Draft Environmental Impact Statement
Public Comment Report

The following includes all comments submitted on the Capitol Lake – Deschutes Estuary Draft Environmental Impact Statement (EIS) during the extended public comment period from June 30 – August 29, 2021. Comments are organized by type: Federal Agency, Public Hearing, Individual, Local Agency, Organization & Business, State Agency, and Tribal Entities. Identification numbers (IDs) are for reference only. Supporting materials, such as original letters or photos, are linked below each comment where applicable. Comments submitted in non-electronic formats have been scanned and rely on optical character recognition for inclusion below.

FEDERAL AGENCY

Name (ID): Dana Dysart (F-1)

Organization (if applicable): Seattle District US Army Corps of Engineers

Submission Text: The Seattle District, U.S. Army Corps of Engineers (the Corps) has recently completed a review of the Capitol Lake DEIS. We recommend further discussion regarding several assumptions used in the analysis with respect to the Corps Navigation and Regulatory authorities. We believe these discussions can help provide better clarity that will help inform a more complete analysis of the alternatives presented in the DEIS.

As reflected in the DEIS, the proposed project will impact the Olympia Harbor Federal Navigation Channel and turning basin originally authorized by the Rivers and Harbors Act of January 21, 1927 and modified in subsequent Acts. The DEIS makes assumptions on the frequency of maintenance dredging which are not accurate. While the Corps has authority to dredge, actual dredge frequency is subject to Congressional appropriation as funds are prioritized nationally. This project was last dredged in 2007, limited to only material suitable for open water. Currently, there are portions of the channel that are shoaled above authorized depths. However, the Corps has been prohibited from conducting maintenance dredging subject to resolution of the state cleanup area.

As stated in the DEIS, a detailed review of the impacts of the proposed alternatives by the Corps is required under the Section 14 of the Rivers and Harbors Act of 1899 (33 USC 408) (Section 408). As part of the Section 408 evaluation, the project will be reviewed to ensure it is not injurious to the public interest and would not impair the usefulness of the adjacent Federal project. Adverse effect on channel maintenance is reviewed by looking at several factors: impacts to navigation traffic, channel profile, proposed project causing a change in the frequency and/or method of dredging; impacts of channel...
dredging; and whether operation and maintenance costs to the authorized Federal project would increase due to the proposed project.

Initial review of the information provided suggests several areas that will require more analysis as part of the Section 408 review. First, the DEIS indicates as much as 743,400CY of sediment being released to West Bay Federal Navigation Channel over a 30 year timeframe (for the Hybrid Alternative). An action of this size impacts the usefulness of the Federal project by increasing dredging frequency and associated maintenance costs. The DEIS identifies initial dredging, long-term maintenance dredging program, and a sediment monitoring plan to help reduce significant impacts to less than significant under the Estuary and Hybrid Alternatives. However, it does not indicate the responsible party for this action or the timing. This information will be critical to review the impact to the Federal project.

Secondly, additional information will be required to validate that the proposed action will not further increase dredging costs by creating conditions that will impact the suitability of dredged material for open-water disposal. If the sediment does not qualify for open-water disposal, the long-term maintenance costs are grossly underestimated. As presented in the DEIS, there is insufficient information supporting both chemical quality compliance and absence of Aquatic Invasive Species (AIS) to verify that open water disposal could be permitted for future dredging events. To evaluate open-water disposal suitability, the Dredge Material Management Program (DMMP) agencies require a suitability determination that includes both chemical testing and compliance with RCW 77.135.040. Both DMMP and Washington Department of Fish and Wildlife should be consulted to determine appropriate survey techniques to determine impacts to dredge material quality in the Federal navigational Channel and associated impacts to dredge material disposal.

Supporting Materials (if any): N/A

HEARING

Name (ID): Sean Threatt (H-1)

Organization (if applicable): N/A

Submission Text: I am the owner of the property affectionately known as the meth garden to many Olympians. My great grandfather, Ralph Bunker, acquired land next to Capitol Lake along Deschutes Parkway in the '50s. Initially to protect the family property from trespassers I installed a chainlink fence. The fence was ripped down and used as a platform for more fence as the homeless encampment grew. As well as the resources have been allocated by the City to get the encampment under control, I began my own efforts to solve the safety hazard and business the drug camp has become. I started going down to the meth garden weekly to clean up and talk to the trespassing addicts. It became clear that these people were in dire need of help and incapable or unwilling to make the changes necessary to get on their feet. They are either addicted to dangerous narcotics and/or mentally ill. It was at this point that I was inspired to use my property as a means to help bring tax revenue to fund a rehab and mental health facility. It is vital to understand that the construction of the proposed new Fifth Avenue Bridge, Deschutes Parkway Bridge required for the estuary will cost millions. Millions that should be spent
protecting business owners and the public, especially those with children from drug abusing homeless. Many people argue that the estuary will save money in comparison to a managed lake scenario because dredging is expensive. This is false because if done correctly a managed lake can be accomplished in a cost-effective manner. Building a sediment trap would reduce dredging cost by 90 percent and would not turn the staple of downtown Olympia, our city capitol, into a sinking mudflat that deters business. In plainer terms, it’s significantly more cost-effective to manage the lake other than the proposed alternative. Already an egregious government overage is going on. I'm a landowner whose land is being used and destroyed by a city-endorsed drug camp. And now the State of Washington wants to take my land without permission and build a bridge to save some fish when we should be focused on saving human lives. It should outrage any homeowner, landowner, or business owner in Washington state. Before we spend millions of taxpayers dollars on this project which will neither improve or grow Olympia, we need to help the people openly dying off of narcotics in the middle of our city. We need to ensure that our children can once again walk and recreate around Capitol Lake without fear of being stuck by an infection heroin needle or exposure to the thriving criminal element of Olympia street culture. There are atrocities happening right under our noses. Underaged prostitution, rape, theft, and ambulances taking bodies that have sitting for days after overdosing. Downtown Olympia and our waterfront should be the attraction of our state capitol. Many people will not frequent our city and support local business because of the danger associated with the street culture and drug-abusing homeless. I ask you to use a realistic and sensible mindset. This project is spending your money without solving what needs to be solved in downtown Olympia. Let's instead use the money to rehabilitate and relocate the homeless and to reclaim our parks and city streets.

Supporting Materials (if any): Public Hearing Transcript

Name (ID): Greg Falxa (H-1)

Organization (if applicable): N/A

Submission Text: My name is Greg Falxa. I am a wildlife biologist that has been studying bats in the Olympia area sorry, not Olympia. Let me start over. I'm a lifelong Olympia. And I've been studying bats as a wildlife biologist in Western Washington for the past 20 years. Happy coincidence, that the largest known colony of bats in Western Washington is at Woodard Bay four miles from my home. Bats are mentioned once in the Executive Summary, very briefly, and again in Section 3, existing. What bats can be found in the study area? Okay. Which bats can be found in the study area is not the biggest question is to me. What I find is when the most significant deficiencies in the document is a discussion of the colonies that are dependent on Capitol Lake when it comes excuse me, the wildlife deficiencies, not overall. As noted in this one short paragraph, Capitol Lake appears to be an important feeding area for two bat species; in particular, little brown and Yuma myotis. I take issue with the use word 'appears' rather than stating that the lake is definitively a vital foraging habitat. The Washington Department of Fish and Wildlife DHS program has designated years ago and mapped Capitol Lake as a priority habitat for Yuma myotis and little brown myotis because of the large nursery colonies 'plural' in the area that congregates and feeds there. The same short paragraph mentions that it is unknown what proportion of the Woodard Bay bat colony of around 3,000 bats utilizes Capitol Lake. However, I've testified on a
number of occasions over the past 15 years during clamp hearings, EIS, pre-EIS scoping, et cetera. That every single bat that I have radio tracked and that's in or numbers over the years form Woodard Bay have used Capitol Lake either exclusively or primarily and mostly exclusively. When? During the months of June, July, and August which is the pup-rearing period in their most important time for nutrient and energies. That's not mentioned. That the discussion of that is is pretty weak in the document and I really hope that it would be because of the significance of Capitol Lake to a multiple large colonies. The EIS also questions that are known and been 15 testified previously and I'll submit additional detailed comments in writing. But the whole issue of bats is

Supporting Materials (if any): Public Hearing Transcript

Name (ID): Steve Shanewise (H-1)

Organization (if applicable): N/A

Submission Text: Hello. My name is Steve Shanewise and I reside in West Olympia. I would like to start my comments tonight by complimenting the DEIS document structure. If this document's compilation format are not the industry norm, they should be. If you just read the Executive Summary, which is concise and easy to do, it will lead you down a simple clear path to whatever issue concerns you. Congratulations on a job well done. However, although the document structure is a gem, at least some of the detailed analysis assessment. I have submitted written comments on many aspects and I do not wish to address them again here

I will focus tonight on what is the lynchpin of the whole EIS process; and that is, decision durability. 'Decision durability' is a mouthful term that addresses whether or not the stakeholders involved with Capitol Lake will accept the preferred alternative; that is, the community and tribes fight it or support it. This concept will become incredibly important in the future when it comes time to ask the legislature for a few hundred million dollars to make things happen here. Elected officials are not prone to giving vast sums of taxpayers' dollars to massive infrastructure projects that have massive community opposition. And massive community opposition, which equates to no decision durability.

What happened here is the either all or all estuary alternatives advanced to become the preferred alternative. In contrast, if the hybrid alternative with a freshwater lake option, otherwise known as 'DELI' which stands for 'dual estuary lake idea.' If this hybrid alternative gets moved forward to become the preferred alternate, many people will come together from both sides to the end this all lake or all estuary war and agree that DELI represents a viable compromise that is the best of both worlds. This joining of both sides to a single DELI would push decision durability off the charts when compared to the all lake or all estuary alternatives. And that's the whole point of DELI. If this community cannot ban together under a single common cause funding to make things happen that never happen and we will be stuck with the muck of the lake that we now have for at least a few more decades.

In closing, I am an estuary proponent, indeed. I'm a certified professional wetland scientist who completely understands the value of limited currents of estuaries in South Puget Sound. But I sincerely believe that the only way we will ever fix things with the existing Capitol Lake and give an estuary at all is
if we do the compromise of DELI. If we can truly bond together as a community so we can fight as one that it will take to get things done. 85 percent of a restored estuary is infinitely better than zero. Thank you.

**Supporting Materials (if any):** Public Hearing Transcript

**Name (ID):** Parakh Hoon (H-1)

**Organization (if applicable):** N/A

**Submission Text:** Thank you for this opportunity to speak. My name is Parakh Hoon. I'm a professor of Political Science at South Puget Sound College. And I recently moved to Olympia and I'm during our graduation, we had our graduation ceremony next to the Percival Creek. And as we spoke we wondered what it would take if the creek would be restored. And our other property which is at Tumwater Falls, also which is the distilling program, we wonder what it would take if we connect our students and our faculty to what is actually happening in our waterways. And so when this public hearing was taking place, I realized that this was our opportunity to commit ourselves to acknowledge that we will be able to do or undue the harms of the past. Reinvent the Capitol Lake, the Deschutes Estuary Long-Term Management Project in the activities that our students are doing in our community colleges, in our educational institutions so that the governance which the previous person spoke about, the long-term commitment that we have with the community will be embedded if we can ground this in our current institutions and that also include our educational institutions as key stakeholders. So as we work through the Capitol Lake estuary system, I would encourage to reach out to local colleges, especially a community college and St. Martins and Evergreen to include policy scenarios and activities that students can engage with in teams over the years, that we can engage in multiple scenarios, examine their political efficacy, track the construction project and see how our community will take over the long-term care and maintenance. As we work on the jurisdictions between local community, state, and Federal support here too our educational institutions with our faculty and political science and law and support the interlocal agreement. So I end with the land acknowledgement where we say that we recognize our colleges, our South Puget Sound Community College, Evergreen, and St. Martins, our students, that as these creeks that flow through our campuses, the water that we are able to see, we hope we can restore the salmon and the wildlife and we can live in co-existence with for upcoming generations. So thank you for this opportunity.

**Supporting Materials (if any):** Public Hearing Transcript

**Name (ID):** Sarah Carroll (H-1)

**Organization (if applicable):** N/A

**Submission Text:** Hi. My name is Sarah Carroll, and I reside in rural Thurston County. I wish to comment tonight on the saltwater pool proposed within the hybrid alternative. While I'm just a high school graduate from Elma, smart people think I'm start. And when I listen to experts talk about how the saltwater pool would actually function, it made me wonder why all the papered experts with Ph.D.s
working on the EIS team didn't have the field sense to see what I clearly do, which is the saltwater pool and the hybrid alternative will simply become a solar oven. This is why. In the summer extreme low tides are diurnal, often in the afternoon. And at such times the saltwater pool would be completely static with no tidal exchange. For example, on June 30th this year the extreme low diurnal tides, both the highs and the lows, would have left the proposed saltwater basin without significant, if any, tidal inputs for possibly 12 hours. This was because the diurnal high that day was only six feet, which is the lowest proposed invert on the tide gates for the saltwater pool. Then during this half day period of completely static mostly shallow water the daytime temperatures soared to record-breaking highs. Temperatures were over 100 degrees that day for many hours and got as high as 108 degrees Fahrenheit. This amount of solar heating with direct sunlight on all parts of the saltwater pool would have dramatically raised water temperatures, especially after 12 hours of no fresh tidal inputs. And then when the tides finally would have gotten deep enough to inflo into the saltwater pool that evening, this much cooler Budd Inlet saltwater would have plunged to the bottom and pushed the heated pool water up to the top and back out into the restored estuary and eventually Budd Inlet. Now, like I said, I'm from Elma and there are not a lot of Ph.D.s walking around on the streets of town, but I'm pretty confident that the vast majority of residents there would completely understand the stupidity of creating a 45-acre saltwater solar oven to heat up a shallow inlet in South Puget Sound in the summer. Thanks.

Supporting Materials (if any): Public Hearing Transcript

Name (ID): Allen Miller (H-1)

Organization (if applicable): N/A

Submission Text: Good Afternoon. Allen Miller, Spokane, Washington. Under the State Environmental Policy Act, WAC 197-11-400 requires an analysis of the urban quality historic and cultural resources and the design of the built environment in the Draft Environmental Impact Statement, and it needs to consider the impacts to the Washington State Capitol Campus National Historic District, since Capitol Lake is a significant part of that Capitol Campus design by Wilder and White in 1911, and the Olmsted brothers in 1928. The DEIS does not analyze the nationally significant city beautiful movement design principles of the state Capitol Campus which is on the national historic register. It was at Olympia, Washington, that the American renaissance in state capitol building reached its climax, such a collection of classical buildings on a plateau surmounting a green hill, 117 feet above sea level proved an irresistible vision. It would be a spectacular monument with Mount Rainier in one direction, the Olympic range in another, and all mirrored in the blue waters of the lake below. The city-beautiful concept of perfection evolved in the dense urban scenes seemed in the seen in these natural landscape of the Pacific Northwest; no architect or designer could have asked for a more splendid setting. Section 106 of the National Historic Preservation Act requires the Draft Environmental Impact Statement to include an analysis of the national historic district and how Capitol Lake is affected. RCW 79.24.720 designates Capitol Lake as a historic facility of the State Capitol and it requires the Department of Enterprise Services to steward Capitol Lake and apply United States Secretary of Interior standards for the treatment of its historic nature.
The Draft EIS fails to analyze the necessary dredging and maintenance of Capitol Lake to the standards applied by the Secretary of Interior. The cost of dredging and maintaining Capitol Lake are extremely inflated by only including the cost of disposing the dredged soils upland instead of an in-water disposal. The Draft EIS on page 7.5 should include the cost of maintaining the historic Capitol Lake with the cost of in-water disposal of the dredge soils. Please abide by these statutes.

Supporting Materials (if any): Public Hearing Transcript

**Name (ID):** Raskal Turbeville (H-1)

**Organization (if applicable):** N/A

**Submission Text:** Hello. My name is Raskal Turbeville and I live in rural Thurston County. My comments today are about the measured evaluation process, or MEP, for the selection of a saltwater pool over a freshwater one for analysis in the hybrid alternative was made. Quite simply, all of the reasons stated in the MEP for selecting saltwater over freshwater have now been proven false. First, there is an ability to get a groundwater permit. While summarily dismissed is too difficult to obtain that was actually false. In deed it might be one of the easiest permits to get in the state of Washington for two reasons. The use will be passive, non-consumptive and there is no one downstream of the take. These facts eliminate the most difficult permitting hurdles to get over because you don't have to show best use of the water. It's not being used; just borrowed. don't have to prove the take will harm anyone else's downstream water rights. Second, groundwater supply availability was questioned. The DEIS now states that it would take less than 500,000 gallons a day to supply a freshwater pool, and that this amount is readily available from the shallow aquifer. Third, the phosphorus loading analysis as related to algae blooms is also incorrect. While the groundwater does have moderate amounts of phosphorous, the DEIS describes how this can easily and cheaply be scrubbed out. Plus, the assumption that the saltwater pool will not have algae blooms is simply preposterous. The DEIS clearly states that Budd Inlet waters will create algae blooms in the restored estuary; sometime severely. This difference between the saltwater pool and the estuary is because the pool will be flushed twice daily with tides; however, so will the estuary. And, moreover, the estuary will be completely flushed twice a day while the saltwater pool will only be partially flushed because it will not drain to zero. The saltwater pool will require a habitat management plan in perpetuity to manage algae blooms just like the freshwater option would. So the freshwater pools were rejected over saltwater because: One, it would be too difficult to get a groundwater permit. False. Two, there would not be enough groundwater available, which is also false three. Three, phosphorous loadings could not be dealt with sufficiently to prevent algae blooms. False. And four, the saltwater pool would not require a habitat management plan to prevent algae blooms, which is also false. Furthermore, while a freshwater pool would provide cool, constant Artesian flows into the restored estuary and eventually Budd Inlet, the saltwater pool would experience dramatic warming on hot summer days with low diurnal tides. Suffice to say that the selection of a saltwater pool over a freshwater pool in the MEP was an abomination of science that needs to be corrected. Finally, there's a solar oven effect someone mentioned earlier of the saltwater pool. The impact would be highly significant to water quality and fish environment. yet it was not mentioned within the MEP. It's assumed
that this error was due to the fact that none of the experts analyzing the situation even thought of it. Thank you for your time tonight.

Supporting Materials (if any): Public Hearing Transcript

Name (ID): Susan Patnude (H-1)

Organization (if applicable): Deschutes Estuary Restoration Team

Submission Text: Thank you very much for facilitating the hearing tonight. I'll just get right to it here. I'm with the Deschutes Estuary Restoration Team, so there's no question in where I'm going with this. But I would like to ask that the EIS extend the project area that's being studied out to the entire include the entire Budd Inlet. Right now you're only going out to west bay, and we consider the project area to go out to Boston Harbor. So that's one thing.

Also, we would like to ask that there be a more thorough analysis of the impacts on lot and the economic impacts to rent payers. If law has to increase its discharge of permits, which is likely under the new Puget Sound general permit a more thorough analysis of the impacts on lot and the economic impacts to rent payers. If law has to increase its discharge of permits, which is likely under the new Puget Sound general permit

We'd also like to get the planning horizon extended. Thirty years, it's just a big why. You know, why 30 years? The dam has already been in place for 70 years. The the tribal use of the estuary goes back thousands of years. Why 30 years?

Also, there's some issues with the salmon let's see here. There's no mention of the native coho salmon running Percival Creek, for instance. It's been well-documented and should be noted. There used to be quite a bit of fishing there before the dam went in. And also, there's studies of tag juvenile salmon by the Squaxin Island Tribe that have shown that juvenile salmon produced in rivers to the north frequently turned south and they enter Puget Sound and South Puget Sound. And they would be using the Deschutes Estuary significantly.

There's also a need to discuss more information on sequestering carbon in the mud flats and the tidal areas and salt marsh vegetation. We would appreciate it if you would go to Restore America's Estuary's website and look at issues and ways to mitigate climate change. There's not a whole lot of discussion in the document about climate change, by the way.

Also, please talk about how you compare lakes with Capitol Lake, when Capitol Lake is the only lake that has a major river flowing into it. And also how Capitol Lake cannot really be called a lake anymore because of it not meeting lake standards for retention time. So those those are the biggest issues that we have and the rest will be in our written comments. Thank you.

Supporting Materials (if any): Public Hearing Transcript
Name (ID): Jonathan Frodge (H-1)

Organization (if applicable): N/A

Thank you. Good evening. I'm a professional limnologist. I've studied lakes in Washington for 40 years. Currently, I'm a board member of the Puget Sound Keeper Alliance. This evening I'm speaking for myself. I would like to follow up on the previous speaker. I would contend that Capitol Lake is not a lake; it doesn't have lake functions and would be more appropriately called the Capitol reflecting pool. And the current configuration or any or the hybrid or the managed lake options have very little chance of maintaining good water quality and probably would use up the dissolved oxygen benefit for Budd Inlet creating a problem there.

The marine estuary would restore the one of the most rare habitats that we've got around. And not only would I I agree extending it out the study area out of Boston Harbor, but I would also include the non-point sources coming down from the Deschutes River or none of these options will give us what we want.

The Tribal issues are not dealt with in as much strong a language as I think as they should be, and I think that the the restoration of the estuary is the most viable option for both the the local environment but the entire Puget Sound environment as well and addresses some of the habitat species issues, water quality issues that we've got Sound-wide, Budd Inlet, and in the local environment. Thank you.

Supporting Materials (if any): Public Hearing Transcript

Name (ID): E.J. Zita (H-1)

Organization (if applicable): N/A

Submission Text: I want to thank the DEOC Floyd Snider team for doing the great job on the Draft EIS and for facilitating strong public engagement including tonight's session. There is there was a new study done by a master's student at Evergreen last year that indicates that the Deschutes River could reach a critical low flow condition this century. If that would happen due to climate change and due to population pressures and water use. If that happens, low flow in the Deschutes River could result in lower sedimentation rates, and that could affect the sedimentation analyses that could reduce some of the long-term costs for sediments management and that might be something that the EIS Floyd Snider would like to take into consideration.

Supporting Materials (if any): Public Hearing Transcript

Name (ID): Keegan Wulf (H-1)

Organization (if applicable): N/A

Submission Text: Sorry, my name is Keegan Wulf. Sorry, that's w-u-l-f. I am the president of the downtown neighborhood association, so this this project borders my neighborhood. And I just wanted to
speak about since there was an opportunity how important it is to preserve this habitat and make it available to future generations and to bring it back from the status that it is now to a functioning estuary so that future residents of my neighborhood and current residents of this neighborhood that regularly go for walks and see this lake or this body of water, this reflecting pool, every day or regularly and continue to enjoy the space. And I support the comments of those of Puget Sound the Sound Keepers and of the Deschutes Estuary Administration team. Thank you.

Supporting Materials (if any): Public Hearing Transcript

Name (ID): Matthew Karas (H-1)

Organization (if applicable): N/A

Submission Text: Hello. Thanks for letting me speak. I just want to emphasize that commenting in these public first and foremost is a privilege that many people do not enjoy. So I just want to make everybody aware that this shouldn't be reflective of everybody within Olympia, they're all demographics, because, unfortunately, like many things in our society participating in these processes is just not accessible to all people.

So after saying that, I think I have many concerns with the document as a whole. But one of them is just the overall tone of the document. It doesn't feel very objective to me. It seems that it really goes out of its way to minimize the potential benefits to some water quality and habitat quality and also makes really bold claims about managing the lake, which I've never read in any other environmental assessment of Capitol Lake and seems to really contradict a lot of studies from the Department of Ecology and Department of Fish and Wildlife that I'm somewhat familiar with.

An example of that is in one section where it reads: Despite the or it says, 'Water quality in the lake is not as bad as some people think it is.' That seems like a very subjective way of phrasing that information rather than objectively stating something. And so that's a little bit of a concern. I also have concerns with some of the seems like selective culling of information from certain areas such as choosing water quality information from a very short period of time and there's more water quality information for a long period of time that would contradict some of the findings that are presented in the DEIS.

It seems that the DEIS team didn't really thoroughly consult or coordinate with a lot of other agencies that are involved in this processes, such as Department of Ecology and Department of Fish and Wildlife and I feel like that's a really grave concern. Instead, it seems like the approach is to invite these agencies to respond to DEIS rather than having them, like, very involved since the beginning of the process.

And also it seems like there wasn't much coordination with the Squaxin Tribe over the cultural resource analysis. I spoke with somebody from the Squaxin Tribe recently who said that their cultural archeologist and people who work in that department were not consulted whatsoever over at the cultural resource section. I feel like the idea of labeling the dann and the lake as a cultural historic site is really, really atrocious and really celebrates colonial settlerism and not the rich history of presettle. Native peoples
who have fished and lived in this area since time and memorial. So that's one area, along with many others, I think should be addressed.

Supporting Materials (if any): Public Hearing Transcript

INDIVIDUAL

Name (ID): Steve Miller (I-1)

Organization (if applicable): N/A

Submission Text: Very detailed and well researched EIS report. Long term self managed lake restoration programs work and I have seen first hand the positive effects that routine dredging and sediment management can provide to a community. Dane County WI just started began there lake restoration program using our equipment, training and in house county workers.

Supporting Materials (if any): N/A

Name (ID): Steve Miller (I-2)

Organization (if applicable): N/A

Submission Text: Long term self managed lake restoration programs work and I have seen first hand the positive effects that routine dredging and sediment management can provide to a community. Dane County WI just started began there lake restoration program using our equipment, training and in house county workers.

Supporting Materials (if any): I-2_Miller.pdf

Name (ID): Joel Hecker (I-3)

Organization (if applicable): N/A

Submission Text: Based on review of the EIS, it appears to me that the Hybrid is the best option. The managed lake is a waste of resources, as you end up back exactly where you started in the beginning and it has limited environmental or public benefit. The estuary option is the best environmentally, but for public use, people would not like the look at low tide. The hybrid option 1) preserves the views people like, 2) allows for recreational activities, 3) provides value for the upfront cost due to reduced flooding, and 4) has a massive environmental benefit. The price tag is high on all options, so it should be the alternative that makes the most sense and has the longest shelf life. Joel Hecker

Supporting Materials (if any): N/A

Name (ID): Barbara Buchan (O-3)

Organization (if applicable): League of Woman Voters
Submission Text: The LWV supports the removal of the 5th Ave Dam & improvement to the Pedestrian Bridge. Improve water quality, recreation & the fish estuary. Sediment Management.

Supporting Materials (if any): N/A

Name (ID): Anna Uyeda (I-4)

Organization (if applicable): N/A

Submission Text: I'm in favor of either the estuary or hybrid, with preference over the full estuary. I also didn't see public swimming listed in the planned recreation options, but I may have missed it. I would like to see that return.

Supporting Materials (if any): N/A

Name (ID): Daniel Locke (I-5)

Organization (if applicable): N/A

Submission Text: Do the hybrid

Supporting Materials (if any): N/A

Name (ID): George Kurzman (I-6)

Organization (if applicable): N/A

Submission Text: If it were entirely up to me, I would choose the restored-estuary option, but I understand the reflecting pool has cultural significance for a lot of people here. Separating the reflecting pool from the estuary preserves that cultural asset while allowing the estuary to be restored. Any option that removes the dam will increase costs for the yacht club, primarily. The yacht club pre-dates the dam by more than 40 years, so we know it was possible to function there without it. Keeping the dam for their sake is essentially a government subsidy for a luxury/recreational organization. The public interest is better served by a restored estuary

Supporting Materials (if any): N/A

Name (ID): Martin Kimeldorf (I-7)

Organization (if applicable): N/A

Submission Text: we've lived in Tumwater for 40 years and read this same article for 40 years

Supporting Materials (if any): N/A
Name (ID): Paul Bunge (I-8)

Organization (if applicable): N/A

Submission Text: I read the paper today and I would generally prefer the fresh water option. I do notice that this is the most expensive which is a downside. And of course it is not the natural state of the area. But the decision to make a dam and make a freshwater lake was made years ago and all other decisions surrounding that (buildings, parks, etc) depend on the lake as it is. I would support other areas remaining estuaries, and am very glad for the Nisqually Valley decisions over the years.

The large homeless encampment is a recent twist to the lake's history. That may be one of the most dangerous and disruptive things currently and should be addressed as well.

Another interesting issue: Those investors who after many years risked to make a very nice and usable facility out of the ugly green monster building that was there before would be punished for their good work by removing the fresh water lake in my opinion.

Supporting Materials (if any): N/A

Name (ID): Marybeth Bland (I-9)

Organization (if applicable): N/A

Submission Text: I am leaning to the hybrid model for the lake. I am leaning this way because of the cost. It would be cheaper than keeping the Capitol Lake as it is now. I also like the learning that we could get from it and this might be the way the lake was really should've been in the first place. A lot of money would have to go into this and I'm not sure where the money will come. I hope that can be outlined so that we can have a more clear idea of how to move forward.

Supporting Materials (if any): N/A

Name (ID): Tom Schrader (I-10)

Organization (if applicable): N/A

Submission Text: KEEP CAPITOL LAKE.... Reflective Beauty vs Smelly Flats Since our Liberal based government always has idiocy over reason.... such as allowing dozens of homeless tents along the lake shore -- Or shutting down the lake for 12 years because of a snail which will never be eradicated (and so what...?!?!). > Much like the Mazama gopher ruling where all of us at the county has had to endure since the three wacky left commissioners decided that a creature which nobody sees was more important than the county's residents. Heck with 'GloBull Warming', the downtown seashore will rise twenty feet, so it will all be a mute point... A lake or an estuary will soon be a sea.
For your consideration the members, board and particularly the Conservation Committee of South Sound Fly Fishers has thoroughly studied the published alternatives, consulted with WDFW biologists, entomologists and most importantly resident and community members who will be affected by the future of this proposal. We have considered the impacts of the decision on the costs of the alternatives, the recreational and community values provided, environmental health of the area and the wildlife impacts the several options would incur. As citizens and taxpayers, we are concerned with the costs of any construction and maintenance. Ignoring these obligations has precluded the dredging and disposal of spill for decades which has brought us to the current status. We have an unhealthy body of water contaminated by invasive species which prevent the activities the lake was supposed to provide, including swimming, boating and fishing.

Our study has led us to prefer an alternative which re-establishes the recreational use of the area, provides a healthy environment for residents, both human and wildlife, at a cost that is most likely to be supported by community resources. South Sound Fly Fishers is a local organization that has promoted conservation projects in our area for more than 50 years. Our primary interest is, of course, fishing but this activity is dependent on a healthy environment that nurtures waterways, riparian zones and saltwater ecologies. It is also a recreational activity which means that we are committed to providing healthy outdoor opportunities for ourselves and also for our families and the non-angling community that we are no less a part of. We include this insight to illustrate that our preferred alternative is certainly the best option for fish and wildlife, but is tempered by our support for the community we share and for which we are creating a legacy that will affect our community for decades to come. We choose not to kick the can of worms our predecessors left us down the road for our children and grandchildren to correct and pay for. Our preference is for the re-establishment of the Deschutes estuary. We can explain this decision by addressing each of the four stated objectives of the project: Improving Water Quality, Managing Sediment Accumulation and Future Deposits, Improving Ecological Functions and Enhancing Community Resources in turn. We will also address the likelihood of success each alternative both of being chosen and long-term results.

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kick the can of worms our predecessors left us down the road for our children and grandchildren to
correct and pay for. Our preference is for the re-establishment of the Deschutes estuary. We can explain
this decision by addressing each of the four stated objectives of the project: Improving Water Quality,
Managing Sediment Accumulation and Future Deposits, Improving Ecological Functions and Enhancing
Community Resources in turn. We will also address the likelihood of success each alternative both of
being chosen and long-term results.

1. Improving Water Quality
A. Estuary. Initial estimated cost $179 million to $336 million. Maintenance
costs are minimized. The alternatives document states ‘water quality will be self-managing as a brackish
estuary’. This means that the constant flow of the river meeting with tidal influx of saltwater will create a
semi-saltwater mix that continuously replenishes itself preventing stagnation and eliminating the New
Zealand Mud snails and Purple Loosestrife plants. These are the invasive freshwater species whose
presence has closed the lake to swimming and boating B. Managed Lake. Estimated initial cost $337
million to $607 million. ‘Water quality plans to be developed’. This vague statement underlies the root of
the current problems. Regular dredging will be required to maintain a depth and quantity that would
allow healthier conditions. Aquatic vegetation may have to be controlled by using herbicides and/or
mechanical removal. Most importantly, maintaining a freshwater habitat allows the survival of the most
troublesome invasive species. Managing acceptable water quality would be expensive and uncertain. C.
Hybrid Alternative. Estimated initial cost $249 million to $463 million. This option reduces the size of the
freshwater lake but furthers the need to control weeds and water quality and to manage the chemical
content of the water since the lake would be groundwater fed. Groundwater contains high levels of
phosphorus which promotes algal growth and higher density of aquatic plants. Mud snails and
loosestrife could persist.

2. Manage Sediment Accumulation and Future Deposits
A. Estuary. Sediment from dredging the large
basin would be deposited upriver in the middle and upper basins creating tideland habitat for plants and
animals. Subsequent accumulation will be minimal as deposits terminate in West Bay as would have
occurred naturally. Dredging in these areas such as Olympia Yacht Club will be required on a six-to-
twelve-year schedule. Less accumulation will occur in federal navigation channel to be the responsibility
of Army Corps of Engineers and possibly Port of Olympia. B. Managed Lake. Construction sediment will
be dumped in the middle basin and will establish a freshwater wetland community. Subsequent
dredging will be required on what is assumed to be a 20-year schedule. The amount removed will be
greater each instance and the interval will likely decrease. This passes the expense and responsibility to
future generations in perpetuity. C. Hybrid. Construction sediment will be deposited upstream to create
tidelands, subsequent dredging will be required at assumed 15-year intervals. A saltwater marsh will
develop in middle basin.

3. Improve Ecological Function
A. Estuary. This alternative will restore the original estuary ecology to the
area. Tidelands support populations of crustaceans, shellfish, aquatic plants and birds and provide a
nursery for outgoing smolt of anadromous fish such as salmon and sea run cutthroat trout. The current
sad condition of the lake is detrimental to the smolt released by the Tumwater salmon hatchery
reducing the success of these fish in escaping to Puget Sound and eventually the Pacific where they
grow and feed aquatic species such as Orca whales. B. Managed Lake. A freshwater lake does not
provide substantial ecological function to our region. The benefits of the freshwater habitat includes providing a generous chironomid larvae population in the shallow muddy waters. These larvae hatch in clouds of midges that are a primary food source for the Mexican Brown Bats that roost in Woodard Bay. The freshwater lake itself attracts a rich diversity of water birds including ducks, brandts, geese and swans that provide excellent bird watching for local enthusiasts. C. Hybrid. This mixed environment provides the same benefits as both the freshwater lake and estuary, though each to a lesser extent due to the reduced scale of each.

4. Enhance Community Resource All three alternatives provide enhanced community recreational facilities and opportunities. A pedestrian bridge will allow access along fifth avenue regardless of the width of the opening to be established. Boardwalks would meander through the tidelands or wetlands to allow up close experience of the habitats and wild life. Boat ramps and docks are projected to provide access to the waters freed of invasive species. A. Estuary. One has only to experience the popularity of the estuary boardwalks at the Nisqually Wildlife Sanctuary to appreciate the value and appeal of our natural tidal ecology, unique to Puget Sound. Opening the basin to boating would benefit local anglers who could access the glut of unharvested hatchery salmon that congregate beneath the falls of the Deschutes. This fishery is produced at great cost but are not optimally harvested since access is restricted. B. Managed Lake. Swimming and boating will be part of the mix available only so long as water quality is maintained and invasive species are controlled. Visitors will continue to enjoy the reflective pool that graces our capitol landscape and observe the myriad waterfowl species that stop over on their migrations. C. Hybrid Alternative. The community will enjoy the benefits of both the other alternatives, though with a lesser impact due to the smaller reflective pool and estuary tide flats.

Sea level rise. No mention or projection was made concerning the very real prospect of sea level rise. One might assume that for instance under the estuary option the tide flats would be covered for a longer period than illustrated in the study, but what effect does this have on the need for armoring the perimeters? Under the managed lake or hybrid alternative, are the projected dams and barriers adequate? There remain a number of unanswered possibilities.

Flood water management. Very little attention has been given to the function of the lake and the dam in controlling unusually high flows in the Deschutes due to storm conditions. No references are found regarding historical downtown flooding prior to or following the construction of the 4th Street dam. Neither are there projections as to the future effects of the three alternatives regarding this issue. For this reason, it is germane to note that the preference of the estuary alternative is predicated on the information provided but we do wish to identify these caveats.

Supporting Materials (if any): O-10_Nanto.pdf

Name (ID): Trace and Leslie Pierson (I-11)

Organization (if applicable): N/A

Submission Text: For those not old enough to remember what it was like before the fifth Avenue dam was installed let me remind you.... Two or three days a week the stench of pungent 'sea rot' was
inescapable downtown. The eyesore of it undeniable to any visitor, industrial as it was. Not a reflection pool, not a place to spend a hot summers afternoon cooling off. Not a place to bring the kids for a picnic and a dip.. no this place was hideous! Please, save the lake as our fore Fathers and Mother's had envisioned some 70 years ago as a place of recreation and beauty for generations to come. If we don't, the sediment issue will only become spread around. Install a sediment filter/ collector at the lake head where it meets the Deschutes River, dredge and exterminate or control invasive species. Restore the lake for recreational use. Make Capitol Lake an asset we can use, enjoy and admire as the center piece of a great city!

Supporting Materials (if any): N/A

Name (ID): Scott Cubberly (I-12)

Organization (if applicable): N/A

Submission Text: Read Olympian article today and have long considered my opinion. I strongly support the estuary option!!! Back to more natural, less money, healthier and less worries about sediment!

Supporting Materials (if any): N/A

Name (ID): Cathy Smith (I-13)

Organization (if applicable): N/A

Submission Text: The estuary plan makes the most sense to me. It is the least expensive, and restores the area to its most original intended form.

Supporting Materials (if any): N/A

Name (ID): Kristen Weinmeister (I-14)

Organization (if applicable): N/A

Submission Text: When do you plan a public showing with an artist rendering of the 2 options? Wouldn't that be nice? Have it at the little restaurant behind chase bank or in the lobby of the new bldg. by the capitol. Or traditions? That way there would be more positive input.

Supporting Materials (if any): N/A

Name (ID): Jason Britsas (I-15)

Organization (if applicable): N/A

Submission Text: My biggest concern is the homeless people who live on the south side of the lake, and all about the city. Are there any plans to deal with the camps and all the environmental issues they bring about? For crying out loud! Not only is it an injustice to leave people languishing on our streets, but why
is the subject never talked about? Is the plan to ignore it and hope they will all die? You are all cowards and don't deserve your positions. DO SOMETHING TO HELP THESE PEOPLE GET OFF OF OUR STREETS!!

Supporting Materials (if any): N/A

Name (ID): Derek Beaulieu (I-16)
Organizations (if applicable): N/A

Submission Text: Let’s make it a functional lake again! This is a show piece for our community and an opportunity to bring back the lake to its full glory! I know it’s more expensive but it is worth it!

Supporting Materials (if any): N/A

Name (ID): Tyler Phillips (I-17)
Organizations (if applicable): N/A

Submission Text: Remove the dam and recreate the estuary. The increased saline conditions of the water should eliminate the habitat for the invasive species currently living in capitol lake. Also, reintroducing the Deschutes river system to Puget sound also creates the opportunity for natural salmon runs. Returning the body of water to its natural state will also allow the lake to reopen to recreational activities. This would be an economic boost for the downtown Olympia area.

Supporting Materials (if any): N/A

Name (ID): Cody Clarke (I-18)
Organizations (if applicable): N/A

Submission Text: I believe the estuary should be fully restored, completely remove the dam.

Supporting Materials (if any): N/A

Name (ID): Scott Campbell (I-19)
Organizations (if applicable): N/A

Submission Text: This area should be an estuary. That lake is disgusting.

Supporting Materials (if any): N/A

Name (ID): Austin Pederson (I-20)
Organizations (if applicable): N/A
Submission Text: Turning Capitol Lake back into an estuary sounds like a great idea to me. I love the idea of returning it to its natural state!

Supporting Materials (if any): N/A

Name (ID): Kathryn Kingman (I-21)

Organization (if applicable): N/A

Submission Text: I support the estuary option. I believe it is the right thing to do as it will be best for the environment and the wildlife, including the birds. I think it would be wonderful to see that. I know some people might prefer to retain the lake and feel the estuary wouldn't look as nice but the estuary would have its own beauty, just a different one. It's time we worked with nature, not against it.

Supporting Materials (if any): N/A

Name (ID): NATHAN SCHNEIDER (I-22)

Organization (if applicable): N/A

Submission Text: I support the managed lake plan and oppose turning Capitol Lake into an estuary. I visit Capitol Lake every day and want to preserve it's beauty and enjoyment for locals and visitors who value our community and outdoor activities.

Supporting Materials (if any): N/A

Name (ID): A Noble (I-23)

Organization (if applicable): N/A

Submission Text: To Whom It May Concern, I wish to express my support for the removal of the 5th Street Dam to implement the long-term management strategy of restoring the Deschutes Estuary. Restoration of this invaluable habitat would support vital salmon populations, which are a of referred prey of southern resident orcas. Southern resident orca populations have diminished to dangerously low levels. Restoring the Deschutes Estuary would support an ongoing, sustainable food source for this iconic species, in addition to supporting economically important salmon fisheries and providing nursery habitat for other fish and shellfish species.

Restoring the estuary would also support economic and environmental resiliency in Olympia. The effects of global climate change can already be observed in western Washington. Removing the 5th Street Dam would help to mitigate the effects of sea level rise and more frequent flooding that are expected consequences of climate change.

In addition to the economic and environmental benefits associated with restoring the estuary, this management strategy has the additional advantage of costing substantially less that other proposed
alternatives, including maintaining the dam and developing a hybrid solution. I urge you to remove the 5th Street Dam as the long-term management strategy for this project.

Supporting Materials (if any): N/A

**Name (ID): Heather Hilf (I-24)**

**Organization (if applicable):** N/A

**Submission Text:** I hope to see the area restored to its natural estuary ecosystem. The estuary option has a positive impact on salmon and other threatened wildlife. It provides recreational opportunities, such as birdwatching and kayaking. It honors native tribes' culture, expanding equity. It could provide educational opportunities, similar to Pier Peer. As our capital city, Olympia has a chance to repair, restore, to lead our state to a healthier future.

Supporting Materials (if any): N/A

**Name (ID): Jeff Morgan (I-25)**

**Organization (if applicable):** N/A

**Submission Text:** Aesthetic values from the beginning should rule and managed lake option best. All else is wide speculation and original purpose serves all better. Thank you

Supporting Materials (if any): N/A

**Name (ID): Stephanie Keahey (I-26)**

**Organization (if applicable):** N/A

**Submission Text:** Hello, I grew up in Olympia and have always known Capitol Lake to be toxic. I often spend time at the Nisqually Wildlife Refuge because of the natural habitat and wetland wildlife. I would love to see the same thing in my city with a native Olympua estuary and wetland. It will make the city more beautiful and more people will have access to nature. The estuary plan will benefit everyone in the long run.

Supporting Materials (if any): N/A

**Name (ID): Sean Foley (O-26)**

**Organization (if applicable):** Mountain Lake Farm, Sunrise Movement, Pacific Northwest Salmon Center

**Submission Text:** I strongly support the option to return the Capitol Lake to a natural estuary. Our continued existence relies on the interconnected webs of nature and the wellbeing of our fellow creatures. This is a small step toward fulfilling our responsibilities.
Supporting Materials (if any): N/A

Name (ID): Allan Kigerl (I-27)

Organization (if applicable): N/A

Submission Text: Remove the dam and let the river return to a natural state. An estuary is more than a polluted pond for legislative postcards. The dam is strangling nature. Wayne Kigerl

Supporting Materials (if any): N/A

Name (ID): Pat Quesnel (I-28)

Organization (if applicable): N/A

Submission Text: I have lived in the Olympia area since 1960. I have observed the slow demise of Capital Lake. The lake was a real asset to Olympia. I am in favor of a Managed Lake approach as the best solution to this problem..

Supporting Materials (if any): N/A

Name (ID): Brieanna Brownawell (I-29)

Organization (if applicable): N/A

Submission Text: Having read a summary of the options being considered for capitol lake's future, I think the estuary option is the best. It seems like the area should be a natural environment as much as possible while still allowing people to walk around it and enjoy a natural setting. The recreation opportunities of the managed lake aren't really worth the cost especially if it will return to unusable condition if maintenance funds lapse.

Supporting Materials (if any): N/A

Name (ID): ERICK DIETRICH (I-30)

Organization (if applicable): N/A

Submission Text: To whom it may concern, my name is Erick Dietrich, and although I am a resident of Olympia since no more than a few years ago, I remember my mom who went to Capitol Lake where she enjoyed visiting it. As a resident here, I am asking you to be fully open to the idea of making this deteriorating place a better place where people can swim and enjoy nature and for nature to thrive. Moreover, the concept of giving to nature places a second lease in life for it and residents can be realized. I appreciate your considering the revitalization of Capitol Lake and its surroundings for everyone Erick D.

Supporting Materials (if any): N/A
Name (ID): Griffin Loerts (I-31)

Organization (if applicable): N/A

Submission Text: Please choose the managed lake option. If the lake was turned into an estuary it would severely hurt downtown Olympias appeal, and waste great recreation opportunities.

Supporting Materials (if any): N/A

Name (ID): Robert Winslow (I-32)

Organization (if applicable): N/A

Submission Text: I support the estuary option. I feel the estuary option is cost effective, reduces and eliminates historic water quality and invasive species problems, and best supports Salmond species. I support state funding for all or most future project expenditures.

Supporting Materials (if any): N/A

Name (ID): Erica Corbin (I-33)

Organization (if applicable): N/A

Submission Text: The estuary proposal allows for a wide variety of habitats to exist in the basins, which will attract various types of wildlife for public viewing, while still allowing for the expansion of recreational opportunities. The estuary option is the best choice for Olympia and the state of Washington to further establish itself as one where people can coexist with nature.

Supporting Materials (if any): N/A

Name (ID): Patrick Sprout (I-34)

Organization (if applicable): N/A

Submission Text: $179 million is the minimum expenditure? $607 million is possible? How sad that we're willing to spend this much money when many of the residents of Olympia are living on the streets. We see these people as 'homeless.' Yes, they are. But, foremost they are citizens of our city. Let's address the sad lives of human beings with little hope for a better life. We are such a wealthy country. Our state prospers above dozens of others economically. These hundreds of millions could build housing for our neighbors who are struggling. Let Capitol Lake return to its most natural state. But, look for a way to address our neighbors who are struggling. Human beings are a priority. Find a plan to address both issues --- our neighbors without homes, and our lake. Imagine $179 million spent on solving homelessness in Washington's Capitol.

Supporting Materials (if any): N/A
**Name (ID): Lana Brennan (I-35)**

**Organization (if applicable):** N/A

**Submission Text:** Do what is most beneficial in spite of cost. Remove homeless encampment to help clean and preserve natural beauty.

**Supporting Materials (if any):** N/A

**Name (ID): Dawn Olsen (I-36)**

**Organization (if applicable):** N/A

**Submission Text:** The history of the lake and why it was built was for the capitol as a reflection lake. I grew up in Olympia and remember the great times with the swimming area with my family and the hydro plane races on the other side of the lake. Those days brought us all together to enjoy the many wonders of what Olympia has to offer. Please go to a Managed Lake and retain what Olympia was once known for, and make our area beautiful again. The lake should be a Managed Lake. Bring back the lake we enjoyed for years, and one of the wonders of Olympia.

**Supporting Materials (if any):** N/A

**Name (ID): Bethany Anonymous (I-37)**

**Organization (if applicable):** N/A

**Submission Text:** I support the estuary option. Once I learned more about the history of the lake, the invasive species, etc...it always felt slightly sad going there. It was a lovely idea but I think, like in many other examples of “progress” that were made decades ago, it’s best to reverse course and allow the natural world to exist as it was meant to be and stop trying to control it. Not to mention, the estuary option appeared to be the most financially feasible.

**Supporting Materials (if any):** N/A

**Name (ID): Jody Suhrbier (I-38)**

**Organization (if applicable):** N/A

**Submission Text:** Thank you the years of effort on this project! Embracing the natural ecosystem approach for long-term management is sound both scientifically and financially. The estuary option is the way to go. If The hybrid option is the way that generates the most public and political will, that's a reasonable compromise. The managed lake option is not sustainable ecologically or financially. It's time to take action, thanks for moving this project forward.

**Supporting Materials (if any):** N/A
**Name (ID): Donna Wright (I-39)**

**Organization (if applicable):** N/A

**Submission Text:** As a life-long resident of this area I believe the Estuary plan to be the best route to take. It costs less and seems a more practical plan.

**Supporting Materials (if any):** N/A

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**Name (ID): Larry Glenn (I-40)**

**Organization (if applicable):** N/A

**Submission Text:** After receiving a job offer with the Olympia Fire Dept. we moved to Olympia in early January of 1960. We were awestruck with the serene beauty of Capitol Lake. Thousands of visitors were taking in the beauty of Christmas Island. Many people were viewing the salmon returning to Capitol Lake to spawn. This salmon run was started by a City employee named Wally Turner. Before then, there were no Salmon in Capitol Lake. Capitol Lake hosted events throughout the year. In the Summer there was swimming off the dock on the East shore, Hydroplane racing in the South basin, water skiing through out the summer, the big event of the crowning of the Lakefair queen, and of course Lakefair itself. Capitol Lake was a magnet drawing visitors year round from across the Northwest. Olympia was an exciting place to visit and live. In 1980 after receiving a job offer in Port Angeles, my family and I reluctantly moved to Port Angeles. There we spent 15 years. After I retired from the fire service in 1985, we moved back to Olympia. We were shocked by what had been allowed to take place with Capitol Lake. 1) The small non-native salmon run had been decimated by tribal netting at the outfall of Capitol Lake. 2) By failing to continue flushing the lake with salt water annually, allowed non native plants to take root in the lake. 3) By the State failing to fulfill there original commitment to dredge the lake as needed, allowed the silt to nearly fill the lake. 4) The lake had become so polluted from failing to flush and dredge, that activities such as swimming, and water skiing had become unhealthy and was no longer allowed. 5) All the activities at the lake sadly had ceased due to the failure of the State to maintain the lake as they had committed to when the lake was first formed. In closing, Capital Lake was first formed to function much like the reflection. pond at the Nations Capitol, not as an estuary, which in my opinion is nothing more than a sour smelling mud flat. This might be acceptable at the Nisqually flats, but not in the heart of the State Capitol. As Capitol Lake has been allowed to deteriorate, so has the downtown of the city. Bringing it back to it's original glory would definitely work wonders for the city as well.

**Supporting Materials (if any):** N/A

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**Name (ID): Larry Glenn (I-41)**

**Organization (if applicable):** N/A

**Submission Text:** One misprint in my submitted document, we returned to Olympia in 1995, not 1985.
**Supporting Materials (if any): N/A**

**Name (ID): Kristen Weinmeister (I-42)**

**Organization (if applicable): N/A**

**Submission Text:** I vote for estuary.

**Supporting Materials (if any): N/A**

**Name (ID): Virginia Towne (I-43)**

**Organization (if applicable): N/A**

**Submission Text:** I feel the need to comment on the proposals for the future for capital lake. I feel that an estuary is important to fish health and the river. This can be accomplished with either a straight estuary or a hybrid with an estuary and the lake. I worry the lake in any plan will be left to become a silted up problem in the future. I love the lake and would like to see it remain, if there is a plan with money to keep it up. If the lake isn't going to be maintained the a straight estuary is better for the environment and far less costly.

**Supporting Materials (if any): N/A**

**Name (ID): Susan Davenport (I-44)**

**Organization (if applicable): N/A**

**Submission Text:** My strong opinion about the three options is that the full estuary restoration is the right and only choice. The most simple and elegant solution is returning the southernmost point of the Salish Sea to it's original configuration.

Tam heartened to see the recognition of the ancient history and social justice being considered at long last. The more contemporary history of the architects that designed the lake, heritage park and walking path is of no consequence compared to this greater historical legacy.

I might say the shanty town from the estuary shores that housed the diverse Asian and other POC service, oyster, lumber workers and greens gatherers is also of profound NW significance.

My question is why the Olympia Yatch Club is even mentioned as a concern. That organization poisoned the south sound for more than two generations with it’s haul out area with toxic scraped off debris and marine paint dripping. The Club had no concern for Budd Inlet then. They can well afford to move their operations elsewhere.

A natural estuary can be an example of restoration and effective filtration for the Deschutes and the bay offering walking recreation and natural history exposure. The lake was a cesspool from its origination with an undiscovered sewer line belching into the lake for over 90 years. No wonder it has always had an
algae bloom. This is rarely spoken about in any writing about the ‘reflecting pool’. The Managed Lake is just an repeat of an earlier mistake and should not be dragged like an anvil of poor decision making into the future. The hybrid is an unfortunate example of design by committee and compromise with the best of each option unnecessarily complicated and awkwardly configured in trying to 'please all the people'. I think the environmental impact statement speaks well for itself in pointing to the estuary restoration.

The other factors examined should all be measured with environmental protection carrying the most weight. I for one will look forward to the day when the river runs through the gently swaying marine plants to the inlet and the smells of the mud and salt water waft over the bridge and up the Westbay hills.

Supporting Materials (if any): N/A

**Name (ID): Jody Disney (I-45)**

Organization (if applicable): N/A

Submission Text: I stand in support of returning Capital Lake to its original form as an Estuary as much as is possible. A combination would be my second choice.

Supporting Materials (if any): N/A

**Name (ID): Meghan Hopkins (I-46)**

Organization (if applicable): N/A

Submission Text: I support the Estuary for the health of the river and the bay and all of the species that reside here. I support the hybrid option only if the health of the waters is the priority.

Supporting Materials (if any): N/A

**Name (ID): s andrews (I-47)**

Organization (if applicable): N/A

Submission Text: stop spending money studying . enough already! take an action. let it return to an estuary.

Supporting Materials (if any): N/A

**Name (ID): Ruth Bernstein (I-48)**

Organization (if applicable): N/A

Submission Text: Keep the lakes. They are the heart of Olympia. Moreover, the trails along the lakes provide valuable exercise & recreation for many people, all year long. This is a city, not a wilderness.
Supporting Materials (if any): N/A

Name (ID): Stephen Bernstein (I-49)

Organization (if applicable): N/A

Submission Text: the lake is very important to me-i walk around it daily.

Supporting Materials (if any): N/A

Name (ID): Richard Wille (I-50)

Organization (if applicable): N/A

Submission Text: Please go with the full managed estuary plan. Return this space to nature smartly.

Supporting Materials (if any): N/A

Name (ID): Jeannine Godfrey (I-51)

Organization (if applicable): N/A

Submission Text: I am in favor of the estuary option.

Supporting Materials (if any): N/A

Name (ID): Jeremy Richtmyre (I-52)

Organization (if applicable): N/A

Submission Text: I support the hybrid model first, then the restoration and ongoing maintenance of the lake as a second option. I do not support the plan to create an estuary only, recreational uses must be considered. No specific opinions on each of the plans. Great work everyone!

Supporting Materials (if any): N/A

Name (ID): Kristen Rich (I-53)

Organization (if applicable): N/A

Submission Text: I would like it to be a managed lake so all can take part in water recreation anytime of the day. A boardwalk, dock and launch are wonderful but these should be at no cost and free for all to use. I don't think more buildings should go up along Deschutes parkway or 5th Avenue. There are already too many vacant buildings and land in the downtown core that can be utilized. Capitol Lake and its surroundings should remain as untouched as possible to retain its beauty.

Supporting Materials (if any): N/A
**Name (ID): Kate Tossey (I-54)**

**Organization (if applicable):** N/A

**Submission Text:** My grandmother used to bring me to Capitol Lake in the late 60s, and talked about what should be done to make the waterways healthier. I'm pleased to see that nearly 60 years later, this issue is finally being talked about. In my opinion, turning the area into an estuary, as it was originally, would benefit humans, fish, birds and so many other species that I don't understand the value of any other options.

**Supporting Materials (if any):** N/A

**Name (ID): Steven Hagerly (I-55)**

**Organization (if applicable):** N/A

**Submission Text:** Please adapt the alternative to restore the estuary only. Given our severely degraded local and regional aquatic habitats and imperiled salmonid species populations it is ecologically imperative to maximize habitat restoration opportunities. It would also improve Olympia’s sense of place by cultivating a more natural marine environment, and provide a golden opportunity to demonstrate and give hope to residents and visitors alike how an urban landscape with modern infrastructure can accommodate major habitat restoration. Thank you for your consideration.

**Supporting Materials (if any):** N/A

**Name (ID): Gery Gerst (I-56)**

**Organization (if applicable):** N/A

**Submission Text:** Simply, I've lived here since 1972. The Lake used to be vibrant, clear, fishable and swimmable. Now it's an eco hazard, smelly, shallow, full of bird feces, unswimmable/fishable/boatable. It was intrusive in 1951; it's now useless and still intrusive; so why have it. Man created this mess because he could, but no one wants to pay for frequent dredging; the invasive species pose a hazard, it stinks, and the dam causes drastic harm to salmon ala sealions, etc. Let's let nature do its thing; it used to be tide flats; it should be now. Salmon win, we win, snails lose. Nisqually works; Mud Bay works; the area near East Bay drive works (and no complaints there). Asian inhabitants on the once natural tide flats harvested shell fish! We don't need a mirror pond at the expense of the natural ecology. The architects vision was ruined anyway the minute the ‘mistake by the lake’ went up and it’s still there, so at least let’s fix the artificial “lake/pond” and return to nature. Yes it will smell like salt water half the time; that’s what tide flats do; I love it. We tried the pond; it’s failed; move on...and the Estuary is the least expensive option too; bonus!! Thanks for taking input

**Supporting Materials (if any):** N/A
Name (ID): Anne Brigandi (I-57)

Organization (if applicable): N/A

Submission Text: I think a hybrid sounds like the best option and the most innovative. If would be nice to still see water and not just mud flats during low tide, and the lake staying as it is seems like an issue and a waste in many ways. I would have to think that the wildlife would thrive more in a more true to nature setting like the hybrid or the estuary.

Supporting Materials (if any): N/A

Name (ID): Jill Casebolt (I-58)

Organization (if applicable): N/A

Submission Text: Hello. I wish to express support for the Estuary option to attend to the many issues that impact Capitol Lake. An Estuary is the most logical, ecologically supportive and cost effective response to a human made problem which has not been successfully resolved despite decades of effort and significant taxpayer monies spent on repeated dredging. An Estuary would provide life and health to plant and animal species, as well as long term sustainability on an ecological and economic basis. The opportunity for residents and visitors to recreate on the Estuary (birdwatching, kayaking/canoeing, fishing) would bring additional value to our city and promote human health and balance. It is time to let go of a vanity project of the past which led to such negative outcomes and cost. Please adopt the Estuary plan for Capitol Lake. Thank you, Jill Joanis Casebolt

Supporting Materials (if any): N/A

Name (ID): Doug Kehn (I-59)

Organization (if applicable): N/A

Submission Text: make the lake usable again for swimming boats no motor it would be quite a ugly eyesore if the lake was gone the lake draws people to sorunding buinesses etc bringing in money a dirty empty hole not so much if we have to pay taxes to do this lets make it nice not ugly

Supporting Materials (if any): N/A

Name (ID): Andy Suhrbier (I-60)

Organization (if applicable): N/A

Submission Text: Let it go back to being an estuary. No more studies and waiting.

Supporting Materials (if any): N/A
Name (ID): Nicolette Oliver (I-61)
Organization (if applicable): N/A

Submission Text: I believe a managed lake is the worst option for Capitol Lake. It would be a waste of money and energy and I fear would leave us no better off in the future than we are today. It should instead be an estuary for the health of our local plants and animals. As a mother of two and a school teacher, I think it is better for our children to see and learn about natural habitats and ecosystems through an estuary as well.

Supporting Materials (if any): N/A

Name (ID): Allen Alsted (I-62)
Organization (if applicable): N/A

Submission Text: How about instead of starting a massive new project and spending a bunch of our money there, you move the homeless population away from privately owned wetland and public bodies of water. I have seen them attempt Fishing and literally throwing whole bags of trash in the lake. The last thing we need to help the covid recovery is our politicians spending our money on non essential projects when a fraction of the money could be spent to have greater impact or on the infrastructure.

Supporting Materials (if any): N/A

Name (ID): John Pruka (I-63)
Organization (if applicable): N/A

Submission Text: Please retain the lake and dam (option1). There are already an excess of mudflats in and around Olympia, We don't want to see or smell another one.

Supporting Materials (if any): N/A

Name (ID): Darek Ball (I-64)
Organization (if applicable): N/A

Submission Text: We must restore the estuary. It is the will of our local tribes and the only way to protect our city from Sea Level Rise. My children deserve to live in a safe, clean and healthy Olympia.

Supporting Materials (if any): N/A

Name (ID): Deborah Russell (I-65)
Organization (if applicable): N/A
Submission Text: My vote is for the estuary. If we don't do this, nature will, eventually.

Supporting Materials (if any): N/A

**Name (ID): Gus Penley (I-66)**

Organization (if applicable): N/A

Submission Text: We should use the Estuary solution. It seems to be the most cost effective and best option for the environment. Wouldn't it bring the southernmost tip of Puget Sound onto the Capitol Campus? That would be a nice addition for the campus meant to represent the evergreen state.

Supporting Materials (if any): N/A

**Name (ID): Mary Biggerstaff (I-67)**

Organization (if applicable): N/A

Submission Text: estuary

Supporting Materials (if any): N/A

**Name (ID): Karen Longhorn (I-68)**

Organization (if applicable): N/A

Submission Text: When I moved to Olympia in 1975 I enjoyed swimming, fishing & kayaking the waters of this area, until they were understandably closed. I support returning the area to its natural state, an estuary, where visitors can learn about & enjoy nature with the least long-term financial & environmental impact. Although it wasn’t mentioned in the brief, a visitor attraction such as a salmon run fish viewing (underwater) ladder would be a real bonus.

Supporting Materials (if any): N/A

**Name (ID): Judith Hoefling (I-69)**

Organization (if applicable): N/A

Submission Text: I prefer the Managed Lake concept for a number of reasons. First it would manage lake sediment properly. It would retain the reflecting pond for the Washington State Capital. It would again allow recreation on the lake. And using the dredged sediment to develop the upper lake into a wetland sanctuary is a good ecological solution. And last, the managed lake would maintain the 1950s agreement to create a beautiful setting for our Capitol.

Supporting Materials (if any): N/A
Name (ID): Susan Davenport (I-70)

Organization (if applicable): N/A

Submission Text: I think the environmental impact statement speaks well for itself in pointing to the estuary restoration. The other factors examined should all be measured with environmental protection carrying the most weight. I for one will look forward to the day when the river runs through the gently swaying marine plants to the inlet and the smells of the mud and salt water waft over the bridge and up the Westbay hills. My strong opinion about the three options is that the full estuary restoration is the right and only choice. The most simple and elegant solution is returning the southernmost point of the Salish Sea to its original configuration. I am heartened to see the recognition of the ancient history and social justice being considered at long last. The more contemporary history of the architects that designed the lake, heritage park and walking path is of no consequence compared to this greater historical legacy. I might say the shanty town from the estuary shores that housed the diverse Asian and other POC service, oyster, lumber workers and greens gatherers is also of profound NW significance. My question is why the Olympia Yatch Club is even mentioned as a concern. That organization poisoned the south sound for more than two generations with its haul out area with toxic scraped off debris and marine paint dripping. The Club had no concern for Budd Inlet then. They can well afford to move their operations elsewhere. A natural estuary can be an example of restoration and effective filtration for the Deschutes and the bay offering walking recreation and natural history exposure. The lake was a cesspool from its origination with an undiscovered sewer line belching into the lake for over 90 years. No wonder it has always had an algae bloom. This is rarely spoken about in any writing about the “reflecting pool”. The Managed Lake is just an repeat of an earlier mistake and should not be dragged like an anvil of poor decision making into the future. The Hybrid is an unfortunate example of design by committee and compromise with the best of each option unnecessarily complicated and awkwardly configured in trying to “please all the people”. I hope better sense prevails and not special interests in the final rounds of decision making.

Supporting Materials (if any): N/A

Name (ID): Desdra Dawning (I-71)

Organization (if applicable): N/A

Submission Text: I vote for the hybrid plan. It would restore the estuary, but also continue to give us the pleasure of having a bit of a lake downtown, with walkways. Continued maintenance would of course be necessary, but that would be true of any of the plans as far as dredging is concerned. I hope this can move forward in a timely manner. This change has been long coming and is much needed! Restoring the estuary is of vital importance to our ecosystem, and all the plants and animals who also call this place their home.

Supporting Materials (if any): N/A
Name (ID): Bethe Hayes (I-72)

Organization (if applicable): N/A

Submission Text: I like the hybrid option because it is cost effective and it pleases everyone. Hopefully the invasive species can be prevented from spreading in any case. Thanks

Supporting Materials (if any): N/A

Name (ID): Jan Pinhero (I-73)

Organization (if applicable): N/A

Submission Text: Hello, Could lake be restructured as a bird sanctuary/ marsh/ wastewater treatment plant patterned after Arcata, Ca.’s on Humbolt Bay?

Supporting Materials (if any): N/A

Name (ID): Katrina Sire (I-74)

Organization (if applicable): N/A

Submission Text: I want the DELI plan. It would be a way to maintain the lake in a cost effective way. We do not want to give up on the beauty of our city. It was the original hybrid plan.

Supporting Materials (if any): N/A

Name (ID): Gail Suydam (I-75)

Organization (if applicable): N/A

Submission Text: What I liked about the hybrid and the managed lake is that there would be community use of the Capitol Lake area. I think it’s very important to develop that area as a community recreation center. My other thought is that I hope this is the last time we have to address this issue. Please take some action that moves this project to completion. Thank you for this opportunity to comment and for making it very easy to do.

Supporting Materials (if any): N/A

Name (ID): Gerald Reilly (I-76)

Organization (if applicable): N/A

Submission Text: I prefer the hybrid option that opens up the estuary but retains a smaller capitol lake. It is also important that the the mud snail issue be dealt with and the lake be available for recreational use. As much as possible of the Arc of Statehood and its county markers should be preserved. The report
is well done. I do not have the expertise to comment on its technical and analytic aspects. Given the large amount of money required to implement any of the options, we may be left by default with allowing the lake to become a fresh water marsh. This would not be ideal, but not unacceptable.

Supporting Materials (if any): N/A

**Name (ID): Kim Adney (I-77)**

Organization (if applicable): N/A

Submission Text: I think it's important to maintain the reflecting pool. I think a hybrid plan seems to be the most cost effective and the biggest bang for the buck. It will be nice to restore recreational use of the lake. A managed plan to dredge the lake and other sediment areas that place the cost onto the State and or Federal government is desirable.

Supporting Materials (if any): N/A

**Name (ID): NANCY SULLIVAN (I-78)**

Organization (if applicable): N/A

Submission Text: There is ample data. Please add our voices to the Estuary option. It is the most sustainable of the three. Nancy Sullivan, Mick Synodis, and Ana Sullivan who live on the west side of Olympia and have watched the lake degrading for years.

Supporting Materials (if any): N/A

**Name (ID): Justin Gailey (I-79)**

Organization (if applicable): N/A

Submission Text: I worry that an estuary path would create an overall unappealing aesthetic if we just add another area that is mud during low tides and would severely detract from the capitol grounds and surrounding parks and downtown core. The odor of stagnant salt water also would add to this issue. However cost is always a factor so I am not sure if the lake plan is financial feasible. My preference is to keep the lake, but a hybrid approach would be acceptable. I don't see a way the estuary model would end up satisfying anyone.

Supporting Materials (if any): N/A

**Name (ID): Margaret Chapman (I-80)**

Organization (if applicable): N/A

Submission Text: To whom it may concern, I am very excited to hear that capitol lake is being prioritized to make it healthier for the environment and for the community. I had no idea how unhealthy
the lake seems to be due to the invasive species and such. I personally only learned this past year that it was a man made lake. And after reading the report and finding out that it’s so unhealthy that it can’t currently be used for recreation or for native habitat mad me sad that it’s just been getting worse through the years. After reading about the options I think helping it turn back into a thriving Estuary sounds like the best option for the community and environment, as so often we find out nature truly does know best and the lake may be able to thrive by being influenced by the tides again. This option also sounds like it would be the most financial responsible and one of the best options for the Olympia yacht club and would allow for wonderful recreation. If I had to pick a second choice the hybrid option sounds interesting. All in all I would love to see that area of water and land begin to thrive again and helping it be more like it naturally was prior to the dam building and the lake make a lot of sense foe the environment and the community. Thank you, Margaret Chapman

Supporting Materials (if any): N/A

Name (ID): John Curtin (I-81)

Organization (if applicable): N/A

Submission Text: At least 3x per week I am at lake. My interest is maintaining enough fresh water, not brackish, for local yr around waterfowl and seasonal migratory songbirds and other birds.

Supporting Materials (if any): N/A

Name (ID): Bryan Bissell (I-82)

Organization (if applicable): N/A

Submission Text: I strongly support the estuary proposal for environmental and fiscal reasons. I lived in Olympia for many years and spent a lot of time at Capitol Lake. It’s a special place that should return to its natural form.

Supporting Materials (if any): N/A

Name (ID): Virginia McCabe (I-83)

Organization (if applicable): N/A

Submission Text: I don’t like any of the 3 proposals put forth by this study. A real useful approach is the one put forth by DELI, the hybrid model that creates a swimming area using artesian water and allowing the Deschutes to flow into an estuary as well. Olympia needs a swimming area, now the YMCA and Evergreen's pools are no longer available. There was a swimming area at one time at the lake, there is no reason this plan shouldn't be implemented. Any dredging that needs to be done can be paid for by the Yacht Club. If those folks have the money to own yachts, they can certainly pony up the fees to keep their basin clear. The DELI model is supported by most folks who have heard and read about it. The DELI
model was not mentioned in this study and I think that's ridiculous. This is a solid, popular plan that will yield a compromise that gives everyone something and the people of Olympia a swimming area!

**Supporting Materials (if any):** N/A

**Name (ID):** Lexis Bates (I-84)

**Organization (if applicable):** N/A

**Submission Text:** I went to grade school in Lacey, WA. In elementary school, I wrote a report regarding how Capitol Lake should be returned to an estuary to sustain a more natural life for the wildlife that has suffered since the lake’s creation. As a 24 year old woman, my stance still stands. The cost of revitalizing the wildlife of that body of water far outweighs the financial costs. A hybrid solution would only solve a partial problem. Full estuary return is the most appropriate answer to return the Capitol to its true glory.

**Supporting Materials (if any):** N/A

**Name (ID):** Thomas Wetherell (I-85)

**Organization (if applicable):** N/A

**Submission Text:** As a recent (~3yr) transplant to Olympia I have to say that Capitol Lake and environs looked to be a great place to paddle. I was so disappointed when I discovered that the area was closed for watersports. One need only look at cities like Bend, Or that have urban waterparks and the vibrant community that support them. While the Deschutes (in WA) does not provide the flow for whitewater activities it certainly can support seasonal recreation, and a saltwater/tidal pool would also help. In any case, I would really like to see SOMETHING done with this area to allow more public use. It could be a huge improvement and draw to downtown. Quite frankly, Olympia needs all the help it can get. Given the options from the EIS, I would choose the estuary, the hybrid, then the lake, in that oprder.

**Supporting Materials (if any):** N/A

**Name (ID):** Joe Digranes (I-86)

**Organization (if applicable):** N/A

**Submission Text:** The Capitol Lake, as is, has outlived it's lifespan, and has basically become a cesspool and an environment for a wide variety of invasive/toxic species. In essence, it is also a health hazard. NOTE: numerous warning signs around the lake regarding it's ‘toxicity.’ I strongly support restoring the area to an estuary. An estuary that will improve water quality, and thus, improve the habitat for native fish, wildlife, and vegetation - and could be aesthetically very pleasing. An estuary won't reflect the capitol building. However, with the increase of algae blooms and dead fish floating on the lake surface - there's really not much to admire.

**Supporting Materials (if any):** N/A
Name (ID): Gerald Steel (I-87)

Organization (if applicable): N/A

Submission Text: As a Professional Engineer and retired environmental attorney in Washington State and as a frequent user of the walkways around Capitol Lake, I strongly recommend that you make the Managed Lake Alternative the preferred alternative in the FEIS. I do not support removal of the Fifth Avenue Dam and Lock as this has become an important historic feature of the City of Olympia that deserves preservation. I recommend that the rest of the Managed Lake Alternative be adjusted to minimize costs and to avoid cost overruns, while maintaining the long-term viability of the Chinook Salmon runs.

Supporting Materials (if any): N/A

Name (ID): Jon Cushman (I-88)

Organization (if applicable): N/A

Submission Text: I am Jon Cushman. Our family farm is at Gull Harbor. It has been in the family for nearly 110 years. We enjoy an abundance of clams and oysters. We swim throughout the summer season. My personal concern is for water quality in Budd Inlet. If the Deschutes empties uninterrupted into Budd Inlet the noxious matter I understand comes along with that water will not settle out in the lake, which is effectively a huge settling pond. If the lake continues to be a settling pond and if the state will once again dredge the noxious spoils which settle there and dispose of them appropriately, I believe water quality in Budd Inlet will be best protected.

Supporting Materials (if any): N/A

Name (ID): Janis Rich (I-89)

Organization (if applicable): N/A

Submission Text: While I support in theory, the conversion of the lake back to an estuary, I think now, with all of the homes and businesses in place, the smell alone at low tide would be awful and detract from people wanting to be downtown. Or, renting or owning a home or business where you would be disinclined to open your windows. The latest heatwave put an exclamation point on that smell. I do like the idea of our humble lake even with its problems. I sadly promote dredging as that at least encapsulates the toxins from getting into the bay, if the dam was eliminated. There is still wildlife living here also. Thank you for your time. A very difficult issue that has taken far too long to resolve, regardless of the ultimate decision. We are not an area like Nisqually where reverting back to the estuary made complete sense. J. Rich Voter No justice, no peace.

Supporting Materials (if any): N/A
**Name (ID): Linda Rhodes (I-90)**

**Organization (if applicable):** N/A

**Submission Text:** I really think tidal flats and or estuary would be a bad choice for the beauty and economy of down town. Please do what needs to be done to keep the lake and return it to usable condition.

**Supporting Materials (if any):** N/A

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**Name (ID): Stacy Winokur (I-91)**

**Organization (if applicable):** N/A

**Submission Text:** Please restore the area to an estuary, it is really the only responsible option. Thank you.

**Supporting Materials (if any):** N/A

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**Name (ID): Scott Voltz (I-92)**

**Organization (if applicable):** N/A

**Submission Text:** I support the estuary option. The estimated construction costs are reasonable and the long term maintenance costs are lower than the other two options. The tribes support this option and I support the tribes and other social justice issues. The estuary option is a better ecological fit then the other options and will have the most positive effect on the diversity in the area. In my opinion, the hybrid alternative is unnecessarily expensive and is a political move to attempt to sway those who what a freshwater lake.

**Supporting Materials (if any):** N/A

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**Name (ID): Julie Maurer (I-93)**

**Organization (if applicable):** N/A

**Submission Text:** I am for returning the Capitol Lake ecosystem to estuarine habitat or the hybrid option. Restoring the ecosystem to its original state may undo some of the sedimentary and invasive species impacts in the area, while providing more habitat for forage fish, intertidal habitat, and other ecosystem services that benefit humans and salmon recovery.

**Supporting Materials (if any):** N/A

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**Name (ID): Victoria Fox (I-94)**

**Organization (if applicable):** N/A
Submission Text: After reading through the alternatives, I support the Estuary alternative. It seems that the most important objectives in future planning for the project area are to restore rare and disappearing estuarine habitat and to allow the Squaxin tribe to resume some of their traditional and historical uses of the area. Both of these objectives would be met by either the Estuary or the Hybrid alternatives. Between the two, the Estuary alternative would be less expensive to construct in the short term and would require less maintenance in the long term.

Supporting Materials (if any): N/A

Name (ID): Paul Meury (I-95)

Organization (if applicable): N/A

Submission Text: I would like to see implementation of either the estuary or hybrid options, preference in that order.

Supporting Materials (if any): N/A

Name (ID): Bruce Eisentrout (I-96)

Organization (if applicable): N/A

Submission Text: I was disappointed to see that all of the alternatives (except do nothing) abandon the open water of the upper two sections of the lake. I think that many people will consider the list of alternatives incomplete without an alternative that includes retention of these two parts of the lake. I think you would add to the legitimacy of the analysis by including such an alternative, even if it is shown to be expensive. If you include it, but determine that it doesn't meet the project objectives, I think some would question your objectives. The sketches of the hybrid alternative show a truly ugly structure. I can't see that enduring 7 or 8 years of construction only to end up with this is worthwhile. Grand Coulee Dam was built in 9 years.

Supporting Materials (if any): N/A

Name (ID): Lasha Steinweg (I-97)

Organization (if applicable): N/A

Submission Text: It seems that the hybrid option for Capitol Lake's future is a good alternative to either a managed lake or a return to estuary. Since the landscape of downtown Olympia was formed with a lake concept in mind, being able to compromise and have some semblance of a lake, but on a much more modest scale, might serve all purposes. If a hybrid option is not just wishful thinking.... The land and water this area 'wants' to be an estuary, so being realistic about development and maintenance of a hybrid landscape will be very necessary as we look forward to what is actually a viable option.

Supporting Materials (if any): N/A
Name (ID): John Newman (I-98)

Organization (if applicable): N/A

Submission Text: The best solution and the least cost solution is to create an estuary. There should be no Lake and no Hybrid solution. They are too expensive and do not meet a scientific analysis of good science. An estuary will last for an eternity. The other 2 proposals must be continually funded for sediment removal. We need an estuary returned to its natural state.

Supporting Materials (if any): N/A

Name (ID): L. Riner (I-99)

Organization (if applicable): N/A

Submission Text: For the last 40 years, I have been apart of the discussion concerning Capitol Lake. We own a home nearby. We need to take out the Capitol Lake Dam. We need to allow the salt water into that former lake area. Salt water will kill any invasive species. We need to kill the Zebra snail that is a terrible pest. We need to allow the salt water to follow into that area, has it had for thousands of years before white men came to this area. This will allow the salmon to swim to the Deshutes River. This will allow the silt that now fills that marsh land, to go into Budd Inlet where it has gone for a thousand years, up to now. I do not support the 'hybrid system' with the pond. It will do nothing except bring more costs to this problem. We need Buddy Inlet to be allowed into the marshland area!

Supporting Materials (if any): N/A

Name (ID): Susan Vanderburg (I-100)

Organization (if applicable): N/A

Submission Text: I support the Hybrid model. It makes total economic and environmental sense to return the basin to a natural estuary, and providing the aesthetics of a small lake at Heritage Park is a good gesture of compromise to satisfy those who desire a lake to walk around. A natural estuary will undoubtedy help juvenile salmon surmount the odds for survival and hopefully will go a long way towards ridding the lake of invasive plants and animals.

Supporting Materials (if any): N/A

Name (ID): Glen Anderson (I-101)

Organization (if applicable): N/A

Submission Text: My comment is solidly grounded in the TRUTH that 'YOU CANNOT FOOL MOTHER NATURE!' Mother Nature created this area to be an ESTUARY! Human-imposed distortions (a 'lake' or an enclosed sub-area as recently proposed) are CONTRIVED and ARTIFICIAL and CONTRARY TO
MOTHER NATURE! Restoring the estuary as naturally and authentically as possible is the CHEAPEST and MOST SUSTAINABLE solution for the mess that exists now.

Supporting Materials (if any): N/A

Name (ID): Tim Motoh (I-102)

Organization (if applicable): N/A

Submission Text: After reviewing the EIS, it is my preference to see the Hybrid option as the Management plan going forward. It appears to achieve, what I see, as the important goals for the Capitol Lake Basin without some of the more undesirable aspects of the other two options. Even with the Hybrid option, as it restores tidal flows, I am concerned about the odors that are present during low tide periods.

Also, none of the maps show maintaining the pedestrian bridge on the South side of the reflecting pool. I hope this was just a graphical error and the bridge will remain. It is a valuable recreational asset to the community.

There is concern with the transient settlement on the Northwest of the reflecting pool (and likely other areas along the Capitol Lake system). I would assume that the activities with the transient camp are likely affecting water quality and introducing pollutants. I did not see any assessment of the impact of the human waste and chemical use of this camp. It may be small or negligible, but it is a concern I have. The Capitol Lake systems issues have been left unaddressed for two ling and I am glad to see this important step taken.

Supporting Materials (if any): N/A

Name (ID): Linda Vandiver (I-103)

Organization (if applicable): N/A

Submission Text: I will not pretend to have read every bit of the EIS draft. I did read the entirety of the three proposed alternatives. I favor the hybrid plan. First, I naturally have an inclination toward a compromise position. After reading the proposals, I feel that in this instance the compromise accomplishes the most important aspects of both other plans. To my mind it is essential that we restore use of the lake. By creating a lake that can support boating and fishing while still removing the dam and creating a partial estuary seems the most sensible approach to me. Originally I favored the existing lake version, but I can see where the hybrid is actually better and therefore and am choosing it as the best option for the lake and the city of Olympia.

Supporting Materials (if any): N/A
**Name (ID): Kathleen Emmett (I-104)**

**Organization (if applicable):** N/A

**Submission Text:** It's time for the dam to go. It's also time for us to learn to appreciate the way natural systems work. I strongly support returning the Lake to the natural estuary it was. Thanks for all your work on this. Kathleen

**Supporting Materials (if any):** N/A

**Name (ID): Ellen Zito (I-105)**

**Organization (if applicable):** N/A

**Submission Text:** I support a return to the natural state of the mouth of the Deshutes river as an estuary. The lake is gross and mud full of essential life would be much better than a lake full of invasive snails.

**Supporting Materials (if any):** N/A

**Name (ID): Francesca Ritson (I-106)**

**Organization (if applicable):** N/A

**Submission Text:** I would like to see the estuary restoration option put in place. The lake itself is unusable and a hinderance for native wildlife. I have never see a reflection of the capital building in the lake. All around the estuary option is the most environmentally sound and while I will miss the walk around the lake, I imagine a walk along the estuary will be equally congenial.

**Supporting Materials (if any):** N/A

**Name (ID): Caroline Lehman (I-107)**

**Organization (if applicable):** N/A

**Submission Text:** I regularly walk beside the lake I prefer the Managed Lake or the Hybrid Option.

**Supporting Materials (if any):** N/A

**Name (ID): Caroline Lehman (I-108)**

**Organization (if applicable):** N/A

**Submission Text:** I regularly walk beside the lake I prefer the managed lake or the hybrid option.

**Supporting Materials (if any):** N/A
Name (ID): Madeline Bishop (I-109)

Organization (if applicable): N/A

Submission Text: I would like you to quantify the flood relief or lack of for the different alternatives methods. I specifically want to know how and how much the reflection pool will help. I saw some references in 7.1.1 that the Hybrid alternative would provide some flood reduction provided by the reflecting pool barrier. I do not feel the EIS gave evidence for this benefit. What would be the dollar cost estimate of reduced flood damage?

Supporting Materials (if any): N/A

Name (ID): Madeline Bishop (I-110)

Organization (if applicable): N/A

Submission Text: I would like more detail about the difference for the salmon in the hybrid vs the estuary alternative. Would the salmon be just as ‘free’ and healthy in the hybrid alternative? Reference 3.3 Analysis of impact.

Supporting Materials (if any): N/A

Name (ID): Madeline Bishop (I-111)

Organization (if applicable): N/A

Submission Text: Reflecting Pool The Executive Summary mentions saltwater and freshwater possibilities for the reflection pool. 'Under the Hybrid Alternative a barrier would be constructed to retain a smaller saltwater reflecting pool in the North Basin...A freshwater reflecting pool concept was also evaluated; refer to Appendix E for more detail on this analysis... If a freshwater reflecting pool were chosen over a saltwater reflecting pool, it would require active management to avoid impacts to public health and visual quality.' My question is how would this decision be made and I'm asking you to be clear about the cost difference between salt and freshwater reflection pool. Table 7.1.1 shows that the cost of the hybrid over the estuary would be at least $46M more for planning, and $70M more for construction plus maintenance over 30 years. The reflecting pool would cost $116 million. Also, as you noted in the Executive Summary, if there was a freshwater pool, there would be the additional requirement of active management to avoid impacts to public health and visual quality. I think people who want a community feature like the reflection pool need to know the cost.

Supporting Materials (if any): N/A

Name (ID): Matt Newton (I-112)

Organization (if applicable): N/A
**Submission Text:** I have lived in Olympia for 20 years and currently a school teacher at Chinook Middle School. I have been following Capital Lakes decline since we first moved here. Back then, I knew that removing the damn would solve all of the problems. It cost the least. It will not make a swamp. Anyone that has been to the Nisqually Wildlife Preserve knows what the area could be. Repairing the area to its natural position would bring thousands of people to the area and make Olympia an example of making the hard corrective decisions. For me and my family, we fully support the estuary option.

**Supporting Materials (if any):** N/A

**Name (ID):** George Kleinknecht (I-113)

**Organization (if applicable):** N/A

**Submission Text:** As a taxpaying citizen of our great state, I am against the higher long-term cost that the state would be responsible for paying under the 'Managed Lake' scenario (Table ES.4 Planning-Level Costs Summary Table). The other scenarios would provide better benefits to salmon as well - how much is the state already paying to help restore our diminishing salmon runs? Let's vote for More $avings and more salmon! One of the saltwater options please, preferably the real estuary and not the hybrid.

**Supporting Materials (if any):** N/A

**Name (ID):** Monica Artz (I-114)

**Organization (if applicable):** N/A

**Submission Text:** I read the draft EIS and I'm pleased to see the planning that's been done so far, and relieved to see the recreational opportunities that would exist. While change is hard, I am in favor of the Estuary plan. Estuaries are critical and undervalued. The Hybrid plan would be an acceptable alternative.

**Supporting Materials (if any):** N/A

**Name (ID):** Amy Evans (I-115)

**Organization (if applicable):** N/A

**Submission Text:** I am wondering if there was consideration in the hybrid option for landscape island screening along the wall, to mitigate the visual impact. Specifically on the marathon park side. Thanks for working on this.

**Supporting Materials (if any):** N/A

**Name (ID):** Judy Morgan (I-116)

**Organization (if applicable):** N/A
Submission Text: As a native Olympia, all my life I have viewed Capitol Lake as the ‘curb appeal’ of our town. I worked for the State for 30 years, so the lake is a symbol of our capitol’s presence. I would like the see Capitol Lake restored to it’s glory - so leave it as a lake! Restore the lake for its beauty as the reflecting pool the 1911 plan advised. Dredge it and clean it up so swimming can resume. For some reason, the planners have never made our lake and shores the priority that so many other places have - they are always left out. Keep Capitol Lake as is - clean it up and make it shine! To have it look like Mud Bay in the middle of downtown would be sickening.

Supporting Materials (if any): N/A

Name (ID): Kristen Larsen (I-117)

Organization (if applicable): N/A

Submission Text: I am writing to express my support for the Capitol Lake estuary restoration proposal. Environmental impact statements show that estuary restoration would improve water quality, manage sediment accumulation, improve ecological functions, and enhance community use of the resource. The lake was created with no attention to the many environmental issues it now causes. The best and most future facing solution would be to return the lake to an estuary.

Supporting Materials (if any): N/A

Name (ID): Cheryl Biale (I-118)

Organization (if applicable): N/A

Submission Text: I strongly support the estuary alternative as the solution. Restoring the estuary would return it to its' natural environment benefitting numerous species. Please consider this as the best long term alternative.

Supporting Materials (if any): N/A

Name (ID): Betty Lott (I-119)

Organization (if applicable): N/A

Submission Text: I am in favor of the hybrid estuary alternative. It retains a sizable reflecting pool feature which is one of my favorite features of the current arrangement, it includes a trail across the middle of the north basin allowing visitors to enjoy both the reflecting pool and a natural estuary feature. It also gets rid of an entirely unnecessary and ugly dam. The reflecting pool feature is especially important to me since allowing that basin to return to entirely estuary would just create an ugly mud flat right in the center of downtown.

Supporting Materials (if any): N/A
**Name (ID): Nancy Peterson (I-120)**

**Organization (if applicable):** N/A

**Submission Text:** All of us who love this area and call Olympia our home (even those of us outside the city) appreciate the Capital Lake space. It’s past time to resolve the issue of its future. I like the DELI approach. It is a compromise. We need to have compromises in our society today. It addresses both sides of the issue in a well thought out plan. Let’s not over think this. That leads to more costs, inefficiency and inaction. DELI is well thought out, and comprehensive, with many details in place. Please go forward with a sense of cooperation and a listening heart. Nancy Peterson

**Supporting Materials (if any):** N/A

**Name (ID): Chris Strode (I-121)**

**Organization (if applicable):** N/A

**Submission Text:** I prefer the option of removing the dam, adding a round-a-bout at deschutes/5th ave to go south on deschutes directly and lastly making a swimming area out of the eastern portion of the main capital lake pool with a demarcation moat with bay water on one side and artesian well filling the swimming area.

**Supporting Materials (if any):** N/A

**Name (ID): Lewis Cox (I-122)**

**Organization (if applicable):** N/A

**Submission Text:** We can let go of the dam and allow the estuary to return to its natural course. Our own Mud Bay is one of the most beautiful places on Earth. We could allow that to happen downtown, too.

**Supporting Materials (if any):** N/A

**Name (ID): Matthew Longenbaugh (I-123)**

**Organization (if applicable):** N/A

**Submission Text:** I prefer the Estuary Alt, in order to restore a semblance of estuarine function to this site. These important ecological functions have been substantially reduced by human alteration of coastlines in Puget Sound over the past century. These functions are necessary for early life history of local salmonid populations.

And please ensure this Alt factors in latest projections of high tide flooding; cf following paper: Article Published: 21 June 2021, Nature Climate Change Rapid increases and extreme months in projections of
United States high-tide flooding. https://www.nature.com/articles/s41558-021-01077-8. Expect greater levels and frequency of high tide flooding likely starting in a few decades in Puget Sound.

**Supporting Materials (if any):** N/A

**Name (ID): Cheryl Fowble (I-124)**

**Organization (if applicable):** N/A

**Submission Text:** I choose the hybrid alternative because this will retain the look of a lake although officially it would be salt water reflective pool. I also like the hybrid alternative due to work on re-establishing native habitat areas. Thank you.

**Supporting Materials (if any):** N/A

**Name (ID): Jon Kime (I-125)**

**Organization (if applicable):** N/A

**Submission Text:** The lake should be brought back to its original condition as a lake. It should be dredged so the weeds and algae are under control and returned to the public for recreation. The dream of returning the lake to its 'natural' state is silly. There is nothing natural about the entire area. The best we can do is manage it.

There is a reason the lake was created from the original mudflat, it smelled terrible and was a constant flood danger. 'Estuary' is a pleasant word for salt water swamp. I am a realist, politics are a real and powerful force in any decision, so if scientific fact is outweighed by political forces let's examine the politics for a moment. Downtown Olympia is quickly becoming developed with condominiums and apartments. Judging by the rents the people moving in have serious resources. Within a short period of time do you honestly believe these people will tolerate the stink of an 'estuary'? Take a quick look at Mud Bay, does anyone want to jog around Mud Bay, or picnic next to it? Please, let's move past short term expediency.

**Supporting Materials (if any):** N/A

**Name (ID): Dianne Hurst (I-126)**

**Organization (if applicable):** N/A

**Submission Text:** As a member of the Olympia Yacht Club, I'd like further clarification regarding what the estuary solution will mean for the Yacht Club. Will we be inundated with silt and will the Yacht Club have to relocate? I understand that something has to be done with the lake, but would like a clarification on how this will impact me personally. Thank You.

**Supporting Materials (if any):** N/A
Name (ID): Jeanette Laffoon (I-127)

Organization (if applicable): N/A

Submission Text: I appreciate the attempt to measure the economic impact on downtown business development. But there does not seem to have been much consideration of the impact on existing small businesses that are the heart of downtown Olympia - especially during the 4-7 years of anticipated construction (of the estuary and hybrid plans). I am concerned that construction disruptions in traffic and noise and the temporary (4-7 year?) removal of 5th Ave will have a chilling effect on downtown customer traffic. Many small and longtime businesses operate on a very slim margin, and even a minor reduction in walk-in customer traffic can tank them. This is evident from the number of downtown businesses that have closed their doors during COVID. Perhaps I am being short-sighted, but some of the best things about downtown Olympia are the unique locally-owned boutiques and restaurants. I would hate to lose our fun funkiness and am disappointed that the EIS does not address the economic impact on this aspect of our lovely little city.

Supporting Materials (if any): N/A

Name (ID): Jeanette Laffoon (I-128)

Organization (if applicable): N/A

Submission Text: 366% increase in sediments at my home!? I live on a houseboat in Martin Marina. At low tide my home is already close to sitting on the bottom. Due to a DNR settlement agreement, I am prohibited from moving my houseboat to another marina. If increased sediments in Budd Bay end up closing Martin Marina, my investment in my home would be lost. On the verge of retirement, this would impoverish me. Are there any provisions in the plan to provide for people like me (and the owners of the marinas and OYC) who have invested in the Budd Bay waterfront, should the estuary or hybrid plans be selected?

Supporting Materials (if any): N/A

Name (ID): Dave Nicandri (I-129)

Organization (if applicable): N/A

Submission Text: Dear Planners: First, let me congratulate you all on reaching this important stage. I found the draft EIS well designed and relatively easy to review, notwithstanding its voluminous nature. But I write more particularly to address what I consider the woeful lack of attention and critical analysis given to the South Basin in the draft EIS. I have to admit, I'm not surprised. As a former member of the Tumwater City Council, I'm long familiar with the privileging of the City of Olympia's interest within the local intergovernmental nexus. Throughout the draft EIS the South Basin, the only part of the study area that is located exclusively within the City of Tumwater, is, at best, considered as merely an annex to the middle basin, not in its own right with its own distinct problems needing attention and mitigation. Let me offer a checklist of issues that need to be addressed in the development of the final EIS.
As a historian, I find it truly astonishing that a potential historic district—the so-called Deschutes Basin Historic District, involving, seemingly, the modern Capitol Lake infrastructure—gets infinitely more attention than the existing Tumwater Historic District, including its signature aspect—the historic Brewery complex. I say the following without hesitation: With the single exception of the west capital campus, crowned by the Legislative Building, there is not a single historic aspect of the built environment in Thurston County, and indeed few in entire state of Washington, with greater iconic significance than the old Brewhouse Tower and adjacent buildings. The draft EIS studies, at considerable length, what the various options might portend for the development of recreational, cultural and economic interests in downtown Olympia, but not a word as to how a new river/lake/estuary option might improve the practicability of the restoration/rehabilitation or re-use of the historic Tumwater brewery, including access thereto.

Relatedly, the draft reports that there are no documented cultural properties in the project area. This statement stands, seemingly, without awareness of the ancient shell midden located below the falls. The archeological investigation of this site was conducted by the former director of the State Capital Museum, Derek Valley. I believe a report of that excavation is on file with the Department of Archelogy and Historic Preservation. State Law requires the safeguarding of the location of such resources, for reasons as readily conceived as imagined. Perhaps planners are aware of the study, for which Mr. Valley was the principal investigator, but shielded the matter from public view, again, consistent with state law. In any event, the project team should consult with that report, or Mr. Valley directly.

Similarly, the draft plan section on Visual Impacts ignores the aesthetic and allied recreational aspects of what a revivified South Basin can mean in terms of waterborne access to, or appreciation of, the intersection of a freshwater waterfall into an arm of the sea. One has to travel hundreds of miles north, into the wilderness of the central British Columbia coast, to find the next example of this phenomenon along the Pacific Slope of North America. Indeed, combining this point with those above, hundreds of pages in the draft document are devoted to the question of a watery reflection of the Legislative Building in the North Basin, yet, not a single mention is made of what was once considered a view prospect of the first order—the wide expanse of open water that used to exist at the foot of the falls bordering the old brewery complex. In effect, the South Basin is the only one of the three wherein the deleterious aspects of the dam/lake construction is now to be considered a permanent feature of the landscape. In no option is there a prospect for any dredging of the South Basin; no remediation except a pitiful stretch of new boardwalk.

The other grievous oversight in the plan is found in the recreational analysis. There are existing City of Tumwater and regional transportation plans that call for a linkage of the evolving Deschutes River corridor bike trail system with the existing system that extends to Woodard Bay. The latter, of course, commences at the Olympia city center 1-5/Henderson Boulevard interchange, less than a mile from the South Basin. The final EIS should consider using the occasion of a new Lake/River/Estuary plan to link these bike/trail systems. The most viable option, to my eye, is to use the notch created by the 1-5 undercrossing of Capitol Way. Of course, to link the Tumwater stretch with the Olympia one, a bike/pedestrian crossing between Tumwater Historical Park and the old brewery complex will be necessary. The obvious design devise to achieve this vision is a structure which evokes the railroad
crossing that was once located there. This feature itself once figured prominently in the former aesthetic aspect the south basin had prior to the construction of the 5th Street Dam and the creation of Capitol Lake.

Of course, pursuant to one of my major themes, though the South Basin is an afterthought when it comes to remediation, 12 of the proposed construction staging will take place there. I thank the team in advance for its consideration of the matters I have raised in this letter.

Supporting Materials (if any): N/A

**Name (ID): Richard Hurst (I-130)**

Organization (if applicable): N/A

**Submission Text:** I would like to see the current lake properly dredged and cleaned up. That will leave us with the beautiful lake, swimming, and boating again. It will also not dump huge amounts of silt into Budd bay.

Supporting Materials (if any): N/A

**Name (ID): Jon Kime (I-131)**

Organization (if applicable): N/A

**Submission Text:** The lake should be brought back to its original condition as a lake. It should be dredged so the weeds and algae are under control and returned to the public for recreation. The dream of returning the lake to its “natural” state is silly. There is nothing natural about the entire area. The best we can do is manage it. There is a reason the lake was created from the original mudflat, it smelled terrible and was a constant flood danger. “Estuary” is a pleasant word for salt water swamp. I am a realist, politicks are a real and powerful force in any decision, so if scientific fact is outweighed by political forces let's examine the politics for a moment. Downtown Olympia is quickly becoming developed with condominiums and apartments. Judging by the rents the people moving in have serious resources. Within a short period of time do you honestly believe these people will tolerate the stink of an “estuary”? Take a quick look at Mud Bay, does anyone want to jog around Mud Bay, or picnic next to it? Please, let’s move past short term expediency.

Supporting Materials (if any): N/A

**Name (ID): Faith Addicott (I-132)**

Organization (if applicable): N/A

**Submission Text:** Estuary please! We need to honor the land, the original purpose of the estuary and delta to feed species and enrich the ecosystem. We have been talking about this for years, and we know what is best for the land, the environment, and the people. We need to restore, not rebuild.
Name (ID): Jennifer Riedmayer (I-133)

Organization (if applicable): N/A

Submission Text: I am in support of restoring the estuary. Given the evidence of climate change and impact of sea level rise, in my opinion, the estuary restoration is the best solution and makes the most financial sense.

Name (ID): Susie Greg Knight (I-134)

Organization (if applicable): N/A

Submission Text: I was born in Olympia in the early 1950's and I've lived here for all but a couple of years. I remember seeing people waterskiing on Capitol Lake, fishing from the shore, and swimming at the park near Water Street. I swam there myself a few times until the word got out that the water was unhealthy. I also recall repeated efforts to clear the lake of debris and silt. One summer a helicopter lifted logs out of the lake. Converting an estuary to a lake seems like a long, losing battle. The July 4, 2021 article in the Olympian had a photograph of Mud Bay 'Experts say it is close to what Capitol Lake area would look like if the dam were removed.' The photo shows a discarded tire and leads one to believe the lake area would look like a mud flat with rubbish all the time. Pretty dismal and not a true picture. Mud Bay is lovely at different times during the day. The article states that people are concerned about the unpleasant smells that come with mud flats. I don't recall any foul odors at Mud Bay and I never smell bad odors at the Billy Frank, Jr. Nisqually Wildlife Refuge. I think the mud flats at Nisqually are interesting and attractive. I do recall bad smells in Budd Bay, but those were related to sewage from humans living nearby. Tam in favor of the estuary. Without human interference, this is an estuary. An estuary attracts birds and provides a natural environment for other life. If people could open their minds, a beautiful, natural estuary in an urban town may be a unique, positive addition to our community. It could be something that people want to see and understand. A reflecting pool is there to reflect and honor the capitol building - an artificial creation. (I have yet to see the capitol building actually reflected in the pool.) An estuary honors the natural world and encourages people to look at and understand the meeting of salt and river waters.

Costs and maintenance will be necessary in any event. The yacht club - why build something like that in an estuary? Seems like a mistake. Very few of us use the yacht club. I'm not happy to pay for the maintenance of the yacht club. Yes, it has been there for a while, but the estuary was there for thousands of years before a group of people decided to create an artificial place for their boats. Maybe it is time to move the yacht club to a deeper water location. My vote goes for an estuary, a unique and interesting environment within the city. Not many cities have a beautiful estuary right downtown.

Supporting Materials (if any): N/A
Name (ID): Karin Landsberg (I-135)

Organization (if applicable): N/A

Submission Text: Thank you for preparing this analysis of the alternatives for Capitol Lake. Having reviewed the executive summary, I would like to see the Estuary alternative moved forward because it appears to best address Tribal/EJ issues and to be most resilient to sea level rise.

Supporting Materials (if any): N/A

Name (ID): Lin Oleary (I-136)

Organization (if applicable): N/A

Submission Text: I have lived in Olympia for 34 years and love it, but I am distressed both the degradation of Capitol Lake and by the lengthy process to address the problems. How many studies/proposals/mediated sessions have there been over the years, with no change in the situation? I am hopeful that this current project will lead to some resolution of this thorny problem. I would like to see the hybrid solution approached seriously, recognizing that it is expensive and takes the most time. It would be lovely to see some of the reflecting lake preserved, but also allowing some tidal fluctuations in the estuary. I walk around the lake frequently and would love to see the new walking areas and boardwalks. And having some recreation back on the lake would be wonderful. Thank you for your efforts on this immense, important project.

Supporting Materials (if any): N/A

Name (ID): Ann Chenhall (I-137)

Organization (if applicable): N/A

Submission Text: I think this project needs to be a shining example of environmental responsibility for the rest of our state and nation. Washington State is investing in cleaning up streams, creeks, and rivers to aid in salmon habitat restoration. This is happening throughout our state. Olympia is more than just a city, we are the capitol of a green state and should set an example. When I attended the zoom meeting on July 15, I became aware of 3 options the draft EIS has listed. I believe we will need to compromise between the extremes to get anything done. My greatest fear is that once again NOTHING will result from all our efforts when we become deadlocked. Therefore I think it best to consider the option I have heard the least about: the hybrid that would give us a lake over by Heritage Park and a free flowing estuary with the outdated dam removed. I would like to know more about the new lake being fed by fresh underground water that is available due to the unique feature of natural artesian springs. We need to come up with a solution that brings our community together this time. I speak for myself, and am an active member of the organizations I listed. Ann Chenhall, annlc325@gmail.com

Supporting Materials (if any): N/A
**Name (ID): John Parry (I-138)**

**Organization (if applicable): N/A**

**Submission Text:** We support the managed lake option. The northern reflecting pond know as Capitol Lake is one of the most beautiful sites in Olympia. Hundreds of walk around the lake each day. To restore the lake for recreational use would would be a huge benefit for the residents of Thurston County. Why the G.A. stopped maintaining the lake over 30 years ago is mind boggling. To resume regular maintenance and bring it back for recreational use would be wonderful.

**Supporting Materials (if any): N/A**

**Name (ID): Nancy Zabel (I-139)**

**Organization (if applicable): N/A**

**Submission Text:** This has been long in coming! Thank you for all the hard work and the attention to detail. The view from my home is of Capital Lake. I had to separate my love of the view and the love of history and wildlife for our community's future. I have felt strongly for the Hybrid option since our early Sounding Board meetings. It recognizes the value of our wildlife ability to enjoy it. Allowing the natural tides of this waterway is important but won't always provide the best view. Using this lake with our friends and family is also important. Boating, possibly swimming and the beauty of the lake is first. Walkways and historical and wildlife markers will teach us about this land. It's the best bang for our buck.

**Supporting Materials (if any): [I-139_Zabel.pdf]**

**Name (ID): Sharon Graham (I-140)**

**Organization (if applicable): N/A**

**Submission Text:** I have reviewed the plans and walked around Capital Lake, also reviewing diagrams around the lake. I recommend the hybrid plan as my number one choice of plans.

**Supporting Materials (if any): N/A**

**Name (ID): Roger Brittingham (I-141)**

**Organization (if applicable): N/A**

**Submission Text:** My wife and I are totally discouraged and disappointed with all the talk of turning what used to be a beautiful lake into mud flats. The lake used to be a focal point for Olympia. Decades ago, people would come down town to swim, and hang out by the lake. Will anyone come downtown to visit mud flats (just in case you are unsure, the answer in no)? The same people that want mud flats must have driven on East Bay Drive or seen Mud Bay (there is an obvious reason it is called that) when the tide
is out. Please tell me anything in our region that is uglier. Please spend the money needed to restore Capitol LAKE.

Supporting Materials (if any): N/A

Name (ID): Karen Knudson (I-142)

Organization (if applicable): N/A

Submission Text: I am opposed to the estuary option for what is currently Capitol Lake. We already have the unattractive mud flats of Mud Bay, as well as the creation of the newer estuary at what is now the Billy Frank Wildlife Refuge. The mud flats often stink at low tide - merchants and visitors should not have to cope with that smell. There's plenty of the mud flat area near the marina. There's a beauty to the lake in front of the Capitol.

It is a wonderful walk to circumnavigate the lake. I would like to see the continued tourism connected with Lakefair - an event that would be rather pointless without a lake. The reflection of the Capitol, as well as the fireworks helps to make Olympia special. It would be wonderful if boating could return to the lake. I feel the cost estimates are slanted, and do not take into account the impact of tourism. I am uncertain if a freshwater lake would be better than a saltwater.

Changing to salt might greatly impact the bats. Has anyone done a study of this impact? Bats are important - are there alternatives for them? On the other hand, salt might take out some of the invasive species infesting the lake now. But I am decidedly opposed to turning the lake into an estuary. Sincerely, Karen Knudson

Supporting Materials (if any): N/A

Name (ID): Susan Todd (I-143)

Organization (if applicable): N/A

Submission Text: I strongly support allowing the lake to return to an estuary. I believe this will contribute to a healthy ecosystem. I could support a hybrid solution but prefer the estuary.

Supporting Materials (if any): N/A

Name (ID): Charlie Ford (I-144)

Organization (if applicable): N/A

Submission Text: I appreciate something finally being done about this. Please fix the capitol lake area.
Name (ID): Patricia Holm (I-145)

Organization (if applicable): N/A

Submission Text: We should try and return this area to more of what is what before humans came and changed to an artificial lake.

Supporting Materials (if any): N/A

Name (ID): Ralph Blankenship (I-146)

Organization (if applicable): N/A

Submission Text: Save the dam. Dredge the north and central lake sections. Our forefathers called for the creation of the reflection lake. We do not know better. Any who have viewed the beauty of the reflections of our capital, Lakefair, the forest, and the city know what our forefathers wished for this former resource that is now choked with weeds and mud. The quality of the water could be improved with enforcement of proper farm practices upstream and onsite storage of contaminated water from residences and roads along the route of the river & creek. Save the Lake!

Supporting Materials (if any): N/A

Name (ID): Margaret Holm (I-147)

Organization (if applicable): N/A

Submission Text: The hybrid approach seems to meet the desires of most of the residents. It is a shame that a whole generation of Olympians have not been able to enjoy a lake.

Supporting Materials (if any): N/A

Name (ID): Patrick Stegner (I-148)

Organization (if applicable): N/A

Submission Text: Hi, I own 731-733 4th ave w Olympia, wa 98502. This new road crosses over my property. The bigger concern, this road appears elevated. Will it impede my view of the lake? Currently I have a beautiful view. You can imagine I would not want to look out my window at an elevated road blocking my view of the beautiful lake

Supporting Materials (if any): N/A

Name (ID): Annie Cubberly (I-149)

Organization (if applicable): N/A
Submission Text: It is time to remove the 5th Ave Dam! show some leadership in favor of a healthy estuary. The lake is a cesspool, an embarrassment for Olympians. We need to improve water quality, improve viability for fish and other creatures. We can manage the sediment & develop a lovely healthy estuary for people, plants and birds. Remove the dam and make Olympia and environmentally healthy & beautiful place to call home & attract tourists.

Supporting Materials (if any): N/A

Name (ID): Jacqueline Stone (I-150)

Organization (if applicable): N/A

Submission Text: I vote for the hybrid model! Thank you,

Supporting Materials (if any): N/A

Name (ID): Emily Waugh (I-151)

Organization (if applicable): N/A

Submission Text: I am in favor of the Estuary Alternative. Thank you so much for your hard work.

Supporting Materials (if any): N/A

Name (ID): Brenda Paull (I-152)

Organization (if applicable): N/A

Submission Text: The removal of the 5th Avenue dam will improve Capitol Lake - return of fish, recreation fun and the cost is the least of all the proposals.

Supporting Materials (if any): N/A

Name (ID): Eric Valley (I-153)

Organization (if applicable): N/A

Submission Text: o far, everything that I have read in the draft EIS and elsewhere on this site completely misses the point, which is this: You, the city and the people of Olympia, unnecessarily and unacceptably altered the waterfront, altered the natural resource, and altered the natural state of critical habitat. Stupid, stupid, stupid, from the very beginning. You need to undo it all and return it to the natural estuary that it was, that it always should have been, and that it should be again.

Supporting Materials (if any): N/A
**Name (ID): Jason Holoch (I-154)**

**Organization (if applicable):** N/A

**Submission Text:** It should be returned to it's natural habitat: estuary. Thank you.

**Supporting Materials (if any):** N/A

**Name (ID): Brian Reiter (I-155)**

**Organization (if applicable):** N/A

**Submission Text:** Treat the lake for the invasive plant species so it can open back up for fishing and recreation! Do NOT turn this back to an estuary!

**Supporting Materials (if any):** N/A

**Name (ID): Steven Byers (I-156)**

**Organization (if applicable):** N/A

**Submission Text:** I favor allowing the area to become a more natural estuary.

**Supporting Materials (if any):** N/A

**Name (ID): Erich Brown (I-157)**

**Organization (if applicable):** N/A

**Submission Text:** I support an estuary for Capitol Lake.

**Supporting Materials (if any):** N/A

**Name (ID): Matt Bradley (I-158)**

**Organization (if applicable):** N/A

**Submission Text:** NZ Mudsnail Concerns. I am a member of the Olympia Yacht Club (OYC) and have a boat moored there and will be moving to Olympia shortly. I am also a professional biologist and understand selection pressure on organisms that changes their ability to adapt to originally adverse environments by somatic and germ line mutations. After hearing your presentation to the OYC, I became concerned about the likelihood of mudsnails becoming established in Budd Inlet to the detriment of the native organisms living there, the ecology of the inlet, as well as to the boats moored there. I have done a literature search and have become even more concerned than I was after your presentation. Here is what I found: 1. Salinity in Budd Inlet is 2/3 seawater, or 22.7 ppt. 2. ‘Our results show that the Columbia River snails were more tolerant of acute salinity stress with the LC50 values...
averaging 38 and 22 Practical Salinity Units for the Columbia River and freshwater snails. This publication is referenced below. 3. Since there is moderate salinity in Capital Lake and basins already, the snails are already mutated to tolerate that level. Once there are large numbers of snails coming into the Inlet on a continuing basis, they will further mutate to thrive in a 22.7 ppt or even higher salinity level. They could continue migrating up the Inlet to contaminate the entire Puget Sound with only 28.5 ppt salinity. Note that 50% of the Columbia river snails tolerated 38 ppt salinity, which is far above Puget Sound and Budd Inlet levels. Mudsnail mutation and adaptation will no doubt occur to 28.5 ppt salinity, opening the Sound and Salish Sea to colonization. 4. Since mudsnails cling to boat surfaces and multiply to prodigious biomass, boaters in the Sound will regret what likely will happen. 5. My recommendation is to do everything you can to keep mudsnails out of Budd Inlet and Puget Sound. While I agree an estuary would be a nice to have, but the almost certain mudsnail disaster trumps that aesthetic. 6. All of this sounds like an ecological disaster waiting to happen! I doubt that's what you want! Salinity adaptation of the invasive New Zealand mud snail (Potamopyrgus antipodarum) in the Columbia River estuary (Pacific Northwest, USA): Physiological and molecular studies. Aquatic Ecology. By: Marshal Hoy, Bruce L. Boese, Louise Taylor, Deborah Reusser, and Rusty Rodriguez. https://doi.org/10.1007/s10452-012-9396-X

Abstract
In this study, we examine salinity stress tolerances of two populations of the invasive species New Zealand mud snail Potamopyrgus antipodarum, one population from a high salinity environment in the Columbia River estuary and the other from a fresh water lake. In 1996, New Zealand mud snails were discovered in the tidal reaches of the Columbia River estuary that is routinely exposed to salinity at near full seawater concentrations. In contrast, in their native habitat and throughout its spread in the western US, New Zealand mud snails are found only in fresh water ecosystems. Our aim was to determine whether the Columbia River snails have become salt water adapted. Using a modification of the standard amphipod sediment toxicity test, salinity tolerance was tested using a range of concentrations up to undiluted seawater, and the snails were sampled for mortality at daily time points. Our results show that the Columbia River snails were more tolerant of acute salinity stress with the LC50 values averaging 38 and 22 Practical Salinity Units for the Columbia River and freshwater snails, respectively. DNA sequence analysis and morphological comparisons of individuals representing each population indicate that they were all P. antipodarum. These results suggest that this species is salt water adaptable and in addition, this investigation helps elucidate the potential of this aquatic invasive organism to adapt to adverse environmental conditions.

Supporting Materials (if any): N/A

Name (ID): Paul Lambert (I-159)

Organization (if applicable): N/A

Submission Text: My name is Paul Lambert. I have lived in Olympia all my life and I am encouraging Enterprise Services to choose the Dual Estuary/Lake Idea for how to fix the polluted Capitol Lake problem. The lake cannot be used as it is now. I grew up in Olympia when the lake was usable. When people could enjoy the lake. Now it's just a polluted place to walk by. It's just a reflecting pool for the capitol and that's not enough. An estuary could be a viable and vital place for people, animals and plants. The DELI option could be something that would make most everyone happy. A usable lake portion for
the lake only people, an estuary and possibly and improvement for the returning salmon. Maybe we could also deal a blow to the New Zealand Snail fiasco. Let’s help bring the health back to the Deschutes River basin and take out the dam that should never have been built.

Supporting Materials (if any): N/A

**Name (ID): Deborah Pattin (I-160)**

**Organization (if applicable): N/A**

**Submission Text:** After looking at the virtual town hall, reading summaries of the findings, and listening to the presentation to the Port of Olympia Commissioners (7/1921), I am in favor of the hybrid model. I do want to make sure that whichever model is adopted does include continual funding for dredging so that the marinas and shipping canal don't fill in. I don't really like the looks of the retaining wall but understand after listening to the Q & A during the Port of Olympia Commissioner presentation that earthen berms would not be earthquake-proof. I also hope that there will be a beach added so that swimming can resume once the water quality has improved. Thanks I do hope that

Supporting Materials (if any): N/A

**Name (ID): John Bosshart (I-161)**

**Organization (if applicable): N/A**

**Submission Text:** I am a resident of Thurston county and I would like to see the Deschutes River restored to it's natural pathway that allows for tidal flow and removes the dam or control of flow. The 'lake' is not an attractive part of Olympia as the 'lake' is for the most part filled in and acting as a retention or settling area for runoff debris and silt from the river. If the impounded area / lake was allowed to become tidal naturally and grow native plants and trees then a city park area could be established. It is a fact that the natural debris/silt from the deschutes would end up in the harbor but that is the natural course of the river. The boat moorage and dock areas would have to be dredged occasionally but that occurred before the lake was established.

Supporting Materials (if any): N/A

**Name (ID): Judy Kennedy (I-162)**

**Organization (if applicable): N/A**

**Submission Text:** From a visual standpoint the hybrid option seems very unappealing. Though it provides a reflecting pond, the wall separating the pond and estuary is ugly. Maybe I have this wrong, but why is a boardwalk proposed for the west shore when there is a perfectly good sidewalk?
Name (ID): Joann Harper (I-163)

Submission Text: I have lived in Olympia all my life - 83 years. My grandfater was an attorney who lived on N Sherman Street. We saw the mud flats. My paternal grand parents homesteaded Kaiser Rd on the west side of Olympia. I would go with my mother to get fish to feed the dairy workers. I know what a natural tide flat looks like I saw Capitol Lake at its worse. I still live on Kaiser Road. I love the lake the reflection of the Capitol Building. Keep Capitol Lake beautiful as it is now - managed lake.

Name (ID): Gerald Sheehan (I-164)

Submission Text: My feeling is that the cheapest solution is not necessarily the best solution. Sometimes you have to spend more to maintain what you have. I, for one, would be willing to pay higher taxes to retain the reflecting pond aspect of the lake. I think it enhances the character of the community and contributes to a more vibrant downtown.

The estuary concept works fine in undeveloped areas like Nisqually but I don't think it contributes to economy of Olympia in the same way that that the reflecting pond would. I think the elected officials of Olympia have let the city decline over the past couple of decades by not acting in the best interests of all the community. Homelessness has not been adequately dealt with and that is a huge detractor from bringing people and businesses back downtown. Rising crime has hurt the vibrancy of the city. Allowing the lake to return to a smelly tidal flat certainly won't help to bring the people and businesses back either. All of these factors also reduce tourism in the area.

Name (ID): Jim Brazil (I-165)

Submission Text: Capital lake is a valuable part of Olympia, providing views and aesthetics while controlling sedimentation in the west side of Budd Bay. As a boat owner with moorage downtown I agree with the Olympia Yacht Club, Recreational Boaters Association of Washington, and the Port of Olympia and advocate for the preservation of the Olympia waterfront. Boaters care about the marine environment and bring both dollars and public interest to downtown Olympia. I recommend you preserve Capital Lake as is, and maintain the beautiful downtown and waterfront we have enjoyed for decades.
Supporting Materials (if any): N/A

**Name (ID): Gerald Sheehan (I-166)**

**Organization (if applicable):** N/A

**Submission Text:** My feeling is that the cheapest solution is not necessarily the best solution. Sometimes you have to spend more to maintain what you have. I, for one, would be willing to pay higher taxes to retain the reflecting pond aspect of the lake. I think it enhances the character of the community and contributes to a more vibrant downtown. The estuary concept works fine in undeveloped areas like Nisqually but I don’t think it contributes to economy of Olympia in the same way that that the reflecting pond would. I think the elected officials of Olympia have let the city decline over the past couple of decades by not acting in the best interests of all the community. Homelessness has not been adequately dealt with and that is a huge detractor from bringing people and businesses back downtown. Rising crime has hurt the vibrancy of the city. Allowing the lake to return to a smelly tidal flat certainly won’t help to bring the people and businesses back either. All of these factors also reduce tourism in the area. I urge the city council and the state to make the hard decisions necessary to return Olympia to the beautiful, vibrant city it once was when I first moved here. Gerald W. Sheehan

Supporting Materials (if any): N/A

**Name (ID): Jim Flynn (I-167)**

**Organization (if applicable):** N/A

**Submission Text:** I believe you could include a swimming area, even though that is not considered at this time. Using available free water resources would reduce the cost and maintenance of that addition. The outfall of the artesian spring used to fill steam locomotives, adjacent to the old railroad station, could be used to provide a constant and clean flushing action for a pool or swim beach. I support the hybrid option.

Supporting Materials (if any): N/A

**Name (ID): Elizabeth Egan (I-168)**

**Organization (if applicable):** N/A

**Submission Text:** Capitol Lake 'as-is' is horrible, and is an example of poor decision-making and mismanagement. Just as some people in our community are staunchly holding onto 'values' that (didn't even rightfully) belong in the early 1950s, there are some people who wanna hold fast to the 'legacy' of the lake from the 1950s. These people are probably also climate science deniers, and no consideration should be given to their wants, because Capitol Lake is an environmental disaster! It also strikes me as racist that 'preserving the lake' is even an option, given that the Tribes of the area have emphatically come out against the gross fake lake and in support of an estuary. The only option that should be considered is an estuary.
Supporting Materials (if any): N/A

Name (ID): Penny Black (I-169)

Organization (if applicable): N/A

Submission Text: Could you explain what property would be used to achieve the 500 foot opening to establish the estuary? Is the cost of replacing the bridge included in the estuary plan? How would the yacht club be impacted by creating an estuary?

Supporting Materials (if any): N/A

Name (ID): KJ Justice (I-170)

Organization (if applicable): N/A

Submission Text: I support the managed lake or hybrid option. An estuary would turn the lake into a mud pit at low tide and make the area less attractive to visitors and negatively impact the vibrancy of the city, downtown, and Capitol.

Supporting Materials (if any): N/A

Name (ID): Reanna Justice (I-171)

Organization (if applicable): N/A

Submission Text: I vote for either the Managed or Hybrid Options. The estuary option will be disgusting once it’s empty and full of mud. We don’t want that look for Olympia. Super disgusting. With the lake full of water year-round day and night, there is the option for rowboats and paddle boats, and other fun activities for families and tourists. I vote for the paddle boats that look like swans for tourists and families to row about on Capitol lake. It will be so fun and cute. Other tourist attractions could include a cotton candy or ice cream truck/stand, a little place to get snacks, water, smoothies, and souvenirs, different art located around the boardwalk, fun stuff that tourists will enjoy and locals will love. Other improvements could include a playground structure at Marathon park, more picnic tables out of there, food trucks in the parking lot, and if the boardwalk was widened around the perimeter of the whole lake surrys (group/family bike) could also be rented and enjoyed by tourists and locals. With all these types of improvements this area could become a hub for more community events, such as Lakefair, but many many others. Thank you for your consideration, if these improvements are made my friends and family and I will come here often and enjoy this delightful area. Thank you very much!

Supporting Materials (if any): N/A

Name (ID): Valerie Anderson (I-172)

Organization (if applicable): N/A
Submission Text: I strongly support restoration of the Deschutes Estuary for the many environmental benefits it would provide. Restoration of the estuary would go a long way towards improving water quality, creating healthy habitat for salmon and other wildlife, and reducing invasive species. In these times when we are clearly seeing the terrible effects of climate change, I believe that taking bold action to restore the estuary would be an extremely important step towards a better world for future generations. However, given that there are many people deeply committed to preserving the lake as it is, for a variety of reasons, selection of the estuary-only option would leave a significant portion of our population dissatisfied. For this reason, I support the hybrid option and I hope that the EIS Project Team gives the Dual Estuary Lake Idea the consideration it deserves. As a society, we are deeply divided in so many ways that compromise is difficult to achieve. Landing on a sensible solution that does provide the important environmental benefits of estuary restoration while also maintaining a freshwater lake for people to enjoy would demonstrate that we are indeed capable of working together for the common good. For the sake of the water, the fish, the environment, and as a meaningful act of cooperation, the Dual Estuary Lake Idea is the best possible solution.

Supporting Materials (if any): N/A

Name (ID): Rebecca Canright (I-173)

Organization (if applicable): N/A

Submission Text: I am a young person who cares about safeguarding our magnificent estuary ecosystem. I respectfully ask you to please do all you can to protect our Deschutes Estuary and the wildlife that calls it home. Environmental and economic health go hand-in-hand, thus I ask you to please support the restoration and protection of this special place.

Supporting Materials (if any): N/A

Name (ID): Robert Chrisler (I-174)

Organization (if applicable): N/A

Submission Text: I didn't see any link to a proposed action if it exists. My preference would be to take out the dam, restore the estuary and augment its access to the community with a series of boardwalks through the area similar to those at the Nisqually estuary and in California, where the Klamath River empties into the ocean.

Supporting Materials (if any): N/A

Name (ID): Sue Johnson (I-175)

Organization (if applicable): N/A

Submission Text: As a child growing up in the '60s I was able to enjoy swimming & even watered skied in Capital lake. It saddened me when the water quality got so poor that we could no longer enjoy the
lake like that. It was nice when the parks were added but the past several years w/the homeless camps &
their RV's parking along the lake it's become not only unsightly & has become unhealthy w/lots of
garbage, it's also unsafe & especially not something I'd want to take my Grandchildren to. The focus
needs to be on protecting nature & making it a place that is safe & family friendly again.

Supporting Materials (if any): N/A

**Name (ID): Kraig Scherz (I-176)**

Organization (if applicable): N/A

**Submission Text:** Making something that was not a lake into a swamp/lake caused this all. It is a ruined
river that had a smallish estuary. It's so simple if you remove the bureaucracy. Let it become a bigger
estuary than it was but not a lake/reflexive pond that glorifies the bureaucracy that got us here.

Supporting Materials (if any): N/A

**Name (ID): John Goss (I-177)**

Organization (if applicable): N/A

**Submission Text:** I've been here since 1946, my brothers and sister used to walk across the old 4th ave
bridge and were familiar with the lake before and after the dam. prior to the 60s and early 7030s there
were a lot of places where artisian waters were discharging into the lake. someone the state, city, county
or who knows. after that the Quality of the lake water started to go downhill. Open them back up and
leave the lake alone. too many unscientific scientists are butting in

Supporting Materials (if any): N/A

**Name (ID): Matthew Noble (I-178)**

Organization (if applicable): N/A

**Submission Text:** I want to voice my support for the DELI. After having been introduced to the concept
by some of its supporters, it has consistently struck me as the best of both worlds; a more functional
estuary, with a great community option for leisure and fun. I hope you'll consider keeping the freshwater
option proposed in the DELI.

Supporting Materials (if any): N/A

**Name (ID): Peggy Zimmerman (I-179)**

Organization (if applicable): N/A

**Submission Text:** I believe the hybrid model would be the best for both “walkers” and “wildlife”. Thank
you for coming up with alternatives.
Thank you for the opportunity to comment on the Capitol lake-Deschutes Estuary Draft EIS. I have significant personal and professional background on this issue from living and working in the Olympia area for 15 years in the environmental sciences for both public sector agencies and environmental non-profit organizations. I have a BS in Marine Biology, an MS in Environmental Science and 35 years professional experience throughout the coastal US as well as educational travel to several foreign countries to study models of fish and wildlife conservation and restoration of large scale landscapes. In particular, I served on a science team for the Puget Sound Nearshore Ecosystem Restoration Project (PSNERP) during my tenure as a habitat and wetlands specialist at Puget Sound Action Team and Senior Scientist at People For Puget Sound as well as serving on one of the earlier Deschutes Estuary evaluation teams. PSNERP developed process-based restoration methodologies, support documents and funding criteria for Puget Sound investments made by several state and federal grant programs. The principles identified and tested throughout Puget Sound’s shorelines by that process underscore my comments. Capitol Lake as it exists now is the quintessential disruption of natural hydrologic and sediment transport processes responsible for degradation of Puget Sound’s nearshore environment and it must be restored. Therefore, I support the Estuary alternative as the most ecologically sustainable and cost-effective alternative. The Draft EIS is comprehensive, detailed and fair in its assessment of the alternatives. The comparisons of short-term construction and long term maintenance costs in table form was particularly compelling as the State of Washington considers the long term investment in any of these alternatives. It might also have been useful to project the costs of the no action alternative alongside the 3 action alternatives as doing nothing still has a significant cost now and into the future. In my review of the DEIS and my knowledge of the Budd Inlet watershed, the estuary alternative seems to support the goals best because it’s the only alternative that protects water quality and native living resources throughout the basin while still maintaining a viable recreational amenity for the Capitol Campus and the Cities of Olympia and Tumwater.

Moreover, the State of Washington has a duty to honor tribal treaty rights with the Squaxin Tribe and the general public who would benefit from restored salmon runs and other native fish and wildlife. As with all impounded basins, the destiny is to fill up with sediments and become stagnant sinks of nutrients that can be liberated by storm flows in an uncontrolled fashion degrading downstream waters like Budd Inlet. I spend quite a bit of my time now that I am here in the Chesapeake dealing with the legacy water quality and fish passage issues of the Conowingo Dam on the Susquehanna river. Capitol Lake was a perfect microcosm and crucible for those issues as the Conowingo Dam creates all the same problems at a multi-state scale. The DEIS scoping of alternatives was wise to identify that even a restored estuary will need some structural modifications such as a dredged channel and reconstructed tidal marshes to reverse the simplification of the lake bottom and prevent overwhelming offshore migration of fine sediments.
I believe the new Zealand Mud Snail infestation can best be remedied or at least minimized by regular tidal flushing with saline water and the estuary alternative is the only one that will positively affect Budd Inlet circulation across an expanded tidal domain addressing persistent dissolved oxygen problems. I understand the desire by many to go back to the 'good old days of Capitol lake'. This attitude denies the scientific reality of this and every other freshwater impoundment in tidal wetlands and people will be reckoning with the poor decisions of yesteryear for decades to come as the realities of sea level rise affect our relationship with the coast. Sincerely, Doug R. Myers (responding as a concerned citizen and life-long defender of Puget Sound) Maryland Senior Scientist Chesapeake Bay Foundation

Supporting Materials (if any): N/A

**Name (ID): Tamalyn Ramsey (I-181)**

**Organization (if applicable):** N/A

**Submission Text:** I have reviewed each of the options, read the commentaries available in The Olympian, and walked the lake a few times to review the updated boards (GREAT IDEA!!!). In light of that, as a lifelong Olympian resident since the 60's (family being here much much longer than that), what I desire most to share as a response is that ACTION begets ACTION which in itself crushes INACTION - the place we have been for decades. Given this, I actually think all three options are excellent and provide a roadmap forward for managing the lake. Each has different pros/cons/HIGHLY REACTIVE opinions by some stakeholder groups, but as just a community representative/member with no special interests, please just choose one option and begin ACTING.

Supporting Materials (if any): N/A

**Name (ID): Kathi Rafferty (I-182)**

**Organization (if applicable):** N/A

**Submission Text:** The Woodard Bay bat colony and its regional significance are mentioned frequently as being a positive part of the environment. With the worry much of the public has regarding bats, should the EIS mention why supporting the bat colony is important?

Supporting Materials (if any): N/A

**Name (ID): Sara Holt-Knox (I-183)**

**Organization (if applicable):** N/A

**Submission Text:** I vote for the full estuary!
Name (ID): Ian Van Dusen (I-184)

Organization (if applicable): N/A

Submission Text: Hi, Senator Hunt! Thank you for taking the time to read my request. I am not writing directly about the capitol lake project but a vision for the south sound waterway. I would like to see a park development stretching from the Westbay Rotary park south all the way under the bridge thru Capitol Lake. Currently that part of town is run down railroad tracks but it has potential to be a truly wonderful park for families, dog walkers, and all types of casual fun. I do not know who currently has ownership of that area but I think it would be in the best interest of city and state to create that park into a public green space looking back onto downtown Olympia. Many cities find success with large long parks across from downtown and I think it would be a much greater benefit to the region than large apartment buildings which are inevitable under current developmental plans. First steps would be further developing Westbay park to the south concrete lots and then down the line renovating the train tracks to be an acceptable path or trail. I am really excited about the prospect of this idea! Please consider and pass on to whoever you deem most fit. Thank you for the email alerting me of this meeting Senator Hunt.

Supporting Materials (if any): N/A

Name (ID): Morena Timm (I-185)

Organization (if applicable): N/A

Submission Text: There can't be clean water when encampments are allowed around the lake and any other type of bodies of water and forest areas. Keeping the encampments clean isn't enough to bring clean water to the sound. There needs to be resources and better living conditions available for people who want it or need it. Thank you.

Supporting Materials (if any): N/A

Name (ID): Carol Miller (I-186)

Organization (if applicable): N/A

Submission Text: I have only one comment at this time, not knowing about a project. Which is that this area is of course, a historic, natural & iconic treasure of the region as well as the entire state. I would offer that the area should be kept in its current 'minimally improved' condition, giving people, families, pets to enjoy the tranquility, with the only 'improvements' towards that end. Much like the royal gardens of Asia where its beauty is allowed to show in its most natural state.

Supporting Materials (if any): N/A
Name (ID): hayley gamble (I-187)

Organization (if applicable): N/A

Submission Text: Water Quality: The EIS should be using data from the 2015 Ecology Water Quality Improvement Report and Implementation Plan for the Deschutes River, Percival Creek, and Budd Inlet, and/or the 2020 U.S. Environmental Protection Agency (USEPA) total maximum daily load (TMDL) for the Deschutes River when evaluating water quality impacts of the various alternatives. How would the various alternatives contribute to meeting the water quality goals in these reports? How would they impact these goals long term (e.g. would the managed lake require more resources to meet USEPA TMDL than other options?)

Sediment: Could the shape of the retaining wall be altered to reduce the sediment deposits under the hybrid option?

General: The managed lake option does not seem to have the habitat and water quality benefits that the other two options have. The estuary option seems to meet all the goals stated, at the 'highest' levels.

Supporting Materials (if any): N/A

Name (ID): Dale Danell (I-188)

Organization (if applicable): N/A

Submission Text: Olympia was my home town for many years since 1949. Olympia was my Fathers residence all his life, beginning in 1921. What we call Capitol Lake today used to be exposed tide flats at low tide. Hence, Capitol Lake is very shallow, between the 5th street dam to the base of the falls. I clearly recall my Father describing the daily stench, of the muddy estuary at every low tide. The community was incredibly pleased with the construction of the dam, to end the rotten smell of the mud flats every day. Low tides tend to be predominantly during daylight hours during summer months, and after darkness during winter. The exposed mud was useless for recreation, spawning habitat, as well as dangerous to venture out on. There used to be a good run of salmon and steelhead every fall. They would congregate at the dam in salt water, and fisheries would lower the dam too to let them migrate up towards the ladders below the most recent brewery. Many spectators enjoyed watching the fish at the 5th street dam, as well as the stripping operations at the upper dam, to collect eggs for the hatchery. In summary, everyone must prepare for a nasty stench every low tide, if the mud flats a the bottom of Capitol Lake are exposed again. Spend some time at Mud Bay, to gather some ideas of how the low tide environment will look and smell like. I fully endorse protecting those habitats at that location. People are also a part of these evaluations, when considering all habitats and natural processes. I therefore recommend, that for all things considered, Capitol Lake is one instance where restoration back to a pre-1949 tidal flat may not be a good idea now.

Supporting Materials (if any): N/A
Name (ID): Margaret Hansen (I-189)

Organization (if applicable): N/A

Submission Text: I believe the return to an estuary option is the best. Thanks for the opportunity!

Supporting Materials (if any): N/A

Name (ID): Wendy Page (I-190)

Organization (if applicable): N/A

Submission Text: I was thinking the other day that it would make sense to open the dam for the rest of the summer, or at least a month, so that people could get an idea of what to expect if the dam was removed completely. I was one of the children swimming in the lake as a child, so I'd love to see it cleaned up and swimmable again. We have so few 'swimming holes' available in this area it would be nice to have some place for the children to play besides fountains. Perhaps a freshwater pool of some sort on the east side of the lake? I know it's a process, but the lake has been looking pretty sad for many years now, I'd like to see something/anything done.

Supporting Materials (if any): N/A

Name (ID): Kalvin Hoang (I-191)

Organization (if applicable): N/A

Submission Text: Going green energy is not easy. This movement needs a good role model from state and federal level. USA also needs to be a good model for other countries too. I think we might be behind some European countries. Thank you for listening.

Supporting Materials (if any): N/A

Name (ID): Kassie Koledin (I-192)

Organization (if applicable): N/A

Submission Text: I would prefer the Estuary option for Capitol Lake for a number of reasons. Major reason, as per your draft EIS, is that 'The estuary habitat conditions reestablished by dam removal would result in substantial beneficial effects for salmon, other anadromous species, and marine fish.' The other reason is that while the initial cost for the Estuary option is high, the annual maintenance cost following the completion of the project is much less. I do not favor continuing the lake and neither do I favor the hybrid option, which does not appear to benefit the salmon and other species as much as the estuary option.

Supporting Materials (if any): N/A
Submission Text: The EIS is well written and organized. My feeling is more analysis should have been done on long-term impacts from each alternative. The project area as it now stands is not an estuary and should not be called as such. * Needs more analysis showing how the alternatives meet set goals. These should be compared to the results of the short and long-term impacts that is addressed in the EIS.

Specific Comments: CHAPTER 3 3.2 Sedimentation 3.2.2.2 West Bay Marinas This is likely due to the higher water levels in the Capitol Lake Basin associated with RSLR, which would reduce current velocities and would reduce erosion of sediments in the Middle Basin. For this reason, later sections describing the analysis of impacts focus on numerical model results without RSLR, because impacts are greater under this scenario. 1. Comment: Shouldn't all analysis use the model 'with RSLR? This will be the norm.

3.2.2.3 Importantly, annual sediment deposition rates in West Bay are highly dependent on river flow events with more extreme flow events depositing more sediments. Additionally, sediment deposition rates are higher on the east side of West Bay because of an area of shallow intertidal habitat along the west side of West Bay, which directs sediment eastward. 2. Comment: Did the analysis consider erosion and source of sedimentation from the watershed, from future further development?

3.3 Water Quality 3-3-1 As part of the water quality analysis for the Draft EIS, the EIS Project Team evaluated monitoring data from 2004 to 2014 and also collected water quality samples in 2019 to compare current conditions against the historical dataset. Despite what has been perceived to be worsening conditions in Capitol Lake, monitoring data indicate that water quality conditions have actually been improving in the lake and are relatively good in terms of physical and chemical characteristics important to aquatic life. There are only occasional seasonal violations of water quality standards, primarily associated with slight changes in temperature and dissolved oxygen. 1. Comment: Although there is a trend for better water quality, this will probably not be the norm, especially under a Lake managed Scenario. These improving water quality trends reduce the level of management that would be needed under a Managed Lake Alternative to meet lake management objectives. 4. Comment: Not sure why the level of management would be reduced. How can this conclusion be made when conditions of the ecosystem is drastically changing, more eutrophication and the basin a settling pond for pollutants.

3.3.5.2 The model shows that Budd Inlet has a relatively high maximum daily depletion of dissolved oxygen due to anthropogenic sources when compared to other South Puget Sound inlets. 5. Comment: Is this high maximum daily depletion due to lack of flushing? It seems this water quality parameter would improve by the constant flushing from the Deschutes, rather than the existing situation.

...Habitats along Capitol Lake. 6. Comment: Current development and any enhancements that is proposed need to take into consideration all the amenities that would occur with restoration of the natural systems. For example, a managed lake scenario will not support or enhance habitats, only those
degraded habitats that currently exist. The area, including Capitol Lake, Percival Cove, and the riparian corridor associated with Percival Creek, is considered a biodiversity area (native habitat within an Urban Growth Area) by WDFW Priority Habitats and Species (PHS) mapping because of its terrestrial habitat and remnant wooded shoreline, which provide nesting and foraging habitat for wildlife. Wetland areas are important for many wildlife species. 7. Comment: This is misleading, since original habitats have been degraded.

3.5.1.3 What threatened or endangered fish species and habitats are present in the study area? 8. Comment: Would wild chinook and steelhead return if the natural system was restored? Searun cutthroat numbers would have the chance to improve, as well as other marine species.

3.6.1.1 Historical (Wetland)Conditions Tideflats Eelgrass can be present at lower elevations if tidal currents, sediment deposition, and water quality create appropriate growing conditions. Although prevalent before the 5th Avenue Dam was constructed, very little of this wetland type is found in the study area 9. Comment: Eelgrass is a major, crucial component of the natural system and the more opportunities for establishment has great value for the Salish Sea. Is there any eelgrass present now? This increase is only possible under estuarine conditions.

3.9.3.1 Squaxin Island Tribe The Deschutes Estuary is the ancestral home to many of the Squaxin Island Tribe’s members. The Deschutes Estuary was originally inhabited by the Steh-chass people who occupied the area around Budd Inlet. The Deschutes watershed continues to be used for ceremonial, subsistence, and commercial harvesting of natural resources, and is a place of strong cultural and spiritual value. The tribe sees value and significance of the Capitol Lake - Deschutes Estuary area as a provider, educator, connection to ancestors, and source of meditative tranquility. In addition, the natural condition of the original river and estuary is valued for the sake of itself. 10. Comment: It is important to point out that not only Tribal members place spiritual value in restoring this area to its former natural state, but many others living in the community. This needs to be emphasized that many of us and our environmental organizations also see the value and if restored, a teaching tool.

Key Findings: Long-Term Effects on Water Quality Under the Managed Lake Alternative, the lake would experience minor to moderate beneficial effects from algae control and substantial benefits from aquatic plant management. Capitol Lake would continue to experience summertime algal blooms. Seasonal exceedances of water quality standards in Capitol Lake (temperature, dissolved oxygen, total dissolved gas, and pH) are likely to continue, and there would be no change in impact to water quality in Budd Inlet. 11. Comment: What would be the substantial benefits on algal blooms and control if chemicals are used over a long period of time.

The Estuary and Hybrid Alternatives would create an estuarine environment in the existing lake basin that would have seasonally low dissolved oxygen, as is typical for South Puget Sound estuaries. This shift would be a significant impact when compared to existing conditions. 11. Comment: This transition to a natural estuary state should be a benefit to Budd Inlet.

Climate change (under all project alternatives) will result in increased water temperature in all three water bodies: the Deschutes River, Capitol Lake, and Budd Inlet. The increase in temperature is likely to
result in increased algal blooms, increased pH, and decreased dissolved oxygen and related impacts on nutrient dynamics. None of the project alternatives considered will affect the magnitude or extent of these impacts. Comment: Climate change is an unknown. However, there needs to be projections made on what likely scenarios would impact the project alternatives. A natural system would have more resiliency against the vagaries of climate change impacts and would go far in preserving and/or enhancing the values associated with a natural system, rather than one that's artificial.

Reflecting the goals of the project to improve ecological functioning and water quality, the Managed Lake Alternative would benefit fish and wildlife in the study area, although not to the same extent as the Estuary and Hybrid Alternatives. Comment: Again, it should be stated here the importance of designing a system that is as natural as possible and mirrors the goals of the project.

For wildlife species, the change to an estuarine environment would eliminate the freshwater lake. This would be a significant impact on bats because of the size of the Woodard Bay colony, its regional importance, its dependence on the freshwater environment of the Capitol Lake Basin for emergent insects, and the elimination of this foraging base. Comment: Wouldn't lakes in the area become a source of insects for the bats? What studies have been done regarding changes in flight patterns and food sources for bat colonies? Thanks for the opportunity to comment:

Supporting Materials (if any): I-193_McCallum.pdf

Name (ID): John James (I-194)

Organization (if applicable): N/A

Submission Text: Consider removing the dam. Dams have led to problems throughout the state and we have begun to remove some; the Elwha River now runs free. Your statement, 'Between 1949 and 1951, a dam was constructed at 5th Avenue, and without the tidal exchange, the area was transformed into a fresh water lake, fed primarily by the Deschutes River. The newly formed Capitol Lake began to experience a range of environmental impairments after construction of the 5th Avenue dam, eventually leading to community restrictions that persist today.' Well, there you have it, the dam caused problems almost immediately and they still persist today; that is what you said and it seems very clear, the dam is the problem. I am hoping you will consider removing the problem, rather than trying to 'fix it'. It would be wonderful to see that area returned to somewhat what it used to be prior to 1949. Imaging seeing the tidal influences nurturing the area daily. Imagine the fish running freely. We could plant the original native plants along the banks of the estuarial area. Eliminating the problem at the source is keen to resolve, otherwise, continually resolving the problems it creates is the chore. Please consider removing the dam, please

Another issue for me to address is the pedestrian usage of the area. My wife, age 65, used to very much enjoy walking around the lake. She is afraid to do so now due to the homeless population congregating in that area. We need to devise some measures to insure safety and tranquility in that area. Perhaps, an assigned pair of Police Officers could patrol that area on bicycles during the daylight hours. Good luck to you all in your efforts on these issues; I really do appreciate you. Sincerely, John James
The dam needs to go. Estuaries are often called the “nurseries of the sea” because so many marine animals reproduce and spend the early part of their lives there. As the tide rises and falls, water depth and chemistry change, creating a wide range of habitats. In some parts of estuaries, filtered by plants such as marsh and seagrasses, moving water becomes still, allowing mud and food particles to settle at the bottom. These variations create safe conditions, making estuaries ideal homes for plants and animals who feed, grow, or reproduce there. Estuaries are also a major stopover point for migratory animals such as waterfowl and SALMON.

I prefer the managed lake alternative (2.2.1)

I support the managed lake option. A potential jewel for Olympia and the state

Greetings! I am a young person who cares deeply about protecting water bodies and especially estuary ecosystems. I respectfully ask you to please protect our beautiful Deschutes Estuary as much as possible, and prioritize the well-being of wild native species of plants and animals. We would be wise to restore the water quality of this estuary and minimize human impact.
Submission Text: Good afternoon, thank you for this opportunity to comment. From looking at these photos combined with what I have read about the 3 choices, I am liking the estuary. From what I've read the estuary is the least expensive option and if it were to look somewhat like the photo, I like the greenery on the 'islands' in the water. I have lived in Thurston county since 1977 and have always enjoyed the scenery around the lake with the building in the background, so it does matter to me.

Supporting Materials (if any): N/A

Name (ID): Elizabeth Baldo (I-200)

Organization (if applicable): N/A

Submission Text: As someone who lives right up the 4th avenue hill from Capital Lake, I would like to us move forward with a return to is natural estuary origins.

Supporting Materials (if any): N/A

Name (ID): Luca Claussen (I-201)

Organization (if applicable): N/A

Submission Text: Olympia resident and home owner here. Am 110% in favor of the estuary option for capital lake. Especially in times of climate crisis and more it seems like we should be working towards the most sustainable option.

Supporting Materials (if any): N/A

Name (ID): Lisa Johnson (I-202)

Organization (if applicable): N/A

Submission Text: I would be most in favor of 1. Estuary and 2. Hybrid proposals as they do more for salmon and sea level rise concerns.

Submission Text: There should be bike paths included in planning, along with walking paths and non-motorized boat access.

Supporting Materials (if any): N/A

Name (ID): Randy Neff (I-203)

Organization (if applicable): N/A

Submission Text: Get rid of the scum and all of their trash and body waste around the lake first, then think about changing the lake.
Supporting Materials (if any): N/A

**Name (ID): Tami Jones (I-204)**

Organization (if applicable): N/A

**Submission Text:** stop wasting money on studies and all the crap. Do something this has been going on for over 10 years now. You all on the project are about to retire by now you've made a career on studies.

Supporting Materials (if any): N/A

**Name (ID): Dave Bulger (I-205)**

Organization (if applicable): N/A

**Submission Text:** I am in favor of the Hybrid model as long as it allows for swimming and kayaking in the new, clean lake.

Supporting Materials (if any): N/A

**Name (ID): Lorrie Mahar (I-206)**

Organization (if applicable): N/A

**Submission Text:** Thanks for requesting input to this very important issue. I have lived in Olympia since 1979. I would support either the Estuary alternative or the Hybrid Alternative.

Supporting Materials (if any): N/A

**Name (ID): Dorothy Wilke (I-207)**

Organization (if applicable): N/A

**Submission Text:** I think the hybrid model gives everyone a little of what they want, part of the lake (the part most people visit and enjoy) and the estuary which should be better for the environment. And it keeps the investment of the work done around the north part of the lake. It seems wasteful to destroy that. I hope there is funding to make progress on this project.

Supporting Materials (if any): N/A

**Name (ID): Laura Stratton (I-208)**

Organization (if applicable): N/A

**Submission Text:** I prefer the Managed Lake Alternative because: 1. The reflecting pond is a beautiful amenity, literally the centerpiece of downtown. 2. Removing the dam would require prohibitively
expensive continuous dredging in the area of the Olympia Yacht Club and perhaps even in the ship canal which is transited by ocean going ships calling at the Port of Olympia.

However, if the Managed Lake alternative is selected, a much safer pedestrian bridge at the dam on Fifth Avenue is needed. It’s just a matter of time before a walker or jogger gets killed by a car while crossing the existing bridge/dam. The distance between passing vehicles and pedestrians is sometimes just a couple of feet. This is VERY, VERY dangerous. Thank you for soliciting my input,

**Supporting Materials (if any): N/A**

**Name (ID): Deb Williams (I-209)**

**Organization (if applicable): N/A**

**Submission Text:** I prefer the estuary plan as it still has public use while improving the environment for salmon and waterfowl.

**Supporting Materials (if any): N/A**

**Name (ID): Grace Lee (I-210)**

**Organization (if applicable): N/A**

**Submission Text:** I really like the idea presented by the ‘Do the Deli’ group. [https://www.facebook.com/dothedeli2021](https://www.facebook.com/dothedeli2021) [https://www.youtube.com/watch?v=1hgb1Mxy1ZI](https://www.youtube.com/watch?v=1hgb1Mxy1ZI) It seems to give both sides what they want. Getting a clean freshwater lake in Olympia would be ideal, especially given how hot the summers have been lately. Capitol lake as it is just looks ugly and polluted and gross. It would be a great asset to downtown to have a better freshwater feature that's big and swimmable. Then restoring the estuary would be great for the environment and the health of the watershed. It seems more low maintenance, just to let nature do most of the work of washing things out with the tides and have a smaller lake to keep clean and maintain. I don't see a downside to what this group has presented, and it seems like the only solution that has been proposed thus far that might actually get funded and done.

DELI DUAL ESTUARY/LAKE IDEA A PLAN TO FIX CAPITOL LAKE

**Supporting Materials (if any): [I-210_Lee.pdf](I-210_Lee.pdf)**

**Name (ID): Carl Schroeder (I-211)**

**Organization (if applicable): N/A**

**Submission Text:** if the public could vote on this issue, I would vote for the Hybrid option. That seems like the best of both worlds. I fear the estuary option would result in a smelly mudflat in the middle of town - not a great idea.
Victoria Sheldon (I-212)

Submission Text: I am mainly concerned about three things: 1. the smell if all or part of the lake is turned into an estuary; 2. the effect on tidelands and waters below the current dam; and 3. the ongoing cost of dredging the tidelands below the current dam. 1. Friends who lived near the lake prior to the construction of the dam said that the surrounding area would stink at low tide. The lake is not like the East Bay tidelands, which were anaerobic. Although sewage no longer flows into the lake, I am concerned that the lake, which is aerobic, when turned into an estuary, will smell. The effect is a definite possibility, as shown by the die-off of shellfish during the recent very hot weather. The smell of dying oysters and clams was overpowering. What studies have been done to determine whether this will happen? If it will smell, what steps will be taken to ameliorate the situation?

2. If the dam is removed, how will the lands below the current dam be protected? Currently, silt is caught in the south lake basin. If the dam is removed, that silt will flow into north lake basin and then into the Sound and accumulate on the tideland below the current dam. This silt could bury the current fishing sites for our heron rookeries and cause economic harm to West Bay Marina and the Olympia Yacht Club. The lowest part of the Sound, just in front of the Olympia Yacht Club, is already a tide flat at low tide and not navigable. What is being done to alleviate the damage which will be done by the removal of the dam and to compensate the land owners?

3. The removal of the dam is not a one-time cost. There will be recurring costs for dredging, which will go on forever. The dredging of the channel will be born by the public through the Corps of Engineers, however the silt will not be limited to the channel. The costs of dredging West Bay Marina, the Olympia Yacht Club and other property will go on for years to come. Dredging costs a lot of money, and some property owners may not be able to bear those costs. If a marina is unable to dredge its business, moorage slips, will be lost, affecting the marina, boats owners and marine businesses. What is being done to address dredging down the road? Thank you for your consideration, Victoria W. Sheldon 222 West Bay Drive NW, Unit G, Olympia

THOMAS JOHNSON (I-213)

Submission Text: I really like the lake and am more than willing to support and contribute to the higher cost of pursuing this alternative.
**Name (ID): Gregory Quetin (I-214)**

**Organization (if applicable):** N/A

**Submission Text:** Please consider the estuary alternative as both the best restoration of the environment and the most resilience to sea level rise due to climate change. Restoring the full estuary will return a rare and precious ecosystem to Olympia and the Puget Sound.

In addition to restoring the estuary, please consider improvements to active transportation around the lake - including walking and biking. Particularly on the west side of the lake sidewalks are too narrow and bike lanes too unsafe to allow for the full potential of the area for recreation and transportation. Finally, with the removal of the 5th Ave dam, take the opportunity to remove a dangerous intersection from traffic coming down from the traffic circles. Be bold a consider making this new bridge one that is primarily for walking and biking, while allowing for emergency vehicles. This will support Olympia's climate goals, create a safer and cleaner Capitol Lake, and reduce maintenance costs for the bridge. If necessary, any negative impact on the automobile network can be mitigated by building a bridge/ramp up to the traffic circles and 4th Ave bridge - though it would be simpler - and beneficial to carbon emissions - to convert this route to non-automobile all together. Thank you for your consideration. Greg

**Supporting Materials (if any):** N/A

**Name (ID): Brian Scheffer (I-215)**

**Organization (if applicable):** N/A

**Submission Text:** Please return the Deschutes Estuary to its original form. Tide flats and all. I have lived here since 1969 and have watched the detrimental effects of short sighted policies as they have unfolded. I am of the firm belief that all dams have long term negative effects on our natural world. They always silt up. Don't keep doing stupid stuff. Silted up dams are considered to have contributed to the downfall of the Mesopotamian civilization thousands of years ago. Have we learned nothing from our history? Please restore our estuary. Thanks Brian Scheffer

**Supporting Materials (if any):** N/A

**Name (ID): Marie Strickland (I-216)**

**Organization (if applicable):** N/A

**Submission Text:** YES, CAPITAL LAKE is in bad needs of getting rid of those snails. Brought in from China, probably on container ships that dock in our port. YES, it is a grave problem for our once beautiful lake. Solution, I am not sure?????? But, THE HOMELESS PROBLEM IN OUR CITY, in my opinion, needs to be addressed by the mayor who lets it continue .My family and I and my friends feel VERY UNSAFE when we go downtown or drive through town. Messes everywhere and dirt . Let's get rid of that and then tackle the lake problem.
Supporting Materials (if any): N/A

**Name (ID):** Thomas Mull (I-217)

Organization (if applicable): N/A

**Submission Text:** I favor the Estuary Alternative! =)

Supporting Materials (if any): N/A

**Name (ID):** Marianne Larson (I-218)

Organization (if applicable): N/A

**Submission Text:** I think that Capital Lake should be about what's best overall for the environment. Therefore I think the estuary or hybrid models look like the best choices to bring about the most advantageous environmental issues.

Supporting Materials (if any): N/A

**Name (ID):** Mark Ausman (I-219)

Organization (if applicable): N/A

**Submission Text:** Leave it as is and clean it out periodically instead of doing nothing for 10-15 years and letting it become a problem. It's a great resource and is enjoyable to walk around. Swimming for children would be nice, too, if the lake were properly maintained.

Supporting Materials (if any): N/A

**Name (ID):** Judy Raff (I-220)

Organization (if applicable): N/A

**Submission Text:** I'm in favor of returning the lake to a functioning lake.

Supporting Materials (if any): N/A

**Name (ID):** Kate Dixon (I-221)

Organization (if applicable): N/A

**Submission Text:** The managed lake alternative is the best approach for the downtown corridor. The lake should be preserved as a public resource and water activities should be protected and encouraged, such as swimming and fishing. It could become a true community asset instead of it's current use.

Supporting Materials (if any): N/A
Name (ID): Ted Kozlowski (I-222)

Organization (if applicable): N/A

Submission Text: Having looked at the three proposals, I favor the Estuary Alternative. Letting nature take its course generally works well. We have all seen disasters and/or major repairs coming from the old attitude that human engineering improves the natural layout, guaranteed/oops. Anyway, this choice will save money, it appears. I like the change in Capitol Lake wherein islands will crop up. This may offer shelter for more birds. If the Estuary Alternative is chosen, it seems the water quality will improve, with the natural fresh and salt water mix. Thank you.

Supporting Materials (if any): N/A

Name (ID): Susan Moreland (I-223)

Organization (if applicable): N/A

Submission Text: Restore it to its natural state (get rid of the dam), maintain it for public use and stop being so short sighted when it comes to our local environment.

Supporting Materials (if any): N/A

Name (ID): Robert Sickles (I-224)

Organization (if applicable): N/A

Submission Text: I favor the Estuary Alternative for the sake of wildlife preservation and to honor our Native Americans’ values. As with the farm at Nisqually Delta, the dam removals in the Olympic Peninsula and the north end of Lake Washington at Juanita Bay, reverting land to natural habitat is always the most humane approach. However I also realize we could wind up with something similar in appearance to Mud Bay at low tide. If that is indeed what the future of Capitol Lake will be, please don't skip over that part of the presentation. Make that an honest part of your proposal, as I can easily predict a strong reaction - possibly negative - from Olympia's citizens and landowners after they see what their view is like from the condo tower. If I'm wrong about this, all the more reason to go Estuary!

Supporting Materials (if any): N/A

Name (ID): Kathleen Guest (I-225)

Organization (if applicable): N/A

Submission Text: Before cement and asphalt took over, one could walk a dirt path, say hello to water critters, wade in with your dog at the known gravelly spots, sail a small boat and kayak. Then it slowly became dolled up, the picnic tables disappeared, the lakefair became 'oh, really' and the snail arrived. Will this project be an enabler for people use? An enabler for fish and others? Will it become a real lake
instead of a human mess? May final decisions be the best for all life forms including humans. Sincerely, Kathleen Guest

Supporting Materials (if any): N/A

**Name (ID): Bethany Cox (I-226)**

**Organization (if applicable):** N/A

**Submission Text:** Hello and thank you for the opportunity to comment. While I love details, my busy life does not always allow me to digest all that is presented within my time constraints. If you all could put out a 'snapshot' of the 3 plans with simple bullet point on each plan's name, cost of initial work, level of environmental improvement (as to how close the restoration will get the area to it's original health prior to the dam being built), and cost of annual maintenance to sustain that level of health all wrapped up in a paragraph or two, it would be helpful. The simulated photos are also helpful.

I do not like the way the hybrid option looks, but if it got the environmental aspect closest to being the most healthy, I'd live with it. My opinion as a voter and tax payer, since it is unlikely to be returned to it's natural state, is that it needs to be as healthy as is possible FIRST (the snails must be eradicated), and then the easiest to maintain - which hopefully will translate to lower costs to maintain and keep healthy.

Supporting Materials (if any): N/A

**Name (ID): Leola Clarke (I-227)**

**Organization (if applicable):** N/A

**Submission Text:** Keep the lake. It is a pretty drive and enjoyable place to take a walk

Supporting Materials (if any): N/A

**Name (ID): Jason Ball (I-228)**

**Organization (if applicable):** N/A

**Submission Text:** Dear politicians, I am a Olympia VOTER for twenty years.. I just want you politicians to stop spending our money. Stop TAXING us and stop spending our money. Stop taxing and stop spending. YOU ARE STEALING MY MONEY and giving it to others you think deserve it more. THAT IS STEALING, PERIOD. YOU STEAL. And I think you are thieves. Thanks, Jason Ball.

Supporting Materials (if any): N/A

**Name (ID): Barry Zickuhr (I-229)**

**Organization (if applicable):** N/A
Submission Text: I am a 25 year Olympia resident, I live within a few blocks of Capitol Lake and use the lake trail and park frequently. I believe that the dam should be simply removed, and the lake returned to its original state as an estuary. the variation of tide and water flow will bring a better connection with natural world to the area. Please return Capitol Lake to its natural state!

Supporting Materials (if any): N/A

Name (ID): Barry Zickuhr (I-230)

Submission Text: I am a 25 year Olympia resident, I live within a few blocks of Capitol Lake and use the lake trail and park frequently. I believe that the dam should be simply removed, and the lake returned to its original state as an estuary. the variation of tide and water flow will bring a better connection with natural world to the area. Please return Capitol Lake to its natural state!

Supporting Materials (if any): N/A

Name (ID): Barry Zickuhr (I-231)

Submission Text: I am a 25 year Olympia resident, I live within a few blocks of Capitol Lake and use the lake trail and park frequently. I believe that the dam should be simply removed, and the lake returned to its original state as an estuary. the variation of tide and water flow will bring a better connection with natural world to the area. Please return Capitol Lake to its natural state!

Supporting Materials (if any): N/A

Name (ID): Charles Dodd (I-232)

Submission Text: Remove the Dam. ckd

Supporting Materials (if any): N/A

Name (ID): Matthew Grohne (I-233)

Submission Text: I like the idea of returning it to an estuary. It seems the most ecologically beneficial option (plus, the little island in the middle looks nice). I would guess it would also be must supportive of wildlife, and it would be nice to have a great variety of non-human residents in the area.

Supporting Materials (if any): N/A
**Name (ID): Megan Moreno (I-234)**

**Organization (if applicable):** N/A

**Submission Text:** I am a mother of five, living in the SW Olympia neighborhood. One of the many aspects I enjoy about my neighborhood is the ability to walk down the hill and around Capitol Lake. During a recent walk with three of my kids, we stopped to appreciate signage with information on the three proposals. My kids and I all preferred keeping Capitol Lake a lake. I understand that swimming is not currently proposed, but we especially liked the fact that maintaining the lake kept open the option to further restore the lake to enable swimming in the future. A swimmable Capitol Lake would be a wonderful gathering spot for the community! Thank you for all the work and development of three thoughtful proposals!

**Supporting Materials (if any):** N/A

**Name (ID): Ahniwa Ferrari (I-235)**

**Organization (if applicable):** N/A

**Submission Text:** Just writing in to voice my support for Capitol Lake as an estuary. I think this is the right move and long overdue. Thanks! Ahniwa Ferrari

**Supporting Materials (if any):** N/A

**Name (ID): Beverly Skinner (I-236)**

**Organization (if applicable):** N/A

**Submission Text:** I have followed this debate about what to do with the lake for quite sometime and am pleased that finally something will be done. I am 72, born and raised in Olympia. The 'Lake' was a special place to socialize, recreate and enjoy downtown., I am sorry that this last generation was not able to have the many good memories, that I and many others who have lived here, of the lake. My comment is to restore the lake back to the the way it was originally planned and keep the dam. Thank you for your consideration.

**Supporting Materials (if any):** N/A

**Name (ID): Henry Epstein (I-237)**

**Organization (if applicable):** N/A

**Submission Text:** I used to live nearby in Lacey, WA... 98516 zip code...not a resident now. However, as a concerned person, I'd recommend whatever it takes to normalize/improve the overall natural system so such drastic change at cleaning things up is not needed again. Restore the balance needed.

**Supporting Materials (if any):** N/A
Name (ID): Loren Freeman (I-238)

Organization (if applicable): N/A

Submission Text: I am concerned that a heavy investment in the estuary plan will present long term problems around encampments, etc. It will be like the investments made in the highway beautification program (just look at the state of the wonderful gardens along I-5 through Olympia). I believe that the hybrid model will be the most sustainable (although the estuary along the western side will present problems stated above). I just do not believe that investments in parks and public beauty stand much of a chance in a society that cannot bring itself to sustain those investments. I am losing hope in the future of Olympia.

Supporting Materials (if any): N/A

Name (ID): Jim Balz (I-239)

Organization (if applicable): N/A

Submission Text: I do not favor the refuge plan...may be too difficult to clean up the water and maintain the cleanliness

Supporting Materials (if any): N/A

Name (ID): Kristy Woodford (I-240)

Organization (if applicable): N/A

Submission Text: I support the estuary alternative

Supporting Materials (if any): N/A

Name (ID): Donna Imam (I-241)

Organization (if applicable): N/A

Submission Text: when we first moved here swimming was allowed in capital lake. a few years later that stopped. i would love to see the lake usable it is sad to have it and only be able to look at it and not use it.

Supporting Materials (if any): N/A

Name (ID): Emily Ecker (I-242)

Organization (if applicable): N/A
Submission Text: As a resident of Olympia, it is my humble opinion that spending the extra time, effort, and money to keep the lake full and non-tidal is a benefit to the city. I do value the environmental consciousness of our city. However, in this particular instance, because of the central location and aesthetic of the capitol campus, I don't think trading a man-made lake for a body of water that will revert to mud at each low tide is in the city's best interest. I think it will make Olympia, our state's capital, less beautiful.

Supporting Materials (if any): N/A

Name (ID): Nancy Parkes (I-243)

Organization (if applicable): N/A

Submission Text: Estuary or Hybrid. While I prefer the Estuary, as a longtime public policy person I believe the hybrid is more likely to gain traction and approval.

Supporting Materials (if any): N/A

Name (ID): Jane Hart (I-244)

Organization (if applicable): N/A

Submission Text: I'm thinking we have much LARGER problems around Capitol Lake than a snail. Any you people been over that way recently?? You continue to allow the homeless population to live there, you won't have to worry about a snail doing damage. At this point, I surprised the snails are all dead.

Supporting Materials (if any): N/A

Name (ID): Patricia Huddy (I-245)

Organization (if applicable): N/A

Submission Text: I am in favor of the Managed Lake Alternative and strongly feel that 'No Action' is not a viable option to preserving this valuable community asset.

Supporting Materials (if any): N/A

Name (ID): Don Williams (I-246)

Organization (if applicable): N/A

Submission Text: I favor the Estuary Alternative to remedy issues surrounding Capitol Lake. I think the free flow of the Deschutes River will improve fish health and water quality it the Deschutes.

Supporting Materials (if any): N/A
**Name (ID): Sharon Ruth (I-247)**

**Organization (if applicable):** N/A

**Submission Text:** I have a Master’s in Hydrogeology. My husband has degrees in Ecology and Anthropology. Returning the land as close as possible to it’s original state is what is best for the physical and ecological environment. Likely, human development rules out tidal flats, but an estuary is a step in the right direction.

**Supporting Materials (if any):** N/A

**Name (ID): Edward Perry (I-248)**

**Organization (if applicable):** N/A

**Submission Text:** 26 July 2021 I recently watched the recorded presentation of the Draft EIS Report. Obviously, something needs to be accomplished to at least renovate Capitol Lake. As a retired civil engineer, I was impressed with the quality and thoroughness of the Draft EIS Report summary presented. As long as my wife's health permitted, we frequently would stop by the lake for reasonably extended periods with a picnic in our car. We would stop at the parking areas off Fifth Avenue or at Marathon Park. We enjoyed both the views of the lake and surroundings, watching large numbers of families enjoying picnics, and seeing many individuals out for runs, jogs or walks around the lake. With the managed lake alternative, or possibly the hybrid alternative, we would have enjoyed visiting Capitol Lake. But I cannot imagine us, or many of the others we observed, stopping to visit or picnic at an estuary near the Capitol and downtown Olympia. For a visit to an outstanding estuary, one merely needs to visit the Billy Frank Jr. Nisqually National Wildlife Refuge. An estuary where our Capitol Lake is located would be a sickly “relative”. Our Capitol Lake is an asset that many people throughout our country would be thrilled to be able to enjoy an equivalent, beautiful lake readily accessible in their community. It would be a shame to completely destroy our wonderful, enjoyable Capitol Lake with the estuary alternative.

Has anyone conducted a survey of how the general public would respond to each of the three proposed Capitol Lake alternatives? More specifically, what would be expected as the extent of public usage for each alternative? After all, Capitol Lake belongs to the public. My vote would be, and undoubtedly my wife’s vote would have been, for the managed lake alternative. While the hybrid alternative would probably be marginally acceptable, our votes would be a huge “thumbs down” for the estuary alternative.

**Supporting Materials (if any):** N/A

**Name (ID): Jerry Anonymous (I-249)**

**Organization (if applicable):** N/A

**Submission Text:** Managed Lake
Supporting Materials (if any): N/A

Name (ID): Harry Branch (I-250)

Organization (if applicable): N/A

Submission Text: The study area is defined as including what is now Capitol Lake and West Bay out to the end of the Port Peninsula because this is the area directly impacted by work. This is an engineering perspective. It's what's defined in the restoration option as the estuary. River estuaries in Puget Sound often have a companion stream that defines and expands the area - Hylebos for the Puyallup, Medicine Creek for the Nisqually, and Moxie Creek for the Deschutes. Moxlie Creek flows into East Bay which is a significant part of the structure of the Deschutes River estuary. If we look at oceanographic physical, chemical and biological parameters we see that East Bay should be included. East Bay has the poorest water quality in South Puget Sound. Not including the impacts of East Bay could lead to omissions and erroneous conclusions.

The EIS states that sediment quality in West Bay has not met quality criteria. Ecology has identified four sites around Budd Inlet that will require future cleanups. Others remain unidentified. There is no doubt that contamination continues to flow into Budd Inlet. The study states: 'The Port of Olympia has been working on cleaning up the Cascade Pole site from creosote contamination for many years'. Actually nothing has been cleaned up. Material has been capped in place in a temporary containment cell and used as fill along the East Bay shoreline. The report continues 'The most recent sediment monitoring in 2012 and 2013 showed decreasing dioxin/furan concentrations.' What location does this refer to? In front of the containment cell? Where did the toxins go? Did they degrade or disperse? A critical statement like this needs clarification. If East Bay is included, the numbers I've seen do not show decreasing concentrations. A science based effort would begin with observation. We observe contamination in surface sediments, an indication of uncontrolled sources. We also observe through chemical analysis that this contamination is in the form of Cascade Pole creosote. One logical hypothesis would be that this is the source. The order in which assessment would proceed should be science driven not development driven and it should be complete. If we don't identify and control sources of contamination prior to removing the dam, clean soil will enter the bay from the upper watershed and we'll have a larger volume of contaminated material.

3. The Deschutes Parkway which borders the entire western shoreline is only briefly mentioned. The roadbed liquefied in places during the Nisqually earthquake and is known to be unstable. What would be the effect of tidal flow and flux on the Deschutes Parkway? Can the parkway survive any of the options indefinitely? Should it be elevated, eliminated or armored?

4. There's an artesian spring underlying the center of downtown Olympia that flows 60 gallons per minute. Artesian water contains no sediments so the primary effect is scouring. A marine chart from the 1850s shows a wedge of deep water heading from the spring to East Bay. The spring was later diverted via a storm drain to Percival Landing. A 1936 aerial photo plainly indicates that the tidal channel followed one created by artesian water, bending to the east, scouring deep water where the yacht club is located. We could utilize the effects of artesian outflow to help maintain deep water where we want it,
perhaps with some minimal maintenance dredging. This possibility changes the dynamic. If we had followed methods of scientific inquiry, this EIS would read much differently. We would have a clearer idea of what scope and parameters should be included and what advantages and disadvantages are represented in each option.

There is a lot of money available for the cleanup and restoration of estuaries at the federal and state level and from non-profit and private organizations. These grants are highly competitive. Budd Inlet being in such a degraded state would be an ideal candidate. To qualify the work must be comprehensive and science based. We can't propose to do half the job. Cleanup must precede restoration.

Natural marine ecosystems are productive, resilient and maintenance free. There's little doubt that a restored estuary is the best option. But if we aren't going to do the job right, I would vote for option number 4 the no action alternative. Those favoring the lake and those favoring the estuary agree on the basics. Bringing in outside money and doing the job right would put the debate to rest.

Supporting Materials (if any): N/A

**Name (ID): Paula Holroyde (I-251)**

**Organization (if applicable):** N/A

**Submission Text:** I strongly support the return and development of the Deschutes to a thriving estuary. With amazement I have watched all of the benefits to the salmon population in the Nisqually Estuary! The Deschutes Estuary could be a successful environmental and recreational destination without the dam.

Supporting Materials (if any): N/A

**Name (ID): Jason Montogomery (I-252)**

**Organization (if applicable):** N/A

**Submission Text:** I don't see any information about cost or impact differences between the three options.

Supporting Materials (if any): N/A

**Name (ID): John Rosenberg (I-253)**

**Organization (if applicable):** N/A

**Submission Text:** Using the language of the Draft Environmental impact Statement (DEIS), there are compelling reasons to choose the estuary alternative and reject the managed lake and hybrid alternatives. 1. Environmental Benefits of Estuary Alternatives The environmental benefits, in addition to trapping carbon, would be substantial. Estuarine wetlands provide water quality, hydrologic, and
habitat functions that are particular to their position in the landscape. The mixing of freshwater and saltwater in estuarine environments creates some of the most productive and valuable habitat on earth. The reestablishment of estuarine conditions by reintroducing saltwater and tidal influences to the Capitol Lake Basin would substantially improve ecological functions in the Project Area. In addition to supporting key ecological processes, estuarine conditions would provide productive habitat for shellfish, salmon, other anadromous species, and marine fish in the area, potentially including Endangered Species Act-listed Chinook salmon (non-hatchery) and steelhead trout. Shallow water habitats with salt marsh vegetation along the shoreline would provide preferred forage and rearing habitat for juvenile salmon. The freshwater aquatic plants that dominate the basin today would not persist.

Removal of the dam would provide a natural freshwater to saltwater salinity gradient that is physiologically favorable to salmon and is not available under the Managed Lake Alternative. Prior to construction of the 5th Avenue Dam, salmon and other anadromous fish species spawned in the Deschutes River downstream of Tumwater Falls. (Historically, Tumwater Falls was a natural barrier to anadromous fish, meaning that there is no naturally reproducing native salmon population in the Deschutes River because migrating adults were not able to pass Tumwater Falls.) (Page 17 DEIS Executive Summary)

2. Benefits to Indigenous Citizens of the region Dam removal and estuary restoration are a matter of justice for the Nisqually and Squaxin Island tribes who were never consulted when the dam was built. As the DEIS clearly states, Tribal populations would experience disproportionately adverse impacts from the Managed Lake Alternative, raising environmental justice concerns. The Managed Lake Alternative would have a continued impact on Usual and Accustomed Fishing Grounds and Stations, and on the Deschutes Estuary, both of which have cultural, religious, and economic significance. The Managed Lake Alternative would also perpetuate historic and continued loss of tribes' and tribal members' connection to the natural environment. Removal of the 5th Avenue Dam under the Estuary Alternative (and the Hybrid Alternative, to a lesser extent) would have beneficial effects for ecological, cultural, heritage, spiritual, and educational value for tribes. Tribal populations would likely experience the beneficial effects of restoration of the Capitol Lake Basin to an estuarine system most significantly. (Page 19 DEIS Executive Summary)

3. An erroneous assumption Based on initial recommendations from the Funding and Governance Work Group, it is assumed that the State of Washington would be responsible for the construction costs associated with any alternative. The approaches to funding long-term maintenance are expected to vary by alternative and are included. (Page 21 DEIS Executive Summary) On the contrary, I think there is every reason to assume that dam removal and estuary restoration would receive federal funds. Having worked in salmon restoration efforts over the past 20 years, I regularly witness the funding of restoration efforts by various branches of the federal government. This project would be no exception. The benefits of restoration would be substantial for Olympia and Tumwater as well as the entire region.

4. Benefits to Downtown Olympia The economic analysis found that there is no clear evidence that implementing any action alternative would reduce demand for residential or commercial development in downtown Olympia. The City of Olympia's plans for the redevelopment of downtown are long-range, and investment in residential and commercial development is projected to increase in intensity over the
next decade. Effects of any of the action alternatives on development in downtown Olympia would be beneficial, as long as the Preferred Alternative is implemented in a way that is both attractive and accessible. This was a key finding in a series of project-specific interviews with municipal planners, economic development officials, private developers, and real estate experts. Overall, the economic analysis concludes that economic factors other than Capitol Lake - Deschutes Estuary Long-Term Management Project would have more influence on market conditions for development. (Page 21 DEIS Executive Summary)

Based on my notes from several presentations by the Department of Enterprise Services that I attended, one of the initial problems I have with the DEIS is that the document consistently refers to the Deschutes estuary as ‘Capitol Lake” when it's not really a lake at all. It's a river that's been cut off from its estuary by a plan for the capitol grounds devised by two architects (Wilder and White) in an office in New York City. The DEIS lists the dam, built in 1951, as being as much a 'cultural resource' as the history of centuries of native inhabitation in this place. This is a travesty and should be corrected. ‘Capitol Lake” is not a lake at all. By continuing to treat it as such and failing to consider it as part of the Deschutes watershed system, the DEIS has bought into the view of a minority of people in this region who want to return us to the 1960’s. In the era of climate change, a managed lake would be irresponsible. The hybrid option is simply an expedient cover for a lack of leadership at the state and regional level. At some point civic leaders and politicians in this area need to develop some backbone and do the responsible thing which is to return the Deschutes estuary to its natural function as, in the words of the DEIS ‘some of the most productive and valuable habitat on earth.” To do any less is a betrayal of the people of this region including the tribes.

Supporting Materials (if any): N/A

Name (ID): Nancy Gaston (I-254)

Organization (if applicable): N/A

Submission Text: am in favor of the Hybrid Alternative

Supporting Materials (if any): N/A

Name (ID): Pamela Mullins (I-255)

Organization (if applicable): N/A

Submission Text: Hybrid plan seems to be best solution

Supporting Materials (if any): N/A

Name (ID): Kenneth Zych (I-256)

Organization (if applicable): N/A
Submission Text: I support the estuary option. I have lived near the Nisqually estuary before and after the dams and the removal of the man made dams increased the beauty and environment for the people and wildlife of the area. The hybrid and 'fake lake' are no long term solution in my mind.

Supporting Materials (if any): N/A

Name (ID): BARBARA SMITH (I-257)

Organization (if applicable): N/A

Submission Text: I believe the estuary option is the most sustainable of the three options offered

Supporting Materials (if any): N/A

Name (ID): Kristin Stewart (I-258)

Organization (if applicable): N/A

Submission Text: Revert to estuary. Am old enough to remember when dam was built, and have always liked estuaries better. Would like to make more comments as time goes on.

Supporting Materials (if any): N/A

Name (ID): Kerry Mill (I-259)

Organization (if applicable): N/A

Submission Text: It boggles my mind that you people are concerned about the lake now. Maybe if you dealt with the homeless people dumping their trash and sewage into the lake there wouldn't be a problem? As much as I would love to see the lake restored to where it was in my childhood, it is blatantly obvious that there are much more serious issues for Olympia to deal with. On one hand, I wish I lived in that voting area, so I could help vote out everyone currently in office- on the other hand I am blessed and grateful to live well away from that area. Pull your heads out and do the right thing by your community.

Supporting Materials (if any): N/A

Name (ID): Karen Bray (I-260)

Organization (if applicable): N/A

Submission Text: I have reviewed the options carefully and think the Hybrid solution would satisfy the most people and be environmentally sound and still provide for recreation. thank you for the opportunity to comment

Supporting Materials (if any): N/A
Name (ID): Evan Enright (I-261)

Organization (if applicable): N/A

Submission Text: The issue isn’t the lake, it’s the surrounding area. Clean up the disgusting homelessness, trash, feces, and needles so we can actually enjoy the damn lake!!!! That is the priority, not snails. Pay attention to your constituents and what is really going on in your community. Rampant drug use and homelessness needs to be addressed as a first priority. Come on!!!! Even if you fix the lake, nobody can enjoy or because they have to walk through homeless camps.

Supporting Materials (if any): N/A

Name (ID): Blake Maresh (I-262)

Organization (if applicable): N/A

Submission Text: I support the Managed Lake Alternative, and I agree that the current situation is not sustainable. I’ve lived here since 1993 and this argument has been going on for most of the time I have been here. Not only is the Managed Lake Alternative consistent with the historical vision for Olympia and the Capitol Campus, but streets, parks and walking trails have all been designed around the North Basin being a managed lake. A managed lake is more esthetically pleasing, and given that there have been homeless communities on Deschutes Parkway in recent years, there is an added safety element. Allowing the North Basin to revert to an estuary could mean more overgrowth where people could lurk or illegally camp out. Finally having a managed lake would lesson the likelihood of foul odors, insects (like mosquitoes) and rodents. Please support Capitol Lake in the manner it should be-as a managed lake.

Supporting Materials (if any): N/A

Name (ID): Kristy Jack (I-263)

Organization (if applicable): N/A

Submission Text: Please maintain the lake as a fresh water lake with increased community usability. If this idea has the least amount of support, I could also get behind the hybrid option.

Supporting Materials (if any): N/A

Name (ID): Anonymous Anonymous (I-264)

Organization (if applicable): N/A

Submission Text: As a long-time Olympia resident with some background in environmental science, I prefer either the Hybrid Alternative with saltwater basin (#1) or the Estuary option. Many thanks for the in-depth explanatory material, and the ease of providing comment.
**Name (ID): ANN VANDEMAN (I-265)**

**Organization (if applicable):** N/A

**Submission Text:** We need an estuary. For the health and preservation of the Sound and the river, we must get rid of the dam. We certainly have the expertise and imaginative resources to restore a functioning estuary, with sea water reaching to the old brewery as nature intended. Human interference created the sludge pond we have now. We must do our best to return it to a natural state, within the tolerance of those who wish to maintain an aesthetic. Personally, I think it's much more interesting to see the constant changing with the tide than to look at a putrid lake covered with toxic algae.

**Supporting Materials (if any):** N/A

**Name (ID): bob Seeley (I-266)**

**Organization (if applicable):** N/A

**Submission Text:** It looks like the Estuary Alternative is best. Natural Environment control is best as the lake is unusable.

**Supporting Materials (if any):** N/A

**Name (ID): Charles Schooler (I-267)**

**Organization (if applicable):** N/A

**Submission Text:** Allowing the estuary to return to its native state seems the most healthy and logical option. I assume it would also be the most economical, especially in terms of long-term maintenance. I favor the estuary alternative.

**Supporting Materials (if any):** N/A

**Name (ID): Roz Jenkins (I-268)**

**Organization (if applicable):** N/A

**Submission Text:** Please seriously consider the hybrid plan. We must give natural systems space and people also need lovely places for recreation. Please find a way to deliver both. While we don't need or want a swampy estuary breeding undesirable creatures, we also don't need to invest in maintaining a large, lifeless reflecting pool with high maintenance costs. Please find and take the middle path.

**Supporting Materials (if any):** N/A
**Name (ID): Anonymous Anonymous (I-269)**

**Organization (if applicable):** N/A

**Submission Text:** Maintain it as a lake for all to enjoy

**Supporting Materials (if any):** N/A

**Name (ID): James Hanson (I-270)**

**Organization (if applicable):** N/A

**Submission Text:** The lake was part of the original state capitol design. The lake is very much part of what makes the capitol city beautiful. Wife and I have enjoyed walking around the lake for the past forty some years we have lived in Olympia. The lake is very poorly managed; e.g. every June the lake should be drained, kills the algae, then about July 1, raise the dam and fill the lake for Lakefair. Don't dredge the lake, too costly. Drain the lake and excavate, the silt would be welcome by farmers for the rich, fertile soil. Dump the silt on state-owned forested areas. The snails will die without moisture.

**Supporting Materials (if any):** N/A

**Name (ID): Judith Schaeffer (I-271)**

**Organization (if applicable):** N/A

**Submission Text:** This seems like a good solution to a long-standing dilemma of how best to protect the health of the river/estuary and meet some desires of the community for recreation. While some will be disappointed at the smaller sized lake, it will be wonderful to have a clean body of water for swimming. Balancing the competing needs is not easy, and this proposal appears to do that nicely.

**Supporting Materials (if any):** N/A

**Name (ID): Robert Morse (I-272)**

**Organization (if applicable):** N/A

**Submission Text:** Please keep the reflecting pond/pool as it is today (or something very close to what we have today). I think that is the heart and image that we the Olympia residents think of when we visualize the City of Olympia. It has been a part of our city for many years and it is beautiful. Keep it. I don't care about the rest of area covered by the plan. Do what makes best sense and costs the least amount in the long term. Just keep the reflecting pool.

**Supporting Materials (if any):** N/A
**Name (ID): Gayle Newsom (I-273)**

**Organization (if applicable):** N/A

**Submission Text:** I am fortunate to live within easy walking distance to Capitol Lake. I use the trail around the lake nearly every week for pleasure and exercise. I would prefer either Option One or Two. The view of clear, sparkling water is important to me. I would also greatly appreciate and use the new trail proposal on the Tumwater end of the lake. I agree that this is a resource shared by the entire community as well as visitors. I feel that the two options that do not include an estuary are the best for everyone. If you need me to clarify or provide more detail, please contact me key phone 360 943 8521 or email gawben@gmail.com, Sincerely,

**Supporting Materials (if any):** N/A

**Name (ID): Kenneth Estes (I-274)**

**Organization (if applicable):** N/A

**Submission Text:** Unless I missed these things, I didn't see much concern about: 1. Global Warming (climate change) and the increased water level. Cost of raising the dam and spillway though mentioned it seemed thinking was of the same level as now.

2. Earth Quakes, damage to hill sides or lowering of ground near the park. 3. Tsunami risk. All could be for naught if buildings, etc. moved up the stream and wiped out everything under the level the scientist are predicting.

4. Opening the lake to empty would raise the silt level in the port and require even more dredging.

5. The smell for digging this up and making 'islands'. The city would have the worse PR than if we had a pulp mill!

**Supporting Materials (if any):** N/A

**Name (ID): Gregory Flothe (I-275)**

**Organization (if applicable):** N/A

**Submission Text:** Due to the declining bird population over the last ten years, my suggestion is to create the estuary plan, but make it also a migratory bird sanctuary, and salmon friendly. It will still need dredging periodically, but with DNR supervision. I hope whatever course the Washington legislature pursues, the main concern will be for wildlife preservation.

**Supporting Materials (if any):** N/A
Name (ID): Carol Miller (I-276)

Organization (if applicable): N/A

Submission Text: After listening to more knowledgeable speakers tonight it seems as if this project has not been thoroughly researched, nor investigated and looks more like a solution looking for a problem. As someone concerned about homeless issues, which happen to exist right on the very banks of this 'pond', I have to wonder & agree with Mr Threatt that everyone continues to ignore the elephant in the room. Much easier to fix than a fresh water/salt water lake/estuary/pond. Any government that Allows-Forces actually since they have no options, its citizens to live on the streets, fails to provide assistance needed to bring them back to functional society. should be ashamed & embarrassed to bring multi-million $ projects ahead of such projects. It's no secret that what's needed are local drug rehab clinics, mental health clinics and transitional, or permanent housing. It starts to look like 'hand washing' when obvious projects like addressing homeless issues (ignored for decades & only getting worse) are being overshadowed by unnecessary, ill-advised lake building. For that, and the more specific & informed issues raised in the open forum I'm opposed to this project.

Supporting Materials (if any): N/A

Name (ID): Judy Louderback (I-277)

Organization (if applicable): N/A

Submission Text: I believe that the area should return to it's natural state as an estuary. This would require the least amount of future upkeep and would provide a beautiful and necessary habitat for wildlife, all while honoring our native peoples and their cultural connection to the area as an estuary.

Supporting Materials (if any): N/A

Name (ID): David Bartruff (I-278)

Organization (if applicable): N/A

Submission Text: A reflecting pond was an idealistic desire, but what a problem it created. Now, no good choices and we certainly have spent too much money studying it without action. There seems to be one choice that was not explored, and that is to create a true river all the way to Budd Inlet. Fill everything behind the defined river course and create a great park space for everyone to use. What a great place for Lakefair that would be. And what are the maintenance cost? Well, you would have to mow the grass. And, there would be the occasional flooding from a King tide or from exceptional river flow. An adequate dike that would be reasonable for any river should be adequate until global warming causes much more than just the lake study area be under water at high tide.

Supporting Materials (if any): N/A
**Name (ID): Trent Kelly (I-279)**

**Organization (if applicable):** N/A

**Submission Text:** I strongly urge that we remove the damn and let the river return to its natural state as an estuary. The source of most all of the problems involving the lake are due to it being false and unnatural. Let nature return to its natural healthy state. If this results in the waters surrounding the Port not being deep enough then so be it. I don't understand why we need to support deepwater shipping anymore. We aren't a resource-based economy like we were half a century ago. Nor do I believe it's important to commit to expensive dredging to keep the water deep enough for a few boat owners to store their crafts in unsightly sheds at the yacht club. It's time to rethink the whole interface between downtown and our waterfront.

**Supporting Materials (if any):** N/A

**Name (ID): Charles Barlow (I-280)**

**Organization (if applicable):** N/A

**Submission Text:** I strongly support the Estuary option for the remediation of Capitol Lake and associated waters. Returning the area to a more natural condition is good environmental practice.

**Supporting Materials (if any):** N/A

**Name (ID): Stanley Jackson (I-281)**

**Organization (if applicable):** N/A

**Submission Text:** I would like the lake to be returned to an estuary. While at low tides it will look like a mud flat in some ways, the rest of the time it will look much like a lake, but requiring much less maintenance and allow better passage for whatever fish and other wildlife might use it for passage up or down stream.

**Supporting Materials (if any):** N/A

**Name (ID): Jane Stone (I-282)**

**Organization (if applicable):** N/A

**Submission Text:** I am in support of restoring the natural estuary as a way to help recover and maintain the health of Puget Sound; nurture the return and/or survival of native species; and serve as a reminder to the urban community of our deep connection with the natural world we live in.

**Supporting Materials (if any):** N/A
Name (ID): John James (I-283)

Organization (if applicable): N/A

Submission Text: I am greatly in favor of the 'Estuary Alternative'. Removing the dam is keen to returning our environment closer to natural and reducing the problems that have ensued since the dam construction. It is the best alternative currently suggested. Please endorse this plan for me

Supporting Materials (if any): N/A

Name (ID): Kathryn and Patrick Townsend (I-284)

Organization (if applicable): N/A

Submission Text: We strongly encourage you to re-establish the Budd Bay estuary. A natural system is not only best for the planet, Puget Sound and all the critters who thrive in an estuary environment, but also best for educational purposes--the simple and profound lessons of mother nature. We live on a muddy/sandy estuary out here in Boston Harbor and it is a wondrous thing. Every day, we are reminded of the rhythms of the waters and the days, the tides that vary based on the moon. So many do not understand these tides--that they are lowest and highest during the summer days and winter nights, that they vary daily by a particular amount of time, that they change from winter to summer just as the solstice changes. The children of Olympia deserve an estuary and to live daily with this tidal system and know it by watching and seeing how the tides change--not just from a book. We hope the parks in the estuary plan include beaches for children. There is no point in going half-way! Please restore the Budd Bay estuary from Capitol Lake.

Supporting Materials (if any): N/A

Name (ID): Michael Sullivan (I-285)

Organization (if applicable): N/A

Submission Text: About the lake/estuary, Making the river ready for an estuary will cost millions that are needed elsewhere. An estuary is a want, not a need. It will require tearing down the new bridge and then building a new one with supports that can withstand the ebb and flow of the tides. The construction of the bridge would mean cutting off traffic during construction to/from the West side which will harm the business economy.

An estuary would creat an unsightly mudflat which would make the entire area, and more importantly, the downtown shopping and dining area - stink. Our family has lived on Water Street, overlooking this water since 1978. We remember when the tide was out that it smelled of rot and that only a small channel of water passed from the Deschutes River into the bay, I mean small! It is debatable whether an estuary would meaningfully increase the salmon run. The water coming down the Deschutes from Mt. Rainier is often like a small creek. Mud and debris from the river and trash from people traveling past the area, will add to the messy tangle of things needed to be cleaned up regularly by city crews. Containing
the mud snail must also be a priority. The lake enhances Olympia. People enjoy walking the length of the parkway. The lake is often featured for its beauty by ty news channels covering Olympia, tourism brochure photos show the beauty of the lake when showcasing the State Capitol. A lake will allow tourists and local families a place to spend leisure time and shop in the nearby area. Do you really think people will move into upscale condos and apartments if the site and smell distract from their home? Property prices will go down To really find out what the majority wants, put it to a straight up vote! Mike and Linda Sullivan with first hand knowledge of what it was like before the lake.

Supporting Materials (if any): N/A

**Name (ID): Denis Langhans (I-286)**

Organization (if applicable): N/A

**Submission Text:** I strongly support the estuary option. It is, in my opinion, the best ecological approach as well as the most practical financially.

Supporting Materials (if any): N/A

**Name (ID): Stacie Lerchie (I-287)**

Organization (if applicable): N/A

**Submission Text:** Please accept this as my submission and vote for the Estuary/Tidal flat option for the future plans for Capitol Lake Olympia WA.

Supporting Materials (if any): N/A

**Name (ID): Karen Verrill (I-288)**

Organization (if applicable): N/A

**Submission Text:** I am very impressed with the work and research that went into the DEIS. It seems critical that the Estuary be restored. This would help eliminate the invasive species and make the entire area healthier for the birds, fish and humans to use. It is less expensive than the alternative and still allows for reflection pond. Thank You

Supporting Materials (if any): N/A

**Name (ID): Valerie Krull (I-289)**

Organization (if applicable): N/A

**Submission Text:** I agree with many commentators who said: This EIS does not accurately reflect a basic scientific foundation in regards to an understanding of water ecology, nor a grasp of the importance of, or impacts on, both river and marine ecology. The State of Washington ought not be in
the business of preserving an orientation to Capitol Lake which is based in settler/invader history and continues the lie that white people have a right to fashion the land in, literally, their image. If it were possible, which I believe evidence has been given that shows that it is not, to have a hybrid solution, I might agree with one commentator who suggested that 85% restoration was better than none. BUT since it is clear that the hybrid solution is doomed to the realities of biology and the clear climate trajectory of our region, please do not make the mistake of applying a badly made bandage to a festering wound. Support a realistic and swift restoration to a natural estuary for what we have been calling Capitol Lake.

**Supporting Materials (if any):** N/A

**Name (ID): Bette Shultz (I-290)**

**Organization (if applicable):** N/A

**Submission Text:** This has been an issue for a long time and each time it comes up NOTHING is done. I would like the lake be cleaned up and useable to the citizens for swimming and boating. FIRST, the homeless camp across the street from the lake needs to go away. The RAT problem is only getting worse. Citizens do NOT feel safe being down there. Quit spending money on studies and get something done.!!!!!!

**Supporting Materials (if any):** N/A

**Name (ID): Doug Maxwell (I-291)**

**Organization (if applicable):** N/A

**Submission Text:** While turning it back into a natural fresh/salt water estuary may be the most ecological solution, it is only fair if the proponents of that solution explain/admit that when the tide is out, there will be a mud flat and all the associated smells, and temptations to walk into it that go along with it. The photo of course shows what it would look like when the tide is in. There should be a photo of what it would look like when the tide is out and the garbage that everyone will throw into it will look like

**Supporting Materials (if any):** N/A

**Name (ID): Yvonne Thompson (I-292)**

**Organization (if applicable):** N/A

**Submission Text:** The North & Middle Basin need to be drained. It smells really bad in that area.

**Supporting Materials (if any):** N/A

**Name (ID): David Bellefeuille-Rice (I-293)**

**Organization (if applicable):** N/A
Submission Text: I favor the estuary option. It's less expensive, now and forever, and will not look bad at all. Estuaries are interesting

Supporting Materials (if any): N/A

Name (ID): Joel Finch (I-294)

Organization (if applicable): N/A

Submission Text: I support an honest study of the DELI plan. I think it gives us a chance to gain a place for swimming and recreation. Regaining a functioning estuary also offers us a chance to improve our local salmonid fisheries. Native salmon need all the help we can give them. Let's face it, the mud snails have won. There is no way to regain the lake as it was. The DELI will be a win/win for our economy. Recreation brings in money to local businesses. I think we all like that. Continuing the endless committees and 'planning' is getting us nowhere. Let's have a compromise. Keeping Capitol Lake as a pretty thing to look at, but you musn't ever touch is ridiculous.

Supporting Materials (if any): N/A

Name (ID): Randall Graham (I-295)

Organization (if applicable): N/A

Submission Text: Been here all my life, retired state employee. 6 years at Enterprise Services. I'd prefer to see a combination of both a managed lake and hybrid alternative. The lake was designed as it is to be a visually appealing adjunct to the Capital Campus. and for that reason should remain as such. I believe the hybrid alternative would support this criterion as well. The las thing downtown needs is a mud filled, mosquito infested estuary that plagued the citizens prior to the lakes construction. Just my two cents...

Supporting Materials (if any): N/A

Name (ID): Robyn Cloughley (I-296)

Organization (if applicable): N/A

Submission Text: It would help me to understand the value of the different alternatives if I understood the conditions this summer that led to lots of dead small silver fish

I notice lots of garbage ends up in Capitol Lake. If the estuary alternative is selected, which is my favorite, will garbage be revealed each low tide? And if so, what is the plan for managing that?

Supporting Materials (if any): N/A

Name (ID): Sharon Fasnacht (I-297)

Organization (if applicable): N/A
Submission Text: Reps. Bateman & Dolan, Thank you so much for all your work related to the future of Capitol Lake! My husband, Gary Fasnacht, and I have enjoyed the Lake since moving here in 1983, and have considered the Lake & its parks & walks, integral to our 77 yr. old physical and mental health. We would like to see 'a' Capitol Lake survive, but with as much respect for Mother Nature's input as possible. We looked for a 'compromise' that would honor Her, and allow we humans to preserve our Capitol Lake. Both of us have read most of the material you've made available and, after consulting with each other, are speaking in support of the HYBRID ALTERNATIVE, which: 1. Removes the Dam. 2. Creates an Estuary. 3. Creates a 'lake'. 4. Supports redesign of local roads and bridges. 1. It removes the dam, allowing the natural, and original, 'exchange' between the salt water and the river water. 2. A natural 'Estuary', destroyed when the dam was constructed, would be re-established. We are honoring what is natural, which will benefit us for centuries to come. 3. A 'LAKE' is established that will be fed by both river water and salt water, which is a more 'nature' lake. And yes, that requires a barrier be constructed that will contain the lake, but will also permit the exchange of sea/salt water and river water within the lake. Again, we honor Mother Nature.

4. And, the planned changes to 4th Ave. and 5th Ave. make all the sense in today's world. With appreciation for all your work!

Supporting Materials (if any): N/A

Name (ID): Joy and Jerry Anonymous (I-298)

Organization (if applicable): N/A

Submission Text: Managed Lake

Supporting Materials (if any): N/A

Name (ID): William Meeker (I-299)

Organization (if applicable): N/A

Submission Text: I support keeping Capitol Lake as a scenic place for all people and as a something to support wildlife and marine animals.

Supporting Materials (if any): N/A

Name (ID): Ellen Vaughn (I-300)

Organization (if applicable): N/A

Submission Text: Please restore the area to the estuary it is supposed to be. Capitol Lake has been a cesspool my entire life and is causing more problems than it is worth. I have lived above the 'lake' for over 40 years. My favorite time for the 'lake' was after the earthquake in 2001. Due to construction to repair the road and bridge, Capitol Lake was kept low and it was fascinating seeing what grasses a
wildlife moved in during that time. Restoring the estuary would help provide an additional filter for pollutants entering the southern end of Puget Sound. The early 20th century vision for Capitol Lake was for it to be a reflecting pool for the dome. The 21st century ideal should be a return to a natural process which an estuary would provide

Supporting Materials (if any): N/A

**Name (ID): Valerie Lange (I-301)**

Organization (if applicable): N/A

**Submission Text:** Re: Preferred Option: Estuary Alternative Hello, I am writing to you in support of the Estuary Alternative option. I believe the estuary alternative is the best option for several reasons, which includes the following points: 1. It will restore habitat and have long lasting ecological benefits. 2. It is a cost effective option compared to the other two. 3. It will improve water quality. 4. It will help to eliminate invasive species. It is time to restore the river to it's natural state. Please remove the dam and let the system heal itself.

Supporting Materials (if any): N/A

**Name (ID): Valerie Estes (I-302)**

Organization (if applicable): N/A

**Submission Text:** Of course I would love to see the managed lake option to bring back the lake to what it was when I was a kid. Many good memories were made swimming and boating in the lake, and the ski competition and boat races during Lakefair. Our kids and future generations should have those same experiences. But I do understand this option will cost the most money so, with reluctance, I would vote for the hybrid alternative.

Supporting Materials (if any): N/A

**Name (ID): Alex Kistler (I-303)**

Organization (if applicable): N/A

**Submission Text:** I vote for either the estuary or hybrid models. The current lake while scenic has big problems with water quality and invasive species that can not be easily mitigated. Returning to a more natural estuary seems like the best choice to me.

Supporting Materials (if any): N/A

**Name (ID): Jay Paulson (I-304)**

Organization (if applicable): N/A
Submission Text: Hello, I am stating my support for returning the Capitol lake area to an estuary. Studies have shown just how important estuaries are for searun fish species. Thank you,

Supporting Materials (if any): N/A

Name (ID): Josh Boisvert (I-305)

Organization (if applicable): N/A

Submission Text: Please return the area to an estuary.

Supporting Materials (if any): N/A

Name (ID): Melissa Griffus (I-306)

Organization (if applicable): N/A

Submission Text: I was raised here but spent 27 years in the Bay Area and am back and I would love to see a return to estuary, which is best for everyone and the planet. Places that have been returned to the estuaries they once were help cleanse the planet and provide homes for many species. Capitol Lake is a dead, embarrassing legacy of a mentality that believes unnatural changes to our environment are pleasant to the eye. Too many bad effects from these kind of choices. Our Capitol city deserves better, we deserve better and the planet deserves better.

Supporting Materials (if any): N/A

Name (ID): Alicia Boisvert (I-307)

Organization (if applicable): N/A

Submission Text: The area should be returned to an estuary equivalent to reestablish the ecosystem services that the creation of the lake eliminated. The need for a reflecting pool is a man-made construct that does not benefit the elimination of invasive species or enhances biodiversity. If one considers the work done with Nisqually as a guide, the Deschutes would best benefit from the total removal of the dam & allow for unhindered intertidal flow. Thank you for considering my opinion. Alicia Boisvert Olympian, mother, science teacher

Supporting Materials (if any): N/A

Name (ID): Daniel McCartan (I-308)

Organization (if applicable): N/A

Submission Text: My first preference would be the full estuary restoration option,. The second choice would be for the hybrid option.
Supporting Materials (if any): N/A

**Name (ID): Brad Stephens (I-309)**

Organization (if applicable): N/A

Submission Text: will love to see the hybrid model. Having a vibrant capital lake for the community with exercise would be a significant positive impact. Including a white water surfing wave in the Plan like Reno or Bend would be a great plus as well.

Supporting Materials (if any): N/A

**Name (ID): Derek Hoffman (I-310)**

Organization (if applicable): N/A

Submission Text: I'll keep this comment short and sweet. I think the hybrid alternative would be the best overall. It would maintain a small lake to serve as a reflecting pool for our state capitol building, as originally intended, while restoring the majority of the area to an estuary which would be better for the environment overall.

Supporting Materials (if any): N/A

**Name (ID): Bradley Proctor (I-311)**

Organization (if applicable): N/A

Submission Text: I write in strong support of the estuary option for the future of Capitol Lake. I moved to Olympia in 2017, and it is clear that the dam, the current lake, and the current landscape is not environmentally sustainable. In contrast, the estuary created at the Nisqually Wildlife preserve has been a huge success, both for the community and for the environment. The EIS report makes clear that only an estuary--not the managed lake or the hybrid alternative--would reduce adverse impacts on tribal communities that the current degradation of the environment has created. It is also clear that only the estuary--neither the managed lake nor the hybrid model--will have actual beneficial impacts to the ecology and wildlife of the region. I am certain that only the estuary (and neither of the alternatives) will improve not only the quality of my physical life as a resident of Olympia--healthier waterways, greater ecological resilience, better impacts on climate--but also my positive sense of living in a town that has not only physical beauty but strong community values. I thus strongly urge the adoption of the plan to restore the estuary.

Supporting Materials (if any): N/A
**Name (ID): Ty Karney (I-312)**

**Submission Text:** Born in Old St Peters (1962) just on the hilll above the lake and growing up a few blocks away, Capitol Lake has always been and should be a lake. Enclosed is a picture of small outboard race boats that were invited to race during Lakefair. (pic 1961) They raced from about 1958 until 2009. This is my culture and heritage. Need to keep the lake a lake.

Look, if you are not from around here, in the 70's all three water basins had boat racing on them. Outboards on the North lake, skiing and drag boats on the South Lake and R/C boats in the Percival creek fish pond during Lakefair. It was hard to decide which was more fun to watch. O.K. times have changed, the North Lake should be used for stand up paddle boards, and kayaks need to be allowed to paddle up to Tumwater falls. Once a year the outboards should be invited to race again.

Killing the mudsnails is so easy - no one wants to do it. Burn them with propane brush burners. Lower the lake enough to expose them and work your way around. Leave the lake level down a bit and let them bake in the summer sun. Then saltwater flush and repeat as needed. Fire is natures way. Dept. of Ecology can go read a book.

Enclosed is couple of lake maps that prioritize trapping the sediment in the South end preserving the North Lake and Port shipping basin operations. More than anything else you need to build a new restroom at Legion and Water. Provide a West facing covered area for weddings and a storage room for 100 chairs. Include additional changing rooms for the wedding party.

**Supporting Materials (if any):** [I-312_Karney.pdf](I-312_Karney.pdf)

**Name (ID): Wison Hancock (I-313)**

**Organization (if applicable):** N/A

**Submission Text:** My comment is about dredging. The unchanging reality that must be dealt with is that the Deschutes River will continue to deliver an annual silt load to it's mouth where it will be deposited right in the heart of the City of Olympia's marine waters. It will never stop. The original North Capital Lake at a depth of some 60' was expected to collect that sediment for several years after which the Department of General Administration was charged with maintenance dredging. They failed and here we are today. My only concern is the fate of the 5th Avenue Dam. And I'm concerned because very little is said about the sedimentation that will occur in the first 3 years after the Dam is removed. Here's the only comment I could find in the current EIS that deals with this issue: 'To avoid or minimize impacts to navigation in West Bay, both alternatives (Estuary and Hybrid) would include an adaptable long-term maintenance dredging plan (part of the alternative), with the frequency of dredging established by a sediment monitoring plan (mitigation measure). Impacts to navigation are considered significant, but could be reduced to less than significant, if consistent funding is available for the long-term maintenance dredging program.' (italics are mine)
The EIS makes the correct observation that during the first 3 years after Dam removal between 200% to more than 300% of the silt will flush up onto the east shore of lower Budd Inlet. It will silt in The Olympia Yacht Club, the entire costly and delightful infrastructure we call Percival Landing, the Mom and Pop marinas south of the Port and to a somewhat lesser extent the Port of Olympia's marine turning basin. The EIS does NOT mention the actual cost of such dredging and that huge cost underpins my comment. Normal dredging involves sucking up the sediment and depositing it in a very deep part of Puget sound near Ketron Island. That sensible option is no longer available. There is a group in Olympia who has gone to court and succeeded in forcing the Port of Olympia to take the dredging spoils that are generated by maintaining their turning basin and haul them away by truck, one truck load at a time. The group bases their objection to normal spoils removal by claiming that lower Budd Inlet spoils contain diazinon (a naturally occurring toxin) and that to re-distribute it other parts of the Sound violates the law. So the current EIS observes that navigation in southern Budd Inlet could be maintained 'if consistent funding is available' for long term maintenance dredging. Nobody has calculated what such funding would amount to when dredging spoils must be trucked away. It's hugely more expensive than 'normal' dredging. And ... it's ongoing, year after year after year. In my view the answer is clear and obvious. If you remove the 5th Avenue Dam, in very short order it spells the end of the Yacht Club, the small private marinas and much more significantly Percival Landing because the hit on The City of Olympia's budget will never sustain the cost of long-term maintenance dredging of lower Budd Inlet. Don't do it! Don't remove the 5th Avenue Dam.

Supporting Materials (if any): N/A

**Name (ID): Phyllis Farrell (I-314)**

**Submission Text:** Greetings, thank you for the opportunity to comment on this important issue. The most environmentally and fiscally responsible alternative is to remove the dam and restore the estuary. Budd Bay and south Puget Sound water quality issues depend on a free-flowing river. Salmon recovery efforts require estuaries for juvenile salmon. The success of the Nisqually River estuary restoration illustrates the benefits of habitat for Nisqually River and other watershed salmon populations. Every effort should be made to provide more habitat for south Puget Sound juvenile salmon and forage fish. Estuaries are carbon sinks. Given climate change effects, every effort should be made to achieve the sequestration benefits of restoring the estuary.

Supporting Materials (if any): N/A

**Name (ID): Paula Holroyde (I-315)**

**Submission Text:** I agree with the state wide Fish Passage Barier Removal strategy that emphasizes the need to restore passages by removing large and more complex barrier structures like dams. ESA-listed salmon and steelhead restoration of ocean and freshwater conditions. These factors are in addition to
the existing and potential connectivity (barrier-fr33 areas) of the system. It is worth defining what is meant by habitat quality, quantity, and connectivity in relation to fish passage restoration for ESA-listed salmon and steelhead.

Supporting Materials (if any): N/A

Name (ID): Ruth King (I-316)

Organization (if applicable): N/A

Submission Text: I very strongly urge that Capitol Lake be maintained as it currently is. It is an iconic part of our landscape and an important natural area in our city. I used to work near the lake and even when I worked on the Capitol Campus, I almost every day ran around the lake or at least part way around. The lake, as it is, is a very important part of our Capitol City landscape. Turning the lake into a tidal river would destroy that landscape. I am very environmentally focused but in this case we have made an environment change that if reversed would be very detrimental to our city landscape. Please keep our Capitol Lake.

Supporting Materials (if any): N/A

Name (ID): Tom Dyer (I-317)

Organization (if applicable): N/A

Submission Text: Please remove the dam and reopen the estuary.

Supporting Materials (if any): N/A

Name (ID): Michael Thompson, MD (I-318)

Organization (if applicable): N/A

Submission Text: One of the reasons we moved to Olympia 26 years ago was its inherent beauty. We were awe struck by the splendor of the reflection of the capitol building on the lake. Please keep the lake as is and maintain it! Sincerely, Michael K Thompson, MD

Supporting Materials (if any): N/A

Name (ID): Robert Gundlach (I-319)

Organization (if applicable): N/A

Submission Text: Please leave the lake as it is. It was designed to enhance the Capital City and not become a stinking tidal ground. People enjoy walking around the lake and Marathon park and the ambiance of the area, (except for the ugly homeless encampment). It is Olympia. Please don't ruin it.
Submission Text: Any plan should include a mandate for a Deschutes Watershed Council, in accordance with the recommendations of the Water Restoration and Enhancement Committee, comprised of representatives from local jurisdictions: Thurston County, Lewis County, Olympia, Lacey, Tumwater, The TCD, the Squaxin Island Tribe, and other organizations. Water quality and quantity are affected by Thurston County's growing population, climate change and the management of the Deschutes River and its 15 watersheds. So, watershed protection is important for sustainable ecosystems. Alignment with the Thurston County Mitigation Plan, specifically carbon reduction and the positive effects of the estuary to absorb carbon from the atmosphere (carbon sequestration), must be part of any plan as we contend with the impacts of climate change.

Recognition and restoration to the Squaxin Tribe of traditional cultural uses and legal rights to Steh-Chass (the traditional name of the Deschutes Estuary) is imperative. The salmon that would use the estuary are from all over Puget Sound. Commission more detailed studies of the use by and impacts on the survival of various species of salmon in the estuary. This is critical given that salmon and the species that depend on them, such as orca whales, are imperiled.

Collaboration with the State Department of Transportation to mitigate toxins in runoff from I-5 and the 101 that pollute the Deschutes Estuary is important.

Submission Text: Having lived in Thurston County since my parents moved here in 1974, and until very recently having lived at 134 W Bay Drive where the lake and the dam were a part of my daily walk, I consider the failure to maintain Capitol Lake to be one of the true tragedies of our community. The fact that the centerpiece of our community and capitol city was allowed to degrade to such a level is appalling. This degradation was a result of conscious decisions by legislative capital budget writers who were opposed to the existence of the dam and therefore wanted the lake to fall into disrepair in order to generate support for the dam's removal. With proper care, the lake can be both a hub of community activity and a vibrant ecological habitat. Water quality concerns in Budd Inlet will always be significant given the low exchange of water at this far end of the Puget Sound. Opening up Capitol Lake to saltwater exchange will not improve this situation. The removal of sediment is also necessary for vessel traffic in Budd Inlet, and can be handled in a more controlled fashion in a freshwater lake with a constant waterline. I would like my children to have the opportunity to enjoy Capitol Lake as I did growing up here before it's closure to swimming in the mid 1980’s, or at least be able to use non-powered watercraft on
the lake. It would be a tremendous waste to allow this central feature of our unique city to be eliminated due to frustration at the lack of maintenance.

**Supporting Materials (if any):** N/A

**Name (ID):** Maureen Wells (I-322)

**Organization (if applicable):** N/A

**Submission Text:** Having studied several documents and heard reports from the committee, I believe the best option is the hybrid. It takes into account several key factors- e.g. rising sea water, algae control, maintenance costs, water temperatures. Keeping a portion of the freshwater lake for recreation, reflecting pond, and a freshwater reservoir are very important to me and my family. We live above Percival Cove and ok with a partial estuary as we enjoy the wildlife.

**Supporting Materials (if any):** N/A

**Name (ID):** Scott McLain (I-323)

**Organization (if applicable):** N/A

**Submission Text:** Dear Enterprise Services: Eleven years ago I worked with other Olympia residents to show that the public comment period for the proposed management of Capitol Lake had been manipulated to make it appear that the majority of area residents wanted the lake turned into an estuary when the opposite was true-our research showed that 80% of the public wants Capitol Lake to remain a lake. The latest EIS comment period is no more statistical representative of the wishes of the public then the last (it is still easily manipulated) and no one should claim broad public support for their preferences based simply on the number of people who voluntarily submitted comments.

While the latest Environmental Impact Statement (EIS) includes an option for keeping and maintaining the lake, the Hybrid Alternative option (however it was decided) is so disproportionate it is a non-starter. That option proposes keeping only 45 acres of the original 260 acre lake as a reflection pool -17% of the original lake. No one looking at that option can pretend it legitimately addresses the preferences of our community. Eleven years ago the public stated clearly we wanted a lake. And, if we were going to accept a hybrid option than a significant portion needed to remain a lake-my, and others expectation was that the entire north basin to remain a lake with the remaining middle and south basin being allowed to return to a mudflat-a reasonable compromise. It is my preference that we honor the public's wishes by going forward with the managed lake option and that we commence as quickly as possible with dredging and fixing the dam to ensure the lakes long-term viability. The hybrid lake option needs to be changed to include the entire north basin as a reflection pool or be completely abandoned-anything less is does a disservice to the public process.

**Supporting Materials (if any):** N/A
Name (ID): Scott McLain (I-324)

Organization (if applicable): N/A

Submission Text: Dear Enterprise Services: Eleven years ago I worked with other Olympia residents to show that the public comment period for the proposed management of Capitol Lake had been manipulated to make it appear that the majority of area residents wanted the lake turned into an estuary when the opposite was true-our research showed that 80% of the public wants Capitol Lake to remain a lake. The latest EIS comment period is no more statistical representative of the wishes of the public then the last (it is still easily manipulated) and no one should claim broad public support for their preferences based simply on the number of people who voluntarily submitted comments.

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Supporting Materials (if any): N/A

Name (ID): Robert Cook (I-325)

Organization (if applicable): N/A

Submission Text: why would so few persons would want to destroy such a beautiful part of Olympia please leave the lake alone

Supporting Materials (if any): N/A

Name (ID): Marc Barber (I-326)

Organization (if applicable): N/A

Submission Text: If this is like every other situation/problem in Olympia/Thurston county, state legislatures . county council members, and city council officials will talk until the cows come in and do nothing until it is too late. It has become apparent to me that nothing ever gets accomplished because of the politics of every situation. Democrats are unwilling to listen of alternate solutions, thus deadlock. Please put politics aside and accomplish something!
Supporting Materials (if any): N/A

Name (ID): Heather Pens (I-327)

Organization (if applicable): N/A

Submission Text: I prefer the Estuary alternative because it is the most environmentally sound and because it is better for the native tribes who should have first say over land and water that was stolen from them. Thanks for all the work you have put into this.

Supporting Materials (if any): N/A

Name (ID): George & Linda Lamb (I-328)

Organization (if applicable): N/A

Submission Text: We tried to participate in the hearing on July 27 and was electronically told by the website, that the meeting would be ‘tomorrow’, to my surprise? Then, it was discovered that the meeting was the original night! But, it was recorded. Thank you for recording it; but, I wonder how many of the prospective speakers were turned away, as was I?

We know there are ecological effects for keeping the dam and Capitol Lake as well as effects on removal. Any choice will have some adverse effects. We believe that managed flow through Capitol Lake is essential to any choice. We do not desire low tide problems from the estuary choice. Is it necessary to have no dam in order to have fish traverse safely? We prefer that Capitol Lake be maintained in a way that will allow fish to be unobstructed; yet, remain a Lake. This does require the dam to be in place in such a way that fish may come through and it does require ongoing maintenance of the river flow through the lake.

Bats and other creatures that have adapted over the decades of the lake’s existence are a significant part of our ecology, too.

Supporting Materials (if any): N/A

Name (ID): Linda Lamb (I-329)

Organization (if applicable): N/A

Submission Text: We tried to participate in the hearing on July 27 and was electronically told by the website, that the meeting would be ‘tomorrow’, to my surprise? Then, it was discovered that the meeting was the original night! But, it was recorded. Thank you for recording it; but, I wonder how many of the prospective speakers were turned away, as was I?

We know there are ecological effects for keeping the dam and Capitol Lake as well as effects on removal. Any choice will have some adverse effects. We believe that managed flow through Capitol
Lake is essential to any choice. We do not desire low tide problems from the estuary choice. Is it necessary to have no dam in order to have fish traverse safely? We prefer that Capitol Lake be maintained in a way that will allow fish to be unobstructed; yet, remain a Lake. This does require the dam to be in place in such a way that fish may come through and it does require ongoing maintenance of the river flow through the lake.

Bats and other creatures that have adapted over the decades of the lake's existence are a significant part of our ecology, too.

Supporting Materials (if any): N/A

**Name (ID): Jody Disney (I-330)**

**Organization (if applicable):** N/A

**Submission Text:** The fish barrier is a man-made structure or human caused impediment that fish cannot adequately migrate through. Remove the dam! Prioritize the barrier reduction to improve the estuary for the fish! We need the Chinook and they need us!

Supporting Materials (if any): N/A

**Name (ID): Chris Chambers (I-331)**

**Organization (if applicable):** N/A

**Submission Text:** Return this to an estuary. The benefits to the planet spread far beyond the relatively few who benefit from the existing park. You can still keep you park and trails. Good Luck Chris

Supporting Materials (if any): N/A

**Name (ID): Tyler Clemens (I-332)**

**Organization (if applicable):** N/A

**Submission Text:** I would first like to say that I appreciate the thorough analysis conducted by the Washington State Department of Enterprise Services in this draft EIS. In the hybrid alternative proposal, there are options for either a saltwater or freshwater reflecting pool, both of which seem to be viable alternatives to Capitol Lake as it currently exists. In Attachment 7 of the EIS under Appendix E: Freshwater Pool Analysis, there is ample information about necessary management strategies and how a freshwater reflecting pool would affect overall water quality. There isn’t, however, information regarding projected maintenance costs specific to this option. While water quality data is vitally important in consideration of the freshwater hybrid option, it would be helpful to include projected maintenance costs because one of the many benefits of the freshwater option is as a recreational swimming opportunity.
In Chapter 2 of the EIS, there is a small sidebar which states that the projected costs of swimming facilities is outside the scope of this document and would have to be determined at a future date. Considering the expense of this project, it may be helpful to provide at least some additional information regarding projected maintenance and swimming facilities costs for the freshwater option to help taxpayers understand how their money would be spent and so they could determine whether the benefits of having a freshwater lake to swim in would outweigh the costs of maintenance and facilities construction. While the saltwater pool option is still a reasonable alternative, a freshwater pool and the opportunity to swim would likely attract many more people, which would, in turn, increase tourism and help to support downtown businesses.

**Supporting Materials (if any):** N/A

**Name (ID):** Charlie Saibel (I-333)

**Organization (if applicable):** N/A

**Submission Text:** My wife and I enthusiastically support the DELI option for Capitol Lake with a sectioned-off area for freshwater swimming. The freshwater DELI option should replace or at least be considered along with the saltwater Hybrid Alternative. DELI would enhance our community with the following: * Help alleviate Olympia's shortage of public freshwater swimming areas. Capitol Lake at Heritage Park used to be the most popular swimming place in Olympia, and it is sorely missed. * The pedestrian parkway path would add quality and length to what has been voted the best walk in Olympia. * It would not significantly limit area of the estuary plan. * It would promote fish and wildlife habitat as many prefer the fresh water environment. * The rock wall separating the lake would be long-term, low maintenance. * Stormwater and detention options are covered in the DELI plan including cleanup efforts currently in progress. An advantage of this plan is that the continuous flow of freshwater into the lake is the best way to keep the water fresh and clean.

**Supporting Materials (if any):** N/A

**Name (ID):** Dave Davis (I-334)

**Organization (if applicable):** N/A

**Submission Text:** Although it's probably the more expensive option, please move forward with the managed lake alternative. Use the middle basin as a silt gathering estuary, and please by all means restore the swimming area that was there so many years ago. Our city needs a public swimming area and doesn't need a swamp in the shadow of the capitol building. WA govt. spends money on far less fruitful endeavors, dredge the lake and restore it to its original glory. Please don't rob Olympia of the last beautiful open space we have. Thank you

**Supporting Materials (if any):** N/A
Name (ID): Joseph Hiss (I-335)

Organization (if applicable): N/A

Submission Text: I don't know if you got my previous comment. In it, I thought Options 3 and 4 were both good. Upon further review, I understood that the estuary/reflecting pool option would cost three times what the estuary-alone project, and would need an ugly wall visible from the lake until vegetation hides it. On this basis I would choose the estuary-alone option. I also think the 'reflecting pool' is somewhat a misnomer, since the existing lake gets enough wind to block the reflection a good part of the time.

Supporting Materials (if any): N/A

Name (ID): Wison Hancock (I-336)

Organization (if applicable): N/A

Submission Text: My comment is about dredging. The unchanging reality that must be dealt with is that the Deschutes River will continue to deliver an annual silt load to it's mouth where it will be deposited right in the heart of the City of Olympia's marine waters. It will never stop. The original North Capital Lake at a depth of some 60' was expected to collect that sediment for several years after which the Department of General Administration was charged with maintenance dredging. They failed and here we are today. My only concern is the fate of the 5th Avenue Dam. And I'm concerned because very little is said about the sedimentation that will occur in the first 3 years after the Dam is removed. Here's the only comment I could find in the current EIS that deals with this issue: 'To avoid or minimize impacts to navigation in West Bay, both alternatives (Estuary and Hybrid) would include an adaptable long-term maintenance dredging plan (part of the alternative), with the frequency of dredging established by a sediment monitoring plan (mitigation measure). Impacts to navigation are considered significant, but could be reduced to less than significant, if consistent funding is available for the long-term maintenance dredging program.' (italics are mine)

The EIS makes the correct observation that during the first 3 years after Dam removal between 200% to more than 300% of the silt will flush up onto the east shore of lower Budd Inlet. It will silt in The Olympia Yacht Club, the entire costly and delightful infrastructure we call Percival Landing, the Mom and Pop marinas south of the Port and to a somewhat lesser extent the Port of Olympia's marine turning basin. The EIS does NOT mention the actual cost of such dredging and that huge cost underpins my comment. Normal dredging involves sucking up the sediment and depositing it in a very deep part of Puget sound near Ketron Island. That sensible option is no longer available. There is a group in Olympia who has gone to court and succeeded in forcing the Port of Olympia to take the dredging spoils that are generated by maintaining their turning basin and haul them away by truck, one truck load at a time. The group bases their objection to normal spoils removal by claiming that lower Budd Inlet spoils contain diazinon (a naturally occurring toxin) and that to re-distribute it to other parts of the Sound violates the law. So the current EIS observes that navigation in southern Budd Inlet could be maintained 'if consistent funding is available' for long term maintenance dredging. Nobody has calculated what such funding would amount
to when dredging spoils must be trucked away. It's hugely more expensive than 'normal' dredging. And ... it's ongoing, year after year after year. In my view the answer is clear and obvious. If you remove the 5th Avenue Dam, in very short order it spells the end of the Yacht Club, the small private marinas and much more significantly Percival Landing because the hit on The City of Olympia's budget will never sustain the cost of long-term maintenance dredging of lower Budd Inlet. Don't do it! Don't remove the 5th Avenue Dam.

Supporting Materials (if any): N/A

**Name (ID): Annabel Kirschner (I-337)**

**Organization (if applicable): N/A**

**Submission Text:** Please remove the dam from the Deschutes Estuary! Prioritize spawning and rearing habitat. Restore the health of salmon and steelhead. Help Chinook in tributaries.

Supporting Materials (if any): N/A

**Name (ID): Judy Artley (I-338)**

**Organization (if applicable): N/A**

**Submission Text:** The fish barrier is a man-made structure or human caused impediment that fish cannot adequately migrate through. Remove the dam. Prioritize barrier reduction to improve spawning and rearing habitat. Restore health and harvestable levels of salmon and steelhead. Estuary habitat is critical to chinook transition to tidal waters.

Supporting Materials (if any): N/A

**Name (ID): Allyson Zipp (I-339)**

**Organization (if applicable): N/A**

**Submission Text:** I prefer the estuary option. In my opinion, it will provide the most environmental benefits, and the best balance of up-front investment versus long-term maintenance costs.

Supporting Materials (if any): N/A

**Name (ID): Ryan Hollander (I-340)**

**Organization (if applicable): N/A**

**Submission Text:** My family wholeheartedly supports reverting Capitol Lake to a natural estuary. The pedestrian and scenic magnetism it already holds would only get more powerful. The lake, currently covered in yellow slime and closed to all recreation, is so obviously ill and needs a change. Letting Budd
Bay and the Deschutes River exchange their waters more freely is the healing this delta needs. Thank you.

**Supporting Materials (if any):** N/A

**Name (ID):** Henry Carson (I-341)

**Organization (if applicable):** N/A

**Submission Text:** Thanks for the opportunity to review. I support the estuary alternative because it works toward water quality, ecological function, and recreation goals while having the lowest estimated cost to taxpayers.

**Supporting Materials (if any):** N/A

**Name (ID):** Marcy Anholt (I-342)

**Organization (if applicable):** N/A

**Submission Text:** Please support the Estuary Alternative to help our fish and other marine regain sustainability. Thank you

**Supporting Materials (if any):** N/A

**Name (ID):** Joyce Baldwin (I-343)

**Organization (if applicable):** N/A

**Submission Text:** Yes, I am in favor of the 'Estuary Alternative' to return the lake to natural estuary conditions. Salt water doses regularly keep it cleaner and freer from the diseases of Capitol Lake. i.e. noxious poison aquatic weeds and organisms. Cleaner is better.

I am a fisheries biology journalist for about forty years. The state hatchery on the river also blocks fish from migrating upriver. The state has been releasing coho or silver salmon to the upriver environment for several years, trying to reseed the river. Also, it is the practice of the hatchery to block all upstream migration until they get their quota. Their practice takes eggs and distributes them to other hatcheries. Both the upriver shotgun releases and the hatchery distribution has not been a success. The state claims failures are due to the Deschutes River floods almost yearly, and the warming of the planet water works. Hatcheries are like a state sacred cow. I am in favor of returning the whole river to its natural environment free from the degrading effects of hatchery systems. Wild is wonderful.

**Supporting Materials (if any):** N/A

**Name (ID):** Jon Bennett (I-344)

**Organization (if applicable):** N/A
Submission Text: Dear Sirs: I fully support the Estuary Alternative as a solution to the problem with Capital Lake. I was with the Dept. of Ecology for 23 years and co-authored a definitive report on the use of copper algicide in freshwater lakes. The effect of using these chemicals was devastating to the benthic organisms. More and more we are learning that nature can repair the damage that humans have caused. Such will be true when the dams are removed and the estuary recovers. Please move to put the Estuary Alternative into effect. Thank You.

Supporting Materials (if any): N/A

Name (ID): Charlotte Brame (I-345)

Organization (if applicable): N/A

Submission Text: An email today from the Sierra Club explained why they support the Estuary Alternative, and I agree with them. Capitol Lake needs to be cleaned up and environmentally safe. Please go with the Estuary Alternative.

Supporting Materials (if any): N/A

Name (ID): Geoff Browning (I-346)

Organization (if applicable): N/A

Submission Text: I support the restoration of the Capitol Estuary Restoration for these reasons: * The current Capitol Lake is toxic to the local ecosystem, our people and our community. * A restored estuary will bring economic, recreational and environmental benefits into the heart of Olympia. Restoring the estuary in full is the least costly option to improving water quality and will restore healthy marine wildlife habitats to the Deschutes River, the Budd Inlet, and West Bay areas of the Puget Sound. Thank you.

Supporting Materials (if any): N/A

Name (ID): Barbara Buchan (I-347)

Organization (if applicable): N/A

Submission Text: The fish barrier is a manmade structure or human caused impediment that fish cannot migrate through. Remove the dam. Prioritize barrier reduction to improve spawning and rearing habitat. Restore the health and harvestable breeds of salmon and steelhead. Estuarine habitat is critical for chinook transition to tidal water.

Supporting Materials (if any): N/A

Name (ID): Felicia Carroll (I-348)

Organization (if applicable): N/A
Submission Text: As much as I have enjoyed the lake over the years, the fact is that nature needs us to step up and become more responsible. It seems the estuary would be more beneficial for nature and I urge you effect the change back to estuary. Thank you.

Supporting Materials (if any): N/A

Name (ID): Art Costantino (I-349)

Organization (if applicable): N/A

Submission Text: I have reviewed the options for addressing the problems at Capitol Lake. I think the Estuary Alternative is the best alternative. It appears to be the most natural and least costly. Such an approach seems to have worked well at Nisqually. The other approaches seem less proven. They also require more engineering. Such complexity is unnecessary and only adds long term risk. Some folks may find other options more attractive looking. I think people have become hooked on more artificial looking environments. I think natural systems are more interesting and beautiful in their own right. I also think the natural approach is more likely to stable. A more natural estuary may take a while to become established, but the process of watching the transition is interesting in it's own right. Once established it will attract and sustain more wildlife, which we should all value.

Supporting Materials (if any): N/A

Name (ID): Peter Crowley (I-350)

Organization (if applicable): N/A

Submission Text: I support this plan to return the Capitol Lake Estuary to its natural state. Let the waters flow. peace Peter J. Crowley Olympia Wa.

Supporting Materials (if any): N/A

Name (ID): Stephen Curry (I-351)

Organization (if applicable): N/A

Submission Text: I want the Estuary Alternative for all the benefits it provides for salmon and other marine wildlife. It is the best long term alternative considering global warming.

Supporting Materials (if any): N/A

Name (ID): Thad Curtz (I-352)

Organization (if applicable): N/A

Submission Text: Dear DES - I live in the South Capitol neighborhood, and frequently walk around what's now the lake. What I enjoy most about it is the birds. I've lived in Olympia for almost fifty years,
so I've witnessed the gradual disappearance of the large and varied flocks of ducks that used to be on Budd Inlet and the lake. I'd like to see us restore the estuary to help improve the water quality in the inlet and the river, and I'd be happier walking around a functioning estuary, mud and birds and salmon and all, than looking at the algae building up in the lake every summer. Best wishes,

Supporting Materials (if any): N/A

**Name (ID): Gloria Davis (I-353)**

Organization (if applicable): N/A

Submission Text: I agree. I don't want the area to keep corroding or creating unhealthy waters for our habitats. Please allow this to pass...

Supporting Materials (if any): N/A

**Name (ID): Brenda Duncheon (I-354)**

Organization (if applicable): N/A

Submission Text: Hello, I would like to say that I would vote for the Estuary alternative for Capitol Lake.

Supporting Materials (if any): N/A

**Name (ID): Nancy Young (I-355)**

Organization (if applicable): N/A

Submission Text: I have looked at the proposed modifications to the Capitol Lake area and I would support the hybrid solution which would create an estuary and a reflection pool. I'm just wondering how you are going to fund it....

Supporting Materials (if any): N/A

**Name (ID): Michael Grieb (I-356)**

Organization (if applicable): N/A

Submission Text: In light of climate change the health of this Lake and surrounding shore area is need of restoration that well support the wild life that continues to struggle with man's over development and pollution runoff. There is Otter, Muskrat, Ducks of all kinds, fresh and saltwater fish and amphibians large and small. Now with Salmon of all types now threatened or on the endangered list or should be on the endangered list the water itself is polluted and contaminated with several invasives. The Capitol Lake itself is nothing more than a retention pond for runoff on all sides. It is high time to renew as much as we can the resource that is beneficial for its recreational purposes and for the natural beauty we all enjoy. Also by restoring the lake visitors from all over the country that visit our Capitol city are treated to a
treasure in our backyard to complement the Deschutes falls and the fish hatchery on the Deschutes river. Thank you

Supporting Materials (if any): N/A

Name (ID): Thomas Hargrove (I-357)

Organization (if applicable): N/A

Submission Text: | support returning tidal flow to Capital Lake. It will probably increase the need for dredging in the marina in the long term, but leaving the dam in place will eventually allow the present lake to fill with silt which is also a bad outcome as increasing water temps will become septic. (More so than they already are on a hot day - more of which can be expected in our future.)

Supporting Materials (if any): N/A

Name (ID): Carol Horner (I-358)

Organization (if applicable): N/A

Submission Text: I fully support the return to the natural estuary. I moved here in 1978 and have gone through several discussions and proposals. I have friends who are experts on both sides, however I always have leaned to the 'keep it natural' side. Now I'm certain and we must make a lasting decision!

Supporting Materials (if any): N/A

Name (ID): Bonnie & Marc Jones (I-359)

Organization (if applicable): N/A

Submission Text: To Whom It May Concern: We strongly support the Estuary Alternative to fully restore the Deschutes Estuary and reintroduce tidal flows to the Capitol Lake Basin. We believe it is imperative to return the area to estuarine conditions, allowing salt water from Budd Inlet to mix with fresh water from the Deschutes River. The Estuary Alternative supports a healthy environment for the near future and long term. It is the only alternative that does so, as well as being the least costly option. The current Capitol Lake is clearly toxic to the local ecosystem and inhabitants, and therefore unsustainable. We want to see the return of good water quality and healthy marine wildlife habitats to the Deschutes River, Budd Inlet, and West Bay areas of Puget Sound.

Supporting Materials (if any): N/A

Name (ID): Robin Kramer (I-360)

Organization (if applicable): N/A
Submission Text: As a resident of Thurston County, I fully support the removal of the 5th Ave dam and the return of Capitol Lake to an estuary. I believe that option is the best for the environment and the cheapest and easiest to maintain. Thank you,

Supporting Materials (if any): N/A

Name (ID): Terry Krembs (I-361)

Organization (if applicable): N/A

Submission Text: Hello, Please remove the dam and let nature resume the care of the estuary. My children learned to swim in the lake in the '70's but the lake was not maintained, another misstep by humans in mother nature's domain. Hopefully the toxic dump the lake has become can be repaired in time naturally. Thank you,

Supporting Materials (if any): N/A

Name (ID): Julia McLaughlin (I-362)

Organization (if applicable): N/A

Submission Text: Remove the dam. It is not natural and it's creating an unnatural, unhealthy environment. Let it go back to being the way it's supposed to be. Natural. Healthy. Beautiful. Thriving. ~

Supporting Materials (if any): N/A

Name (ID): Karen Mensinger (I-363)

Organization (if applicable): N/A

Submission Text: Please support the Estuary Alternative for Capitol Lake to restore the health of the Deschutes Estuary environment! This choice will bring recreational, economic and environmental health to Olympia! This is also the least expensive plan to pursue! Please support the Estuary Alternative to restore Capitol Lake and the Deschutes Estuary!

Supporting Materials (if any): N/A

Name (ID): Ed Molash (I-364)

Organization (if applicable): N/A

Submission Text: I support that option, except - how can the low tide stench be mitigated for local homeowners?

Supporting Materials (if any): N/A
Name (ID): Allen Mote (I-365)

Organization (if applicable): N/A

Submission Text: To whom it may concern. My vote is for the 'Managed Lake Alternative.' The lake currently provides a unique and world class aesthetically beautiful State Capital Campus. It is a destination for locals and travelers from all over the world. It enhances the economy of Olympia and Washington State. Fish already use the existing waterways. Increasing the recreational opportunities will again put downtown Olympia on the map. We can remember kayaking on the lake, for instance. The fresh water lake provides habitat for birds and wildlife that will be lost with saltwater. It will take decades, if ever, for the mud tidal flats to grow vegetation. Why have mud flats instead of a usable and beautiful, nature-filled habitat and recreational environment.

Currently: it would be most welcome if the many potholes in the gravel trail would be filled. Please help prevent unnecessary sprained ankles and injuries, from this most-used public destination. Thank you for allowing comments.

Supporting Materials (if any): N/A

Name (ID): Kerri Neathery (I-366)

Organization (if applicable): N/A

Submission Text: To Department of Enterprise Services: Estuaries are vital to a I live in Montesano, WA and strongly support the Estuary Alternative. healthy ecosystem. Thank you for the opportunity to express my support.

Supporting Materials (if any): N/A

Name (ID): Pete Plumley (I-367)

Organization (if applicable): N/A

Submission Text: Return the Capitol Lake area to an estuary (no hybrid). Capitol Lake was never a good idea and yet another environmental disaster made by previous generations. This can be fixed. Make it natural again. Thank you.

Supporting Materials (if any): N/A

Name (ID): Tina Ramsey (I-368)

Organization (if applicable): N/A

Submission Text: Of the proposed solutions for the environmental issues suffered by the Capital Lake, restoring the estuary in full to its natural state is the best option we have. Since building the dam led to all of the current issues, removing it should, over time, lead to their reversal. It should as well be the
healthiest option for the native wildlife we all cherish and want to create the best habitat for. Why create a managed lake or any sort of dam or pool when we can simply remove the dam that is causing so many problems and let nature handle it best? Thank you for your time,

Supporting Materials (if any): N/A

**Name (ID): William Workman (I-369)**

**Organization (if applicable):** N/A

**Submission Text:** All three action alternatives create additional habitat for homeless persons to camp around Capitol Lake. However, the Estuary Alternative provides far greater social justice by creating more additional homeless camping space than the other options. In the Estuary Alternative, camping spots for homeless habitat will be created in areas which are currently flooded full-time, but will only be flooded by king tides after construction of the Estuary Alternative. In fact, the homeless will even have their own private islands to camp on. Plus, the saltwater will suppress mosquitos which always makes camping more enjoyable. These are good social justice reasons to select the Estuary Alternative. Please be sure to add this to Table 4.14.4 as a Major Beneficial Effect for the Estuary Alternative.

Supporting Materials (if any): N/A

**Name (ID): William Workman (I-370)**

**Organization (if applicable):** N/A

**Submission Text:** Homeless persons have already dismantled portions of wooden walkways at Capitol Lake for the lumber and firewood. These current proposals will provide more building materials (wooden walkways), more firewood, plus copper wiring (for the lighting) which the homeless can definitely use considering their bad planning skills. Please add this as a major benefit for all action alternatives.

Supporting Materials (if any): N/A

**Name (ID): William Workman (I-371)**

**Organization (if applicable):** N/A

**Submission Text:** The project will result in some very attractive campsites for homeless persons to move into. However, the cost of providing the required additional homeless services do not appear to be included in the Estuary operating budget. Who is going to feed the new residents and provide free bathrooms, free needles, free garbage collection, social services, and rat control? These are cost items which should be addressed in advance of construction.

Supporting Materials (if any): N/A
Name (ID): William Workman (I-372)

Organization (if applicable): N/A

Submission Text: All Washington State Agencies have been directed by E2SHB 1109 (Section 221, Subsection 9), HB 1783, and the WA State Equity Task Force to “embed equity into every action”. The EIS fails to fully-consider the equity impact to insure that required equity goals are realized for wokeness and social justice. The EIS also fails to propose equity mitigation measures. What is being proposed to insure equal outcomes for each race as mandated by the Summary Proposal of the Washington State Office of Equity? (refer to their website for this requirement). For example, if more whites use the trails than “persons of color”, this by definition makes those walkways systemically racist according to the Washington State Legislature and the Equity Task Force. Since this project is a state-run project, what steps are proposed to bring this project into mandated racial alignment with all other state-run projects and processes? How does this project insure social justice, equity, and wokeness as part of the CORE PROJECT GOALS as directed by the Washington State Legislature in E2SHB 1783, and the Office of Equity? It appears that the entire EIS will need to be re-written from the beginning.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-373)

Organization (if applicable): N/A

Submission Text: Exposing mudflats to oxygen and solar heating accelerates the rate of organic decomposition which results in the production and release of additional methane and carbon dioxide gases which are identified as greenhouse pollutants by the USEPA. However, on Page 4-37, the EIS makes the statement that “…none of the action alternatives would affect the magnitude or extent of climate change impacts”. Since this is an environmental impact statement, the resulting devastating planet-wide impacts on climate change crises, global warming, melting ice, greenhouse effects, and overall scary weather panic must be fully-considered. Calling the impact absolute zero is clearly a false statement. The entire EIS will need to be re-written from the beginning so that it addresses the Governor’s mandated war on carbon.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-374)

Organization (if applicable): N/A

Submission Text: Table 2.3.8 makes the claim that the disposal location of sediment dredged from West Bay (every 6 years) in the Estuary Alternative is “in-water”. Has the supposed disposal site been permitted? Is that going to be someone else’s problem? There must be some type of written response from the DMMP to make a commitment for future dredging prior to making this unsubstantiated claim. The West Bay does not have the luxury of merely pushing the sediment aside to create new islands, and calling it “removal”.

Name (ID): William Workman (I-375)

Organization (if applicable): N/A

Submission Text: The EIS makes the claim that the disposal of sediment from a natural system is “in-water”. Has the supposed disposal site been permitted? Is that going to be someone else’s problem? There must be some type of written response from the DMMP to make a commitment for future dredging prior to making this unsubstantiated claim. The West Bay does not have the luxury of merely pushing the sediment aside to create new islands, and calling it “removal”.

Supporting Materials (if any): N/A
Submission Text: From Page 4-57 regarding the restoration of tidal influence (which spreads the New Zealand Mudsnail in greater amounts than ever): “It is assumed that the resource agencies would consider this impact to be outweighed by the overall substantial beneficial improvements that the Estuary (and Hybrid) Alternative would otherwise provide”. Since resource agencies are not qualified to weigh social justice benefits (if any), it can be assumed that this statement refers solely to environmental benefits, of which there apparently are very few. Certainly the EIS does not support the conclusion that removing the dam will improve the water quality of Capitol Lake, which is already proven to be cleaner than West Bay. Perhaps this statement was made because of the reduction of invasive species. In fact, every species on the planet today is an invasive species because there was a time when every location on the planet had no such species. In order to believe in “substantial beneficial improvements” for any alternative, you would need to believe there would be substantial degradation of the environment if the opposite was done. In order to believe that reducing (but never eliminating) New Zealand Mudsnails results in “substantial beneficial improvements”, you must therefore believe that their introduction into Capitol Lake resulted in substantial degradation of the environment. Mudsnails are apparently killing everything for miles around, so please clarify exactly what is so devastating about New Zealand Mudsnails?

Supporting Materials (if any): N/A

Name (ID): William Workman (I-376)

Organization (if applicable): N/A

Submission Text: Dumping organic-rich sediments into the Puget Sound in the Estuary Alternative will deplete oxygen in an already oxygen-deficient environment. If the Puget Sound has not already been declared to be oxygen-deficient, then dumping oxygen-depleting sediments insures that it soon will be. The effects of the Estuary and Hybrid Alternatives have been falsified in the EIS and it will need to be entirely re-written.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-377)

Organization (if applicable): N/A

Submission Text: The last paragraph of Page 4-61 says: “Transportation of AIS [Aquatic Invasive Species] outside of Capitol Lake is prohibited by state law”. Yet, removal of the dam will result in the defacto transportation of such invasive species outside of Capitol Lake. In addition, Page 4-62 states: “…eradication is generally considered not to be feasible given the extent of the New Zealand Mudsnail
infestation and their resiliency”. Furthermore, Page 4-62 also discusses: “...the likely persistence of New Zealand Mudsnails in the upstream portions of the Estuary and Hybrid Alternatives”. Yet, other statements in the EIS reveal the plan to transport sediment containing these invasive species and dump them a deepwater disposal area, which requires testing to insure that aquatic invasive species are not included in the material being dumped. Is seems as if these sections were all written by different people who were not communicating. Please explain these contradictory statements or re-write them so they do not contain false or unproven assumptions about long-term sediment disposal permitting. Upon making the required corrections, you must then go back and revise your cost estimates which falsely claim that you know something which you do not know, which is that private and quasi-public entities will be able to get permits to dump their AIS-infested sediment at deepwater disposal sites in the long-term. You have absolutely no basis for that statement.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-378)

Organization (if applicable): N/A

Submission Text: Page 4-63 claims that: “...the conversion of freshwater lake habitat to tidally influenced brackish estuary would substantially benefit anadromous fish...” as if there is a vast habitat which opens up when the dam is removed. So where is this habitat? The Deschutes River is already accessible by fish ladder, and there never was a significant Salmon run up the Deschutes River, so what natural condition is supposed to be magically restored by removing the dam?

Supporting Materials (if any): N/A

Name (ID): William Workman (I-379)

Organization (if applicable): N/A

Submission Text: The EIS predicts “substantial beneficial effects” to the environment as a result of removing the dam, such as on Page 4-77. The EIS predicts “substantial benefits” on Page 4-109. The EIS also uses the phrase “substantial ecological benefits” on Page ES 17 and 4-85. Yet the EIS states the exact opposite as soon as the details are revealed, such as in the lower half of Page 4-63 where it is revealed that the loss of freshwater habitat will kill off the bats and all freshwater fish (bass and bullhead are subsequently identified). On Page 4-68 it states that some species: “...would not be able to persist in a saltwater environment”. On Page 4-68 it is also revealed that for salmon: “...migration occurs under existing conditions and is not precluded...” In fact, there never was a significant salmon run up the Deschutes River because it has been blocked by the falls for 10,000 years. The writers of the EIS provide no evidence that there was any significant salmon run there. The entire EIS may need to be re-written to eliminate these untruths and more fully-explain what the substantial benefits are for removing the dam.

Supporting Materials (if any): N/A
Submission Text: Note that the EIS discriminates against the Managed Lake Alternative throughout the document. Two such examples are Table 4.5.2 on Page 4-71 and Table 4.5.3 on Page 4-73. In these tables wherever the beneficial impacts of the Estuary and Hybrid Alternatives are claimed, the EIS uses the phrase “Substantial Beneficial Effect” or “Moderate Beneficial Effect”. However, each adverse effect is only called a “significant impact” as if adverse effects do not matter. Instead, every substantial or moderate adverse effect of the Estuary and Hybrid Alternatives should have been identified as a “substantial adverse effect” or “moderate adverse effect”. Killing the bats, bass and bullhead (as revealed by the EIS) qualifies as substantial adverse impacts and therefore MUST be labeled as such. Later on Page 4-77, these killings are called “significant unavoidable impacts” instead of “substantial adverse impacts”. The EIS has stacked the deck against the Managed Lake Alternative, and should be entirely re-written.

Submission Text: Page 4-77 of the EIS states that tideflat habitats are “...now rare in the region”. That is a false statement. Page 4-81 states: “...estuarine wetlands...are considered rare in the region”. That is also a false statement. Page 4-91 then correctly claims that “Within 15 miles of the project site there are many estuaries”. It seems as if there were too many writers of the EIS and they got all their lies mixed up. The entire EIS must be re-written from the beginning. Please include the truth this time.

Submission Text: Page 4-86 of the EIS states that carbon is a greenhouse gas. That is a false statement. Carbon is not a gas under normal atmospheric conditions. Carbon dioxide however may be a very weak greenhouse gas. Both carbon and carbon dioxide are absolutely critical for life on this planet. I recommend that some actual scientists should be added to the EIS team, so that the EIS can be re-written from the beginning.
Submission Text: Page 4-86 refers to the Estuary and Hybrid Alternatives when it states: “…the vegetated marshes established under those alternatives would sequester more soil carbon…” but a vegetated marsh will not be the result. A far more accurate analog would be Mud Bay or Nisqually Reach. At low tide there will be more mud than marsh. The entire EIS may need to be re-written so that it fully justifies turning Capitol Lake back into the beautiful smelly mud pit that it used to be.

Supporting Materials (if any): N/A

Name (ID): George Comstock (I-384)

Organization (if applicable): N/A

Submission Text: My first choice among the options is a managed lake, and my second choice is the hybrid solution.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-385)

Organization (if applicable): N/A

Submission Text: The EIS completely failes to mention that the proposed elevated walkways and lighting in all action alternatives will be good sources of wood and copper for the adjacent homeless camp residents. The homeless have already removed numerous wooden planks from the walkways near Marathon Park and stolen wiring from many locations in Olympia. They would certainly appreciate a closer supply of free lumber and copper. The Capitol Lake homeless would just like to thank DES in advance for the free stuff. Housing and homelessness in Thurston County is a major consideration, but the EIS hardly addresses it. The entire EIS will need to be re-written to disclose the actual impacts of the additional homeless habitat and homeless services which will thereby be created, and propose full mitigation to be paid for be DES and the City of Olympia.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-386)

Organization (if applicable): N/A

Submission Text: According to Page 4-107, the Estuary Alternative would result in additional flooding in Olympia during extreme tides as compared to the other alternatives. Does it really make sense to construct anything which increases flooding in Olympia considering that scary sea level rises are just around the corner? The entire EIS may need to be re-written to propose additional mitigation for the Estuary Alternative.

Supporting Materials (if any): N/A
Name (ID): William Workman (I-387)

Organization (if applicable): N/A

Submission Text: After Page 4-107 claims that the Estuary Alternative results in higher water elevations during high tide, Page 4-114 turns right around and claims that the Managed Lake alternative includes higher water elevations (at the end of the first paragraph). It seems as if the writers of the EIS cannot decide which story to tell. The entire EIS may need to be re-written to provide uniformity between the various writers and their estuary fantasies.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-388)

Organization (if applicable): N/A

Submission Text: How can maintenance dredging disturb cultural resources (if any still exist) as described on Pages 4-114 through 117 when the dredging is only removing sediment which was deposited above the level at which the cultural resources were previously buried? The dredging would re-establish pre-sedimentation bottoms. Dredging permits contain plenty of restrictions, including the prohibition on gouging out new flood control channels. There are so many unsupported statements in the EIS that it may need to be entirely re-written from the beginning.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-389)

Organization (if applicable): N/A

Submission Text: Much of Downtown Olympia was constructed on top of decomposing (shrinking) organic fill materials similar to Seattle, San Francisco, Boston, New Orleans and hundreds of cities worldwide. In Olympia, soils are consolidating over time causing Downtown Olympia to sink down almost as fast as ocean levels are rising up. This information is found in the October 2017 AECOM Report to the City of Olympia and several other independent sources. In fact, according to local land surveyors, some areas in Olympia are sinking much faster than sea levels are rising. They check into sinking benchmarks all the time. The EIS uses the phrases “rising sea levels” and “sea level rise” over forty (40) times, and never once mentions land subsidence, sinking, or soil consolidation. Perhaps the EIS Team is unaware that water levels going up and land going down are two different things. In fact, when land goes down it actually provides more flooded storage volume for the rising waters, which decreases sea level rise. Capturing some irrelevant amount of carbon is not going to stop occasional flooding in Downtown Olympia, which was already happening before and after 1952. If this effect even happens, then it would be so minor that it is too trivial to merit consideration. The EIS denies this science and therefore MUST be entirely re-written to reflect the science.

Supporting Materials (if any): N/A
Name (ID): William Workman (I-390)

Organization (if applicable): N/A

Submission Text: The EIS uses the phrases “invasive species” and “AIS (aquatic invasive species)” more than five hundred (500) times. In fact, since Capitol Lake was completely frozen over 18,000 years ago, every species has invaded since then. The writers of the EIS and unelected bureaucrats are an invasive species and therefore have no right to determine which species get to live and which must die. For example, why would a few fish be more valuable than thousands of bats? The writers of the EIS have no right to use the phrase “invasive species” and therefore the entire EIS must be re-written.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-391)

Organization (if applicable): N/A

Submission Text: If there are 15 invasive species listed by the EIS for the Estuary and Hybrid Alternatives which must now die by DES directive, and only a few salmon and shellfish are added back, does this make sense environmentally? The entire EIS may need to be re-written to disclose the full and actual environmental impacts and propose realistic and hopefully successful mitigation measures for these deaths.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-392)

Organization (if applicable): N/A

Submission Text: If there are 15 invasive species listed by the EIS for the Estuary and Hybrid Alternatives which must now die by DES directive, and only a few salmon and shellfish are added back, does this make sense environmentally? The entire EIS may need to be re-written to disclose the full and actual environmental impacts and propose realistic and hopefully successful mitigation measures for these deaths.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-393)

Organization (if applicable): N/A

Submission Text: Page 4-108 of the EIS Notes that “The Olympia SMP Restoration Plan addresses the Budd Inlet Estuary in two of its priorities. Section 6.5 of the SMP, Priority 5 - Reconnect Fish Passage to Budd Inlet, and Restore Mouths of Tributary Streams” However, there are three major flaws in this logic WHICH WILL REQUIRE THAT THE EIS MUST BE ENTIRELY RE-WRITTEN TO ELIMINATE
OBVIOUS BIAS: a. The will of the citizens of Washington State was already fully-expressed in the 1911 Wilder & White Plan which called for construction of the dam (finally constructed in 1951-52). b. There has been no vote by the citizens to rescind that plan and tear the dam out, so how can unelected bureaucrats make this decision? c. There is already a fish ladder connecting the Lake with Budd Inlet. That which is already connected cannot be re-connected.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-394)

Organization (if applicable): N/A

Submission Text: Keeping rocks and soil confined behind the dam until it is collected would be far more efficient and economical. When the dam is removed, the same sediment will be spewed out over a mile of West Bay. It defies common sense to think that the cost of dredging will go down by spreading the sediment over a larger area. However, the EIS completes this magic trick by cheating on the cost estimates. The EIS artificially reduces the cost of sediment removal for the Estuary and Hybrid Alternatives by assuming perpetual in-water disposal. The EIS writers say that Managed Lake sediment must be hauled to an expensive upland disposal area (due to the New Zealand Mudsnail) while Estuary sediment can be cheaply dumped directly into the Puget Sound (probably between Anderson and Ketron Islands). The EIS writers assume that sediment spewed from the Estuary Alternative will be certified free of the mudsnail. However, the mudsnail is euryhaline and adapts well to brackish environments. The mudsnail can survive in Capitol Lake and at the Yacht Club. In fact, neither sediment will be free of the mudsnail. The mudsnail can also survive in some areas of the Nisqually Reach near the in-water dump site. Salinity levels as low as zero (0) have been measured at Nisqually by salinity surveys, thus ensuring invasive mudsnails would thrive after spreading. The mudsnail can trap an air bubble with its shell and float anywhere the tides go. Releasing it by removing the dam may not be the most intelligent action. If the writers of the EIS want to contradict this, then they should obtain letters from ECY, DNR, EPA, and USACE committing to allowing perpetual future dumping of West Bay sediment directly into the Puget Sound (Anderson-Ketron). Since the entire EIS is based on this single assumption, the writers of the EIS should already have obtained such letters. Even if this assumption was true for now, the writers of the EIS have no idea what restrictive rules these regulatory agencies will invent in the future. Environmental regulations are progressively more restrictive all the time. Since the cost estimates have been falsified, the EIS will need to be re-written.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-395)

Organization (if applicable): N/A

Submission Text: The option which makes the most sense was completely omitted from the EIS document. The most sensible option is: 1. Repair the dam, then 2. Dredge the middle basin once every 15-20 years, and 3. Kill the “invasive species”, and call this project done. The Department of Enterprise
Services is typical of most Washington State Agencies in how they insist on wasting millions of dollars (so far) of money stolen from the hard-working taxpaying residents of Washington State. The EIS document is typical bureaucratic bungling over the politics of dredging and is therefore a complete waste of public funds. In what way does this EIS enable the long-term maintenance which is required in order to implement the various options? Dredging would happen once and then the politicians and unelected bureaucrats would conveniently forget about it. After that, the material which was supposed to be dredged will just flow out into West Bay and become somebody else’s problem. The entire EIS may need to be re-written to reflect this political reality, or include the fifth alternative described above. The fifth alternative will be called the “Sensible Alternative”.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-396)

Organization (if applicable): N/A

Submission Text: All three options create thousands of feet of new walking paths and boardwalks which are partially hidden from Deschutes Parkway. However, the report contains no evidence that the City of Olympia and/or Washington State Patrol is ready to dedicate additional resources for public safety to add patrols to these proposed rape trails. The Washington State Patrol and City of Olympia Police which currently provide security in that vicinity must be contacted for their official responses prior to obligating them with additional unfunded mandates.

Supporting Materials (if any): N/A

Name (ID): Diana Moore (I-397)

Organization (if applicable): N/A

Submission Text: The Draft Environmental Impact Statement issued by the Department of Enterprise Services raises concerns for those of us concerned about the degradation of the environment both by the dam and future impacts due to climate change. The Estuary option is clearly the best (and least expensive), but important points were either left out or not emphasized. The estuary habitat reestablished by dam removal would have substantial beneficial effects for salmon, other anadromous species, and marine fish. Due to declines over many decades, estuary habitat is an increasingly valued habitat as compared to freshwater lakes, which are more abundant. The DEIS has too little discussion of the impacts of climate change on the area and the promise of climate change mitigation for each alternative. It should be emphasized that estuaries are quite effective at sequestering carbon and this should be quantified in the statement.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-398)

Organization (if applicable): N/A
Submission Text: The dam-removal options appear to be a scheme to transfer the cost and the politics of dredging from the Department of Enterprise Services to other entities. The other stakeholder entities should provide written responses regarding whether they accept this cost and responsibility. In the absence of such written documentation, can Washington State Taxpayers assume that the City of Olympia, Port of Olympia, Department of Natural Resources, and the Squaxin Tribe accept the future costs of dredging for the dam removal scenarios? Are the writers of the EIS proposing something which the EIS Work Group Members already know is never going to happen? The entire EIS may need to be re-written to disclose the financial impact on other entities and propose mitigation for when DES fails to dredge, which we already know is going to happen based on the documented history of this agency.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-399)

Organization (if applicable): N/A

Submission Text: Removal of the dam cannot possibly improve the water quality in the area currently occupied by Capitol Lake, because the brackish water in Budd Bay is already more contaminated than Capitol Lake (per the EIS), and the water quality in Capitol Lake is already stated to be “good” (per the EIS) and has even been improving in recent years (per the EIS). The EIS may need to be re-written to reflect this significant oversight. These various sections of the EIS seem to have been written by different people who were not communicating with eachother. Instead of talking to eachother, they may have been in different offices or out walking their dogs during the Covid lockdown.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-400)

Organization (if applicable): N/A

Submission Text: The Funding and Governance Work Group does not include any stakeholders from private industry or the Federal Government. Were those stakeholders excluded so they would be unaware of the proposed transfer of the financial, environmental, and political burdens of dredging West Bay?

Supporting Materials (if any): N/A

Name (ID): William Workman (I-401)

Organization (if applicable): N/A

Submission Text: According to the Long-Term Hydrodynamic and Sediment Transport Model, a single large flooding event on the Deschutes River without the dam would move over 250% more tons of sediment into West Bay. This would significantly reduce the depth of draft for all vessels and it would take a long time to clean up the resulting underwater disaster. After that event is everyone supposed to
wait several years for the dredging approvals before they can operate large boats again? Future dredging will be required to jump through the hoops of future regulations, not today’s. The noose is slowly tightening on the Olympia Waterfront.

Supporting Materials (if any): N/A

**Name (ID): William Workman (I-402)**

Organization (if applicable): N/A

**Submission Text:** The EIS appears to neglect the full effects of global warming. Global warming alarmists have determined that the City of Olympia will soon be entirely underwater due to anthropogenic carbon. As the hydrodynamic model shows, deeper water results from global warming melting the ice caps. It is also well understood that deeper water always flows more slowly for a given volumetric flow rate. Does this slower velocity result in less sediment transported into West Bay? Will the additional water from melting glaciers allow vessels of deeper draft to enter West Bay and Downtown Olympia, thereby eliminating the need for dredging? One global warming scenario was demonstrated in the model but does not appear to have been correctly-interpreted by the writers of the EIS. Perhaps this section of the EIS will need top be re-written.

Supporting Materials (if any): N/A

**Name (ID): William Workman (I-403)**

Organization (if applicable): N/A

**Submission Text:** According to the tribal principal of “Gwitsawdit” (sidebar on page 3-99) the filling of Budd Inlet to create the City of Olympia was a skookum violation of the “teachings of the land”. So why would just the dam need to be removed? Actual respect for the “... balance of life and respect for nature...” requires the removal of approximately half of Downtown Olympia in order to restore full gwitsawdit tidal flow and “emphasize the interconnectedness of all aspects of the environment”. By what process was the extent of removals determined? Who arbitrarily determined that removing just the dam would provide complete gwitsawdit? Clearly, more removals are required in order to restore the “... balance of life and respect for nature...” to the Olympia waterfront. Perhaps removing Downtown Olympia can also be included in a future phased approach for the project.

Supporting Materials (if any): N/A

**Name (ID): William Workman (I-404)**

Organization (if applicable): N/A

**Submission Text:** Sections 3.10 and 3.14.5 of the EIS fail to fully-appreciate the impressive visual resource which will be restored when the blue-sky-reflective lake surface is replaced by natural organic mud pit vistas. This will be similar to Mud Bay which is well known by locals to offer aesthetically-
superior views at low tide. The EIS fails to include the substantial benefits of mud. The City of Olympia can generate significant revenue from hosting mud wrestling competitions.

**Supporting Materials (if any):** N/A

**Name (ID):** William Workman (I-405)

**Organization (if applicable):** N/A

**Submission Text:** It is common knowledge that sediment in water prefers to settle out at the lowest points. If a marble is dropped into the YMCA swimming pool, it does not stick to the sides of the pool or remain in the shallows. It rolls on down the slope to the deep end. The deepest spot in the West Bay pool is close to where the Port of Olympia ties up the big ships. In addition, multiple tidal cycles repeatedly wash sediment around in circles until it sinks down into the deepest areas and stays there until dredged. Figure 4.1.3 on Page 4-13 does not show the Port of Olympia pier and turning basin being filled up by sediment any deeper than just outside the basin. Therefore, the graphic is wrong. Please make the appropriate corrections which show the turning basin filled up with sediment.

**Supporting Materials (if any):** N/A

**Name (ID):** William Workman (I-406)

**Organization (if applicable):** N/A

**Submission Text:** The first paragraph of Page 4-16 contains a fundamental misunderstanding of the Federal Navigational Servitude Doctrine. The Doctrine gives the Federal Government the right (but not the obligation) to regulate, enable (or obstruct) the navigation of navigable waterways. In what way does the doctrine require the USACE to dredge sediment from West Bay every 5-6 years as required by the Estuary and Hybrid Alternatives? Perhaps the writer of that statement could check with an Attorney specializing in waterway navigation rights. Alternatively, perhaps 5-6 years is not the correct interval for dredging. The EIS writer should enlighten us on that subject.

**Supporting Materials (if any):** N/A

**Name (ID):** William Workman (I-407)

**Organization (if applicable):** N/A

**Submission Text:** Page 4-20 contains a technical error. It refers to a “1-year river flow event”. Note that the 100-year flood event by definition has a (1/100) 1% chance of being equaled or exceeded in any given year, and the 50-year event has a (1/50) 2% chance of being equaled or exceeded in any given year. This means that the 1-year event would have a (1/1) 100% chance of being equaled or exceeded in any given year. There is no flood event above zero flow which has a 100% chance of being equaled or exceeded in any given year. Therefore, the 1-year event is a statistical impossibility. Some hydrologists in the Puget Sound area do not appear to comprehend elementary statistics. However, all references to a “1-year
river flow event” are pure fiction and should be removed from the EIS at the same time the entire document is being re-written.

Supporting Materials (if any): N/A

**Name (ID): William Workman (I-408)**

**Organization (if applicable):** N/A

**Submission Text:** Table 4.2.3 on Page #4-20 shows that the Estuary Alternative will dump over 6 inches of AIS-infested sediment onto the Olympia Yacht Club every year on average. Table 4.2.6 on Page 4-28 shows that the Hybrid Alternative will dump almost 8 inches of AIS-infested sediment onto the Olympia Yacht Club every year on average. No business can survive the cost of receiving that much waste material except perhaps a landfill. Has the Department of Enterprise Services reclassified the Olympia Yacht Club as an underwater landfill?

Supporting Materials (if any): N/A

**Name (ID): William Workman (I-409)**

**Organization (if applicable):** N/A

**Submission Text:** Page 4-26 states that piles at the Olympia Yacht club may need to be removed and reinstalled to allow for dredging. The EIS writers imply that this must be an easy task which means they obviously have never done it before. Pile removing and installing is not easy to get a permit for. Just waiting for a response to the application can take weeks or months.

Supporting Materials (if any): N/A

**Name (ID): William Workman (I-410)**

**Organization (if applicable):** N/A

**Submission Text:** You should eliminate all discussions of economics related to the various alternatives in Section 4.14 of the EIS. First of all, the law does not require an EIS to include economic analyses. Secondly, your writers know very little about economics and are not qualified to discuss it. For example, on pages 4-180 and 4-181 it appears that the writers of the EIS counted spending on dredging as an economic benefit (it creates employment!). In economics, this is called Frederic Bastiat’s Broken Window Fallacy, which explains how money spent to recover from DELIBERATELY- CAUSED damage (breaking windows or spreading sediment all over Budd Bay) is not actually a net benefit to society. Please remove all such economic nonsense. Sediment is less expensive to remove when contained, and the writers have made other questionable assumptions about the disposal of dredged material in the Estuary Alternative which has been explained in other comments.

Supporting Materials (if any): N/A
Name (ID): William Workman (I-411)

Organization (if applicable): N/A

Submission Text: According to Page 4-177 of the EIS, in the middle of the page, the anticipated flood levels included in the City of Olympia’s Sea Level Rise Response Plan are less than those predicted with the dam in place. In other words, the plan from several years ago assumes dam removal. Therefore, Olympia's Plan must have already previously assumed that the dam was going to be removed. This statement has accidentally revealed that as far as the City of Olympia is concerned, dam removal is already predetermined. That would make this entire EIS exercise a complete fraud. Is this a complete fraud?

Supporting Materials (if any): N/A

Name (ID): William Workman (I-412)

Organization (if applicable): N/A

Submission Text: Page 4-177 of the EIS states that both the No-Action and Managed Lake Alternatives will cause flooding which damages utilities. However, the shallow type of flooding which is anticipated is not even close to that which would damage properly-designed utilities. Then on Page 4-178 it is revealed that there would only be less than one more foot of flooding as compared to the Estuary Alternative. Please ask an actual utility expert to provide a valid opinion about an additional foot of flooding and all the utility damage it will cause, or else remove the statement from the EIS. Revise the EIS to identify which specific utility which will be damaged by the shallow flooding of the type which is anticipated. Since you made the statement, you must now tell the tax-paying public which specific utility is going to be damaged. There are two types of utilities around Capitol Lake, as follows: There are those which have been there since before the Dam was constructed, and have therefore made it through 70 years of utility-destroying floods which you are claiming. Alternatively, there are utilities which were installed after the dam was in place, which means they must have been defectively-designed if they do not fully-account for the dam being there. Which one of these utility defects does your statement refer to?

Supporting Materials (if any): N/A

Name (ID): William Workman (I-413)

Organization (if applicable): N/A

Submission Text: 90. Page 4-177 of the EIS states that both the No-Action and Managed Lake Alternatives will cause flooding which damages utilities. However, the shallow type of flooding which is anticipated is not even close to that which would damage properly-designed utilities. Then on Page 4-178 it is revealed that there would only be less than one more foot of flooding as compared to the Estuary Alternative. Please ask an actual utility expert to provide a valid opinion about an additional foot of flooding and all the utility damage it will cause, or else remove the statement from the EIS. Revise the EIS to identify which specific utility which will be damaged by the shallow flooding of the type which is
anticipated. Since you made the statement, you must now tell the tax-paying public which specific utility is going to be damaged. There are two types of utilities around Capitol Lake, as follows: There are those which have been there since before the Dam was constructed, and have therefore made it through 70 years of utility-destroying floods which you are claiming. Alternatively, there are utilities which were installed after the dam was in place, which means they must have been defectively-designed if they do not fully-account for the dam being there. Which one of these utility defects does your statement refer to?

Supporting Materials (if any): N/A

Name (ID): William Workman (I-414)

Organization (if applicable): N/A

Submission Text: Pages 4-132 and 4-133 refer to Deschutes Parkway as a “scenic drive”. As anyone who has driven there recently knows, it is a very scenic tour of blue tarps, homeless camping, inoperable vehicles, garbage piles, and swamp weeds. The writers of the EIS may want to perform an actual site inspection to review how scenic this corridor really is. At least the writers have a sense of humor. Referring to Deschutes Parkway as a “scenic drive” is a complete joke. Please remove all such opinions from the EIS.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-415)

Organization (if applicable): N/A

Submission Text: The barrier / retaining wall which is proposed to be constructed to enclose the reflective pool in the Hybrid Alternative is perhaps the ugliest aspect after the unreflective mud pit. We could call it the rusty sheet pile look. The EIS pretends to address visual aesthetics but fails to discuss the three uglies which blows the whole EIS out of the water: Homeless garbage camps, non-reflective mud pit, and rust-streaked brown steel sheet pile or black-stained concrete walls. Nothing else is worth debating about aesthetics without disclosing those impacts.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-416)

Organization (if applicable): N/A

Submission Text: The City of Olympia has more than 30 artisian wells as reported by the March 26, 1999 Technical Memorandum 1204 by Robinson & Noble and Brown and Caldwell. Some of those wells are still flowing. What will be the effects on wells which results from a lowering of groundwater levels in the vicinity of Capitol Lake. There was reported to be 96 known wellsites in Downtown Olympia, many of which have not been capped and are still in use.
Name (ID): William Workman (I-417)

Submission Text: The City of Olympia has more than 30 artisan wells as reported by the March 26, 1999 Technical Memorandum 1204 by Robinson & Noble and Brown and Caldwell. Some of those wells are still flowing. What will be the effects on wells which results from a lowering of groundwater levels in the vicinity of Capitol Lake. There was reported to be 96 known wellsites in Downtown Olympia, many of which have not been capped and are still in use.

Name (ID): William Workman (I-418)

Submission Text: 62. The EIS fails to consider the potential effects of dam removal on the depth of groundwater and drinking water wells in the City of Olympia. Wells in the vicinity of Capitol Lake will be subject to saltwater intrusion in the same way that many wells around Puget Sound have been affected by saltwater intrusion. Saltwater would back-up into an area currently inundated by freshwater. Wells in the vicinity of Capitol Lake would become tidally-influenced, and would be pumping from a lowered water level in the casing. Many wells in the Puget Sound area have been ruined by saltwater intrusion. When the exact cause is known it usually results in lawsuits. Contact the officials at the Southwest Drinking Water Office of the WA State Department of Health to verify these facts. Include their response when the entire EIS is re-written.

Name (ID): Johanna Roth (I-419)

Submission Text: I prefer the managed lake option.

Name (ID): Max DeNise (I-420)

Submission Text: I'm in favor of the Estuary Alternative. Get rid of the dam. Let the tides come in and go out.
Name (ID): Frances Lench (I-421)

Organization (if applicable): N/A

Submission Text: I am looking forward to your implementing this carefully thought-out plan. I will be watching and evaluating your actions. Thank you.

Supporting Materials (if any): N/A

Name (ID): Linda Nicholas (I-422)

Organization (if applicable): N/A

Submission Text: The alternative seems to be the cheapest long term solution to the snail infested algae blooming stinking Capitol Lake current condition.

Supporting Materials (if any): N/A

Name (ID): Penny Witt (I-423)

Organization (if applicable): N/A

Submission Text: As a voting resident of Olympia, I support the Estuary Alternative for both the health and monetary well-being of our community.

Supporting Materials (if any): N/A

Name (ID): Nancy Young (I-424)

Organization (if applicable): N/A

Submission Text: Originally, I had submitted support for the hybrid plan for creating an estuary and a reflecting pool at Capitol Lake. After further research and discussion, I have changed my mind to support the Estuary Plan, which is the more affordable plan and will help promote the healthy growth of salmon. I encourage you to follow through with this plan which will be the best outcome for our community and the health of our salmon population. Thank you.

Supporting Materials (if any): N/A

Name (ID): Sydney Hann (I-425)

Organization (if applicable): N/A

Submission Text: I would like to see the lake cleaned and turned back to recreational use. People used to water ski on that lake. How much fun would that be to actually have a park where you can do more than just walk around and look at things? I would LOVE to be able to throw my raft in the lake and row...
around for a few hours. Small towns are notorious for having nothing to do. Parks with paths are nice, but some of us would rather have a more intense experience than a meandering stroll. Especially considering how long and hot our summers have become, it would be wonderful to have a swimmable body of water in the core of our capital city.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-426)

Organization (if applicable): N/A

Submission Text: Constructing additional homeless habitat is difficult to justify when the taxpaying public will be unable to use those areas due to safety concerns. This has already happened in Seattle, Portland, and right here at Capitol Lake. The Estuary Alternative creates the most additional camping space, though this represents the future for all three options. Please stop pretending as if any of the action alternatives are going to create a nice place to bring your family. The truth is that the entire area is disgusting and you would know that if you have been there recently.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-427)

Organization (if applicable): N/A

Submission Text: Page 4-26 states that the assumed disposal location for dredge spoils is at an approved open-water disposal location in the Puget Sound. The EIS writers have no idea how much longer the assumed disposal site will be allowed to receive additional crab-killing, AIS-infested sediment. Environmental regulations are getting more difficult to comply with over time. Obtaining future permits will be accomplished under tighter future regulations which have not even been invented yet. The Deschutes River will undoubtedly wash contaminated sediment and invasive species into the Yacht Club, which may or may not meet the criteria for open-water disposal. In addition, the EIS writers do not have any appreciation for the cost and difficulty of getting an upland disposal site permitted.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-428)

Organization (if applicable): N/A

Submission Text: Page 4-26 states that maintenance dredging in West Bay would be required every 6 years under the Estuary Alternative. Page 4-31 states that the dredging interval would be only 5 years for the Hybrid Alternative. Page 4-27 (sidebar) notes that estuary and hybrid dredging would be completed if consistent funding was available. This is a significant issue because the Department of Enterprise Services has already demonstrated their inability to provide maintenance funding due to political issues. Maintenance dredging may happen initially, but long-term maintenance is unlikely because there is no
funding mechanism which cannot be defeated by the politicians. Since consistent long-term funding of lake maintenance is not realistic, please remove that assumption from the EIS when it is re-written, and propose mitigation for what happens when the sediment which should have been dredged just passes downstream and plugs up West Bay.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-429)

Organization (if applicable): N/A

Submission Text: The EIS writers apparently believe that using the word “equity” 20 times is the equivalent of actually disclosing and mitigating the equity impacts of the project. In addition, the entire EIS only mentions equity relative to tribal populations, as if black citizens do not exist. According to the EIS writers, equity only applies to tribal populations, and apparently not to any other persons of color. This is a gross violation of WA State Law. This project cannot be allowed to continue because all the options benefit whites or tribal populations more than blacks. The EIS will need to be re-written from the beginning to end, or else the project must be cancelled.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-430)

Organization (if applicable): N/A

Submission Text: In Thurston County, housing is considered by all public officials to be a major consideration in all decisions. Considering the number of live-aboard boats at the Olympia Yacht club, there should be some accommodation for not making these people homeless by displacing their boats and/or raising their rates to pay for private dredging. The EIS must disclose the impacts of making live-aboard homeless, and propose mitigation for their near-certain dislocation. The most reasonable mitigation scenario is for the City of Olympia to take over the Yacht club when it goes bankrupt and turn it into a floating homeless camp. The EIS should propose this mitigation when it is entirely re-written.

Supporting Materials (if any): N/A

Name (ID): Troy Fortmann (I-431)

Organization (if applicable): N/A

Submission Text: The Hybrid Alternative with freshwater pool represents a chance to demonstrate to all citizens that thoughtful and timely win-win government is still possible. If this plan is allowed to become a one or the other proposal then I have little faith that anything will be done until the dam fails or the water is so foul that it becomes an EPA site. The Hybrid Alternative is a chance to do the right thing in a controlled manner
Submission Text: The three action alternatives were apparently invented and dictated by politicians. The politicians apparently thought that two extreme proposals could be made, and then a “Hybrid Alternative” in between the two extreme positions would save the day as their pre-planned tactical compromise position. This EIS reads just like Goldilocks and The Three Bears. The Hybrid Alternative is “juuuust Riiiiight”. Little did the politicians know that the Hybrid Alternative would actually end up with the absolute worst impacts of the three action alternatives. The EIS buries the fact that the Hybrid Alternative has the worst impacts of all three action alternatives. Please clarify that fact in the executive summary because most taxpaying Washington State citizens have real jobs and don’t have time to read the entire document. Nor do they have the luxury of writing fiction like some others. The following statement must appear in the Executive summary when the EIS is re-written: “The Hybrid Alternative has the worst impacts of the three action alternatives”.

Submission Text: All members of the Funding and Governing Work Group have long histories of hiring the most expensive consultants and paying them much more than they are worth, including paying them to fix their own mistakes. Can the hard-working taxpaying residents of Washington State look forward to more of the same waste of public funds on this project?

Submission Text: Page 21 of the Executive Summary states that “…dredged material would be trucked to an upland disposal site under the Managed Lake Alternative and would be taken by barge to an in-water disposal site under the Estuary and Hybrid Alternatives”. This has the effect of making the Managed Lake Alternative falsely appear to have much higher long-term maintenance costs as shown in Table ES.4. In fact, the writers of the EIS have no idea whether private entities such as the Olympia Yacht Club will be permitted to transport the additional sediment (with or without contamination and invasive species) by barge and dump it somewhere else in Puget Sound waters (Anderson-Ketron) under FUTURE environmental regulations which are currently unknown by anyone and getting stricter every year. The EIS writers are apparently making the unsupported assumption that sediment from the Estuary and Hybrid Alternatives containing invasive species will be permitted to suffocate crabs at
Nisqually, but not for the Managed Lake Alternative. Page 4-37 makes the claim that “dredged sediment quality in both the lake basins and West Bay is expected to be uncontaminated”. That sediment is already contaminated. The cost estimates in the EIS must be revised to show that each action alternative has an equivalent cost per unit of material dredged.

**Supporting Materials (if any): N/A**

**Name (ID): William Workman (I-435)**

**Organization (if applicable): N/A**

**Submission Text:** Why is LOTT a separate partner for funding and governance when LOTT is already controlled by local governments? Is LOTT only a member because they have deep pockets? This project is not related to the collection, treatment, and discharge of wastewater in East Bay. In fact, statements about future TMDL restrictions based on LAKE discharges are speculative at best, and probably altogether false. Can the hard-working taxpaying residents of Washington State look forward to even higher sewer rates in the future to pay for this waste of money? LOTT already pays for numerous things which are not necessary for the collection and treatment of wastewater.

**Supporting Materials (if any): N/A**

**Name (ID): William Workman (I-436)**

**Organization (if applicable): N/A**

**Submission Text:** Page 4-58 says “The New Zealand Mudsnail is not expected to be within the sediment that would be dredged under the Estuary Alternative because of the salinity levels within West Bay and because maintenance dredging would occur in deeper water used for navigation”. Both of those claims are misleading. First of all, the New Zealand Mudsnail can and will adapt to higher salinity conditions. It is already adapted to lower salinity levels such as in the Nisqually Reach where salinity levels as low as zero have been measured. Secondly, the maintenance dredging at the Olympia Yacht Club will include some sediments from shallow water habitat preferred by mudsnails. The reason why this is significant is because it is likely to eventually result in greatly-increased costs for long-term sediment disposal in the Estuary Alternative when it is determined that West Bay sediments cannot be transported by barge and dumped into the Puget Sound (Anderson-Ketron) due to the presence of the New Zealand Mudsnail. The fact that the populations would be greatly-reduced by brackish water still leaves some of them surviving in the sediment. The sediment from West Bay would need to be transported to an upland disposal site which is far more expensive. The EIS has already resulted in people claiming that the Managed Lake Alternative is much more expensive in the long-term than the Estuary or Hybrid Alternatives. The future will prove such statements to be false. Alternatively, perhaps the writers of the EIS can procure letters from all the permitting agencies (ECY, DNR, USACE, etc) which guarantee disposal rights in perpetuity. The probability of that happening is exactly zero of course, so stop making the false claims.
Supporting Materials (if any): N/A

Name (ID): William Workman (I-437)
Organization (if applicable): N/A

Submission Text: Dredging Capitol Lake would not disturb any recreational or commercial activities of any type because there are none. However, dredging West Bay is significantly disruptive to both commercial and recreational activities. The EIS writers failed to mention this. In fact, they claim there will be no significant impact to West Bay regardless of the fact that pilings may need to be moved, boat berths will be temporarily unavailable, and millions of dollars will be wasted on permits and dredging which should never have been required in the first place. They fail to compare this to the absolute zero impact on recreational and commercial activities from dredging Capitol Lake. This should be corrected in the re-writing of the EIS.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-438)
Organization (if applicable): N/A

Submission Text: Statement on Page 4-57: “...New Zealand Mudsnails can become acclimatized to the saline environment”. Since the entire EIS must now be re-written anyways, this statement must be revised everywhere it appears to read: ‘New Zealand Mudsnails have become acclimatized to numerous brackish environments throughout the world”. It seems as if the EIS was written by numerous people who were not sharing their text, not communicating, or perhaps out walking their dogs during Covid lockdown.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-439)
Organization (if applicable): N/A

Submission Text: On Pages #4-150 and 4-154, the last sentences make the claim that dam removal alternatives will wash higher-quality or clean sediment into West Bay, resulting in “substantial beneficial effects” to the quality of sediment at West Bay. Those pages further imply that this has significant environmental benefits by covering or capping contaminated sediments. There are several flaws with this logic, as follows: a. This supposed high-quality sediment is the same sediment which the Yacht Club and Port of Olympia are then supposed to remove by dredging, which results in its removal. So the sediment will not remain in place as a cover or cap in those areas as the EIS claims. In fact, it will be repeatedly uncapped and uncovered over the years, which will repeatedly disturb the sediment below, and for some distance to the sides as well. b. The EIS identifies this supposedly high-quality sediment as a cover over the top of contaminated sediments which provides environmental benefits. However, once contaminated sediments are capped, it is against EPA policy to uncap them, re-expose them, and
spread contaminated sediments all over Budd Bay. At EPA sites, there are highly-enforced regulations in place to insure the cap is never disturbed again. Thus any of the cleaner soils over the top would need to remain undisturbed - undredged. If both the ECY and EPA plan to perpetually allow for the uncapping of sediments contaminated with “...existing high concentrations of...dioxins/furans and carcinogenic PAH’s....“ then the writers of the EIS should request letters to that effect. Of course they will never obtain such letters. c. This supposed high-quality soil is the same soil which has been infused with the New Zealand Mudsnail, which means that it no longer matters how pure it is, it may not be accepted for disposal by dumping directly into the Puget Sound. This supposedly clean sediment may need to be disposed of at an upland disposal site under future regulations, just like it would if the dam remained in place. Anyone who claims that future environmental regulations will stay the same as they are today is obviously not familiar with environmental regulations. On average, they only get more difficult, complicated, and expensive over time. The EIS must be re-written to remove all references to the supposed “substantial beneficial effects” which would accrue in the Estuary and Hybrid Alternatives when contaminated soils are capped by clean soils then repeatedly uncapped, disturbed, and exposed by subsequent dredging. The claim of “substantial beneficial effects” is provably false.

Supporting Materials (if any): N/A

**Name (ID): Abdi Fatemi (I-440)**

**Organization (if applicable):** N/A

**Submission Text:** I would like to recommend the following for capitol lake improvement: Hybrid alternative 'decision Durability “ I am talking about freshwater pool option not the saltwater also like to do some swimming.

**Supporting Materials (if any):** N/A

**Name (ID): William Workman (I-441)**

**Organization (if applicable):** N/A

**Submission Text:** Section 4.13.2.2 is supposed to be discussing impacts on actual utilities, not on the speculative future financial conditions of the utility providers themselves. Was this information hidden under the wrong label to reduce the probability of anyone discovering the true reason why DES wants to remove the dam?

**Supporting Materials (if any):** N/A

**Name (ID): William Workman (I-442)**

**Organization (if applicable):** N/A

**Submission Text:** In Section 4.13.2.2, The EIS launches into speculative future TMDLs from the Department of Ecology. Why are the writers so eager to reveal how the Department of Ecology
proposes to use TMDLs to tighten the noose for DES and LOTT in the future, yet they ignore the same
future in which the Olympia Yacht Club and Port of Olympia must apply for dredging permits under
ever-tightening regulations? The EIS must assume a level playing field for each option. Assume today’s
regulations or tomorrow’s, but don’t change the rules in the middle of the game just to make the other
team lose. The EIS contains this type of bias in nearly every section. Therefore it must be entirely re-
written.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-443)

Organization (if applicable): N/A

Submission Text: WAC 197-11-875 exempts the Department of Enterprise Services from SEPA when
nothing is being constructed. Is this why all the alternatives propose to construct some items, to
eliminate the exemption and make it appear as if the dam needs to be removed? Why is it necessary to
construct anything at Capitol Lake? All of the problems at Capitol Lake can be addressed by maintaining
the dam properly, killing invasive species, and dredging. No portion of that requires any construction.
The DES could have been entirely exempted. The EIS must be re-written to include the COMMON
SENSE OPTION, which is: Maintain the dam properly, kill invasive species, and dredge. Done. In this
option, do not propose mitigation (none required).

Supporting Materials (if any): N/A

Name (ID): William Workman (I-444)

Organization (if applicable): N/A

Submission Text: The sidebar on Page 4-175 is deliberately misleading. It discusses significant impacts
on utilities, then over-extends the the definition to include speculative impacts on the finances of public
service agencies themselves. For SEPA/EIS/GMA processes, the impact on utilities refers to the physical
infrastructure and its capacity to serve, not the public agencies willingness or financial means to serve.
Theorizing about how the Department of Ecology’s theoretical TMDL actions might cause higher
wastewater or stormwater rates for residents at some unknown time in the future is a thinly-veiled
threat of retaliation by ECY if the dam remains. If this is a real threat, then let ECY state its threat to
Thurston County rate-payers in writing (hint: they won’t). The problem of TMDLs should be dealt with at
its source(s), which is either the (future) TMDL action or the pollutants being discharged within the
entire Deschutes River Watershed (such as the locations where cattle, other livestock, and pets routinely
defecate directly into the water). Pollutants are not magically generated within the waters of Capitol
Lake.

Supporting Materials (if any): N/A
Name (ID): MARY MULHOLLAND (I-445)

Organization (if applicable): N/A

Submission Text: I'm writing in support of the estuary or hybrid alternatives. I encourage the state to avoid the Managed Lake alternative simply because the Managed Lake requires the most management, which would need to be consistent and ongoing. I don't feel that I can trust future state stewards to maintain the Managed Lake as proposed in this EIS. The estuary or hybrid alternatives are more likely to serve the community in the longer-term.

Supporting Materials (if any): N/A

Name (ID): Linda Dahmen (I-446)

Organization (if applicable): N/A

Submission Text: I believe restoring the estuary to its natural state is the most beneficial for a healthy environment, for fish and wildlife to thrive and for our community. Thank you for your consideration.

Supporting Materials (if any): N/A

Name (ID): David Heywood (I-447)

Organization (if applicable): N/A

Submission Text: I support returning Capitol Lake to an estuary. Thank you.

Supporting Materials (if any): N/A

Name (ID): Jessica Rose (I-448)

Organization (if applicable): N/A

Submission Text: I would like to see capital lake restored into the the deschutes estuary. Returning the tidal conditions by removing the lake, will offer the waters a natural opportunity to rebalance the harm that has come from the damming of the river to form the lake.

My main concern about this is how are we going to mitigate the invasive species impact if they are released into the sound? Will they be unable to survive in salt water? Thank you so much, I am grateful to see us supporting the movement of our waters, and honoring the council and stewardship of the Squaxin tribe. I do think that opening this up will help decrease some of the stagnation we have been experiencing in Olympia on many levels.

Supporting Materials (if any): N/A
Name (ID): Brent Swift (I-449)

Organization (if applicable): N/A

Submission Text: I am in favor of returning this area to the estuary and natural state of this area. I would appreciate you consulting with the squaxin tribe and their stewardship of this land. Thank you for looking at how to handle this situation.

Supporting Materials (if any): N/A

Name (ID): PAM SMITH (I-450)

Organization (if applicable): N/A

Submission Text: Enough studies. Put the area back to an estuary. A hybrid model or lake is an expensive, unattractive option. Stop spending money on study after study and restore tidal action, remove the dam, and build a new bridge.

Supporting Materials (if any): N/A

Name (ID): Laura Hurtado Webb (I-451)

Organization (if applicable): N/A

Submission Text: My preference is for the Estuary for the following reasons: * Improve environment for salmon leaving and returning to the river Improve ecosystem and coastal wetland area to sequester carbon Reduce invasive species in Capitol Lake Cost is least expensive of the 3 options. Thank you for reading. My input is based partially on the Washington 2016 Deschutes River Watershed Guide.

Supporting Materials (if any): N/A

Name (ID): John & Gail Nispel (I-452)

Organization (if applicable): N/A

Submission Text: Both my wife and I believe allowing Capitol lake return to it’s original estuary condition is the preferable alternative for the area.

Supporting Materials (if any): N/A

Name (ID): Leanne Whitesell (I-453)

Organization (if applicable): N/A

Submission Text: Hello, As a member of the Sierra Club, I am writing in support of the Estuary Alternative as described in the Draft Environmental Impact Statement for the Capitol Lake - Deschutes
Estuary Long Term Management Project. I support the Estuary Alternative because it is the only option that supports a healthy environment for all and encourages preservation and responsible growth for future generations for the following reasons: * The current Capitol Lake is toxic to the local ecosystem, our people and our community. * A restored estuary will bring economic, recreational and environmental benefits into the heart of Olympia. * Restoring the estuary in full is the least costly option to improving water quality and will restore healthy marine wildlife habitats to the Deschutes River, the Budd Inlet, and West Bay areas of the Puget Sound.

Supporting Materials (if any): N/A

Name (ID): Jonathan Lindsay (I-454)

Organization (if applicable): N/A

Submission Text: Support of estuary restoration

Supporting Materials (if any): N/A

Name (ID): William workman (I-455)

Organization (if applicable): N/A

Submission Text: According to the EIS, both the Estuary and Hybrid Alternatives are dam-removal scenarios which will require dredging of West Bay with a 5-6 year interval between dredging. However, the EIS fails to address the following issues for this dredging: a. What is the stable and sustainable funding source being proposed for the additional dredging of West Bay with the dam removed? Dredging on a 5-6 year interval does not appear to be funded. Will the Department of Enterprise Services volunteer to pay the additional cost of dredging West Bay, or attempt to transfer the additional costs to private industry or the Federal government? b. Table 2.3.8 makes the mistake of only mentioning “West Bay dredging conducted by others” in the No-Action Alternative, as if the Estuary Alternative does not include any dredging by others. That is false. c. Has the US Army Corps of Engineers been contacted for comment? They must be specifically asked how permitting and dredging West Bay on a 5-6 year interval fits into their schedule and budget. Alternatively, if this effort is neither scheduled nor budgeted, then the entire process should be put on hold until the funding sources are identified. d. In addition to the cost of dredging West Bay, there will be significant recurring costs just to obtain environmental permits for dredging which are not shown in any line item. Who pays those future costs? e. Dam-removal options use the term “dredging” while mostly proposing to push or pump Capitol Lake silt a short distance to create an immediately adjacent island. No actual removal of soil is being proposed for island construction. It can be safely assumed that this is due to the cost of hauling and permitting which is thereby saved. However, the businesses in Bud Bay will not have this luxury for the dredge spoils they need to remove. Someone will need to pay for hauling (and permitting for hauling) to the disposal location as well as dredging the navigable channel. The islands take up volume which could be used for storage of sediment. The islands will then become sources of sediment themselves when they get washed into West Bay. f. Future dredging permits will be obtained under
future environmental regulations, not current regulations. The EIS contains 30-year dredging scenarios without any consideration of the fact that compliance with environmental regulations becomes more difficult with every change. In the future, new regulations will be invented which ECY, DNR, WDFW, USEPA, DOH, USACE, USCG, and the Squaxin Tribe have not even thought of yet. The process will continue to get more difficult and expensive over time, similar to all other types of environmental permits. Just obtaining timely comments from all those agencies is already a months-long process. Over time, permitting has reached the point where the requirements from one agency directly contradict the requirements from other agencies, which prohibits obtaining permits. Environmental rules are already sufficiently-complex that obtaining permits could require a 6-year time frame. In other words, each subsequent permit cycle may need to start before the previous dredging is complete. Dredging West Bay would then become a never-ending money-spending process. The EIS presents future dam-removal scenarios which are impractical, unlikely, unworkable, unsustainable, and therefore guaranteed failures. The EIS must therefore proposed mitigation for what happens when these scenarios fail.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-456)

Organization (if applicable): N/A

Submission Text: Are the predictions for sediment deposition rates in West Bay for the Estuary and Hybrid Alternatives based on initial conditions of sediment in the Middle and North Basins, or are they based on the actual sediment conditions which will exist in the Middle and North Basins after dredging deferrals by DES? Sediment will only continue to accumulate in the North Basin which will increase sediment pass-through into West Bay over time. Limiting the sediment pass-through to West Bay will be dependent on timely dredging in the North Channel/North Basin which has already proven to be politically impossible. The IES proposes no mitigation for this anticipated condition.

Supporting Materials (if any): N/A

Name (ID): Becky Liebman (I-457)

Organization (if applicable): N/A

Submission Text: To All Concerned: I have been searching for the right words and I realize the recent resolution of the Olympia City Council says it all. I quote them here. The Estuary Alternative will: --provide the rare opportunity to restore scarce tidelands and estuarian habitat, --be the most beneficial to tribal populations, --address social justice and equity impacts associated with the No Action and Managed Lake Alternatives, --substantially benefit anadromous fish and marine fish, --be the most beneficial for controlling invasive species, --be beneficial for reducing downtown Olympia flooding, --be the most beneficial to Budd Inlet water quality, --be better aligned with local climate adaptation goals than the Managed Lake Alternative, --be the least impactful to regional LOTT Clean Water Alliance and --be the most natural and environmentally sustainable, and --be the least cost alternative over the 30-year planning horizon. On top of this, the visual image of our beautiful Capitol dome and a restored
estuary will powerfully communicate our 21st century awareness that we are part of - and not the center of -- a profound and miraculous ecosystem. Thank you very. Sincerely, Becky Liebman

Supporting Materials (if any): N/A

Name (ID): William Workman (I-458)

Organization (if applicable): N/A

Submission Text: Progressive Washington State politicians failed to authorize funding for Capitol Lake Maintenance in order to create a man-made disaster so they could then be environmental savours and solve the problem by removing the dam. Progressives never let a disaster go to waste. However, after the dam is removed, what incentives do the politicians have to authorize any funding for maintenance? It won’t happen. Please include a plan for full mitigation from this impact when funding is not approved and the future dredging is not authorized.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-459)

Organization (if applicable): N/A

Submission Text: The sidebar on Page 4-157 of the EIS makes the claim that sediment quality in West Bay would improve in the Estuary and Hybrid Alternatives by washing cleaner sediment on top of it. Presumably this would happen by one of the following mechanisms: a. The contaminates are still there, but they are diluted by mixing with cleaner sediments? (dilution makes them more difficult to clean up in the future). b. The contaminates are still there but they are safe because they are capped by cleaner sediment? (which is then repeatedly uncapped by dredging, sloughing, and tidal action over the years). c. Future dredging re-suspends contaminated sediments and spreads them all over West Bay, which decreases the concentrations of contaminates? (but improves sediment quality). d. Future dredging results in transferring contaminated sediment to some other site such as the in-water disposal site? (try getting a permit for that). The EIS must clarify and explain the mechanism by which sediment quality is supposed to improve, and where the contaminates will go, or remove such unsupported statements.

Supporting Materials (if any): N/A

Name (ID): Beverly Torguson (I-460)

Organization (if applicable): N/A

Submission Text: I guess this whole project isn’t a priority with me, but I think I would like to see the hybrid version. If that option is too expensive, my second choice would be the estuary version. I know most people like the lake, but it’s not a natural option and I would think it would be hard to maintain. I think making things the way nature intended might be the best option (estuary), but the hybrid option
might suit more people. Sometimes I think humans do too many things to suit themselves with not a lot of regard for the planet.

**Supporting Materials (if any):** N/A

**Name (ID):** William Workman (I-461)

**Organization (if applicable):** N/A

**Submission Text:** Housing and homelessness are very important issues in Thurston County which the EIS fails to adequately consider. Since the Estuary and Hybrid Alternatives propose to increase the cost of sediment removal at the Olympia Yacht Club by four times the current rate, where will the live-aboard residents go when the Yacht Club goes bankrupt? The proposed mitigation should include providing equivalent moorage elsewhere, because bankruptcy is the most probable scenario. Perhaps this can be included when the EIS is re-written.

**Supporting Materials (if any):** N/A

**Name (ID):** William Workman (I-462)

**Organization (if applicable):** N/A

**Submission Text:** The improvements proposed by all action alternatives will include significant upgrades to what the Capitol Lake homeless have at present. Boardwalks will offer additional area with good drainage, elevated tent sites, and excellent attachment points for blue tarps. The EIS must be re-written to include these improvements as SUBSTANTIAL BENEFITS when the dam is removed. Housing and homelessness are very important issues in Thurston County which the EIS fails to adequately consider.

**Supporting Materials (if any):** N/A

**Name (ID):** Mark Holm (I-463)

**Organization (if applicable):** N/A

**Submission Text:** An estuary is the best option for fish and wildlife which should be the first priority. Human convenience should be the 2nd priority but animals and fish first. The estuary will restore the area to what it was decades ago and what it should be for a healthy environment. The current lake serves no useful purpose at all as no one can fish, swim, row a boat plus it usually gets scummy during the summer. Definitely no on the lake. Thank you.

**Supporting Materials (if any):** N/A

**Name (ID):** Jennifer Laine (I-464)

**Organization (if applicable):** N/A
Submission Text: I prefer the Estuary alternative for several reasons: 1. It replaces the 5th Ave. (vehicle) bridge, which is currently in ‘fair’ condition. Failing to replace this bridge now, will only mean having to do so in the future. 2. The reconfiguration of the 5th Ave/bridge and Deschutes Parkway intersection will be safer for drivers and pedestrians. 3. The estuary gives the best opportunity for educational experiences. For example, I can imagine school field trips to the estuary boardwalk. 4. The Estuary Alternative gets us as close as possible to the natural state of the environment, without artificial dams, or other man-made structures. 5. The reflecting pool in the Hybrid Alternative doesn't make sense to me, as the pool wall will be exposed a significant amount of the time, whenever the tide is too low. This doesn't connect us to nature. It is a literal wall to separate the artificial from the natural

Supporting Materials (if any): N/A

Name (ID): William Workman (I-465)

Organization (if applicable): N/A

Submission Text: The Washington State Department of Ecology (ECY) is apparently threatening to implement drastic TMDLs for Capitol Lake discharges. One of the specific issues mentioned is nutrient loading. In the sidebar on Page 4-176 of the EIS, ECY is reportedly expected to issue load allocations to Capitol Lake IF IT REMAINS A LAKE. In other words, ECY is threatening to regulate a lake as a point source (which it is not) if the Department of Enterprise Services (DES) makes the “wrong” decision. The EIS should comment on the legality of this retaliation by regulation. Has ECY retaliation been specifically authorized by the Washington State Legislature? If not, then the EIS should name the unelected bureaucrat who is exceeding their authority by making this threat.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-466)

Organization (if applicable): N/A

Submission Text: Page 4-36 contains the statement: “The lake basin is currently overwhelmed with aquatic plant growth, and further loss of open-water areas is expected to result in a SIGNIFICANT IMPACT on water quality” This statement must be rewritten to reflect the truth as follows: “Due to the failure by DES to properly manage aquatic weeds and algae, the lake basin is currently overwhelmed with aquatic plant growth. Continued failures by DES to provide this basic maintenance is expected to result in SIGNIFICANT IMPACT on water quality”.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-467)

Organization (if applicable): N/A
Submission Text: The effects of ever-tightening regulatory restrictions are relevant to the Yacht Club and the Port of Olympia, because their maintenance dredging in the future will be done under future regulations which will undoubtedly be more restrictive than current regulations. The writers of the EIS look into their crystal ball and see future TMDLs which the Department of Ecology is supposedly going to use to force removal of the dam, or somehow regulate Capitol Lake as a point source. Then, the EIS writers look the other way when dam-removal forces West Bay users to get their dredging and other permits under the same type of ever-tightening environmental restrictions. This is an example of bias which the EIS pretends does not exist. The deck appears to have been stacked. The entire EIS must be re-written to eliminate this bias.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-468)

Organization (if applicable): N/A

Submission Text: According to the EIS, if DES can manage Capitol Lake poorly enough, and dischargers to the Deschutes river can pollute the river sufficiently, then Ecology will do its part to force removal of the dam. Otherwise, ECY will at least use TMDLs to over-regulate point source permittees to compensate. Since the nutrients are in the Deschutes River, can ECY provide written guarantees that nutrient loading will go down when the dam is removed? Perhaps the Deschutes River can be freed from such bondage and inject those nutrients directly into West Bay with no polluting dam in the way. The EIS should provide the necessary guarantees that phosphorus, nitrogen, and TOC nutrients will go down, or else dam removal would be a waste of tax dollars paid by hard-working citizens of Washington State. Perhaps the writers of the EIS can request written assurances from ECY on that subject.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-469)

Organization (if applicable): N/A

Submission Text: According to the EIS, Capitol Lake water is already cleaner than Budd Bay, and getting cleaner. It seems that the proposed estuary would be contaminated by the brackish water from Budd Bay. Who can provide a guarantee that the water quality within the new estuary will be cleaner when mixed with Budd Bay water under tidal influence once the dam has been removed? Such claims should be regarded with suspicion until they are provided in writing with some type of scientific evidence.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-470)

Organization (if applicable): N/A
Submission Text: The sidebar on Page 4-176 states that the Department of Ecology may assign TMDL allocations to Capitol Lake, then use them as a hammer to force unrelated dischargers at other locations to reduce their discharges if Capitol Lake does not behave according to the Department of Ecology’s wishes. This may be a violation of the Nolan-Dolan principal or another legal principal which requires that conditions imposed on an entity must have a direct connection to that entity’s impact. It is not legal for a law enforcement agency to issue a speeding ticket to someone riding in the back seat of the bus. Please check with legal counsel and remove the sidebar on Page 4-176 from the EIS.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-471)

Organization (if applicable): N/A

Submission Text: The sidebar on page 4-175 of the EIS, states that that ECY will use TMDL load allocations to regulate Capitol Lake discharges. By what process does ECY assign enforceable TMDL’s to Capitol Lake? In the future ecological disaster scenario in which the dam remains in place, is the ECY threat to regulate lake discharges on Page 4-175 of the EIS actually just a threat from the writers of the EIS? Are the proposed regulations actually for point sources whereas dams are defined as non-point sources? As the writers of the EIS are aware, ECY cannot regulate that which is not provided for by the appropriate RCW/WAC’s such as 173-201A WAC and 173-226 WAC. Which permit is being violated? When the EIS is entirely re-written to eliminate such confusion, please be sure to cite the code reference which enables ECY to regulate nutrients discharged from a Lake.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-472)

Organization (if applicable): N/A

Submission Text: 19. The supposedly poor water quality in Capitol Lake was cited in The Daily Olympian on July 28th, 2021 as the reason why the dam should be removed. Yet the EIS states that the lake has: “...good water quality in terms of physical and chemical properties important to aquatic life” on the lower half of page 3-26. Since someone is not being truthful here, perhaps the EIS writers can clarify exactly who that is. It appears that those representing the EIS team have spread verbal mis-information about the water quality in Capitol Lake, while providing the truth in writing, knowing that most people don’t have time to read over a thousand pages. That way, the EIS team will not get caught lying, but the word about needing to remove the dam still gets out there. The EIS team and DES could easily correct the public’s mis-perception, but they won’t.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-473)

Organization (if applicable): N/A
Submission Text: Page 4-175 of the EIS states that the Department of Ecology (ECY) blames the dam for depleting dissolved oxygen levels in Budd Inlet. Instead of making unsupported statements, it would be preferable for the EIS to identify the report title and page number where ECY blames the dam for low water quality in Budd Inlet. If the Department of Ecology has issued such a written statement, then they also must be willing to provide a written guarantee that water quality in Budd Bay will improve when the dam is removed. Please also identify the reference where ECY provides this guarantee. Otherwise, the hardworking taxpayers of Washington State might spend hundreds of millions of dollars to create an odorous mud pit which provides few benefits. This clarification will be relatively minor considering that the entire EIS needs to be re-written anyways.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-474)

Organization (if applicable): N/A

Submission Text: The EIS does not appear to have any beautifully-rendered illustrations which depict how the Washington State Capitol Dome will appear when reflected in the estuary mud pit. Please add one of these to the EIS.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-475)

Organization (if applicable): N/A

Submission Text: LOTT set outrageously high sewer rates so they could pay for expansion of their wastewater empire (and million-dollar employee lawsuits) regardless of the timing of future connections. LOTT wanted to construct their “highly-managed” Taj Mahal wastewater alternative ASAP regardless of the timing of future connections. LOTT went way beyond what the Department of Ecology was requiring. There was a letter to this effect which the Department of Ecology provided to LOTT about 25 years ago (which nobody can seem to locate now). Since current sewer rates are partly based on the poor water quality in Budd Bay with the dam remaining in place, does that mean LOTT will reduce their rates once ECY agrees that water quality has dramatically-improved after dam removal? Is LOTT willing to commit to such a rate reduction, or are they just threatening higher rates for the Managed Lake Alternative? Please identify who is actually making this threat? Is it LOTT, ECY, or just the writers of the EIS?

Supporting Materials (if any): N/A

Name (ID): William Workman (I-476)

Organization (if applicable): N/A
Submission Text: Section 3.3 of the EIS cites nutrient loading and resulting low oxygen levels as the main problems created by the dam. Lake aeration has been used in the past to solve that problem. There are several different configurations to consider, which vary from fine-bubble diffusers to in-lake fountains. The aeration would only need to operate during times of the year when dissolved oxygen levels are too low. There are numerous types of rotary and floating aerators which could be temporarily installed to assess the effectiveness of aeration before spending millions of dollars on a dam removal project which only serves to pass nutrient-loaded sediment (and dredging costs) onto someone else downstream. Aeration is guaranteed to have at least some effect on nutrients. DES has no right to waste the taxpayer’s money from the hard-working citizens of Washington State until they have at least tried some lower-cost options.

Supporting Materials (if any): N/A

Name (ID): Esther & Warren Kronenberg (I-477)

Organization (if applicable): N/A

Submission Text: I support the Deschutes Estuary Restoration Team in its efforts to restore the Deschutes Estuary. Their position is based on best available science and reflects the urgency we face as a nation and a planet in stopping the dramatic decline in ecosystem health and biodiversity we have witnessed in a few decades. As a member of the League of Women Voters' Water Study team, I also am acutely aware of the ongoing damage to our water resources. This is clear in the reduced water quality, increased sediment and invasive species that have plagued Capitol lake and are getting worse, making any use by the public impossible. Our society needs to acknowledge the wisdom of the indigenous peoples who correctly view the land and its resources as relations. Current science in biology, physics and chemistry amply demonstrate the interconnectedness of all living beings and the inherent wisdom of nature. Our current world view that views resources as commodities and individuals as separate has clearly run its course, and continuing in this perspective is threatening our very existence. Our legal system needs to change to reflect REALITY - that all parts of our living system have rights and need to be respected or we will perish. I urge you to follow the recommendations of DERT and let the river assume its rightful place in our ecosystem, free of human interference. Thank you. Esther and Warren Kronenberg

Supporting Materials (if any): N/A

Name (ID): William Workman (I-478)

Organization (if applicable): N/A

Submission Text: The WQ Improvement Report (ECY Publication 12-03-008, June 2012) identifies that the sources of the water quality issues on the Deschutes River are septic systems, agricultural operations, Ayer/Elwanger Creek, Tempo Lake, Chambers Creek, Lake Lawrence, Reichel Creek, and Spurgeon Creek. These are listed as contributing to excess nutrient loads and numerous other water quality problems. Refer to Page 178 of the WQ Improvement Report for this information, including cattle
defecating directly into the River. Perhaps these contributions of nutrients and therefore low oxygen levels can be addressed at their sources instead of requiring Budd Bay point-source dischargers to make up the difference? This EIS process appears to have already advanced beyond the point where the truth makes any difference, but this should still be explored if it is not too late.

Supporting Materials (if any): N/A

**Name (ID): William Workman (I-479)**

**Organization (if applicable):** N/A

**Submission Text:** Every fourth of July, thousands of waterfront land owners launch tons of fireworks over (and therefore into) Thurston County Lakes. The active ingredients in these fireworks are metals and metallic salts. There are dozens of color-rendering combinations of sodium, potassium, copper, sulfur, magnesium, phosphates, nitrates, chlorides, etc. When these polluting nutrients come down the Deschutes River, will removing the dam make the nutrients disappear?

Supporting Materials (if any): N/A

**Name (ID): William Workman (I-480)**

**Organization (if applicable):** N/A

**Submission Text:** Section 3.3 of the EIS cites nutrient loading and resulting low oxygen levels as the main problems created by the dam. In that case, perhaps harvest the invasive plant species and algae before they can decompose and add to the nutrients which result in oxygen depletion. Aquatic plants create good compost for gardens. Perhaps also try adding low doses of alum which is done at other lakes to control nutrient loading. These are both cheaper than removing the dam.

Supporting Materials (if any): N/A

**Name (ID): William Workman (I-481)**

**Organization (if applicable):** N/A

**Submission Text:** Section 3.3 of the EIS cites nutrient loading and resulting low oxygen levels as the main problems created by the dam. In that case, perhaps harvest the invasive plant species and algae before they can decompose and add to the nutrients which result in oxygen depletion. Aquatic plants create good compost for gardens. Perhaps also try adding low doses of alum which is done at other lakes to control nutrient loading. These are both cheaper than removing the dam.

Supporting Materials (if any): N/A

**Name (ID): William Workman (I-482)**

**Organization (if applicable):** N/A
Submission Text: Table 3.3.6 and Figure 3.3.5 show the results of the ECY modeling and reporting dissolved oxygen levels and depicts steadily improving oxygen levels in Budd Bay through 2006-2008-2014. Since water quality has been steadily improving, why would DES push the panic button now and rip the dam out? Perhaps the EIS could include a graphic which more-clearly shows how dissolved oxygen levels have been improving over time. This would communicate the truth about oxygen levels. Please don’t cheat on this graphic by doing something like comparing October of one year to May of another.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-483)

Organization (if applicable): N/A

Submission Text: There are numerous statements all throughout the EIS which mention good water quality in Capitol Lake. For example, the sidebar on page 3-28 states: “...Capitol Lake exhibits relatively good water quality when compared to other lakes in the area. Ecologically, the low temperatures and high dissolved oxygen are more supportive to cold water fish than other local lakes.” However, the supposedly poor quality of water in Capitol Lake was cited in The Daily Olympian on July 28th, 2021 as the reason why the dam should be removed. The hard-working, tax-paying citizens of Washington State have a right to know who is lying here.

Supporting Materials (if any): N/A

Name (ID): Jeb Maki (I-484)

Organization (if applicable): N/A

Submission Text: I support the Estuary Alternative because it is the only one that supports a healthy environment for all and encourages preservation and responsible growth for future generations

Supporting Materials (if any): N/A

Name (ID): blaine wheeler (I-485)

Organization (if applicable): N/A

Submission Text: I favor the original architects plan and vision.. I have watched this process drag on for an interminable number of years as those who want a swamp (aka estuary) obstructed and stalled and stalled. In the end they have managed to seriously increase costs of taking any actions. I further feel that length of the report and the many many many years of stalling could to the skeptical indicate there was a predetermined answer searching desperately for justification. Be bold, preserve the vision of our beautiful Capitol Campus

Supporting Materials (if any): N/A
**Name (ID): McKenzie Ervin (I-486)**

**Organization (if applicable):** N/A

**Submission Text:** Please return Capitol Lake to an estuary. While the emissions and impact to recreation are high in the short term, this solution allows the area to return to its natural state and best support our natural wildlife and wetlands. In a time of climate crisis, I urge the city to prioritize conversation and select the estuary solution.

**Supporting Materials (if any):** N/A

**Name (ID): Michael Berger (I-487)**

**Organization (if applicable):** N/A

**Submission Text:** I support the Sierra Club Deschutes Estuary Alternative and think the Capital lake dam should be removed to restore the Deschutes Estuary. It is time to think about natural environments and not the view for a privileged few.

**Supporting Materials (if any):** N/A

**Name (ID): Shilo DeLaCruz (I-488)**

**Organization (if applicable):** N/A

**Submission Text:** After reviewing all 3 alternative plans I am writing to let you know I strongly support the Estuary Alternative. It is the only one that supports a healthy environment for all and encourages preservation and responsible growth for future generations for the following reasons: The current Capitol Lake is toxic to the local ecosystem, our people and our community. A restored estuary will bring economic, recreational and environmental benefits into the heart of Olympia. Restoring the estuary in full is the least costly option to improving water quality and will restore healthy marine wildlife habitats to the Deschutes River, the Budd Inlet, and West Bay areas of the Puget Sound. Personally I wouldn't want to maintain an environment that's prone to become toxic every few years. Nor would I want to maintain a smaller toxic area just for a reflection (look but don't touch) like the hybrid alternative provides. I think the best thing about Washington State is our natural environment and the best option for Capitol Lake is the Estuary Alternative. We will be amazed at how beautiful this area will become (naturally) over a very short period of time. We are in the Evergreen state and I believe the wild nature of the Estuary Alternative will represent the heart of Washington as it restores this sacred land. If nothing else, do it for the Salmon. -Estuary Alternative Thank you for accepting my comments on such an important environmental project.

**Supporting Materials (if any):** N/A
Name (ID): Kenneth Estes (I-489)

Organization (if applicable): N/A

Submission Text: I have made a comment before, this is a supplement from information I read in The Olympian newspaper. This is a link to projected Scientist reports on tidal increase: https://www.theolympian.com/news/nation-world/national/article252736353.html#storylink=related_inline Highly suggest someone at least read this report. Sincerely, Ken Estes

Supporting Materials (if any): N/A

Name (ID): Frank Turner (I-490)

Organization (if applicable): N/A

Submission Text: 1) What is the future of the 5th Avenue Bridge to be? If the 5th Avenue Bridge is removed along with the dam, what impact will it have on travel time between the West Side of town and downtown? How will impact on travel be mitigated, and by whom?

2) Under the hybrid alternative, will the 60 acre lake be salt or fresh water?

3) What is the accounting period for the long term costs of maintenance under the alternatives in the executive summary. Will the displayed figures be spread over a year, 10 years, or some other period?

4) Please be more specific about the effect of sea level rise over the next century. How will this be managed under different scenarios

5) Will aeration fountains be needed for improved oxygenation?

Supporting Materials (if any): N/A

Name (ID): Dana Madsen (I-491)

Organization (if applicable): N/A

Submission Text: My comment is this: Retain the lake as is under the Managed Lake alternative. There are several reasons for this opinion. First, the visual experience with the lake is far superior to a view that is all or partly a mud flat twice a day at low tide. I noticed in the draft EIS that the pictorial representations were not designed to clearly show any alternative that included a mud flat. I submit that this is clearly a bit of fakery designed to mask the ugly reality of the proposed estuary (mud flat.)

Secondly, I did not read anything in the presentation describing the infestation of mosquitoes that would arrive with the mud flat.
Nor was any mention made of the smell of the mud flat. One only has to visit the East Bay Marina at low tide to revel in the smell.

Thirdly, there did not seem to be any thought given to the possibility of marketing the dredged materials as sand, gravel or topsoil with the routine dredging depending on the character of the material encountered. Certainly the material in the lake now looks like mud because it hasn't been dredged for many years. Fresh regular river deposits are quite marketable as aggregates, however. That would reduce the cost of the Managed Lake alternative.

Supporting Materials (if any): N/A

Name (ID): Jeanette Dickison (I-492)

Organization (if applicable): N/A

Submission Text: Dear Ms/Sir, I would like to express my support for the restoration of the Deschutes Estuary in response to the Draft EIS. The restoration of the Estuary is essential to water quality, fish habitat and Olympia's community values of sustainability and environmental stewardship. As a former Olympia City Council member, 1994 - 2003, I participated in many council work meetings to evaluate the three proposals. At that time, I supported the Hybrid option that I thought would balance the existence of the Reflecting Pool with habitat restoration. I no longer support that position. The King Solomon compromise of splitting the baby in two is no longer viable. Outside of the Capitol Lake process, the baby has been split many times since the 90's - locally, nationally and globally. It's been compromised by all of us in the belief that there is room to compromise. Informed citizens know the peril we face if we continue to whittle away our planet in the name of aesthetics, false economics and small constituencies. The Estuary alternative is not the most expensive alternative because expense only increases with habitat destruction, degraded water quality, and, especially in this instance, our ability for the LOTT facility's continuation to serve our UGA while we promote smart growth in our cities. The Estuary is not OPTIONAL if we embrace our environmental goals as a region and honor our agreements with Tribes. Many small steps toward restoring Budd Inlet and Puget Sound have been taken but collectively are not nearly enough. We must begin moving very deliberately on a large scale, showing real leadership to accomplish our environmental goals. Restoring the Deschutes Estuary is the BIG STEP within our grasp.

Supporting Materials (if any): N/A

Name (ID): Susan McRae (I-493)

Organization (if applicable): N/A

Submission Text: Capitol Lake is essentially dead. I can remember swimming and canoeing. No more. The New Zealand mud snail has put the water off limits. While I like the idea of a small reflecting pool, I believe that the healing power of an estuary is more important, and less expensive. I understand that the Olympia Yacht Club and Port of Olympia would prefer to see dredging, but Olympia was never designed
to be a deep water port. Estuaries take time to re-establish, but the Nisqually Refuge shows what can be done. Let's help our salmon, alleviate some of the higher tides, and work to heal our planet.

Supporting Materials (if any): N/A

**Name (ID): Cheryl sebaska (I-494)**

**Organization (if applicable):** N/A

**Submission Text:** Born and raised in Olympia since 1945. Capital Lake has transitioned into a area just like our unsafe, Nonfunctional area. Downtown merchants have time and time again tried to revitalize their stores to attract business. Just like capital lake a huge amount of work and money went into a walk and functional areas for use by our public. As I walk around capital lake I see no activity except for weeds, ducks and water is condemned because of snails. Last warm weekend tourists and locals were roaming and trying to patronize walks and downtown area. What additional activity would they have enjoyed if the lake was accessible to cool their feet, rent a row boat, waterski, swim, picnic, watch or learn sailing, etc etc. years ago it was a destination now it's a smothering nonfunctional swamp not even considered a lake. Revenue could be brought into the city instead of revenue for weed upkeep. Sorry but am bitter thinking of what it was and what it could be. For the enjoyment of ALL.

Supporting Materials (if any): N/A

**Name (ID): Judith Cichowicz (I-495)**

**Organization (if applicable):** N/A

**Submission Text:** While this household supports the estuary reversion, as residents of West Olympia, the destruction of the 5th avenue bridge without first installing some temporary replacement would create major traffic problems, congestion for West Olympia residents. Increased trip distance, and traffic congestion slow downs result in additional negative environmental impacts.

Supporting Materials (if any): N/A

**Name (ID): Bill Cogswell (I-496)**

**Organization (if applicable):** N/A

**Submission Text:** I support the Estuary Alternative, which would fully restore the Deschutes Estuary by reintroducing tidal flows to the Capitol Lake Basin. This would return the area to estuarine conditions where saltwater from Budd Inlet would mix with freshwater from the Deschutes River.

Supporting Materials (if any): N/A

**Name (ID): Judy O'Looney (I-497)**

**Organization (if applicable):** N/A
Submission Text: I support the Estuary Alternative.

Supporting Materials (if any): N/A

Name (ID): Gary Wiles (I-498)

Organization (if applicable): N/A

Submission Text: I'm emailing to voice my support for converting Capitol Lake in Olympia back into an estuary. This option will produce important environmental benefits and will be less costly to maintain than keeping the site as a lake. Thank you.

Supporting Materials (if any): N/A

Name (ID): Harry S Griffith III (I-499)

Organization (if applicable): N/A

Submission Text: I believe the lake should be returned to an estuary as prior to any dam.

Supporting Materials (if any): N/A

Name (ID): Doug Hansen (I-500)

Organization (if applicable): N/A

Submission Text: I would just like to be able to legally fish for Bass and other species of fish within Capitol lake. I would like to be able to at the very least fish from shore ASAP :-)

Supporting Materials (if any): N/A

Name (ID): Parker MacCready (I-501)

Organization (if applicable): N/A

Submission Text: I strongly support the proposed Estuary option. Having reviewed the excellent study materials I believe this option will improve salmon habitat by allowing more natural flow of the river and mixing with the Sound. The estuary option will also result in a stunningly beautiful tidal area at the heart of our city, reinforcing our connection to the ocean. Thank you very much for the hard work that went into this study. It was clearly presented.

Supporting Materials (if any): N/A

Name (ID): Maxine Dunkelman (I-502)

Organization (if applicable): N/A
Submission Text: I hope swimming can be restored. Thank you for all of your work

Supporting Materials (if any): N/A

**Name (ID): David McDorman (I-503)**

Organization (if applicable): N/A

Submission Text: Have you any concerns about the pbc spill and sediment contamination in the lake?

Supporting Materials (if any): N/A

**Name (ID): FREDERICK TIMMER (I-504)**

Organization (if applicable): N/A

Submission Text: I love the 'deli' idea! That makes perfect sense and a reasonable compromise.

Supporting Materials (if any): N/A

**Name (ID): Paul Brice (I-505)**

Organization (if applicable): N/A

Submission Text: I vote for the Managed Lake option.

Supporting Materials (if any): N/A

**Name (ID): Ryan Troy (I-506)**

Organization (if applicable): N/A

Submission Text: I'm happy to see the federal funds allocated for this decision making process are being utilized. As with most government projects it takes a few years to decide and another decade to implement. However, in this case, 10 years is merely a drop in the bucket compared to the next million plus years that this estuary will provide cool, nutrient rich sanctuary for our Salmon. Just imagine being able to harvest Olympia Oysters in Olympia! The oyster that brought us the Capitol status in the first place. Every year I see the same people trimming the same hedges, clearing the same moss, washing off the same mildew along with all the other perennial chores we have. Blow the dam and let Mother Nature get to work on this money pit formerly known as Capital Lake. If you guys throw anymore names on the tide flats other than Deschutes Estuary please make it something we don't have a hard time spelling or pronouncing.

Supporting Materials (if any): I-506_Troy.pdf
**Name (ID): Lois Ward (I-507)**

**Organization (if applicable):** N/A

**Submission Text:** Please remove the dam and allow and support the plan to return the Des chutes River to a natural estuary. This is the least expensive option but more importantly it is the best alternative for the environment, the river and Puget Sound. The current lake is toxic and it is time to return this area to it's natural formation.

**Supporting Materials (if any):** N/A

**Name (ID): David Field (I-508)**

**Organization (if applicable):** N/A

**Submission Text:** Re-establishment of the estuary is the less expensive method of dealing with the problem. The fresh water settling pond idea works but the cost/benefits do not work out as planned. Agree with SSFF recommendations.

**Supporting Materials (if any):** N/A

**Name (ID): Rebecca Claxton (I-509)**

**Organization (if applicable):** N/A

**Submission Text:** The Hybrid concept would be my preference

**Supporting Materials (if any):** N/A

**Name (ID): Chuck Pfeil (I-510)**

**Organization (if applicable):** N/A

**Submission Text:** I prefer the Estuary option and my 2nd choice would be the Hybrid. Regardless of the choice made, it’s time to take action to end this sick lake and make a move to improve the quality of this water. Also I want the State to commit to ongoing maintenance

**Supporting Materials (if any):** N/A

**Name (ID): Gary Merz (I-511)**

**Organization (if applicable):** N/A

**Submission Text:** As an Olympia native of over 60 years and local business person with a CPA firm on Percival Landing I whole heartedly support the maintaining the Capitol Lake as a navigable fresh water lake that attracts the members of our community as well as tourists. As a child growing up in West
Olympia I would ride my bike downtown and swim in the lake and have memories of waterski competitions and small hyroplane races during Capital Lakefair. Thank you.

**Supporting Materials (if any):** N/A

**Name (ID):** Michael Scholl (I-512)

**Organization (if applicable):** N/A

**Submission Text:** I feel that nature should take it's course and subverting nature will only cost more and more. The Estuary plan is the only way to go and, because of the nature of tides, will make a more natural reflecting pool.

**Supporting Materials (if any):** N/A

**Name (ID):** Michele Burton (I-513)

**Organization (if applicable):** N/A

**Submission Text:** I am writing in favor of the removal of the 5th Avenue Dam and returning the area to an estuary. As stated in the Draft EIS, estuary habitat is some of the most important habitat for supporting young fish, especially salmon. The cool water and aquatic plants provide both food and shelter for many species. According to an article at OPB (https://www.opb.org/news/article/estuaries-disappear-american-west-coast/), 'Estuaries are also among the most endangered habitats on the planet. The study found that, at one point, salt marshes covered roughly 2,800 square miles of the West Coast. That's an area larger than the state of Delaware. But today, that number has been reduced by more than 85%.' According to NOAA (https://www.fisheries.noaa.gov/feature-story/new-mapping-reveals-lost-west-coast-estuary-habitat), 85.2% of Salish Sea Estuary habitat has been lost. We have a once-in-a-generation chance to begin restoring some of this vital habitat. The naysayers complain that the view will be ugly and the smell unpleasant. According to the Draft EIS, the estuary will be covered with water 80% of the time. Low tides on East Bay and near Priest Point don't impact the community's use of the areas. The ugly argument just doesn't hold up. I love that the South Basin will be allowed to return to freshwater or brackish wetland. This will create additional habitat for migrating birds. I am wholeheartedly in favor of the Estuary Alternative.

**Supporting Materials (if any):** N/A

**Name (ID):** Barbara Buchan (I-514)

**Organization (if applicable):** N/A

**Submission Text:** Estuary Alternative would fully restore the Deschutes Estuary by introducing tidal flows to the Capitol Lake Basin, allowing Budd Bay saltwater to mix with River freshwater making the conditions necessary for juvenile salmon to survive. The current Cap. Lake situation is toxic to the local...
ecosystem & limits its use by the community. this alternative & dam removal is the least cost & most effective to restore healthy marine wildlife habitat.

Supporting Materials (if any): N/A

**Name (ID): Victoria Loveland (I-515)**

**Organization (if applicable):** N/A

**Submission Text:** I vote for the Hybrid Alternative’s “Decision Durability”, freshwater option. I was watching children at the beach and thinking about how ridiculously hard it would be to tell them not to touch the water. I think swimable waters are important.

Supporting Materials (if any): N/A

**Name (ID): Fay Wright-Bjorgen (I-516)**

**Organization (if applicable):** N/A

**Submission Text:** Using 30 year cost estimates from The Daily Olympian, August 12, 2021, we would spend annually 6 million-11 million for the Estuary; 8.3 million- 15 million for the Hybrid; 11 million- 20 million for the lake as is. With the estimated difference between Estuary/Tide flat choice and Hybrid choice being only 2.3 to 4 million per year, I hope we could choose to save the 5th street bridge (for very real traffic needs), eliminate the damn, and create a smaller, viable public park, pond space as an aesthetic boon to our suffering downtown, while still opening a large area for an estuary. So much has been lost in Olympia over the years that it breaks my heart to see more public space and walkable beauty taken from us. In addition to the desire to preserve a bridge and some readily accessible area to visitors and citizens, climate science is making clear the very real issues of the rise of ocean levels, so doesn't an open tide flat create a very real threat to downtown businesses, (not to mention the smell of a town built on a large tide flat) I think a sound argument can be made for the hybrid plan. I would vote to pay for that.

Supporting Materials (if any): N/A

**Name (ID): Robert Evashenk (I-517)**

**Organization (if applicable):** N/A

**Submission Text:** Estuary is the best option. It has the benefit of habit, tribal significance and has the lowest ongoing maintenance costs.

Supporting Materials (if any): N/A

**Name (ID): joseph chiveney (I-518)**

**Organization (if applicable):** N/A
Submission Text: Please return it to the estuary it once was and make a permanent change. Let’s make Olympia a destination, just like in Elwah river... no one sees this as a mistake... the salmon are back! Take a look at Nisqually estuary... we could have something similar in the middle of an urban environment. the dam was a mistake, hatched and constructed during a period of political graft where construction dollars got spent anywhere convenient for profit. Let’s set the way for forward thinking by being forward thinking..... what will be here in 50 years if we return it to its natural state? What will be here in 50 years if we don’t... another problem that has to be fixed.

Supporting Materials (if any): N/A

Name (ID): Cory Miller (I-519)

Organization (if applicable): N/A

Submission Text: I wholeheartedly favor full estuary restoration for the Deschutes River. I look forward to the day when I can look at a healthy estuary that is home for birds and salmon than a choked, snail-infested failed experiment. It should never have been built.

Supporting Materials (if any): N/A

Name (ID): Denis Ganey (I-520)

Organization (if applicable): N/A

Submission Text: Allow the area to return to full estuary.

Supporting Materials (if any): N/A

Name (ID): Lee Ann Gekas (I-521)

Organization (if applicable): N/A

Submission Text: From all that I have read it seems obvious to me that restoring the estuary to it's natural state is the best option ecologically and also the most financially feasible. Since I did not grow up in this area and only moved here in 2014, I am not emotionally connected to the view that Capitol Lake presents. I appreciate the wildlife that an estuary supports and would hope that this natural state can be restored. Thank you for the opportunity to share my opinion. Lee Ann Gekas, M.D.

Supporting Materials (if any): N/A

Name (ID): Alice Johnson (I-522)

Organization (if applicable): N/A

Submission Text: As active members of the Olympia community and property owners and tax payers, we strongly favor the hybrid option for the future of Capitol Lake. We run and walk around Capitol lake
frequently, and would appreciate the smaller fresh water Lake which would show off the clear artesian waters which Olympia has been known for. Surrounding the Lake with the natural estuary would support the natural wildlife. The hybrid model is the only option we support. Turning the entire space into an estuary would be an ugly option for Olympia. We live off of West Bay Drive and experience the daily smell of the mud flats during low tide. To have the entire space look and smell like mudflats most of the day would be detrimental for Olympia. We want to draw people to downtown, not repel them further, as already businesses are struggling downtown. Maintaining at least a small lake would contribute to a vibrant downtown Olympia. The smaller Lake size would be more manageable long term, easier to keep clean. Although there would be more structural changes needed up front, this will be worth it long term. Please go for the hybrid plan for Capitol Lake, and everyone will be happy!!

**Supporting Materials (if any):** N/A

**Name (ID):** Marc Sulik (I-523)

**Organization (if applicable):** N/A

**Submission Text:** I would like the Hybrid option to be selected. That is the best option for people to still be able to enjoy the Capitol Park and have a Lake to recreate in while at the same time improving the habitat for fish with the reconstructed Estuary leading to Budd Inlet. I have seen the cost estimates for the options and even though the Hybrid option is more expensive than the single Estuary option, I believe the money would be well spent for future generations to enjoy both the lake and the estuary having the best of both to enjoy. Please Select the Hybrid Lake/Estuary option as the project. Thank you

**Supporting Materials (if any):** N/A

**Name (ID):** Tom Giesecke (I-524)

**Organization (if applicable):** N/A

**Submission Text:** Having lived and attended school in Olympia from KG through high school (OHS). I fondly recall the fine swimming area on the east side of the lake where Lakeshore Park is now. As a WA licensed Family Physician, I recommend the reestablishment of a swimming park there that will provide physical exercise opportunities especially for youth. At least 30 minutes daily of physical activity is recommended for all adults and even more for children. I strongly support the Dual Estuary Lake Idea (DELI) proposal and recommend it be properly and objectively studied. DELI provides a win-win for Capitol Lake and the people of the South Sound area.

**Supporting Materials (if any):** N/A

**Name (ID):** Elizabeth McNagny (I-525)

**Organization (if applicable):** N/A
Submission Text: I'm a resident of Thurston County and I frequently walk the path around Capitol Lake. I support the estuary option. At this time of climate change and degradation to the natural environment, I believe we need to take every step we can to support the ecosystem and reverse the damage we have done.

Supporting Materials (if any): N/A

Name (ID): Doug Buster (I-526)

Organization (if applicable): N/A

Submission Text: I strongly support the Estuary option for the future of Capitol Lake and Deschutes. The Estuary option clearly would provide the best relief for water quality issues for both southern Salish Sea and the Deschutes. It will also provide the best support for our salmon and other wildlife. A distant second choice would be the Managed Lake option. This is nowhere near as good for the environment and would cost far too much money. But it would provide a pretty lake for local residents to enjoy. The Hybrid approach fails to excel on any criteria other than offering an attempt to compromise. Compromise can be a good goal, but this is just about as bad as the current situation. Please move quickly -- actually do something.

Supporting Materials (if any): N/A

Name (ID): Kimberly Abbey (I-527)

Organization (if applicable): N/A

Submission Text: Resident of Olympia since 2015. I was very grateful to the LWV-TC for holding a forum where we heard from the experts on the EIS regarding the Capitol Lake. I learned much from them. Personally, I prefer the DELI solution, called the hybrid. I look forward to a future where Olympia has a swimming beach in the middle of our city. A future where the tides will flow freely again. I know this DELI solution requires periodic dredging, and I have learned that the long shore workers who work for the Port of Olympia could be called upon to perform this function when needed.

Supporting Materials (if any): N/A

Name (ID): Katy Pratt (I-528)

Organization (if applicable): N/A

Submission Text: Thank you for accepting public comments. I am actually open to all of the options but would it be possible to keep the pedestrian bridge at the south end closes to the Capitol and next to the train tracks? It is fantastic having a loop for young kiddos and wonderful that you can add on more for distance toward Tumwater Falls.

Supporting Materials (if any): N/A
**Name (ID): Joslyn Trivett (I-529)**

Organization (if applicable): N/A

Submission Text: I support the Dual Estuary Lake Idea plan for Capitol Lake. Generally, I believe that a hybrid approach will make the most people happy -- it will be the win-win that we need. Just as important, a fresh-water, swimmable lake will be an enormous benefit to the community. We will embrace and celebrate it so quickly and completely that the multi-decade struggle will disappear from collective memory. Please make that happen!

Supporting Materials (if any): N/A

**Name (ID): James Stewart (I-530)**

Organization (if applicable): N/A

Submission Text: DELI all the way! Keep the reflecting pool with fresh water. I don't want to see Mud Bay downtown below the capitol. Yes to the benefits of an estuary, no to Mudfair!

Supporting Materials (if any): N/A

**Name (ID): Abby Kelso (I-531)**

Organization (if applicable): N/A

Submission Text: I support the estuary plan, we should pursue the solution that is best for the environment.

Supporting Materials (if any): N/A

**Name (ID): Steve Russell (I-532)**

Organization (if applicable): N/A

Submission Text: The hybrid option with a freshwater 'pool' should be strongly considered and is a solid compromise, which I believe is necessary to accomplish anything. We want a healthy estuary and would love to be able to swim and enjoy the beauty and reflection of a small lake

Supporting Materials (if any): N/A

**Name (ID): Casey Vaughn (I-533)**

Organization (if applicable): N/A

Submission Text: As a native Olympian I would say that most of us support the the estuary option. The estuary option really supports the vision and culture that represents Olympia. We want a healthy
environment with little human impacts. Restoring this ecosystem close to it’s natural state would benefit all parties involved, including the wildlife. The estuary idea is also the cheapest of the options which could leave other fund available to pursue other issues in the area. Having lower maintenance costs and time is also a reason to pursue the estuary option. Man kind doesn’t need to create more work for ourselves by micromanaging environments that existed for thousands of years before us. Let’s do the right thing here and restore this ecosystem to it’s original form. Let’s make a legacy for ourselves that we can feel confident about.

Supporting Materials (if any): N/A

**Name (ID): Jessica Revelas (I-534)**

**Organization (if applicable):** N/A

**Submission Text:** I support the dual lake/estuary idea. Olympia lacks a public swimming area, and in the age of climate change, having a swimmable freshwater lake in downtown Olympia would be an amazing asset to the community. In addition restoring the estuary would help keep Budd inlet healthy and provide needed habitat. Let’s get it done!!

Supporting Materials (if any): N/A

**Name (ID): Lois Wheeler (I-535)**

**Organization (if applicable):** N/A

**Submission Text:** Keep Capitol Lake! Capitol Lake was designed to reflect our beautiful capitol building, should remain true to that vision, and be kept that way. As the state capital, we should be a shining star. We should be proud to welcome visitors to enjoy our unique reflecting lake. The lake should be a diamond in our state capital crown. We do not need our capitol building overlooking a downtown smelly muddy eyesore. There are other mudflats around Olympia: do we need one downtown? A beautiful reflecting lake would attract walkers, park-goers & others downtown, who also might explore shops. And yes, 'Lake Fair' would have to be replaced by 'Stinky Mud Fair' which might prove to be unpopular.

Supporting Materials (if any): N/A

**Name (ID): James Vaupel (I-536)**

**Organization (if applicable):** N/A

**Submission Text:** Having watched and evaluated Capitol Lake as a teacher since 1969, It is encouraging to see the possibility of action being taken. I would be great to see a useable recreational lake as well as a functioning ecosystem but the commitment to maintain whatever decision is made is paramount. My preference would be to see a hybrid system, especially one as inventive as DELI that has been proposed. Using fresh water input to a recreational lake and allowing a natural flow seems to be a unique solution.
Though costly, its time to commit to and fund for a long term and attractive solution hopefully a lure to residents and tourists.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-537)

Organization (if applicable): N/A

Submission Text: The Capitol Lake DEIS dated June 2021 fails to fully-disclose the impacts of removing the Capitol Lake Dam. Specifically, the DEIS is silent regarding the depth to groundwater and the effects on drinking water wells in the City of Olympia. Dam removal will result in saltwater flooding underground into areas which are currently recharged by the freshwater in Capitol Lake. Salt is not removed by filtering through soil. Saltwater does not meet the drinking water requirements of the EPA or the WA State Department of Health. Wells in the vicinity of Capitol Lake may be subject to saltwater intrusion, local wells will become tidally-influenced, and will be pumping from a lower level when the lake is drained, which increases energy consumption and carbon footprint. Many wells around Puget Sound have been rendered unusable by saltwater intrusion. This can result in lawsuits in cases where the cause is obvious. Contact the officials at the Southwest Drinking Water Office of the WA State Department of Health to verify the importance of water source protection. There was reported to be 96 known well sites in Downtown Olympia, many of which have not been capped and are still in use. In addition, the City of Olympia has more than 30 artesian wells as reported by the March 26, 1999 Technical Memorandum 1204 by Robinson & Noble and Brown and Caldwell. Some of those wells are still flowing and in use without the need for any pumping. Lowering groundwater levels could cause these wells to cease their current artesian operation. Injecting saltwater into the ground could cause these wells to increase in TDS. What will be the effects on these wells after lowering groundwater levels in the vicinity of Capitol Lake? The DEIS is silent on this issue.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-538)

Organization (if applicable): N/A

Submission Text: The Capitol Lake DEIS dated June 2021 fails to fully-disclose the impacts of removing the Capitol Lake Dam. Specifically, the DEIS is silent regarding the depth to groundwater and the effects on drinking water wells in the City of Olympia. Dam removal will result in saltwater flooding underground into areas which are currently recharged by the freshwater in Capitol Lake. Salt is not removed by filtering through soil. Saltwater does not meet the drinking water requirements of the EPA or the WA State Department of Health. Wells in the vicinity of Capitol Lake may be subject to saltwater intrusion, local wells will become tidally-influenced, and will be pumping from a lower level when the lake is drained, which increases energy consumption and carbon footprint. Many wells around Puget Sound have been rendered unusable by saltwater intrusion. This can result in lawsuits in cases where the cause is obvious. Contact the officials at the Southwest Drinking Water Office of the WA State Department of Health to verify the importance of water source protection. There was reported to be 96 known well sites in Downtown Olympia, many of which have not been capped and are still in use. In addition, the City of Olympia has more than 30 artesian wells as reported by the March 26, 1999 Technical Memorandum 1204 by Robinson & Noble and Brown and Caldwell. Some of those wells are still flowing and in use without the need for any pumping. Lowering groundwater levels could cause these wells to cease their current artesian operation. Injecting saltwater into the ground could cause these wells to increase in TDS. What will be the effects on these wells after lowering groundwater levels in the vicinity of Capitol Lake? The DEIS is silent on this issue.
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Supporting Materials (if any): N/A

Name (ID): William Workman (I-539)

Organization (if applicable): N/A

Submission Text: The Capitol Lake DEIS dated June 2021 fails to fully-disclose the impacts of removing the Capitol Lake Dam. Specifically, the DEIS is silent regarding the depth to groundwater and the effects on drinking water wells in the City of Olympia. Dam removal will result in saltwater flooding underground into areas which are currently recharged by the freshwater in Capitol Lake. Salt is not removed by filtering through soil. Saltwater does not meet the drinking water requirements of the EPA or the WA State Department of Health. Wells in the vicinity of Capitol Lake may be subject to saltwater intrusion, local wells will become tidally-influenced, and will be pumping from a lower level when the lake is drained, which increases energy consumption and carbon footprint. Many wells around Puget Sound have been rendered unusable by saltwater intrusion. This can result in lawsuits in cases where the cause is obvious. Contact the officials at the Southwest Drinking Water Office of the WA State
Department of Health to verify the importance of water source protection. There was reported to be 96 known well sites in Downtown Olympia, many of which have not been capped and are still in use. In addition, the City of Olympia has more than 30 artesian wells as reported by the March 26, 1999 Technical Memorandum 1204 by Robinson & Noble and Brown and Caldwell. Some of those wells are still flowing and in use without the need for any pumping. Lowering groundwater levels could cause these wells to cease their current artesian operation. Injecting saltwater into the ground could cause these wells to increase in TDS. What will be the effects on these wells after lowering groundwater levels in the vicinity of Capitol Lake? The DEIS is silent on this issue.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-540)

Organization (if applicable): N/A

Submission Text: The Capitol Lake DEIS dated June 2021 uses a discussion about utilities to issue a threat regarding higher wastewater treatment costs if the dam remains in place, but then fails to fully explain the linkage between the two. Section 4.13.2 is supposed to be disclosing the impacts on physical utility infrastructure. Instead, it speculates about future regulations and financial conditions for the serving agencies themselves. This section discusses supposedly-significant impacts on utilities, then over-extends the definition to include impacts on the treatment costs for serving agencies such as LOTT. For SEPA/EIS/GMA processes, the impacts on utilities refer to the physical infrastructure and its capacity to serve, not the agency’s financial means to serve.

In addition, the TMDL sidebars on Pages 4-175 and 4-176 are deliberately misleading. Theorizing about how the Department of Ecology’s future TMDL actions might cause higher wastewater or stormwater rates for residents at some unknown time in the future is a thinly-veiled threat of retaliation by ECY if the dam remains in place. If this is a real threat, then let ECY state its threat to South Sound rate-payers in writing. The problem of TMDLs for dissolved oxygen, nitrogen, or other pollution should be dealt with at the sources of pollution, which are within the entire Deschutes River Watershed (such as the locations where cattle, other livestock, and pets defecate directly into the water). Those and other pollutants are from non-point sources throughout the Deschutes Watershed. They do not suddenly appear behind the Capitol Lake Dam. They are going to enter West Bay and deplete oxygen levels whether or not the dam remains in place. Is dam removal guaranteed to reduce nutrients and improve oxygen levels or is this only an experiment paid for by hard-working Washington State citizens? Since current high wastewater treatment costs are apparently driven by the poor water quality in Budd Bay with the dam remaining in place, does that mean L’OTT will reduce their rates once ECY agrees that water quality has dramatically-improved after dam removal? Is ECY willing to provide a guarantee of water quality improvement when the dam is removed, or is ECY only threatening more regulations if the dam remains in place? The EIS should identify who is actually making this threat. Is it LOTT, ECY, DES, or was it invented by the writers of the EIS?

Supporting Materials (if any): N/A
Name (ID): Linda Kunze (I-541)

Organization (if applicable): N/A

Submission Text: Thank you for the opportunity to comment on the Draft EIS for the proposed alternatives to manage the Capital Lake - Deschutes Estuary area. I appreciate the thought and work that went into developing and analyzing the alternatives. Based on the materials provided and my knowledge as a wetland ecologist I support the Estuary Alternative for the following reasons: . . . Estuarine wetlands and aquatic systems are critical ecosystems and have been degraded or destroyed to a large extent throughout the Puget Trough region. Restoring the Deschutes estuary is not only important for the Deschutes but also Budd Inlet and the southern Puget Sound. Although freshwater systems have important values, estuarine systems have very high value and are far less abundant regionally so the need to restore them is greater. The Estuary Alternative does the most for salmonids and other estuarine species. It will allow the restoration of estuarine wetlands which have very high productivity and habitat for a range of invertebrate species which are the base of the estuarine food chain. It should better improve water quality in the estuary and Budd Inlet. It will do the most for controlling invasive wetland and aquatic plant and animal species and reducing the need for on-going invasive species control including the potential need to use biocides. It will reduce the potential of invasive species being spread to other areas. Brackish marshes are more likely to be restored to native plant species as opposed to freshwater wetlands which are more likely to be dominated by non-native plant species with limited ecological value. * Longterm construction and maintenance costs are lowest for the Estuary Alternative. The Estuary Alternative has the highest value for native people, helping to make amends for their lost lands, traditional uses, cultural values and salmonid resources.

The greatest downside to the Estuary Alternative is reduced feeding habitat for the bats. I hope ways to mitigate for lost bat habitat can be identified and implemented

I do not support boardwalks being developed within either the freshwater or estuarine wetlands. Although they can provide an amazing educational opportunity, they also fragment habitat and impact wildlife using the wetlands. Also, boardwalk maintenance is expensive and with sea level rise could be vulnerable. Instead I would suggest building viewing platforms along the shoreline. Again, thank you for the opportunity to comment.

Supporting Materials (if any): N/A

Name (ID): Barbara Buchan (I-542)

Organization (if applicable): N/A

Submission Text: The fish barrier is a human - caused impediment that fish cannot adequately migrate thru. remove the dam, Restore scarce tidelands and improve estuarine habitat most beneficial for improving the Budd inlet water quality

Supporting Materials (if any): N/A
Submission Text: The range in each of the cost estimates is very broad. Anyone seriously considering making a decision on which one to choose would need to make sure that all potential costs are included. Large projects like this often produce cost overruns and delays that should also be considered. Some questions I have about costs include are there any eminent domain costs?, e.g. Will the Bayview parking lot and building remain intact with the Estuary or Hybrid alternatives? If there is a risk of needing this property the cost of purchasing it should be estimated and included in the report. Also, will the Yacht Club be effected in any way? If so, that cost should also be included.

The different fiscal options presented also suggest which entity or entities would fund the proposal. Even with the City of Olympia endorsing the estuary proposal there does not appear to be any commitment from the governmental entities that would be involved. The Port of Olympia doesn't appear to be in the best financial position and often the City of Olympia has budget problems--seems risky to rely on them for substantial funding. It would be useful to include in the document that these discussions have not happened and there is no guarantee that anyone but the state will fund the project.

Is the cost of replacing the 5th Avenue bridge included in your estimates and how long will the construction take to complete the project? Also, the City of Olympia has asked that there be a temporary bridge supplied so that cost should be added to your estimates for the Estuary or Hybrid options.

You mention that the Port of Olympia would need to dredge in Budd Bay before the Estuary or Hybrid option is allowed to go forward with the removal of the dam. Even though you mention that the Port of Olympia needs to do this it still would be helpful to include the cost and how long it will take to dredge so that the public can understand the full cost of this project. When the Port has money to do this will also effect the timing of the project--any information from the Port would be helpful to include in the report as it effects the timeline.

Footnotes to pg. 6 Chapter 7 indicate the potential for significant increases to costs on chart especially if the material dredged from the north basin cannot be dumped in the bay. This issue should be more prominently displayed on pg. 6 in the chart and not hidden in small print in the Footnotes. Has any state agency with regulatory authority over where this material can be dumped provided any input into this part of the plan?

7.1.3 pg. 3 Include a documented source for the statement in the report that states on pg. 3, paragraph 2 that sediment dredged under the Estuary or Hybrid option would be in a saltwater environment and there is low potential for aquatic species persistence. Making statements without documentation on issues as significant as this are not helpful.
Page 8 --Saying sediment deposition from the project is not expected to significantly impact the Port of Olympia because navigation is already impaired does not appear to be a satisfactory response. Do you have a source that you can provide that documents this statement?

Have state agencies responsible for improving the quality of Puget Sound reviewed your report? If they have their comments should be considered and documented in the final report.

The picture in the Olympian that suggested that the estuary/hybrid options would look like Mud Bay at low tide was not very appealing. This picture should be included in your final report.

Have you also considered mentioning the smell that could occur? Any information you have about the smell should be included in the report.

Supporting Materials (if any): N/A

**Name (ID): Annie Cubberly (I-544)**

Organisation (if applicable): N/A

**Submission Text:** I support Removing the dam restoring the estuary to restore tidelands and improve habitat anadromous fish and marine fish. It would lower flooding in downtown Olympia, improve water quality. It is clearly the most cost effective choice.

Supporting Materials (if any): N/A

**Name (ID): Edwin Metcalf (I-545)**

Organisation (if applicable): N/A

**Submission Text:** Hello! I'm 90 years old and question the efforts to change Capitol Lake. I lived on the west side of Olympia. I recall the hundreds of times, walking, Biking and over the west side bridge I watched the big trunks hauling dirt from the hill at the entrance of Percival Creek and the building of the dam, I remember standing on the railroad trestle with a friend watching all the trash floating under the trestle on its way with the current tide. I remember watching salmon going up Percival Creek and the Deschutes Falls. Is that environment going to return after the demolition of the dam?

Supporting Materials (if any): N/A

**Name (ID): Oscar Soule (I-546)**

Organisation (if applicable): N/A

**Submission Text:** I strongly support the managed lake option presented in the draft EISs. The managed lake provides a unique amenity for the City of Olympia and the region. It is used by hundreds of people daily and thousands of people annually. They get more physical, educational, psychological, and emotional value from the lake than from a mudflat. This was described in one of the charet exercises in
which I took part during the CLAMP process. The loss of any natural ecosystem should not be taken lightly. However in this case, the permanent loss of a mudflat similar to Mud Bay for the ecosystem that is currently in place does is worthwhile in my opinion. The managed lake option is the most expensive. However, there are significant costs associated with any choice. The overall benefits to the area makes the extra cost worthwhile in my opinion. I believe I am qualified to speak on the subject having taught ecology and natural history at The Evergreen State College for more than three decades. I have had undergraduate and graduate students do work in and around Capitol Lake. I have lived a block from the upper bluffs overlooking the lake for more than forty years and served on the City of Olympia Environmental Commission when it existed. I feel the hybrid option will eventually be fraught with problems that will lead to either a default choice of a managed lake or estuary. I also feel the managed lake option provides a greater number of options in dealing with sea level rise the will challenge the waterfront in the near and foreseeable future. It is a good idea for return the Capitol Lake Basin to its former status as a mudflat; however, it is a much better idea to maintain and enhance it as a lake/reflecting basin.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-547)

Organization (if applicable): N/A

Submission Text: The Capitol Lake DEIS dated June 2021 contains numerous misleading statements which are intended to result in dam removal. One of many examples is on Page 4-36 where it states: ‘The lake basin is currently overwhelmed with aquatic plant growth, and further loss of open-water areas is expected to result in a SIGNIFICANT IMPACT on water quality’. This statement should be rewritten to reflect the truth as follows: ‘Due to the failure by DES to properly manage aquatic weeds and algae, the lake basin is currently overwhelmed with aquatic plant growth. Continued failures by DES to provide this basic maintenance has resulted in a SIGNIFICANT IMPACT on water quality’. According to the DEIS, if DES can manage Capitol Lake poorly enough, and dischargers to the Deschutes river can pollute the river sufficiently, then Ecology will do its part to force removal of the dam. Otherwise, ECY will at least use TMDLs to over-regulate point source permittees to compensate. Since the nutrients are in the Deschutes River, can ECY provide written guarantees that nutrient loading will go down when the dam is removed? Perhaps the Deschutes River can be freed from such bondage and inject those nutrients directly into West Bay with no polluting dam in the way. Perhaps the writers of the EIS can request written assurances from ECY on that subject. The EIS should provide the necessary guarantees that phosphorus, nitrogen, and TOC nutrients will go down, and oxygen levels will go up, or else dam removal will be a waste of tax dollars paid by hard-working citizens of Washington State.

Supporting Materials (if any): N/A

Name (ID): Mary Carney (I-548)

Organization (if applicable): N/A
Submission Text: Thank you for the opportunity to comment on the future of Capitol Lake. I am opposed to the estuary only idea, and support the dual estuary and lake plan to fix Capitol Lake. I understand we must care for the salmon and I favor that, but Capitol Lake serves as a central function of identity for the Capitol dome itself and the growing numbers of people who have used and enjoyed the beauty and nature of open water in the downtown area. I believe that the freshwater lake option to allow recreational use of a lake for swimming and perhaps small paddle boat and row boat rentals along with an estuary would be the best option in the long run. These activities would greatly enhance the vitality of our downtown area and give recreational options to our visitors during the tourist season. A decision to remove the existing lake entirely based upon cost is shortsighted. Let's use our imagination. The downtown in its current beautification process deserves that a freshwater lake and estuary be the best option. We are the capitol city of the State of Washington and our dome should be emphasized in the waterfront area as it overlooks the city while we also care for the ongoing health of the salmon. A hybrid option is the best option.

Supporting Materials (if any): N/A

Name (ID): Judy Artley (I-549)

Organization (if applicable): N/A

Submission Text: The fish barrier is a man-made structure or human caused impediment that fish cannot adequately migrate through. Pls remove the dam. Restore tidelands and improve estuarian habitat. Allow beneficial? control invasive species. Lower probability of flooding downtown Oly. Most beneficial for improving the Budd Inlet water quality. Most sustainable and least costly over 30 years.

Supporting Materials (if any): N/A

Name (ID): Renee Boaglio (I-550)

Organization (if applicable): N/A

Submission Text: I support the Decision Durability of DELI over any other alternative! It sure would be wonderful to have swimming in the lake. I really do not want another smelly tidal flat like in the past - people matter too!

Supporting Materials (if any): N/A

Name (ID): Zach Zimmerman (I-551)

Organization (if applicable): N/A

Submission Text: I think a hybrid model like the group Do the DELI have proposed is the best idea! A swimmable lake, and a full functioning estuary would make it a great place to be. Please consider the option from the Do the DELI folks. It make both sides VERY happy and restores a treasure downtown to a usable swimming area.
Supporting Materials (if any): N/A

Name (ID): Glen Anderson (I-552)
Organization (if applicable): N/A

Submission Text: I have been studying this issue for a good number of years. 'Capitol Lake' is actually fraudulent. It VIOLATES MOTHER NATURE. Mother Nature created an estuary. An estuary lets nature do its work correctly. 'Capitol Lake' VIOLATES the natural processes. 'Capitol Lake' is an environmental disaster. It also wastes taxpayers' money. RESTORE THE ESTUARY, as Mother Nature intended!

Supporting Materials (if any): N/A

Name (ID): Desdra Dawning (I-553)
Organization (if applicable): N/A

Submission Text: I am a citizen of Olympia Washington, and often use the Capitol Lake for walks. I have watched it become what appears to be a sometimes stagnant dead lake. Friends tell me that at one time, it had a place for people to come and swim. Now we are told not to touch the water, for fear of a tiny snail! The argument over what to do with this area which once was a flourishing estuary ecosystem, has gone on long enough. I truly hope a decision is made soon and action can move forward! I am in favor of the DELI option, rather than the All Lake or All Estuary options, which, based on Decision Durability in the DEIS, could most likely bring an end to the argument on both sides of this long-belabored issue. It is the most reasonable compromise being offered, and could satisfy the desire for the community to have a lovely fresh-water place to swim (we have NO PUBLIC SWIMMING POOL IN OLYMPIA), and the need for our eco-conscious community to see restoration of the estuary. Please make a final decision soon, and please be open to this option that takes all concerns into account.

Supporting Materials (if any): N/A

Name (ID): Robert Barnoski (I-554)
Organization (if applicable): N/A

Submission Text: I support the lake or the dual estuary and lake ideas. Maybe someday the lake could become swimmable under the dual use idea for the city of Olympia. The lake was formed because the mud flats were very unattractive. Salmon can still swim up the lake to the Tumwater Falls hatchery. The estuary would be very unattractive.

Supporting Materials (if any): N/A

Name (ID): Lauri Vigue (I-555)
Organization (if applicable): N/A
Submission Text: To whom it may concern, I am a biologist/environmental planner with WDFW. I am impressed with the quality of material presented for review. I am hopeful that the state can finally move forward in resolution of this issue. I am in favor of an estuary alternative. It will have substantial benefits for wetlands, ESA listed fish, shorebirds, wading birds, and Thurston County. It is also the most cost-effective approach of the alternatives presented. The estuary option will also help mitigate sea level rise over the long-term. The managed lake is not sustainable with 15 aquatic invasive species, regular flooding, poor water quality, and very limited recreation.

The one area I would like to see further work in the EIS is on bat mitigation, is there anything that can be done to help mitigate the loss of bat foraging in Capital Lake? Over time could the bats move to another wetland or lake system?

Under recreation, I did not see any reference to the connection to the regional trail being proposed in Tumwater along the Deschutes River.

The estuary alternative would provide environmental benefits similar to the Nisqually restoration project. In order to mitigate for the projected future loss of habitat in the Puget Sound with increased population growth and climate change, the estuary alternative makes the most sense. Thank you for taking my comments.

Supporting Materials (if any): N/A

Name (ID): Gary Reid (I-556)

Organization (if applicable): N/A

Submission Text: The compromise plan, with a small freshwater lake and a large estuary sounds best to me, both from an environmental standpoint and from a political standpoint. Let's end the fighting and move ahead with a plan that protects both interests.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-557)

Organization (if applicable): N/A

Submission Text: The Capitol Lake DEIS dated June 2021 makes numerous claims in an attempt to stack the deck in favor of dam removal. For example, Section 4.13.2.2 speculates about theoretical future TMDLS from the Department of Ecology (ECY). The DEIS writers are eager to explain how ECY might use TMDLs to tighten the noose for DES, LOTT, and other dischargers in a theoretical future. Yet they ignore the same future in which the Olympia Yacht Club and Port of Olympia will apply for dredging permits under similar ever-tightening regulations. The DEIS should assume either current or future regulations to establish a level playing field for evaluating each alternative. Instead, the DEIS changes the rules in the middle of the game to make sure the other team loses. The DEIS contains this type of bias in nearly every section. The effects of ever-tightening regulatory restrictions are relevant to the
Yacht Club and the Port of Olympia, because their maintenance dredging will be permitted under future regulations which will undoubtedly be more restrictive than today's regulations. The writers of the DEIS look into their crystal ball and see a future in which ECY is supposedly going to use TMDLs to force removal of the dam, or somehow regulate Capitol Lake as a point source (which it is not). Then, the DEIS writers look the other way when dam-removal forces West Bay users to obtain frequent dredging authorizations and related permits under ever-tightening and more expensive environmental restrictions. One of the specific issues mentioned is nutrient loading. In the sidebar on Page 4-176 of the EIS, ECY is reportedly expected to issue load allocations to Capitol Lake '...if it remains a lake'. In other words, ECY is threatening to regulate the lake as a point source if DES makes the wrong decision about dam removal. The sidebar on Page 4-176 indicates that ECY may assign TMDL allocations to Capitol Lake, then use them as a hammer to force innocent dischargers at other locations to reduce their discharges if DES does not remove the dam in accordance with ECY's wishes. This is similar to the police issuing a speeding ticket to people riding in the back of the bus. Other dischargers have no control over the polluters upstream of Capitol Lake. The DEIS should comment on the legality of ECY retaliation by regulation. Has ECY retaliation been authorized by the Washington State Legislature? This is an example of bias which the DEIS pretends does not exist. The deck appears to have been stacked. The DEIS should be re-written to eliminate this bias.

**Supporting Materials (if any):** N/A

**Name (ID):** Emily McCartan (I-558)

**Organization (if applicable):** N/A

**Submission Text:** I strongly support the Estuary Alternative described under this plan. Restoring the Deschutes estuary is the kind of infrastructure investment we need to be making, relying on ecosystem functions to provide adaptability and resilience. I hope that the final EIS will select the Estuary Alternative and make ecological functions an explicit part of the discussion and ongoing monitoring, because it provides a valuable example for other communities of how to invest in solutions that offer long-term sustainability for cities and natural resources together by allowing natural processes to work.

The restoration of the Nisqually Estuary has provided ample science supporting estuary recovery as important for salmon stocks, eelgrass, birds, and wildlife, as well as supporting Squaxin Island treaty rights and creating beloved opportunities for recreation and human engagement with nature. Natural shorelines and estuaries also offer more resilience to climate change and potential opportunities for carbon capture. Olympia can be an example of working with natural systems by restoring the Deschutes Estuary, giving us a future where our state government and Olympia residents have a deep and daily connection with the tides, with fish and shorebirds, and with the historic rhythms of South Puget Sound and its rivers. Please choose the Estuary Alternative!

**Supporting Materials (if any):** N/A
Name (ID): William Workman (I-559)

Organization (if applicable): N/A

Submission Text: The Capitol Lake DEIS dated June 2021 makes false claims in an attempt to stack the deck in favor of dam removal. For example, on Page #4-150, the last sentence makes the claim that dam removal will cause deposits of higher-quality or clean sediment in West Bay, resulting in 'substantial beneficial effects' to the quality of sediment. The DEIS claims this has significant environmental benefits by covering or capping contaminated sediments. There are several flaws with this logic, as follows: This high-quality sediment is the same sediment which the Yacht Club and Port of Olympia are then supposed to remove by dredging. Therefore, the sediment will not remain in place as a cap as the DEIS claims. In fact, it will be repeatedly uncapped over the years, which will disturb the sediment below it, and for some distance to the sides by sloughing. Future dredging will re-suspend contaminated sediment and disperse it over West Bay, making it more difficult to clean up in the future. The DEIS cites this as a substantial beneficial improvement in sediment quality. Once contaminated sediments are capped, it is against EPA policy to uncap them, re-expose them, and spread the contamination. For example, at EPA CERCLA sites there are rigorously-enforced regulations in place to insure the cap is never disturbed again. Thus any of the cleaner soils over the top would need to remain undisturbed - undredged. If either the ECY or EPA plan to perpetually allow for the uncapping of sediments contaminated with 'existing high concentrations of...dioxins/furans and carcinogenic PAH's....' then the writers of the DEIS should request letters to that effect. This high-quality soil cap is the same soil which has been infused with the New Zealand Mudsnail, which means that it no longer matters how pure it is, it may not be accepted for disposal by dumping directly into the Puget Sound (Anderson-Ketron in-water disposal ?). This sediment may need to be disposed of at an upland disposal site under future regulations, just like it would if it had remained in place behind the dam. Future environmental regulations will not stay the same as they are today, in any case. On average, regulations only get more difficult, complicated, and expensive over time. The need for upland disposal of sediment in the dam-removal alternatives would destroy the integrity of the cost estimates in the DEIS. The EIS should be re-written to remove all references to the supposed 'substantial beneficial effects' which will not accrue in the dam-removal (Estuary and Hybrid) Alternatives when contaminated soils are capped by clean soils then repeatedly uncapped, disturbed, and exposed by subsequent dredging. The claim of 'substantial beneficial effects' is provably false.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-560)

Organization (if applicable): N/A

Submission Text: For example, after dam removal, Figure 4.1.3 on Page 4-13 shows the Port of Olympia pier and ship turning basin with equal sediment depth compared to just outside the basin. However, it is common knowledge that sediment is heavier than water and prefers to settle out at the lowest points, such as inside the turning basin. If a marble is dropped into the YMCA swimming pool, it does not stick to the sides of the pool or remain in the shallows. It slowly rolls on down the slope to the deep end. The
first deep end encountered by sediment in West Bay is the turning basin where the Port of Olympia ties up the big ships. After dam removal, floods on the Deschutes River will wash more sediment into West Bay. Then, multiple tidal cycles will repeatedly wash the sediment around in circles until it sinks down into the deepest areas and stays there until dredged. Sediment always seeks the lowest points. The depth of sediment deposited inside the turning basin cannot be equal to the depth just outside the basin. Therefore, the graphic is wrong. Please make the appropriate corrections which will show the ship turning basin filled up with sediment.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-561)

Organization (if applicable): N/A

Submission Text: The Capitol Lake DEIS dated June 2021 fails to disclose the full impacts of dam removal. For example, when Capitol Lake is drained dry for dam removal, the groundwater pressure on Deschutes Parkway roadway fill materials will be relieved on the east side. This may cause the fill materials which supports Deschutes Parkway to fail and slide downhill. Deschutes Parkway was constructed on very poor and unstable fill materials which was demonstrated during the February 2001 Nisqually Earthquake. Deschutes Parkway was closed for several months while the cracks, slumps, and slides were cosmically graded over, paved over, and hidden from view. Those slide planes where the earth failed are still there, and can slide again when the groundwater levels drop. In addition, lowering groundwater levels can cause land subsidence, similar to California’s Central Valley, which has sunk down over 15 feet due to lowering groundwater levels. Deschutes Parkway can be expected to settle unevenly, and the EIS does not disclose this potential impact, nor does it propose any mitigation.

Supporting Materials (if any): N/A

Name (ID): Carolyn Samson (I-562)

Organization (if applicable): N/A

Submission Text: Comment: I think the dam should be removed and the river to run freely

Submission Text: I also think that the state should build a lake on the north part for swimming and water sports. Lucern, Switzerland has a nice walkway over Lake Lucern. Something like this could be added between the 'lake' and the river.

Supporting Materials (if any): N/A

Name (ID): Julie Watson (I-563)

Organization (if applicable): N/A
Submission Text: Thank you for your work to plan for the future of the Deschutes Estuary. I’ve lived in Olympia for over 5 years, and I have always loved walking around Capitol Lake. However, I also care deeply about having an ecosystem that supports current and future generations and their ability to live in a community with thriving native fish and wildlife. Process-based restoration and restoring function and resilience of our estuaries is critical to meeting our Puget Sound recovery goals, and Olympia needs to serve as a model - not the exception - of protecting and restoring a functional estuary that confers multiple benefits. I appreciate the attention to recreation in the plans, particularly walking trails and water access for kayaks.

This preserves the recreational opportunities that make the current Capitol Lake an important hub of the Olympia community. I suggest considering placing additional boardwalk trails (like Nisqually) in the upper basin within the full restoration option. I also suggest thinking about the needs of cyclists, even if that just means adding bike racks near the trailheads. Even better would be a loop bike trail around the full basin. Finally, I suggest working with WDFW to develop educational materials and content for signs along the boardwalk.

Also, the EIS does not seem to mention or account for the homeless population that formerly encamped under the bridge and that now encamps along the west side of Capitol Lake. DES should work with the city of Olympia and community to develop alternatives for finding compassionate, supportive ways to mitigate the impact of the houseless population on the estuary (and the other benefits of this project such as recreation) and mitigate the impact of this project on the houseless population.

In sum, I support the Estuary alternative with the addition of more trails (perhaps a loop boardwalk) in the upper basin and with an added component that acknowledges and addresses the houseless population. I would also support the hybrid model, but stress the need for as much estuary process restoration as possible. Thank you for your consideration of these comments and for your notable effort to give the community extra time, Q&A opportunities, and education to facilitate engagement.

Supporting Materials (if any): N/A

Name (ID): Tom Laurie (I-564)

Organization (if applicable): N/A

Submission Text: I would like to see more information and analysis about how the different treatments would be expected to affect biodiversity in the project area. A brief section focusing on this would make comparisons easy. Since we are faced with a changing climate for the foreseeable future, it would be interesting to see some analysis on how different options would be expected to promote or affect flora and fauna climate resiliency in the project area.

Supporting Materials (if any): N/A

Name (ID): Jennifer Bammert (I-565)

Organization (if applicable): N/A
Submission Text: I have lived here my entire life, 58 years. Capitol Lake is one of the key locations to go to in Olympia for families and for exercise. Please keep it a lake, don't go back to the years prior to creating Capitol Lake. It's unattractive and will no longer bring residents and guests to recreate in. Keep it the gem it is and it would be nice to restore it too. Dredging should be an option.

Supporting Materials (if any): N/A

Name (ID): Jennifer Johnson (I-566)

Submission Text: Please consider the environment in the impact of this decision. Let the Deschutes run free! An estuary would be a welcome center in our community.

Supporting Materials (if any): N/A

Name (ID): Ashlynn Strode (I-567)

Submission Text: I would prefer the hybrid option.

Supporting Materials (if any): N/A

Name (ID): Bruce Campbell (I-568)

Submission Text: Let me begin by stating that I favor keeping and improving the Capitol Lake. I'm aware of the problem created by the accumulation of sediment and the difficulties of removing it to another location if the lake is dredged. I am submitting three proposals which I briefly outline below and am attaching three plans for the proposals. (1) Use the dredged sediment to create and island which would be landscaped and could be a bird sanctuary. It would be best placed near the western edge of the lake adjacent to Deschutes Parkway. (2) My second proposal is to create a peninsula with pedestrian access to the newly formed land that would be a park. An option would be an island with a pedestrian bridge. (3) Option three would be using dredged material to create both land for additional parking adjacent to Deschutes Parkway and pedestrian access to the newly formed peninsula. This proposal would include limited structural development such as a restaurant and coffee shop with decks for outdoor dining overlooking the lake and vista. If boating is allowed in the future a small marina could be added for rental craft. These rentals might include row boats, kayaks, canoes, bicycle boats and small sailboats. Let me conclude by stating that our Capitol Lake is a wonderful asset to the city and state and it's my opinion that any of the theses proposals would be an improvement over the present situation or the estuary proposal.

Supporting Materials (if any): I-568_Campbell.pdf
Name (ID): Tom Schrader  (I-569)
Organization (if applicable): N/A
Submission Text: It's a waste of time.....!!! You have already made up your mind to make it go to a SMELLY slough!!! SAVE THE LAKE!!!!!
Supporting Materials (if any): N/A

Name (ID): Ellen CHOLSKI  (I-570)
Organization (if applicable): N/A
Submission Text: As 79 year old native Olympian, I support returning Capital Lake back into an estuary. I have read the comments about the previous reeking tidelands in The Olympian. The tidelands used to smell because raw sewage was also entering into Budd Bay. East Bay Drive at low tide was to be avoided, and that isn't true anymore. Therefore, I wish the lake become an estuary again.
Supporting Materials (if any): N/A

Name (ID): Kim Gubbe  (I-571)
Organization (if applicable): N/A
Submission Text: I like the Dual Estuary/Lake Idea. I think it is a win/win for everyone.
Supporting Materials (if any): N/A

Name (ID): paul knight  (I-572)
Organization (if applicable): N/A
Submission Text: I was disappointed in the three proposals put forward for consideration on the future of the lake. None of them are 'clean' or straight forward, containing provisions un-needed or illogical. The so-called Hybrid plan with the fresh water reflection pond is the worst. Remember what happened to the roadway around the lake with the 2002 Nisqually Earth Quake? The same thing, or worse would happen with the retaining dike in the next quake

The Estuary option is totally flawed and would silt up Puget Sound while creating an unsightly and smelly situation. We had that and our wise ancestors found a better solution-the lake. My suggestion is-- dredge the lake, leave the dam in place and do maintenance dredging as needed. Nothing has been done in probably 40 years so don't say it's too expensive to maintain a lake. Since none of the proposals make sense throw them all out. Open the Dam and keep it open for one year, letting the tide flow in and out, simulating an estuary. After a year, if the public and planners still want an estuary then OK. If not, dredge clean and maintain the lake we all know and love.
I PERSONALLY SUPPORT THE 'MANAGED LAKE ALTERNATIVE' FOR A NUMBER OF REASONS: 1) CAPITOL LAKE DESERVES TO BE...‘A LAKE’ AGAIN - NOT SOME STINK-HOLE.; 2) WITH THE REMOVAL OF THE DAM, THE AMOUNT OF SILT THAT WILL BE RELEASED INTO LOWER BUDD INLET WILL BE DETRIMENTAL TO ALL WATER RELATED ACTIVITIES AND BUSINESSES. DON’T PUNISH THOSE OF US WHO ENJOY THE CURRENT BUDD INLET WATER CONDITIONS BECAUSE OF 30 YEARS OF NEGLECT WITH REGARD TO CAPITOL ‘LAKE’. PLEASE,...JUST FIX THE DAMN LAKE!!

Remove the dam and make it a tidal basin

Keep the dam and clean up the lake.

Remove the dam and let nature take its course.

Please, PLEASE.. restore as an estuary!! In the long run, will benefit the whole state as well as the wildlife that will thrive... Thank you!
Name (ID): Dennis Cheasebro (I-578)

Organization (if applicable): N/A

Submission Text: I vote for as natural an estuary as feasible. Note that natural features in an urban environment require investment in keeping them natural.

Supporting Materials (if any): N/A

Name (ID): Shaun Stapleton (I-579)

Organization (if applicable): N/A

Submission Text: I think a managed lake would be good; also if possible, a swimming area like there was in the past would be fun.

Supporting Materials (if any): N/A

Name (ID): Steven Sortais (I-580)

Organization (if applicable): N/A

Submission Text: The lake has had problems since I moved there in 1983. The dam should be torn down and let nature take it course. The Nisqually rehabilitation was a huge success.

Supporting Materials (if any): N/A

Name (ID): Brea Hronek (I-581)

Organization (if applicable): N/A

Submission Text: You should put a bunch of ducks on the lake. They'll eat the snails and help solve the issue.

Supporting Materials (if any): N/A

Name (ID): David Childers (I-582)

Organization (if applicable): N/A

Submission Text: Make the lake accessible for swimming

Supporting Materials (if any): N/A
Name (ID): Donna Ogden (I-583)

Organization (if applicable): N/A

Submission Text: Estuary!!!!

Supporting Materials (if any): N/A

Name (ID): David Dinsmore (I-584)

Organization (if applicable): N/A

Submission Text: I believe removing the dam and allowing for a natural saltwater inlet would be more beneficial and maintain a more natural balance while maintaining the original plan for a reflecting pond nestled against the campus.

Supporting Materials (if any): N/A

Name (ID): Colleen Gillespie (I-585)

Organization (if applicable): N/A

Submission Text: Please keep the lake. This is a beautiful public amenity that if cared for properly, will benefit many generations of residents and visitors.

Submission Text: Please evaluate the economic impact having this amenity plays for our community. Lunch or dinner and a walk around the lake is a huge draw, plus the number of housing units recently built and to be built relies on the amenity.

Supporting Materials (if any): N/A

Name (ID): KHALSA JOSLIN (I-586)

Organization (if applicable): N/A

Submission Text: I think Capitol Lake should be returned to its original state as an estuary.

Supporting Materials (if any): N/A

Name (ID): Judith Joslin (I-587)

Organization (if applicable): N/A

Submission Text: Return it to an estuary.

Supporting Materials (if any): N/A
Name (ID): Michele Merrill (I-588)

Submission Text: Please clean up and improve the existing Capitol Lake as originally designed. This is the Capitol of Washington State that looks horrible everywhere else in the City of Olympia. Making the lake mud flats will only contribute to the terrible ascetic of this area. Review our history. There was a shanty town located on the mud flats in a similar economy. We already have homeless camps. We need some beauty for the public to enjoy. It might even bring people back to downtown Olympia business. I work downtown and would like to enjoy a beautiful lake. It’s a positive step in the right direction. Thank you, Michele Merrill

Supporting Materials (if any): N/A

Name (ID): Terrence Drochak (I-589)

Submission Text: Please restore the area back to natural estuary to: Reclaim lost historic estuarine habitat. Increase natural habitat benefits to salmon and orca. Eliminate future dam maintenance costs. Reduce invasive species control costs. Lead by example by showing others successful Puget Sound habitat restoration is possible. Use this opportunity as a model for others to follow. Maximize the educational opportunity for others. Thanks for the opportunity to comment.

Supporting Materials (if any): N/A

Name (ID): David Elliott (I-590)

Submission Text: I have live in Olympia since 1968 and spend a lot of time boating. I took sailing lessons on Capitol Lake as a child and then taught those same lessons for Oly parks. I participated in Lakefair sailboat races on the lake also. I work in the Capitol building and continue to sail in Olympia. I am disappointed that the lake has been allowed to become useless and would like to have the state manage the resource. It is a beautiful centerpiece to our city, completing the campus, and providing a nice walking area. I strongly feel that having a mudflat next to the city would be an enormous step backwards. There was a reason that the people of 1950’s decided it would be an improvement to create the lake, mudflats are not attractive and they do smell, especially on hot days. Finally, dredging the lake will prevent the necessity for dredging the port by sequestering the silt, there is plenty of market for fill dirt. In summary, get back to managing the lake as a resource for the city as a centerpiece and as an in town recreation location. There could be sailing, canoeing, kayaking and any number of boating opportunities for people. The parks department could be promoting recreation there. thank you

Supporting Materials (if any): N/A
**Name (ID): Gary Proctor (I-591)**

Organization (if applicable): N/A

Submission Text: I support the removal of the 5th. St. dam and restoring the estuary.

In addition, I would like to see a study of the possibility of retaining a separate saltwater pond for recreational uses alongside the restored estuary.

Supporting Materials (if any): N/A

**Name (ID): Kimbal Austin (I-592)**

Organization (if applicable): N/A

Submission Text: My parents use to tell me that before the dam downtown Olympia smelled like a run a way sewer when the tide was out, twice a day. No one like to go downtown at that time. They said the dam was the best thing to ever happen to Olympia. Don't remove the Dam !!!

Supporting Materials (if any): N/A

**Name (ID): Edith Hitchings (I-593)**

Organization (if applicable): N/A

Submission Text: I strongly recommend that the damn be removed to allow the area to return to the estuary is was originally. If there is to be a mix of estuary and damn I would want to see what the environmental impact would be. Any time a damn is put in to change the natural area it seems to lead to significant issues. I'm also curious as to how the fish are impacted by the damn. Returning the area to its natural state seems logical to improve the environment in the capitol lake area. Thank you

Supporting Materials (if any): N/A

**Name (ID): matthew (I-594)**

Organization (if applicable): N/A

Submission Text: I like to see the lake gone And returned to its natural state

Supporting Materials (if any): N/A

**Name (ID): Aaron VanAlstine (I-595)**

Organization (if applicable): N/A
Submission Text: I vote for the long-term management alternative to convert Capital Lake to an estuary.

Supporting Materials (if any): N/A

Name (ID): Terry Otness (I-596)

Organization (if applicable): N/A

Submission Text: I'm supporting the estuary option. It makes a nice statement about the state's support for restoring estuary habitat in Puget Sound. Even better it is in the south part of the sound so, it's good for anadromous species and is a good starting point in moving towards restoration of marine and freshwater habitat in Washington. Having lived in the state as a youth, and upon my return as an older adult I had never been to the state capital until a few years ago. When I saw the reflecting pond I felt the view to be unnatural and out of place. Now, understanding the history of the pond which seems stagnant and uninviting as a fresh water body. I wondered if others had the same impression. Returning the area to its natural state and dynamic will be good for fish, wildlife, canoeists, kayakers, young children and people of all ages who visit the state capital city.

Supporting Materials (if any): N/A

Name (ID): Angelina Wood (I-597)

Organization (if applicable): N/A

Submission Text: If you're going to spend the money to clean up the lake and make it nice and useful again, PLEASE clean up and move out the tent city in one entire side of the lake. It’s disgusting and unsafe.

Supporting Materials (if any): N/A

Name (ID): Heidi Lambert (I-598)

Organization (if applicable): N/A

Submission Text: Please take out the dam!

Supporting Materials (if any): N/A

Name (ID): Rdiall Akira (I-599)

Organization (if applicable): N/A

Submission Text: The dam can be used as a hydrodam.

Supporting Materials (if any): N/A
Name (ID): Katherine Cox (I-600)

Organization (if applicable): N/A

Submission Text: I liked the hybrid model with the saltwater reflecting pool alternative. Thank you for all the hardwork you put into the report and for inviting people to contribute their input! Capitol Lake is a very special place to me, as well as the Olympia Brewery...and if there are future opportunities to volunteer with clean-up, or if you need any artwork to beautify the area, I would love to help. :)

Supporting Materials (if any): I-600_Cox.pdf

Name (ID): Brian Burdon (I-601)

Organization (if applicable): N/A

Submission Text: Remove the dam and restore the estuary.

Supporting Materials (if any): N/A

Name (ID): David Kelley (I-602)

Organization (if applicable): N/A

Submission Text: Use the hybrid option. Allow for the reflection pond but we need more and larger estuaries FAR more than mad made lakes that are ecologically unstable. When in doubt allow more natural solutions rather than forced in natural ones.

Supporting Materials (if any): N/A

Name (ID): David Prescott (I-603)

Organization (if applicable): N/A

Submission Text: the “Hybrid“ option, which would allow for the restoration of tidal flow, the removal of the dam along with the creation of a smaller, manmade lake. I like this one. It’s the Capitol Lake it should be a showcase for our state.

Supporting Materials (if any): N/A

Name (ID): H Weinberg (I-604)

Organization (if applicable): N/A

Submission Text: SUBJECT: Capitol Lake project - support public swimming area MESSAGE: Hello, DES; My neighbors - and myself- support the combined lake-estuary proposal: It seems a shame that we're surrounded by so much water, but there's no clean, designated outdoor place to swim. A clean,
fresh-water swimming area would be welcomed by all age-groups. We really need a clean - and Artesan spring-fed (!) - public swimming area. I'd appreciate your thoughts on this. Thanks for your consideration. The community - young & old - would really benefit from an outdoor, clean, fresh water, natural, public swimming area at Cap Lake. I'd appreciate your thoughts. Thanks. H. Weinberg (Voter / Resident)

Supporting Materials (if any): N/A

Name (ID): Kathleen & Bryan Davis (I-605)

Organization (if applicable): N/A

Submission Text: We have lived in the city of Olympia for over 30 yrs. We miss the activities and beauty of the lake. We walked it yesterday and already the bugs and smell are horrific. We support the Managed Lake Alternative. This Alternative would build upon the Capitol Lake water quality improvements acknowledged in the DEIS. In terms of construction costs and timelines, this is the least expensive and least disruptive to the community.

If there is a funding lapse after construction, any adverse impacts would be restricted to North Basin recreational opportunities rather than the irreversible, broader adverse impact on West Bay navigation resulting from dam removal and the resultant sediment transport and deposit. We have substantial concerns about the DEIS assumptions and estimated costs of sediment deposition, erosion, and dredging that would result from the 5th Avenue Dam removal under the Estuary and Hybrid Alternatives. The DEIS wholly underestimates how much sediment is likely to be deposited and the corresponding West Bay dredging costs under the Hybrid or Estuary Alternatives. It has been calculated that in the first 15 years after the 5th Avenue Dam is removed, it could cost as much as $148 million under the Estuary Alternative or as much as $177 million under the Hybrid Alternative to dredge the West Bay Area (OYC, Fiddlehead, Martin One Tree marinas; Percival Landing; Anthony's Homeport Dock; and the channel up to the Turning Basin). The DEIS does not identify 'who benefits and who pays' under each Alternative. This would not happen until after the Preferred Alternative is selected. This lack of certainty mirrors the failed history of action and funding for Capitol Lake over the past 30 years. Because of this lack of certainty, we are concerned that once the Dam is, irreversibly removed, responsibility for maintenance dredging would likely fall on the private marinas. None of us is in a financial position to handle multi-million-dollar dredge projects every five or six years. Should DES move forward with either the Estuary or Hybrid Alternative, the marinas and business must be held harmless from all impacts of future dredging work, permitting etc.

Supporting Materials (if any): N/A

Name (ID): Tom Schrader (I-606)

Organization (if applicable): N/A

Submission Text: KEEP THE LAKE....!!!! No SMELL from an estuary!!!!
Supporting Materials (if any): N/A

**Name (ID): Glen Hunter (I-607)**

**Organization (if applicable): N/A**

**Submission Text:** Was there a consideration for the wild life that use the lake? The use of the lake for wildlife will go away. First you change nature then you change what we have mad.

When I as a member of OYC have to pay for dredging again and again and again, I will seek compensation from you. What about the dredging that will have to be done more often for the Port. Now which way is more costly? Glen Hunter

Supporting Materials (if any): N/A

**Name (ID): Matt Kluh (I-608)**

**Organization (if applicable): N/A**

**Submission Text:** Date For 3 generations my family has worked, played, volunteered and supported our community and waterfront. Please keep the dam!!! I just submitted this regarding the Capitol Lake vote, cut/paste pass along to whomever, if you like... :) Capitol Lake used to be a beautiful, usable space in Olympia, what it has become over the past 20-30 years is a mess. I am glad that this community has finally decided to do something about it, and I am submitting my comments today in favor of the Managed Lake Plan for Capitol Lake. As a long time member of the Olympia community, when I was in high school, I used to teach sailing on Capitol Lake for the Olympia Parks & Rec Dept, and on the other side of the dam, at the Olympia Yacht Club. I also happily swam and enjoyed both basins of the lake during many years as a volunteer and participant in the formerly annual Lakefair Waterski Tournament. My wife and I are boat/boathouse owners now at the Olympia Yacht Club, and enjoy Budd Inlet with family and friends now. The Managed Lake is the ONLY plan that actually addresses all the issues that currently plague the mismanagement of this beautiful body of water.

The sediment control alone should be a MASSIVE influence on this decision. The sediment (rich in nutrients) should be removed from the lake on a constant basis, and would provide a constant revenue source to at least pay for itself, once the initial removal of the massive amount of sediment currently allowed to accumulate uncontrolled is removed... which is the root of the problem in the first place. Any plan other than the Managed Lake simply puts this massive sediment problem further out into the bay, a problem that will have to be paid for (dredging under ALL marina and Port spaces) by the City of Olympia/State of WA (whomever EXACTLY makes this decision who will be held accountable). Do not pass the buck. Do the right thing for this community and ALL of the aquatic environment effected by this decision. VOTE FOR THE MANAGED LAKE PLAN FOR CAPITOL LAKE. Sent from my iPhone

Supporting Materials (if any): N/A
Name (ID): Cathi Olson (I-609)

Organization (if applicable): N/A

Submission Text: Estuary please! Take away the dam

Supporting Materials (if any): N/A

Name (ID): Linda Newland (I-610)

Organization (if applicable): N/A

Submission Text: Going back to an estuary will effectively terminate all boating facilities in the Budd Inlet which would be a devastating loss to not only local Boaters in Olympia but to us who visit and pay into the local Olympia economy. The tax base would also take a hit.

Plus who wants to look at the historical tidal mud flats at low tides? Not pretty and also is smelly.

Supporting Materials (if any): N/A

Name (ID): Sue Geiger (I-611)

Organization (if applicable): N/A

Submission Text: My preference is to let this become a natural estuary for wildlife viewing, animal habitat and as an educational area for local schools. Interpretive center, signs, and walkways, etc. Allow nature to take this area back, much like Nisqually.

Supporting Materials (if any): N/A

Name (ID): Teri Wright (I-612)

Organization (if applicable): N/A

Submission Text: Please work to restore the natural habitat. Please remove the dam and clean up what was created by this dam. Thank you.

Supporting Materials (if any): N/A

Name (ID): Terence Getchman (I-613)

Organization (if applicable): N/A

Submission Text: Short and sweet. The LAKE should be dredged once more then the dam should be removed and land area restored to its original state before 1949 allowing nature to take its course once again.
Name (ID): Beth Ketah (I-614)

Submission Text: I really like the idea of restoring the land back into an estuary and letting nature take its course. This is not only a cost effective measure requiring less maintenance, but declares Washington's dedication to the environment. This of course began with dam removal on the Olympic Peninsula. It also provides research opportunities for college, state and tribal communities on the outcomes of manmade environments. Thank you for the option to comment on this project.

Name (ID): Brynjar Halldorsson (I-615)

Submission Text: All lakes and rivers are to be free of toxins

Name (ID): Deborah Stuart (I-616)

Submission Text: The presentation does not mention removal of the dam. Is that feasible? There is not enough information presented here for the public. Why must the lake return to public use? Does 'public use' focus on motorboats only and/or is the lake otherwise polluted? Are there businesses using the lake? Other public uses? Any vegetation issues? Fish inhabitants? For example, would dredging or removal of sediment may partially address the snail problem? How much dredging is required otherwise annually and at what cost? Pea puffer fish might help in snail removal as they eat them...Some nuse of or predator might eliminate the snails naturally

Name (ID): William Workman (I-617)

Submission Text: The Capitol Lake DEIS dated June 2021 uses misleading cost estimates to justify dam removal. Table ES.4 of the Executive Summary shows construction costs plus long-term maintenance costs for the dam removal alternatives are lower than keeping the dam. The hard-working, tax-paying citizens of Washington State have real jobs and are unlikely to read through the entire DEIS to discover that the actual costs of construction plus long-term dredging for the Estuary and Hybrid Alternatives are hidden in Footnotes #8 and #9 on Page 7-6. Notice that the Estuary and Hybrid costs for construction
plus long-term dredging are actually significantly higher than the Managed Lake Alternative ($660M and $924M vs. $607M, respectively), not significantly lower as shown in Table ES.4. [Note: All the footnotes in Table 7.1.1 are numbered incorrectly.]

The DEIS writers are making the unsupported assumption that sediment from the Estuary and Hybrid Alternatives containing invasive species and/or toxins will be permitted to spread the New Zealand Mudsnail and suffocate crabs at Nisqually (near the Anderson-Ketron in-water disposal site ? ), but not for the Managed Lake Alternative. The New Zealand Mudsnail has already adapted to brackish water such as that found throughout South Sound waters, and sediment from West Bay will not be free of it. Therefore, how can the DEIS writers claim that in-water disposal will be permitted? Page 4-37 also makes the claim that ‘dredged sediment quality in both the lake basins and West Bay is expected to be uncontaminated’. However, that sediment is already contaminated, and any attempt to remove it will stir it up and spread it around. Page 21 of the Executive Summary states: ‘...dredged material would be trucked to an upland disposal site under the Managed Lake Alternative and would be taken by barge to an in-water disposal site under the Estuary and Hybrid Alternatives’. However, the footnotes for Table 7.1.1 show that upland disposal costs approximately twice as much as in-water disposal for a given amount of dredged material. This has the effect of making the Managed Lake Alternative (keeping the dam) appear to have much higher long-term maintenance costs than the Estuary or Hybrid Alternatives (removing the dam) as shown in Table ES.4. The DEIS writers have no idea whether West Bay sediment (with or without contamination and invasive species) can be permitted to be dumped somewhere else in Puget Sound waters (Anderson- Ketron ? ) under FUTURE environmental regulations which are currently unknown by anyone and getting stricter every year. The majority of long-term dredging costs will be incurred more than fifteen years from now.

The cost estimates in Table ES.4 of the DEIS should be revised to match those in Footnotes #8 and #9 on Page 7-6. The DEIS should show that each action alternative has an equivalent cost per unit of material dredged.

**Supporting Materials (if any):** N/A

**Name (ID):** Tim Whipple (I-618)

**Organization (if applicable):** N/A

**Submission Text:** Capitol Lake used to be a beautiful, usable space in Olympia, what it has become over the past 20-30 years is a mess. I am glad that this community has finally decided to do something about it, and I am submitting my comments today in favor of the Managed Lake Plan for Capitol Lake. As a long time member of the Olympia community, when I was in high school, I used to teach sailing on Capitol Lake for the Olympia Parks & Rec Dept, and on the other side of the dam, at the Olympia Yacht Club. I also happily swam and enjoyed both basins of the lake during many years as a volunteer and participant in the formerly annual Lakefair Waterski Tournament. My wife and I are boat/boathouse owners now at the Olympia Yacht Club, and enjoy Budd Inlet with family and friends now.
The Managed Lake is the ONLY plan that actually addresses all the issues that currently plague the mismanagement of this beautiful body of water. The sediment control alone should be a MASSIVE influence on this decision. The sediment (rich in nutrients) should be removed from the lake on a constant basis, and would provide a constant revenue source to at least pay for itself, once the initial removal of the massive amount of sediment currently allowed to accumulate uncontrolled is removed... which is the root of the problem in the first place. Any plan other than the Managed Lake simply puts this massive sediment problem further out into the bay, a problem that will have to be paid for (dredging under ALL marina and Port spaces) by the City of Olympia/State of WA (whomever EXACTLY makes this decision who will be held accountable). Do not pass the buck. Do the right thing for this community and ALL of the aquatic environment effected by this decision. VOTE FOR THE MANAGED LAKE PLAN FOR CAPITOL LAKE.

Supporting Materials (if any): N/A

**Name (ID): Jeannine Sielinski (I-619)**

**Organization (if applicable): N/A**

**Submission Text:** Hi, My suggestion is to remedy the situation in the most sustainable way. I'm not sure what that is but it's time to clean it up and return the Lake (or estuary) into a healthy habitat that supports the local environment (for native plants/grasses/trees, animals, birds and insects...fish too) My $0.02 cents. Let's do it right this time. Best Regards, Jeannine

Supporting Materials (if any): N/A

**Name (ID): Thomas Weissenberger (I-620)**

**Organization (if applicable): N/A**

**Submission Text:** Even though I don't live in Olympia anymore I still pass and bike through the area that will be affected by adoption of any of these proposals. I heartily and wholeheartedly implore you to leave the lake as it is. I do not see the scale of disruption foreseen (the elimination of a functioning dam and bridge and the changes of the shoreline) as being worth any and I mean any future benefit. I thank you for taking the time to collect public comments. Again - please leave the lake as it is.

Supporting Materials (if any): N/A

**Name (ID): Matthew George (I-621)**

**Organization (if applicable): N/A**

**Submission Text:** I would strongly prefer to see a hybrid option pursued for this project where some sort of partition is installed to maintain a small freshwater lake on the ease side of the current reflecting pool area. Having this area open to swimming, assuming there are sufficient resources to keep it safe and clean, would be a great benefit for the downtown area.
Supporting Materials (if any): N/A

Name (ID): Stephen Frahm (I-622)

Organization (if applicable): N/A

Submission Text: Turn it back into an estuary and make it into a salmon creek restoration project. Make it a showcase project with the local tribes. It would show we are serious about restoring our historical salmon runs. As well as being a yearly reminder for our public representatives of the amazing beauty of our northwest salmon streams and the need to protect them from harm if we want the salmon to return. It would make it a real northwest capital, not a wanna-be replica of Washington DC.

Supporting Materials (if any): N/A

Name (ID): Becky Russell (I-623)

Organization (if applicable): N/A

Submission Text: Return it to its natural state. It will provide salmon habitat and an estuary for migrating birds. Put in natural vegetation that will help decrease Olympia's carbon footprint. Build trails through like Nisqually to attract tourists and give locals another outdoor experience.

Supporting Materials (if any): N/A

Name (ID): Pamela Ward (I-624)

Organization (if applicable): N/A

Submission Text: Remove the dam! Return the “lake” to a natural, healthy environment as it was meant to be!

Supporting Materials (if any): N/A

Name (ID): Naomi Oppenheimer (I-625)

Organization (if applicable): N/A

Submission Text: I think either fully return it to an estuary or partial estuary with a reflecting pond. Either way I think the dam needs to go. We can see how much damage we’ve done to the natural ecosystem in just 70 years by adding this dam. In the name of restoring this states natural beauty, I damn the dam.

Supporting Materials (if any): N/A
Name (ID): Meg Town (I-626)

Organization (if applicable): N/A

Submission Text: Maximum effort should be employed to 1. Remove the dam. 2. Reestablish a functioning estuary. 3. Be a model project for the public, including students of all ages to learn from citizen science...

Supporting Materials (if any): N/A

Name (ID): Sally Dayton (I-627)

Organization (if applicable): N/A

Submission Text: Remove the dam and restore to original configuration.

Supporting Materials (if any): N/A

Name (ID): Paul Clerget (I-628)

Organization (if applicable): N/A

Submission Text: I have lived in Olympia for 60 years and would swim in the lake as a child. I would like the see an area that is fresh water fed by the springs that are supposedly in the lake. This could be used for swimming or for water supply in the event of disaster. The rest of land can be used for estuary or tidal influence.

Supporting Materials (if any): N/A

Name (ID): Donna Rice (I-629)

Organization (if applicable): N/A

Submission Text: I am strongly in favor of the duel lake and river approach because the history of our Capitol included the Lake. With the artisan water source, it might be clean enough for swimming again as it was when we came to Olympia in 1975. We also need to protect the salmon so they can continue to exist. So having the Deschutes River able to freely flow should be more helpful to the salmon. Though this is the more costly approach, it is well worth maintaining both our salmon and the historic addition to our Capital City. Thank you for your consideration.

Supporting Materials (if any): N/A

Name (ID): Barbara McMichael (I-630)

Organization (if applicable): N/A
Submission Text: As much as I've enjoyed walking around the lake, I think the return to the natural estuary could still provide a wonderful water-related experience for humans, and it would be much, much better for the fish, birds and other creatures who have seen too much of their habitat encroached upon. Time to give it back!

Supporting Materials (if any): N/A

Name (ID): Nature (I-631)

Organization (if applicable): N/A

Submission Text: Listen to nature and to learn how she wants grow, and then help her. Seems the estuary plan is most aligned to this maxim that has been trying to teach us from our very existence. Will we finally start listening? If we want her to keep sustaining our lives, we will.

Supporting Materials (if any): N/A

Name (ID): Iesha Molnes (I-632)

Organization (if applicable): N/A

Submission Text: I believe Capitol lake should be returned to the natural estuary it was before the dam was put in place.

Supporting Materials (if any): N/A

Name (ID): Douglas Drees (I-633)

Organization (if applicable): N/A

Submission Text: Channel 5 interviewed WA State Lake Manager where he stated some untrue statements. A private engineering group ran water samples of Capital lake, and found its water to be the cleanest water in all of Thurston County lakes. I am extremely opposed to removing the dam. It saves the harbor and shipping lanes from becoming an unusable water way, because the silt and dirt would fill up the harbor. The lake needs to be dredged back to its original depth all the way South to Tumwatet Falls Park, creating more shoreline and parks. The fish ladder at the dam needs to be updated, and another one added if needed.

Supporting Materials (if any): N/A

Name (ID): Rebecca Reuter (I-634)

Organization (if applicable): N/A

Submission Text: The most logical and environmentally sound action for Capitol lake is to remove the dam and restore the estuary. This move would foster sustainable practices putting into play many
federal and state goals to restoring habitat of native species. How great would it be for Washingtonians to witness the restoration of our state's valuable natural resource right outside of the Capitol. It would help encourage those with waterfront property both businesses and residences to seek sustainable ways to develop their waterfront.

Supporting Materials (if any): N/A

Name (ID): Chris Johnson (I-635)

Organization (if applicable): N/A

Submission Text: I am in favor of removing the dam and restoring the estuary

Supporting Materials (if any): N/A

Name (ID): Alan Muller (I-636)

Organization (if applicable): N/A

Submission Text: I think restoring Capitol Lake to as close to its original condition would be the best solution. As we watch everything change around us, having one thing carefully preserved is very attractive. Keep it fresh water, remove the 15' of silt, restore indigenous flora and fauna. The benefits would pass on to many future generations. What a concept! Natural and indigenous plants and animals.

Supporting Materials (if any): N/A

Name (ID): Willie Rhodes (I-637)

Organization (if applicable): N/A

Submission Text: In reviewing the proposed 3 options based on the latest study, I l prefer the hybrid model with the Estuary being a close 2nd. It would be my desire to redesign the entire walkway around the lake to make it more walker friendly, but I understand that is not the goal of this project. The hybrid model, to some degree, addresses that issue. Thank you for the opportunity to provide input. Willie Rhodes

Supporting Materials (if any): N/A

Name (ID): Nila Williamson (I-638)

Organization (if applicable): N/A

Submission Text: Estuary! Start now! I can't wait to enjoy it! Thank you!

Supporting Materials (if any): N/A
Name (ID): Bryan Perrenod (I-639)

Organization (if applicable): N/A

Submission Text: Prefer to see the natural estuary restored with public use mixed in.

Supporting Materials (if any): N/A

Name (ID): Joel McCune (I-640)

Organization (if applicable): N/A

Submission Text: Living literally at the top of the hill from Capitol Lake and as a regular human powered watersport recreation participant, I have been following the progress of this initiative with quite a bit of interest. Based on reading the EIS, I cannot understand any way the Estuary is not the overwhelming preferred alternative.

I am ecstatic about the prospect of restoring human powered recreation with the associated ecological benefits. One somewhat trivial consideration is ensuring the Marathon Park boat launch has access to the dredged deep water channel at lower tide. I definitely envision people frequently getting stranded downstream if this is not the case, having to exit Budd Bay up the rocks near the grocery store, and having to walk back to Marathon Park. Beyond this, I also am very pleased to see the addition of a bridge along the north side of Capitol Lake paralleling the Fifth Street bridge.

As a frequent cyclist, this bridge is somewhat terrifying to cross with the complex intersection and no space for bikes. In summary, consider my comment in strong support of the Estuary alternative and please consider ensuring access during most low tides from the Marathon Park boat launch to the dredged main channel.

Supporting Materials (if any): N/A

Name (ID): Jim Byrne (I-641)

Organization (if applicable): N/A

Submission Text: I support returning Capitol lake to an estuary. My family visits the lake often, and I want my children to be able to marvel at the push pull of the tides and witness a landscape that changes with each flush from the sound and leaves us with new things to discover on each visit. The lake in its current form just feels so stagnant, out of place and disconnected from the natural beauty of Puget Sound just a few feet away. Take out the dam. Return the lake to an estuary. Let nature back in.

Supporting Materials (if any): N/A

Name (ID): Jim Byrne (I-642)

Organization (if applicable): N/A
Submission Text: I support returning Capitol lake to an estuary. My family visits the lake often, and I want my children to be able to marvel at the push pull of the tides and witness a landscape that changes with each flush from the sound and leaves us with new things to discover on each visit. The lake in its current form just feels so stagnant, out of place and disconnected from the natural beauty of Puget Sound just a few feet away. Take out the dam. Return the lake to an estuary. Let nature back in.

Supporting Materials (if any): N/A

Name (ID): MARADEL GALE (I-643)

Organization (if applicable): N/A

Submission Text: I like the idea of re-establishing the estuary by breaching the lake to re-connect it. However, if there is any notion that Olympia should become a port that handles large Panamax size ships, this is totally unacceptable. These ships are bad enough in the north part of Puget Sound; we don’t need to bring their polluting dirty ways further into the south Sound where the impacts would be even more damaging given the geography of Puget Sound.

Supporting Materials (if any): N/A

Name (ID): Deidre Pearson (I-644)

Organization (if applicable): N/A

Submission Text: I was there last night and I was a bit more concerned about the lack of water. I guess a silver lining is in sight, yeah? When there’s no water we won’t need to worry about the snails.

Supporting Materials (if any): N/A

Name (ID): B. Paull (I-645)

Organization (if applicable): N/A

Submission Text: To whom it may concern: The Estuary Alternative would fully restore the Deschutes Estuary. It would return tidal flow; it is the most cost effective; require the removal of the dam; restore fishing for the community, honor native Americans. Please choose the Estuary Alternative. Thanks you.

Supporting Materials (if any): N/A

Name (ID): Earl Hughes (I-646)

Organization (if applicable): N/A

Submission Text: As a member of the Olympia Yacht Club I’m for the Managed Lake Alternative for the following reasons: The managed lake alternative keeps the sediment within the lake as it is now.
Both of the estuary alternatives would leave an annual sediment at the Olympia Yacht Club of 6 to 7.5 inch per year. That would mean we would have to dredge at least every 6 to 8 years. This cost would be prohibitive. I was told on a zoom meeting that a consortium made up of local jurisdiction would be developed to help cover most of the dredging cost. Do you honestly think Lacey or Tumwater are going to budget money for the Olympia water front? The State which manages the lake has not budged the money to dredge over the past 20+ years as they were suppose to. If they had done their job everything would be fine now.

Supporting Materials (if any): N/A

Name (ID): Barbara Buchan (I-647)

Organization (if applicable): N/A

Submission Text: To whom it may concern: The Estuary Alternative would fully restore the Deschutes Estuary. It would return tidal flow; it is the most cost effective; require the removal of the dam; restore fishing for the community, honor native Americans. Please choose the Estuary Alternative. Thanks you.

Supporting Materials (if any): N/A

Name (ID): John DeMeyer (I-648)

Organization (if applicable): N/A

Submission Text: Thank you for the opportunity to comment on the DEIS. The following are my comments and questions. Executive Summary: Pg. 3, Four introductory colored pictures seem to set the stage for a rational for doing the EIS by showing the Lake at it's worst. Two of the photos attempt to show that the lake suffers from water quality impairments and that the dense community of aquatic plants affect ecological functions. However the details in the EIs show that water quality in the Lake has improved and is considered relatively good and that the dense community of plants actually improves the water quality of the water flowing through the Lake from the Deschutes River.

The visual simulations on pages 9,10 and 11 are also deceiving. They show the estuary and hybrid only at a higher tide. Other simulations deep in text do show the alternatives at lower tides, however an executive summary should portray a balanced unbiased approach.

Pg. 21, Table ES.4 Planning level costs Summary. It should be noted that costs for both the Managed Lake and Estuary alternatives are based in part by unrealistic and unsupported assumptions. Th DEIS assumes that under the Lake alternative all future edge material will have to be trucked, the most costly option, to an upland site 20 years after the initial dredge, due to the assumed continuing presence of the NZ mud snail and Purple loosestrife plants. It fails to evaluate the use of rail transport for moving the dredged material to an upland disposal site. This done in spite of the fact that there is an active rail line running through the project site and an adjacent state owned upland site available for dewatering the dredged material. The use and cost for rail transport of dredged material should be a part of the decision making process and not considered latter only if the managed lake alternative is chosen.
Project Alternatives and Construction Approach: 2-0 Pgs. 2.9 Use two illustrations to show that under the estuary and hybrid alternatives tide flat's do not emerge until the tide level falls below O elevation NAV 88. NAV88 elevations are referenced to a geologic datum that is considered the 0.0 elevation. Tidal water levels, on the other hand, are referenced to the average of the lower low tides in a given geographic location. In the two illustrations tide flats would begin to emerge with +4 foot tide and the MHHW would be +14 feet tidal elevation. Pg. 2.10 is a series of graphics attempting to illustrate the statement on the previous page intended to minimize the adverse visual impacts of exposed mudflats, which states the project tide flats would be covered with water (+4 tide) 80% of the time. It should also be pointed out that over 90% of the days in the summer months will experience these tides during the daylight hours. Figures 2.24 & 2.23 show the estuary and hybrid alternatives would look like at 'their best' at high tide. A more balanced and objective description would also include pictures of these two alternatives at a low tide. Pg 2.50 Construction of the Reflecting Pool Wall. This section provides only the length of the wall with approximately 130 wing walls spaced 20 feet apart to prop up the structure. No height is given for either the reflecting pool wall or the wing walls, although the text does state that the wing walls would remain submerged under most tidal elevations. These are serious omissions from a serious visual adverse impact as well as construction integrity. The reflection wall would have to be high enough to prevent being overtopped by the highest 'king tides' plus an allowance for sea level rise. A picture should be added showing what a 20 foot high reflection pool wall and its' supporting wing walls would look like at a +4 foot tide as viewed from the Deschutes Parkway.

The Puget Sound region is subject to periodic earthquakes. Earthquakes in the 60's and 70's did significant damage on the Capitol Campus and Deschutes Parkway. The proposed Hybrid alternative results in a 20 foot high, half mile long retaining wall holding back 40 plus acres of impounded water. Would this structure be strong enough to withstand a 6.0-7.0 earthquake? A breach of the retaining wall at a low tide would have disastrous downstream results.

Water Quality: 3.0 Table 3.3.5 does do a good job in showing the effect Capitol Lake has on reducing the concentration of total nitrogen (TN) discharge into Budd Inlet during the critical summer months. The text states .... 'As summarized in the table, (3.3.5) there was a small decrease in average total nitrogen between the river and lake as well as decreases in dissolved inorganic (DIN)'...... The table while showing the yearly average DIN concentrations for the Middle and North Basins, fails to show the DIN concentration of the Deschutes River that flows into the Lake. This should be added for the table to have full meaning, i.e. assuming a DIN concentration of 7mg/l for the Deschutes River would show that there is a 70% reduction in the DIN concentration. Table 3.3.2 does an even better job in showing the DIN concentration reduction between the river and North basin. Taking the DIN numbers from the graph for the critical months of July, August and September would show that there is approximately a 98% reduction in the concentration of DIN in the water flowing from the Lake into Budd Inlet. Ecology's Puget Sound Nutrient Forum which is currently addressing the excess nitrogen problem from wastewater plants and watershed tributaries in Puget Sound uses DIN Nitrogen loading 'applying the DIN concentration to a watershed or waste water treatment plant's discharge flow to calculate a nitrogen loading factor in pounds or kilograms) as the main metric in describing amounts of nitrogen. i.e. the LOTT wastewater treatment plant's discharge permit expresses DIN wastewater discharge limits in in pounds of DIN/day. The information in Table 3.3.5 and Figure 3.3.2 should be expanded to show the
difference in DIN nitrogen loading between the River at Tumwater Falls (585 lbs./day) and the Lakes discharge into Budd Inlet from the North Basin.

Pg. 3-16---' Capitol Lake has been listed in Ecology's 303(d) for impaired waters due to bacteria and phosphorus since 1996.' However, it should be noted that from 2004 thru 2014 the Lake met the bacteria water quality standard during the critical summer months, Water quality sampling was discontinued in 2015. Pg. 3.3.2 Budd Inlet Vessel Traffic Patterns : A very misleading diagram is used to show that Budd Inlet experiences very little vessel traffic (maximum of 200 vessels per year) by showing only vessels equipped with AIS and being tracked by the Coast Guard.. The Olympia harbor is home to over 1,500 recreational vessels and during a summer day the number of vessels on Budd Inlet may be in the hundreds. A quick look at a Google Earth image of the inlet will show over 21 vessels operating on the Inlet as the satellite flew over.

Long Term Impacts: -4.0 Pg. 4.34--- Key Findings under the Estuary and Hybrid alternatives...'Budd Inlet would experience minor to moderate benefits associated with improved oxygen, and algal blooms are expected to be largely the same as current conditions. rsus Pg.4-43---'Under the estuary alternative..... compared to the Capitol Lake where DO conditions are generally good throughout the (lake) basin, DO concentrations in this area would be very low under the estuary alternative during certain conditions.' It should be explained why under the estuary alternative, which will result in a significant increased DIN loading to Budd Inlet, would result in DO and algae remaining largely the same in the Inlet.

General Comment / Conclusion. A proposed project plan of the scope and magnitude of this DEIS should provide the decision makers with detailed information as to: 'What will be done-'When it will be done' and 'Who will do it'. The Estuary and Hybrid alternatives are significantly lacking in 'Who will do it' with regard to sediment management. The Funding and Governance work group suggests some type of management body created under RCW 39.34. However there is no mention of any potential entities that would possibly make up this body, even though all the logical state and local governmental entities made up the work group. The legislature directed that the EIS must consider equal funding from non-state entities such as local governments, special purpose districts tribes and not-for profit organizations. However the DEIS makes no mention of possible funding sources. The the federal Army Corp of Engineers (ACOE) represents the Federal interest in maintaining the navigation channels in West Bay and the Inlet. The DEIS assumes the ACOE would be responsible for a significant potion of future dredging. Was the ACOE consulted in the preparation of the proposed dredge plan? Would they be expected to be part of the future governance body? How can a responsible decision maker be expected to make a decision favoring the Estuary or Hybrid alternatives without first knowing 'who will do it and how will it be funded?

Water quality in the Lake has improved and is considered good. It is apparent that the aquatic plants in the Lake actually provide a significant water quality benefit by filtering out practically all of the nitrogen(DIN) originating in the Deschutes watershed during the critical summer months, yet the DEIS fails to recognize the importance of this benefit and how it might be part of Ecology's Puget Sound Nutrient Forum effort.
The DEIS fails to describe a funding and governance model for the estuary and hybrid alternatives that includes the Federal, State and local entities that would be responsible for the Budd Inlet sediment management. Until these issues are resolved, which could be years, Capitol Lake should be adaptively managed as a lake starting with a dredge of the North Basin. Thank you again for the opportunity to comment on this important issue.

**Supporting Materials (if any): N/A**

**Name (ID): Bor Las (I-649)**

**Organization (if applicable): N/A**

**Submission Text:** Feed one invasive creature to the other invasive creature that lives on the other side of Deschutes Parkway

**Supporting Materials (if any): N/A**

**Name (ID): Leo Scott (I-650)**

**Organization (if applicable): N/A**

**Submission Text:** I would like to see the area restored to its natural state, as much as possible.

**Supporting Materials (if any): N/A**

**Name (ID): Walter Johnson (I-651)**

**Organization (if applicable): N/A**

**Submission Text:** I am in favor of maintaining Capitol Lake and spending the money necessary for returning it to usable form. I understand that returning the lake to an estuary might be the most environmentally sound thing to do, but as a state and county taxpayer, I would like to see my money spent to restore the lake. Downtown Olympia seems to be evolving into a more user friendly city and one which will soon have many more downtown residents. The lake would add to the beauty of our city whereas the return to an estuary with the resulting tide flats would be detriment to use and growth.

**Supporting Materials (if any): N/A**

**Name (ID): Laurell McCann (I-652)**

**Organization (if applicable): N/A**

**Submission Text:** Put the salt water back in the lake.

**Supporting Materials (if any): N/A**
Name (ID): Kate & Steve Schroder (I-653)

Organization (if applicable): N/A

Submission Text: Capitol Lake is an integral part of downtown Olympia. To allow this area to become just an estuary would have a major detrimental effect on the aesthetics of our city. Gone would be the lovely water aspect of the park and Capitol buildings. The view would be of so-called pioneering vegetation and a mud flat. Concern for the quality of the water in the basin could be addressed without destroying this lovely feature - the lake. The State renovated this area years ago and created a lovely promenade around our lake which is used by all in the area. Attention was also given to the regular flooding of the two streets adjacent to the lake and this seems to have been alleviated. The hybrid version proposed seems to address all these issues. The “Hybrid” option, which would allow for the restoration of tidal flow, the removal of the dam and the creation of a smaller, manmade lake. Continuing to have a fresh water way station for water fowl and migrating birds is a benefit we now have. One that is visible to all and not hidden behind alder, willows and whatever wild vegetation which would come with an estuary only proposal.

Supporting Materials (if any): N/A

Name (ID): Dennis demoor (I-654)

Organization (if applicable): N/A

Submission Text: seems to me if clorox was dispensed into the lake in extreme amounts it should kill the snails and other unwanted pests and filter the lake afterwords, create a professionally maintained lake, like an aquarium, and bring back to life a human play ground. I drive by it on purpose now whether I need to go either direction or coming down the courthouse hill.

ONE thing I really oppose is the homeless situations there abouts, all the area could be so beautiful for young and old and families, I'd volunteer my labor to help, but I broke my back in 2017. Had surgery but am permanently disabled. Life is nothing but pain but it would be so marvelous, soothing, relaxing to have a wonderful SAFE place for all people to be, so close to home. Of course those people displaced could be offered jobs if they really wanted to work and help out and get their lives in the right direction to better themselves and increase their self esteem, and yes I have been homeless a couple of times, no work being the major reason. I have spoken!

Supporting Materials (if any): N/A

Name (ID): Martin McCallum (I-655)

Organization (if applicable): N/A

Submission Text: I have completed my review of the EIS report. I am writing to offer my personal recommendations on the future of the Deschutes River esti I am a long time resident of Thurston County. The basis for my recommendations comes from what I have learned through my own
community involvement: In 2018 & 2019, I attended three public meetings held by the Tribal/Interagency Committee on the Deschutes River Estuary staffed by your department. I also attended two public meeting of the Capitol Lake CLAMP committee staffed by the former Washington General Administration. Participated in a series of public meetings staffed by the WA Department of Ecology to prepare a plan required by U.S. Environmental Protection Agency to address current TMDL water quality and water temperature violations in the Deschutes watershed. Serve on the WRIA 13 salmon recovery advisory committee staffed by the Thurston County Planning Commission. The Deschutes River is the principle river in the WRIA 13 region. Volunteer for the Nisqually Land Trust, Capitol Land Trust, Thurston County Stream Team, and the South Puget Sound Salmon Enhancement Group (SPSSEG). I recommend the removal of the 5th Avenue dam and the restoration of a full free flowing estuary. A managed lake alternative is unacceptable and unworkable. The hybrid option is problematic. The adoption of the Estuary Alternative by the Legislature will restore health to the river and sea mixing zone so that migrating shore birds will once again make their hurried visits along with bird loving tourists -- a popular interaction we see each day at the Billy Frank Jr. Wildlife Refuge in the Nisqually delta. I ask that you give my recommendation your utmost consideration.

Supporting Materials (if any): N/A

Name (ID): Lindsey LaRock (I-656)

Organization (if applicable): N/A

Submission Text: Greetings! Thank you for considering the public input. I have moved to Olympia within the past year, and I have greatly enjoyed walking around the lake in all seasons of the past year. Paths are important, and the access to the trail is important. Although I love the idea of an estuary, I cannot help but wonder how badly Olympia will smell at low tide. Downtown Olympia needs revitalization, and the stench of low tide will not help businesses be moved to join the downtown area. Please consider the environmental impact, But also the potential economic impact and do a dual system. Do the deli.

Supporting Materials (if any): N/A

Name (ID): Kendall Brown (I-657)

Organization (if applicable): N/A

Submission Text: I would look into this gentleman. He has a doctorate in this field, and proven success recovering these types of ecosystems. He knows how to clean sediment, bacteria, parasites and pollution. His name is Marinoorikawa and he has a relevant PhD in Bioindustrial Science. Links: https://youtu.be/O6JseTWJCPY https://www.google.com/amp/s/brightside.me/wonder-people/a-man-from-peru-has-found-an-ingenious-way-to-clean-lakes-and-its-a-breakthrough-the-earth-was-crying-for-719560/amp/ https://m.facebook.com/morikawaphd

Supporting Materials (if any): N/A
**Name (ID): Sam E (I-658)**

**Organization (if applicable):** N/A

**Submission Text:** I support the lake/estuary hybrid. I expect it to be costly and difficult to complete, but it sounds like a smart investment.

**Supporting Materials (if any):** N/A

**Name (ID): Benjamin Alterman (I-659)**

**Organization (if applicable):** N/A

**Submission Text:** I would find it helpful if the EIS could be more explicit about what will happen to the train tracks and pedestrian bridge at Marathon Park in the 3 options outlined.

Similarly, it would be helpful to know how, specifically, the Deschutes Parkway will connect to Olympia if the 5th avenue bridge is removed.

**Supporting Materials (if any):** N/A

**Name (ID): Ruben Nunez (I-660)**

**Organization (if applicable):** N/A

**Submission Text:** Nice idea to bring it back to it's original state. My concern is that homeless people have been living, destroying and polluting that area. You have a bigger problem with that issue than turning the lake into an estuary. It will just become more free area for the homeless to occupy with out any regulations.

**Supporting Materials (if any):** N/A

**Name (ID): Bob Jacobs (I-661)**

**Organization (if applicable):** N/A

**Submission Text:** At a couple of places in the Executive Summary there is commentary on the closure of the Capitol Lake swimming area in 1985. The wording leads the reader to understand that the lake became ever more polluted with bacteria and finally the swimming area had to be closed. That is incorrect in at least two major ways: 1. It was not the lake that was polluted, but the swimming area. To my knowledge, the lake as a whole has never exceeded allowable bacterial levels for swimming. During the CLAMP process we learned that the two major pollutants in Capitol Lake were/are nitrates and phosphates. These are fertilizers and are an environmental concern because they cause an overgrowth of aquatic plants in the summer that die in the fall and cause reduced oxygen levels in Budd Inlet. But nitrates and phosphates are not dangerous to swimmers. The high bacterial levels in the swimming area were caused by effluent from a stormwater outfall in that area. The city tried to reduce these levels by
installing an impervious curtain around the swimming area and flushing it with huge amounts of city water -- up to 10% of daily city-wide usage -- but that did not work. A year or two after closure of the swimming area the city Public Works Department discovered that 'sanitary sewage' was entering the stormwater line via an accidental 'cross connection'. Thus, one reason for the closure was in fact bacterial levels, but these levels were limited to the swimming area, not lake-wide. And importantly, this problem was easily corrected.

Supporting Materials (if any): N/A

Name (ID): William Workman (l-662)

Organization (if applicable): N/A

Submission Text: The Capitol Lake DEIS dated June 2021 makes numerous attempts to stack the deck in favor of dam removal. For example, the three action alternatives were fabricated such that the compromise 'Hybrid Alternative' would still result in dam removal....which is the objective of this process. Thus, the politicians still get what they want while appearing to compromise. The politicians apparently thought they could make two extreme proposals, then a 'Hybrid Alternative' compromise in the middle between two extremes would save the day as their pre- planned tactical position. Those three action alternatives seem to have been dictated by politicians. Yes, that would be Senate Bill 6248 (ESSB 6248 (2020) - Section 1026, Page #49, Line #16). The three alternatives were in fact dictated by politicians. This EIS reads just like Goldilocks and The Three Bears: Keeping the dam is too expensive...draining the lake eliminates the reflective pool...... but the the Hybrid Alternative is 'juuuuust Riiijight'. This is a conspiracy against the people of Washington State. Little did the politicians know that the Hybrid Alternative would actually have the worst impacts of all three action alternatives. The writers of the EIS should clarify that fact in the executive summary because most hard-working tax-paying citizens of Washington State have real jobs and don't have time to read the entire document to find how their money will be wasted. Nor do they have the luxury of writing fairy-tale fiction like some others. The following statement should appear in the Executive summary when the EIS is re-written: 'The Hybrid Alternative has the worst impacts of the three action alternatives'. While the truth is hidden deep within the document, the DEIS is is clear on this point, much to the chagrin of the politicians: The Hybrid Alternative, which was supposed to be the approved compromise position, actually has the worst impacts of all three action alternatives. It has the highest cost ($924M - Note #9 on page #7-6), it causes the most sediment erosion and dredging (middle of Page #2-22), and has the ugliest aesthetics (reflective mud estuary plus a rusty 790- meter sheet-pile barrier wall for the reflecting pool). This will be known as the Goldilocks Conspiracy.

I've got good news and bad news. The bad news is that removing the Capitol Lake Dam will cause previously - conveniently - confined sediment to spill out and spread all over into an otherwise navigable waterway and choke it with silt and rocks. However, the good news is that the navigable waterway will be choked with silt and rocks. You see it is a Federal Navigable Channel, which means some day we might get some free dredging services from the US Army Corps of Engineers to clean it out. Normally, dispersion makes messes more difficult to clean up. But as 'everyone knows: Federal dollars are easy to
get... like freeeeeeee! You just print more when you run out. Has anyone checked with the US Army Corps of Engineers about this? Please provide their written response.

The Capitol Lake DEIS dated June 2021 makes numerous attempts to stack the deck in favor of dam removal. Check this out: Page #2-23: ‘Sediment dredged from West Bay during the recurring maintenance dredging event under the Estuary and Hybrid Alternatives is expected to be suitable for disposal at an in-water location.’ Page #7-3: ‘...upland disposal would be more than double the estimated cost of recurring maintenance dredging under the Estuary and Hybrid Alternatives’. Page #2-23: ‘New Zealand Mudsnails... are saltwater tolerant but do not thrive in saltwater environments.’ Page #2-23: ‘Although a small population of New Zealand Mudsnails may establish in West Bay, high densities are not anticipated because of salinity levels’ Page #4-157: ‘...it is likely that all sediments dredged during maintenance dredging could be disposed in-water, so long as the material was also free of invasive species’ Page #4-26: ‘. if invasive species are present in the sediment, the dredged material will be transported to an upland disposal site.’ TRANSLATION: . We pretend that all the sediment from West Bay will be disposed of in-water, to make dam removal look far cheaper than keeping the dam. This is because fewer mudsnails can survive in West Bay due to the higher salinity. Of course, in-water disposal requires that the sediment must be completely free of all mudsnails..... understand yet? Let us quickly pass the costs of dredging along to someone else before they figure out how expensive it is about to get for them. Please pay no attention to that man behind the curtain.

Supporting Materials (if any): N/A

Name (ID): Scott Goddard (I-663)
Organization (if applicable): N/A
Submission Text: I believe this body of water should be managed with its primary goal to protect fish and wildlife, and to promote diversity in animal and plant forms. Our area is filled with recreational spots for humans. I'm all for providing perimeter walkways for human recreation, but the waters in Deschutes River estuary at Capitol Lake should be reserved for wildlife and fish. I believe the Estuary Alternative will best accomplish these goals.

Supporting Materials (if any): N/A

Name (ID): Mark Pearson (I-664)
Organization (if applicable): N/A
Submission Text: Thank you for the opportunity to comment on the Draft EIS (DEIS). I strongly support the Managed Lake Alternative. The DEIS fails to recognize the decisions that led to the creation of Capitol Lake in the first place. The Capitol Lake Basin, and much of the Lower Bud Inlet were tidal mud flats prior to the creation of Capitol Lake. While the DEIS shows pictures of the basin under both the Estuary and Hybrid Alternatives, they are misleading. There are numerous photographs of the basin before the Lake was created and they show the reality of the result of dam removal. In addition, while
the potential for funding shortfalls in the management of siltation is mentioned, the DEIS fails to realistically assess the likelihood of political appetite for paying the dredging costs of private marinas in lower Budd Inlet. Should the dam be removed and the likely shortfall occur, maintaining marinas, including Percival Landing, will not be an economic possible and the entire area will become an unattractive mudflat, driving away development and recreation. The DEIS's failure to address this likely outcome is a glaring omission with irreversible impact. I have attached two examples of the ACTUAL estuary and would hope that any final EIS would include a more realistic presentation.


Name (ID): Paul Pickett (I-665)

Organization (if applicable): N/A

Submission Text: Thank you for the work that went into this EIS. Unfortunately it appears to downplay compliance with the Clean Water Act. For each option, a more detailed analysis is needed for CWA issues, including the effect of options on NPDES stormwater permits, compliance with water quality standards, impacts on 303d listings, and support for implementing TMDLs (both existing and draft). Compliance with federal law is a major component in the options under consideration, and should be given the highest level of scrutiny and weight. In particular, the option to manage the existing lake clearly does not allow compliance with the CWA. This should be clearly analyzed and made a key point of evaluation. The hybrid and estuary options appear to be more likely to allow CWA compliance.

Supporting Materials (if any): N/A

Name (ID): Myles West (I-666)

Organization (if applicable): N/A

Submission Text: Add loaches to the lake, they are a bottom feeding fish that prey on snails. Or open up a French restaurant es cargo yum!

Supporting Materials (if any): N/A

Name (ID): Rob Penney (I-667)

Organization (if applicable): N/A

Submission Text: Comments on Capital Lake Deschutes Estuary Plan.docx (~16 KB) I found the planning document extremely well researched and written, especially given the myriad of complex factors, estimates and simulations involved. Thank you for your consideration of my comments.

In the Background section, the very first sentence of section on Project Area is: 'The Project Area includes the 260-acre Capitol Lake that is managed by the Department of Enterprise Services
(Enterprise Services), and it extends to the northern point of West Bay of Budd Inlet. The word “northern' should be “southern'.

The goals of the project don't seem to be simultaneously achievable by any action alternative (e.g. prioritizing ecological functions is generally at odds with recreation and aesthetics).

Improving water quality must include impact upstream flows into the river, which is outside the project area.

The pedestrian boardwalks mentioned on page 18 should be briefly noted in the table on 8.

The photos on pages 9 and 11 seem identical. Where are the estuarian islands and the wall surrounding the small reflecting pond in the hybrid option on page 11?

The simulated photo on page 10 is very appealing but doesn't seem to reflect the descriptions of the estuary options having no standing water 20% of the time.

The discussion of a swimming beach option at the top of page 19 seems to suggest that the anticipated water quality wouldn't prohibit safe swimming, but I thought this wasn't the case.

In the discussion of social justice/equity at the top of 20, it would be useful to note the current preference of the local tribes on the plans discussed, if this is known; I expect it is.

Using the averages values for the range of. This seems like REALLY important costs to share by this table as well as near the beginning of the executive summary so readers can review the myriad of details in the first 20 pages weighing the pros and cons of each action alternative while knowing their relative costs.

Supporting Materials (if any): N/A

**Name (ID): Rob Penney (I-668)**

**Organization (if applicable):** N/A

**Submission Text:** In the comments I just submitted on the plan, I realize I didn't include my preference on which action alternative I preferred. I remember a decade ago when this discussion first began, the directors of Ecology, Natural Resources, and Fish and Wildlife sent a joint letter strongly advocating for an estuary. That carried weight with me--these are the experts and they must have felt very strongly about the enormous benefits of the estuary option to publicly put their weight behind it and risk public and political backlash. Sure, I would enjoy the look of a dredged lake and the opportunity to paddle in it, but I prefer restoring an estuary. A functioning, resilient Puget Sound ecosystem is defined to include tidally-influenced wetland habitats at the estuaries of Puget Sound's major rivers that provide ecosystem functions, goods, and services. 75 percent of river delta tidal wetlands have been lost or degraded in Puget Sound. River delta estuaries, a unique environment where freshwater mixes with salt water and sediments collect, provide important feeding and resting habitat for young salmon, migratory...
birds, and many other species that cannot find these unique benefits in any other place in our landscape. Furthermore, as a taxpayer and an economic realist, I think cost estimates need to be considered, especially knowing the impact that the pandemic has had on the state and local budgets. The average 30-year cost estimates (the average of ranges for construction and maintenance in the Capital Lake - Deschutes Estuary EIP) for the managed lake, estuary, and hybrid options are $472M, $258M, and $374M respectively. So the estuary is also estimated to be the cheapest option by far. Given the likely increasing costs of climate change in wildfires, flooding, and droughts as well as more pandemics, I think the state would be wise to conserve resources on this project while making the choice that reflect how we value our environment.

Supporting Materials (if any): N/A

Name (ID): William Workman (I-669)

Organization (if applicable): N/A

Submission Text: The Capitol Lake Draft Environmental Impact Statement (DEIS) dated June 2021 contains only four alternatives which are intended to restrict citizen choices and justify dam removal. In addition, one of the choices is the 'Do-Nothing' Alternative, which is only included because it is required by law. The Do-Nothing Alternative would be a poor choice... not a serious consideration in this case. As previously proven, the three remaining 'action alternatives' were dictated by politicians who stacked the deck in favor of dam removal. It seems that a fifth option which makes the most sense was completely omitted from the DEIS document. This fifth and most sensible option is: 1. Repair the dam; 2. Dredge the middle basin once every 15-20 years; 3. kill the 'invasive species'; 4. Address the problem of nutrients at their source; 5. Call this project done. The Department of Enterprise Services (DES) is typical of most Washington State Agencies which insist on wasting millions of dollars every year, stolen from the hard-working taxpaying residents of Washington ate. The DEIS docume typical bureaucratic bungling over the politics of dredging and is therefore yet another waste of public funds. In what way does this DEIS enable the long-term maintenance which is required in order to implement any of the various options? Dredging would happen once and then the politicians and unelected bureaucrats would do what they do best....conveniently forget about it. After that, the sediment which was supposed to be periodically-removed will just flow out into West Bay and become somebody else's problem. The entire DEIS may need to be re-written to reflect this political reality, and include the fifth alternative described above. WAC 197-11-875(5) exempts DES from SEPA-EIS when nothing is being constructed. Is this why all the action alternatives propose to construct some items such as unnecessary walkways and interpretive centers? ......to eliminate the codified exemption and justify dam removal? Why is it necessary to construct anything at Capitol Lake? All of the problems at Capitol Lake can be addressed by maintaining the dam properly, killing invasive species, dredging, and nutrient source controls. No portion of that requires any construction. The DES could have been entirely exempted from SEPA-EIS. Since the DEIS has already been written, it should now be edited to include the COMMON SENSE OPTION, which is: Maintain the dam properly - kill invasive species - dredge - source controls - done. In this common sense option, there is no need to ramble-on about impacts (SEPA-EIS-exempt) and no reason to propose mitigation (none required). Repairing the dam is expensive but quite easy: Hire someone who knows
what they are doing and get the dam repaired. All infrastructure eventually requires either maintenance or demolition. If the politicians can successfully delay repairing the dam long enough, then demolition will become the only remaining option. We know this next step is difficult for DES, but try this anyways: Hire someone who actually knows what they are doing, and get the dam repaired. Dredging Capitol Lake has been done before. It was last managed by DES (GA back then). Some of those long-gone managers knew what they were doing.

Submission Text: Killing most invasive species is actually quite easy. Just temporarily drain Capitol Lake during a hard freeze once per year. Refill. Done.

Pets and livestock are routinely defecating directly into the Deschutes River. Illicit RV campers and homeless camps are polluting the Deschutes as well. The Department of Ecology (ECY) is well aware of this but prefers inaction when there are political sensitivities. The following are direct quotes from ECY (text bolded for emphasis): 'Reductions are necessary throughout the watershed, but the highest reductions are needed in small tributaries to Budd Inlet. Immediate efforts should focus on identifying and reducing sources in the tributaries to Budd Inlet, building from past efforts by the City of Olympia and others. Urban areas include a variety of potential sources, including cross-connected infrastructure, failing septic systems, domestic animals, recreational users, and homeless populations. Stormwater should receive particular attention.' 'Two locations along the Deschutes River (13-DES-20.5 and 13-DES-28.6) did not meet Part 2 of the water quality standards, and further source identification is recommended. Bacteria concentrations decline further downstream, and downstream sources do not appear to cause violations.' 'Dairies have the potential to contribute fecal coliform bacteria to the Deschutes River. Both operations should be evaluated for overall facility management and manure applications in particular. Additional water quality monitoring may be warranted.' 'Ecology staff noted cows on the banks and fecal material in the river and on gravel bars between Old Camp Lane (13-DES-32.3) and the Lake Lawrence tributary (13-LLT-00.0). This site should be evaluated for fencing and waste management.' 'While Black Lake Ditch meets the water quality standards, Percival Creek does not, and additional source identification is warranted. Potential sources include recreational users and homeless populations.' (Source: Page 103 of ECY Deschutes TMDL-WQ Report, Publication No. 12-03-008) Every Fourth of July, thousands of waterfront land owners launch tons of fireworks over (and therefore into) Thurston County Lakes. The active ingredients in these fireworks are metals and metallic salts. There are dozens of color-rendering combinations of sodium, potassium, copper, sulfur, magnesium, phosphorus, phosphates, nitrates, chlorides, etc. When these polluting nutrients come down the Deschutes River, the Washington State ECY wants you to believe they are magically created by the Capitol Lake Dam. So lets remove the dam and make them all disappear? Apparently, common sense no longer applies at DES or ECY. 1. Repair the dam; 2. Dredge the middle basin once every 15-20 years; 3. Kill the 'invasive species'; 4. Address the problem of nutrients at their source; 5. Call this project done. This fifth alternative will be called the 'Common Sense Alternative'.

Supporting Materials (if any): N/A

Name (ID): Deborah Alterman (I-670)

Organization (if applicable): N/A
Submission Text: I hope that whatever happens, there would still be access for pedestrians to use the pedestrian walkway on the BNSF railroad track bridge that gives access from the Deschutes Parkway Marathon Park to the park around the North Basin and Heritage Park. This pedestrian Walkway on the railroad bridge is never mentioned and it does not show up in any of the diagrams or visual simulations.

Supporting Materials (if any): N/A

Name (ID): Allen Miller (I-671)

Organization (if applicable): N/A

Submission Text: CAPITOL LAKE WATERSHED DRAFT EIS COMMENTS REGARDING HISTORIC AND CULTURAL RESOURCES Pursuant to the State Environmental Policy Act (SEPA) WAC 197-11-440(6)(iv) Urban quality, historic and cultural resources, and the design of the built environment, the EIS needs to consider the impacts to the Washington State Capitol Campus National Historic District since Capitol Lake is a significant part of the Capitol Campus designed by Wilder and White in 1911 and the Olmsted Brothers in 1928. The Draft Environmental Impact Statement does not take into account the nationally significant City Beautiful Movement design principles of the State Capitol Campus which is on the National Historic Register. In 1911, the architectural firm of Wilder and White created a master plan for the Washington State Capitol Campus as part of a nation-wide design competition. This plan captured the imagination of the competition judges with its unique approach, a group of symmetrically arranged buildings in a forest, atop a bluff overlooking a reflective lake, the City of Olympia, and Puget Sound. As stated by Wilder and White in their August 29, 1911 report to the State Capitol Commission, ‘a tide lock at [54h Avenue] would form a lake and the whole effect would be visible from most points of the City as well as the Sound.’ “Washington's Audacious State Capitol and Its Builders,” Norman Johnston, p. 33, (1988). Wilder and White incorporated five design principles into their plan for the State Capitol Campus. These principles include: (1) the City Beautiful Movement, (2) the Capitol Group of buildings, an unprecedented design of separate legislative, executive, and judicial buildings to look like a singular Capitol building when viewed from Budd Inlet, downtown Olympia, and the Fourth Avenue Bridge, (3) the borrowed landscapes of the Olympic Mountains and Budd Inlet to frame the design, (4) the northern orientation of the Capitol Group and Campus to Budd Inlet and the Olympics and (5) a lake to reflect the beautiful buildings on the bluff. 'It was at Olympia, Washington, that the American Renaissance in state capitol building reached its climax... Such a collection of Classical buildings on a plateau surmounting a green hill 117 feet above sea level proved an irresistible vision. It would be a spectacular monument, with Mount Rainer in one direction, the Olympic Range in another... all mirrored in the blue waters below. The City Beautiful, a concept of perfection evolved for dense urban scenes, seemed destined to achieve its finest expression in the natural landscape of the Pacific Northwest. No architect or dreamer could have asked for a more splendid setting.' Temples of Democracy, The State Capitols of the USA, Professor Henry-Russel Hitchcock (1976), pp. 257-259. The Olmsted Brothers 1928 plan for the landscape also required Capitol Lake to reflect the buildings. Maintenance of Capitol Lake as a reflective lake is necessary in order to preserve and protect the historic design of the Washington State Capitol Campus which is the best example of City Beautiful movement architectural design and urban planning outside of Washington D.C. Capitol Lake stands in the design tradition of the Tidal Basin and the other
Department of Enterprise Services

reflective bodies of water along the National Mall from the U.S. Capitol of the Lincoln Memorial. Failure to protect Capitol Lake would replace its mirroring and sparkling presence with the dismal mud flats of the past. 'To the south of the boulevard skirts the edge of a proposed freshwater lake secured by tide locks across the head of the Sound and will be a great addition to the city park system.' The American Architect, VOL CVIII, No. 2083, November 24, 1915, Wilder and White, p. 346. The late 1940's was to include the beautification of the expanse at the base of the Capitol group site to its north and west. The (Wilder and White and Olmsted Brothers) plan saw this area as a grand water feature... [to replace the plane of mudflats... The project also included the construction of a dam, the ensemble thereby creating a permanent body of water, Capitol Lake. Substantially completed in 1951, this new visual and recreational amenity became an appropriate setting for the acropolis of the Capitol group which is now so handsomely supported.' Washington's Audacious State Capitol and Its Builders, Professor Emeritus, Norman J. Johnston (1988). Significant progress has been made toward the completion of the Wilder and White plan since 1911. After the Capitol Group of buildings on the West Capitol Campus bluff was completed and the Olmsted landscaping plan was instituted in the 1920's and 1930's, Capitol Lake was created by the State Capitol Committee and the Legislature in 1949-1950 with the construction of a dam and a tide gate along 5th Avenue. Since 1991, further progress has been made toward the completion of the North Capitol Campus Heritage Park along the shore of Capitol Lake with the Legislature and City of Olympia spending twenty-five million dollars to complete the land acquisition, the Arc of Statehood, the Western Washington Inlet, the Eastern Washington Butte, the North Campus Trail, the Lawn Amphitheater, the City Fountain, the City seasonal ice and roller rinks in the Isthmus Park, and several phases of the construction of Heritage Park and the Washington State Law Enforcement Memorial. Two million dollars in private funds have also been raised for construction of these City Beautiful elements of the North Capitol Campus. The predesign of enhancements to the Eastern Washington Butte at the North end of the Arc of Statehood should also be addressed in the Draft EIS. Maintaining the open water environment in the north and middle basins of Capitol Lake is the only action which is compatible with the historic 110-year plan for the State Capitol Campus. The Draft EIS does not consider the national significance of the historic design of the State Capitol Campus remaining intact by maintaining and improving Capitol Lake through regular dredging every 10 to 20 years which occurred up until 1986. 16 U.S.C. 470f-Section 106 of the National Historic Preservation Act provides, The head of any federal agency having direct or indirect jurisdiction over a proposed Federal or federally assisted undertaking in any State and the head of any Federal department or independent agency having authority to license any undertaking shall, prior the approval of the expenditure of any Federal funds on the undertaking or prior to the issuance of any license, as the case may be, take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register. The head of any such Federal Agency shall afford the Advisory Council on Historic Preservation established under Title II of this Act a reasonable opportunity to comment with regard to such undertaking. The Nationally protected State Capitol Campus Historic District must be preserved under federal law. Under RCW 79.24.720 Capitol Lake is designated as a historic facility of the State Capitol. RCW 79.24.720 - Department of enterprise services' responsibilities. The department of enterprise services is responsible for the stewardship, preservation, operation, and maintenance of the public and historic facilities of the state capitol, subject to the policy direction of the state capitol committee and the guidance of the capitol campus design advisory committee. In administering this responsibility, the department shall: (1) Apply the United States secretary of the interior's standards for
the treatment of historic properties. Capitol Lake must be preserved under State law. The Draft EIS fails
to analyze the necessary dredging and maintenance of Capitol Lake to the standard as applied by the
Secretary of Interior to the National Mall in Washington D.C. Capitol Lake is the City Beautiful
movement equivalent of the Tidal Basin and the reflective pools from the U.S. Capitol to the Lincoln
Memorial.

The cost of dredging and maintaining Capitol Lake are extremely inflated by only including the costs of
disposing the dredge spoils upland instead of in-water disposal. The Draft EIS chart on page 7-5 should
include the cost of maintaining the historic Capitol Lake with the cost of in water disposal for a fair
comparison of the cost of the alternatives. Whether dredging in Capitol Lake or dredging in Budd Inlet
the New Zealand mud snail will be present and those dredge spoils can be safely disposed of in-water.
The dredge spoils from the Lake could also be used and sold as valuable soil and be a revenue stream to
the State. The sediment disposal costs of maintaining Capitol Lake should also be shared by the State,
Thurston County, the Port of Olympia, the City of Olympia, the City of Tumwater, and LOTT since all
these public entities benefit from removal of sediment in Capitol Lake on a every 10-to- 20-year basis
just as Capitol Lake was designed. Removal of the dredge spoils in Capitol Lake will be less frequent and
more economical than removing the dredge spoils from contaminated Budd Inlet. Not maintaining
Capitol Lake is in violation of Federal and State Law and the Draft DEIS must analyze these issues.

List of Exhibits Exhibit 1 1911-12 Wilder and White watercolor of State Capitol Campus Exhibit 2 Guide
of Olmsted Legacy at the Washington State Capitol Campus Exhibit 3 1954 Photo North Basin Exhibit 4
1982 Photo Capitol Lake North Basin swimming and recreation Exhibit 5 1974 National Register of
Historic Places Inventory - State Capitol Campus Historic District Exhibit 6 Capitol Campus Heritage Park
Development Association letter Exhibit 7 Letter from Washington State Dept. of Archaeology &
Historical Preservation Exhibit 8 Photo Middle Basin reflection (day) Exhibit 9 Photo North Basin
reflection (day) Exhibit 10 Photo Middle Basin reflection (night) Exhibit 11 Photo North Basin reflection
(night) Exhibit 12 Photo Middle Basin mudflats Exhibit 13 Photo North Basin mudflats Exhibit 14 Photo
North Basin mudflats Exhibit 15 Photo State Capitol Campus National Historic District

Supporting Materials (if any): I-673_Miller.pdf

Name (ID): William Workman (I-672)

Organization (if applicable): N/A

Submission Text: The Capitol Lake Draft Environmental Impact Statement (DEIS) dated June 2021
contains misleading information which is intended to justify dam removal. For example, it is common
knowledge that containment of any pandemic of sediment is more cost-effective than spreading the
disease around. Certainly, preventing the spread of mud, rocks, and invasive species by containment
behind the dam would be far more efficient and economical than infecting the entire West Bay. The
Capitol Lake Dam is like an N95 mask: not 100% effective but reasonably low-cost and painless.
However, when the dam is removed, the sediment, contamination, and invasive species will be spit out
over a mile of West Bay. It defies common sense to think that the cost of dredging will go down by
spreading the sediment over a larger area. However, the DEIS completes this ‘deny-the-science’ magic
trick by cheating on the cost estimates. The DEIS artificially reduces the cost of sediment removal for the Estuary and Hybrid Alternatives by assuming perpetual in-water disposal for only those two options.

The DEIS writers say that Managed Lake sediment must be hauled to an expensive upland disposal area (due to the New Zealand Mudsnail) while Estuary sediment can be cheaply dumped directly into the Puget Sound (between Anderson and Ketron Islands?). The DEIS writers assume that sediment spewed from the mouth of the Estuary Alternative will be certified free of the mudsnail.

However, the mudsnail is euryhaline and adapts well to brackish environments. The mudsnail can survive in Capitol Lake and at the Yacht Club. In fact, neither sediment will be free of the mudsnail. The mudsnail can also survive in some areas of the Nisqually Reach near the in-water dump site. Salinity levels as low as zero (0) PSU have been measured in the Nisqually Reach by salinity surveys, thus ensuring invasive mudsnails would thrive after spreading to a new host victim. The mudsnail can trap an air bubble with its shell and float anywhere the tides go. Releasing the sediment pandemic by removing the dam may not be the most intelligent action. If the DEIS writers want to contradict these facts, then they should obtain letters from ECY, DNR, EPA, DFW, and USACE committing to allowing perpetual future dumping of West Bay sediment directly into the Puget Sound. Since the entire DEIS is based on these flawed assumptions, the DEIS writers should already have obtained such letters. Even if their assumptions were true for now, the DEIS writers have no idea what variants of restrictive rules these regulatory agencies will invent in the future. Environmental regulations mutate to become progressively more restrictive all the time. Since the cost estimates have been falsified, the DEIS will now need to be re-written. Let's keep the dam and do our part to avoid super-spreading the sediment pandemic.

Supporting Materials (if any): N/A

Name (ID): Bob Jacobs (I-673)

Organization (if applicable): N/A

Submission Text: This is the second installment of my comments re the Capitol Lake Deschutes Estuary DEIS. 1. Non-comparable cost estimates The DES representative who briefed the Heritage Park board mentioned that the cost estimates for the three alternatives in the DEIS are not comparable. I do not remember the details, but as a former financial analyst and elected official, I find non-comparable estimates completely unacceptable. Cost estimates for alternative courses of action are obviously very important for decision making. And they are focused on by the media, as we have already seen in the case of this DEIS. Thus, cost estimates are a powerful influence on policy decisions. Cost estimates should included all costs -- capital and operating costs over a reasonable period, e.g., 25 years direct and indirect costs - public and private costs. Cost estimates should also include reasonable ranges and should be discounted at a reasonable rate.

2. Fair Treatment of the Hybrid Alternative I am troubled by concerns that I have been hearing in the community to the effect that the DEIS might not be treating the Hybrid Alternative fairly. Bias should be avoided in an EIS. Two specific items I have heard about are the water and the wall. a. Water. The idea of a hybrid approach has been around for many years. The reflecting pool has always been conceived of as
a freshwater basin, fed by a number of artesian wells that would intercept the plentiful underground flows from uplands to Budd Inlet and Capitol Lake. The idea is that the freshwater flows would be voluminous enough to replenish the pool every few days, thus preventing stagnation. Also, it has been reported that this plan would be easily permitted because it would be a 'non-consumptive use'.

Reportedly, the DEIS assumes brackish water would be used in the reflecting pool. That is just not as attractive as fresh water. Why assume brackish water? Are the potential artesian flows insufficient? How do we know? Could the depth of the reflecting pool be reduced to make this work? b. Reportedly, the dike which would separate the reflecting pool from the river is assumed to be constructed of sheet piling. Steve Shanewise, who has expended considerable effort in researching this option, suggests that a wall constructed of loose boulders (like the railroad trestle) would be more attractive, cheaper, and more durable. Steve says he knows a person who builds such walls regularly. Has DES taken the time to seriously consider this option?

3. Truck Disposal Why is truck disposal assumed under the Managed Lake Alternative, rather than the less expensive barge/in-water disposal approach that I believe was used in the last dredge?

Supporting Materials (if any): N/A

**Name (ID):** William Workman (I-674)

**Organization (if applicable):** N/A

**Submission Text:** The Capitol Lake Draft Environmental Impact Statement (DEIS) dated June 2021 contains misleading information which is intended to justify dam removal. For example, the DEIS writers claim that the principle of Federal Navigational Servitude obligates the US Army Corps of Engineers (USACE) to dredge West Bay. The first paragraph of Page #4-16 contains this fundamental misunderstanding of the Doctrine of Federal Navigational Servitude. The Doctrine actually gives the Federal Government the right (but not the obligation) to regulate, enable (or even obstruct) the navigation of navigable waterways. In what way does the doctrine require USACE to dredge sediment from West Bay? Actually USACE is not required to do anything except what the courts and congress tell them to do. This question becomes important because the Estuary and Hybrid Alternatives require dredging, every 5-6 years. The DEIS writers would like you to believe that the USACE is going to magically adjust their dredging interval to the new reality after dam removal. How was it determined that dredging at any specific interval has any relation to the Federal Navigational Servitude Doctrine? Perhaps 5-6 years will not be the actual interval for dredging. Perhaps the EIS writers should enlighten us on that subject. rhaps DEIS writers should check with an Attorney specializing in waterway navigation rights.

Supporting Materials (if any): N/A

**Name (ID):** Patrick Stack (I-675)

**Organization (if applicable):** N/A
**Submission Text:** Just rebuild the ecosystem into an estuary.

**Supporting Materials (if any):** N/A

**Name (ID):** Scott Woodard (I-676)

**Organization (if applicable):** N/A

**Submission Text:** It is time to restore and maintain Capitol Lake as it was intended, from legislation passed in 1938 authorizing its creation, and created in 1951. I have witnessed what was once a vibrant lake (both basins) where the community enjoyed, boating and swimming turned into an ugly marsh. Washington General Administration initiated 'Save a Beautiful Lake' movement in 1975 - but through total failure by the legislature, and all governing bodies - the shear neglect, and deferred maintenance has led us to a time where it is essential to restore the lake. People do not want a mud flat estuary as the reflection of the Capitol Building, or a downtown focal point! Tribal leaders are indicating its for the fish...well they are the ones with nets stretched from one side of the dam from Bayview grocery to the rail lines on the west - sounds good in theory but not reality of their actions. All surrounding marinas, as well as the Port of Olympia, and Percival Landing, will be affected by constant inflow of sediment damaging commerce for what should be a beautiful waterfront. RESTORE the LAKE is the only truly responsible solution - its there, protect and restore this valuable asset as it was intended. Poor management is not a reason to change this once beautiful and vibrant resource.

**Supporting Materials (if any):** N/A

**Name (ID):** William Workman (I-677)

**Organization (if applicable):** N/A

**Submission Text:** The Capitol Lake Draft Environmental Impact Statement (DEIS) dated June 2021 buries information which supports keeping the dam. For example, the DEIS mentions dissolved oxygen levels 24 times and how important and dangerously-low they supposedly are, before ever mentioning the inconvenient facts. The truth is that dissolved oxygen levels generally appear to meet the applicable water quality standards (see Table 3.3.6). In addition, dissolved oxygen levels improved between 2006 and 2014 (see Figure 3.3.5). This figure shows the results of the ECY modeling and reporting dissolved oxygen levels and depicts improving oxygen levels in Budd Bay by comparing 2006 and 2014. One would think that if water quality data was going to be used to rip a dam out, that there should be more of it. Perhaps there is more data for different times and locations in West Bay. This data presented in the DEIS is sparse considering how much this is about to cost the hard-working residents of Washington State. Since water quality already seems to be sufficient (temp-DO-pH) and has been improving, why would DES push the panic button now and rip the dam out? Perhaps the DEIS could include a graphic which more-clearly shows how dissolved oxygen levels and other parameters have been improving over time, or at least have not been getting any worse. This would communicate the truth about water quality trends. Please don't cheat on this graphic by comparing October of one year to May of another, or by comparing different locations to each other. One might think that the Executive Summary would
provide some clarification about improving water quality because many members of this community have been misled by inaccurate articles in The Daily Olympian and other sources of information. Most citizens have real jobs and they don't have time to read the entire DEIS document. Keep the dam in place and the fish will thank you.

Supporting Materials (if any): N/A

**Name (ID): Steven Byers (I-678)**

**Organization (if applicable):** N/A

**Submission Text:** I favor the full restoration of the Deschutes River Estuary.

Supporting Materials (if any): N/A

**Name (ID): Brian Combs (I-679)**

**Organization (if applicable):** N/A

**Submission Text:** I strongly support removing the 5th Avenue dam and restoring the Deschutes River estuary, either in the form of a free flowing river-estuary, or in the 'hybrid' form, if the hybrid option can be achieved while restoring most of the estuary. In these times of unprecedented changes and assaults on the planet, and life as we know it, how can the dam removal and estuary restoration not be the best option? Capitol Lake is an impaired water body with conditions that violate state water quality standards; it's configuration and environmental conditions are detrimental to the health of the Deschutes River and Puget Sound. Returning the lower Deschutes River into estuary habitat will yield profound benefits to salmon and marine life not only from the local watershed but also to those from other natal rivers. South Sound estuaries support feeding and rearing for juvenile chinook salmon from many river systems, not just the local rivers. The historical Deschutes estuary also supported Percival Creek natal salmon. The Draft DEIS confirms that removing the dam and restoring the estuary will improve ecological health, be less costly, improve water quality, and eliminate or reduce invasive species which have led to the closures of recreational uses. Combining estuary and river restoration with recreational and community planning for the area around Heritage Park could provide great benefits to the community. Getting rid of the mud snails and other invasive species via the introduction of tidal waters is a logical and cost effective step towards opening up recreational and community uses of the area now closed to access. It's time to prioritize the health of the water that provides life to us all over the perceived, aesthetic value that a man-made lake presents. In fact, both values can be achieved. Some of the most beautiful and iconic cities have estuaries and rivers intertwined with the built environment, including San Francisco, Vancouver B.C., and New York. Olympia should seize the chance to do the right thing for the environment AND make the community a more vibrant and economically viable place.

Supporting Materials (if any): N/A
Name (ID): Nathan Brown (I-680)

Organization (if applicable): N/A

Submission Text: Capitol lake is not functioning as a manufactured lake, and returning deschutes river and Puget sound to original condition is at least a step in the right direction, the removal of the Elwha river dams is instructive but the Elwha will take decades to recover, better start sooner than later here at home. I support dam removal here in the hopes of returning salmon health for future generations, many species are dependent upon that. Thank you for your consideration.

Supporting Materials (if any): N/A

Name (ID): Christi Johnson (I-681)

Organization (if applicable): N/A

Submission Text: I support returning Capital Lake to a natural Estuary. Capital Lake is not a real lake. I'd rather grow fish, clams and other seafood that we can eat rather than boats. I don't know why you would compare Capital Lake to naturally formed lakes. I don't think that is an equivalent comparison. There aren't many areas on the planet where fresh water meets salt water the way it does here in Budd inlet. This is a unique treasure that we get to live next to every day. We should take special care of this treasure and potential abundant food source.

Other areas of concern that related to the future Capital Lake estuary is pollution from the Deschutes river, homes and businesses that are not on LOTT and leaking sewage into the river/estuary/budd inlet area.

Also, this estuary extends all the way out to Boston Harbor. Why does it seem the study is not more inclusive of the entire unique estuary area. From my perspective this unique habitat includes the Deschutes river, Capital Lake Estuary and Budd Inlet all the way out to Boston Harbor. Please restore it to it's natural state so we can all have more local food sources, clean air and clean water. Thanks for letting me comment on this study.

Supporting Materials (if any): N/A

Name (ID): CJ Gruber (I-682)

Organization (if applicable): N/A

Submission Text: Our household strongly supports the Estuary plan

We also agree with DERT’s recommendations to move quickly with reaching out to Tribal stakeholders and others with historical and scientific expertise before solidifying any definitive plans. We commend the council for recommending moving forward with removal of the dam and returning this habitat to estuary conditions. Thank you!
Supporting Materials (if any): N/A

Name (ID): Maree Quade (I-683)

Organization (if applicable): N/A

Submission Text: My preference is the hybrid model. I have read many of the different reports and feel the hybrid would fit our community best and provide a beautiful lake/reflecting pond and estuary for maximum wildlife, birds and amphibians activity and habitats. I realize you want a more extensive letter but due to Covid I am watching a toddler and baby so have very little time for long explanation but I would like my vote to be recognized.

Supporting Materials (if any): N/A

Name (ID): Laurence Reeves (I-684)

Organization (if applicable): N/A

Submission Text: Thank you for this opportunity to comment on the Draft EIS for the Capitol Lake - Deschutes Estuary. In general I feel the draft EIS was thorough and well executed. Here are some things that I would like to see better addressed and/or discussed: 1) Habitat benefits for ESA-listed species: more attention should be called to the alternative that provides the highest level of habitat for ESA-listed species. At this time where we are losing our last runs of chinook salmon and resident orca pods, more attention needs to be paid to how the alternatives will impact listed species.

2) Climate change, sea-level rise and carbon sequestration: again, I believe more attention should be focused on these issues as they relate to the different alternatives, as these issues are fundamental to our ability as humans to continue living on this planet in a manner we are accustomed to. More emphasis should be placed on the alternative that provides the most benefit in terms of carbon sequestration and climate change resiliency.

3) Historical significance: I believe there is too much emphasis placed on the historical significance of the dam and lake. The dam and lake have been on the landscape for less than 75 years, while the unfettered estuary was on the landscape for tens of thousands of years, before white settlers decided to alter it. Prioritizing and emphasizing the recent modifications made to the estuary by white people is clearly chauvinistic and disrespectful to the Native Americans who lived in and around the Deschutes Estuary since time immemorial. We should not be prioritizing white history over Native American history.

My personal preference is to have the estuary fully restored/enhanced to achieve a condition more closely resembling it's pre-dam and lake condition. If we are serious about attempting to reverse species loss and climate disaster, bold steps must be taken and anything less is a disservice to our children and the planet. Thank you again for this opportunity to comment.

Supporting Materials (if any): N/A
Name (ID): Jules James (I-685)

Organization (if applicable): N/A

Submission Text: I've just finished reading the draft EIS for Capitol Lake. I'm thinking if the birds, bees, insects and fish could vote, they would overwhelmingly support the Estuary option. They could use the area 24-7 for food, shelter and pleasure. Us humans are there in force mostly on sunny days, and only for recreation. Highest and best use of Capitol Lake is as an estuary.

Supporting Materials (if any): N/A

Name (ID): Helen Thornton (I-686)

Organization (if applicable): N/A

Submission Text: I support the hybrid plan to create part estuary & part lake.

Supporting Materials (if any): N/A

Name (ID): Steven Aksamit (I-687)

Organization (if applicable): N/A

Submission Text: Please let Capital Lake become a natural estuary again. Have we not learned that nature can manage nature best? If we want to be good stewards of the environment let nature take care of itself. Thank you, Steven Aksamit

Supporting Materials (if any): N/A

Name (ID): Erika Fehr (I-688)

Organization (if applicable): N/A

Submission Text: I am glad the comment period was extended so I can send my comment in time. I heard about this at the last minute. It may be of value for your planning to hear about a Japanese environmental clean-up technology that I have now been familiar with for years. It is called EM Technology. EM stands for Effective Microorganisms. EM is a combination of three main naturally occurring beneficial microbes that can literally render polluted aquatic or soil environments into a clean and healthy condition again. It digests sediments, neutralizes toxins, like petrochemicals, pesticides, industrial pollutants, even arsenic over time and it also deals with metals, referring them into the less harmful atomic state. Implementation is not expensive and very effective and absolutely environmentally friendly without any negative side effects for plants, animals and humans. The technology has been used for 40 years all over the globe in many successful projects. Unfortunately EM Technology is not yet well known and implemented enough in America, especially in governmental programs. To give you a picture of the effectiveness of this technology and to show the power of
microbes, the most minute living beings on earth, I want to mention one example of many outstanding environmental projects that was completed in Japan in the 90s. Seto Inland Sea, a Japanese bay, was terribly polluted, no seaweeds or fish could be harvested. One sewage plant along the shore line started to use the Effective Microorganisms and what happened at the discharge point: Little fish were attracted to the sewage plant area. The discharged water represents a probiotic solution that is beneficial for aquatic life so that regeneration can occur. That made a noise and soon all other sewage plants were following the example. Within 5 years the Seto Inland Sea was remediated, the water was clean and healthy and fish, oysters, and seaweeds could be harvested again. I can provide a magazine 'Eco Pure' where this project is described in detail besides others. In my opinion there is no need of redesigning the estuary. It is possible to control pollution with EM Technology and clean up Capitol Lake in a relatively short time and with minimal costs compared to other solutions.

Supporting Materials (if any): N/A

**Name (ID):** Eloina Monchilov (I-689)

**Organization (if applicable):** N/A

**Submission Text:** Let it be what it is meant to be from the start, beautiful, natural wetlands. They have an important function which among many it’s a habitat that provide shelter to many creatures and plants. By allowing the water to flow freely in its water form, it would help move sediment layers and bring nutrients to the water, land, and animals. The Capitol Lake is so polluted and full of invasive New Zealand snails which are harmful to the whole ecosystem. These invasive species will take over eventually all the lakes here in Olympia, Lacey, Tumwater, etc. Which in time will make them inaccessible, polluted, and toxic! Learn from Nisqually Bird Refuge, what a successful project it became!

Supporting Materials (if any): N/A

**Name (ID):** THOMAS JOHNSON (I-690)

**Organization (if applicable):** N/A

**Submission Text:** I am strongly in favor of maintaining the fresh water lake. Either of the other proposals will result in a stinking low tide mud flat in the center of our city at the foot of our capital campus. It does cost more but it is an asset well worth the cost while the alternate is a 12 hour a day nuisance.

Supporting Materials (if any): N/A

**Name (ID):** Anna Wahler (I-691)

**Organization (if applicable):** N/A

**Submission Text:** I am interested in the future of Capitol Lake and the wildlife that benefits from this ecosystem. In particular, I am concerned with the future of the bat colony that roots at Woodard Bay in
East Olympia. These bats feed nightly in capitol lake from May to September. Many of these bats are nursing females and depend on the food source found at the lake to feed their young. If the lake was dredged and the water level reduced during the summer months, it would cause a significant negative impact on these animals. Bats, although often feared or hated, form a vital part of the ecosystem by keeping insect populations in control. I urge you to keep in mind the bats of Olympia as you decide the future of Capitol Lake.

Supporting Materials (if any): N/A

Name (ID): Lyna Ray (I-692)

Organization (if applicable): N/A

Submission Text: Hi, I was walking around Capitol Lake and saw a man advertising to 'Do the DELI', a plan to clean up Capitol Lake and create a hybrid alternative to make the lake swimmable again. I am in favor of his plan, if it does make the lake swimmable again. I have been a resident of Thurston County since 5th grade (am 33 now), and I remember a time when the lake WAS swimmable. We had art and music festivals, people with their kids would come hang out and swim at the lake down town, go jump and dance around in the fountain, and in general enjoy the shops, restaurants and sellers in downtown Oly. It was fun, beautiful and a great place to go spend a day with your friends or family. Now it is a stinky, contaminated duck pond that is practically abandoned except for the homeless camping out around the area. That is pathetic. I expect more from the capital city of our state. Please work on a solution to this on-going problem, and seriously consider the 'DELI' plan as an option to restore the beauty and functionality of the Capitol Lake area downtown. Thank you for your time and consideration.

Supporting Materials (if any): N/A

Name (ID): Georgene Abbott (I-693)

Organization (if applicable): N/A

Submission Text: I think an estuary is the most responsible and reasonable choice. Please strongly consider it. Thank you.

Supporting Materials (if any): N/A

Name (ID): Janet Wiley (I-694)

Organization (if applicable): N/A

Submission Text: I was one of the original members of the Deschutes Estuary Restoration Team, originally named the Friends of the Deschutes Estuary. I attended nearly all of the CLAMP meetings that revolved around this never ending lake vs estuary issue, all the way thru to the final recommendation to restore the estuary, which was NOT PUBLISHED IN THE FINAL DOCUMENT. I have witnessed countless studies and public comment periods since that time. Now, here we are. Will this be punted one more
time? DERT’s evaluation of the draft EIS echoes exactly what went thru my mind when I reviewed the documents. Please know, that the restoration of this estuary is what I will always support. Nothing less will serve the Salish Sea. I do not believe that resources to create the hybrid solution is wise. It was not taken seriously when initially studied by CLAMP and it is not a viable option now except in the minds of those who sit on the political fence. I see it as a creation of yet another fake lake that the State will need to manage and pour unnecessary money into over and over again. Everything in the document that DERT submitted is 100% supported by me.

Supporting Materials (if any): N/A

Name (ID): Kate Rosengard (I-695)

Organization (if applicable): N/A

Submission Text: My preference for Capitol Lake is Managed Lake for these reasons: The Estuary choice would ultimately be a do nothing approach with unsavory and unsightly consequences, and would also necessitate dredging which would have to occur in the inlet so the port could function. The Hybrid choice would cause money to be spent to remove structures and rebuild with a less than satisfactory result. 1. The Managed Lake choice implies that the various aspects of the lake would be cared for on an ongoing basis. 2. The Managed Lake choice would, according to the description of the long-term plan provided on the EIS site, ‘address the diminished beneficial uses of the waterbody, caused by accumulating sediment, historically poor water quality, algal blooms, and invasive plant and animal species’, which seems to me a worthwhile goal for the community. 3. People of certain ages retain memories of swimming and boating on the lake which hopefully could begin again. 4. The Managed Lake choice would preserve the lake which greatly enhances the setting of the Capitol Building which is seen by many people who come either to simply visit or on official business and provides a lasting impression of our state. 5. Complexities of the Managed Lake choice would provide people with jobs. 7. Just as a homeowner budgets for money to be spent to maintain a home for the family, the Managed Lake option would necessitate budgeting for maintenance to care responsibly for the people's Capitol Building; it could be done. 8. While I am a fan of living in harmony with nature such as xeriscaping in desert environments, I cannot envisage a similar approach to mudflats, which is one of the major reasons for choosing the Managed Lake option.

Supporting Materials (if any): N/A

Name (ID): Loretta Seppanen (I-696)

Organization (if applicable): N/A

Submission Text: Thank you for the opportunity to give comments on the draft EIs for the Capitol Lake - Deschutes Estuary Project. I appreciate the thorough review of the required EIs elements for the No Action Alternative and the three proposed alternatives. My reason for commenting to request that a subsection be added to the final EIS Cultural Resources Section (4.9) to describe cultural, heritage, spiritual, and educational values inherent in the built environment of each alternative, and ways in which
the impact of these values could be mitigated. Built environments, particularly in publicly funded projects, tend to reflect, express, and reinforce a cluster of cultural, heritage, spiritual, and educational values of the dominant culture at the time of construction. I will refer to this cluster as Majority Values. By intention or not, Majority Values are conveyed to everyone who interacts with the built environment. Importantly, they will continue to echo through future generations, even after Majority Values no longer reflect the values held by the community. For this reason, the description of each of the offered alternatives should include a description of the implicit Majority Values. When the implicit values are out of sync with contemporary community values, mitigation strategies should be listed through publication and informational exhibits on-site. I have provided an example, below, of the values implicit in each alternative. VALUES IMPLICITE IN BUILT ENVIRONMENT OF THE ALTERNATIVES 1. Estuary Alternative This is the closest to a natural environment, though given the many manmade changes in the area, the best that can be said is that this alternative harmonizes the built and natural environments. The implicit Majority Values are accepting of the natural ebb and flow of tides and recognize that from time to time the powers of nature can and will disrupt the human desire for a stable environment. The viewer might sense unease about what was on the shoreline adjacent to the city park where the built environment covers up some of Olympia's history such as the effort to hide poverty and homelessness from view by removing Little Hollywood. 2. The Managed Lake Alternative This is an entirely built environment. It speaks to a time the Majority Value it reflects was that humans are to dominate nature making it stable and idealized. The dam, and the more recently added concrete walls riming the Take that highlight the state's thirty-nine counties, present the lake as newly formed, effectively erasing the longer history of the site, while enshrining the Capitol Building in permanence. The built environment specifically fails to acknowledge the peoples who have been on these waters and land since time immemorial. The lake is a contemporary statement about the modern American desire to hide from view realities like poverty and homelessness. It was built, at least in part, to eliminate Little Hollywood, the float houses on the edge of Olympia that served the needs of those with little means for more than two decades. The lake is like an advertising photo created to highlight the dream of some community booster. It is a photo that covers that over any imperfections in the community. 3. Hybrid Alternative The natural environment is partially present though dominated by the built environment with the dam removed but the water flow constrained by a concrete barrier to allow for a saltwater pond. The Majority Values that support domination over nature are present here just as they were in the Managed Lake Alternative. The free-flowing water with its tidal flow and potential to flood, however, attests to the understanding that humans are not unequivocally dominant over nature. Nature can trump the human desire for stability and domination. This juxtaposition reflects the unsettled reality and political polarization of the 2020's in America, perhaps in the world, as many of us cling to a sense of separateness from the rest of nature, while the reality of climate change hammers home the message that humans face the same existential crisis as do all living things.

MITIGATION STRATEGIES For all alternatives it is possible to be transparent about the cultural, heritage, spiritual, and educational values that influence the design of their respective built environments. It is important to be explicit about the values symbolized by the built environment and to explain that other alternatives that symbolize different values were considered but not chosen. Mitigation should also include recognition of long past uses of the environment, specifically of the river
as a means of travel. As already described in the ESI, kiosks can provide the history of use of this land and waterway, including the long history of Indigenous use.

**Supporting Materials (if any): N/A**

**Name (ID): Edwin Pole II (I-697)**

**Organization (if applicable): N/A**

**Submission Text:** Of the two presented, I support the Estuary alternative as the most natural and least expensive to maintain. I do NOT support the hybrid 'reflecting pool' or the managed lake alternatives especially if not totally funded by Olympia. The rest of the state should not be burdened with the costs of maintaining an artificial environment for Olympia. If Olympia wishes to have a 'reflecting pool' or a city 'beach', it should pay for the costs itself and coordinate its design, installation, and maintenance with the state. One major objection by Olympia residents is that a natural estuary is odiferous. Life is smelly. It is natural. Further, I don't perceive any particularly unpleasant odors when I drive by the Nisqually delta or Mud Bay. I think the whole premise is false. A further objection to the natural estuary is that it would impact the private boat docks, north of the 5th Avenue bridge, and the Port of Olympia. State funds should not go to supporting docking for people that can afford boats nor to a Port that is a failing enterprise. They should support themselves.

**Supporting Materials (if any): N/A**

**Name (ID): Alicia Elliott (I-698)**

**Organization (if applicable): N/A**

**Submission Text:** I support returning the north basin to its original, tidal estuary state. The capital lake as it sits is a dead end. It will never be healthy and will be a constant and expensive struggle for us to keep from total putrefaction. The estuary will be very expensive to restore up front, but won't cost much in the long haul to maintain.

**Supporting Materials (if any): N/A**

**Name (ID): Shannon Lambson (I-699)**

**Organization (if applicable): N/A**

**Submission Text:** An estuary would be my preferred option as someone who believes the science behind habitat restoration to help declining salmon runs. Estuaries are key for juvenile salmon and our state capital should reflect that instead of being a holding pond for invasive species.

**Supporting Materials (if any): N/A**
Submission Text: My first comment is on the relationship of climate change and sediment deposition, which I feel did not receive enough attention in the Deschutes Estuary - Capitol Lake EIS. The EIS acknowledges that climate change will affect the outcome of any estuary plans, not only through sea-level rise, but through increasing flood events, and intensifying sediment deposition. The EIS states, “Climate change will also affect rainfall patterns and river flow rates. Climate models predict that the Deschutes Watershed may experience a 10% to 30% increase in extreme 24-hour rainfall by mid-century. Similarly, future peak flow rates in the Deschutes River may increase; however, flow rate change projections are uncertain. Increased peak flow rates have the potential to cause more frequent and substantial flooding in the Capitol Lake Basin. Increased peak flow rates will also mobilize more sediment, which may lead to higher rates of lake bed elevation change” (3.6-7). The Executive Summary (8) states that ecological functions would be the same under the Estuary and Hybrid alternatives, but at the same time documents that the Hybrid model would present greater challenges than the Estuary in sediment management. While the Estuary model would require recurring maintenance dredging every six years, the Hybrid model would require dredging every five years. In the Hybrid model, the majority of Capitol Lake would be retained as a reflecting pond, while the tidal flows would be limited to a small channel west of the retaining wall. As water “flows through the North Basin and out to Budd Inlet, it would accelerate along the reflecting pool wall. This increase in speed would scour sediment near the wall. Sediment eroded from the North Basin in this way would be transported into Budd Inlet, causing increased sedimentation. As a result, the Budd Inlet deposition for the Hybrid Alternative would be approximately 23% greater than the predicted deposition for the Estuary Alternative, although the patterns of change would be similar” (4.1.6.1). Simply put, the springtime floodwater-driven sediments in the Hybrid model would be constricted within a narrower path, rushing toward Budd Inlet, and not allowed to slow down and spread out over the estuary. Intact estuaries have the effect of mitigating violent floodwater surges coming from inland rivers and streams, just as they mitigate storm surges coming from the sea. But if only a small portion of the estuary is permitted to regularly contain tidal flows, the estuary would not serve its full ecological function. Floodwaters would roar through a narrow chokepoint, gushing sediments toward the Port and Yacht Club. The EIS takes climate change-influenced hydrodynamics into account in assessing the No Alternative scenario, in which the risk of dam failure ‘would be highest during back-to-back flood events, which will occur with increasing frequency given future climate projections” (4.1.2.1), but climate change is never mentioned when assessing the Hybrid alternative. Will we see increased or intensified flood events causing water to roar through the narrow “estuary' circumscribed in the Hybrid alternative? Temporarily lifting the tidal gates may allow some flood-borne sediments into the pool, but will not be as effective in flushing them out as in the regular tidal flows allowed by the Estuary alternative.

The Hybrid or "Dual Estuary-Lake Idea' (DELI) is being sold as a compromise containing the positive aspects of both a lake and an estuary. Through reading the EIS, I have come to believe that the Hybrid is the least attractive of the three alternatives, because it retains some of the negatives of the lake (requiring constant maintenance) and constricts the estuary into a narrow channel that fails to realize its
potential for ecological restoration, sediment management, and flood control. The Hybrid alternative wants to have its cake and eat it too, but fails to fully achieve either goal, particularly given future weather extremes. Imagine for a moment if the planners of Nisqually delta restoration had, instead of pulling out all the dikes, and opted for a ‘hybrid’ model of continuing cattle grazing but opening tidal flows into a few narrow waterways. The Nisqually estuary restoration would not have been such a resounding success, and would not have been able to reverse the historical damage to ecosystem health. The 5th Avenue Dam and Capitol Lake have caused enormous damage to estuarine functions, and the estuary ecosystem should be restored as much as is technically possible, rather than opting for half-measures.

The 5th Avenue Dam as a historical injustice My second comment, drawing from our students' research, is how damming the Deschutes River constituted a historical injustice toward Indigenous, Black, and immigrant communities that have lived in the estuary area. The “Deschutes: Restoring the Estuary' chapter of Removing Barriers, written by Griffin Hart and Tierra McCarty, can be downloaded here. I have also attached the Book Introduction and Deschutes chapter to these comments to make them part of the official record. Hart and McCarty reviewed the history of the estuary, including the displacements of the Squaxin village of Steh-Chass, a series of Chinatowns, the Little Hollywood shantytown (to make way for Capitol Lake), and contemporary homeless communities. They found that, through the displacement and razing of marginalized communities, the estuary has been historically transformed from a life-giving place of abundance to a place of ecological harms and racial / economic injustices. The construction of the 5th Avenue Dam stands as one of the most profound injustices, which it is high time to roll back. In the collection of his essays, Tell the Truth, Nisqually treaty rights leader Billy Frank Jr. supported “making a better home for all forms of life, including people... instead of accepting a steadily shrinking estuary pie, the tribes are working to make that pie bigger.' As a tribal rights advocate since 1978 and a resident of Olympia since 2005, I would like to strongly support the stance of the Squaxin Island and Nisqually tribes for the Estuary alternative. Under Article VI of the U.S. Constitution, the 1854 Treaty of Medicine Creek has the federal standing of the “Supreme Law of Land,’ and served a promise that tribal nations would have access to fish and shellfish in their “usual and accustomed” harvesting places. The Deschutes estuary was one of those places, and the 1951 construction of the 5th Avenue Dam could be defined as a violation of that treaty. In fact, Billy Frank Jr. himself was among those violently arrested in a 1968 ‘Fish-In’ at the 5th Avenue Dam, in a scene from the documentary As Long as the Rivers Run. The 1974 Boldt Decision reaffirmed the continuity of treaty rights, and subsequent tribal legal victories instituted state-tribal co-management of the fisheries, which has made Washington a national model of environmental collaboration. The 2007 Martinez Decision ordered that the state remove or repair harmful culverts, and the state is finally complying after years of intransigence. The 5th Avenue Dam is much larger and more harmful than any of the culverts covered in that ‘Culverts Decision.’ The state and local governments need to honor their continuing treaty obligations, remove both the dam and artificial lake, and not leave themselves open to future tribal litigation based on these strong legal precedents.

Why do we need a reflecting pool anyways? Given this history, my third comment takes issue with the goals of the Managed Lake and Hybrid alternatives to maintain a pool to reflect the Capitol. In my value system, attempting to (as much as possible) restore an ecosystem that worked for thousands of years,
and the honoring of our treaty obligations to the Indigenous nations who stewarded that ecological balance, takes precedence over views of a classical building constructed in 1928, or the colonial celebration of a state founded in 1888. The Estuary alternative would still reflect the building at least once a day at high tide, but no public funds would be spent on a reflective pool to serve as an aquatic mirror for a government symbol. The successful partial restoration of the Nisqually Estuary in the Billy Frank Jr. Nisqually National Wildlife Refuge, through the collaboration of federal and tribal governments, has attracted far more public, media, and tourist interest than the Capitol building's reflection in Capitol Lake. Even a partially restored Deschutes estuary could become a crown jewel in a future Olympia ecodistrict, and be marketed to tourists similarly as “reflecting” Olympia's ecocultural values, which are also illustrated by the Procession of the Species, and recently by Joe Seymour's four Coast Salish salmon on the views on Fifth building near the dam. In their Deschutes chapter in Removing Barriers, Hart and McCarty observe, “Through ive partnerships betwe local organizations and tribal nations...we have seen a positive impact on the health of the Deschutes River ecosystem. However, by reviewing the work that has been done on the dam removals on the Elwha and dike removal on the Nisqually, it is easy to come to a realization that we need to remove the 5th Avenue Dam to help remove barriers to salmon runs on the Deschutes. ....When the Deschutes Estuary is turned back into a mudflat, the saltwater can flow in and out, and it could again become a functional habitat for salmon and other aquatic species. The Deschutes Watershed and estuary would benefit from the removal of the 5th Avenue Dam and the contaminants....' Hart and McCarty conclude, 'To address the many facets of restoration, we can help make the estuary a beautiful place to live for everyone who works and lives in Olympia, and all of the Steh-Chass watershed area. In so doing, we could begin to reverse the displacement of communities and waters in Olympia, an allow them to move freely without constraint. Following the last 140 years of alteration, the Deschutes River and the vestigial remnants of its historic estuary will become an example of contemporary approaches to environmental justice and ecosystem restoration.' When I attended the 2018 Steh-Chass Festival in Heritage Park, I was struck by the synchronicity of Native cultural revitalization, ecological restoration of the watershed, and the potential revival of downtown Olympia. In my research and advocacy, I have seen that environmental and climate resilience will not be successfully implemented only from above, by the federal government or United Nations, but from below through a patchwork of local watershed-based solutions from below. I urge that you choose the Estuary alternative to contribute one patch to the quilt of resilient solutions in the Pacific Northwest. Visionary leadership is needed to reverse the damage of the past, and build a more hopeful and resilient future in collaboration with the natural world and our fellow human beings.


Name (ID): Douglas Ryan (I-701)

Organization (if applicable): N/A

Submission Text: I have read the Draft Capitol Lake/Deschutes Estuary Environmental Impact Statement, and I support the option for restoring the Deschutes Estuary. There are a number of reasons why I think the Estuary option is the best one: Restoring the Estuary would most effectively address the immediate environmental problems posed by the current lake, namely sediment accumulating in the
lake, low summer oxygen levels in lake water, and invasive exotic aquatic species in the lake. The Estuary restoration would cost taxpayers less in the long-run than either of the other options. By mingling salt and freshwater, the Estuary would create habitat needed by anadromous fish, like salmon and trout, both for their returning spawning runs and for the survival of rearing young fish swimming out to the ocean. By creating vital mudflat habitat, the Estuary would increase the amount of estuarine organisms that are food for important fish such as salmon. Increasing salmon would help restore other struggling Puget Sound species that depend on them for food, especially the endangered pod of southern orcas. Restoring the mile-long Deschutes Estuary, the southern-most arm of Puget Sound, would be an important step toward the goal of Washington State to bring back Puget Sound as a functioning ecosystem. Restoring the Estuary would bring back a significant spiritual and cultural ecosystem that has been revered by the indigenous people who have lived here for many centuries. I am skeptical that the other options, both of which include a lake, can effectively correct the current problems of Capitol Lake. I especially think that invasive exotic species will continue to plague any options that include a lake, and so long as invasive species are present, I doubt that recreational use will be possible, because of the high risk that water-contact recreation would pose of spreading the invasive species to other waters bodies. In summary, considering the impacts of the three options in the study, I think that best option is to restore the Deschutes Estuary as a functioning ecosystem. In many cases elsewhere, restoration of degraded ecosystems, while they may be technically possible, are often not possible because undoing the damage is too expensive. The Deschutes Estuary offers the State of Washington the truly rare opportunity to both gain the benefits of bringing back a naturally functioning ecosystem and at the same time actually save taxpayers money. Common sense says that our community can't afford to miss this unusually attractive opportunity.

Supporting Materials (if any): N/A

**Name (ID): Wendy Vance (I-702)**

**Organization (if applicable): N/A**

**Submission Text:** I think we either go with a managed lake or estuary alternative. I don't like the ugly retaining wall in the hybrid model. I am not a proponent of mudflats due to the smell, especially so close in proximity to downtown Olympia. You may need to convince citizens of that part.

My comment today is just to suggest that you consider a round-about on the new 5th Ave bridge. I don't know if you plan to have a traffic light where traffic turns left from 5th Ave on to Deschutes Parkway, but I'm curious if the rise in elevation might inadvertently create a potential for more accidents if there is no traffic light or round-about.

Supporting Materials (if any): N/A

**Name (ID): Matthew Karas (I-703)**

**Organization (if applicable): N/A**
Submission Text: I can't believe that we are still having this conversation, when the solution has been so obvious for so long. We all know that the dam would never ever be built in the current climate. Washington state policies would never allow the dam to be built, yet for some reason we are still wondering whether it should remain in place. One thing the DEIS doesn't address is - what practical function does the dam provide? While some dams provide electricity, flood-protection, or a reservoir for water, this dam provides nothing but an environmental crisis. The CLAMP process provided ample evidence on the benefits of estuary restoration, and recommended dam removal. Sadly, this study was ignored, and we find ourselves wasting millions of dollars on yet another study. As if that isn't enough, the DEIS is terribly flawed and shockingly biased. Truly, an astonishing disappointment. The conclusions are not written objectively, as an analysis of this nature should be, but are rather misconstrued by authors who clearly favor a managed Lake, or are simply resistant to change. I am confident that you are receiving ample notes from various environmental organizations that outline the myriad flaws with the DEIS. You have a lot of work to do over the next year to make the necessary corrections. You need to work harder to conduct a thorough analysis and create a document that is objective in its findings. You have failed in many areas, some so obvious that it really calls into question the integrity and competence of your team.

How did you fail to account for East Bay when Ecology's TMDL demonstrates that the dam has an even larger impact on East Bay than West? This is an astounding oversight

Expand the area to include all of Budd Inlet.

Stop comparing the reflecting pool to other lakes in the region - it is NOT A LAKE, SO YOU CAN NOT COMPARE IT TO OTHER LAKES.

The authors make audacious claims that water quality standards could be met under a managed lake alternative and work hard to minimize the improvements to water quality under the estuary alternative. The authors state that water quality is improving in the reflecting pool, despite public perception. This isn't just a subjective comment, it is a bold-faced lie that contradicts every study I have ever read on the Deschutes Watershed. There are many organizations sending detailed comments, including the non-profit that I work for - the Deschutes Estuary Restoration Team (DERT). Please take these comments seriously and do a better job. LOTT and the Olympia City Council support full estuary restoration, as do many other leaders, representatives, businesses, and community members. Let's do the right thing here, this fight is getting tired.

Supporting Materials (if any): N/A

Name (ID): Gerald Cichlar (I-704)

Organization (if applicable): N/A

Submission Text: Maintain the lake as it is. The environmental damage done decades ago by installing the dam and the subsequent loss of the tidelands/estuary is too complicated to undo and the current visual appeal would be seriously degraded by tidelands at the foot of the Capitol. Use funds to mitigate
tideland damage in other areas. The recreational and aesthetic opportunities of a lake within a city center are a unique and desirable feature for the city of Olympia.

**Supporting Materials (if any):** N/A

**Name (ID):** Gary Franklin (I-705)

**Organization (if applicable):** N/A

**Submission Text:** There are fundamental flaws in the current EIS, and the assumptions underpinning the analysis. I was the representative for the South Capitol Neighborhood Association when the earlier analysis on these issues occurred. This initial Capitol Lake Adaptive Management Plan was initially developed in 1999-2001, and contractors were engaged to address these issues by the General Administration agency in approximately 2009 with findings presented to multiple stakeholders at that time. I believe we had met for 1-2 days, with multiple notes being taken on flip charts by the contractors and GA staff. The final report on that stakeholder engagement effort can be found here: https://des.wa.gov/sites/default/files/public/documents/About/CapitolLake/21-CapitolLakeAlternativesAnalysisFinalReportJuly%20200.pdf?=21277 My impression of that process was that both the contractors for GA and the GA staff were definitely biased towards what they perceived to be an environmentally advantageous alternative—either the estuary or the hybrid. Multiple issues raised by myself and others at that time were not considered or even properly documented: 1. The historical nature of the inclusion of the Capitol lake in the original design for the State capitol campus by Wilder and White and their landscape architects the Olmstead Bros was never discussed in any detail at all. Historical archives documenting the long standing nature of the original goal of the planning of the Capitol Campus to include a reflecting pond for the capitol buildings on the bluff has received no weight in the 2009 or current analyses. This would be like taking out the reflecting pond for the Washington Monument in Washington, DC and returning the Potomac river to an estuary. Also my understanding is that the Capitol Campus is on the National Registry of Historical places (https://catalog.archives.gov/id/75613517). The request to place the Capitol campus buildings and surrounding grounds and Capitol lake was submitted in 1979. Since the Capitol Lake was part of the original design of the Capitol Campus, I believe the EIS should have analyzed the historical impact of the current alternatives, not just the environmental impacts.

2. There was not, and is not today in the current EIS, adequate assessment of recreational and place Capitol Lake for the citizens of WA State. I had recommended in the 2009 CLAMP deliberations, and reiterate now, that there should be a formal assessment via formal survey methods of the recreational use of the lake and the meaning of the lake to those who use it either regularly or who visit the lake from all over the state. Yes, there are place signs all around the lake, as there were in 2009, ‘explaining’ the alternatives. But there is no request for or emphasis on the meaning of the lake to those who use the lake. I recommended conducting a representative survey of lake users over a period of time, including all seasons, to gauge an accurate view of the lake’s use and meaning to WA citizens. This survey would cost a fraction of what was paid to the contractors on the CLAMP project in 2009. Many stakeholders would be very interested in the results of such a survey. In addition to the pleasure derived from the lake, the
draw of the Capitol Campus and the Lake has also likely benefited the economy of Olympia and environs. Again this has not been addressed at all.

3. There is another fundamental flaw in the way the alternatives are presented. There is no alternative to maintain the status quo of the lake PLUS funding ongoing dredging and perhaps other important needed work. The managed lake alternative only includes returning the middle and southern basin to estuary. There is no alternative to maintain the lake states of the entire lake and to conduct dredging as needed.

In addition to this, I believe the cost estimates in the EIS on the different alternatives dramatically overestimate the dredging costs and underestimate toe costs of the alternatives.

4. There is no assessment of what may occur from return to an estuary from odors of dead fish, or what may occur from an increase in mosquito populations potentially carrying such things as West Nile Virus. Again, some of these issues were raised in 2009, but were not documented nor carried forward to the current EIS as potential health risks.

Supporting Materials (if any): N/A

Name (ID): Paul Allen (I-706)

Organization (if applicable): N/A

Submission Text: I strongly support removal of the 5th Ave dam and restoration of the Deschutes Estuary. I have followed this project for years and the only thing that has changed is the Capitol Lake reservoir continues to fill with sediment and the water quality in the reservoir continues to degrade. Several studies clearly show that Deschutes Estuary restoration is the most economical long term solution as well as the best way to improve water quality and the habitat for salmon and other threatened endangered species. Please move forward with recommending Deschutes Estuary restoration so I can see this happen in my lifetime. More than enough time has passed. It is time to act by restoring Deschutes Estuary. I wrote the following comments in 2010. Please demonstrate the effectiveness of government by moving forward with the estuary restoration process. Dear polisci committee members, Please excuse the long post. There are several facets affecting Deschutes Estuary restoration that I discuss below. I am trying to be brief so this email jumps among several points without much segue. I have followed the CLAMP process for many years, attended many meetings and ALL the CLAMP study component presentations by the consultants directly to CLAMP and the evening public presentations that followed. I have to say the CLAMP process was the most open and inclusive public process I have witnessed. There was ample opportunity for the public to add their comments at the CLAMP meetings, regardless of validity. There were several public presentations of the Deschutes Estuary Feasibility Study (DEFS) results as each study component was completed. Formal public testimony as well as informal Q&A for the public occurred. Ninety seven percent of the people I speak to about this decision favor Deschutes Estuary restoration. I have not surveyed Ron Rants who developed the buildings by the port and farmers market. I have not surveyed the vocal minority of yacht owners or yacht salespeople who are now subsidized by WA State taxpayers via the 5th Ave. dam which, as Bob J.
mentioned, serves as a sediment trap upstream from their marinas. I personally know members of the Olympia Yacht Club (OYC) who favor Deschutes Estuary restoration. On the other hand, the OYC board is looking out for their own financial interests which lead them to favor retaining the dam. The lake is immaterial to their concerns. There are others in Olympia who favor retaining Capitol Lake reservoir purely based on their own personal aesthetic preference. Over the last few years, informal polls in the Olympian, typically among local residents, show a nearly 50:50 split lake vs. Deschutes Estuary restoration. I agree with Bob Jacobs that 10 years ago, general public opinion was more in favor of retaining Capital Lake than it is now, among OLYMPIA area residents. The reason behind this shift is a growing awareness among the general public of the huge cost of maintaining Capitol Lake reservoir as well as the worsening health of Puget Sound. Ongoing public education campaigns are a must if Puget Sound is to be protected. The general public must see the benefit of spending their tax dollars on protecting Puget Sound and the environment around them or the legislature will continue to put environmental concerns on the back burner, underfunded and under supported. We all know it will take another 5-10 years for the Deschutes Estuary restoration process to succeed. In 5-10 years, kids now aged 8-13 will be eligible to vote. Their influence may be key in affecting future legislators desire to protect Puget Sound by restoring Deschutes Estuary. This means we need a significant educational component focusing on school age youth. During our enviro lobby day meeting with Representative Kathy Haigh, D-35th, she vehemently expressed this need to educate our youth for these very reasons. It is pertinent to know that CLAMP consultants said studies show that, in general, the majority of US citizens favor protecting our environment and are willing to spend some money to do so, even if they will never visit the area they are protecting. The implication for us is that, outside of Olympia, a majority of state residents (taxpayers) will probably favor estuary restoration as the best, most economical and environmentally sound choice for the future of Capitol Campus. Deschutes Estuary restoration involves state land only. No private holdings need to be acquired to make this happen. Federally money is likely available for estuary restoration but not maintaining Capitol Lake by dredging. Federal money will act as an economic stimulus to the Olympia area as the dam is removed, a new wider, safer bridge is built across the newly reclaimed Deschutes Estuary, pedestrian walkways are enhanced, etc. As mentioned, the science is clear in that Deschutes Estuary restoration will result in significantly greater water quality, wildlife habitat, benefit for at-risk species, etc., as compared to maintaining Capitol Lake as a reservoir. It is relevant to note that Budd Inlet (the portion of South Puget Sound adjacent to Capitol Lake/5th Ave. dam), has some of the worst water quality of any of the estuaries tested in WA State based on scientific studies by Ecology. Scientific modeling indicates that Capitol Lake/5th Ave. dam causes harm to the water quality in Budd Inlet, particularly regarding dissolved oxygen. I will defer specifics to our science officer, Doug. I agree it is important to have a local organization promoting Deschutes Estuary Restoration. I am a board member of Deschutes Estuary Restoration Team (DERT) which will serve in that role. However, it is incredibly important for groups like People for Puget Sound to play a significant role promoting Deschutes Estuary restoration as part of our plan to promote restoration and protection of wetlands around Puget Sound. Ideally, a coalition of groups favoring Puget Sound restoration and protection will form to help move this process through the political arena. A few years ago, an American Rivers <http://www.americanrivers.org/> representative publicly testified on behalf of that organization in support of Deschutes Estuary restoration. They have expressed ongoing support to me. I also contacted Restore Americas Estuaries <https://www.estuaries.org/>, PugetSoundKeepers Alliance
and a few other organizations in the past, that may help garner their respective member support for this project.

**Supporting Materials (if any):** N/A

**Name (ID): Anita Thomson (I-707)**

**Organization (if applicable):** N/A

**Submission Text:** Restoring the estuary is the best alternative because it provides the best habitat for our native wildlife, an educational resource for science and history and a chance for all to witness the natural beauty of our state. What better way to frame our state capital?

**Supporting Materials (if any):** N/A

**Name (ID): David moon (I-708)**

**Organization (if applicable):** N/A

**Submission Text:** Remove the dam. Let nature take its course. Have an annual community review of status to generate recommendations.

**Supporting Materials (if any):** N/A

**Name (ID): kelsey Jenkins (I-709)**

**Organization (if applicable):** N/A

**Submission Text:** Tear down the dam and restore the site back into it's natural state. Let the salmon swim freely. Stop holding nature captive with colonizers ideals of land management. Even better yet, give the land back to the tribes.

**Supporting Materials (if any):** N/A

**Name (ID): Lisa Winiecki (I-710)**

**Organization (if applicable):** N/A

**Submission Text:** Restore Capitol Lake to its orginal beautiful state - expensive yes - but a real treasure for this city & its visitors!

**Supporting Materials (if any):** N/A

**Name (ID): Buffy Turner (I-711)**

**Organization (if applicable):** N/A
Submission Text: As an Indigenous woman and marine ecologist living in Olympia, I support removal of the dam, and restoration of a healthy, free-flowing Deschutes River. I agree that: 'Estuary habitat conditions reestablished by dam removal would result in substantial beneficial effects for salmon, other anadromous species, and marine fish. Due to historical declines, estuary habitat is a scarce and valued habitat... as compared to freshwater ponds and lakes, which remain relatively abundant' (DEIS, 4-68). 'Tribal populations would experience disproportionately adverse impacts from the managed lake alternative, raising environmental justice concerns. Removal of the 5th Ave Dam under the Estuary Alternative... would have beneficial effects for ecological, cultural, heritage, spiritual, and educational value for tribes' (DEIS, 19). 'Aquatic invasive species that are intolerant to saltwater (e.g., New Zealand mudsnail, Eurasian watermilfoil, curly pondweed) would be largely eradicated from the area with the transition from freshwater to saltwater' (4-69). When combining the costs of construction plus 30-years of management, the Estuary alternative is the most cost effective alternative, while a managed lake is the most expensive alternative by a significant margin.

However, DES and the consultant team did not speak with many state and local agencies with extensive knowledge of the project area, but instead expects the relevant agencies to respond to the DEIS. This is an inefficient and unprofessional approach. DES and the consultant team apparently did not speak with staff at the Squaxin Tribe regarding cultural resources and historic uses of the Deschutes River and Estuary. There is a lack of attention in the Executive Summary given to Tribal cultural resources such as the Steh-Chass, the indigenous name for the lower Deschutes River and estuary, the effect being to privilege the recent landscape architecture of colonial settlers over millennia of Indigenous cultural landscapes.

There appears to be significant picking and choosing of data to support an apparent outcome. For instance, the DEIS notes that Thurston County had ongoing water quality data from 2004-2014, but for purposes of the DEIS, only water quality data from 2010 to 2014 was used because there was a 'trend' in that five-year period. The DEIS acknowledges that the 'Lake' does not meet the regulatory standards for a Lake, and is therefore subject to water quality standards for rivers. Yet the DEIS repeatedly compares data from Capitol 'Lake' to other lakes in the region. Why? Similarly, water quality in Budd Inlet is compared with others in South Sound, despite the fact that none of them have a freshwater river flowing into them.

The project area includes only West Bay, ignoring the impacts of the 5th Ave Dam on East Bay and the rest of Budd Inlet. The project area must be expanded to reach Boston Harbor.

The DEIS has very little discussion of the impacts of climate change on the project area and the potential for climate change mitigation under each alternative. Estuaries are very effective at sequestering carbon and this value should be quantified in the study.

Supporting Materials (if any): N/A

Name (ID): Kristin Voth (I-712)

Organization (if applicable): N/A
Submission Text: August 28, 202 Capitol Lake Deschutes Estuary Subject: Public Comment Greetings, I have lived in Olympia Washington and been a homeowner here for almost 30 years. One of the beautiful scenes that drew me to this area was the lovely reflection of the Capitol in the lake. I have watched it become a stagnant, unusable lake that was once a place for friends, family, and visitors to come together for walking, picnics, boating, and even, at one time, swimming. Do not let the original idea of a reflecting pond, which will surely draw locals as well as tourists to the downtown area, die. That being said, the desire to return the lake, at least partially, to its original state as an estuary is environmentally sound. That is why I am in favor of the DELI concept (Dual Estuary/Lake Idea) for fixing Capitol Lake, rather than the All Lake or All Estuary options, which, based on Decision Durability in the DEIS, could most likely bring an end to the argument on both sides of this issue. It is the most reasonable compromise being offered and could satisfy the desire for the community to have a lovely fresh-water place to gather as well as the need for our eco-conscious community to see the restoration of the estuary. Please be open to this option which takes all concerns into account. Regards, Kristin Voth 434 Cushing St. NW Olympia WA 98502 {360}790-2388

Supporting Materials (if any): N/A

Name (ID): Carol Middleton (I-713)

Organization (if applicable): N/A

Submission Text: I am in support of estuary restoration. What was done in Elwa is model for what could occur in Olympia. It could create more diverse habitat with more birds, vegetation and change with tides.

Supporting Materials (if any): N/A

Name (ID): Jamie Sullivan (I-714)

Organization (if applicable): N/A

Submission Text: I am a city of Olympia resident and I live roughly 1/4 of a mile from Capitol Lake on the Deschutes Parkway side. I use Marathon Park and the Capitol Lake campus for exercise multiple times a week and I have done so for 15+ years. In the past two years, I have seen evidence of dilapidated RVs and cars draining fluids and sewage onto the sidewalk or into the lake. The amount of trash and human waste, including medical waste, around the Deschutes Parkway encampment is dangerous and unacceptable. Estuary or lake, clear the encampment and prevent overnight parking along Deschutes Parkway to uphold public access and safety and to maintain our treaty obligations to neighboring tribes who are also stakeholders.

Supporting Materials (if any): N/A

Name (ID): Williamr Fenton (I-715)

Organization (if applicable): N/A
Submission Text: I doubt my words matter, as your minds already seem made up. Although costly, I am strongly in favor of the managed lake option. The lake is a beautiful part of the downtown area.

Part of this management needs to include managing the substantial number of vagrants who seem to think it's ok to pollute the land and water of our once beautiful city. I get that folks can get down on their luck, but that in no way excuses the dirty needles, general litter, and pee/turds released into our waterways through state-owned channels. CLEAN THIS CRAP UP, REGARDLESS OF WHICH OPTION YOU CHOOSE!

Supporting Materials (if any): N/A

Name (ID): CHARLES ROSENGARD (I-716)

Organization (if applicable): N/A

Submission Text: 1st choice: Managed lake...least expensive. There are lots of other things to spend state money on (homelessness, renewable energy, etc.). 2nd choice: Hybrid: retains the visual of the lake.

Supporting Materials (if any): N/A

Name (ID): Norval Goe (I-717)

Organization (if applicable): N/A

Submission Text: Hybrid plan makes the most sense. Having a smaller pool would be much easier to maintain. Nature's tidal flushing is necessary to keep the marine basin's habit balanced.

Supporting Materials (if any): N/A

Name (ID): John Kelly (I-718)

Organization (if applicable): N/A

Submission Text: Capitol Lake should be returned to its nature as an estuary. As a recreational lake, it's a flop; as a reflecting pool for the Capitol, it's a cruel joke on the residents of the homeless encampment-it takes a special kind of cruelty to grandly present the Capitol dome's shimmering to people living under tarps. Any kind of artificial lake, either the present mudhole or the slimmed-down DELI version, impacts wildlife adversely and burdens the city with maintenance costs. An estuary would promote wildlife, largely maintain itself, and provide as many scenic and recreational opportunities as an artificial lake.

Supporting Materials (if any): N/A
Name (ID): Torren VAldex (I-719)

Organization (if applicable): N/A

Submission Text: I strongly support implementation of the estuary alternative and the removal of the dam creating Capitol Lake.

Supporting Materials (if any): N/A

Name (ID): Lisa Ceazan (I-720)

Organization (if applicable): N/A

Submission Text: My concerns regarding the alternative plan selection process:

1. The choice should take into account impacts on ALL of Budd Inlet, not just the existing lake and West Bay

2. All agencies and organizations, public and private, (e.g. DNR, the Squaxin Tribe) with relevant knowledge and experience should be consulted - this was not implemented in the DEIS and thereby limits its scope. Also, mistakes, such as including the impact of dredging for Panamax ships, need to be corrected - Port of Olympia Commissioners were taken aback when this section of the DEIS was read to them at a public hearing. They had never requested such dredging. This error calls into question the reliability of the DEIS.

3. Restoration of all fish, bird, mammal and plant species of the naturally occurring ecosystem of the Deschutes River and Estuary must be the number one priority value and goal in the selection of an alternative plan. No compromises should be made in this perilous time of mass extinctions and climate change.

4. The restoration of indigenous cultural rights must also be a top priority, over any other historical 'rights' listed in the DEIS.

5. Capitol Lake is not a natural lake and should not be evaluated as such.

6. Aesthetics are another priority. The DEIS points out how an 18' wall near Marathon Park in the Hybrid alternative plan would not harmonize with the surroundings. Being able to view the numerous and myriad wildlife that would return to a restored estuary (e.g. multiple species of birds, seals, otters, salmon) would be a boon to those who enjoy the two parks, who picnic, rest, run and walk there. It also has the potential to contribute to our local economy, because it could function as a viable tourist attraction.

7. The Estuary alternative plan is the most cost-effective. It makes sense to choose it for this reason, especially since securing funds for modifications of any sort may be challenging.

8. DoE should align itself with Washington state congressional leaders who strongly advocate for restoring and protecting Puget Sound and its ecosystems. CD-10 Rep. Marilyn Strickland co-chairs the...
Puget Sound Recovery Caucus. She and Rep. Derek Kilmer were able to get the Puget SOS Act of 2021 passed, which [taken from Rep. Strickland's website]: 'would enhance the federal government’s role and investment in Puget Sound, the nation’s largest estuary by volume, which is vital to Washington state’s identity and economic engine.' The DoE must factor in the fact that the Deschutes River and Estuary are inextricably linked to ALL of Puget Sound. This is an ecologically sound and rational approach.

**Supporting Materials (if any): N/A**

**Name (ID): Bradley Andrews (I-721)**

**Organization (if applicable): N/A**

**Submission Text:** I commend the individuals responsible for creating the draft EIS. The document is very well done, clear and thorough. After reviewing the alternatives, my first choice is the estuary option. I would also be supportive of the hybrid option. I do not support the managed lake option.

One additional comment I have that is not discussed at all in the document is that a homeless tent camp has existed now for many years along the northwest side of the lake, either within or just outside the project area. For any of these options to be successful environmentally, recreationally, and esthetically, this homeless camp must be addressed. The City needs to relocate it outside the project area, or take viable steps to provide suitable housing to the homeless so the camp does not return post project. While this issue may not rightfully be part of an EIS, it is part of the overall project success so I would like to know how the city intends to address this camp. Thank you for the opportunity to comment.

**Supporting Materials (if any): N/A**

**Name (ID): Kelli Carmony (I-722)**

**Organization (if applicable): N/A**

**Submission Text:** I am in favor of the dual Estuary/Lake Idea

**Supporting Materials (if any): N/A**

**Name (ID): Susan McRae (I-723)**

**Organization (if applicable): N/A**

**Submission Text:** I agree with the EIS that the estuary alternative would significantly improve habitat and water quality conditions, is the most cost effective alternative, and would greatly reduce or eradicate the invasive species that have plagued the lower Deschutes River basin for decades. The presence of the New Zealand mud snails is more than enough reason to reject the 'lake' alternative. It is time to remove the dam and allow the land to heal.

**Supporting Materials (if any): N/A**
Name (ID): Greg Black (I-724)

Organization (if applicable): N/A

Submission Text: I favor the hybrid alternative.

Here are my comments. From the Executive Summary page 12, 'Despite what has been perceived to be worsening conditions in Capitol Lake, monitoring data indicate that water quality conditions have actually been improving in the lake and are relatively good in terms of physical and chemical characteristics important to aquatic life.' This shows that a primary reason for an estuary (to improve water quality that violates state water standards) is not as severe as previously thought. Further I only saw a minor reference to the water quality of the Deschutes River upstream to its source from the project area. From the Executive Summary page 23 'For example, if the TMDL goal for total phosphorus in the Deschutes River is achieved, it would result in a substantive reduction in nutrients in the Project Area, which would reduce algal blooms and improve dissolved oxygen concentrations.' I understand that this is not part of the project area, but no plan or methodology to achieve the TMDL leaves out a huge factor in water quality at the mouth.

This is a major gap. Given that water quality is not the driving factor it once was, other cultural, environmental, and popular public use amenities become more prominent. I understand that tribes and others are in favor of the estuary. I understand that the estuary is likely to improve the ecological conditions at the mouth. The hybrid alternative fulfills both of those while keeping a reflecting pool for the Capitol. The additional amenities are also significant. There would be a way to walk around the lake portion increasing hiking options which would be attractive to many. It would have a relatively calm and stable water level for appropriate water craft. It would provide a new and interesting landscape view of the entire area. It would draw locals and tourists in to visit and linger. And it would eliminate flooding In Heritage Park and along Powerhouse Rd. if not also on Water St. I understand that there are springs on the east portion of the area. These could supply enough fresh water to have a continual overflow out thus keeping the lake from becoming stagnant and providing sufficient water turnover, There was no discussion of what the adaptive management plan would be. I understand that having a swimming area was specifically not considered being left up to the City. This should be part of this project and would be a most welcome amenity by many

I recognize that the hybrid may have higher construction and maintenance costs than the estuary. However the increased attractiveness of the fresh water hybrid would bring many more people to the area who would be spending their money generating an increase in taxes received which could help defray the increased costs. It would increase the vitality downtown and add to its vibrancy more than the other alternatives. The fresh water hybrid with swimming would create a new destination in the Olympia area and would likely please almost all who are interested in this project. It would add a remarkable attraction to downtown Olympia for many years to come.

Finally the separation of improving water quality in the Deschutes River, the Capitol Lake - Deschutes Estuary Long- Term Management Project, and the Olympia Sea Level Response Plan may be a way to...
manage the work. But this distinct separation creates silos in areas that overlap and therefore could have unintended adverse consequences. Please keep this in mind. Thank you for your consideration.

Supporting Materials (if any): N/A

**Name (ID): Elizabeth Filep (I-725)**

**Organization (if applicable):** N/A

**Submission Text:** I would like to see Capitol Lake returned to an Estuary so that both humans and wildlife can coexist in a future and sustainable world. Especially since PNW is growing more and more each year, and current city of Olympia has the growth mind set of build, build, build. But more building doesn't mean progress when so much is lost of the natural world, especially the loss of habitat and the canopy of trees. An estuary will allow for wildlife to return and provide birds, like the blue heron refuge. Salmon populations will thrive. And last but not least, future generations of Olympians will be able to enjoy the natural world and amazing wonder where salt and fresh water meet.

Supporting Materials (if any): N/A

**Name (ID): Michael Leierer (I-726)**

**Organization (if applicable):** N/A

**Submission Text:** I believe and Estuary is the best option. 1.) Keeping the lake is costly and will likely increase in cost over time. The lake now serves no community value other than a view of a body of water. We get that at high tide from the bay. No lake recreation is currently possible nor expected to become possible. 2.) From my understanding, creating an estuary will require dredging of the released silt. Apparently there may be funding available for that and other dredging. Dredging would be very helpful for the Port and marinas. That funding, I understand, would not be available when keeping the lake. 3.) An estuary will be a far better ecological addition for the Olympia downtown. It would provide an ever changing variety of views and provide a home for plants aquatic animals and birds. With good design a certain amount of space could allow for a few trails, scientific exploration and education.

Supporting Materials (if any): N/A

**Name (ID): Richard Hovde (I-727)**

**Organization (if applicable):** N/A

**Submission Text:** The lake was made as a reflection pool for one of the most beautiful state capitals in America. The lake used to be a place to gather and fellowship. I don't want a stinky estuary in downtown Olympia.

Supporting Materials (if any): N/A
Dear State of Washington Dept. of Enterprise Services,

I wish to comment on the Capital Lake project. I am interested in supporting the hybrid alternative with the saltwater reflecting pool. I believe that economically the state capital benefits from this public park feature, and I feel that removing the dam and allowing an estuary is of significant importance. Only the Hybrid addresses these primary concerns. The lake has been a center focal point for the area for over 70 years. Originally a park to get rid of a shanty town, it is again in a situation that without public support the area could become a sad embarrassment to the state of Washington. The proposal for the Managed Lake Alternative is just expensive. It doesn't solve any of the environmental issues with regard to historic habitat. I was in favor of creating an estuary and now I see that the hybrid option would bring me to the middle. I remember the old swim park and it was a social place. The capital lake area is well used by locals and tourists and it is important to recognize our investment in this landmark both as the state capital and as a growing community. I believe that if we fast forward twenty years we'll look back on this decision as we do on other infrastructure projects that were successful. By creating a recreational area that attracts users, we maximize the opportunity to provide the most enduring legacy rather than force the decision makers to remake this decision all over again when it becomes obvious that the Managed Lake is a problematic ecosystem. If we do not provide an estuary for Tribal restoration needs, this topic will never be addressed and will be an ongoing issue into the future of Olympia. It is important to recognize the shared nature of our natural habitat. The Hybrid Alternative has decision durability for getting our population interested in fixing the habitat shortcomings we now face. Thank you,

Laureen Brian

I'm writing to voice my support for a hybrid approach to the long-term management of the Capitol Lake - Deschutes Estuary waterbody. I believe this to be the best of the four possibilities outlined in the Draft Environmental Impact Study because of the balance it brings to the competing historical, environmental and economic interests involved. It's a solution that can ease the cultural and aesthetic differences and by doing so prove durable enough to gain the political support needed for a project of this magnitude. This hybrid approach balances diametrically opposing aesthetics that allows each side to benefit over a do nothing approach and provides a foundation for a more inclusive historical perspective by addressing some of the equity and social justice issues related to restoring the estuary while supporting the historic 1911 plans for a sustainable reflecting pool. The environmental reasons for supporting the hybrid approach with a salt water lake are based on - - the substantial benefits to fish and wildlife as per the draft Environmental Impact Study (EIS), section 4.5, the reduction of invasive species due to salt water as per EIS, section 4.4, - and the transformation of more common fresh water lands into estuarine wetlands as per EIS, section 4.6. Economically, it's - - the least expensive way to preserve the investment in the reflecting pool (construction plus long range costs, Executive Summary, pg. 21,
table ES.4), - the best option for reducing flooding (as per EIS, section 4.1), - provides additional recreational opportunities (as per EIS, section 4.8), and as per EIS, section 4.14, 'the Estuary Alternative would beneficially affect tribal populations through the cultural, heritage, spiritual, and educational value that an estuarine environment provides.' Neither the Lake or Estuary approach is likely to garner enough support to be politically viable, leaving only the do nothing option. While it's true that water quality is not diminishing according to the study, the aesthetic of the area is suffering. It's incredibly unattractive to have a body of water so infested you shouldn't touch it and the state's investment to provide a reflecting pool for the capitol is visibly at risk, giving the impression of general decay. Furthermore, any delay in construction only compounds the future impact in an area of growth. And finally, and perhaps most importantly, do nothing leaves the current issues of equity and social justice unaddressed. Instead of running away from our history we should look to embrace it by applying everything we've learned to the inclusive solution presented in the hybrid approach. In closing I'd like to recognize the work done to the options. This is a complex issue and the research and writing that was put into the executive summary made it easy to objectively compare the approaches.

Supporting Materials (if any): N/A

**Name (ID): Ronan Craft (I-730)**

Organization (if applicable): N/A

Submission Text: The Estuary plan is the right choice for the plants, animals, and people of this community. Please restore the estuary!

Supporting Materials (if any): N/A

**Name (ID): Pam Dittloff (I-731)**

Organization (if applicable): N/A

Submission Text: Please do not make this stinky mudflats.

Supporting Materials (if any): N/A

**Name (ID): Rob Penney (I-732)**

Organization (if applicable): N/A

Submission Text: Comments from NextDoor on Capital Lake / Deschutes Estuary Plans As of 8/29/21 at 10:40 AM I, Rob Penney, copy-pasted all the comments from my posting on Next Door yesterday. I replaced all names but mine with XXX and deleted all the icons and where people live and when they comments for brevity-it's still six pages. I also deleted three confusing comments in a row about making a wager-the typical silliness you get on social media. I expect/hope someone on the review time participates on NextDoor and can benefit from any additional comments later today. I'm heading out soon and wanted to get at least this much into your hands. Rob Penney Crunch time to Weigh In on
Future of Capital Lake / Estuary. We only have until Sunday night to submit comments on plans for Capital Lake. Roughly: leave it as is with more dredging to make it boatable, yank out the dam and transform it into a natural estuary, or make a hybrid with an estuary and a small reflecting pond by the capital. View the plan, which I think is extremely well researched and written, at https://capitollakedeschutesestuaryeis.org. See my attached photos of five key pages. Remember: sharing ideas on NextDoor feels productive and is a great start, but if you want to impact the future of a key feature of our town you need to actually submit comments to the state. Once the project plan is set, you may find yourself grumbling for decades every time you drive past the lake / estuary, regretting not taking the time to do what you can when you had the chance. Thanks. I remember a decade ago the directors of Ecology, Natural Resources, and Fish and Wildlife sent a joint letter strongly advocating for an estuary. That carries weight with me--these are the experts. Sure, I'll miss the look of the lake and the opportunity to paddle in the lake, but I lean toward restoring an estuary, which is the most biologically productive places for marine life and birds. Most estuaries around Puget Sound have been permanently replaced by developments, and this is a rare chance to add one back. Note that the average 30-year cost estimates for the managed lake, estuary, and hybrid options are $472M, $258M, and $374M respectively. So the estuary is the best environmental option and the cheapest by far. Thank you so much for doing your part to shaping the future of our community. Comment Thanks, Rob, for your insight! And great pics! Comment You have presented a case to contemplate comfortably. Thank you. I'll read and comment, with a beginning lean your direction. Comment Yup. Highest and best use of Capitol Lake is as an estuary. The birds, bees and fish can use it 24-7 for shelter and food naturally. Human-made water features cost more and achieve less. Comment Comment submitted. Thank you for bringing this to my attention! Comment Capitol lake is a giant storm water collection pond designed to stop downtown Olympia from flooding during winter storms when the Deschutes river is on flood stage. The Army Corp of Engineers designed it that way and that's why there's a dam with flood gates. The politicians want you to think it's only a reflecting pond. When in reality it has a real safety purpose, not just vanity. Returning to 'natural' will only allow flooding of downtown and poor control of storm water and sediment produced by the river. It's funny how this fight has gone on for over 25 years! I remember them dredging the lake and the bay in the 70's and it's long overdue! An estuary will produce nothing but a giant stinking mess, especially in the winter! Comment XXX your understanding is full of false information and flawed science. Your yacht at the OYC will be fine. Seven generations man. Set the River Free. Rob Penney I'm not a hydrology expert, but it seems the biggest impediment to avoiding flooding of downtown is the 'armoring' wall around capital lake that precludes surface water from naturally draining into the lake, but maybe there are underground pipes that facilitate that. It seems that an estuary with an enormous unimpeded connection to the bay can absorb runoff water as well or better than the lake. As for a 'king tide' flooding downtown, it seems the walls around Capital Lake will work to retain that water until it recedes. I think we're all coming up with good observations and questions, but to a certain extent we need to assume that the folks who will design this restoration project are good at what they do and will consider things like flooding in their design.(edited) Comment Thanks Rob! Comment If only it were that easy. I lived in one of the two houses on the westside with an unobstructed view of Capitol lake so I had a vested interest at the time of the study. They spent 10 years in 10 million dollars and at the last meeting and I went to it, one person raised their hand and said 'I would just like for the record even though your recommendation is for an estuary that it will greatly impact bud bay with a ton of sediment that is going to be let into the bay and the marina will no longer be able to exist' and
someone else raised their hand and said the bay was not part of this study. And at this point I was like wait..what? you spent ten years and ten million dollars and did not look at how it would affect going in to the Bay?? they said no we didn't study anything past the dam itself. At another time a gentleman came to a garage sale that we had and said that his mom had built our house and that she was the first female mayor of Olympia and before it was damned off to make it Capitol Lake it was a very muddy and smelly as he put it embarrassing for Olympia with a tendency to flood ...and then he said but a few decades go by and how quickly people forget. Anyways he said it was an embarrassment to Olympia (I think this was in the 50s??) and so the plan was to dredge it every eight to ten years and that hasn’t been done in a long long time so now it is very shallow and kind of a toxic mess. They spent the money that was set aside for dredging on the study. I appreciate you bringing this up so people are aware, I wish I had confidence in the 'study' but I do not. How could they not include the impact on the 'other side of the dam'? || never replied to anything on here as I agree it doesn't do any good to rant or Rave I guess I'm just saying I spent many hours /days/ years of my life invested in this and I do hope if people have an educated opinion that they make it known. We sold the house and moved to Mason county. Comment Thank you for sharing! This is why our communities need our elders who know and remember what happened in the past. Just because something new sounds like a good idea, doesn't make it so. It's also not surprising the government study would be limited in scope and not calculate the true consequences from this action unfortunately. Comment Hold up there XXX, Impact on the bay has been studied. Please study resorted estuaries before you continue with this false scenario. Comment XXX okay, let's talk about our elders and their voices and what happened in the past. As a sixth generation Oly Girl, from my family's stories and history, the best darn thing that can happen is to restore the estuary. I'm also an oral historian and archivist; it's time we finally hear what the local tribal elders had to say about restoring the estuary. Their voices have at least equal weight in the decision. Or are yacht club priorities and mis-perceived property value concerns really more important? Comment XXX Animosity is not needed. What are the impacts of invasive species spreading into the bay if it's returned to an estuary? What was the smell prior to it being damned to assist to prevent flooding? What damage will occur if returned to an estuary that appears cheap now that may have greater costs in the future? The fact is that there is institutional knowledge that yes, elders, older, wiser, citizens have more understanding for the reasons why the lake exists. That should be considered and I'm glad to get a better understanding of how the area has evolved. Trying to return to what it originally was pre-civilization is not always realistic as clearly there are people, families, business, property, the bay that can all be impacted. I'm glad for people who can share their messages for people to weigh and measure information instead of attacking others. Comment People lived on the mud flats in our past history before the lake. Rob Penney You and others are quite right that a study that didn't analyze the downstream impacts of the project is incomplete. However, this study did include that, and the costs in the study that | summarized reflects the varying cost of dredging the bay for each scenario to maintain it for ships at the port as well as recreation boaters. Rob Penney appreciate the wisdom of the elders being brought into the conversation. A lot of my focus for the last ten years had been assessments of new and emerging technologies, but it's important to consider the long-range and historical perspectives. XXX mentioned hearing the perspectives of the tribes. I would really like to read those if someone has a link. This was their land originally and I think it's important to remember and respect that. Regarding the possible smell of the estuary, I've walked around the Billy Frank Jr. Nisqually Wildlife Refuge many times since it was restored to an estuary and was never bothered by any offensive smell. What about others? Comment Do what best for the environment and the salmon. The rest of us
will have to just come along Comment I'm a big salmon fan, but read the State's report. None of the three options will change salmon habitat. The whole lake salmon habitat is man-made, there was never a natural salmon run. Salmon can jump four feet, but not 12, the falls stopped them until the fish ladder was installed about 100 years ago. In no way shape or form will the lake be 'natural' again since it is surrounded by city and freeway. This is just a way for the state to renege on their promise to maintain the lake. Nothing more. Comment XXX, you are believing / perpetuating false history and science to condone the dam. I have relatives that documented a salmon run in the mid 1800s. The proof is there. Comment XXX Are you saying that salmon can leap 12 feet over the falls? That the fish ladder wasn't man made? Free the river sounds good but the river has always dumped into what was a tide flat. If you want a downtown tide flat again perhaps we can address why the state built the dam in the first place. It was flooding and the stink. A quick visit to Mud Bay explains a lot. Why is there no one living there? Could it be the smell? The King Tides flooding the area? Don't get me wrong, I believe your opinion will prevail, Not because of the science, but because it is the cheap alternative to maintaining the lake for boating and fishing. GA has wanted to dump the lake on the city for a long time. Please be specific. Comment XXX you're such a Californian story teller! You're the one spreading lies! You have relatives who fished the Deschutes in the mid 1800's? I call BS!! Comment XXX I don't know what to make of your comment. No, I'm not from California, although I don't know how that is relevant, and I never claimed to have fished the Deschutes in the 1800s. My grandfather and father fished the rivers in Kitsap if that is important somehow. It's fine for you to call BS, but on what? Comment Set The River Free!! Comment Great Idea Lets do this! Comment I like the idea of making it a natural estuary. A reporter with The Olympian wrote about it a couple weeks ago. I emailed him and asked for further info on his statement that the 5th Avenue bridge would be removed when the dam is dismantled. He has not responded after 2 weeks. Can anyone expound on this? Rob Penney I've read nothing about the bridge being removed, and I'm sure they'd never consider that. The report says it will just be a wide connection to the bay, as in the full width of the bridge rather than the tiny little dam. Comment Please visit Mud Bay. That is what an estuary looks and smells like. Is that what you want downtown? It's natural, I'll give you that. Comment By the way, before the pioneers over-logged the southern Salish Sea, Mud Bay, or Squa-ait|Cove, was sandy, not muddy. It has never fully recovered. Comment Nisqually was turned back into an estuary Comment It sure has and it's great for wildlife, but would you want the Nisqually delta in your city? Comment I grew up with pulp mills. It wouldn't bother me much. Comment I voted for the managed lake. Having mud flats in the middle of Oly doesn't appeal to me. I think if it becomes an estuary that people will regret it after not too long. Comment Time to give back to nature, instead of continually taking. I'm 110% in agreement of turning it into an estuary. Comment I am for the upper lake becoming an estuary and the lower lake to continue being a managed and dredged lake. The lake acts as a flood management tool and protects the use of our Port. The lack of planning on the impact to the Port and shipping channel is so concerning. This isn't about folks taking out their big boat. This is about blocking the ship channel and port facilities to all. Rob Penney I just want to remind everybody again to not just participate on Next Door and not share comments with the state at comment@CapitolLakeDeschutesEstuaryEIS.org. Thank you!

Name (ID): sandia Slaby (I-733)

Organization (if applicable): N/A

Submission Text: Thank you for your work on this project/issue. I think it must be obvious, if politics and personal opinion be taken out of the decision, that returning the Deschutes estuary to our planet, to our State, and to the Puget Sound is the right thing to do. I personally think it is the best thing for Olympia, as well. Please take/support that course of action. I have not studied the options of the different 'shoreline' plans to understand which is best, but removing the dam and moving in the direction of allowing the estuary to return makes sense.

Supporting Materials (if any): N/A

Name (ID): Charlotte Persons (I-734)

Organization (if applicable): N/A

Submission Text: Dear DES staff and other contributors to the DEIS: Thank you for your considerable work on preparing the DEIS, and for the opportunity to comment on it. I prefer the Estuary Alternative because it: *restores the estuary for fish and other marine habitat; *eliminates most problems with non-native invasive species, water quality, and potential flooding of the existing Capitol Lake and the proposed Managed Lake alternative; *honors the spiritual connection and historic rights of the Squaxin Island Tribe; *will in the end be an attractive natural addition to Olympia's waterfront area for both visitors and tourists. *will be the least expensive and most sustainable alternative over time;

However, the current plan in the DEIS would open the dam and allow the river to flow in 15 to 16 years! Native salmon runs are almost non-existent now, and it is doubtful that any will remain by then. I urge you to rewrite the construction plan described in the DEIS to: *fast track the FEIS and permitting; *create a construction plan that speeds up opening the dam. Among many possibilities are: -unless the newly flowing river will endanger Deschutes Parkway, move that road and improve its intersection with 5th Ave. AFTER the dam is opened -remove dredge spoils off site instead of using them to build artificial habitat that over time might be moved away along with other sediments -use no coffer dam or a coffer dam that allows the river to flow freely during the rebuilding of the 5th Ave. bridge -add the amenities -- pedestrian bridge, boardwalks, fishing dock, boat launch and decontamination station, and so on -- AFTER the dam is breached. This will require more funding than the current DEIS construction plan for the Estuary alternative. I suggest that the state legislature and governor will be willing to allocate extra funds to save native salmon runs at the very foot of the Capitol Campus. Another source is tribes and foundations -- they have been instrumental in saving other fish-habitat created by removing dams in Washington State. I urge you to choose the Estuary Alternative AND to explore every avenue to speed up opening the dam as soon as possible. Please work to breach the dam and restore the river estuary in 6 years, not 16!

Supporting Materials (if any): N/A
Name (ID): Brookelle Riley (I-735)

Organization (if applicable): N/A

Submission Text: To whom it may concern, I am writing today to Voice my alignment with the decision to do the DELI. It seems like a great opportunity to unite two sides of opposing forces into one cohesive solution, that would benefits not only the environment and our natural land but the community at large. The swimable lake would also be a huge resource for families and communities alike! I hope this support is taken with value.

Supporting Materials (if any): N/A

Name (ID): Brookelle Riley (I-736)

Organization (if applicable): N/A

Submission Text: I'm writing today to express support for the Dual Estuary Lake Idea for the freshwater lake. It is a great idea that would greatly be if it our society!!

Supporting Materials (if any): N/A

Name (ID): Amy Troyer-Karas (I-737)

Organization (if applicable): N/A

Submission Text: I first want to acknowledge that the land and water in question is the traditional territory of the Steh-Chass people, of the Squaxin Island Tribe, and also pay respect to Medicine Creek Treaty Tribes, the Nisqually and Chehalis people who have stewarded these lands and waters for thousands of years. I strongly support the restoration of an estuary and the removal of the 5th Ave dam. As we continue to experience impacts of climate crisis in our region, from wildfire smoke to declining salmon runs, it is more clear than ever that we must make dramatic efforts to reverse the short-sighted decisions of the past to restore vital habitat and ecology in our community. Estuaries are beautiful, rich and vibrant. Capitol 'lake' is not. Its creation was an act of environmental injustice, displacing poor and Indigenous peoples who depended on the wild foods provided by the estuary habitat. To keep it in place further perpetuates this injustice in prioritizing an increasingly toxic, inert reflecting pool for the Capitol Building over the health and well-being of salmon and other wildlife species culturally significant to First Peoples in this region. Beyond these compelling reasons, the estuary alternative is the least expensive option by a wide margin. Please act now to restore vital habitat and ecology and right the wrongs of the past, to ensure that future generations do not continue to bear the burden of correcting our mistakes.

Supporting Materials (if any): N/A

Name (ID): Edward Whitesell (I-738)

Organization (if applicable): N/A
**Submission Text:** I have reviewed your June 2021 Draft Environmental Impact Statement for the long-term management of Capitol Lake and the lower Deschutes River, and I would like to offer some brief comments. I am a 70-year-old homeowner in West Olympia, where I have lived for 23 years. My wife and I have enjoyed countless walks over the years, from our home to Capitol Lake, around it, and back home again. We have seen many changes with the seasons and the tides and have enjoyed many community gatherings around the lake. My wife grew up in Olympia and has fond memories of the lake's early years when it was clean and open to the public. One might think that a couple like us would be eager to see that Capitol Lake be retained, cleaned up, and re-opened for public use, given our close association with the lake over the years. On the contrary, we are eager to see the Deschutes River Estuary restored. Each time we walk around the lake we are filled with a mixture of reactions to the beauty of the setting juxtaposed with the ugliness of the water pollution and in the summer - the vast mats of blue-green algae and, sometimes, dead fish. This is not what we want for our community, and neither is it what we would expect to see below Washington's Capitol Dome. Having lived in southeast Alaska, I know what healthy estuaries are like and, by contrast, how rare they have become in Washington. I miss Alaska's tidal wetlands, teeming with fish, game, and avian life, and I wish the same for my own community. As your detailed study shows, it would be both expensive and environmentally disadvantageous to attempt to restore and maintain a lake environment by continuing to dam the mouth of the Deschutes River. The most sensible alternative is the estuary alternative.

It is also critical that the Department of Enterprise Services and the citizens of Olympia respect the wishes of the Native Peoples who are the traditional users and managers of the Deschutes Estuary. I appreciate your close collaboration with the Tribes, and I know you are aware of their strong support for the estuary alternative. The recommendations and positions of the Tribes should not be considered those of just one more 'stakeholder,' of equal importance to those of any other stakeholder. The Capitol Lake dam and I were both born in 1951. I would like to think that my own life span will be longer than that of the dam, so that I might see the restoration with my own eyes. But that is not the point of my comments in this letter. My point is that I fervently hope that future generations will enjoy the environmental, cultural, economic, and public benefits of the Deschutes Estuary for evermore. Thank you for considering my views.

**Supporting Materials (if any):** N/A

**Name (ID):** Philip Goff (I-739)

**Organization (if applicable):** N/A

**Submission Text:** I recommend keeping the lake option. Downtown has so much potential, and the full lake option is the best option to help make downtown nice. The partial or full estuary option would an eyesore (I recommend looking at the area on MudBay Road at low tide to see what it would look like). As it is, we avoid downtown because of the open drug use and unsafe feeling. The lake option is the best option to improve downtown.

**Supporting Materials (if any):** N/A
Name (ID): Philip Goff (I-740)

Organization (if applicable): N/A

Submission Text: I feel Figure 2.2.4 on page 2-12 of the EIS is misleading. The image and description paint a nice-looking picture of the estuary. But this is at 'mean' tide when there is plenty of water. There should be a drawing at low tide, when the area would be mud, like Mud Bay Road. This would give your readers a more balanced view. Thank you.

Supporting Materials (if any): N/A

Name (ID): Kevin Maltz (I-741)

Organization (if applicable): N/A

Submission Text: I like the idea of the hybrid plan (Dual Lake / Estuary Idea. It is a great compromise between the lake and the estuary proposals. I really like the idea of a place to swim downtown too.

Supporting Materials (if any): N/A

Name (ID): Mark Keith (I-742)

Organization (if applicable): N/A

Submission Text: It's time to upgrade...Remove the dam and make it natural

Supporting Materials (if any): N/A

Name (ID): Michael Smith (I-743)

Organization (if applicable): N/A

Submission Text: Please resume managing the upper and lower basins of Capitol Lake dredging for depth the maintain and remove the accumulation of river sediment. Maintain the Lake as a lake. Dredge it ASAP!!

Supporting Materials (if any): N/A

Name (ID): Sue Danver (I-744)

Organization (if applicable): N/A

Submission Text: Support the Estuary Alternative. Seventy-five percent of river delta tidal wetlands in Puget Sound have been degraded or lost. The Puget Sound Partnership's goal of restoring estuaries by 2020 was reached by only 20%. Restoration of the Nisqually estuary was presumed to be upwards of 80% of that figure. The Deschutes delta has lost 51% of its shoreline length to development. A restored
Deschutes estuary will re-establish a functional, resilient estuary and increase habitat for seabirds, shorebirds, salmon, shellfish, and marine life. The visual benefits to the city and its residents and tourists of a healthy estuary once again, will have long-term economic gains for Olympia. The Estuary Alternative has significant beneficial effects of restoration for tribes - ecological, cultural, heritage, spiritual, and educational.

Suggestions regarding the Estuary Alternative and its implementation: I would like to see the Deschutes/Capitol Lake project developed in a landscape context since the functioning of the system is dependent on what happens upstream and throughout South Puget Sound. Natural communities of wetland, sea, wading and shorebirds and other animals are associated with its habitats, from wetlands and riparian forests to nearby communities, farmlands and working lands. By restoring historical habitat, the estuary will provide a safety factor for rearing fish. Conversion to an estuary would substantially benefit anadromous fish. Mudflats are teeming with life. There will be a shift in avifauna and wildlife, but there won't be any overall loss. Three major steps are necessary to restore the historic estuary, e.g. both the west and east parts of Budd Inlet - cleaning up toxic sediment, removing non-point pollution from stormwater and leaky septic systems, and restoring wat input from historical tributaries. The value of wetlands, rivers, marshes, tideflats, and uplands as ecosystem services is reduced when contaminants are present in habitats or water (page 3-139, 3.14.5). The project described in the DEIS is an opportunity to clean up non-point pollution from 50 water outfalls into Capitol Lake and to ensure the federal government cleans up sediments with dioxins and PAHs in west Budd Inlet before new sediments are delivered by the free-flowing Deschutes River (see explanation below). These projects are a necessary first step. However, to restore the historic Deschutes estuary, the FEIS must include a plan to remove toxic sediments from the entire delta, to focus current programs to cleanup septic tanks and stormwater on developments along all its shores, and to daylight and restore water volume to its tributaries. Consider restoring Moxlie Creek to have inflow to East Bay and reconnect upstream for salmon use again. Connection with historical tributaries is critical in returning length to the shorelines. The Deschutes delta historically had a shoreline of roughly 11 miles; it now has a current length of about 5.6 miles, as many delta tributaries have been lost. Restoration would mean the Deschutes estuary would, once again, be the next largest in South Sound. No longer will migratory salmon fry have to travel a long way to find habitat when they leave the Nisqually estuary.

Estuary Alternative. We urge Department of Enterprise Services, parties that serve on the Work Groups, and Washington State agencies to expand the scope and continue the momentum of the Deschutes Estuary/Capitol Lake project as described in the DEIS.

Modeling Model the settling and accretion of sediment throughout the three basins of Capitol Lake, West Budd Inlet and beyond. Expand the current northern border of the project area to include the entirety of Budd Inlet. Hydrodynamic and sediment transport models, along with historic maps, help determine where flow conditions would re-create existing tidal sloughs from transported sediments. Popular birding destinations, sloughs are braided channels where tidal saltwater and freshwater mix in estuaries. River sloughs form in old river channels. Sloughs act as buffers from waves and weather events, and as protective habitats for juvenile salmon, other young fish, and marine species. Sloughs also serve key functions in pollution control. Once cleanup is assessed and accomplished, sloughs could
be established in East Bay to aid in its restoration. Modeling can determine where sediments could accrete. 2. Good modeling of the historic estuary will create also more certainty for many kinds of planning: for the initial and periodic dredging of the Deschutes Estuary and siting its new amenities; for Budd Inlet's shoreline buildings, parks, boat launches, docks, and roads; and for the frequency and extent of dredging Budd Inlet, whether for private and public marinas or for the Port of Olympia's marine channel and turnaround basin.

Sediment contaminants Contaminants must be removed before the dam is removed. Low levels of chemical exceedances in contaminated sediments can become cumulative over time. Sediment contaminants must be removed from West Bay and all exceedances before the dam is removed. Does this statement "West Bay sediments would be "the clean sediment deposited from the Deschutes River, rather than the existing West Bay sediment" (page 2-23) presume the federal government/DMMP will have removed contaminants from existing sediment before dredging? This statement about federal regulations pertaining to West Bay contaminants must come earlier in the DEIS: "...this [West Bay] sediment contamination is expected to be addressed through a separate regulatory process before long-term operation of the selected alternative" (page 4-154). Instead, it must say “before the dam is breached.” Clarify the potential conflict on page 4-150 to match this information. Create a timeline with the federal government/DMMP to ensure they conduct their regulatory sediment removal process before the dam is removed. Add the timeline to this project as well, and list timeline dates in the FEIS.

Dredging Please be mindful of human effects of long-term maintenance dredging on Budd Inlet's marine environment. Spot dredging for sediment placement during restoration should have no major effects. The Port of Olympia marine channel/turning basin must be maintained. However, the risk of sediment quality degradation from recurring maintenance dredging throughout the project area is not necessarily low (page 4-150). Dredged sediment quality loses its capacity to hold dissolved oxygen (DO). During dredging, organic material (aquatic plants and planktonic algae) in bottom sediments is resuspended. Oxygen is lost to the air, causing significant reductions in the DO concentration in a tidal waterway. When bottom waters do not flush into surrounding waters, oxygen is used up in the bottom sediments when bacteria eat excess organic material. Low DO levels can affect migration and spawning for salmon, reducing hatching success and causing direct mortality to adult and juvenile salmon. Dredging impacts marine organisms by degrading their habitat, introducing noise, and remobilizing contaminants. It creates sedimentation issues including increases in suspended sediment, where invertebrates, eggs, and larvae are most vulnerable. High turbidity levels from suspended sediments cause waterways to fill in faster.

Marinas Dredging for shoaling and navigation is known to reduce DO levels, aside from creating turbidity and destroying vegetation and marine life. The Sediment Management Standards and Water Quality Standards do not consider habitat issues. In the case of private marinas, dredging will not promote natural system recovery. Shoaling means vessel-generated waves cause boats to erode the banks and seabed, removing substantial amounts of sediments, aquatic plants, and marine life. Low DO would be enhanced without dredging or shoaling. All three West Bay marinas experience shoaling and/or sediment accumulation to some extent (page 3-15).
Consider moving marinas to a location where dredging is not required. Consider limiting or moving private and public boating and marina facilities away from the tidal zone and east Budd Inlet, thus removing some of the need to maintenance dredge. Habitat to support estuarine functions could then be established, to the benefit of all citizens, particularly in the tidal/freshwater mixing area at the breached dam and at East Bay. Does maintenance dredging due to private boat mooring preclude the possibility of sloughs in East Bay?

Water pollutants Use the construction project to restore the water quality of Budd Inlet, which is more contaminated than most other Puget Sound estuaries. The current construction plan for the Estuary alternative will simply replace the approximately 50 stormwater outfall pipes along the shore with pipes made of a material that will not corrode in saline water. However, these outflows are known sources of “non-point” pollution from tire residues, vehicle oil leaks, lawn pesticides and fertilizers, and a host of other pollutants. The perfect opportunity to monitor stormwater pollutants is when the outflow pipes are dug up and exposed. The pipes can then be directed to move stormwater into underground retention facilities that will clean the stormwater before it flows into the Deschutes Estuary. Restoring a clean Deschutes estuary would be a tremendous net ecological gain for Puget Sound estuaries.

Bat Habitat Please document the “severe” impact to bats with conversion of Capitol Lake to an estuary. One bat species is a state Species of Concern, but not state-or federal-listed. Is there best available science/data supporting the loss of Capitol Lake as a ‘severe impact” to bats? BHAS supports the protection of bats in their natural habitats and encourages the protection of freshwater wetlands, but not in converted historic estuaries. Acquisition can steer the plan’s freshwater direction for the Estuary Alternative. Work with Capitol Land Trust to acquire restorable lands along the Deschutes River or closer to Woodard Bay.

Construction Breach the dam earlier in the process to help conserve salmon. Estuarine habitat loss is one of the greatest threats to native salmon runs. The current construction plan for the Deschutes Estuary alternative involves 2 to 3 years on the FEIS and 5 years on permitting. At the very end of the 7 to 8 year construction period, the construction plan will release the dam and let the Deschutes River flow freely. Under the proposed plan, assuming no delays, the dam will actually be opened 15 to 16 years from now! To speed up the end goal of opening the 5-Avenue dam, we urge fast-tracking of the FEIS and permitting process. Modeling of shore accretion and other changes, including changes to East Bay, can begin as soon as the Estuary alternative is chosen. Similarly, permitting of some construction pieces can begin before the FEIS is completed. All of the permitting can be expedited - similar to emergency bridge repairs. Permitting must be more clearly defined in the EIS. The statement “management activities to maintain water quality and ecological functions would be defined during permitting.” (page 2-53) is vague. Describe the levels of permitting involved for these activities. Describe how management activities would be defined in the permitting process, particularly since it has been shown time and time again that no net loss of wetland ecological functions, applied during permitting, has not been achieved. To speed up the process of dam release and removal, the first step before the estuary construction project begins must not be moving and extending Deschutes Parkway. Instead, consider moving and extending Deschutes Parkway after Capitol Lake is dredged, outfalls are secured, and the dam is breached. It is not clear from the DEIS whether
increased water flow from the un-dammed Deschutes River will require moving Deschutes Parkway. The current intersection of Deschutes Parkway SW and Olympia Avenue SW is certainly not ideal, and we applaud the desire to improve it. Yet if the Deschutes Parkway will not be at risk, consider moving and extending the parkway to improve the intersection after the dam is breached. Revise the construction plan to open the dam as soon as the three basins of Capitol Lake are dredged to create a channel. Building the 5-Avenue bridge can be done without a coffer dam, or with a coffer dam that allows the river to flow freely or almost completely freely. The amenities - 5-Ave. pedestrian bridge, fishing dock, boardwalk, boat launch and decontamination station - can be added after the river is flowing. * Speed up the construction process by removing the dredge spoils off-site from Capitol Lake instead of using them to create habitat. Creating artificial habitat such as islands and artificial shores with the dredge spoils may not be feasible if New Zealand mud snails and pollutants are too numerous. Artificial islands or shores may simply disappear if not modeled accurately. Over the years, the river will ebb and flow with high and low tides and droughts and floods. Very likely these artificial “habitats” will be moved around, just like other sediments. Instead, with native plantings along the shores to support the system, let the river create its own shoreline habitat.

While BHAS emphatically prefers the Estuary Alternative, we would like to comment on some problems with the description of the Managed Lake Alternative. The EIS must provide comparisons to other dammed lowland river impoundments, not lakes. Regarding flooding: we can't step back to the historical floodplain, but we can get closer with mitigative actions. Consider any potential overflow channels, or natural processes (as in Percival Creek), and enhancements needed to increase flow frequency, to create small ephemeral (from rain runoff) wet meadows upstream. An adaptive management plan with monitoring for invasive species will probably be needed in the Habitat Enhancement Plan.

Delete the sentence on page 12: “Perceptions of poor water quality and worsening conditions in Capitol Lake are likely based on the impaired aesthetics from aquatic plant growth and the ongoing restrictions on recreational use, rather than water chemistry.” Impaired aesthetics is a subjective term, and perceptions must be left to public comment. The next sentence “However, recent monitoring data indicate that water quality in Capitol Lake is relatively good.” Relative to what? Other impoundments? Freshwater impoundments are not directly comparable to saltwater habitats. Capitol Lake's water quality is only as good as what comes out of the outfalls.

Stepping back, the EIS should consider the integrity of the lower Deschutes Watershed and Budd Inlet ecosystems as an active estuary for future generations. Please keep this perspective as my comments.


Name (ID): Jonathan M Rily (I-745)

Organization (if applicable): N/A

Submission Text: Destroy the dam. I know it’s not the same, but what they did with nisqually is perfect.
Supporting Materials (if any): N/A

Name (ID): Justin Rose (I-746)

Organization (if applicable): N/A

Submission Text: I'm not sure what study is being looked at but the debate on dams and how they affect wildlife is and easy one. Remove the Capitol Lake dam, drain the lake and re-establish the natural flow to Puget Sound. Capitol Lake was created to boost the ego and vanity of man. Let Mother Nature have it back. Cheers

Supporting Materials (if any): N/A

Name (ID): Mike Dice (I-747)

Organization (if applicable): N/A

Submission Text: You don't need a reflecting pond. Geez! Let it go back to nature. If it goes back to a natural state you can then integrate unobtrusive nature trails or viewing areas for people to enjoy if they want to. If people want to swim they can swim in any one of the many other lakes in the area. I was born in Olympia and grew up there in the 70s and 80s. Could not use the lake for anything during that time.

Supporting Materials (if any): N/A

Name (ID): Carole Bark (I-748)

Organization (if applicable): N/A

Submission Text: Managing the algae, milfoil, and other problematic plant life and shoreline management, along with muck eating microbes will vastly decrease the numbers of snails and improve water quality.

Submission Text: Keep the dam and work with what is already there.

Supporting Materials (if any): N/A

Name (ID): Earl Strausbaugh (I-749)

Organization (if applicable): N/A

Submission Text: Please remove the dam and restore the estuary. This land was here before us and we need to be less impactful or there will soon be nothing left. Salmon, orcas, etc. We have ruined nature's balance with greed and ignorance. Please remove the dam. I'll provide free labor.

Supporting Materials (if any): N/A
Name (ID): Andrea Wilbur-sigo (I-750)

Organization (if applicable): N/A

Submission Text: I’d like to see the damn removed and follow the tribes lead at fixing the lake to clean up the area And make it more environmentally appropriate please let’s take care of our environment together

Supporting Materials (if any): N/A

Name (ID): Barbara Carry (I-751)

Organization (if applicable): N/A

Submission Text: Thank you for considering my comments on the June 2021 Capitol Lake-Deschutes Estuary Long-term Management Project Draft Els. I am a retired hydrogeologist with the Washington State Department of Ecology and have experience in water quality monitoring and analysis. My comments fall into two main categories: 1) issues with the water quality analysis for Capitol Lake and 2) my opinion, based on the information available, that the estuary is the best alternative.

Supporting Materials (if any): N/A

Name (ID): Barbara Carry (I-751)

Organization (if applicable): N/A

Submission Text: Here are my comments on the water quality analysis for Capitol Lake from Attachment 7. The data used to determine that water quality has improved in Capitol Lake for 2004-2014 from Thurston County are not presented in the report, nor is there a reference that a reader could consult. The Quality Assurance and Quality Control methods and results for the 2004-2014 monitoring data are also not presented. Without verification of the data and methods used for the 2004-2014 monitoring, we cannot know that the conclusion that water quality has improved is accurate. An outside objective peer review of the analytical aspects of the report is needed to verify the methods, data, and conclusions of the report.

The report indicates that two stations in the lake were sampled in 2004-2014. Were these sample sites combined for trend analysis or were the two sites analyzed separately? The method for treating the data for analysis should be specified.

Appendix D of Attachment 7 shows Kendall Tau results, but it is not clear which location each graph represents (there are more than one graph for each parameter). It would be helpful to label the graphs with the sample location.

Although significant trends for water quality parameters are listed in the Water Quality Section of the report, the actual changes are not shown. A comparison of actual values would help give perspective to
the degree of change, i.e., annual means or medians in a table or graph. Alongside significant water quality improvements, there was significant water quality deterioration in conductivity in the data considered as a whole and summer. Likewise dissolved oxygen decreased significantly in the fall at the surface, when salmon are moving up the river.

Anomalous lake conditions during the 2019 data collection due to the spill and cleanup of the Deschutes River may have introduced an unknown bias on results. Besides that, year to year variation can be enormous so that one year of data is not sufficient for making weighty management decisions. Basing major conclusions about nitrogen loss between the river and the lake, and resulting impacts on Budd Inlet, on data collected only in 2019 is not reliable. The conclusion that the 2019 data indicate that removing the dam would increase nitrogen input to Budd Inlet (Attachment 7, p. 4-41) conflicts with the WA Department of Ecology analysis, which received thorough peer review, and indicated improvement in Budd Inlet with dam removal. Again, outside peer review of the technical aspects of the report are warranted.

Reasons for choosing the estuary alternative. Constructing the dam and lake, while an act of civic pride by our predecessors, has caused great damage to the ecosystem, including salmon and other fish and shellfish. The No Action or Managed Lake alternatives are especially irresponsible with the knowledge that the water body does not meet the state regulatory definition of a lake with a water retention time of only 0.6-7.9 days for less since more sediment has accumulated. The current or managed water body that isn’t really a lake is an incubator for algae and aquatic plants that deplete oxygen from the water and raise the temperature of the water-two of the major stressors for salmon and other fish. As the DEIS reports, dissolved oxygen levels are measured during the day, when plants are producing oxygen. Oxygen levels decrease tremendously at night and by early morning can be quite low. Unfortunately, fish need oxygen 24 hours/day. The hybrid option is also not a responsible choice. Both the salt water and fresh water reflecting ponds would have poor water quality at best and require intensive management, including treatment with a coagulant to remove excess phosphorus to attempt to control algae growth, according to the DEIS. As a community, it is our responsibility to act more humbly than our predecessors and try to rectify the damage that has been done to the Deschutes Estuary before the salmon runs and other wildlife are completely ruined.

Supporting Materials (if any): N/A

Name (ID): Dale Armstrong (I-752)

Organization (if applicable): N/A

Submission Text: I appreciate the efforts made to insure the decision on Capitol Lake be made with science. However, I am a physician and I must take issue with some of the conclusions made by the report. I will state from the onset, I firmly believe the ‘Lake’ was a mistake in the first place. I put lake in quotation marks because it isn’t really a lake. We just put a dam at one end of the river and slowed it down a bit. Let us take an example of how well the Nisqually Estuary is functioning and try to replicate that. People and nature are both able to enjoy the benefits. I am sure if we asked the salmon, they would definitely take issue with the study and support a return of the river meeting the ocean to its natural
habitat!!!! Please don't allow fancy numbers and data to interfere with common sense!!!! It has had to be dredged at least twice because of sediment filling. The Estuary would solve that dilemma on its own. Sometimes we just have to admit that we cannot improve on Mother Nature!!! Let Capitol Lake return to its natural splendor as an estuary!!

Supporting Materials (if any): N/A

Name (ID): Malorie Kennedy (I-753)

Organization (if applicable): N/A

Submission Text: This land belongs to First Nations people and it should have never been up to us to put a dam in. Restore the estuary to mend broken treaties and bring some natural beauty back to the downtown area.

Supporting Materials (if any): N/A

Name (ID): Joseph Johnson (I-754)

Organization (if applicable): N/A

Submission Text: I strongly recommend preserving the entire Capitol Lake and continue dredging on a periodic basis. It should be a decision at the State level, not the city, due to the extraordinary impact on the beauty of the Washington's capital city. There are many reasons to preserve the entire lake, and it is worth the resources to do so. I live within blocks of the lake and my family and I walk there often. I am an avid outdoors person and environmentalist, and I respect the good intentions of the alternative solutions, but the other solutions will create an eyesore and diminished beauty compared to the current setting.

The current large freshwater lake is another important habitat for migrating waterfowl. Salmon are able to easily migrate in the current system.

What are the negative results and costs of the alternatives? For example, will draining area result in low tide putrid smells, impacting downtown businesses?

In developing the current lake, Olympia's earlier planners developed a world class lake, enjoyed by all, citizens and visitors alike - don't ruin it. Preserve the entire lake for the sake of future generations.

Supporting Materials (if any): N/A

Name (ID): Guy Winkelman (I-755)

Organization (if applicable): N/A

Submission Text: Before my father passed away he stated to me 'you better hope they Don't return that lake to an estuary! as growing up in Olympia before they installed the damn was so nasty as the
smell at low tide was unbearable throughout the area.’ As a lifelong resident of Olympia myself and the fond memories of swimming in the lake when they had the dock and recreation system in place for swimming and recreation and having worked in facilities for GA and Enterprise Services I am acutely aware of the issues confronting Capitol Lake, the river, the Basin and Bud Inlet et al. Personally I think we should dredge the lake and leave the damn in place take the dredge material via railroad (activate old line) dry it out in eastern WA to kill all the snails, etc. and use the clean material as compost and soil supplement for the farmers.

Supporting Materials (if any): N/A

Name (ID): Mary Condon (I-756)

Organization (if applicable): N/A

Submission Text: I support returning Capitol Lake to a natural estuary. I have lived in Olympia for over 30 years, and this issue has been discussed since the 1990s if not longer. It's time to return the area to it's natural state NOW.

Supporting Materials (if any): N/A

Name (ID): Lisa Dias (I-757)

Organization (if applicable): N/A

Submission Text: Please dredge and keep Capitol lake, a lake.

Supporting Materials (if any): N/A

Name (ID): Nancy Stevenson (I-758)

Organization (if applicable): N/A

Submission Text: I appreciate the opportunity to comment on the Draft EIS for Capitol Lake/ Deschutes Estuary. I provide my comments and questions for consideration as the final EIS is prepared and a preferred Alternative is chosen. 1. Removing the 5th Ave Dam is necessary to restore tidal flows and improve ecological functions of the Deschutes Estuary. It's clear that removing the dam is necessary to restore and improve the natural wetland habitat and overall ecological functioning of the Deschutes Estuary. Both the Estuary and Hybrid Alternatives take this action and achieve this purpose. Both options are less expensive than the Managed lake.

2. Should a small lake/ reflection pond be retained? There is something special about the tranquility...the reflective beauty of Capitol Lake. Looking at the visual simulation (on page 44 of the Draft EIS Presentation dated July 2021) illustrates how the smaller salt water pond of 45 acres proposed in the Hybrid alternative retains this beauty even at low tide. Retaining such a pond provides an elegant
transition from the cityscape to the natural setting of the estuary which is recreated by the removal of the dam.

3. What are the other potential benefits of the reflection pond that would justify the extra costs (Hybrid costs $70 to $127 million more than the Estuary). Besides the aesthetic appeal of a maintaining a reflection pond there are added recreational benefits. The pond’s barrier wall includes a 14 foot wide path completing a 1 mile multimodal loop around the lake for pedestrians, bikes, and handicap access. The pond also provides enhanced boating opportunities. The salt water tidal action through the barrier wall helps manage, in a natural way, invasive species like the mud snail. Further, the flushing action of the tidal waters may reduce low dissolved oxygen levels in Budd Bay. There are flood prevention attributes as well. On page 7-5, Table 7.1.1, comparing costs of the alternatives, indicates that there are: ‘...reduced costs to the City of Olympia, the Port of Olympia, and other entities given the flood reduction provided by the reflecting pond barrier wall.’ If these costs can be quantify, then that analysis should be prepared and included in the final EIS. 4. A suggested improvement to the pond’s barrier wall.

4. A suggested improvement to the pond's barrier wall. On page of the 47 of the Draft EIS Presentation dated July 2021, there is a comment that: 'Barrier wall could be improved with textured concrete panels and integration with Eastern Washington Butte Design. What would this look like? Are there any other ways to improve the look of the wall? If the Hybrid Alternative is selected then such improvements should be made.

Supporting Materials (if any): N/A

Name (ID): Monica Anney (I-759)

Organization (if applicable): N/A

Submission Text: I first want to acknowledge that the land and water in question is the traditional territory of the Steh-Chass people, of the Squaxin Island Tribe, and also pay respect to Medicine Creek Treaty Tribes, the Nisqually and Chehalis people who have stewarded these lands and waters for thousands of years. I strongly support the restoration of an estuary and the removal of the 5th Ave dam. As we continue to experience impacts of climate crisis in our region, from wildfire smoke to declining salmon runs, it is more clear than ever that we must make dramatic efforts to reverse the short-sighted decisions of the past to restore vital habitat and ecology in our community. Estuaries are beautiful, rich and vibrant. Capitol 'lake' is not. Its creation was an act of environmental injustice, displacing poor and Indigenous peoples who depended on the wild foods provided by the estuary habitat. To keep it in place further perpetuates this injustice in prioritizing an increasingly toxic, inert reflecting pool for the Capitol Building over the health and well-being of salmon and other wildlife species culturally significant to First Peoples in this region. Beyond these compelling reasons, the estuary alternative is the least expensive option by a wide margin. Please act now to restore vital habitat and ecology and right the wrongs of the past, to ensure that future generations do not continue to bear the burden of correcting our mistakes. Thank you!!!
**Name (ID): Robert & Patricia Patrick (I-760)**

**Organization (if applicable):** N/A

**Submission Text:** Finally, we were surprised that the DEIS considered a saltwater pool instead of fresh water pool option, and are curious why the DEIS authors did not do a better job in evaluating the fresh water pool option. We believe a fresh evaluation of the fresh water pool option, with consultation with new expert consultants, will provide clear evidence of the viability and cost-effectiveness of the fresh water pool option.

We have studied the DEIS, most particularly the 'Decision Durability' section of the Executive Summary. As you are well aware, there exists in the community and throughout the state very strong views for both of the major alternatives. Choosing either as a Preferred Alternative is really no decision at all as there will be endless appeals and court cases from the losing side. Thus, Capitol Lake will remain in its worsening condition. We strongly support a proposed compromise, the DELI proposal, that will give each side of the issue most of what they want. This compromise will have the potential to unite the two sides and provide a wide-ranging list of benefits to the environment and to the state-wide community.

**Supporting Materials (if any):** N/A

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**Name (ID): Steve Shanewise (I-761)**

**Organization (if applicable):** N/A

**Submission Text:** Measurable Evaluation Process On p.2-2 of Chapter 2: Project Alternatives and Construction Approach, the 4th paragraph describes the Measured Evaluation Process used to select a saltwater pool over a freshwater lake within the Hybrid Alternative. In particular, Exhibit 2.4: Project Goals, called out in the margin, details four specific issues where the freshwater lake actually beats the saltwater pool, not the reverse: 1) A freshwater lake will improve water quality by introducing cool artesian flows into Budd Inlet 24/7; a saltwater pool would release sun-warmed water on hot summer days with low diurnal tides (Solar Oven Effect). 2) A freshwater lake will have no sediment inputs from groundwater; a saltwater pool should have at least some sediment inputs from Deschutes River water pushed back by tides. 3) A freshwater lake will improve ecological functions by increasing habitat diversity (a freshwater lake will provide habitat for waterbirds to drink, bathe and rest that is unavailable in the restored estuary); a saltwater pool will provide no additional habitat to restored estuary. 4) A freshwater lake would enhance community use by providing a beloved swim beach that would have beneficial economic impacts to downtown businesses; a saltwater pool would not provide a swim beach or the same beneficial economic impacts. Furthermore, all issues presented throughout the DEIS process to reject the freshwater lake in favor of a saltwater pool have been proven false (see below: WATER QUALITY ANALYSIS; Phosphorus and Adaptive Management Plans plus GROUNDWATER; Availability and Water Right). Finally, here's a bullet point layout of a Measured Evaluation Process for the choice between a freshwater lake or saltwater pool in the Hybrid Alternative without bias against the lake. Freshwater Lake. . Water permit not hard to obtain Adequate groundwater supplies available Phosphorus can be easily and cheaply scrubbed Would supply cool water to restored estuary Freshwater
habitat would enhance ecosystem diversity. Freshwater swim beach would be beloved by the community. Beautiful reflective pool for the capitol dome would protect Heritage Park from tidal influence. Could have a put-and-take trout fishery for kids and seniors. Recorded public support in Scoping. Do what is best, not easiest. Saltwater Pool will have algae blooms same as or worse than the restored estuary or a freshwater lake. Adaptive Management Plan also required in perpetuity to scrub phosphorus (more difficult than freshwater lake). Solar Oven Effect (water heats up; increases algae growth; threat to fish).

No freshwater swim beach. No recorded public support in Scoping.

General Water quality analysis of the freshwater lake/saltwater pool issue is horribly flawed. First, the DEIS states that the saltwater pool would have water 'cooler, with higher D.O. and less algae than in the restored estuary.' (p. 13 of Ex. Sum.). Second, it also states that the freshwater lake would have worse water quality problems than a saltwater pool because the latter would get daily tidal flushing (p. 5-2 of WQDR). These are not scientifically defensible statements. I explain why below.

Tidal Flushing There is this insane notion presented in the DEIS that twice daily “tidal flushing” (App. E of WQDR; p. 5-3 and p. 5-18) would somehow magically make the saltwater pool water clean, but at the same time would not make the restored estuary water clean (no algae blooms in saltwater pool; significant algae blooms in restored estuary). This makes no sense considering that the restored estuary will be fully flushed with every tide, but the saltwater pool would only be partially flushed because it would be a “perched basin” with an invert outlet that would maintain a minimum water depth of 6 feet. Furthermore, solar heating on warm summer days with low diurnal tides would greatly exacerbate water quality problems. Finally, when talking about shellfish and raptor habitat within the saltwater pool (Att. 9; p. 5-42 and p. 5-44) it is actually stated that the saltwater pool would receive less flushing than the adjacent restored estuary and would therefore not be suitable habitat for shellfish or raptors. Suffice to say that the analysis stating tidal flushing of the saltwater pool will keep it clean should be flushed down a toilet.

Phosphorus There is this equally insane notion that somehow the Budd Inlet waters, which have significant phosphorus loadings and already have problems with algae blooms, would not have this same problem when the water enters the saltwater pool (p. 13 of Ex. Sum.). How on earth does this happen? How does Budd Inlet water enter the saltwater pool, then sit there static for hours during low tides on hot summer days (see Solar Oven Effect below), and not have algae growth? This is not a scientifically defensible conclusion. The DEIS also states that phosphorus in the groundwater could cause algae blooms in the freshwater lake. However, even if this were true, it is also clearly explained in the DEIS how the phosphorus can be easily and cheaply scrubbed from stormwater, well-heads and the lake itself (Chapter 4; pages 4-1, 4-5, 4-6, and 4.7 plus App. E of WQDR; p. 5-3). Rather than acknowledge this potential, the DEIS goes completely the other way in emphasizing how incredibly bad the algae blooms would become in the freshwater lake (App. E of WQDR: p. 3-5 and p. 5-4), but almost never mention this would only occur without active management. They also incorrectly state that the saltwater pool would not have problems with algae blooms, a claim that is patently absurd (see next).

Adaptive Management Plans It is also repeatedly stated throughout the DEIS that a freshwater lake would require an Adaptive Management Plan that would have to be implemented in ‘perpetuity’ in order to prevent algae blooms in this system, yet no such Adaptive Management Plan would be required for...
the saltwater pool (p.8: Table ES-1; p.28 and p.30 of Executive Summary). Not only would a saltwater pool also require an Adaptive Management Plan in “perpetuity” because it would have problems with algae blooms, it would be harder to mend than one for the freshwater lake because phosphorus inputs the saltwater pool would be variable and not easily treated while the freshwater lake groundwater inflows would have constant phosphorus values and the wells could be easily scrubbed. So, here again the freshwater lake wins out over the saltwater pool, exactly opposite of what the DEIS says.

Stormwater Outfalls (App. E of WODR; p.4-1) The DEIS also implies that fixing the existing stormwater outfalls into the north basin of Capitol Lake would only be necessary under the freshwater lake option. This is false. Stormwater outfalls will need to be treated for existing phosphorus loadings by 2024 for any Alternative chosen, Estuary, Lake or Hybrid, and specifically not just for the Freshwater Lake option in the Hybrid Alternative. This is because new rules will be implemented by state law starting then.

Stratification The DEIS states in one location that the Hybrid freshwater lake would not stratify because of wind action (App. E of WQDR; p.3-5) but then also says in two different locations that the water would stratify because of solar heating in summer (p.5-2). In both instances, the action of stratifying or not stratifying is portrayed as a negative impact for the freshwater lake.

Well Oxygenated Freshwater Lake The DEIS states (Chapter 4: p.4-49) that ‘...long-term, unavoidable adverse impacts to the lake basin would occur under the Estuary or Hybrid Alternative because the lake basin would be converted from a well-oxygenated freshwater lake to an estuary with low oxygen conditions...’. A freshwater lake instead of a saltwater pool in the Hybrid would provide mitigation compensation for this adverse impact. Indeed, a freshwater lake would provide clean, well-oxygenated water to Budd Inlet because of the groundwater inputs, something the saltwater pool could never do.

Solar Oven Effect The DEIS recommended saltwater pool would literally become a solar oven on hot summer days during extreme low diurnal tides. While the DEIS does say that ‘solar heating’ would cause stratification of the water column in the freshwater lake (see Stratification above), they never mention solar heating for the saltwater pool option. Indeed, they actually say that the saltwater pool would provide ‘cooler’ water to Budd Inlet than the freshwater lake (p.13 of Executive Summary). Low diurnal tides in summer would often submit a saltwater pool in the Hybrid Alternative to significant solar radiation. For example, on June 26, 27, and 28 of 2021, low diurnal tides would have left a saltwater pool with static water (no tidal inputs) for at least ten consecutive hours each day, over half of this in the heat of the afternoon. Then, on those same three summer days, temperatures rose to over 100 degrees where non-stop, direct sunlight would have been shining onto an unshaded saltwater pool. Needless to say, such extended, solar heating of a static, shallow body of water would cause significant warming, and any fish trapped within the saltwater pool during the lack of tidal exchange would likely be harmed. Then, when the tides finally did reach a level deep enough to flow into the saltwater pool again that evening, this much cooler Budd Inlet water would have plunged to the bottom and pushed all the solar-warmed, saltwater pool water back out and into the restored estuary. This would have negative impacts on water quality (would increase algae blooms) and could potentially harm fish, especially migrating salmon.
MAINTENANCE DREDGING The freshwater lake would require no maintenance dredging basically forever. However, a saltwater pool would need periodic dredging in perpetuity because of sediment inputs from tidal flows pushing the Deschutes River, silt-laden waters back upstream. In Chapter 4, p.4-13: Fig. 4.1.3, there is a depiction of sediment deposition under each Alternative. Note that the Hybrid Alternative has no deposition shown within the barrier wall pool. That would only happen with a freshwater lake, which is not at all noted. With a saltwater pool, there would be deposition. An unbiased analysis would have called-out this beneficial impact for the freshwater lake.

ECONOMIC ANALYSIS The conclusion reached in the DEIS regarding economic impacts was that they would be similar in type for all three Alternatives (p.22 of Ex. Sum.). This is an example of a conclusion that would substantially change with a freshwater lake instead of a saltwater pool in the Hybrid Alternative. The freshwater lake would have a significant beneficial impact to downtown economic vitality because a swim beach would attract more public use to the area than all other public use features combined in any Alternative. On hot summer days there would be at least hundreds of people using the Heritage Park swim beach which would in turn equate to significant use of downtown businesses, especially restaurants and bars. In a fair analysis, the Hybrid Alternative with a freshwater lake clearly beats the Lake and Estuary Alternatives when it comes to economic benefit.

GROUNDWATER Availability During development of the DEIS it was originally said that up to 38,000,000 gallons per day (gpd) of groundwater would be needed to keep the freshwater lake clean. However, the DEIS states that slightly less than 500,000 gpd is all it would take for the freshwater lake to work, and admit that this volume would be available from the aquifer (App. E of WQDR: p.1-3 and 2-3).

Water Right It was also said, and seems to still be, that it would be difficult if not impossible to get a Water Right to access the artesian flows beneath the lake basin. Nothing could be further from the truth. Indeed, it could be one of the easiest Water Rights to get in Washington State for two reasons. First, the take is “Passive, Non-consumptive” meaning the flows are artesian and the water will only be borrowed temporarily before being delivered to Budd Inlet where it would have ended up anyway. This means you don't have to clear the hurdle of 'Best Use' in the permitting process because it's not being 'used'. Second, there is no one downstream of the take who would complain about a potential loss of their own water rights. So, portraying the Water Right issue as a fatal flaw for the freshwater lake is simply false.

Test Well It is difficult to understand why a simple, cheap test well was not installed to obtain accurate, undeniable data on water quantity and quality. More time and money was probably spent gathering field data from leaking wells and then extrapolating it than a test well would have taken. The potential inaccuracies of the extrapolated data used is mentioned often (App. E of WQDR: P.1-5; p.2-1/2; p.3-2) and there is even an almost admission that a test well should have been put in (p.3-3: ‘Additional groundwater....monitoring data would be needed to reduce model uncertainty’). One problem with a test well though would be that your data would be accurate and hard to deny.

FISH AND WILDLIFE Fish The DEIS states that a saltwater pool would provide fair to moderate rearing habitat for salmonids,' (p.31 Ex. Sum.). The saltwater pool could actually become a death-trap fall all fish on hot summer days with low diurnal tides when water would sit static through the heat of the day (see above: Solar Oven Effect). The DEIS also states that a freshwater lake ‘would stress anadromous fish’,
even though there would be no fish access between the freshwater lake and the adjacent restored estuary.

Water Birds The DEIS analysis of water bird use for the freshwater lake and saltwater pool is completely flawed. First, they fail to even mention the waterfowl use of the freshwater lake when mentioning wildlife benefits (p. 31 of Ex. Sum.), yet this use is referred to as being higher than what a saltwater pool would receive (App. E of WQDR; p. 5-4 ‘...the freshwater reflecting lake may have higher duck and goose populations than a saltwater pool.’). However, when it comes to water quality issues from excrement, the frequent use of the freshwater lake by waterfowl and gulls is specifically called out many times. The fact is the freshwater lake would provide clean freshwater for waterfowl, gulls and shorebirds to drink and bathe in that a saltwater pool would not (water birds don't drink saltwater and prefer to bathe in freshwater). It would provide what is known as a functional lift to the ecosystem by providing additional habitat (freshwater lake) that would be unavailable with a saltwater pool option.

Bats The analysis on impacts to bats is based solely on a saltwater pool, not a freshwater lake (Att. 9; p. 5-44). A freshwater lake would provide 45 acres of freshwater habitat that would support insects bats feed on which the saltwater pool would not provide. This is another positive for the freshwater lake over the saltwater pool not pointed out in the DEIS.

Raptors The DEIS states that the saltwater pool would not have the same habitat values for raptors as the restored estuary because it would lack “the daily dynamics of tidal action’ (Att. 9; p. 5-44). And it also says that a freshwater lake ‘would not support raptors or fish-eating birds well” (p. 31 of Ex. Sum.). I would argue that a saltwater pool would provide excellent habitat for eagles because of the potential for the Solar Oven Effect to kill fish, and that a freshwater lake would provide good prey (stocked trout) for ospreys.

DECISION DURABILITY (p. 25 of Ex. Sum.) Decision Durability is the lynchpin of the Hybrid Alternative with a freshwater lake because it will garner much more community support if chosen as the Preferred Alternative than either the all Lake or all Estuary Alternatives would. Think of it as you would Ranked-Choice Voting. Anyone who would have either the all Lake or all Estuary Alternative as their first choice would certainly choose the Hybrid Alternative as their second, but never their third. And there are building numbers of people who would vote for the Hybrid with a lake as their first choice because they believe a compromise is a fair, functional solution where we will get the best of both worlds. This means in a RCV system, the Hybrid Alternative would beat both the Estuary and Lake Alternatives because it would garner all the 2nd place votes as well as quite a few 1st place votes, but would get no 3rd place votes. The significance of having strong Decision Durability comes when it's time to ask for the money to design and build the chosen Preferred Alternative because with a divisively split community, funding will be very difficult to get. Elected officials do not dole out money to massive infrastructure projects that half the people in a community will loathe when built. However, if most of the community is united behind the Preferred Alternative, the opposite is true. And that is what Decision Durability is all about. If either the Lake or Estuary Alternatives become the Preferred Alternative, the civil war stalemate that has been fought for decades over these two choices will just continue on. The only way to stop the fighting so we can come together as one is through the Hybrid Alternative with a Freshwater Lake.
HEIGHT The DEIS states the height of the barrier wall for the Hybrid Alternative would be 18.5'-25' and that this would cause 'severe visual impacts' (p.33 Ex. Sum.). However, these are elevations, not heights, based on a tidal datum. The true height of a new barrier wall would be about 10 at the southern end and only about 16' at the north end. Plus if a rock barrier were built with a 3:1 slope, there would be no vertical 'wall'.

ROCK, NOT SHEETPILE A rock barrier would be cheaper, easier and quicker to build than a sheetpile wall. Plus, a rock barrier would easily survive even major earthquakes, if built with at least 3:1 sideslopes, while a sheetpile wall would not because it is a fixed, rigid structure that would crack from ground shaking. A rock barrier would also provide a boulder slope with cavities where salmon smolts could and seek refuge at most tides. It would also present a much lower visual impact than a shear, sheetpile wall.

RE-USE OF DREDGE SPOIL The idea of reusing dredge spoils to make islands that would support trees seems questionable. The material picked up through suction would consist only of silts and fines which would tend not to mound well, even when initially confined with a containment wall. Once the wall was removed, these piles of silts/fines would erode back down to a uniform level within the landscape, especially with tidal action under the Estuary and Hybrid Alternatives.

DREDGING LOCATION In the Estuary and Hybrid Alternatives, long-term dredging is only proposed north of 4* Avenue in Budd Inlet. However, this approach would allow the restored estuary to just continue to fill in with sediments over time and eventually lose much of its functional values. Dredging instead in the south end of the middle basin (as proposed in DELI) would prevent the eventual filling in of the estuary by capturing the sediments at the upper end of the system rather than the lower end.

The tidal opening necessary at 5:Avenue has significant ramifications for any estuary restoration. Full removal of the existing dam and roadway to create a 500'-wide opening could require a 4-year closer of both 5* Avenue and the Deschutes Parkway. In contrast, if just the guts of the 5:* Avenue dam were removed to allow free tidal exchange, the closures would be just a few months. Plus, overall project costs would be reduced by tens of millions of dollars. This option has been rejected within the DEIS analysis apparently because of concerns over scouring of the 4th Ave. Bridge supports. However, this is a false narrative. Under existing lake conditions, the dam tide gates are sometimes opened to release lake water when there is a significant difference in tide vs. lake water levels (lake is higher). This creates considerable 'head' pressure which then causes the lake water to rush much faster out of the dam orifice than any flow velocities that would occur with an open free-flowing tidal system. If the desire for a 500'-wide opening is purely aesthetics and not based on some ecosystem function, it should be rejected. And what possible, functional, cost-effective benefit could be gained given the same tidal constriction occurs just a few hundred feet upstream at Marathon Park? Indeed, I would suggest that a brief constriction in the flow might help mix the tidal waters and thereby improve their quality.

Supporting Materials (if any): I-761_Shanewise.pdf

Name (ID): Pam Panowicz (I-762)

Organization (if applicable): N/A
Submission Text: Thank you so much for the opportunity to comment on this very important project. I am hopeful that in the future, we won't defer action because of several more studies. I am writing for myself and my husband and for several family members and friends who support the Managed Lake Alternative. We are also fully supportive of the report submitted by the Olympia Yacht Club. They have done extensive research and put many hours into a comprehensive, thorough reply to DES. I was born in Olympia nearly 77 years ago. I remember the nudflets that surrounded Olympia and the unacceptable stench they had.

My first question considers the economic impact of selecting any alternative. It is mandated that the EIS must consider expanded area around Capitol Lake and Budd Inlet Including the Port of Olympia for the economic analysis. To reiterate the Olympia Yacht Club comment, 'The Estuary and Hybrid Alternatives Include assumptions regarding sediment deposition, erosion and dredging that will result from removal of the 5th Avenue dam, The concern is that the data underestimates the sediment going in West Bay and therefore the dredging costs associated, W111 the US Army Corps of Engineers maintain, as before, the Federal Navigation Channels and the turning basin dredging, if the 5th Avenue dam removal significantly increases the cost? Having their agreement to this project, before removing the Den, is essential, It's also important that the consequences of contamination of the New Zealand Mud sell are known. If the Den removal allows the snail Into Budd Inlet, will the contamination change participation of the USAE? Certainly, boaters, Budd Inlet home owners, business owners, Port of Olympia, local, state and federal government, the tribes and non-profits must know who pays, no matter which Alternative is approved. In Section 7,2 on page 7-7, it is stated, 'In the past planning process, the lack of committed funds in the State of Washington budget was frequently cited as the potential obstacle to the adequate long-term management of Capitol Lake-Deschutes Estuary.' Consequently, for 90 years this project has been on hold, Money has been paid to consultants and we are still studying the problem! The lack of budgeted funds in the past and the resulting inaction, have to be considered a learning experience. We can not expect action on Capitol Lake-Deschutes Estuary unless we know who will pay and a funding plan is outlined. It is significant to note, that with the Managed Lake Alternative, the adverse impacts from a funding lapse, would be restricted to North Basin recreation rather than an irreversible Impact on West Bay navigation resulting from the dam removal, It would be a major problem to remove the dam and then worry about sustainability of the project.

Boating interest in Thurston County is more active than ever, People are buying boats as a way to escape quarantine from Covid. We have enjoyed boating for decades and are members of the Olympia Yacht Club, There are more than 200 boats using Budd Inlet, which I'm sure you know, I watch kayaks, canoes, paddle boards, speed boats, cruisers, industrial crafts, freighters, racing sculls, sailboats all apart of the traffic on the bay. Only a small percentage of boats are equipped with AIS. The 200 figure you stated seems irrelevant. It minimizes the participation from our 4 marinas on Budd inlet and Swantown on East Bay. We have sailing clubs, many visiting boaters and the recreational boaters who don't keep their boats at a morning. There are many festivals and activities throughout the year like Tug Boat Races, wooden Boat Festival, Dragon Boat Festival, Parade of Lighted Ships, Foofarow, tribal canoe journeys, Toliva Shoals Race and many sailboat regattas, to name a few. These events and enthusiasts confirm many participants but very few have AIS or know what is 1s. It has a wonderful surprise in the DEIS report that 'monitoring data indicate that water quality conditions have actually been improving in the
Lake and are relatively good in terms of physical and chemicals characteristics important to aquatic life. With that encouraging report and positive inclination, it would be an ironic time to lose the beauty and tangible, intangible benefits of the Lake. To the thousands of people who congregate, exercise, bird watch and hold community events, what will be the attraction for them with mudflats? As we have seen when the lake is drained, there is no Lake. It is replaced by the Deschutes River stream and a mudflat, depending on the tide and the Deschutes River volume. The mud is thick, heavy and would require signage to warn people not to pass.

According to Oscar Soule, PhD; and Kaye Ladd, PhD; both previous Evergreen professors involved in Ecology and Chemistry, respectively) were quoted in reference to Capitol Lake. 'Mudflats are anaerobic environments, chief among the organisms are bacteria which reduce sulfate to sulfides. The problem for humans is that one of the sulfides is hydrogen sulfide, which not only stinks bad but is TOXIC to humans.' As a young child, I remember the smell in downtown, likened to the infamous 'aroma of Tacoma.' What a pity, if we are to replace our lovely Lake with such an unpleasant creation.

**Supporting Materials (if any):** N/A

**Name (ID): Crystal Trigg (I-763)**

**Organization (if applicable):** N/A

**Submission Text:** Greetings, I would like to submit my support for restoring the Capitol Lake area back to its natural state as an estuary.

**Supporting Materials (if any):** N/A

**Name (ID): Pam Panowicz (I-764)**

**Organization (if applicable):** N/A

**Submission Text:** Your graphs indicate, under the Estuary Alternative, that the Basin would be covered with water 80 percent of the time. That sounds good but if the tides are high at 10PM to 6AM it will have little impact on the pleasure people derive. The Olympia Yacht Club stated in their response that July 2021 had 28 days or 90 percent of the days, during daylight hours, when tide flats were exposed. It is not adequate to evaluate the exposed mudflats on a 24 hour lock. It would add more to the discussion if people knew the daylight hours of mudflat exposure, especially in the summertime when outdoor activities on the water, are cherished. I look forward to hearing responses to the well defined questions from the Olympia Yacht Club. Any response that I receive from you will be appreciated. Hopefully, these questions will be given honest consideration so that Olympia receives the most valuable Alternative for our working waterfront, businesses, families, children and seniors.

**Supporting Materials (if any):** N/A
**Name (ID): Philip Pearson (I-765)**

**Organization (if applicable):** N/A

**Submission Text:** I strongly support the Deschutes Estuary for several reasons. First, I believe it to be the best environmental solution for salmon and other native species. Second, it would reduce or eliminate the problems caused by the poor water quality of the artificial lake. Third, in the long run it would likely be the least expensive alternative as it would better approximate natural forces needing the least maintenance. While the lake is attractive from a distance, its water quality makes it quite unsuitable for the future. I understand the hybrid alternative would be the most expensive action and makes no sense. It would be the combination of the worst parts of the other two plans. Please restore the Deschutes Estuary, and quickly while there may be time to save the salmon runs.

**Supporting Materials (if any):** N/A

**Name (ID): Diana Flannery (I-766)**

**Organization (if applicable):** N/A

**Submission Text:** I have lived in Olympia for more than 40 years. I worked and lived downtown for many of them. I walked around Capitol Lake frequently and attended many gatherings by its side. I have watched the lake change over the years and listened to the many controversies surrounding it and its use. I prefer to see the lake return to an estuary. Restoration of the natural habitat and marine and wildlife would be of great educational interest and is an ecologically sound move from what I have read. To restore a sacred place to the native Tribes would be a positive action.

**Supporting Materials (if any):** N/A

**Name (ID): Rodger Cummings (I-767)**

**Organization (if applicable):** N/A

**Submission Text:** Okay As a citizen of Olympia for 46 years, I support Decision Durability, and a freshwater pool as well as estuary restoration. It's a balanced approach.

**Supporting Materials (if any):** N/A

**Name (ID): Ulla Giesecke (I-768)**

**Organization (if applicable):** N/A

**Submission Text:** We support the restoration of the entire Capitol Lake as a freshwater body with wildlife preservation as a flyway for migrating birds etc. There are enough estuaries around, just go over to Mud bay or over the bridge at Budd inlet one can see enough mud flats when the tide is out (they also reek)--why extend that? Why balk at the idea of managing a fresh water lake which is relatively small in
size comparatively? Think of the effect on our community of reeking mudflats and backed up traffic if
the 5th ave Bridge is taken out. If you cite an environmental need to revert to a 'natural state', then
consider entire countries which are built on wise management of waterways--like Holland for example
with its extensive built up dikes. Holland is one of the most environmentally friendly countries in the
world, and they actively manage their water resources. Please think of the next generations and truly
consider the citizens you represent when you make such important decisions as the future of Capitol
Lake.

Regarding financing, we suggest asking for State or even Federal grants to complete this project to
maintain Capitol Lake and make it a State partnership at least.

Having lived in Olympia's near west side for over 50 years, we have appreciated Capitol Lake and have
been saddened with its demise. Having a clean, sparkling lake surrounding our state Capitol grounds is a
major asset to our community and State. We can't understand why it has not been maintained, when
other communities and countries are able to maintain much larger bodies of water; to us it represents
gross mismanagement. The management of Capitol Lake should be under the jurisdiction of the State,
and the whole grounds should be made a State park. You should also buy up the private property where
vagrants are illegally camping and take control of this blight on our community. (Moving the vagrants to
the County Fairgrounds where there are adequate facilities for their basic hygiene and other needs is a
humane option).

Supporting Materials (if any): N/A

Name (ID): Anthony Walker (I-769)

Organization (if applicable): N/A

Submission Text: Remove the damn so the ecosystem can rejuvenate itself.

Supporting Materials (if any): N/A

Name (ID): Kezia Wentworth (I-770)

Organization (if applicable): N/A

Submission Text: It's pretty obvious that the best solution is to remove the dam. I am not a scientist but
I do work in finance and from a financial point of view it also makes the most sense to remove the dam.
Ecological standpoint says remove the dam. Financial standpoint says remove the dam. So remove the
dam.

Supporting Materials (if any): N/A

Name (ID): Irene Osborn (I-771)

Organization (if applicable): N/A
Submission Text: Restoration of the estuary is by far the best solution.

Supporting Materials (if any): N/A

Name (ID): Dick Binns (I-772)

Organization (if applicable): N/A

Submission Text: Attached please find in PDF format my personal input as an Olympia area resident on the Capitol Lake Deschutes Estuary DEIS process. Please note that this input is different than the input I forwarded you Saturday morning under the same email address from the owner of The Oyster House and Budd Bay Cafe. Please let me know if you have any questions on my submissions. Thank you for your time and attention.

To Whom it May Concern: Thank you for the opportunity to comment on the Draft Environmental Impact Statement for Capitol Lake/Deschutes Estuary. I have significant concerns about both the Estuary and Hybrid proposals that entail removal of the 5th Avenue Dam as outlined in the DEIS. My main concerns are that the dam removal options as examined in the DEIS significantly underscore both the costs and the environmental, economic, recreational and aesthetic impacts to Olympia’s waterfront and downtown area. Olympia has a phenomenal waterfront. As the City of Olympia's website says: Set like a jewel at the southern tip of Puget Sound with sweeping views Olympia's sparkling setting has drawn people to its rich shores for thousands of years. Today there is something for everyone here in the embrace of Olympia's remarkable waterfront.

From an environmental aspect I was pleased to see that the DEIS acknowledged that Capitol Lake was a clean lake with decent water quality. What I did not see discussed that I'd hoped to was the role Capitol Lake plays as a nitrate sink in removing nitrates via the plant life growing in the lake from the nitrate rich Deschutes river before it enters Puget Sound. I believe the Deschutes is the second most nitrate rich river in western Washington and higher nitrate levels contribute to lower dissolved oxygen and thus poorer water quality in Puget Sound. Any proposal to remove the dam needs to evaluate how the loss of this nitrate sink will be remediated without further environmental damage to the South Sound.

Examination of recreational options under the various scenarios was limited. In the Managed Lake scenario no mention was made of the possibility of boating and sailing instruction for smaller children on a properly managed and dredged Capitol Lake. Nor did the DEIS address how the popular sailing lessons offered by the City Parks Department would be conducted in the event lower Budd Inlet was to silt up once the 5th Ave Dam was removed.

My major concerns lie in the cost and aesthetic impacts that removal of the 5th Avenue Dam would have on Olympia. With no dam, large amounts of silt that previously stayed in Capitol Lake will now deposit in lower Budd Inlet. While the DEIS acknowledged this issue it then minimized the impact by taking the best possible silt deposition scenario and not addressing the key issue of who would do the dredging and how it would be financed.
Unmanaged silt in lower Budd Inlet threatens not only the marinas and Port as mentioned in the DEIS, but the City's Percival Landing, Port Plaza and indeed all of Olympia's 'remarkable waterfront' as silt continues to accumulate. What was once largely a view across Budd Inlet to Mt. Rainier, the Olympic Mountains or Black Hills will become a view across unsightly and unusable mud flats.

While the DEIS made the assumption it was cheaper to dredge lower Budd Inlet than Capitol Lake I do not believe this is necessarily the case as managing the same amount of silt over a wider area not as accessible from the shore is likely to be more expensive, particularly if historically polluted areas are encountered while dredging what used to be Olympia's industrial area. The Puget Sound cities that are located near rivers manage their rivers as Olympia has been doing in a fashion with the 5th Avenue Dam. One need only look at pictures and charts for Bellingham, Everett, Seattle or Tacoma to understand this. Everett for instance has the Snohomish river draining to its north but the city and waterfront is protected by a large artificial jetty. To abandon Olympia's de facto "management plan" as instantiated by the 5th Ave Dam without a backup strategy could be a civic blunder of epic proportions. And the impact to our economy in terms of desired development, residents occupying or owning market rate housing, good jobs and tourism could well prove to be significant. I understand the belief that creating an estuary will improve environmental conditions and empathize with the desire to do so. As much as anyone I want a healthier cleaner Puget Sound. But it's by no means clear to me that the very expensive removal of the dam and subsequent silt management costs it imposes is the best use of our tax dollars. These same funds could be spent across Puget Sound on many smaller and more impactful projects that offer a higher environmental return because they aren't trying to undo 170 years of development. To commit large amounts of funds towards a Deschutes Estuary without examining what else might be a higher priority and impact for Puget Sound is a mistake.

I care about Olympia and its future as evidenced in my active financial and volunteer support of civic and cultural organizations like Harlequin Productions, Enterprise for Equity and Olympia Youth Sailing. I do not want to see the City and these organizations hurt by an expensive and uninformed effort that will damage Olympia economically, recreationally and aesthetically while doing little, if anything to improve the environment of Puget Sound. Thank you for your time and attention to the DEIS and for supporting an inclusive process.

Supporting Materials (if any): N/A

Name (ID): Nancy Partlow (I-773)

Organization (if applicable): N/A

Submission Text: When the 5th Avenue dam was installed 70 years ago, the area south of the dam was essentially turned into a freshwater wetland, which it has been functioning as ever since. Over these seventy years the area behind the dam has gained more and more wetland characteristics, to the extent that it is now a vibrant freshwater wetland ecosystem. Signs of this are everywhere. A thriving dragonfly population breeds in the lake, as I wrote about in a nature blog a few years back: http://olypollinators.blogspot.com/2016/09/here-be-dragons_6.html Many species of warblers call, breed and feed on the massive number of lake-breeding insects within this fabulous freshwater habitat.
Here is a video I took of a Yellow-rumped warbler at Capitol Lake: https://www.youtube.com/watch?v=B3ZzZna5U7U Here is another blog I wrote that mentions the chironomid flies and caddisflies that breed in the lake, and their importance as a food source for wetland-associated bird species: http://olypollinators.blogspot.com/2016/04/a-wild-success-food.html No wetland assessment or classification appears to have been made of the lake as part of the EIS process. I believe it is important that such an assessment be conducted. If the 260-acre lake does qualify as a freshwater wetland under state guideline, its loss as such (even to an estuary which is a much different ecosystem) may be required to be mitigated by the acquisition or creation of freshwater wetlands elsewhere, preferably in the upper Deschutes Watershed. One clear evidence that Capitol Lake is operating as a burgeoning fresh water wetland is the presence of freshwater mussels living on the bottom of the lake. No mention of this species of mussel, or the effects upon it of changing the lake to a marine environment, is mentioned in the Draft EIS. Every effort should be made to positively identify the mussel species living in the lake (and there may be more than one), since several species of freshwater mussels are critically endangered, and the loss of 260 acres of habitat could be important. Here is a video I took of freshwater mussel shells littering the bottom of Capitol Lake. The mussels were probably killed during a drawdown of the lake during a freezing period, or a hot spell: https://www.youtube.com/watch?v=VP3psqRpU4k&list=UUG3jWO8v65u8IjuwiXzblSA

The southern end of the Deschutes Estuary was highly impacted by the installation of the 5th Avenue dam, but also by the creation of Interstate 5, which walled off the south basin and retained only a small opening for the river to pass through. The result is that sediments have built up in the south basin to the extent that the area north of the Old Brewhouse, which used to be open marine habitat, is now many acres of land growing a beautiful mixed forest of alder trees and other species. Tumwater Historical Park on the other side of the river similarly has a heavily forested shoreline that would be detrimentally impacted by tidal influences and the intrusion of salt water. This would be a major loss that should be assessed and mitigated.

Supporting Materials (if any): N/A

Name (ID): wendy gerstel (I-774)

Organization (if applicable): N/A

Submission Text: Monitoring and modeling tell us we should be preparing for more and bigger storms. They also tell us that sea level is rising, and in areas of downtown Olympia, the land is subsiding (sinking). So relative sea level rise in those areas will only be greater. The shoreline will move inland. The more room it has to do that, the less threatening and costly that inland ‘relocation’ will be. As a geologist, I work with Tribal, public, and private shoreline landowners to mitigate human triggers of shoreline erosion and landsliding. Through careful drainage, vegetation, and development management we can accommodate these natural processes while keeping ourselves and our infrastructure investments safe. The geologic and geomorphic character of our region, which shapes the landscape we cherish and is a draw to others moving here, is dynamic and can be destructive. We should be working towards adapting, rather than continually modifying to suit us.
I respectfully submit these comments in strong support for the full restoration of the Deschutes River Estuary for the following reasons, not necessarily in the following order: Whereas, true ‘reflection’ of our Washington State Capitol, in its location in the Pacific Northwest, must consider the reverence for and value placed on wildlife and its habitat - marine and terrestrial - by all Washington State residents, particularly Native Tribes; And whereas, accepting current and future climate conditions requires accommodating sea level rise and greater and more frequent downstream flooding; And whereas, local Native American Tribes advocate for estuary restoration to give salmon a fighting chance at survival and reestablishing healthy, productive runs; ...the only scientifically, economically, and ecologically defensible alternative is to restore tidal flow to conditions similar to the historic Deschutes Estuary, remove the 5th Avenue Dam, and create a 500-foot opening to reconnect the Capitol Lake Basin with Budd Inlet.

The exact intent of the Wilder and White, and Olmsted design for the Capitol Campus appears to still be in debate. Nevertheless, that intent should not be a driver this many years later. We live in a different time, with warming climate, more rapidly-increasing population, changing public interests, and a better understanding of our role as part of the local ecology. Furthermore, keeping any lake (salt or freshwater), clear enough to reflect the Capitol buildings seems costly and unlikely. And tidal flats only ‘stink’ if you don’t like living on an ecologically functional shoreline.

Supporting Materials (if any): N/A

Name (ID): Maurice Major (I-775)

Organization (if applicable): N/A

Submission Text: The “Olympia Sea Level Rise Plan” (paragraph 5) does not include the best and latest science behind relative sea level rise, and thus underestimates the degree to which tidal flooding will increase over time.

This table does not include a category for “Treaty-protected Resources.’ Under Part 2 of the Boldt Decision, the state must not just ensure that tribes get half of the fish and other resources guaranteed in the Treaty of Medicine Creek, but it must also ensure that populations of those resources are not depleted or eliminated. All alternatives should be evaluated in terms of their effects on treaty-protected fish and other resources.

“Cultural Resources” should include ecosystems and species of importance to tribes, which can constitute Cultural Landscapes and/or Traditional Cultural Properties (both of which are categories in the DAHP WISAARD database, or traditional fishing and gathering areas (access to which was included in the Treaty).

ES-33 “Cultural Resources” mentions the “Des Chutes Basin Project Historic District,” yet there is not record of such ever having been proposed, and it is not in the DAHP WISAARD database. Absent any actual District, the DEIS should either eliminate mentions of this District, or include a potential Estuary Archaeological District. The table mentions several components of this imaginary District, yet mentions
none of the actual archaeological sites and cultural places known to tribes and the Chinese-American community. Along with the omission of Treaty-protected cultural resources, this results in a skewed and racist cultural resource framework that privileges potential impacts to a possible District of 20th Century cultural resources over millennia of actual Indigenous cultural resources, in direct contradiction to the stated emphasis on justice. It is unacceptable to list estuary alternative potential effects to a district that does not exist as a significant impact, especially when the certain effect of lake maintenance dredging on archaeological resources is termed a potentially significant impact.

ES-33 Section 106 will certainly apply to components of the project, but for actions not considered federal undertakings, Governor’s Executive Order 21-02 and RCW 27.53 will apply. Please include this information.

ES-33 The table mentions no potential benefits of estuary restoration. The estuary alternative more than the others will protect and enhance culturally important species and landscapes. The hybrid alternative is described as having a benefit by reducing the potential impact to the reflecting pool, which is not a historic resource in the DAHP WISAARD database, much less determined NRHP-eligible. No evidence is presented to support the assertion of a benefit.

ES-33 The cultural resources here do not include historic archaeological sites likely to exist in the reflecting basin, such as materials and sites related to Chinatown or Little Hollywood. ES-39 Again, this does not address cultural resources other than archaeology and historic built environment. This is incomplete. An estuary is a cultural landscape of deep significance to tribes, so the omission of cultural landscapes, cultural materials (plant and animal species of importance to tribes), and traditional cultural properties from consideration skews the cultural resource considerations in an unfair way.

ES-39 There is no reliable basis for claiming that the estuary and hybrid alternatives would have “a greater risk of encountering unrecorded archaeological sites.” It is likely that a focus on re-establishing the natural Deschutes estuary channels would actually have less potential to encounter and affect unrecorded archaeological sites than the lake basin dredging proposed under the managed lake and hybrid alternatives.

ES-39 Key Findings regarding cultural resource should begin with the need for cultural resources surveys. ES-39 Proposed Mitigations for cultural resources emphasize a “Protection and Monitoring Plan.” The City of Olympia and DAHP’s input on projects in the City have also emphasized monitoring, but the resulting plans have been repeatedly violated and are not reliable protections for archaeological resources.

Ch1-All Narrative and tables make it seem as if Technical Evaluation of alternatives can be done with the data collected to create the DEIS. In fact, significant questions and data gaps remain that could affect consideration of alternatives.

Ch1-All This chapter begins history with the design and then construction of the Capitol Lake Basin. This is misleading, since the estuary existed for millennia before that, and estuary restoration is an option.
Ch3-88 The history of recreational use excludes 5,000 years of tribal use, and the first 100 years of non-Native use, all of which occurred on an estuary that existed before the artificial lake was constructed. This silences important voices in history.

Ch3-90 Thank you for including traditional cultural properties. These should be included in the Executive Summary as well.

Ch3-90 NHPA Section 106 is one framework for considering effects. But because federal agencies may not include the entire project area or range of project actions, it is important to recognize that the State has obligations under RCW 27.53, the RCW sections related to burials, Governor’s Executive Order 21-02, SEPA, and the Centennial Accord and Millenium Agreement. Ch3-91 The cultural resources process is described as beginning with historic register eligibility evaluations. In fact, this project must begin with an inventory process, since there are cultural resources yet to be documented. The way this is written, the project proponents could claim that only resources known and recorded previously must be evaluated.

Ch3-91 Tribes that should be invited to consult include all of the Medicine Creek Treaty Tribes, but Muckleshoot and Puyallup are excluded. While the ACOE is obligated to consult only with federally recognized tribes, the State should invite Steilacoom and Duwamish as well, since they historically visited Olympia on a frequent basis.

Ch3-91 No state agency is identified as lead for cultural resource consultation. This is important, since the ACOE frequently decides to consult and review only a limited portion of large, complex projects. Executive Order 21-02 requires cultural resource review and consultation for any state-funded actions not undergoing 106 review.

Ch3-91 “Methods for Studying Cultural resources” is misleading with regard to archaeology. It should state clearly that no archaeological inventory was attempted.

Ch3-92 Either use modern tribal entities or include the full set of bands who used Budd Inlet. Please consult with tribes regarding preferred spelling/orthography.

Ch3-92 There are several Lushootseed placenames in and near the project area that should be included. Indian Claims Commission testimony by Squaxin Island Tribe elder Johnny Scalopine identified multiple locations where longhouses existed in the project area, which should be mentioned here.

Ch3-92 It is important for the DEIS to notes that in addition to recorded archaeology, more sites are certain to be encountered. This is true not just in adjacent uplands, but in all three basins. The tectonic history of the project area means that former upland sites may not be below sea level, and the widespread deposition of fill in Olympia has buried additional sites. The DEIS mentioned that the Squaxin are “salt water people,” but fails to mention that salt water people created sites in the tidelands, below post and current sea level.
Ch3-93 There was no coherent “Des Chutes Basin Project,” at least not in the sense of historically significant undertakings such as the Columbia Basin Irrigation Project. The two-word “Des Chutes” spelling is modern error, as the legislative authorization was for DesChutes.

Ch3-94 Legislative authorization mentioned elements that never happened, such as a railroad along 5th Avenue and a road along the south side of the lake basin. Along with the changes in plans and difference between the architectural and landscape architectural plans and the actual results, these are important considerations when historic register eligibility and project cultural resource effects are considered.

Ch3-94 The final paragraph includes among the historic themes “European settlement,” but not Asian settlement, despite abundant evidence that the land adjacent to the lake was home to one of the first Chinese enclaves in Puget Sound. It also ignores Native response to the development of Olympia, continuing a troubling tendency of this document to act as if tribal use and valuing of this place stopped in 1854.

Ch3-95 If images of the historical visions for a reflecting pond are included, why not tribal visions, or a representation of tribal use areas?

Ch3-96 Inclusion of the “Des Chutes Basin Project Historic District” is extremely misleading. There is no such thing, and nobody has proposed it. DAHP confirmed on July 22, 2021, that no entity has proposed such a district. At most, the period of significance (a crucial part of any NRHP eligibility evaluation) would be 1951-1971. If the DEIS is to list potential districts with potential eligibility, an archaeological district or cultural landscape or traditional cultural place encompassing the estuary and surrounding shores must also be included. The period of significance would be roughly 5,000 years preceding the dam. The focus on a historic district with a misspelled name and minimal period of significance over a cultural landscape steeped in millennia of cultural significance is unjust and racist.

Ch3-99 Section 3.9.3 poses the question of whether TCPs are present, and then avoids answering it. It is troubling that the DEIS recommends forming a new historic district based on the dam, but does not do the same for TCPs associated with non-white people.

Ch3-99 Somewhere here, it should be mentioned that even after Euro-American settlement had begun, Olympia Oysters remained an important resource. In his history of the oyster industry, E. N. Steele states that the Squaxin maintained a claim to the oyster beds north of 4th Avenue, and that the Chinese community claimed those south of 4th. This is culturally and environmentally important information about the estuary.

Ch4-114 Again, the DEIS states that removing the 5th Avenue Dam and loss of the reflecting pool is an impact. This is far from certain, and it should be made clear that there is no such thing as a Des Chutes Basin Project Historic District. Ch4-114 Again, the Key Findings focus on the dam and reflecting pool but little else. The repeated emphasis on these recent features to the exclusion of other cultural resources results in a DEIS that misleads readers and pushes them toward the manage lake alternative. Ch4-114 Stating that impacts to archaeology would be potentially significant while dam removal would be a significant impact is wordplay not borne out by the evidence, and a racist elevation of the
dam and pool over all other cultural resources, including those that have been present for hundreds or thousands of years. Ch4-114 The Key Findings omit cultural landscapes and traditional cultural properties. This is again an implicit bias against the estuary alternative, since it would represent a benefit to those types of cultural resources, whereas all other alternatives are significant impacts.

Ch4-117 Establishment of “habitat areas” (islands) in Capitol Lake would in fact be an impact to the Lake if it were a contributing element of the recommended Basin District; the visual effect of a marsh or island in something designed as a reflecting pool is a substantial reduction in integrity. While that eligibility has not been determined, the entire DEIS considers potential effects, so for consistency, the managed lake alternative should be classified as a potential effect on historic resources.

Ch4-118 Thanks for finally mentioning the benefits of estuary restoration to non-archaeological tribal cultural resources. However, to be fair and consistent, why not list benefit in bold, as is done with impacts?

Ch4-119 Maintenance dredging is unlikely to occur outside of existing dredged or natural channels, and is therefore unlikely to have impacts on archaeology. Less than significant impacts would be accurate.

Ch4-119 Again, impacts to a non-existent Historic District are emphasized for the estuary alternative. It remains troubling that potential impacts to a potential District that does not exist is given so much weight. Ch4-119 Estuary restoration would be a benefit to the existing historic districts downtown, whose period of significance pre-dates the dam. Estuary removal would re-establish NRHP integrity dimensions such as setting, association, and feeling.

Ch4-120 Maintenance dredging effects under the hybrid alternative are said to be likely only if the saltwater reflecting pool option is chosen. In fact, freshwater pool would also be subject to sedimentation and eventual eutrophic action, and dredging would become necessary.

Ch4-121 If in fact the reflecting pool is determined eligible, a wall that reduces its size and changes its shape is definitely not a mitigation, as suggested. Remove this misleading statement.

Ch4-122 Again, discussion jumps straight to evaluation and mitigation, with no indication that there are massive and significant data gaps that can only be addressed by field inventory.

Ch4-122 Again, proposed measures for archaeology are relegated to the attachment, while a laundry list of measures for historic built features is included in the main DEIS.

Ch4-122 The City of Olympia issues Certificates of Appropriateness? Really? I served on the Heritage Commission, and no such process existed then for projects such as this. It remains doubtful that such a Certificate carries any weight, legally.

Ch4-122 Mitigation may also be required under Executive Order 21-02.
It is not correct to state that the managed lake alternative has no adverse impacts on historic built environment resources. The City and State-listed downtown historic districts gained their significance from the pre-dam era. The dam and reflecting pool are not new impacts to those districts, but they are in fact adverse regarding these existing districts.

Key Findings state that estuary and hybrid alternatives will have greater effect due to more ground disturbance, but this does not consider that the additional ground alteration is primarily dredging of previously dredges areas.

Paragraph 2 of the Key Findings focuses on construction effects unrelated to cultural resources, and deems them “less than significant.” This distracts from cultural resources.

Key Findings should include the fact that historic built environment surveys have been done previously, but that archaeological inventory leaves major gaps, and planning cannot move forward in compliance with Section 106 or EO 21-02 without an archaeological inventory survey.

"Archaeological Resources“ needs to state clearly that at this time, only a tiny percentage of the APE has been studied. Any recommendations beyond inventory are premature.

Jet grouting is described as to deep to allow assessment of archaeological effects. Archaeological monitoring of geotechnical testing or archaeologist-directed sampling has demonstrated ability to identify and assess archaeological deposits.

All of the additional effects noted for the estuary alternative presume significance of the historic built environment. None of the features mentioned (including Capitol Lake) are contributing elements of either the Downtown Olympia or Washington State Capitol Historic Districts. The dam and associated infrastructure were built in the final two years of the Downtown District's period of significance, and almost all of the contributing elements of both districts were constructed well before the dam and lake. The only post-1950 construction mentioned as contributing elements are commercial properties that have no association with the dam or pool. For this reason, the presence of the dam, bridge, and parkway must also be assessed as potential impacts to the existing districts, and their removal as a potential benefit.

Effects on archaeological sites cannot reasonably be assessed without more detailed construction plans and an inventory survey. Staging areas and fill introduction have an unknown but tentative potential to affect archaeological deposits along Deschutes Parkway through compaction or decreased accessibility, but neither would actually have direct effects on depositional integrity, and would be reversible or avoidable. Habitat construction is regularly designed to avoid archaeological resources on Puget Sound estuaries. The likely archaeological effects are not significant, and should be assessed as potentially significant even less than significant.

Estuary alternative is characterized as having definite long-term impacts on historic resources. That statement is debatable-no eligible properties or districts are affected, and removal of 1950s features may be a benefit to either or both districts-but does not belong in this chapter.
Ch5-54 Again, the only legal framework presented is Section 106, but 5.9.6.1 states that a Site Alteration and Excavation permit may be necessary. Such permits are not issued for projects under Section 106 review and consultation. The reality is that the project will likely include elements without a federal nexus that may need DAHP permits and elements that may require a Memorandum of Agreement that stands in place of a state permit in the 106 process.

Ch5-54 Archaeological inventory survey is definitely needed for any action alternative in this DEIS. Regardless of DAHP recommendations, the first principle of both federal and state cultural resource protection is to gather the information needed to make decisions. Given the paucity and quality of existing archaeological data, an inventory survey must be completed.

Ch5-54 Mitigation requires an inventory, and professional evaluation of sites identified during that inventory. Therefore, archaeological inventory survey is a necessary precursor of mitigation, but not mitigation. Archaeological monitoring or data recovery excavations may be proposed as mitigation.

Ch5-55 Archaeological monitoring of geotechnical work is an excellent recommendation. This works better when continuous sampling (rather than typical geological sampling at 5-foot intervals) is done throughout the vertical APE extent.

Ch5-55 Any Inadvertent Discovery or Monitoring Plans must be based on inventory findings. Neither can reasonably be used in places where inventory including subsurface testing was not completed before construction.

Ch5-56 Again, long-term impacts to historic built environment are mentioned in this chapter on short-term effects.

Ch6-20 Again, potential impacts to a non-existent historic district are highlighted, and the estuary alternative called out for its significant impact, without reference to the actual, refister-listed Downtown and Capitol Historic Districts. This creates a disadvantage unsupported by evidence or process.

Ch6-20 The DEIS states without evidence that prehistoric and ethnographic-period cultural resources have already been reduced. In fact, all recent archaeology has shown that Olympia’s ancient and early historic resources are preserved beneath fill.

Overall The emphasis on a potential Deschutes Basin Project Historic District in the DEIS and in the Cultural Resources appendix severely skews discussions of historic and cultural resources throughout the document. * There is no such District, and the contributing elements described actually detract from the existing Capitol and Downtown Historic Districts, since all of the named elements post-date and alter multiple dimensions of NRHP integrity. * The recommended District is mentioned so many times that readers get the impression it already exists, or that it enjoys support from historic preservation professionals. I am such a professional, and see multiple factors that would prevent finding such a District eligible * If the DEIS is to recommend potential historic districts, it should also spend equal time on a Deschutes Estuary Cultural Landscape Archaeological District. North, mid and south basins all have archaeological sites and landforms that are best understood as an over-arching
Archaeological District. Repeated mention of a potential Basin Historic District whose period of significance is just 20 years while ignoring the Squaxin and Indigenous archaeology and cultural materials and cultural landscape is negligent and racist. Throughout the document, the appearance of the proposed Basin Historic District creates the impression that there will be adverse effects if the 5th Avenue Dam is removed and the “lake” returns to tidelands. This is false, unless and until the Basin District is formally determined eligible and more important than the Capitol and Down Historic Districts, other historic structures previously determined NRHP eligible, and archaeological sites (both previously recorded and yet to be documented).

Overall Throughout the DEIS and the Cultural Resources Appendix, the authors fail to identify the gaping holes in our knowledge of archaeological and tribally valuable cultural resources (e.g., natural resources with cultural value and meaning, such as fish and sweetgrass). A few previously recorded sites are mentioned, but data gaps are not. Local archaeologists are aware of other sites, and high-probability locations and landforms in the APE, but the DEIS and Appendix barely mention that substantial archaeological investigation is needed before cultural resource impacts can be understood, much less avoided or mitigated. Historical resources (newspaper accounts, letters, Indian Claims Commission testimony, etc.) also indicate that ancient and early historic era Indigenous settlements and sites are present, but not yet documented. It is fundamentally important that the DEIS identify the need for archaeological inventory survey before the likely effects of each alternative can be described, much less addressed.

Overall As a result of the deficiency in recognizing archaeological data gaps, the DEIS and Cultural Resources Appendix incorrectly jump ahead to emphasizing the use of monitoring and inadvertent discovery plans. This fails to acknowledge standard process, in which cultural resources must be found, documented, and evaluated against NRHP criteria before mitigation or avoidance strategies are even discussed. Use of MIDPs (Monitoring and Inadvertent Discovery Plans) has been common in Olympia in recent years, and in almost every case have led to cultural resource damage, violations of the MIDP conditions, and construction delays. This approach subverts due diligence and city, state, and federal law, and will subject this project to legal jeopardy. I strongly urge the accepted

Overall Thoughout the DEIS and Cultural resources Appendix, the regulatory framework for cultural resources is presented as Section 106 of the NRPA. Section 106 will undoubtedly come into play, but as any experienced cultural resource professional knows, the federal APE may not be the same as the state APE. This document needs to carefully consider and make clear that in addition to federal Section 106, there is the State’s RCW 27.53 statute (and others), the RCW sections related to burials, Governor’s Executive Order 21-02, SEPA, and the Centennial Accord and Millenium Agreement, and Olympia Municipal Code shape the legal and regulatory framework for this project. No state agency is identified as the lead for cultural resources consultation that is required under various statutes and Orders. It is crucial to identify the responsible agency for that now.

Overall The Cultural Resource sections throughout the DEIS fail to identify a critical point, which is that Olympia’s waterfront developed primarily by building on fill. This preserved archaeological materials beneath a mantle of sediment, often with excellent preservation conditions.
Overall The DEIS and Cultural resources Appendix ignore Treaty-protected resources. In my view, there should be an entire chapter of the DEIS devoted to impacts—both adverse and beneficial—that various alternatives may have on resources protected by the Medicine Creek Treaty of 1854.

Overall Throughout the DEIS and Cultural Resources Appendix, authors give the impression that only archaeological sites and historic built environment. Equal attention should be given to the potential for cultural landscapes, traditional cultural places, and cultural materials that remain important to contemporary Indigenous people.

Overall Throughout the DEIS and Cultural Resources Appendix, authors barely or never mention that archaeological sites (and potentially traditional cultural places) associated with Chinese and other non-Native ethnic groups exist. Potential impacts to the original Chinatown, Little Hollywood, and other sites in and around the North and far South Basins in particular are not addressed.

Supporting Materials (if any): I-775_Major.pdf

Name (ID): JUDITH RADLOFF (I-776)

Organization (if applicable): N/A

Submission Text: Hello, My husband and I are professionals and have been involved in salmon recovery and environmental restoration for over 30 years. We strongly support either the estuary or hybrid alternative for the Capitol Lake-Deschutes restoration.

While salmon recovery efforts have focused on freshwater habitat for decades, stocks continue to decline drastically. Emerging research shows that repairing degraded and lost estuarine habitat is equally important for salmon recovery. Even though the Deschutes River has limited upstream salmon habitat because of the falls, the estuarine function is vital to salmon recovery in tributary streams, survival of other aquatic and terrestrial species, and a healthy environment overall. The Capitol Lake-Deschutes estuary restoration is a rare opportunity for large scale estuarine habitat restoration in Puget Sound and the greater Salish Sea.

By choosing to proceed with this project in the Washington State capitol city, we are sending a message to the rest of the state and the region that we are serious about doing the right thing. I was not able to read through all of technical documents but I am well familiar with the regional and global challenges of sediment management in a river delta setting and sea level rise. Highly engineered environments that rely on regular dredging are much less resilient at adapting to changing conditions such as increased flooding, extreme weather (including drought), and vegetation change associated with climate change. A solution that restores natural processes as much as possible will be the most resilient and adaptable in the future.

I am somewhat familiar with the dual estuary lake idea (DELI) that was not formally included in the DEIS but may be reconsidered in the final EIS or as a hybrid option. I think this idea has merit and should be considered. It adds recreational elements not available in the existing Hybrid alternative. It also provides
better freshwater habitat, manages stormwater and high groundwater, and provides a potential, low-tech solution to sediment dredging. This proposal was prepared by long-time professionals and has merits worthy of consideration. The proponents believe it could be a win-win solution between the all-estuary and all-lake sides of this project. As a taxpayer who believes in long-term solutions that restore natural processes to the maximum extent in our urbanized environments, I think the hybrid/DELI alternative should be strongly considered and that the estuary should be restored to the maximum extent possible.

Supporting Materials (if any): N/A

Name (ID): Helen Wheatley (I-777)

Organization (if applicable): N/A


Thank you for the opportunity to provide comment on this Draft EIS. I support the Estuary Alternative as the most broadly beneficial and therefore the best under the criteria of the State Environmental Policy Act (SEPA). Every year that the decision is delayed, the public cost of this project rises. What has been the cost of delay since 2009, not only in accumulated sediments and construction costs, but missed opportunities to apply for federal restoration and infrastructure grants? It is long past time to move forward.

ECONOMICS DISCIPLINE REPORT Visual Impacts (accuracy): The report misstates that “Implementation of the Estuary Alternative represents the most visual and environmental change to the downtown area...” (p. ES-4) The Visual Services Discipline Report states otherwise. On the Estuary, the Visual Services attachment states: ‘While the lake would become an estuary and have a different vegetation and water regime, the changes under the Estuary Alternative would be harmonious with the surrounding landscape because it would maintain a unified naturalistic shoreline environment in a setting that is dominated by parks and open space.’ On the Hybrid: “The Hybrid Alternative would be the same as the Estuary Alternative in the Middle and South Basins. However, in the North Basin, the visual impacts of the barrier wall would be severe, introducing a large, conspicuous structure that divides the waterbody and blocks views across it from the east and west. Although mitigation for the appearance of the wall could be provided, its sheer scale would result in a significant unavoidable impact.’ (Visual Services Discipline Report, p. ES-2) (emphasis added) Reasonable alternative: Where applicable, the wording throughout the Economics Discipline Report, and throughout the EIS, should be corrected to reflect that the Hybrid Alternative produces significant impact, and that the Estuary would produce change “harmonious with the surrounding landscape.’ ‘Harmonious' should be interpreted to mean “no impact” visual/aesthetic elements.

Invasive Species (information, call for revision): The persistence of the New Zealand mud snail (NZMS) under all freshwater alternatives may lead to a huge impact on recreational use in nearby freshwater bodies, as the snail is likely to spread outward from its current environment, especially if recreational
uses are reintroduced. The potential economic and recreation impact of the NZMS as it spreads throughout the county over the time frame of the project, should be considered.

LAND USE, SHORELINES, AND RECREATION DISCIPLINE REPORT Recreation (gap): Because it starts with the period after the Dam was constructed, the discussion fails to address the long history of recreational use that predates the Lake, including swimming and boating, but especially fishing. This section should mention that the state has also taken an interest in promoting fish rearing in the Basin for many decades, as has the Squaxin Island Tribe. It should explain that recreational fishery was important to residents and a significant use of the Basin prior to dam construction. Pedestrian Activity: (gap; fairness) There does not appear to be discussion, in this section of the EIS or elsewhere concerning recreation, of the recreational impact of the current substandard condition, for pedestrians or bicyclists, of the current dam roadway. This substandard condition should be called out. (concern about study process) An inherent flaw of a Park User Survey may be that it fails to capture those who are not using the park because of aversive factors. Its current condition has certainly driven people away, including the smell during certain times of the year. Impacts for small children (information; fairness): As a parent, I will add these qualitative observations: The sidewalk at the dam crossing is extremely narrow and forces users to walk close to traffic. It is difficult for family groups to utilize. It is probably difficult for people with certain disabilities to utilize. The wall in Heritage Park (Arc of Statehood) is also somewhat problematic for parents of young children. Children are attracted to walk on it, which means there is a risk of falling off into deep water. This discouraged me from using that area when my children were small, unless I had another adult with me to help supervise. An Estuary alternative could create a window of time when parents might feel more comfortable bringing small children to walk along the waterfront section, and children would have more wildlife to see. Also, due to lack of circulation and flow and the accumulation of algae mats, the water at the sea wall often appears unhealthy and frequently contains dead wildlife (fish and birds). The mats of detritus may be an attraction for birds. As a result, the wall often has a lot of bird poop on it. An estuary may encourage a change in bird behavior resulting in a cleaner wall. For parents of young children, the sanitary health and the safety of the shoreline environment is an important recreational consideration.

Shoreline: Regulatory environment (Accuracy, regulatory requirements) The document states that DES ‘is responsible for the stewardship, preservation, operation, and maintenance of Capitol Lake Basin.’ This is not accurate. Be more clear about the areas of responsibility. Federal: it is part of a federal Estuary of National Significance; explain the extent federal regulatory interests (which are a major consideration for this EIS). Very significant, the Deschutes Basin is part of WRIA-13. Department of Natural Resources: DNS controls and is responsible for the tidelands. DES leases them. (suggested change) It would be good to use this introductory space to introduce and more fully contextualize the Regulatory Laws/Programs/Policy tables. It is important to highlight that Tideland is land for which DNR, not DES, is responsible. Consider the element of tideland leasing.

Shoreline (Information; methodology; fairness) Under the Estuary Alternative, it appears that additional, island shoreline would be created. This is a significant fact, considering the Shoreline Management Act. Along similar lines, the Hybrid Alternative would create a new shoreline structure in the form of a long and tall seawall. Under the No Action alternative, shoreline would shrink. Provide
more discussion of alternative differences for shoreline, with consideration of the Shoreline
Management Act. If these differences are not accounted for, the Estuary alternative will not receive fair
consideration. (Accuracy) Given the very different shoreline scenarios with the different alternatives, it is
hard to understand how the conclusion could be drawn, in terms of shoreline, that 'none of the action
alternatives would change any land or shoreline uses...' under impacts of operation. (5.3.2.3) Either this
requires further explanation, or it is not accurate. What is Baseline? (Methodology/assumptions) There is
an implicit choice in how to handle the dam as an object in the environment. Either the dam is is
regarded as an object that changes the environment, or it is an object that is a constant (no change) in
the environment. It is usually assumed that the No Action Alternative serves as baseline. However, the
fundamental reason why a Long Term Management Plan is necessary, is that the dam is a change agent
in the environment. Shoreline is a particular area where it makes a difference whether the impact of the
dam is regarded as a constant or as a change agent. The No Action and Managed Lake alternatives
propose to keep the dam. This makes the question of 'baseline' complicated. The No Action alternative
guarantees change, not status quo. For this section (and indeed the whole of the EIS), in the Long-Term
timeframe, the Estuary Alternative actually provides the closest approximation to a theoretical 'no
change' baseline. (suggested change) It is reasonable, and preferable, that all distinctions or impacts
should be measured from the baseline of the estuary. In real life and real time, the "Lake Alternative' is a
change scenario (change from the present, requires constant management). The Hybrid Alternative' is a
change scenario. The No Action Alternative is a change scenario. The Estuary is a return to normal.

CULTURAL RESOURCES DISCIPLINE REPORT What is this Report about? This report explains how
archaeology and historic build environment resources are incorporated into the EIS. That is what the
Resource Description and Summaries of Impacts (Tables E$ 1 and 2) tell us. The Executive Summary and
discussions of Regulatory Context and Methodology are consistent with that. (suggested change) For
clarity, this report should be renamed the "Historical Resources Preservation Discipline Report.' Other
cultural elements, such as aesthetics and recreation, are covered elsewhere.

(suggested change) The narrative description in Section 4, Affected Environment, Section 4.2 Historic
Built Environment Resources, needs to be very carefully labeled so that the ready understands that under
'Historic Development Context,' what is being presented is not the full history of the Deschutes Basin,
but a continuation of Historic Preservation analysis (a summary of 'cultural resources within the study
areas.'). (suggested change; fairness) Likewise, it should be made clear that 'Indigenous Context' in the
Archaeology section is not equivalent to Indian history, and the Medicine Creek Treaty (upheld by the
Boldt Decision) is not a terminus to that history, which continues to this day.
(gaps/methodology/accuracy/faimess) This begs the question: where, then, is the full history of the
Study Area? Why is it not included? For just one example, look at the Boldt Decision of 1974. That
decision did not simply confirm the Medicine Creek Treaty. In its own right, it had significance for
management of the Basin over the past (nearly) half century.

DES is the lead agency, but this does not mean that the EIS should be structured around the capitol
campus, or biased toward those aspects of the Basin that are under the purview of DES its presentation
of cultural considerations. To draw the distinction in a very brief way, the Cultural Resources Discipline
Report examines the history of human-built things: existing (and some past) structures and artifacts
(what they are and where they are or might be). This is an historic preservation approach. An examination of history, according to the full purpose of SEPA, would look more like Environmental History and Cultural Geography: it would center upon the interaction between people and place in the study area: how they changed it (not just built within it), how they utilized it, thought about it, and were themselves changed by it. That's a very different narrative to the one presented here. (suggested change) It would take a very long time to discuss what could or should be in the Cultural Resources Discipline Report, or in other parts of the EIS with a culture component that is not there. There may be a somewhat efficient way to mitigate the mistaken (overly narrow) methodology. Besides relabeling the Report to better reflect its purpose to consider impacts on Historic Preservation resources, create a new section to provide a statement and/or table that provides summary guidance to the relationship between basin history/culture and other agencies connected to the basin. In the Economics Discipline Report, EcoNorthwest discusses social elements in the added contexts of 'Subsistence Value' 'Non-Use/Existence Value;' 'Recreational Value' and 'Commercial Value.' By using this or a similar framework, calling these elements out and briefly examining them as historical elements, the holistic and contextual analysis provided in the Economics Discipline Report regarding impacts, might be better achieved in the Cultural Resources Discipline Report as well. Another way to discuss historic-cultural elements in a manner similar to the EcoNorthwest approach) could be to associate them with jurisdictions: Capitol Campus Committee/Architectural; Fish and Wildlife, Tribes/Fisheries Resource; Local, state, federal, tribal/economy, infrastructure, property and social history; federal, ecology/waterway. This would better impart an understanding that there are many historical considerations besides those related to historic preservation, and would encourage a better (fairer) process of achieving balanced consideration. The absence of History/Environmental History/Cultural Geography makes this analysis incomplete and inadequate under the charge of SEPA. It would take a long time to describe and document all the ways that it fails. But at least, if labelled properly as an analysis for Historic Preservation, and if there were balanced discussion of other important historic/cultural geographic elements in a separate section of the report, it would not both fail and confuse. Some particular notes on what is contained in this Discipline Report:

Some particular notes on what is contained in this Discipline Report: 'Reflecting Pool' and Status Quo Bias The cultural concept of 'reflecting pool' is very important in this EIS. The Hybrid Alternative is essentially built around it. (accuracy) Reference to ‘the reflecting pool’ should be very carefully contextualized. For example, the sentence on page E$-3 (which, by the way, is a bit nonsensical and needs a rewrite): 'Hybrid alternatives would remove the...Dam..., eliminating the reflecting pool.” The Visual Resources Discipline Report shows clearly that the “reflecting' element will persist with the Estuary alternative most of the time. All parts of the EIS should harmonize with the findings of the Visual Resources Discipline Report. (accuracy/methodology/fairness) The 'reflecting pool' issue is not trivial from a cultural perspective. It is one significant reason why it has taken many years for the state to make a long-term management plan. The 'reflecting pool' cultural trope provides an example of why it is necessary to draw a distinction between Historic Preservation and other kinds of history. Its cultural meaning is not contained within its historic preservation history, it has a life of its own as a cultural idea. Yet this important cultural element is not contextualized usefully by the Report. The current structuring of Cultural Resources Discipline Report suffers from what EcoNorthwest discusses, in the context of economic values, as 'status quo bias' and 'the endowment effect.' (See section 4.3.4, Summary of
Findings for the Demand and Value of Recreation. Economic Discipline Report, p. 4-40) Briefly stated, there is a tendency for people 'to value more highly what they know;' and for 'people who perceive they are giving something up that they care about' to 'value the loss more highly than the value someone may place on gaining something new.' Furthermore, the built environment can foster cultural values and beliefs about the past that are largely ur lated to the actual histories of how a built vironment came to be, and the purposes it was actually built to serve. Thus, people may value what they believe about an historic object in place (a building, a statue, a 'reflecting pool'), even though those beliefs are more grounded in the present than in the past. (See Michel-Rolph Trouillot, Silencing the Past: Power and the Production of History) The built environment is an artifact of not just cultural practices but historical power relations in society that continues to shape cultural memory (hence, historic preservation). It must be noted that much of the historical built environment under discussion in this report, is rooted in an historical period (1920s-1950s) of active and deliberate erasure of the preceding history of the Deschutes Basin and its peoples. This includes the project area's contemporary twentieth century working class inhabitants, as well as the indigenous history stretching back thousands of years. The 'reflecting pool' is a culturally controversial object. For some, it represent erasure symbolized by “Little Hollywood.” It also represents erasure of Native American culture. For this reason, present-day discourse on the roles of certain architects or 'leading citizens' in shaping the history of the Basin should be approached with professional caution. Likewise, the cultural meaning of the built environment should not be assumed to be culturally monolithic. (See, for example, Eric Hobsbawm and Terence Ranger, The Invention of Tradition and Roxanne Dunbar-Ortiz, An Indigenous Peoples' History of the United States.)

(suggested change) At the very least, incorporate present-day tribal voices in the Cultural Resources Discipline Report to provide understanding that there are multiple cultural perspectives regarding the built environment and its meaning. As it stands, the Report implies that Native American history is limited to archaeological concerns, when in fact Native voices are a vital element of present-day management.

The Des Chutes Basin Project Historic District: What is a Cultural Factor, What is Impact
(accuracy/methodology) The Des Chutes Basin Project Historic District does not exist. Despite the methodological bias of this report toward historic preservation of the existing built environment, there is still no basis for including a nonexistent historic district as the equivalent of existing historic districts. There can not be an 'impact' on something that does not exist. Therefore, statements such as the following should be removed: "If the recommended Des Chutes Basin Project Historic District is determined eligible for listing, this work would permanently diminish the integrity of the resource's essential physical features, and would be a significant adverse impact.' Likewise, tables 4.4 references the 'Potential Des Chutes Basic Project Historic District' as if its potential existence were on an equal par with existing registered resource elements. This reference should be removed. "Potential' historic districts should not be treated on equal footing with actual historic districts (Tumwater Historic District, etc.). As a manifestation of cultural value, the difference between being qualified, and actually being registered, must be recognized. (inconsistencies) Here is one example of how the current approach sows confusion: There may be individual historical properties registered in existing historic districts that are very significant for consideration of project impacts. They are not listed in a table. Yet individual historical properties that are not registered, are listed in a table: Table 4.6.) It is hard to understand why...
individual properties that are not in historic districts are summarized by a table, when individual properties that are registered, are not. (gaps/suggested change) There is no particular need to know what resources were surveyed. There is a need to know what resources may be impacted. The maps (e.g., Figure 4.2) could be modified, perhaps adding stripes or circles around those to which attention should be drawn. A table could be provided. It could substitute for the current data-dumping approach in this Report of listing resources that are not related to impacts and alternatives. Again, ECONorthwest provides a useful model within the EISs itself. It does not include or catalogue all the data it collected, it just says that it collected and analyzed it, and provides the information that matters. That helps to streamline and focus the information-gathering process for the decision-maker reading the document. A finished Discipline Reports should not require considerable data-culling and independent data analysis by the reader. For these reasons, consider removing Table 4.6 (and other overly-extensive data) because it may be more confusing than enlightening. As the non-contextualized treatment of a nonexistent historic district suggests, too much space is given over to detailing historic preservation/registration status in the report, at the expense of discussing historical context and meaning. In the case of discussing “historic built environment resources,” the Report would be better focussed on helping to identify which historic structures need particular attention in the specific context of impacts from the Long Term Management Project. Their registration status and jurisdiction may, or may not be important.

More methodical emphasis on cultural meaning is needed (strong opinion) It is worth considering that one reason why there is not already be a Des Chutes Basin Project Historic District, could be that the built structures are not of comparatively high cultural value. See the language provided from the Comprehensive Plans to consider what that might mean. Local residents may not see the values of “high quality civic architecture” in the Des Chutes Basin Project. Let’s face it. The dam is ugly and inadequate to present need. The Deschutes Parkway is, for the overwhelming majority of people, just a road. A major part of the Deschutes Basin Project, as planned, never even happened - instead, the railway persists. The concept of this historic district has not been ‘achieved in cooperation with all members of the community and... integrated into city decision-making processes’ per the Olympia Comprehensive Plan. Besides local residents, state actors have not perceived a high level of historical value in the structures themselves, regardless of whether they qualify for potential preservation technically. (methodology/gaps/fairness) Cultural importance matters more than historic preservation in the context of SEPA (see SEPA discussion below). For instance, while the antagonistic historical facts of Capitol Lake and Deschutes Basin Estuary each have cultural importance, the Dam, as a structure, does not. People who love the Basin as a recreational resource for walking, may not even have full awareness that the bridge they walk across is also a dam. Yet the dam is discussed here, and the waterbody is not, because the River and other natural resources are not considered as ‘historic’ elements in this report unless they are modified by humans or, in the case of the ‘reflecting pool,’ a product of modification. Why and when does this matter for the EIS? One significant example: the cultural importance of the Lake must be considered alongside the cultural importance of the Estuary. Compared the heavy weight of this central evaluative task, the dam, as a structure, is virtually irrelevant from a cultural perspective. Likewise, the Deschutes Parkway is not understood by any but a handful of individuals to be a key element of the Des Chutes Basin Project, it is simply a road. It plays no role in helping people to understand the cultural heritage of the Basin. So what, really is the ‘resource?’ Percival Creek, which flows under the Deschutes
Parkway, has its own historical and cultural importance for its Chum and other salmon, for its great interest to recreational and subsistence fishermen historically, for the loss of its estuary, and subsequent history as a salmon pen area. Yet it is not discussed in the report. It should be. The historic preservationist approach applied here, including evaluation of alternatives based on 'potential impacts to a historic resource's integrity,' is not adequate. It is not the same as consideration of the importance of an historical resource, the meaning of the resource, and the relationship of the resource to other historically important elements. Under SEPA, the environmental task of 'attaining the widest range of beneficial uses' is paramount. Excessive focus on currently existing historic built environment resources caused this part of the EIS, which is supposed to help with SEPA evaluation, to lose its way. SEPA isn't even listed as part of the criteria used to evaluate significance 'for the surveyed resources' (built/archaeological). It should be.

Section 2.0 Regulatory Context (methodology/gap) The ‘regulatory context” discussed in the Report refers to regulation of historic preservation. This is inadequate. SEPA: Clearly, the starting point for regulatory context of cultural evaluation in an EIS is SEPA itself, and the values and goals it enumerates that relate to discussion of cultural elements. (information) The State Environmental Policy Act counts the biological and physical environment as a wellspring for the human need for cultural enrichment as well as other elements of human health. It calls upon government to support ‘conditions under which human beings and nature can exist in productive harmony,’ while meeting social, economic and other human needs now and for future generations. 'Aesthetically and culturally pleasing surroundings; ‘an environment which supports diversity and variety of individual choice'; achieving a 'balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities'; and attaining 'the widest range of beneficial uses of the environment without degradation, risk to health and safety, or other undesirable and unintended consequences' are all important elements that should be weighed, according to the state legislature, when considering cultural environment elements of policies and actions. To that end, SEPA asserts that not only the natural sciences, but the social sciences and design arts, as well, should be deployed in decision making. Economics is one of the social scientific disciplines applied for this DEIS, but the state also seeks to 'preserve important historic, cultural, and natural aspects of our national heritage.' According to the SEPA handbook, the EIS examines 'all areas of probable significant adverse environmental impact associated with the alternatives...” The Report limits the 'areas' to archaeology and historic built resources. It has already been discussed why this is no sufficient. (methodology) In the context of SEPA specifically, the problem with inadequate cultural analysis is that it can lead to inaccurate weighing for “balance' under SEPA, or failure to recognize that ‘balance' is even in question. For example, in the case of the dam, there may be an adverse historical impact to preserving it as an historic resource because doing so preserves an active tool by which an historic injustice is perpetuated. For another example, while the hybrid alternative is depicted in terms of mitigating a loss, it is more appropriate to address it as construction of a new structure into the environment.(suggestion/information) The fundamental problem of the Report is clearly one of scoping. The EIS needs a practical fix that does not require a whole new research program based on better methodology

Because it is another social science-based report, and because consistency is desirable across the EIS, the Economics Discipline Report and the work of ECONorthwest should again be utilized as a model. It
provides a helpful table that may suggest a useful example of how to frame scoping the historical issues that would be sufficient to avoid necessitating a "redo." Table 3.1 of that report, Description of Ecosystem Service Study Areas, delineates particular areas of concern (e.g., flood regulation, visual aesthetics), and then connects the resource elements ('supply') to who thinks it matters ("populations that use the Capitol Lake Basin...for recreation"). The range of these communities goes from local users of the project area, to 'the Pacific Northwest, the U.S., and the world,' or even 'global.' The Cultural Resources Discipline Report could benefit from construction of a similar table to help distinguish: what environmental elements are areas of concern for historical meaning (e.g., the water or shoreline, salmon, the Dam, nearby buildings); the geographical location and physical presence of these cultural-historical resources (the 'supply'); and those people or jurisdictions to whom it matters. Table 3.1 of the Economics Discipline Report already starts the process. Under the ecosystem service element listed as 'cultural, heritage, spiritual, and education' it lists the Basin and West Bay as the 'supply' elements, and delineates 'Populations that currently or historically have connected with the resources in the Capitol Lake Basin, directly or indirectly, centered primarily in Western Washington and statewide.' Similarly, under the 'visual aesthetics' service element, it identifies a tighter circle of concern: 'populations that use the Capitol Lake Basin and West Bay for recreation; Populations living within view of the project area.” These kinds of clarifying refinements are absent from the Cultural Resources Discipline Report, making it very hard to understand either the universe of what might be called stakeholders, or the jurisdictions (local? state? national?) for the elements being examined. It would also be helpful to better connect to cultural elements in other discipline reports in the EIS. As noted, the cultural discipline report has not been harmonized with the discipline report on the visual/aesthetic element. It clearly has also not be harmonized with the Economic element. These interrelationships within the EIS should be noted and refined.

The National Regulatory Context (gaps) It has already been observed that this Report leaves out many historical elements. One of them, is the national relationship with the Deschutes Basin and Budd Inlet. SEPA seeks to 'preserve important historic, cultural, and natural aspects of our national heritage.' (emphasis added). Archaeology and Historic Districts (which the Deschutes Basin Project is not) are only one aspect of national heritage interest. (methodology/information) Turning to history, the federal regulatory context matters not only in terms of historic preservation, but in terms of the unfolding of Basin/Inlet history itself. The federal interest in the navigation channel, dredging, and in salmon fishery, very much shaped the cultural meaning of the Dam structure and other structures and built environment, including fill land, within the Basin. The Clean Water Act and federal treaties were pivotal in setting the Long Term Management Project in motion. As part of an Estuary of National Significance, the Deschutes Basin is certainly a valued part of our national fabric, a fact that is reinforced by the ongoing process of developing a TMDL for the watershed. This too is an active part of the history of the Basin that has unfolded over several decades so far, as well as being a regulatory parameter. There are many ways that the federal government participates in the governance of Budd Inlet. (strong opinion) For EIS consideration, the Estuary Alternative will clearly expand, enhance and preserve the national resource and cultural value of the Basin from a federal perspective. (consistency/gaps/suggestion) Other parts of the EIS also need enhanced discussion of the federal interest. For example, there appears to be no discussion that expanding this federal connection can also expand the potential funding base for the Long Term Management Project, compared to the other alternatives.
The Status Quo Bias and Myth History (methodology/information) The structuring of Cultural Resources Discipline Report suffers from what EcoNorthwest discusses, in the context of economic values, as 'status quo bias' and 'the endowment effect.' It also reflects this phenomenon as it has occurred among those selected as key stakeholders/information sources. (See section 4.3.4, Summary of Findings for the Demand and Value of Recreation. Economic Discipline Report, p. 4-40) Briefly stated, there is a tendency for people 'to value more highly what they know;' and for ‘people who perceive they are giving something up that they care about’ to ‘value the loss more highly than the value someone may place on gaining something new.’ The academic field and the practice of Historic Preservation has certainly seen a great deal of critique for its inherent biases, especially in relation to social justice. (See, for example, the recently developed methodology of cultural heritage needs assessment, Ned Kaufman, "Historic Places and the Diversity Deficit in Heritage Conservation," The Journal of Heritage Stewardship, No. 2, Summer 2004. https://home1.nps.gov/CRMJournal/summer2004/article3.html) The built environment can foster cultural values and beliefs about the past that are largely unrelated to the actual histories of how a built environment came to be, and the purposes it was actually built to serve. Furthermore, the built environment is an artifact of historical power relations in society that shapes memory. (See Michel-Rolph Trouillot, Silencing the Past: Power and the Production of History) Much of the historical built environment under discussion in this report, is rooted in an historical period of active and deliberate erasure of the preceding history of the Deschutes Basin and its peoples. This includes the project area's contemporary twentieth century working class inhabitants, as well as the indigenous history stretching back thousands of years. In particular, present-day discourse on the roles of certain architects, architectural schools (City Beautiful) or 'leading citizens' (see Wilder a & White, below) in shaping the history of the Basin should be approached with professional caution. (See, for example, Eric Hobsbawm and Terence Ranger, The Invention of Tradition and Roxanne Dunbar-Ortiz, An Indigenous Peoples' History of the United States.) The cultural shaping of Memory is not something to be discounted as wrong, but rather as part of the historical fabric that shapes the world in which the artifact lives. Good examples right now is the debate over display of Confederate statuary, or the commemorative meanings of the name 'King' in King County or the naming of the Jackson Highway. Unfortunately, the qualitative sections of this Discipline Report fail to distinguish clearly among history, historic preservation, and the phenomena of cultural memory. (suggestion/gap/consistency) Turning again to EcoNorthwest and the Economics Discipline section, one possible corrective might be to include discussion of what EcoNorthwest labels as elements of 'Subsistence Value' 'Non-Use/Existence Value;' 'Recreational Value' and 'Commercial Value.' Where any of these elements arise in the text or discussion of the Cultural Resources Discipline Report, they are currently incidental and not a part of the research design or methodology. calling them out and examining them as historical elements as well as economic elements, the holistic and contextual analysis provided in the Economics Discipline Report, might be better achieved in the Cultural Resources Discipline Report as well.

Appendix A: Study of Cultural & Spiritual Values (2009) (AHBL, Inc) (suggestion) This section should be removed from the Discipline Report and treated strictly as a reference. A large percentage of the Cultural Resources Discipline Report consists of this 2009 study performed for DES by AHBL, Inc. It shares many of the methodological problems of the current Discipline Report, only worse. (information) Twelve very eventful years have passed since publication of the AHBL study. This includes the huge impact of the New Zealand Mud Snail on the cultural use of the Basin. It also includes the advent of
homelessness as a very significant structural element of society in the study area. Although these may be seen as novel elements, they both have historical continuity with past history. The NZMS is part of a succession of invasive species that are actually a biological element of the 'built environment' of the historic dam structure. Prior to its commodification and subsequent acquisition by the State, much of the shoreline held the cultural position of a 'commons,' utilized for its "subsistence value" for working class people, displaced people, and immigrants. These elements of history, so powerful especially within the last decade, were not even on the radar of the 2009 report. Now the cultural currents of the movement for justice and equity, COVID and even climate change, have further contributed to the transformation of many forms of cultural use of the Des Chutes Basin and Budd Inlet. The 2009 study is obsolete.

(methodology/gap) of particular concern when viewed by today's social science standards, the old study relied on views "which will be known" (quotemark added) to interviewees but held by other groups or communities.(emphasis added). This was a dubious method even 12 years ago, and now it cannot stand. Where possible, if interviews are to be included (and there is ample reason not to include the ones provided), then this should be rectified by seeking interviewees who regard themselves as members of those 'groups are communities' empowered to provide their own perspectives for this study.

Capitol Architecture and Built Environment (accuracy) Minor correction: "Johnson' should be 'Johnston.'

(strong opinion/methodology) In reference to the AHBL study and the narrative section of the the main body of the Discipline Report (which is notably better than the AHBL study), the history of Capitol Architecture is given too much prominence. Furthermore, it is not separated sufficiently from the Deschutes Basin Project as an historical event in its own right. The over-emphasis on capitol architecture may have three sources: bias because DES is the lead agency on the EIS; an historic preservation analysis performed without a justice and equity lens; status quo bias. Furthermore, an unusual aspect of this EIS is that the Long-Term Management Project is prompted by the impact of an historic built resource, the dam.

Wilder & White and Olmsted Brothers: (accuracy) Appendix A, "Study of Cultural & Spiritual Values Associated with Future Alternatives for Capitol Lake Basin' contains a misstatement of fact when it says: "...the 1911 Wilder & White plan for the Capitol Campus...proposed the creation of a pond to reflect the domed Legislative Building and the Temple of Justice in a portion of the Lake basin...'. This is simply not true (see discussion below). Furthermore, the weight given to the Olmsted Brothers sketch is based on an inaccurate understanding of their landscape plan. (information) The Wilder & White design was based on the idea of the (waterless) Acropolis at Athens where, in the words of Wilder & White themselves, 'the unity of the whole is evident from all points... The site like the Acropolis was isolated from the city and raised above it, and the buildings comparatively small, yet all contributing to the same general purpose.' The context of the "Birdseye view' illustration, is also provided by Wilder & White in The Cornell Architect (1916): 'It was evident that the presence of the Capitol Group should have an important influence on the development of the city of Olympia and at the request of influential citizens we prepared a report containing suggestions to that end. In order to facilitate their comprehension a birdseye view of the city was prepared showing the proposed relation of the Capitol to these improvements.' (emphasis added In other words, it was suggested that the construction of the City itself follow the construction of the Capitol design. After the Capitol Group was designed, certain "influential citizens" asked the architects for a sketch of how they could build the city to utilize the potential
viewscape. In response the architects presented a view based on significant dredge and fill of the Basin, not a reflecting pool. The Birdseye View sketch does not show reflection, nor does any other Wilder & White sketch.

Wilder & White sketched the main approach to the Capitol Group based on a belief that they could build terraces into the hillside. Their considerations for the viewscape were focused on how this would affect design of the Capitol Group. In their words: 'The exact restrictions as to the boundaries of the site contained in the original programme were modified and at the request of the Capitol Commission we revised the group plan, holding to the same arrangement but gaining more space in every direction. This permitted the use of architectural terraces as a setting for the Legislative and Justice Buildings and gave them additional importance, while it also permitted a loftier dome on the central unit....' (emphasis added) As architectural historian Norman Johnston has pointed out, Wilder and White were based in New York, and were unaware of the environmental conditions (let alone railroad property rights) when they created the original design. Among other things, this made them ignorant of the local cultural importance of the northward viewscape from the bluff toward the Olympics range. As a result, they erased this culturally valued element, which had been included in the original call for designs (contest). As Wilder & White themselves stated: 'Neither of us had been to Washington and for the conditions surrounding the problems were entirely dependent upon the information contained in the programme.' All they knew was that "On the north and west the ground sloped abruptly to the water about one hundred feet below,' and they were told that "near the centre of the grounds were the original foundations upon which is was proposed that the principal unit should be placed with the frontage towards the north, thus making this the principal axis of the group. 'Wilder & White won the competition despite tossing away the northerly viewscape, which they had blocked in their design with the Justice building. They were solving a cost problem efficiently. There were compromises and contingencies built into the design from the very beginning. In the end, Wilder & White's design concept of the grounds and the stair promenade had to be tossed aside. The soil composition of the bluff undermined the construction of the stair promenade, which was a central feature of their design. The dredge-and-fill city of the Birdseye illustration, didn't happen. As an historical artifact in its own right, the Birdseye illustration took on a life of its own in the late 20th century.

The introduction of the landscape architecture firm Olmsted Brothers onto the scene, which was a rocky one, introduced another one of many elements of historical contingency to the Capitol Campus. Their proposed design sought to remedy the problems created by the placement of the Wilder & White capitol group, which could not provide a main approach up the bluff as anticipated. They proposed to solve the problem by creating viewscape and main approach angled from downtown Olympia. Unfortunately, our present-day understanding of the Olmsted vision was erased when tall downtown buildings destroyed the line of sight to the Capitol, and because a significant part of their landscape design connected to their concept of the main approach was never executed. As a result, the "reflecting pool' illustration assumed a greater importance in the late 20th century, than it possessed at the time of its sketching. As a collection of historic built resources, the Capitol Campus has been cobbled together not just from architectural vision, but from compromise, physical and economic limitations, and changing needs, values, and structures of power. Frequently deployed in relation to the concept of a 'reflecting pool,' the architectural sketches demonstrate that not all of the significant architectural artifacts were built
resources. The sketches have arguably gained more cultural power than the physical element of the Lake itself for some, as demonstrated by the interviews and misstatements of fact even within the draft EIS. This includes the culturally persistent concept that the estuary will significantly disrupt the visual field, when in fact it is harmonious and would continued to provide the ‘reflection’ function a good deal of the time. (suggestion) The loss of a structure does not necessarily result in the loss of the capacity to place or retain related historical objects accessibly in the environment. The EIS should discuss how the 'impact' or sense of loss of historic build resources can be mitigated by measures such as providing a permanent display about the history of the Capitol Group, landscape design, and Capitol Lake, somewhere on the Capitol Campus. (strong opinion) Applying historical analysis, not just historic preservation analysis, to the Lake Management and Hybrid Alternatives requires incorporating an understanding of the history of architectural ideas, but within their proper limits. Construction of a wall, in particular, would be like erecting a statue of a Confederate hero in the 1920s. It would be a construction of a new object to institutionalize and enforce an interpretation of the past that perpetuates the power dynamics of the present. (References: Wilder & White, 'Illustrations of Washington State Capitol Competition Drawings,' The Cornell Architect, Vol 2, No. 3, June 1916, https://babel.hathitrust.org/cgi/pt?id=coo.31924015161049&view=1up&seq=10&skin=2021 Norman J Johnston, Washington’s Audacious State Capitol and Its Builders. Seattle: UW Press, 1988)

NAVIGATION DISCIPLINE REPORT (consistency) Navigation contains cultural, economic, and land use elements, which need to be accounted for. This goes back to the general observation that the different reports should be better harmonized to present a coherent perspective, both in the Discipline Reports themselves, and in the Executive Summary.

Navigation Dreams: The Ship Canal (information) It may be worth noting, as a point of cultural information, that from the 1930s up until the 1960s - in short, in the same time frame as the evolution of capitol campus planning - proponents (including federal legislators) promoted the idea of turning the Deschutes Basin into part of a large canal system connecting Olympia/South Sound via the Deschutes and Chehalis Rivers. It was taken seriously enough, to have even been proposed by local ‘influential citizens’ as a better alternative for New Deal infrastructure spending, than the Bonneville Power Administration. This is an example of how there was persistent interest in continued commercial as well as recreational use of the navigation channel throughout much of the 20th century. It is another illustration of how the Basin’s function as a setting for the Capitol Campus was always just one part of a larger field of meanings, uses, debates and discussions about the Basin and the Deschutes River.

(gap: transparency) When I attended a workshop on the draft EIS, the presenters could not explain fully Figure 3.2.2 regarding navigation patterns. This figure is potentially important. It matters for explaining who is using Budd Inlet for navigation, and how frequently. Right now, it is pretty incomprehensible, and the text (3.2.1; 4.2.1) provides no enlightenment, either. How frequently do vessels call at the Port? How heavily is the channel used by the marinas? This should be treated as essential information for many aspects of the EIS, based on the purposes of SEPA.

(suggestion) Supplement the navigation channel use data with a table, or some form of information that informs how heavily the channel is actually used and by what types of vessels. For example, how often on average to cargo ships call at the Port of Olympia? Once every two weeks? Once month?
There should be greater effort to determine and characterize current use of the channel by recreational craft.

(suggestion) Port of Olympia future use (4.2.2): It was important news to the Port Commission and the public, that the Port 'would like to welcome Panamax and Neopanamax vessels...to their berths.' The presence of this text in the EIS even prompted a news story in The Olympian. One Commissioner called it “nuts,” and others agreed that the dredging problem alone is insurmountable, let alone other factors involved in bringing Panamax ships to Olympia. Remove the second paragraph of 4.2.2 completely from the EIS. It would be helpful to discuss anticipated future navigation needs of the Port of Olympia in a SEPA context, in addition to the dredging discussion. Climate change, the transformation of shipping in response to the need for reduced greenhouse gas emissions, and the aging (usefulness) of the berths are examples of additional long term considerations.

CHAPTER 2: PROJECT ALTERNATIVES AND CONSTRUCTION APPROACH Engagement with Government Partners: (accuracy) The presentation of government/agency engagement as being somehow synonymous with stakeholder engagement is not really correct. The legal framework and economic framework of government engagement should be highlighted to enhance understanding of the decision-making task being shepherded by DES. For instance, the legal framework must also be discussed in the section on how and when a decision will be made. DES appears to be conflating its capacity to weigh values in a selection criteria process, with a larger question of how regulations and policies impact the ultimate decision. Indeed, existing law, and not just a recognition of the degraded state of the Deschutes Basin, is a trigger of the whole Long Term Management Project and its EIS process. (suggestion) There should be better discussion of how a DES 'decision' on the EIS plays into the larger process of making a real-world decision with government partners, and perhaps better conceptualization of how this can be accomplished giving due weight to the findings of those partners. As of this writing, LOTT and the City of Olympia have already made an effort to participate in the decision.

This comment applies also to Table 2.1.1 on Objective Criteria, Ch. 2 p. 2-3. How does DES come to the conclusion that the only context for 'Regulatory Feasibility' is how regulations directly impact management by DES? DES is the lead agency for the EIS process, not the only agency involved in management of the Deschutes Basin/Estuary. Other agencies bear responsibility for regulatory aspects. The Executive Summary should be rewritten to highlight that the regulators are critical to the decision process. A table could be created to help point the readers to those sections of the DRAFT EIS where regulatory elements are more fully discussed (e.g., Discipline Reports).

Supporting Materials (if any): l-777_Wheatley.pdf

Name (ID): Patricia Wenger (I-778)

Organization (if applicable): N/A
Submission Text: Thank you for your work on improving the quality and studying Capital Lake in Olympia. I would like to see the dam removed so to allow for better movement of water and wildlife. Thank you for your work, Patricia Wenger

Supporting Materials (if any): N/A

Name (ID): Robert Jensen (I-779)

Organization (if applicable): N/A

Submission Text: Under the Shoreline Management Act, the Draft Environmental Impact Statement is inadequate under the law. Section Nine lists the permits required for the various alternatives. It identifies the shoreline master programs of Tumwater and Olympia. However, this is significantly misleading to the reviewer. It overlooks, the requirement for development to be consistent with the policies of the Shoreline Management Act. RCW 90.58.140(1)(2). Development means a use consisting of the construction or exterior alteration of structures; dredging; drilling; dumping; filling; removal of any sand, gravel, or minerals; bulkheading; driving of piling; placing of obstructions; or any project of a permanent or temporary nature which, interferes with the normal public use of the surface of the waters overlying lands subject to this chapter at any state of water level. RCW 90.58.030(a). Specifically, regarding the policies, RCW 90.58.020 begins with the following declaration: Legislative findings-State policy enunciated-Use preference. The legislature finds that the shorelines of the state are among the most valuable and fragile of its natural resources and that there is great concern throughout the state relating to their utilization, protection, restoration, and preservation. Later, this section contains the following language: This policy is designed to insure the development of these shorelines in a manner which, while allowing for limited reduction of rights of the public in the navigable waters, will promote and enhance the public interest. This policy contemplates protecting against adverse effect to the public health, the land and its vegetation and wildlife, and the waters of the state and their aquatic life, while protecting generally public rights of navigation and corollary rights incidental thereto. The section culminates as follows: Permitted uses in the shorelines of the state shall be designed and conducted in a manner to minimize, insofar as practical, any resultant damage to the ecology and environment of the the shoreline area and any interference with the public's use of the water. “The Shoreline Management Act is to be broadly construed in order to protect the state's shorelines as fully as possible.” English Bay Enterprises, Ltd. v. Island County, 89 Wn.2d, 16, 20, 568 P.2d 783,786(1977). These provisions are mandatory. Restoration of the estuary is the only alternative which will satisfy them.

Supporting Materials (if any): N/A

Name (ID): Allen Mote (I-780)

Organization (if applicable): N/A

Submission Text: There appear to be several issues that either have not been considered or, at least, do not seem to be addressed in the summary proposals. The most important are briefly addressed in Section 4.1. UPSTREAM EROSION MANAGEMENT. The State would seem to be in a position to manage or
require the management of upstream erosion, rather than just continuing to dredge the result of the eroded materials filling Capitol Lake basin at taxpayer expense. How is this being addressed?

2. SNAILS For many years Capitol Lake has been closed to public use for the stated reason of the invasive 'snails.' All 3 proposals indicate the Lake will be re-opened to public use. How is it now that the Lake will be opened to public use? My last research indicated that the snails have not been controlled or eliminated, but have spread further upstream, Is the State now stating that the snails are not an issue? Or is it a misstatement that the Lake will once again be open for public use?

3. MAINTENANCE PLAN & FUNDING The Lake has not been well maintained. Will a permanent long-term maintenance fund be established to cover the next 50 years of maintenance, or in perpetuity, so the mess that exists now will not happen again?

4. ABSENCE OF MEDICAL, SOCIOLOGICAL, MENTAL HEALTH, ETC., EXPERTISE IN PLANNING There are several significant issues not addressed in the proposals that dramatically impact the physical, mental, emotional, and spiritual health of residents of the local communities as well as that of many visitors. Following are a few. 4A. Medical science has known for decades the dramatic impact of using ionizing machines to help hospitalized patients heal more rapidly, About 30% faster. Both physical and mental health conditions. The highest amount of healing ions in nature is around moving water. For centuries, indigenous peoples have used moving water as a healing environment for people suffering physical or mental distress. In the case of Capitol Lake, the waves moving across the water contribute to this health benefit. Capitol Lake is the only environment in the Olympia area that can provide this benefit. 4B. Medical science has also known for decades the importance of light for the health of people. For many people the lack of adequate sunlight and the minimum daily requirement for lumens can lead to a medical diagnosis of SEASONAL AFFECTIVE DISORDER (SAD), both a physical and mental/emotional disorder. Many additional people suffer from what can be considered as low-grade SAD This illness not only impacts the level of well-being of those suffering from it, and their families, but is also correlated with loss of productivity, depression and suicide. In fact, it was a Dr. at the University of Washington who developed what has become known as the 'Light Box,' which is now used worldwide, especially in areas where there is insufficient light for people to maintain health or to thrive. In Olympia, with the dark winters due to the cloud cover, and the predominance of forest canopy which further blocks natural light, there is not sufficient light/lumens available for many months out of the typical year. Capitol Lake is the only natural environment where the absence of tree canopy cover, can allow the full penetration of natural light from above (yes, even through the clouds), and also reflects light from the surface of the water. These can significantly add to the required minimum daily requirement for lumens, and to the health and well-being of people. 4C. As populations become more dense, electronic devises are used longer and more frequently, more people work and are seated in offices, traffic increases, life is more complicated, etc., there is a contagion of increased tension among people and a decrease of healthy, natural, 'grounding' opportunities. As the pace of our society continues to increase, which adds stress to peoples lives, illness proliferates. Many health professionals will state that about 90% (or more) of illness is the result of stress. People need a natural place to unwind and remember who they really are. Many societies have built-in practices and places to mediate the toll of stress. The US really does not. Open spaces and moving water have a natural calming and restorative effect on people.
Keeping the Lake as open and uncomplicated as possible, can help reduce the ill effects of stress, sedentary work, and add to the overall health, well-being, and productivity of people. 4D. Open, VISUAL space, is a requirement for the health of a significant number of people. People who have grown up where they can see long distances, and whose brains and minds have adapted to that environment need to experience a regular amount of visual space to remain mentally healthy, which also means to remain physically healthy. Without that, these people, many without realizing it, will slowly begin to decline and experience reduced effectiveness in work and living, and health, This also applies to many people who've grown up in environments that are heavily forested and/or with extensive cloud cover. This has been recognized in other cultures for centuries. And, in fact, is used as a mental health therapy, when life gets too overwhelming (as also noted in 4C above), i.e., taking the distressed, ill person away from the the overwhelming aspects of their lives, to a place where they can see a far-off, open and uncomplicated, horizon. Olympia, doesn't really have such a place. The closest would be Capitol Lake if it were kept open, so people could experience the natural, calming, soothing, effects of moving water, uncomplicated open space; healing ions, breezes touching their skin; etc.; all helping them return to a natural and healthy human experience. 4E. Summary: In essence, designing Capitol Lake to be as visually open as possible, with free moving wind and waves, would be the only source in Olympia for the optimal health and healing of people and thereby all aspects of he community. The State of Washington, has the opportunity to make a clear statement that the physical, mental, emotional, and spiritual health of citizens is not only important, but critical to their well-being and to the overall prosperity of the citizens. To address only the 3 proposed designs through engineering and earth science eyes would be not only be short-sighted, but would discount the decades of medical, sociological, psychological, anthropological, etc., research and science, and what has been learned that makes peoples lives work well, feel a sense of fulfillment and happiness, and heal well when ill.

Supporting Materials (if any): N/A

Name (ID): E.J. Zita (I-781)

Organization (if applicable): N/A

Submission Text: Thank you for your fine work on Phases 1 and 2 of the CLDE process, including the DEIS released last month. My written comments are similar to my verbal comments at your first public session this July. Sedimentation from Deschutes River flow is a major issue in the CLDE DEIS. Your hydrological studies and data reviews are excellent tools for projecting sedimentation rates, depths, and locations in each of the alternative scenarios (managed Lake, restored Estuary, Hybrid, or No Action). I trust your methods, your results, and your cost estimates, assuming generally steady Deschutes River flow. A recently published study found that Deschutes River flow is declining due to population pressures and climate change. The new study finds that a 'critical low flow' condition may occur in coming decades. The good news is that lower Deschutes flow may reduce expenses due to long-term sediment management. The bad news is that lower Deschutes flow is likely to adversely affect ecosystem health and human uses in the watershed. For the purpose of the final CLDE EIS, you may be interested in the methodology and results of this new study. It might inform your projections of future sedimentation in each of the alternative scenarios. The new study is Eunbi Lee's graduate thesis? ”The

As you know, climate acceleration of extreme weather events is likely to cause episodes of heavier rainfall and flooding in our region. Those events may contribute to episodically increased Deschutes flow and sedimentation. That could partly counter the decreased flow projected in Ms. Lee's thesis. The net effects of extreme weather events are notoriously difficult to project. I look forward to your final EIS conclusions and recommendations, trusting you to synthesize the best available knowledge. Your work informs our community's important decision about the future of Capitol Lake-Deschutes Estuary.

Thanks too for your exemplary public engagement throughout the CLDE work - from stakeholder groups and extended public comment opportunities, to publication of your excellent work on your clear and accessible website, https://capitollakedeschutesestuaryeis.org/ Best, Zita (a member of the CLDE Work Group, representing the Port of Olympia) 


ZitaCommentDEIS_2021_Aug.pdf discusses factors that may affect sedimentation rates in the study area, and offers a new study for consideration: EunbiLee_ThesisFinal.pdf projects future Deschutes River flow. Climate change and population pressures may cause a 'critical low flow' condition in the Deschutes in coming decades. This may affect sedimentation rates. Lee's methodology and results may be of interest for the Capitol Lake - Deschutes Estuary final EIS.

Supporting Materials (if any): I-781_Zita.pdf

Name (ID): Christine Djafarian (I-782)

Organization (if applicable): N/A

Submission Text: I am living on Capitol Blvd. overlooking the south and middle basin of Capitol Lake. I fell in love with the waterview when we bought the house and enjoy it every single day. I do not want it to be an estuary and look at tideflats. My neighbor who passed away a couple years ago mentioned that it was muddy and sometimes smelly when it used to be an estuary. The value of my home would decrease and I would be devastated to loose my view. Also Olympia it the capital of Washington and deserves a managed lake for people to enjoy. I hope you consider my viewpoint. After all I am the one who has look at it every single day.

Supporting Materials (if any): N/A

Name (ID): Gregory Quetin (I-783)

Organization (if applicable): N/A
Submission Text: I support restoring the estuary.

Submission Text: Please also considering the long term maintenance costs and resilience to climate change when making this decision.

Supporting Materials (if any): N/A

Name (ID): amelia sohler (I-784)

Organization (if applicable): N/A

Submission Text: the estuary is the very best for the environment out of the 3 alternatives. A 'mirror' is unnecessary and reflects a past era aesthetic which did not take into account the devastation and unmanageability this would cause.

Supporting Materials (if any): N/A

Name (ID): Katie Woodland (I-785)

Organization (if applicable): N/A

Submission Text: I find this introductory paragraph misleading. ‘Historically, freshwater from the Deschutes River would mix with saltwater from Budd Inlet over expansive tidal flats. Between 1949 and 1951, a dam was constructed at 5th Avenue and, without the tidal exchange, the area was transformed into a freshwater lake, fed primarily by the Deschutes River. The newly formed Capitol Lake began to experience a range of environmental impairments after construction of the 5th Avenue Dam, eventually leading to community use restrictions that persist today.’ The dam was not built after the lake as the sentence implies. Nor was the lake an immediate recreation area, as it is understood by most of the present population, until the late 1950’s - mid 1960’s. The ‘...expansive tidal flats’ statement is completely misleading. In addition to the tidal flats that were the outflow to the Deschutes River, tidal flats covered much of downtown Olympia from the south side of Legion Way and to the old boundary of Swan Town which was, I think, the east side of Plum Street. All the area of Olympia to the north has a little bit of bedrock sticking out into the bay, and extensive fill. The Deschutes River was not the only outflow into the bay and there are extensive mudflats under most of the rest of downtown Olympia. And the outlet to Bud Inlet from the Deschutes River was smelly and a mosquito nursery. Those who object to the occasional smell of the low tide mud flats on a hot day, would be shocked by the smell of the pre-lake aroma. No one is proposing to tear out downtown, but we need to understand that we are dealing with a miniscule part of the “mudflats”. However, this is no reason to tear out Capital Lake. It is, indeed, a convenient object to make ourselves feel better about the environment and climate change

But I do not believe the future high tide problems will be helped by installing a slough. I think it could easily make things worse. As it is, the bay around the west end of the downtown area, including Percival landing, is filling in (the Yacht Club paid for their own dredging and disposal which should be noted); and with the (proposed) slough runoff, the process will undoubtedly speed up, giving us the mudflats everyone seems to want. In addition, higher tides caused by global climate change, downtown Olympia
is due for constant and messy pre-Capital Lake flooding (Water Street was named 'Water Street' for a reason). The dam allows us to hold back the river water and keep the tides from overfilling the lake causing the flooding that we used to often experience. This has made downtown flooding a thing of the past. I don’t understand how the flooding problem will be abated in the future unless we build a higher wall around the slough. Which should be added to the initial projected cost.

The State of Washington has taken little responsibility for the maintenance of Capital Lake since the mid 1960’s early 1970’s. No one wanted to pay for the maintenance and dredging required to keep the lake healthy. It has been completely ignored since then the last minimal efforts that ended during the 1970’s. Areas of the south lake basin have been filled in, for various reasons since then, and the north basin of the lake has become a convenient catch basin for the extensive runoff of sediments and chemicals. The sediments, from the last 50 years of upstream runoff containing huge amounts of nitrogen and other chemicals from farming, golfing, cars, roads, and other uses need to be thoroughly addressed. There are also problems with the dollar figures attached to the dredging, repairing, and of the lake versions. There are also the ongoing maintenance issues the state always winds up putting off/ignoring (same as all other options). The complete cleanup of the tainted sediments that should be undertaken, no matter the option, is not included in any concrete way. There appears to be a lot of patching up - doing the minimum, but I have questions about actual clean up.

Also, what about the long-term maintenance funding? With the lake option there is, at least in acreage, a limit to the dredging that must be done and a limit to the manmade damage to the bay. Everyone agrees, there must be specific, extensive, and expensive testing to determine how deep these sediments are and where they begin and end. And what, specifically, to do with them, not just professional guestimates. It would probably, as these things go, cost at least 2 or 3 times any amount listed in any of the present documents. The “cheap” alternative is not cheap, especially if the actual costs of clean up, dredging, installation, and maintenance of the installation both short and long term are considered. The cost of really solving the UPSTREAM runoff problems (ongoing costs are not included anywhere) and future maintenance of the slough. Will there be a budget crunch and will maintenance eventually be seen as too expensive at some point and put off in 10 or 20 years, based on the history of Capital Lake. This will result in the death of the south Bud Inlet area. Without the accessible catch-basin of the lake, we can look forward to an even more expensive bill for repairs. Ending the grade school/community/tourist salmon watches, the sightings of seals, the occasional endangered whale, and the other saltwater species that we are still lucky to see from time to time both on the water and on the shore, would be a sad footnote. A slough, mudflats, swamp, in the middle of Olympia. I don’t believe the slough alternative is, in any way, more justified than the lake alternative. Personally, I would be very sad to see Capital Lake turned into something else. We are a town that wants to grow. It would give credence to my son’s view that Olympia and Washington State is represented by both the present and proposed “swamp”. “What state puts a swamp in the middle of its capital city, on purpose? So they are going to make sure there is nothing for kids to do and no reason to live here.” I agree with our son. I also don’t think a slough/mudflats/swamp will do the trick. I remember how proud we were, as kids, when we could take our out-of-town friends to the lake and swim, or paddle around the lake, or just sit and look at it while solving the problems of the world. There was Lakefair and fireworks. For a short period we had the greatest tourist attraction you could imagine; we were proud of “The Lake” and of our town, our
State Capitol up on the hill, and our state. I want a fabulous tourist attraction, meeting place, wedding venue, picnic spot, walking trail; a place where kids can gather, swim, engage in and with the community. I want (not prefer) a Lake. Thank you for your time and consideration

Supporting Materials (if any): N/A

Name (ID): Chance Asher (I-786)

Organization (if applicable): N/A

Submission Text: Thank you for the opportunity to review and comment on the draft EIS for the Capitol Lake - Deschutes Estuary project. I appreciate how easy the document was to read with clear explanations, graphics, and references. My preference would be either alternative that allows some part of Capitol Lake to become an estuary. I have three comments: 1) A fatal flaw related to the lack of rigorous analysis of a sea level rise vulnerability assessment for each alternative that must be addressed, 2) a significant error related to assumptions on cost of dredged material management, and 3) a lack of sufficient analysis of biological impacts and/or benefits. They are detailed below

1) Issue - Insufficient analysis of climate change and sea level rise. The document includes cursory and inadequate analysis of water levels in Capitol Lake based on past tidal events, which is inappropriate for understanding future sea level rise projections and inundation scenarios. The science is well established that sea level rise to some extent is inevitable -- we are already seeing the impacts. However, there is no rigorous and in-depth analysis of sea level rise and how that will impact 1) water levels in all Capitol Lake basins, Percival Cove, and Percival Creek, 2) flooding from upriver, 3) erosion of hillsides along the Middle Lake basin, Percival Cove, and Percival Creek where homes are located, 4) Marathon Park, 5) Heritage Park, and 6) Deschutes Way. Included in the draft EIS appendix is a sediment transport study with a brief and egregiously inadequate mention of increased discharge due to climate change from Deschutes river, but a thorough and scientifically rigorous vulnerability assessment from sea level rise by climate experts has not been done. This is a fatal flaw that affects each alternative and cannot be overlooked. A brief search on NOAA’s Coastal Sea Level Rise Viewer shows impact along the entirety of the shorelines and slopes in all Capitol Lake basins, Percival Cove, Percival Creek, Deschutes Way, Heritage Park, and Marathon Park even under one foot of sea level rise. See attached graphic and NOAA website: https://coast.noaa.gov/slr/#/layer/slr/1/-13681743.127159342/5947325.405275516/14/satellite/none/0.8/2050/interHigh/midAccretion. Of course, it is much worse as sea level rise increments increase. In addition, the University of Washington Climate Impacts Group has a sea level rise viewer to visualize the probabilities of sea level rise under different greenhouse gas emissions scenarios. See attached graphic and UW CIG website: (https://cig.uw.edu/our-work/applied-research/wcrp/sea-level-rise-data-visualization/) This impact to shorelines will also impact the toe of the slopes surrounding the Capitol Lake basins, Percival Cove, and Percival Creek. This, in turn, will impact the stability of these slopes and the multitude of homes and infrastructure atop these slopes. Recommendation. Fill this data gap and fatal flaw by consulting with professional expert climate scientists (e.g., University of Washington Climate Impacts Group) and professional expert geologists (e.g., landslide specialists) and incorporate sea level rise projections and a scientifically rigorous vulnerability assessment into this analysis. Because this project will be considered long-term or
permanent, the projections should be based on a conservative greenhouse gas emissions scenario (RCP 8.5). A thorough understanding of the risks to the land surrounding the lake, Percival Cove, and Percival Creek and the stability of the slopes and homes and infrastructure atop these slopes is critical.

2) Issue - Insufficient analysis of disposal of dredged material. There is an assumption that dredged material from West Bay can be disposed of at an in-water disposal site. This analysis appears incomplete for the following reasons: a. According to the Dredged Material Management Program (DMMP), the only option for in-water disposal of dredged material from Budd Inlet is the Anderson-Ketron open water disposal site. Dredged material will not be allowed to be disposed at any other site in Puget Sound. In order to meet DMMP standards for disposal at the Anderson-Ketron open-water disposal site, concentrations of any contaminants would need to be at or below natural sediment background. See WA Department of Ecology Sediment Cleanup User’s Manual, Chapter 10, Table 10-1 for natural background concentrations for Puget Sound (https://apps.ecology.wa.gov/publications/SummaryPages/1209057.html). The draft EIS does not include sediment chemistry for either Capitol Lake or West Bay/Budd Inlet sediment so the assumption that dredged material is suitable for open-water disposal is not supported. b. Costs of open-water disposal of dredged material vs. upland disposal are widely different and this is not included in the analysis. Recommendation. Considering the recent cleanup of PCBs in Capitol Lake and the known contamination in West Bay/Budd Inlet, sediment chemistry for Capitol Lake and West Bay/Budd Inlet needs to be included in this analysis. The WA Department of Ecology Environmental Information Management database (https://ecology.wa.gov/Research-Data/Data-resources/Environmental-Information-Management-database) has existing data for this area that can be easily downloaded for analysis. In addition, see WA Department of Ecology South Puget Sound Regional Background publication (https://apps.ecology.wa.gov/publications/SummaryPages/1809117.html) has information that shows existing sediment concentrations in this area.

) Issue - Insufficient analysis of biological impacts. The EIS includes insufficient analysis of biological impacts and/or benefits from each alternative. For example, impacts or benefits to salmon, benthic community, and marine and freshwater aquatic dependent wildlife (e.g., sea birds, bats). Recommendation. Consult with aquatic and wildlife experts to re-write the EIS to include a more thorough analysis.

Supporting Materials (if any): I-786_Asher.pdf

Name (ID): David Risvold (I-787)

Organization (if applicable): N/A

Submission Text: I've been following this issue for some time and it is clear that there is no compelling reason not to restore the estuary. Simply none.

Supporting Materials (if any): N/A
I am a current resident of and business owner in the City of Olympia. I was also born and raised in Olympia, and frequently recreated in Capitol Lake growing up. Midway through completing my Bachelor of Science degree in Conservation Biology at the University of Washington (UW), I began working with the Washington State Department of Ecology (Ecology) evaluating non-native aquatic species invasions, and conducting water quality studies primarily for Total Maximum Daily Load models. That work, which lasted from 1998-2004 included water quality data collection from Capitol Lake, which was already severely impaired two decades ago. After my tenure with Ecology, I received my Master's of Science degree in Freshwater Ecology from the University of Montana's Flathead Lake Biological Station under the mentorship of Dr. Jack Stanford. Following that, I worked for various private and non-governmental organizations monitoring and interpreting data regarding multiple aspects of freshwater ecology and fisheries throughout the Pacific Rim in watersheds inhabited (or formerly inhabited) by Pacific salmon. Currently, I am a PhD Candidate in Aquatic and Fishery Sciences at UW under the advisement of Dr. Daniel Schindler. In addition to deepening my general comprehension of freshwater ecology and the analytical skills important to interpreting it, I've analyzed dozens of Environmental Impact Statements (EIS) for one of several aspects of my dissertation as well as for independent consulting work. For nine years, I've also owned and operated an independent consulting business related to various aspects of freshwater and estuarine ecology in salmon ecosystems. Overall, I believe my collective experience and expertise is uniquely applicable to evaluation of the Capitol Lake - Deschutes Estuary Draft EIS (DEIS).

The DEIS in its current form is not sufficient for finalization without additional opportunities for public comment. The DEIS is insufficient with respect to 1) its lack of identification of a preferred alternative without the opportunity to publicly comment on that alternative; 2) the breadth and depth of data and fundamental principles of freshwater ecology that were (and were not) incorporated in the document; and 3) it's insufficient consideration for indirect, cumulative, and synergistic effects. 1) EIS's are consistently long, unwieldy, complicated, and seemingly intended to overwhelm and confuse the stakeholders most invested in their outcome. Tribes, developers, conservationists, and land and yacht club owners simply do not have sufficient financial and/or technical resources to thoroughly review all components of a document of this nature. The document consists of approximately 3,500 pages. Of those, 42 pages comprise the Executive Summary which is what the majority of reviewers and comments will address given the capacity and expertise of reviewers. In other words, most public comments will be based on less than less than 2% of the actual document. In light of that, the Executive Summary, and even the main body of the EIS itself should more closely reflect/describe the detailed findings of the DEIS attachments. Moreover, the identification of a preferred alternative would at least allow unpaid stakeholders to focus their reviews on a more manageable body of work.
2) Fundamental aspects of freshwater and salmon ecology are ignored in the DEIS. For example, the river continuum concept-arguably THE most fundamental principle of stream to estuary ecology-is largely ignored throughout the DEIS. In general, the DEIS fails to consider the full body of best available science relevant to the project. While the DEIS does include some relevant, peer-reviewed literature, it largely ignores the most important concepts relevant to this project including: a. The River Continuum Concept (Vannote et al. 1980) b. The Shifting Habitat Mosaic (Stanford et al. 2005), and C. The Portfolio Effect (Schindler et al. 2010).

3) Indirect, cumulative, and synergistic effects of all alternatives are ignored and/or inadequately considered. In general, a. Indirect effects are considered further in space or later in time (which for this project is wholly insufficient given the lack of consideration for the entirety of longstanding water quality-including TMDL-data for the entire project area). As one example, the DEIS should include ALL water quality data collected for the study area over time rather than the most recent data that behoove agency goals (for example, the data we collected in the early to mid-2000's should be included in the document, in addition to everything collected before and since). b. Cumulative effects are given cursory, if obligatory, consideration in the DEIS. While I understand you may have fulfilled your NEPA requirements in this regard, the cumulative effects of this project are undeniable with respect to salmon recovery and fundamental principles of salmon and river ecology. Moreover-collectively, between legal experts and scientists alike-we simply cannot agree on our ability to measure cumulative effects. C. Synergistic effects are allowed, but not required. The best we can do with synergistic effects is to hope we can at LEAST measure the sum of our parts. And with a little luck, give that sum a fair multiplier. As authors, you could have done better. I don't have the time I'd like to comb through and respond to this EIS. But I would like to reiterate that it is NOT ready for proper and thorough review. Please give us another chance to take a closer look once you have a preferred alternative, and have incorporated some more relevant data.

Supporting Materials (if any): N/A

Name (ID): Robert Panowicz (I-789)

Organization (if applicable): N/A

Submission Text: There are few of us today who remember back seventy years to the building of the Fifth Avenue dam. There were multiple reasons for installing the dam, not the least of which was to turn the eye sore of tidal flats into a lake. A lake which could be enjoyed by the entire community both visually and recreationally. Over the years the lake has changed, and we have done little to maintain it as it was originally intended. While it may not be possible to return it to its 1951 condition, it is still possible to return and maintain it as a functioning lake providing both visual and recreational benefits. I strongly encourage the committee to adopt the Managed Lake Alternative.

Supporting Materials (if any): N/A
**Name (ID): Anthony Hemstad (I-790)**

**Organization (if applicable):** N/A

**Submission Text:** I'm a frequent 'user' of Capitol Lake as myself and/or members of my family go dog walking or jog around the lake almost every day. We very much support the option of keeping the lake in its current form as a lake. The 'reflecting pool' idea that Wilder & White had while designing the overall Capitol Campus is greatly enhanced by keeping the lake intact. We are fortunate to have such an incredible Capitol Campus - allowing the lake to revert to being mudflats for much of every day would greatly detract from the Capitol Campus itself and from downtown Olympia. Most cities would love having such a lake as we have today - we shouldn't destroy what others so greatly admire and would want for their own communities.

**Supporting Materials (if any):** N/A

**Name (ID): Nora Jordin (I-791)**

**Organization (if applicable):** N/A

**Submission Text:** Please keep it a lake. Its beauty is in not being recreational. I was down there yesterday around sunset and its was so peaceful and serene. Tons of wildlife that wouldn't necessarily hang out on a mud flat. Its a downtown treasure. There's already the East and West Bay mudflats that's enough. Dredging would not be good for the long term.

**Supporting Materials (if any):** N/A

**Name (ID): Susan & George Bredensteiner (I-792)**

**Organization (if applicable):** N/A

**Submission Text:** The Capitol Lake - Deschutes Estuary includes the 260-acre waterbody, known as Capitol Lake, located on the Washington State Capitol Campus, adjacent to downtown Olympia, at the base of Puget Sound. Unfortunately, the decisions during the 1940s prior to the 1949-1951 construction of Capitol Lake (an area transformed into a freshwater lake fed primarily by the Deschutes River after construction of a dam at 5th Avenue) did not include the current important project goals:

* Improving water quality
* Managing sediment accumulation and future deposition
* Improving ecological functions
* Enhancing community use of the resource

Perhaps a complete scientific understanding of the ecology and resulting ecological impacts were unavailable 70+ years ago or were just ignored in favor of what seemed a beautiful enhancement of the area. In any event, the scope of the costly, unhealthful, and ecologically unsound problems that have developed because of the addition of the lake were not foreseen. For years-since the 1970s-the Olympia and Washington State Capitol Campus communities have been trying to figure out what to do about those increasing endangerments to the Deschutes River, the lack of an estuary allowing for the mix of fresh and salt water in its importance to the propagation of salmon, and even the health of Washingtonians who had enjoyed a Capitol Lake swimming area before it had to be closed due to toxic bacteria. The only
thoughtful, healthful, and ecological way to fix the Capitol Lake problem is to return it to an estuary, removing the 5th Avenue Dam, creating an approximately 500-foot opening reconnecting Capitol Lake Basin with Budd Inlet, and reintroducing tidal flow that is similar to the historic Deschutes Estuary. The plan to return Capitol Lake to an estuary will also allow for building a new 5th Avenue Pedestrian Bridge that allows continued use of the popular North Basin loop. In addition, Restoration of boating and fishing is planned to promote resumption of water-based activities. A Hybrid Alternative does NOT fix the degradation caused be the current Lake configuration that has proliferated and will continue to expand in the absence of the well thought out Estuary Alternative.

Supporting Materials (if any): N/A

**Name (ID): Michele Geyer (I-793)**

**Organization (if applicable):** N/A

**Submission Text:** I feel very strongly about the balance and co-munity the Dual Estuary/Lake Idea will provide for Olympia, Thurston county and even beyond with ecology efforts worldwide. It will set a vitally important, non-polarized precedent in a time when we are in dramatically separate camps on so many levels. Let’s not delay any longer in both restoring the estuary and providing a fresh water swimming lake for Olympia residents and visitors. I support the Freshwater Hybrid Alternative’s Decision Durability over all the Lake and Estuary Alternatives.

Supporting Materials (if any): N/A

**Name (ID): Rick Applegate (I-794)**

**Organization (if applicable):** N/A

**Submission Text:** Thank you for consideration of my comments. I was very happy to learn of this review process and the Draft Environmental Impact Statement (EIS). I agree that a no action alternative for Capitol Lake does not accomplish the project’s objectives and I would prefer an undertaking that addresses issues presented by the lake in its current condition. Like many observers, I perceive Capitol Lake as an unhealthy body of water because of its periodic growth of algae, restrictions on recreation access, and stagnant appearance. Of the options presented in the EIS, I am most excited about the potential restoration of the Deschutes estuary. Every time I visit the Billy Frank Jr. Nisqually National Wildlife Refuge, I marvel at the abundance and diversity of wildlife that the Nisqually River estuary supports. While I recognize that ecosystem enhancements to the Deschutes River will not likely achieve similar levels of success, I would very much appreciate whatever incremental ecological function they can accomplish. I also understand the estuary alternative as an action that would likely reduce the artificial habitat exploitable by the New Zealand mudsnail, and perhaps other invasive species of concern as well. Finally, I would greatly value any incremental benefit tribal populations may realize from estuary restoration.
I have only one minor request for additional study, if it is possible. I would like to know if construction of a pedestrian path or boardwalk on the east side of the middle or south basins is feasible and whether it presents any environmental concerns. Ideally, I would love to see access to the Deschutes estuary become available on the east side from a point south of the Capitol, although I recognize that could be a challenging development.

Supporting Materials (if any): N/A

**Name (ID): Rachael Hemstad (I-795)**

**Organization (if applicable): N/A**

**Submission Text:** PLEASE do NOT turn Capitol lake into an estuary! I support Capitol Lake We have put so much money and effort into making Capitol lake and the surrounds beautiful so that all can enjoy. I grew up in Olympia. I grew up swimming in this lake. Every time I am down in Olympia, I take my lunch break there or I walk around the lake at the end of my work day. So wonderful to have this possibility! The park around the lake is fabulous. If it ends up being an estuary, the smell and the ugliness will be incredibly unfortunate. Why would anyone do this? I believe you can figure out a balance to be able to keep the lake as it is. Please do not turn this wonderful lake into an estuary!

Supporting Materials (if any): N/A

**Name (ID): Mary Lane (I-796)**

**Organization (if applicable): N/A**

**Submission Text:** I prefer the estuary option.

Supporting Materials (if any): N/A

**Name (ID): Thomas Anney (I-797)**

**Organization (if applicable): N/A**

**Submission Text:** Restore the estuary!

Supporting Materials (if any): N/A

**Name (ID): Nathaniel Jones (I-798)**

**Organization (if applicable): N/A**

**Submission Text:** With appreciation, I recognize the accomplishment of releasing this weighty Draft EIS. Numerous dedicated teams have contributed to the production of this document and its many appendices. This milestone has allowed for meaningful discussions within the community, knowing that pivotal decisions can now be made and resolution of the vexing issues contained in the Lake/Estuary...
puzzle may be possible. Thank you for bringing us to this point. The project area sits within a larger context of bustling urban growth, a verdant watershed, and the stunning beauty of Puget Sound. The interactive connections between these elements are physical, social, economic, and powerfully symbiotic. What happens at the mouth of the Deschutes River carries impact upstream, downstream, and in a concentric pattern across the region, affecting livelihoods, ecological systems, and our understanding of our collective values. I find that the DEIS does not offer needed context that discusses the relationship between the long-term management of the project area and the environmental health of Puget Sound. The Sound is in trouble caused by the everyday activities of the 5 million people who live here. Unimpeded population growth, coupled with a contemporary way of life, has produced the loss of habitat, acidification, toxic chemicals, depleted oxygen, untreated runoff, and hardened shorelines, which are crashing the food webs that sustain the Sound. A responsible long-term management plan must consider navigation, culture, economics, transportation, odor, and utilities but these concerns are no more important than the impact of alternative scenarios on the downstream environment, particularly if that environment is imperiled. Puget Sound's declining health has been a recognized fact for decades. Current progress is not keeping pace with Puget Sound's rate of decline. It is up to us to prioritize the recovery of this great asset. As written, the DEIS ignores the Sound, looking only as far as the southern tip of Budd Inlet. This approach is stunted and irresponsible and misses the greatest opportunities associated with this project.

Chapter Four of the DEIS considers the alternative scenario's consistency with various plans and policies. It is proper that the shoreline management plans and climate plans of local governments be carefully considered (and it is clear that the scenarios provide significantly different degrees of consistency with these plans). It seems quite odd then that the document ignores the legislated recovery goals for the Sound, including habitat restoration and water quality improvements. The water quality conditions of Capitol Lake and Budd Inlet do not meet standards and are not acceptable. A careful reading of the DEIS finds: Budd Inlet frequently violates the water quality standard for dissolved oxygen and has a relatively high maximum daily depletion of dissolved oxygen from human-caused sources compared to other South Puget Sound inlets, Capitol Lake experiences summertime algal blooms, violations of state standards for dissolved oxygen, pH, and temperature, and frequent violations of total dissolved gas, and The creation of Capitol Lake destroyed some of the most productive and valuable habitat on earth including productive habitat for shellfish, salmon, other anadromous species, and marine fish in the area, potentially including non-hatchery Chinook and steelhead trout, as well as the preferred forage and rearing habitat for juvenile salmon and a natural freshwater to saltwater salinity gradient that is physiologically favorable to salmon. What is particularly concerning is that these findings are not emphasized in the report; instead, they are often buffered with distracting prose. The DEIS needs to be more straightforward in its presentation of the substantial concerns associated with current conditions and the ability of the alternatives to mitigate the situation.

Finally, I find the enormous cost, poor aesthetics, and questionable sustainability of the hybrid alternative(s) to be a non-starter. The idea of building a 20-foot wall, capable of holding back acres of water, on a deep silt foundation, near a seismic fault would be ludicrous, were it not being taken seriously by policymakers. Those who suggest that this concept has any relation to the Olmsted Brothers design principles, which seek to conserve natural features and promote the natural ecology of a
site need to revisit their understanding of the Olmsted legacy on our capitol campus. I find that the DEIS is rather blithe in presenting this alternative as a legitimate contender without a thorough explanation of what is being proposed. Thank you for this opportunity to submit comments on the Draft EIS. This portfolio of technical documents represents a profound volume of serious work. While I have voiced serious concerns with some aspects of the product, I appreciate the great effort involved in assembling and presenting these findings. Thank you.

**Supporting Materials (if any):** N/A

**Name (ID):** Sue Hedrick (I-799)

**Organization (if applicable):** N/A

**Submission Text:** I prefer the plan to have Capitol Lake become an estuary

**Supporting Materials (if any):** N/A

**Name (ID):** Alan Reichman (I-800)

**Organization (if applicable):** N/A

**Submission Text:** Based on my review of the Draft EIS, it is apparent that either the Hybrid option or the Estuary option should be selected as the preferred alternative. My first choice for the preferred alternative is the Hybrid option, but I am also supportive of the Estuary option. The information and analysis in the Draft EIS shows that the Managed Lake option is not a viable alternative for ecological and economic reasons. The estuary, and its ecological functions, should be restored.

**Supporting Materials (if any):** N/A

**Name (ID):** Allen Mote (I-801)

**Organization (if applicable):** N/A

**Submission Text:** There appear to be several issues that either have not been considered or, at least, do not seem be addressed in the summary proposals. The most important are briefly addressed in Section 4. 1. UPSTREAM EROSION MANAGEMENT. The State would seem to be in a position to manage or require the management of upstream erosion, rather than just continuing to dredge the result of the eroded materials filling Capitol Lake basin at taxpayer expense. How is this being addressed?

2. SNAILS For many years Capitol Lake has been closed to public use for the stated reason of the invasive “snails.” All 3 proposals indicate the Lake will be re-opened to public use. How is it now that the Lake will be opened to public use? My last research indicated that the snails have not been controlled or eliminated, but have spread further upstream, Is the State now stating that the snails are not an issue? Or is it a misstatement that the Lake will once again be open for public use?
3. MAINTENANCE PLAN & FUNDING The Lake has not been well maintained. Will a permanent long-term maintenance fund be established to cover the next 50 years of maintenance, or in perpetuity, so the mess that exists now will not happen again?

4. ABSENCE OF MEDICAL, SOCIOLOGICAL, MENTAL HEALTH, ETC., EXPERTISE IN PLANNING There are several significant issues not addressed in the proposals that dramatically impact the physical, mental, emotional, and spiritual health of residents of the local communities as well as that of many visitors. Following are a few. 4A. Medical science has known for decades the dramatic impact of using ionizing machines to help hospitalized patients heal more rapidly, about 30% faster. Both physical and mental health conditions. The highest amount of healing ions in nature is around moving water. For centuries, indigenous peoples have used moving water as a healing environment for people suffering physical or mental distress. In the case of Capitol Lake, the waves moving across the water contribute to this health benefit. Capitol Lake is the only environment in the Olympia area that can provide this benefit. 4B. Medical science has also known for decades the importance of light for the health of people. For many people the lack of adequate sunlight and the minimum daily requirement for lumens can lead to a medical diagnosis of SEASONAL AFFECTIVE DISORDER (SAD), both a physical and mental/emotional disorder. Many additional people suffer from what can be considered as low-grade SAD. This illness not only impacts the level of well-being of those suffering from it, and their families, but is also correlated with loss of productivity, depression, and suicide. In fact, it was a Dr. at the University of Washington who developed what has become known as the “Light Box,” which is now used worldwide, especially in areas where there is insufficient light for people to maintain health or to thrive. In Olympia, with the dark winters due to the cloud cover, and the predominance of forest canopy which further blocks natural light, there is not sufficient light/lumens available for many months out of the typical year. Capitol Lake is the only natural environment where the absence of tree canopy cover, can allow the full penetration of natural light from above (yes, even through the clouds), and also reflects light from the surface of the water. These can significantly add to the required minimum daily requirement for lumens, and to the health and well-being of people. 4C. As populations become more dense, electronic devices are used longer and more frequently, more people work and are seated in offices, traffic increases, life is more complicated, etc., there is a contagion of increased tension among people and a decrease of healthy, natural, “grounding” opportunities. As the pace of our society continues to increase, which adds stress to peoples lives, illness proliferates. Many health professionals will state that about 90% (or more) of illness is the result of stress. People need a natural place to unwind and remember who they really are. Many societies have built-in practices and places to mediate the toll of stress. The US really does not. Open spaces and moving water have a natural calming and restorative effect on people. Keeping the Lake as open and uncomplicated as possible, can help reduce the ill effects of stress, sedentary work, and add to the overall health, well-being, and productivity of people. 4D. Open, VISUAL space, is a requirement for the health of a significant number of people. People who have grown up where they can see long distances, and whose brains and minds have adapted to that environment need to experience a regular amount of visual space to remain mentally healthy, which also means to remain physically healthy. Without that, these people, many without realizing it, will slowly begin to decline and experience reduced effectiveness in work and living, and health. This also applies to many people who’ve grown up in environments that are heavily forested and/or with extensive cloud cover. This has been recognized in other cultures for centuries. And, in fact, is used as a mental health
therapy, when life gets too overwhelming (as also noted in 4C above), i.e., taking the distressed, ill person away from the overwhelming aspects of their lives, to a place where they can see a far-off, open and uncomplicated, horizon. Olympia, doesn’t really have such a place. The closest would be Capitol Lake if it were kept open, so people could experience the natural, calming, soothing, effects of moving water; uncomplicated open space; healing ions, breezes touching their skin, etc., all helping them return to a natural and healthy human experience. 4E. Summary: In essence, designing Capitol Lake to be as visually open as possible, with free moving wind and waves, would be the only source in Olympia for the optimal health and healing of people and thereby all aspects of the community. The State of Washington, has the opportunity to make a clear statement that the physical, mental, emotional, and spiritual health of citizens is not only important, but critical to their well-being and to the overall prosperity of the citizens. To address only the 3 proposed designs through engineering and earth science eyes would be not only be short-sighted, but would discount the decades of medical, sociological, psychological, anthropological, etc., research and science, and what has been learned that makes peoples lives work well, feel a sense of fulfillment and happiness, and heal well when ill.

Supporting Materials (if any): N/A

Name (ID): Wanda Hedrick (I-802)

Organization (if applicable): N/A

Submission Text: Having observed the degradation of Capitol Lake over time, and having read much of the draft Environmental Impact statement, I am convinced that it is obvious that the time has finally come to act on the 'lake problem'. I am in favor of the estuary solution as the most ecologically sound, sustainable, and economical choice.

Supporting Materials (if any): N/A

Name (ID): Marla Byrne (I-803)

Organization (if applicable): N/A

Submission Text: A LOT has changed since the Capitol Building was designed, and Capitol Lake was dammed up as a reflecting pool. Our attitudes and understandings of nature have changed, as have architecture and design. We know now that it doesn’t benefit anyone or any creature to bend and break nature to simply reflect a building, or to create a recreational swimming facility. This is the South Puget Sound, and it is one of the most beautiful places in the world. We need an estuary, we need the tides, just as much as the estuary’s inhabitants need us. That’s ecology, something that our state is at the forefront of valuing, and an estuary would reflect those values.

Supporting Materials (if any): N/A

Name (ID): JJ Lindsey (I-804)

Organization (if applicable): N/A
Submission Text: After reading the Deschutes Estuary Restoration Team's (DERT) comments....they are so comprehensive, covering so many of my concerns, that I can't imagine making any better case myself for the Estuary option, and why. But seeing as you'd likely count my comments here, with theirs, as just ONE total comment.....I now endeavor to put my own concerns forward. I believe the Estuary option is the only fully reasonable option we can carry into the future. As much as I dearly love to walk around Capitol Lake, and find the Lake a lovely visual.....I also know that it's existence is a false overlay which has come with many problems, expensive and environmentally unsustainable. I was much more hopeful about a combo lake/estuary option. But when I viewed the mock-ups and read about that proposal....it was unfortunately visually unacceptable, expensive, and would not accomplish the goals we need for these important bodies of water (Deschutes River, and Puget Sound's Budd Inlet.

My main concerns: 1) It is clear that the Steh Chass peoples of our region support returning this back to estuary.. There is an imperative for their voices to be dominating the narrative, and the outcome. I am concerned that it seems you did not consult them, to arrive at your proposal....how can this be? We have done irreparable and great harm to the tribes....our region is indistinguishable from the lands and uses they once had here. NOW, we have the opportunity to right one of those wrongs. The salmon and the health of Budd Inlet are crucial for that outcome. This should be of primary importance in this Draft EIS. Please make it so. We made promises to the Tribes, and if we do not keep those promises from treaties, we are worth nothing......certainly not self-respect. 2) Nature's intelligence, and the costs we incur to ignore it. Capitol Lake has been pretty. But I want to live in and among a place which has as its central focus....the natural order of things. We screw things up when we try to 'manage' major waterways, cut mountaintops off to mine, pollute the air, the water, and the lands. In this case, NATURE dictates an estuary. We should listen to Nature. The tribes voices are so important because they always chose to live in this way, and we have much to learn from them.....after so much time marginalizing that voice and that intelligence, to our peril. Follow nature's creation, the immeasurable truth of the tides, the cleansing and renewing perfection of water movement, estuarine mixing of fresh and salt water, the free flow of wild creatures following their timeless intuitive ways. Why is there never this voice included in documents like this? As if the world is a mechanism which we have somehow created, or even figured out We have not. Use Nature's intelligence to return this damaged waterway to its natural state of being.

3) Costs.. These are all expensive options. Manipulating nature always bears these costs. Now, to fix it, it is a kind of mercy....a blessing that the cheapest alternative is the one which best restores the region. Let's not underestimate the costs which will be incurred for climate change adaptation, other restorations of all kinds, sea level rise, an endless list. Let's take the 'cheapest and best' option.

4) There are many irregularities, somewhat biased framing, disagreement between the data and the Summary, underlying assumptions. I would refer you to DERT's points on this......they cover the most important inconsistencies and problems. I was disappointed with a sense of opinion in a document which should be about presenting DATA. What we should be commenting on is the efficacy of the data, but we are left to comment on whether enough of it is contained in the Draft.

5) Budd Inlet. We have as our waterfront, as our playground....one of the absolutely most toxic and dirty bodies of water in all of Puget Sound. Activities from our past created a toxic mess. Letting nature work a magic we can never hope to accomplish, we now have the opportunity to improve the water quality of...
the region. This is just so critically important. I should have made it number 1. 6) Salmon, salmon, salmon..... Orcas, The chain of life.

**Supporting Materials (if any):** N/A

**Name (ID):** William Graeber (I-805)

**Organization (if applicable):** N/A

**Submission Text:** While your project goals are commendable, the DEIS lacks sufficient discussion of how those goals relate to the landscape scale ecosystem processes that drive the current and desired future conditions within and downstream of the project area. Beyond that, the DEIS fails to adequately acknowledge the regional context and meaning of the project area and watershed as a component of the Salish Sea Ecosystem. I can envision eyes rolling and a project manager somewhere saying ‘that is beyond the scope of this project (i.e., not my problem)”. Before you dismiss this comment, hear me out. What I see in the proposal is - the failure to adequately describe the ecological settings and processes and how the project alternatives relate. The resulting gaps in the assessment have led to errors of omission and in judgement on the feasibility of desired future conditions outcomes. One such error that has come to light is the misunderstanding between the project proponents and the Port of Olympia regarding the potential for future deeper berthing facilities. The error has called into question the underlying assumptions for maintenance dredging volumes and costs estimates for the two estuarine alternatives. Are the costs actually much less? Further, are there other means of mitigating potential impacts on the Port and marinas that have not yet even been explored? It may make more sense to plan for future reconfiguration of the channel/facilities interface or even some relocation of facilities in lieu of maintenance dredging. I see a more problematic manifestation of the lack of vision for what a sustainable future condition may look like in the cumulative impacts section discussions. My impression of the foreseeable actions discussion is they all seem to be conceptual level early stage responses focused on protecting existing built infrastructure from sea level rise. There is no acknowledgement even at this conceptual level that, maybe, the most sustainable and cost-effective foreseeable actions may include some form of pulling back the shoreline to avoid the impending flooding of the low-lying areas. It seems the discussion of the alternatives needs to focus on restoration of the Deschutes estuary as the first step towards a sustainable future condition, given sea level rise is going to happen. Then the adjacent areas will need to plan for how to most cost effectively respond to sea level rise, including perhaps pulling back the shoreline in some places as well as other protection strategies. Legacy problems in adjacent areas needs to not be used as an excuse to constrain projects that will lead to a more sustainable future condition.

A major error of omission is the DEIS failure to meaningfully acknowledge that Percival Creek even exists, much less discuss it as a significant part of the historic Deschutes estuary landscape. That oversight has left a major gap in the subsequent analyses and discussions of the potential alternatives and comparative costs and benefits. The DEIS identifies the embayment of Capitol Lake west of the Deschutes Parkway including the delta at the mouth of Percival Creek as within the project’s geographic boundaries. However, as far as I can glean from the lack of any discussion and the conceptual maps of the alternatives, the approach to the embayment west of the Deschutes Parkway and the existing
Percival Creek delta has been to ignore them and hope nobody notices. It is unacceptable for the project proponent to present project alternatives that so blatantly ignores such a large component historic estuary and existing conditions. At present, the Deschutes Parkway with the existing culvert forms a dam that has further fragmented the historic estuary. The causeway is a barrier between the western embayment and the adjacent reach of project area. It has and will continue to impede the connectivity of habitat forming processes through the middle and lower reaches of the project area. As such it will continue to manifest continued degraded water quality and sediments transport conditions until that connectivity is adequately addressed. Over the last 30 years I have observed the delta at the mouth of Percival Creek prograde out from the ravine toward the Deschutes Parkway culvert. Once WDFW abandoned the embayment of Capitol Lake west of the Deschutes Parkway as a rearing pond and pulled the flow training barrier, it seems the change in flow pattern has accelerated isolation of the embayment from the transport of water and sediment inputs from Percival Creek. The DEIS does not address the future condition of the embayment and delta for any of the alternatives. It appears likely that, if ignored, the progradation will soon totally isolate the embayment leading to worsening water quality and aquatic vegetation problems and creating ongoing sediment management problems at and below the culvert.

On the other hand, a proactive approach to integration of the embayment's water and sediment transport processes within the greater project area could provide substantial benefits to the long-term management approach and benefits. Percival creek was historically a productive salmon spawning tributary to the Deschutes estuary as evidenced by historical artifacts and records of tribal utilization as well as evidence of the productive potential of the stream. In my own experience I have observed the creek accommodate sufficient numbers of natural spawners to suggest it could support self-sustaining chum spawning populations numbering in the thousands.

The DEIS totally misses any recognition there is a major opportunity to restore a chum run and potentially create a Kennedy Creek style salmon spawning stream destination for fishing, viewing and education activities that would be a tremendous enhancement to the community use goal of the project proposal. The EIS needs to address this gap and explore the effective alternatives for restoring the connectivity of the mouth of Percival Creek through the western embayment to the greater project area. One obvious approach to accomplish the above is to replace the existing culvert with a culvertor bridge near the southern end of the embayment to support an estuarine tributary channel connection to the middle basin reach of the project area. Such a configuration would allow the Percival Creek delta to continue to prograde into the embayment and gradually form an estuarine marsh habitat corridor.

Given that restoration of a substantial chum run to Percival Creek is likely very feasible and needs to be fully explored puts the reflection Pond hybrid concept in a less favorable light. Even without the chum early migrant's needs for that area as fully functional and accessible estuarine habitat, the pond still perpetuates the fragmentation and degradation of the historic Deschutes estuary. With the potential for a substantial chum run, the pond presents an unacceptable removal of the potential estuarine habitat for early migrant chum parr and smolts to rear and transition to the broader nearshore environments.

We claim to value salmon and Orcas. If we truly do, we need to ALL understand and adapt to their ecosystems. We non-natives that have adopted their ecosystems as our new homeland need to learn how to live sustainably within a healthy and more fully functional Salish Sea Eco-region if our
grandchildren are to have any chance of having salmon and Orcas in their future here. The site of the historic Deschutes estuary is one of the most feasible large-scale estuarine ecosystem restoration projects available within Puget Sound. Restoring it will significantly contribute to restoring and sustaining the ecological function of the South Sound, including restoring a chum salmon run that could become a destination recreation and ecosystem learning site. The State Capital site could be a model all citizens of the State of Washington look to for how we have learned to adapt to, and live sustainably in the Salish Sea - home to vibrant populations of salmon and the resident Orcas. It is time the Washington State Department of Enterprise Services (Enterprise Services) got on-board and demonstrated the whole of the State of Washington (as a government entity) is fully committed to recovery of salmon, Orcas and to restoration of the Puget Sound ecosystem. The State of Washington needs to demonstrate leadership as we search for a path forward toward living sustainably in the Salish Sea Ecosystem and the iconic salmon species and Orcas we share it with.

Supporting Materials (if any): N/A

Name (ID): Greg Falxa (I-806)

Organization (if applicable): N/A

Submission Text: I've lived in Olympia since 1973 and for the past 20 years have been studying bats as a wildlife biologist in Washington and other western states. On the subject of bats I have authored and coauthored peer-reviewed articles, performed field studies, research, and inventories, and assist others across the western states in the pursuit of information on the life history strategies of our different bat species. I am submitting the following comments because two of the alternatives would likely extirpate thousands of reproductive female bats in the south Puget Sound region. My professional analysis and testimony over the years (including comments similar to the ones below submitted during the EIS scoping process) have had little impact on the discussion about the potential impacts on local bat populations. I now feel obligated to be blunt about this will start with the conclusion: Nobody should expect to find any bats at the historic Woodard Bay roost site if either of the estuary options are constructed. Additionally, the overall bat population in northern Thurston County would be seriously reduced if Capitol Lake is converted to a salt water or inter-tidal feature. As described in detail below, Capitol Lake is the primary feeding area for: 1) the largest known bat colony in western Washington; 2) a very significant feeding area for another large colony of the same 2 species (Evergreen State College Organic Farm); 3) a large collection of smaller Little brown bat colonies scattered around Cooper Point (over 1,000 bats); and 4) for numerous Big brown and Silver-haired bats from largely unidentified colonies in the surrounding area. Although no study of bats arriving from the areas south of Capitol Lake has occurred, it would be a reasonable assumption that there are bats arriving from other colonies which have not been documented. Every summer evening the Woodard Bay Yuma bat colony draws a varied collection bat watchers - families, locals with out of town visitors, scout groups, university field trips, K-12 school groups, and local and visiting naturalists. Located on public land and accessible to the public, many people go there specifically to watch the Yuma bats fly out of the old railroad pier at sunset. The Department of Natural Resources has installed several interpretive signs detailing the importance of the colony, describing their natural histories, including the long commutes the colony makes to Capitol
Lake. This colony has been at this location since at least the mid 1980s, but the public engagement has increased significantly in the past 10 years.

In the Draft EIS Executive Summary on Page 24, bats are mentioned briefly: “The Managed Lake Alternative would best support the foraging base for bats...’ Because the largest known nursery colony of bats in western Washington (at Woodard Bay) would likely be wiped out by both of the estuary alternatives, the treatment here seems quite inadequate. To portray the fresh water vs. salt water dilemma as 'would best support' misses the mark an accurate summary statement would be along the lines of ‘Capitol Lake is the primary foraging site for the largest known bat nursery colony in western Washington. The Managed Lake Alternative is the only alternative that would support the foraging base for this regionally significant bat colony.’

Bats are again mentioned in Section 3, Existing Conditions & Affected Environment under 3.5.2.3: What bats can be found in the study area? The problem is this: ‘Capitol Lake appears to be an important feeding area for two bat species in particular, little brown bat and Yuma myotis.’ Troubling here is the use of the indefinite 'appears' rather than stating what has been known for years - that Capitol Lake is the primary foraging habitat for the largest known nursery colony of bats in western Washington state. Because of this critical relationship the WDFW Priority Habitats and Species program has designated and mapped Capitol Lake as Priority Habitat for Yuma bats (Myotis yumanensis) and Little brown bats (Myotis lucifugus) because of the congregations of foraging bats from nursery colonies in the south Puget Sound region.

This same paragraph states that it is unknown what proportion of the Woodard Bay bat colony utilizes Capitol Lake. However, during CLAMP and a number of other official Capitol Lake / estuary forums over the past 15 years I have testified and discussed the data showing that during the pup-rearing period of June, July and August, in nearly all cases Capitol Lake is the exclusive foraging location for the mothers nursing their young. Some, possibly most nursing mothers make the trip twice each night, returning to the pier at the Woodard Bay Natural Resource Conservation Area in the middle of the night to nurse the young, then back to Capitol Lake for a 2nd foraging bout before finally returning to the nursery roost before dawn. So, although we cannot quantify a precise proportion, we can say that nearly all (if not all) of the nursing mother bats raising their pups at the Woodard Bay colony are flying to Capitol Lake nightly, using it as their primary feeding area.

This short paragraph on bats ends with ‘These bats use Capitol Lake to forage and do not appear to use other smaller lakes and ponds closer to their colonies.’ Yuma myotis bats do not feed at small water bodies like ponds. They feed low over the water at lakes, reservoirs, slow moving rivers in Thurston Co., the Black River) which need to be paired with roost sites suitable for a couple thousand bats. Capitol Lake is the closest lake to the large Woodard Bay maternity colony. Although there are a few small ponds closer than the lake, they are not significant in bat foraging terms. Even if they did utilize ponds, the total surface area of these small water bodies might support a few dozen bats, not the estimated 4,000 - 5,000 bats which surface-feed at Capitol Lake. No significant foraging by bats from the Woodard Bay or the Evergreen State College Organic Farm colonies has been observed at local ponds. Additionally, salt water and brackish water do not support the aquatic emergent insects that Yuma myotis feed on.
The statement from Section 4 (quoted below) is an accurate but cursory summary of the issue with bats and the future of the lower Deschutes River basin. I believe that definitive language like this should be used in the EIS in Section 3, along with a more in-depth description of the loss of bats if the lake habitat changes to an inter-tidal basin. As discussed below, the following quote statement doesn't reveal much about the long-term relationships between the large local historic bat nursery colonies and the lake. 'The change to an estuarine environment would eliminate the freshwater lake. This would be a significant impact on bats because of the size of the Woodard Bay colony, its regional importance, its dependence on the freshwater environment of the Capitol Lake Basin for emergent insects, and the elimination of this foraging base.'

In several areas of Section 4 the phrase significant impact or significant negative impact is used when describing the impact the estuarine alternatives would have on bat populations. One might conclude this means unavoidable reduced populations, but in reality the impact would likely be the collapse of the colonies, in the first year that bats returning from hibernation encounter the loss of Capitol Lake. They return each spring to their natal roost, pregnant and in need of an insect-rich lake for foraging. The notion that they could just move to another lake in the region doesn't follow the realities of their population dynamics - the other lakes are already occupied with the bat population that it can support.

This narrative is not new. My first public testimony describing the relationship between Capitol Lake and the Woodard Bay bat nursery colony was to the CLAMP study group in December of 2003. During the summer 2003 I had secured permitting from WDFW to radio-tagged and track bats at the Woodard Bay nursery for the purpose of learning the foraging habits of this group. The tracking revealed a solid route of bats flying the unusually long distance from the colony to Capitol Lake, and a high fidelity to the lake. During this first CLAMP public testimony session I informed the group of this important development. To be sure, finding the bats was a surprise to me and to every colleague in the bat world with whom I shared my data. These species of bats were thought to have home ranges of a few miles, not having been previously documented to commute over 7 miles one way to regular foraging grounds. This data was presented at several scientific meetings, including an oral presentation to the North American Symposium for Bat Research in 2008. For four consecutive summers I continued to radio track these bats during the summers when time allowed. In 2012, under contract from the Dept. of Natural Resources, I did a followup tracking project which verified that Capitol Lake was still the Woodward Bays colony's foraging grounds. This 2012 tracking work verified the earlier observations that the freshwater lake is where this colony foraged every night during their reproductive season. Throughout the CLAMP process I provided the committee with updates on what we were learning about the importance of these colonies and their dependence on Capitol Lake. In spite of these efforts, none of the 4 CLAMP commissioned reports during 2007/8 addressed bats utilizing Capitol Lake. A 2008 summary report authored by the WA Department of Fish and Wildlife (Implications of Capitol Lake Management for Fish and Wildlife) mentioned bats a few times, generally lumping them with songbirds. It failed to make any connection between the large regional colonies of Yuma bats and Capitol Lake. It appeared that the report summarized the data from the 4 preceding reports, the ones that did not address bats. This is discussed in Dr. David Milne's 2015 reporting on the health of Capitol Lake, which acknowledged the association of the large Woodard Bay bat nursery with Capitol Lake (Capitol Lake - The Healthiest Lake in Thurston County). I truly hope that Dr. Milne's 2015 analysis was considered during the EIS process.
record. Additionally, WDFW staff comments on the lake / estuary alternatives may or may not make it through the agency's filtering and consolidation process. If they do, it is likely that much of what I've presented here will be supported, as the biologists who have observed the local bats are aware of the importance of the lake to the large colonies in the greater Olympia area, and the Woodard Bay nursery colony in particular. Regional media have covered the Woodard Bay and Capitol Lake bat phenomena (NW Public Radio, 2 years ago; Seattle Times, 19 years ago; etc) and even in nationally recognized literature (I've Heard The Vultures Singing, Lucia Perillo, 2009). Prior to Covid-19 the summer bat walks at Capitol Lake typically attracted overflow crowds.

Supporting Materials (if any): N/A

Name (ID): Anthony Smith (I-807)

Organization (if applicable): N/A

Submission Text: I ask to keep the lake we don't have the tax dollars to pay for it.

Supporting Materials (if any): N/A

Name (ID): Karen Smith (I-808)

Organization (if applicable): N/A

Submission Text: Keep it a lake

Supporting Materials (if any): N/A

Name (ID): Eliza Ghitis (I-809)

Organization (if applicable): N/A

Submission Text: While the DEIS does not identify a proposed alternative, I support the Estuary alternative which will enhance the Capitol Campus with natural recreation opportunities while also protecting natural resources and building resilience to the effects of climate change. The DEIS clearly states that the goals of the Capitol Lake - Deschutes Estuary Long-Term Management Project are to improve water quality, manage sediment accumulation, improve ecological function, and enhance community use of the resource (DEIS, pg. 1-15 - 16). The Estuary alternative will be better suited to meet these goals because of the following: It will provide greater reduction of river and tidal flood risk than the No Action or Managed Lake Alternatives (DEIS, pg. 4-6, 6-11). Estuarine wetlands are increasingly rare in the region and provide substantial benefit over freshwater deepwater habitats (DEIS, Pg. 6-15). The estuarine environment of Budd Inlet is critical habitat for Chinook salmon, which are listed as endangered under the Endangered Species Act (ESA) and bull trout, which are listed as threatened under the ESA (DEIS, Pg. 3-61, 3-63). Juvenile salmon from rivers to the north that were tracked by WDFW and the Squaxin Island Tribe frequently move toward the south when they enter Puget Sound, but the lack of estuarine habitat in the South Sound reduces their success rates. Southern resident killer
whales (SRKW) were listed as endangered under the ESA in 2005. The Southern Resident Orca Task Force created by Governor Inslee in 2018 recommended increasing the availability of Chinook as one of its overarching goals. The DEIS states that the Estuary alternative would be highly valuable for Chinook, other salmon, and marine fish (DEIS, P. 4-68), and hence beneficial to SRKW (DEIS, 4- 70). * Restoring estuary function would support shellfish, including crabs (DEIS, pg. 4-69). * Aquatic invasive species in Capitol Lake, such as the New Zealand mudsnail, Eurasian watermilfoil, and curly pondweed, would be eliminated by the introduction of saltwater. This would further benefit anadromous and marine fish by replacing invasive aquatic vegetation with salt marsh and tidal habitats (DEIS, Pg. 4-69). Although the Estuary alternative would create conditions unfavorable to freshwater fish, none of those present are listed as threatened or endangered by the state or the ESA. In fact, some freshwater fish such as bass, carp, and bullhead are non-native species that prey on native salmonids (DEIS, pg. 4-70). Estuaries improve resilience to the effects of climate change by sequestering carbon in vegetation and substrates and by attenuating flooding. The Estuary alternative would not require treatments for high phosphorous concentration as a groundwater-fed reflecting pool would (DEIS, pg. 2-29). Restoring estuarine conditions would provide greater benefits than the other alternatives for native species that historically used the Project Area (DEIS, Pg. 4-68). The long-term sustainability of the Estuary alternative would meet economic goals by precluding future maintenance of the 5th Avenue dam in the Managed Lake alternative and tide gates in the Hybrid alternative. 

My concerns with the DEIS analysis are listed below: Adaptive Management Plans For each action alternative, the DEIS states that adaptive management plans will be developed during the design and permitting process to maintain water quality, improve ecological functions, and manage invasive species (DEIS, pg. 2-5, 2-8, 2-13, 2-53). The adaptive management plan will contribute greatly to the success of the preferred alternative and the alternatives cannot be adequately evaluated without knowing what they would be.

Climate Change The DEIS fails to present sufficient detail for how climate change will alter environmental conditions during the life of the proposed project. The hydrodynamics and sediment transport model used two storm scenarios- without and with incorporating relative sea level rise (RSLR). Sediment deposition rates were lower with RSLR due to higher water levels in the Capitol Lake Basin reducing current velocities and hence, erosion of sediments in the Middle Basin. The DEIS analysis focuses on the model results without RSLR, because impacts are greater under this scenario (DEIS, pg. 3-13, 4-12). While using the more conservative estimate is understandable in some instances, in this case it is misleading. Sea levels have been rising and will continue do so at an accelerating rate. The most recent Intergovernmental Panel on Climate Change Sixth Assessment Report (IPCC AR6 2021) concluded that global sea level rise has accelerated since pre-industrial time and it will continue to accelerate in this century. Any analysis of coastal conditions must include RSLR, especially when evaluating the amount of sediment deposition that will occur in navigation areas of Budd Inlet.

Furthermore, in the Pacific Northwest, heavier storms are expected as atmospheric rivers (plumes of moisture from the tropical Pacific Ocean commonly known as the Pineapple Express) are projected to get 26 to 30 percent stronger by 2070. Consequently, winter flood risk in the region will increase due to heavy precipitation events increasing in both frequency and intensity. The DEIS acknowledges that
climate projections indicate a 10 to 30 percent increase in the most extreme 24-hour rainfall periods by mid-century in our region. Such events would increase Deschutes River flows, which could in turn cause more frequent and more severe flooding and higher rates of lakebed elevation change (DEIS, pg. 3-6, 3-7). This would increase the frequency and cost of dredging under the Managed Lake Alternative, but this is not discussed.

Mitigating for Shoreline Armoring The DEIS neglects to address the environmental impacts of the mechanically stabilized earth retaining wall structure below the new roadway connection from Deschutes Parkway to the roundabout at 4th Avenue Wand of the 1,500 cubic yards of riprap to be placed along critical infrastructure to avoid scour from restored tidal action (DEIS, pg. 2-47). Stabilization measures should be designed to support ecological function and use green infrastructure components as much as possible.

Insufficient and Inconsistent Time Scales By selecting a 30-year horizon for the DEIS, important and relevant information is ignored. For example, the long-term sediment management over a 30-year period misrepresents the volume of sediment dredged for the Managed Lake alternative over time. The DEIS claims that the amount dredged under the Estuary Alternative is greater than the Managed Lake during the 30-year project time (DEIS, pg. 2-24); however, the Managed Lake dredge events will increase in frequency and quantity over time. In the Managed Lake alternative, more sediment settling in the North Basin over time would require dredging more frequently than the initial 20-year interval and more material would be removed during each dredge event (DEIS, Pg. 2-21). Over time, the amount of material removed under the Managed Lake Alternative would be comparable to the other alternatives (DEIS, pg. 2-24).

The Thurston County data used to assess long-term water quality and for the alternatives analysis were from 2004 to 2014 (DEIS, Pg. 3-18), even though Thurston County collected water quality data in Capitol Lake and other area surface waters, including the Deschutes River, for several decades prior to 2014 (DEIS, Pg. 3-21). The rationale for this truncated data set is that strong trends for key parameters were not appropriate to use in characterizing existing conditions (DEIS, Pg. 3-19). This decision requires more explanation, particularly because the sediment accumulation analysis for West Bay used data from 1998 to 2020, even though erosion rather than deposition has been observed over the past 9 years (DEIS, Pg. 3-11).

Environmental Justice and Tribal Sovereignty When the tribes, in what is now known as western Washington, ceded vast tracts of land in treaties with the United States government in the 1850s, they reserved their rights to protect their way of life. The treaties specifically and purposefully protected their ability to continue to gather, hunt, and fish on and outside the reservations.: U.S. v. Washington, known as the Boldt decision, affirmed the tribes' treaty fishing rights and established the tribes as co-managers of the resource who retain the right to half of the harvestable salmon returning to Washington waters. As treaty-protected resources, salmon and steelhead are of vital importance for tribal subsistence, economies, cultures, and spiritual identity.

The DEIS cultural resources analysis briefly mentions the cultural and spiritual significance of the Deschutes River to the Squaxin Island Tribe, the Nisqually Indian Tribe, and the Confederated Tribes of
the Chehalis Reservation, and the treaty-protected fishery of West Bay. However, far more space in the assessment is allotted to recent history since the construction of Capitol Lake. For perspective, my rather ordinary house in West Olympia predates the 5th Avenue dam by two years, while the treaty tribes have called these lands and waters home for many millennia.

The Cultural Resources Discipline Report states that the Squaxin Island Tribe considers a restored estuary to be “an educational resource to teach about nature, land, and ancestors, as the area once was an important regional hub of indigenous trade and transportation’ (Geller et al. 2009:30, as cited on pg. 4-76). However, this and other details of the importance of functioning river and estuary are not covered in the DEIS cultural resources analysis.

Contradictory and Subjective Statements In the water quality assessment, dissolved oxygen and nutrients are emphasized, purportedly because low dissolved oxygen concentrations are a long-term problem in Budd Inlet (pg. 3-20). Other water quality problems, such as temperature, pH, bacteria, and sediment quality, are acknowledged, but covered with less detail (DEIS, Pg. 3-20). In addition, the DEIS characterizes Capitol Lake as having ‘only occasional seasonal violations of water quality standards, primarily associated with slight changes in temperature and dissolved oxygen” (DEIS, pg. ES- 12). However, Capitol Lake has been listed by the state as impaired under the Clean Water Act Section 303(d) due to bacteria and total phosphorus since 1996, as is noted in the DEIS (pg. 3-16). In addition, the largest anthropogenic causes of low dissolved oxygen in Budd Inlet are nutrients and total organic carbon from Capitol Lake (DEIS, Pg. 3-25).

The DEIS states that Capitol Lake currently has relatively good water quality for aquatic life and that water quality standards (such as for temperature and dissolved oxygen) are occasionally exceeded, but tempered by the Deschutes River (DEIS, Pg. 3-23, 3-26). At the same time, the DEIS claims that water temperature frequently exceeds the 17.5 °C maximum criterion for water temperature, for both surface and bottom waters (DEIS, pg. 3-24).

The DEIS purports that Capitol Lake decreases total nitrogen and dissolved inorganic nitrogen (DIN) in Budd Inlet during the summer, and that dam removal would have the effect of increasing total nitrogen and DIN, which would in turn, increase algal production in Budd Inlet (DEIS, pg. 3-37). However, modelling by the Department Ecology describes the process thusly: Capitol Lake receives nitrogen, generally in the form of nitrate, from the Deschutes River and Percival Creek. The computer model of Capitol Lake correctly predicts that the water leaving Capitol Lake has lower nitrate concentrations than the water entering through the Deschutes River during the summer growing season. Monitoring data confirm that nitrate concentrations exiting the lake are lower than those entering the lake during the summer season. Phytoplankton and macrophytes within the lake transform nitrogen from nitrate to organic nitrogen forms. As the plants die and decay, the nitrogen is released back to the water column where it can reach Budd Inlet. A portion of the nitrogen is cycled within the sediments, and some is buried. Capitol Lake decreases nitrate and total nitrogen seasonally, although the majority of this nitrogen still reaches Budd Inlet.

Multiple comparisons with the water quality of other lakes in Thurston County are included in the DEIS (pg. 13, 2-28, 3-18, 3-20, 3-24), but the scientific reasoning for doing so is unclear. The presence of poor
water quality in the vicinity may be due to many factors and cannot be assumed to a natural background condition. This reasoning is further undercut because Capitol Lake is not a natural lake. These comparisons, along with statements about misperceptions of water quality problems (DEIS, pg. ES-12, 3-17, 3.26), seem to be downplaying water quality concerns in Capitol Lake. Is 'relatively better than others' being proposed as a legitimate water quality target?

The DEIS identifies the conversion of Capitol Lake to estuary as a significant impact on the important and substantial Woodard Bay bat colony which feeds at Capitol Lake (DEIS, pg. 4-70). However, the DEIS Fish and Wildlife Discipline Report states that the Middle and South Basins are gradually and passively transitioning to a vegetated wetland, which would substantially reduce the ability of the area to support bats (pg. 4-64). Furthermore, the DEIS neglects to analyze whether the Yuma myotis and little brown myotis bats that predominately form the Woodard Bay colony would use estuarine habitat for foraging. These bat species are known to utilize estuarine habitat in the Columbia River estuary, the San Francisco Bay estuary, the Cowichan River estuary in British Columbia, and the St. Lawrence River estuary in Quebec, Canada. 6,7,8,9

In conclusion, maintaining a dam purely for aesthetic purposes on a river than can support salmon populations is an outmoded endeavor in light of 21st century challenges such as climate change and human population growth. Dams such as the 567 Avenue Dam create significant barriers to the survival and abundance of salmon species and salmon recovery is critical to our region's ecological, economic, and cultural health. 10 Salmon are also critical to the recovery of the endangered southern resident killer whales. While Washington State makes significant investments in restoring degraded estuarine habitat, it must also fully exercise its authorities to continue to fund and develop actions such as the Estuary alternative that will promote public use, resilience to climate change, and a thriving environment in the Deschutes River and Budd Inlet for generations to come.

Supporting Materials (if any): I-809_Ghitis.pdf

Name (ID): Allan Flannery (I-810)

Organization (if applicable): N/A

Submission Text: Let it go back to a natural estuary

Supporting Materials (if any): N/A

Name (ID): Kris Klohe (I-811)

Organization (if applicable): N/A

Submission Text: I support the transformation back to the natural estuary of Capitol Lake as best we can given resources and understanding of the science that supports doing this because the present lake is not helpful to anything other than an occasional reflecting pool picture.

Supporting Materials (if any): N/A
Name (ID): Chris Hemstad (I-812)

Organization (if applicable): N/A

Submission Text: Growing up in Olympia and spending huge amount of time in my youth both in Capital lake swimming and on Capital lake on boating I am deeply saddened by the horrible state of the current lake and more so with the movement to tear out the dam. Dredging the lake is the only right thing to do. If not, sediment will continue into Budd inlet and close off our port, or making dredging there necessary. Please keep our lake usable, not a swamp.

Supporting Materials (if any): N/A

LOCAL AGENCY

Name (ID): Gary Edwards (L-1)

Organization (if applicable): Thurston County

Submission Text: The Thurston County Board of Commissioners would like to submit comments regarding the scope of Work for the upcoming Environmental Impact Statement (EIS) for the Capitol Lake/Lower Deschutes Watershed project. We believe it is crucial to include an analysis of the upper Deschutes Watershed in the EIs for this project. It appears the current study area includes water quality research only in the Lower Deschutes Watershed and Capitol Lake. An assessment of commercial and residential activities on the Upper Deschutes watershed is also necessary, it contributes to water quality in the lower basin and in the lake. It is important to gather data of land activities of the Upper Deschutes as part of the Els process, leading to making informed decisions as to the future of Capitol Lake. We look forward to your response to our comments.

Thank you for the opportunity for Thurston County to review the draft Environmental Impact Statement for Capitol Lake-Deschutes Estuary and for your recent comprehensive presentation to the Board of County Commissioners (BoCC) on this project. A previous letter sent by the BoCC on November 9, 2018, (attached for reference) asked for this project to include analysis of water quality impacts on the Upper Deschutes watershed. Thurston County continues to be concerned the DEIS does not clearly communicate these impacts and asks below for additional information to be added. With this letter, the County focuses on the four project goals and related analysis in the DEIS: 1. Improve water quality 2. Manage sediment accumulation and future deposition 3. Improve ecological functions 4. Enhance community use of the resource,

Improve water quality Current water quality issues are described by the Department of Ecology in Ecology publication number 12-03-008: Deschutes River, Capitol Lake, and Budd Inlet Temperature, Fecal Coliform Bacteria, Dissolved Oxygen, pH, and Fine Sediment Total Maximum Daily Load Technical Report. This report describes the serious water quality issues in the basin, including the upper watershed, and the steps needed to correct the problems. The County is concerned the DEIS does not clearly communicate the differential water quality impacts among the alternatives in keeping with this
Ecology report. On page xxiv of the report it states: 'The combined effects of current nonpoint and point sources exceed the loading capacity of both Budd Inlet and Capitol Lake for nutrients with the lake in place. With Capitol Lake in place, more of Budd Inlet and Capitol Lake would violate standards for DO under critical conditions than with a restored Deschutes estuary. If the lake were to revert to an estuary, a smaller portion of Budd Inlet would violate standards for DO, and the geographic area that is currently Capitol Lake would meet marine water quality standards for DO under all nutrient loading alternatives. Load reductions are needed under either alternative and will be developed in the Water Quality Improvement Report'. The unnecessary warming of the water is called out in Ecology's water quality reports as adding to the dissolved oxygen and temperature exceedances observed in water quality for the Deschutes and surrounding watersheds and Capitol Lake. Acknowledgement of how this Ecology report is being captured in the DEIS analysis would be helpful, as well as a more clear accounting of how different alternatives will positively or negatively impact the already serious water quality issues in the basin and Budd Inlet. For example, the DEIS should describe how a reflecting pool would affect water temperature: Solar heating of the water retained behind the wall with little circulation would likely affect the temperature of the water contained in the reflecting pool, and therefore when released or in contact with tidally induced water, may exacerbate water quality problems because of high water temperatures/ lower dissolved oxygen levels. As for impacts to the upper watershed, page xxi of the Ecology document 12-03-008 Deschutes River, Capitol Lake, and Budd Inlet Temperature, Fecal Coliform Bacteria, Dissolved Oxygen, pH, and Fine Sediment Total Maximum Daily Load Technical Report describes how the configuration of Deschutes Estuary or a managed Capitol Lake would impact water quality standards for surrounding tributaries. It is notable that tributaries emptying into a managed lake would have higher water quality standards applied than if they were emptying into an estuary. As described by the County in our letter sent November 9, 2018, water quality standards upstream in the Deschutes watershed should be included in the analysis in the DEIS. We request this information be added to the DEIS.

Sediment management A description of how ongoing sediment management would be funded/implemented for all alternatives should be added, including any impacts on jurisdictions that would bear the costs of ongoing maintenance.

Improve ecological functions The DEIS should include a more detailed description of how an estuary would provide a natural control/elimination of the invasive New Zealand mud snail.

Enhance community use of the resource Thurston County is concerned that a managed lake or hybrid option that retains water behind an 8-13 foot wall (estimation based on measurements discussed among the technical CLDE group) would create a visual impact that, from water/pedestrian level, a person would be looking at the outside of a wall, not a reflecting pool.

As for recreational uses, it is clear the ability for active use (boating, swimming) is limited due to invasive species present in the lake, which if allowed to propagate elsewhere could cause irreparable harm to other environments. It is unclear in the DEIS how well the 'clean-out' areas would work and what assurances there would be for consistent use by the public to clean off kayaks and other small boats or equipment. Examples from how these stations have effectively worked elsewhere would be helpful to include in the DEIS. Thurston County is concerned that without footwear, boats, and other personal
flotation devices being consistently cleaned off, the odds of invasive species being transmitted to other watersheds is very likely.

Thurston County notes that while in-water recreational use may be limited by an estuary option, the boardwalk at Nisqually Wildlife refuge is a big attraction for the refuge and is regularly used by the public to view all the incredible wildlife and plants associated with the Nisqually Estuary. The Draft EIS states that 'estuary habitat is scarce and valued in the region compared to freshwater ponds and lakes' and that 'estuarine wetlands provide some of the most productive and valued habitats on earth.' An analysis of relative value associated with public use of the different alternatives would enhance the DEIS and help identify a preferred alternative.

Supporting Materials (if any): L-1_Edwards.pdf

Name (ID): Eric Christensen (L-2)

Organization (if applicable): City of Olympia

Submission Text: The City of Olympia appreciates the opportunity to comment on the Draft Environmental Impact Statement (EIS), for the Capitol Lake - Deschutes Estuary Long-Term Management Project. We understand that careful and thorough analyses and findings are essential to the environmental review process. We thank you for the recent Washington Department of Enterprise Services presentation to City Council and your answers to our questions. . . The attached resolution, approved by City Council on August 10, 2021, summarizes the City's concerns and requests. In general, The City finds that the Estuary Alternative would: provide the rare opportunity to restore scarce tidelands and estuarial habitat, be the most beneficial to tribal populations, address social justice and equity impacts associated with the No Action and Managed Lake Alternatives, substantially benefit anadromous fish and marine fish, be the most beneficial for controlling invasive species, be beneficial for reducing downtown Olympia flooding, be the most beneficial to Budd Inlet water quality, be better aligned with local climate adaptation goals than the Managed Lake Alternative, be the least impactful to regional LOTT Clean Water Alliance and stormwater utility ratepayers, be the most natural and environmentally sustainable, and be the least cost alternative over the 30-year planning horizon. Given the above findings, the Olympia City Council requests that the Estuary Alternative be selected as the only clear Preferred Alternative for the final Environmental Impact Statement for the Capitol Lake - Deschutes Estuary Long-Term Management Project. Please accept the enclosed resolution and attached list of comments compiled by City staff as the City of Olympia's response to the draft EIS. We are committed to the EIS process at both the elected official and staff levels. We feel you and your consultant team have prepared a thorough and sincere draft EIS. Let us know how we can help. If you have questions, please contact Eric Christensen, Water Resources Director, at echriste@ci.olympia.wa.us or 360.570.3741.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF OLYMPIA, WASHINGTON, SUPPORTING THE ESTUARY ALTERNATIVE FOR LONG-TERM MANAGEMENT OF CAPITOL LAKE - DESCHUTES ESTUARY WHEREAS, the Washington State Department of Enterprise Services (DES) is conducting an environmental review process under the State Environmental Policy Act for the Capitol Lake - Deschutes
Estuary Long-Term Management Project; and WHEREAS, through Engrossed Substitute Senate Bill 6095, the Washington State legislature required DES to develop an environmental impact statement to consider alternatives for Capitol Lake. The alternatives considered must include, at a minimum, a lake option, an estuary option, and a hybrid option. The environmental impact statement will also consider sediment transport and locations within lower Budd Inlet. The department must work with affected stakeholders to develop mitigation plans. The environmental impact statement must also consider an expanded area around Capitol Lake and Budd Inlet including the Port of Olympia for the economic analysis. The environmental impact statement must consider the use of equal funding from nonstate entities including, but not limited to, local governments, special purpose districts, tribes, and not-for-profit organizations; and WHEREAS, through Engrossed Substitute Senate Bill 6248, the Washington State legislature required DES to complete a draft environmental impact statement with at least the three options of a managed lake, an estuary, and a hybrid lake by June 30, 2021, with the intent of a final environmental impact statement that includes identification of a preferred alternative for Capitol Lake management be completed by June 30, 2022; and WHEREAS, on June 30, 2021, DES released the Draft Environmental Impact Statement (draft EIS), for the Capitol Lake - Deschutes Estuary Long-Term Management Project including information on long-term management alternatives and key findings from the technical analyses; and WHEREAS, the draft EIS is currently out for public comment until August 13, 2021, and no further opportunity for public comment is anticipated; and WHEREAS, the draft EIS does not identify a Preferred Alternative; and WHEREAS, the Preferred Alternative will be selected by DES with support from their project team and input from Work Groups and the Community Sounding Board; and WHEREAS, the majority of the draft EIS project area lies within the city limits of Olympia and is part of the downtown community, our cultural and economic hub for which we have invested significant resources; and WHEREAS, the entirety of the draft EIS project area lies within the Squaxin Island Tribe treaty lands; and WHEREAS, the draft EIS (page 4-118) states that 'the Estuary Alternative would beneficially affect tribal populations through the cultural, heritage, spiritual, and educational value that an estuarine environment provides;' and WHEREAS, the draft EIS Executive Summary (page 35) states that 'Reintroducing tidal hydrology to the Capitol Lake Basin would benefit many of the species of importance to local area tribes, including salmon and shellfish, and potentially other fish and wildlife, as well as plants.' These benefits are also important to the community and region as a whole; and

WHEREAS, the draft EIS (page 7-11) states, that 'The Managed Lake Alternative would perpetuate historic inequities, particularly for tribal populations that have experienced ongoing adverse effects from changes to the ecosystem since non-Indigenous settlement of the region and continued loss of connection to the natural environment'; and WHEREAS, the draft EIS Executive Summary (pages 4 and 5) states that 'Due to historical declines, estuary habitat is scarce and valued in the region compared to freshwater ponds and lakes, which remain relatively abundant' and 'Estuarine habitat in the South Sound has experienced severe reductions in both the quantity and quality of such key habitats for fish' and 'Because of this, the transition in habitat type from freshwater lake to estuary would be highly valuable.' This makes the Estuary Alternative a unique and rare opportunity and would provide an important example of the State's commitment to restoring Puget Sound, salmon, and Southern Resident Orca in its Capitol City; and WHEREAS, the Draft EIS Executive Summary (Page 40) states that under the Estuary and Hybrid Alternatives, 'the 5th Avenue Bridge would be closed for approximately 4-
5 years for replacement'. This will have a significant impact on access to downtown, overall mobility in the Olympia and the ability to maintain utility services, and WHEREAS, the draft EIS Executive Summary (page 17) states “The mixing of freshwater and saltwater in estuarine environments creates some of the most productive and valuable habitat on earth. The reestablishment of estuarine conditions by reintroducing saltwater and tidal influences to the Capitol Lake Basin would substantially improve ecological functions in the Project Area. In addition to supporting key ecological processes, estuarine conditions would provide productive habitat for shellfish, salmon, other anadromous species, and marine fish in the area, potentially including Endangered Species Act-listed Chinook salmon (non-hatchery) and steelhead trout. Shallow water habitats with salt marsh vegetation along the shoreline would provide preferred forage and rearing habitat for juvenile salmon.’ This makes the Estuary Alternative a unique and rare opportunity and would provide an important example of the State's commitment to restoring anadromous species (salmon), and Southern Resident Orca in its Capitol City; and WHEREAS, the draft EIS (page 4-63) states ‘Under the Estuary and Hybrid Alternatives, the conversion of freshwater lake habitat to a tidally influenced brackish estuary would substantially benefit anadromous fish and marine fish, potentially including ESA-listed Chinook salmon and steelhead trout, as well as shellfish’; and WHEREAS, the consumption of ESA-listed Chinook salmon has long been linked to the survivability of ESA-listed southern resident killer whales and the estuary option results in substantial beneficial effects on salmon including Chinook which is a key recommendation to recover ESA-listed killer whales; and WHEREAS, the draft EIS (page 4-69) states that with the Estuary Alternative, ‘Aquatic invasive species that are intolerant to saltwater (e.g., New Zealand mudsnail, Eurasian watermilfoil, curly pondweed) would be largely eradicated from the area with the transition from freshwater to saltwater’; and WHEREAS, the draft EIS Water Quality Discipline Report (page 5-14) estimates that with the Estuary Alternative there will be an improvement (“minor to moderate benefits”) in dissolved oxygen in Budd Inlet over the Managed Lake and Hybrid Alternatives; and WHEREAS, the draft EIS (page 4-106) states “Maximum water levels for the Estuary Alternative would be slightly (1 foot [<0.3 meters]) lower than those of the No Action and Managed Lake Alternatives’ and ‘During extreme river floods (with 2 feet [0.61 meters) of RSLR), the Estuary Alternative would reduce the extent and intensity of flooding compared to the No Action and Managed Lake Alternatives’; and

WHEREAS, the draft EIS (page 4-184) indicates the total cost of estuary alternative over 30 years would be $70 to $271 million dollars less than the Managed Lake and Hybrid Alternatives; and WHEREAS, the draft EIS (page 4-176) states ‘As part of a future Capitol Lake/Budd Inlet TMDL to reduce nutrient loading in Budd Inlet, Ecology is expected to issue load allocations to Capitol Lake if it remains a lake. If Capitol Lake does not meet its future load allocations, LOTT, and other nutrient sources within the Capitol Lake Basin, including stormwater dischargers, will likely be required to improve water quality of their discharges by increasing treatment and/or reducing their discharges during the summer. These measures would increase the costs for treatment of wastewater and stormwater discharges, which would be passed on to rate payers.” However, the draft EIS does not quantify the potential costs to affected regional ratepayers; and WHEREAS, the draft EIS (page 4-119) states ‘Removing the dam would re-establish pre-Deschutes Basin Project tidelands and estuary functions associated with historic use patterns of the estuary’; and WHEREAS, the creation of a “Des Chutes Basin Project Historic District’ recommended in the draft EIS (page 3-96) would recognize only those historic elements related to the creation of Capitol Lake, to the exclusion of the extensive cultural and historic resources adversely
impacted by that project and its subsequent alteration of the entire Deschutes Estuary ecosystem. Instead of focusing on a single period of significance the entire EIS project area should be designated a Cultural Landscape, with a Treatment Plan to guide future conservation and preservation decisions including mitigation of operational effects of any selected alternative; and WHEREAS, the draft EIS Economics Discipline Report (page ES-7) states "The Estuary and Hybrid Alternatives would provide more opportunity for carbon sequestration and less methane emissions than the Managed Lake Alternative, with the Estuary providing slightly more storage capacity than the Hybrid Alternative. Both the Estuary and Hybrid Alternatives are better aligned with local climate adaptation goals than the Managed Lake Alternative'; and WHEREAS, the process for prioritizing selection criteria for the Preferred Alternative solicited from the Work Groups and Community Sounding Board was not informed by the analyses and findings of the draft EIS; and WHEREAS, the Estuary Alternative would provide the rare opportunity to restore scarce tidelands and estuarine habitat, would be the most beneficial to tribal populations, would address social justice and equity impacts associated with the No Action and Managed Lake Alternatives, would substantially benefit anadromous fish and marine fish, would be the most beneficial for controlling invasive species, would be beneficial for reducing downtown Olympia flooding, would be the most beneficial to Budd Inlet water quality, would be better aligned with local climate mitigation and carbon sequestration goals than the Managed Lake Alternative, may be the least impactful to regional LOTT Clean Water Alliance and stormwater utility rate payers, would be the most natural and environmentally sustainable, would honor traditional cultural and spiritual values of the land and waters in Budd Inlet as a whole, and would be the least cost alternative over the 30-year planning horizon; NOW, THEREFORE, BASED ON THE RECITALS ABOVE, THE OLYMPIA CITY COUNCIL DOES HEREBY RESOLVE as follows: 1. The Olympia City incil hereby supports selection the Estuary Alternative as the only clear Preferred Alternative for the final Environmental Impact Statement for the Capitol Lake - Deschutes Estuary Long-Term Management Project.

2. The Olympia City Council hereby requests DES to perform a more rigorous scientific process for prioritizing selection criteria for a Preferred Alternative.

3. The Olympia City Council hereby requests that, given the impacts to the Squaxin Island Tribe and to address equity and social justice impacts, the Squaxin Island Tribe's input in the Decision Durability selection criteria be weighted more heavily than other partners given treaty rights under the Medicine Creek Treaty of 1854 and Tribal interests in the health of the Budd Inlet ecosystem as a whole.

4. The Olympia City Council hereby requests the ability to provide additional input on selection of the Preferred Alternative to be identified in the final Environmental Impact Statement for the Capitol Lake - Deschutes Estuary Long-Term Management Project.

5. The Olympia City Council hereby requests the formation of the Deschutes Watershed Council be included in the final recommendations to create a formal collaborative body to move restoration forward, as was also recommended in the proposed Deschutes Watershed Restoration and Enhancement Plan.

6. The Olympia City Council hereby requests that as a part of evaluating the Estuary Alternative, that a temporary 5th Avenue bridge structure be installed during construction to provide redundancy in this
vital part of the City's transportation and utility network between West Olympia and downtown Olympia.

7. The Olympia City Council hereby thanks DES for the opportunity to comment on the draft Environmental Impact Statement for the Capitol Lake - Deschutes Estuary Long-Term Management Project.

In the final EIS, please acknowledge that this makes the Estuary Alternative a unique and rare opportunity that would provide an important example of the State’s commitment to restoring Puget Sound, and salmon and Southern Resident Orca populations.

This is important context to include as restoration of circulation, natural fresh/salt salinity gradients and estuarine nutrient transport and cycling cannot be realized in a managed lake alternative.

It is also possible that they would not be met. Why only state one side of this range of possibilities? Where is the data that shows that “tidal water would be exchanged twice daily and that water would be cooler, with higher dissolved oxygen concentrations, and less algae than the estuarine water outside of the reflecting pool.”?

Emphasis on the alterations to ecological function created by the dam seems more relevant to the overall selection of a preferred alternative than the concerns about aquatic plants in the lake.

The Olympia Sea Level Rise Response Plan acknowledged the potential for changes in Capitol Lake as a result of the EIS process and provided adaptation strategies that could be considered with all of the action alternatives. Regardless of the future of Capitol Lake, the eastern shoreline along Heritage Park will need to be modified in order to prevent both existing and future downtown flooding. Different alternatives could present subtle changes in how the shoreline is modified to address sea level rise. The plan also acknowledges that near-term (by 2024) strategies for elevating the landscape in low areas of Heritage Park should be implemented to reduce existing river-driven flooding.

In the final EIS, please revise Figures ES.5 and ES.6 to indicate that the landscape elevations within Heritage Park will need to be increased to prevent flooding in downtown Olympia. It is assumed that with the Hybrid Alternative, the reflecting pool barrier wall will fulfill this purpose.

Mention benefits to natural processes, salinity mixing zone and increase of aquatic habitat by 3.3 acres from Dam removal. Also applies to Figure ES.7.

Hydrodynamics - No mention of improved fresh/salt salinity gradient and potential benefits to larger Southern Budd Inlet circulation from Estuary Option. Water levels in flood scenarios are not contextualized with degree relative to flood elevations. Sediment transport to Budd Inlet is also a benefit to nearshore habitats supporting resiliency to sea level rise and a more natural distribution and release of sediment and freshwater.
Uncertainty in water quality improvements from a yet to be developed adaptive lake management plan are not mentioned in Managed Lake alternative, but uncertainty is highlighted in potential water quality improvements to Budd Inlet in Estuary Alternative.

In estuary alternative highlight the beneficial effects on shorebirds, wading birds, shellfish, diving and dabbling ducks as described in the fish and wildlife discipline report as moderate to substantial (Fish and Wildlife page 5-49 and DEIS 4-71 table 4.5.2) Also increase of deepwater habitat by 3.2 acres from dam removal as moderate beneficial effect (Fish and Wildlife 5-30)

Mention restoration of 3.3 acres of deepwater estuary habitat of 3.3 acres from Dam removal should be mentioned in wetlands under estuary and hybrid alternatives. (from page 4-81)

In the final EIS Executive Summary, please acknowledge the Estuary Alternative’s minor beneficial effect for orcas in Table ES.2.

In the final EIS, please revise Table ES.2 under the Estuary and Hybrid Alternatives to also propose coordination with the Olympia Sea Level Rise Response Plan on design parameters for the flood protection design of the Heritage Park berm to account for extreme river flooding.

In the final EIS, please revise the summary of Air Quality and Odor impacts in Table ES.2 to acknowledge these differences in greenhouse gas emissions and potential for carbon sequestration between the Estuary and Hybrid alternatives. Please also acknowledge that the Estuary and Hybrid alternatives are better aligned with local climate adaptation and mitigation goals than the Managed Lake Alternative.

Please acknowledge that these benefits to the natural environment are also of importance to the community and region as a whole.

This has a very large impact on access to downtown and overall mobility in the Olympia. Please describe how this impact is anticipated to be mitigated. It is important to note that without an alternate east-west route (such as the 4th Avenue bridge), loss of the 5th Avenue Bridge would cripple transportation and emergency vehicle access in the City. Has a temporary bridge, similar to what was implemented with the 4th Avenue bridge replacement following the Nisqually earthquake, been given consideration? If not, could the proposed 5th Avenue pedestrian bridge be redesigned to allow its use as a temporary vehicular bridge during construction?

Given this: 1. Although the Washington State legislature has tasked DES with doing so, given that DNR is the landlord and DES is the tenant, is it appropriate for DES to be the decision maker for the Preferred Alternative? 2. In the final EIS, please provide greater detail of what the governing body for long-term management of the Capitol Lake - Deschutes Estuary is envisioned to be. 3. The terms of the lease (Section 7.3) require that “prior to any construction, alteration, replacement, removal or major repair of any improvements (whether Landlord-Owned or Tenant-Owned), Tenant shall submit to Landlord plans and specifications which describe the proposed activity. Construction shall not commence until Landlord has approved those plans and specifications in writing.” Given this, it appears that DNR has the final approval of the Preferred Alternative. Please address this in the final EIS. 4. The terms of the lease
(Section 7.4) indicate “Tenant-Owned Improvements shall be removed by Tenant by the Termination Date unless Landlord notifies Tenant that the Tenant-Owned Improvements may remain. If the Landlord elects for the Tenant-Owned Improvements to remain on the Property after the Termination Date, they shall become the property of Landlord without payment by Landlord.” Section 7.1 of the lease indicates the 5th Avenue dam is a tenant-owned existing improvement. Given this, it appears that DNR has the authority to request the removal of the dam by the termination of the lease. Please address this in the final EIS.

To promote fairness and equity across the many aspects of the community, please include social justice and equity as a selection criterion.

There does not appear to be an evaluation or mention of Environmental and Economic “Sustainability” in the draft EIS (particularly Chapters 3 or 4).

Thus far the process for prioritization of the criteria does not appear to have been rigorous and was not informed by the findings of the draft EIS. Performance of a more rigorous process for prioritizing and weighting the selection criteria, with input from the Work Groups and Community Sounding Board, is necessary before a Preferred Alternative can be selected.

With the reconfiguration, please add an evaluation of vehicle LOS at 4th and Simmons and the lower roundabout (top of 4th Ave bridge).

Boardwalks at Billy Frank Jr Nisqually NWR were constructed on prior disturbed areas (levees and service roads) with subsurface geotechnical investigation to support diamond pier/pin pile pile system. This design may not be feasible in unconsolidated/placed sediments in the lake/estuary scenario.

Makes no mention of the Tribes' uses and value of the estuary for educational and spiritual purposes. The report should consider our contemporary Tribes as part of the broad community of the project area and include their traditional, current and future envisioned uses and values here and in other sections that enumerate the community uses and benefits of each alternative. See text in section 4.14.3.4 re importance to Tribes of water quality, habitat, aesthetics, cultural, heritage, spiritual & educational value of “ecosystem services” of the estuary. That language should appear in benefits lists and community use sections.

Consider changing West Bay to Budd Inlet. The Swantown Marina boat launch located in East Bay is a primary access point for boaters in Budd Inlet.

Further explain this at-grade path. A path on the ground should described more fully including who is serves and what it connects to. Will it connect to the planned West Bay Trail?

Consider referring to this as a “pedestrian/bicycle” bridge. It is described as intending to serve bicyclists, and multimodal. It would be clearer to put bicycle in the title. This bridge will significantly improve bicycle access in the area.
Width of bridge is 14 ft. Because bidirectional travel by bicyclists and pedestrians is expected, consider a wider design, 16 ft is recommended. A multiuse trail is 12 feet. Shy distance should be added for the railings. Unlike an at grade trail, people using the bridge will shy from the railing, narrowing the effective travel space.

It is assumed that this pedestrian and bicycle bridge will be built to remain permanently; this should be stated. The function and aesthetics of this bridge should be developed with the City of Olympia and community involvement.

Continue to maintain the at-grade pathway connection under both the 4th and 5th Avenue bridges regardless of the chosen Alternative. The at-grade pathway connection is critical to providing safe pedestrian and bicycle connectivity and for future connection with Olympia’s waterfront trail.

The design of this connection should consider be integrated with the design of the future planned West Bay Trail. The design of this connection should assume wide sidewalks and enhanced bike lanes. The number of lanes, the bicycle and pedestrian access, intersection treatment, and the aesthetics should be developed with the City of Olympia and community involvement.

See chapter 5 comment below. The impacts of closing the 5th Avenue bridge are significant and not fully mitigated by the Deschutes Parkway reconfiguration.

The final EIS should state the design of this bridge should be developed with the City of Olympia and community involvement. Specifically, the number of lanes, the bicycle and pedestrian features, and bridge aesthetics. The use of guardrail should be removed from the description at this stage.

The final EIS should state function and aesthetics of this connection should be developed with the City of Olympia and community involvement.

If the water quality analysis study area includes the Deschutes River and Percival Creek, as well as West Bay and East Bay of Budd Inlet, please revise the study area boundary depicted in Exhibit 3.27.

The cultural resources study scope includes the project area +.25 mi buffer. However, the resulting recommendation includes designation of a historic district area narrowly related to creation of Capitol Lake to be called “Des Chutes Project Historic District.” This proposed district may be useful for isolating the historic elements that would see significant adverse impact (demolition, loss) from a preferred option that removes the dam. But that is its only, speculative, marginal utility. Structures (including the Lake) that are believed eligible for listing and which will be impacted by a preferred alternative should be thoroughly documented as a mitigation measure - regardless of which alternative is chosen. For this reason, the recommendation for a narrowly drawn historic district comes across as a tone-deaf to the array of cultural resources in and along the waterway, that continues to discount and defer consideration of the cultural, pre-contact, and historic resources that were adversely impacted by the creation of the Lake in the first place. Those lost or impacted resources disproportionately reflected the presence of marginalized populations (Little Hollywood, Olympia’s Chinese Community, and our Tribal Community’s presence throughout the waterways of Budd Inlet). They also include the commercial industries of the
South basin and residential properties and neighborhoods impacted by dredge spoils and redirected transportation routes over water, bridges, and land. A more progressive and unifying approach would be to pursue a Cultural Landscape designation for the project area from the Falls to North Port that acknowledges and documents without bias the many, cumulative human uses over time, creates a Treatment Plan to guide future decisions regarding conservation, protection, and preservation, and develops an Interpretive Plan to share those many stories. The recent creation of Washington’s National Maritime Heritage Area could provide support and momentum for a Deschutes Estuary Cultural Landscape designation within the NMHA. The work could be funded as a mitigation measure and possibly with grant support.

Union Avenue is an arterial; map shows it as a major Collector

Transit routes on 4th and 5th Avenue are mentioned. Two Intercity Transit routes, 12 and 42, use Deschutes Parkway and should also be mentioned.

Add more discussion of transit routes, including a map of the routes in the affected area. Also, provide transit ridership numbers (possibly boardings/dischargements on these routes at the Olympic Transit Center). There are a significant number of people who ride buses and will be impacted by a future project.

Page Reference Issue Comment 3-121 Bicycle facility definitions. Use the term 'Bike Corridor' instead of 'Bike Street.' 3-121 Bicycle facility definitions. 3-122 Docks as trails Remove the sentence that states: ‘These designations are consistent with...’ It is not needed and is inaccurate (Bike Corridors are not Class III bike facilities.) Docks are shown as trails and this is mentioned in the text. Many of these docks are locked and not open to the public. Suggest not showing docks as trails.

Page 3-123 The Bike Corridor on 7th goes to Washington; shown on map as going to Capitol.

Chapter 4 Section 4.3 recommends monitoring water quality, invasive species and aquatic plants to evaluate whether the objectives are being met. It is recommended that a collaborative partnership, like the Deschutes Watershed Council, be established or consulted to monitor implementation of the Preferred Alternative's long-term management. It is recommended that a collaborative partnership, like the Deschutes Watershed Council, be established or consulted to monitor implementation of the Preferred Alternative's long-term management. This would be consistent with the WRIA 13 Committee recommendations.

Section 4.1 Beneficial effects of restoring sediment transport to Budd Inlet for habitat, marine food webs and SLR adaptation is not mentioned in this section. Sediment is not only a problem to be resolved. There are many beneficial effects of restoring natural sediment transport to lower Budd Inlet. Please include benefits to existing habitat in southern Budd Inlet of restored natural sediment transport processes in addition of impacts.

4-3 The draft EIS states the modeled +100-year river flood event will cause high water levels of up to 17.4 feet (5.3 meters) NAVD 88 in the North Basin, 17.7 feet (5.4 meters) NAVD 88 in the Middle Basin,
21.0 feet (6.4 meters) NAVD 88 in the South Basin. These elevations appear to take into account 2 feet of RSLR. Please indicate it in the narrative. The narrative does not appear to mention this. 4-3 The draft EIS states water levels in Budd Inlet will reach 16.1 feet (5.0 meters) NAVD 88 during the 100-year tide. Please indicate it in the narrative. The narrative does not appear to mention this.

4-3 and 4-5 The draft EIS states during extreme high tides (i.e., the 100-year tide), elevated water levels in Budd Inlet are prevented from entering Capitol Lake by the 5th Avenue Dam. This is not quite accurate. Regardless of the season, at even moderate high tides, marine water often enters the lake through the fish ladder. It is suggested that the narrative be changed to say “during extreme high tides, marine water from Budd Inlet is limited/reduced from entering Capitol Lake by the 5th Avenue Dam.”

4-6 The text box in the right-hand column of the page appears to be blank.

4-8, 4-9 and 4-10 The draft EIS states “numerical model results for maximum water levels at specific locations throughout the study area graphically illustrated in Figures 4.1.1 (for extreme river flood event) and 4.1.2 (for extreme tidal flood event), both with 2 feet (0.61 meters) of RSLR, are listed in Tables 4.1.1 and 4.1.2.” Please add a note in the titles or footnotes in both figures and tables acknowledging that they represent conditions with 2 feet of RSLR. Should the paragraph end “both with 2 feet (0.61 meters) of RSLR, and are listed in Tables 4.1.1 and 4.1.2.”

4-8, 4-9 and 4-10 The draft EIS states numerical model results for maximum water levels at specific locations throughout the study area graphically illustrated in Figures 4.1.1 (for extreme river flood event) and 4.1.2 (for extreme tidal flood event), both with 2 feet (0.61 meters) of RSLR, are listed in Tables 4.1.1 and 4.1.2. Please provide similar figures and tables for existing conditions without sea level rise.

4-9 and 4-10 Maximum water levels are not depicted within the reflecting pool for the hybrid alternative in Figures 4.1.1 and 4.1.2. Is this because water levels within the reflecting pool were not modeled? If so, please explain that in the narrative.

4-11 Maximum water levels for an extreme tidal flood event with 2 feet of RSLR are listed in Table 4.1.2. The water level elevations on the north side of the 5th Avenue Dam are higher for the No Action and Managed Lake Alternatives than they are for the Estuary and Hybrid Alternatives. This is not intuitive. It would seem that with no or little flow from the lake, water levels outside the dam would not be higher. Does this have to do with the total volume of water within the hydrodynamic study area?

4-11 Maximum water levels for an extreme tidal flood event with 2 feet of RSLR are listed in Table 4.1.2. The top elevations of the radial gates and fish gate are not provided. Does the hydrodynamic model take into account the top elevations of the radial gates and fish gate? With 2 feet of RSLR, will tidal elevations be higher than the top of any or all of the gates? If so, the water elevations in the North Basin for the No Action and Managed Lake Alternatives do not appear to support this.

4-62 Chemical control of invasive plants and New Zealand mud snail. Do not support chemical controls for mollusks or plants as a long term management option for these species. Reintroduction of natural salinity regime and containment seems a more viable approach. Continued chemical control has off
target effects and negative impacts on water quality and dissolved oxygen as plant materials decompose.

4-82 Table 4.6.2 beneficial effect of restoring 3.3 acres of aquatic habitat is not listed. This is a net gain impact not less than significant. Included dam removal restoration of 3.3 acres of waters of the US as a benefit in table 4.6.2 first row/impact finding, as listed on page 4-81.

4-84 Pin pile viability uncertain - at least using same system as used at Billy Frank Jr Nisqually NWR. Boardwalks at Billy Frank Jr Nisqually NWR were constructed on prior disturbed areas (levees and service roads) with subsurface geotechnical investigation to support diamond pier/pin pile system. This design may not be feasible in unconsolidated/placed sediments in the lake/estuary scenario.

4-86 Under the key findings for carbon sequestration, the draft EIS describes the vegetated marshes established under the Estuary and Hybrid alternatives as more consistent with the goals of the Thurston Climate Adaptation Plan, but does not reference the Thurston Climate Mitigation Plan. Please revise this statement to clarify that the Estuary and Hybrid alternatives are also consistent with the carbon sequestration goals of the Thurston Climate Mitigation Plan.

4-91 The draft EIS states that the Managed Lake Alternative “would not promote consistency with the Guiding Principles in the 2017 Thurston Climate Adaptation Plan, capturing and storing GHG emissions”, but does not reference the Thurston Climate Mitigation Plan. The Managed Lake alternative is also inconsistent with the TCMP strategy to sequester carbon through habitat restoration. Please revise this statement the clarify that the Managed Lake alternative would also not promote consistency with the carbon sequestration goals of the Thurston Climate Mitigation Plan.

4-94 Statement that Estuary alternative is less consistent than other alternatives in long term GHG emissions seems inconsistent with table below and table 4.7.2 if in water disposal is an option. Include text to acknowledge the estuary alternative has the least greenhouse gas emissions associated with construction and operation compared to other action alternatives if in water disposal is viable as shown in Table 4.7.4 when compared to Table 4.7.2 on page 4-90.

4-94 The draft EIS states: “Within the context of regional GHG emission goals described in the 2020 Thurston Climate Mitigation Plan, [the Estuary Alternative] is less consistent than the Managed Lake or No Action Alternative in terms of reducing long-term GHG emissions associated with construction and operation activities. However, the Estuary alternative promotes the greatest levels of consistency with Guiding Principles in the 2017 Thurston Climate Adaptation Plan.” This statement is misleading as currently written and could be interpreted to suggest that the Estuary alternative is inconsistent with the Thurston Climate Mitigation Plan (TCMP). However, creating opportunities for carbon sequestration through ecosystem preservation and restoration is an important strategy identified in the TCMP to achieve regional greenhouse gas reduction targets, and as such the Estuary Alternative is entirely consistent with the climate mitigation goals and strategies of the TCMP. In the final EIS, please revise this statement to clarify that the Estuary Alternative is consistent with the carbon sequestration goals and strategies described in the 2020 Thurston Climate Mitigation Plan.
4-96 The draft EIS states: “Within the context of regional GHG emissions goals described in the Thurston Climate Mitigation Plan to reduce GHG emissions 45% below 2015 levels by 2030 and 85% below 2015 levels by 2050, [the Hybrid Alternative] is less consistent in terms of reducing long-term GHG emissions associated with construction and operation activities. However, the Hybrid Alternative provides more consistency than the Managed Lake Alternative with Guiding Principles in the 2017 Thurston Climate Adaptation Plan by improving the ability to reduce, capture, and store GHG emissions, but less than the Estuary Alternative.” This statement is misleading as currently written and could be interpreted to suggest that the Hybrid alternative is inconsistent with the Thurston Climate Mitigation Plan (TCMP). However, creating opportunities for carbon sequestration through ecosystem preservation and restoration is an important strategy identified in the TCMP to achieve regional emission reduction targets, and as such the Hybrid Alternative is consistent with the climate mitigation goals and strategies of the TCMP. In the final EIS, please revise this statement to clarify that the Hybrid Alternative is consistent with the carbon sequestration goals and strategies described in the 2020 Thurston Climate Mitigation Plan.

4-101 Statement that all action alternatives are supported by the Olympia SMP seems inconsistent with DEIS findings that estuary and hybrid alternatives offer higher gains in ecological function, restored estuarine habitats and intertidal influence. It does not seem that all action alternatives are equally supported by the Olympia SMP. Please revise to state that the estuary and hybrid alternatives are more consistent with the SMP. Current working seems inaccurate or at least misleading. As stated on page 4-104 “Managed Lake Alternative would not directly support the priorities of the Olympia SMP Restoration Plan for restoration of the Budd Inlet Estuary.”

4-107 Discussion of flooding seems to understate the change in river flood elevations in the estuary alternative compared to numbers presented in Table 4.1.1 on page 4-11. River flood information for both estuary and hybrid alternatives for river flooding is over 2 feet lower than in alternative that maintain the lake based on Table 4.1.1.

4-113 Section 4.9, Cultural Resources: Long Term Impacts and Benefits See comments on Section 3.9 regarding creation of a “Des Chutes Project Historic District.” The approach to the Cultural Resources Discipline within the draft EIS is to separately addresses “cultural resources” i.e., the pre-contact Tribal and archaeological interests, and “historic (built environment) resources” i.e., primarily post-contact history. While practical, this approach significantly reduces the emphasis on cultural resources due to the lack of traditional documentation; especially in this instance, where so much of that pre-contact evidence of human habitation was lost or obscured with the creation of Capitol Lake and its chain of irretrievable alterations to the estuary ecosystem. Segmenting history into pre- and post-contact periods is especially unhelpful however in considering long-term impacts and benefits of the proposed alternatives, since those impacts (good and bad) accrue to the entire community inclusive of the Tribes. Similarly, mitigation measures to be determined within a NEPA process should not be compartmentalized, nor limited to the loss of the Lake and its structural accessories, but considered in terms of the broad impacts of the undertaking and its effect on the entire estuary and its human community - reflective of the impacts of the Lake’s creation. In addition, much more ink should be spent detailing what is known of Tribal activity in the area. The report notes that the area was once “an
important regional hub of indigenous trade and transportation” (p. P 3-99, section 3.9.3.1) but there is no further mention and no citation for this info on Native commerce, social activity, and travel. Deeper research and documentation is merited. Data recovery and interpretation should be included among the list of possible mitigation measures both for construction and for longterm operational impacts, in relevant sections of the report.

4-118 The draft EIS states that the Estuary Alternative would beneficially affect tribal populations through the cultural, heritage, spiritual, and educational value that an estuarine environment provides. Given the identified impacts to the Squaxin Island Tribe, and given the Squaxin Island Tribe's treaty rights under the Medicine Creek Treaty of 1854, and to address equity and social justice impacts, the Squaxin Island Tribe’s input in the Decision Durability selection criterion should be weighted more heavily than other Work Groups and Community Sounding Board.

Section 4.11 Mud Minnow and freshwater mussels are not addressed in the draft EIS Staff reports that Olympia mud minnow and freshwater mussels may occur in the lake

4-166 Dredging and moving of spoils. Importance of rail and barge. There are three stated options for transporting dredging spoils: truck, rail, and barge. Greater emphasis should be placed on rail and barge for transfer of spoils as much as possible to reduce street and traffic impacts. While it is stated that traffic on streets with at grade trail crossing will be impacted with the transport of dredging materials by rail, this impact is likely far less significant than the impacts to traffic from truck transport. There likely to be significantly fewer at-grade rail crossings and they tend to be further from the downtown when compared to the impacts of trucks on intersections. Use of trucks to move spoils will impact traffic congestion, as stated. Use of trucks will also have a significant impact on the condition of the asphalt of these streets and should be stated and evaluated. Pavement restoration is mentioned in Chapter 5 page 78. A similar statement should be made about long term dredging and hauling operations.

4-174 The draft EIS states that “under the No Action and Managed Lake Alternatives, impacts would be significant if Ecology requires LOTT and other dischargers to implement more stringent actions for stormwater and wastewater discharges to improve water quality and meet regulatory standards in the basin.” This may require LOTT to discharge to infiltration basins (currently not permitted in Thurston County) or possibly relocate treatment plants. These costs have the potential to exceed the estimated costs for the CLDE action alternatives. Can the potential utility and ratepayer costs of this impact be quantified? In the final EIS, please acknowledge the potential significant impact to LOTT and other dischargers in Section 4.3 and Table ES.2.

4-181 Key finding box - Ecosystem services language seems to understate value of estuarine alternatives compared to managed lake. The estuary alternative provide a larger suite of ecosystem services that are more fitting in this landscape context. Estuaries are rare on the landscape and can only exist at this type of location. It seems inappropriate to equate the ecosystem services provided by an estuary in this location with an artificial managed lake. A huge lost opportunity if the ecosystem services that could be provided by and estuary are not actualized at a site in this landscape position and ecological context. 5-2 Key Findings Box Punctuation Extra period in the last sentence.
5-7 BMPs Throughout the chapter there are several references to BMPs. It would be helpful to describe/list some or provide a link to a list.

5-9 Typical permit requirements related to concrete and high pH concerns Describe or provide reference to what typical permit requirements might be

Chapter 5 Use of acronyms Define acronyms used.

5-14 Upland disposal sites Further description of potential sites - how close to site. Could affect traffic control plans, etc.

5-16, Section 5.4.6 Mitigation measures implemented Reference is to what DES would do. Wouldn’t this work be done by a Contractor? If so, wouldn’t it be prudent to incorporate permit requirements into Plan/Spec package?

5-16, Section 5.4.6.1 Second paragraph references WDFW approved BMP’s. Only place WDFW approved BMP’s are referenced in the Chapter. Are these particular BMP’s really unique to this body of work? Suggest a link to the WDFW BMPs.

5-18, Sections 5.5.2 and 5.4.2.2 Consistency 5.4.2.2 says animals would avoid construction activity. This is the only place that suggests this. Is this accurate?

5-33 Odor section Odor due to decaying organic matter dredged up is not included. Does it need to be? Whether during construction or after, especially in the Estuary option?

5-43, Section 5.8.2 Walking distance impacts Information does not clearly articulate that pedestrian routes will be extended, and that the route will not be flat, it will be the portion up/down the slope along Deschutes to 5th Ave to 4th Ave

5-43, Section 5.8.3 Temporary trail trestle Provide a description of what this might look like/where installed. Is there a cost difference? - incorporate into cost section as applicable. Provide this option consistently in future sections. It shows up intermittently.

5-44 to 46, Sections 5.8.4 - 5.8.6.1 Recreationalists ability to use other portions of the trail around the lake How realistic is this? With varying construction activities, parking, material deliveries, etc. will pedestrians safely and easily be able to navigate portions of the trail? How will homeless encampments either existing or as may pop up throughout construction be addressed? Including pedestrian/bicycle access/restrictions.

“Most of the recreation resources in the study area would remain open and continue to operate.” Stated in many places in this section Provide alternative access points to recreation sites and trail detours Is this over simplifying? Is there an effective way to show graphically? Will there be signage warning pedestrians if they need to turn around well in advance of actual closure? Will ADA considerations be met during construction? How feasible is this? Given closed streets/construction activity/ only access from street side, not the lake? Better graphic detail of detour routes and phasing of construction activity.
Section 5.9.4 Archeological concerns There is no mention of the reconstruction activity along Deschutes Parkway related to post earthquake conditions.

Section 5.10.2 Viewer impacts/restrictions Are there alternate locations, along 5th Avenue that could be enhanced to improve viewer/recreational activities? 5-61 Marathon Park closure First bullet in 5.10.6.1 suggests access for visual access during periods of no construction, where feasible. What will the elements be that result in allowing access? Duration of opening/closings should be considered.

5-68 Traffic counts/commuter peak hours Acronyms Use of train Post COVID it is likely that employees will be able to continue to telecommute. How does this change affect stated levels of impact? Include definitions of acronyms Some type of vehicle and/or equipment would be needed in order to remove/shuttle goods and materials from the train, if that option used. Not addressed.

5-68 Closure of 5th Ave bridge for 4-5 years Closure of the 5th Avenue bridge is unacceptable. A temporary bridge is needed. With a closure, the only reasonable detour is 4th Avenue. The resulting congestion could result in significant safety, economic and quality of life impacts. Relying on just one bridge (4th Avenue) for east/west access could inhibit emergency vehicle access. Temporary bridge proposal and bike and pedestrian access. A temporary 5th Avenue bridge should not be in lieu of a pedestrian/bicycle structure; it should be in addition to or integrated with that structure. I-5 and SR 101 impacts Without the 5th Avenue bridge, and increased congestion on 4th Avenue, there will be impacts to I-5 and SR 101 which should be described and evaluated.

5-71 Truck haul routes Truck haul routes should use Deschutes Parkway and not 4th and State, to avoid the impacts of trucks on the downtown businesses and residents. Significantly fewer people would be impacted by exclusively using, or prioritizing the use of, Deschutes Parkway.

Table 5.12.1 Applying time of day restrictions Impact missing - Single east-west route via 4th Avenue Bridge Construction Worker Parking Street Capacity, Sidewalk, or Bike Lane Restrictions Railroad usage Impacts to Bus routes and emergency vehicle response To what extent would this affect project cost. The table does not reflect the significant impact of only having the 4th Avenue bridge available for traffic for a very long time. Accidents/weather events/earthquake could severely impact capacity on 4th Avenue bridge. A temporary bridge should be incorporated into the mitigation options. Will this be restricted to specific locations with specific access to/from to minimize impacts to remaining street network? A more robust evaluation of all routes and impacts, given COVID related changes to traffic patterns should be completed Would rail cars also be used for material storage? Address the impact of splitting routes/extending response times for buses and emergency response vehicles. Given the vulnerability of the 4th Avenue bridge in the event the 5th Avenue bridge is removed, will additional apparatus be needed on the West side? Pavement Degradation Due to Construction Traffic Pavement condition must be managed during construction with FINAL restoration being done once work is complete. This applies to entire detour routes, not only in proximity of the Lake.

5-77, Section 5.12.4 Significance of impacts Current report suggests that “The remaining impacts on surface transportation from construction of the Estuary Alternative would be less than significant. This does not adequately consider the vulnerability of only on east-west route via the 4th Avenue Bridge.
5-78, Section 5.12.6.1 Measures Common to All Alternatives Construction Traffic Management Plan (CTMP) Measures identified to address the transportation impact of closure of the 5th Avenue Bridge during construction. Have all impacted parties been adequately considered; City (Public Works, Police, Fire, School District, Intercity Transit, State, Federal (USPS), commercial parties? Routes and conditions should be resolved early in the process with City of Olympia, as the impacts have potential for being significant. COVID impacts on traffic pattern changes should be evaluated in order to better reflect conditions during the proposed construction window(s). The Thurston Regional Planning Council (TRPC) has adjusted the county-wide transportation model to account for COVID impacts moving forward. Consider ride share incentives/opportunities for construction employees. Construct a 2-lane temporary bridge with consideration for bike and ped traffic. Vulnerability of the City without a redundant E-W route must be further evaluated. The duration of proposed construction is simply too long to go without a temporary bridge.

5-79 Closure of 5th Avenue bridge. Transit impacts. There is minimal discussion of the impact to transit service with the closure of the 5th Avenue bridge for 4-5 years. Not only will the routes on 5th be impacted, but the congestion on 4th will impact all buses that use 4th and 5th Avenues. This should be highlighted as an impact that is in addition to the congestion for passenger vehicles.

5-79 Reference to trail trestle Reference to a temporary trail trestle is made as an alternative to the 5th Avenue Pedestrian bridge. This needs further explanation. The construction of the 5th Avenue Pedestrian bridge should be a priority and constructed at the beginning as stated elsewhere in the draft EIS.

5-81 to 85 Key Findings and subsequent paragraphs. Can you really ensure that emergency services will not be compromised? Seems like a bold statement. Have Olympia and private response companies been approached to truth these statements? In subsequent pages this message of minimal impact to emergency service providers is repeated. Have discussions occurred with Puget Sound Energy (PSE)? Again, are the statements supportable? Will PSE and other private utility providers being giving this are first priority? The City requests to be involved in the determination of methods related to relocation of utilities during the design phase. Disagree that impacts on public services and utilities from the hybrid Alternative would be less than significant. Please reevaluate including consideration of the vulnerability of a single east-west route connecting Olympia.

5-86 to 92 Economic info/projections Was the Thurston Regional Planning Council (TRPC) consulted for baseline data? The downtown area is changing as a result of new residential units. New businesses are starting up and could be vulnerable to proposed closures. Minor adverse impact??

7-11 The draft EIS states that “The Managed Lake Alternative would perpetuate historic inequities, particularly for tribal populations that have experienced ongoing adverse effects from changes to the ecosystem since non-Indigenous settlement of the region and continued loss of connection to the natural environment.” Again, to promote fairness and equity across the many aspects of the community, please include social justice and equity as a selection criterion.
Economics Discipline Report (pages 5-22) The draft EIS Economics Discipline Report Section 5.5.1 discusses the cost for construction of the Estuary Alternative. In the final EIS, please acknowledge that State and federal funding for habitat restoration may be available to offset the cost for construction of the Estuary Alternative.

Attachment 5 Hydrodynamics and Sediment Transport Discipline Report 4-17 Figure 4-16 indicates a typical spring tide was used for the extreme river flood event. Extreme river flood events typically occur in the winter (November through January). Would it not be more accurate to use a typical winter tide when modeling the extreme river flood event? Winter tides are generally greater than spring tides.

Attachment 5 Hydrodynamics and Sediment Transport Discipline Report 4-17 The 5th Avenue dam operation representation section discusses the East and West gates of the dam, but does not discuss the fish ladder. Was the fish ladder modeled with the 5th Avenue dam operation representation? The top of the fish gate is substantially lower than the radial gates.

Attachment 7 Water Quality Discipline Report Prior Ecology TMDL studies indicate that the Capitol Lake Dam has the largest impact on dissolved oxygen levels in Budd Inlet overall, while the Draft EIS appears to reach some differing conclusions regarding water quality. The draft EIS does not indicate whether the Department of Ecology reviewed the water quality analysis or whether Ecology concurs with the analysis. Please address this in the final EIS. If possible, please integrate the findings of the final TMDL for Budd Inlet in the final EIS.

Attachment 7 Water Quality Discipline Report Appendix A The draft EIS indicates the Water Resources Methodology for Capitol Lake - Deschutes Estuary was reviewed by an independent third-party expert or experts. In the final EIS, please identify the independent third-party expert or experts.

Attachment 9 Fish and Wildlife No mention of freshwater mussels in lake. Staff reports that freshwater mussels are present on areas of Capitol Lake. Please investigate if present in the lake and include in mitigation discussion as a species to address and relocate if possible. Likely persist or recolonize in lower section of river/south basin.

Attachment 9 Fish and Wildlife (pages 4-27) Waterfowl like American wigeon, green-winged teal, and pintail use estuarine tidal mudflats extensively at Nisqually National Wildlife Refuge this is not listed in Table 4.8 This is not listed in Table 4.8

Attachment 10 Wetlands (page ES-4) Table ES2 does not list beneficial effect of 3 ac of fill removal in estuary and hybrid alternatives (per page ES-2) Please make note of beneficial effect of fill removal from 3 acres of deep water and tidal mudflats in Table ES2. Per section 5.5.2.4 page 5-20 this is a beneficial effect that is not listed in this table

Attachment 10 Wetlands - page 3-6 First bullet in section 3.4.2 lists loss of wetlands from placement of fill lists as an e.g. “removal of 5th Avenue Dam” This is a benefit and expansion of waters of the US not a loss. Remove dam removal from this list and state the beneficial increase of waters of the US of 3 acres from fill removed. Listed in section 5.5.2.4 page 5-20 as a substantial beneficial effect
Attachment 18 Economics Discipline Report, page 3-12 The Economics Discipline report states “Managing sediment is a common cost of doing business for water dependent businesses (e.g., ports and marinas). Changes in physical and natural infrastructure that change sedimentation patterns may increase or decrease the cost of management, resulting in benefits or costs to affected entities. Costs materialize as businesses direct spending to sediment management and away from other opportunities. These costs could materialize through direct payments for private dredging activities, or increased taxes or fees paid as part of a cost-sharing agreement to address dredging on a public or community basis. Although the draft EIS indicates there will be “no effect” on downstream economic activity, maintenance dredging will potentially have impacts on private marinas and the Port of Olympia. The cost of these impacts may even eventually lead to the need to relocate private marinas. Please consider mitigation of the costs of these impacts through grants or low-interest loan funding.

Attachment 18 Economics The Economics Discipline report indicates that regional work to develop a climate mitigation plan is currently in progress. However, the plan was completed in January 2021. Please update this description to reference the completed plan. https://www.trpc.org/909/Thurston-Climate-Mitigation-Plan

Attachment 18 Economics Discipline Report The Economics Discipline report describes the Estuary and Hybrid Alternatives as more consistent with local climate change adaptation policies than the Managed Lake Alternative, but does not acknowledge consistency with local climate change mitigation policies. Please revise these descriptions throughout this report to acknowledge that the Estuary and Hybrid alternatives are also consistent with local climate mitigation plans.

Throughout Draft EIS notes that interested Tribes include the Squaxin, Nisqually, and United Chehalis, but there is no indication of representation or consultation beyond the Squaxin Island Tribe. City of Olympia’s cultural resources code (Olympia Municipal Code 18.12.120, .130, .140) requires consultation with interested Tribes.

Supporting Materials (if any): L2_Christensen

Name (ID): Marc Daily (L-3)

Organization (if applicable): Thurston County Regional Planning Council

Submission Text: The Transportation Discipline Report and the EIS omitted key information sources that would have greatly enhanced the analysis of short and long-term impacts, indirect and cumulative effects, and potential mitigation measures of the alternatives analyzed in the Draft EIS. As cited in the Transportation Discipline Report, the only element of TRPC work that was consulted in the analysis was the 2018 version of the Thurston County Bicycle Map. Foundational planning elements like the regional transportation plan, What Moves You Regional Transportation Plan 2045 for the Thurston Region (2020 or previous 2016 version), and the Thurston Regional Trails Plan (2007 and currently being updated) were not evaluated. Both of these documents provide critical context, insight on potential impacts, and potential mitigation opportunities that were not examined in the EIS. For example, aside from mentioning that a broader trail system exists and providing a map of existing facilities, the EIS does not
consider how the Capitol Lake Loop trail and bike lanes along Deschutes Parkway are vital to the regional trail system. It does not assess impacts and opportunities of the project associated with the planned West Bay, Percival Canyon Trail, Phase 4 extension of the Karen Fraser Woodland Trail (see EIS Figure 4.6). It also does not acknowledge the recently completed extension of the Deschutes Valley trail that connected Tumwater to the Capitol Lake Loop trail at Tumwater Historical Park (Figure 1). These trail connections are an essential piece of the Thurston region’s overall transportation strategy and should be recognized in the analysis of project-specific impacts.

All three alternatives include a pedestrian/bicycle bridge connecting 5th Avenue and Deschutes Parkway. TRPC supports this proposal, as it addresses an important recommendation in the Thurston Regional Trail Plan (2007, p. 3-49). The EIS discusses potentially creating a temporary trail or completing the 5th avenue multi-use bridge prior to construction of the new 5th avenue bridge to mitigate for the roughly 4.5 years that 5th avenue will be closed to traffic. That would be helpful mitigation and yet evaluation of the project alternatives in relation to the Regional Transportation Plan and the Regional Trails Plan would have suggested additional mitigation options such as completing Phase 4 of the Karen Fraser Woodland Trail and/or the Percival Canyon Trail prior to closure of the 5th Avenue Bridge. Including these trail investments as mitigation would not only help address the construction-related impacts of 5th Avenue bridge reconstruction but would also provide long-term transportation benefit to the region and greatly enhance public access to the improvements made within the project area under any of the three action alternatives. In particular, completion of Phase 4 of the Karen Fraser Woodland Trail would eliminate the current gap between the Woodland Trail, Deschutes Valley Trail, and the Capitol Lake Loop Trail, greatly enhancing the regional trail systems function as a viable alternative to vehicular travel. More information on the remaining section of the Karen Fraser Woodland Trail can be found at https://olympiawa.gov/city-services/parks/parks-and-trails/karen-fraser-woodland-trail.aspx. TRPC urges that all of these planning documents be considered in the final EIS transportation analysis.

The Transportation Discipline Report and EIS also did not utilize readily available transportation modeling tools that would have improved analysis of impacts and mitigation measures. As the MPO and RTPO for the Thurston Region, TRPC develops and maintains the Regional Travel Demand Model. In addition, the region has invested in a dynamic traffic assignment model that is particularly well suited for analyzing different alternatives and construction-related transportation impacts and mitigation measures. The preparers of the EIS contacted TRPC about potentially performing transportation modeling for the evaluation, but did not ultimately choose to conduct modeling. The analysis of the short, long, indirect, and cumulative impacts would have been improved by alternative-specific transportation modeling of closures, detour routes, and transportation function of the completed project. This would foster more robust analysis of the impacts on transit, vehicles, freight movement, pedestrians and cyclists. Such modeling should be considered for the final EIS or at least as the preferred alternative moves further into project development.

One comment specific to the alternatives presented is in relation to the Deschutes Parkway bike lane along the north basin where Deschutes Parkway and 5th Avenue converge. Currently in both the northbound and southbound directions, the bike lane ends as it approaches the 5th avenue bridge due to
width constraints. Under any of the alternatives, full connectivity of the bike lanes along both Deschutes Parkway and 5th Avenue should be provided for.

Lastly, it is unclear how the transportation analysis or the rest of the EIS dealt with the impacts on users with disabilities. Ensuring that our transportation system works for all users regardless of age, income, or ability is foundational to our regional transportation system. The Final EIS should more explicitly address potential impacts of the alternatives on differently abled users of the project area.

Supporting Materials (if any): L-3 Daily.pdf

Name (ID): Pete Kmet (L-4)

Organization (if applicable): City of Tumwater

Submission Text: Preferred Alternative At our August 10, 2021 Worksession, the Tumwater City Council discussed which alternative would be most beneficial to Tumwater and the region, given the current information in the Draft EIS. The Council was unanimous in support of one or both of the estuary alternatives (either a full estuary or hybrid alternative) for the following reasons: Lower Budd Inlet would be returned most closely to its natural state. This is the best opportunity to restore water quality and the natural ecosystem in Budd Inlet. It would also give salmon raised in the Deschutes watershed the best chance for survival by providing an opportunity to acclimate to salt water on release and fresh water when returning. Removing the dam would return the falls to a direct plunge into Puget Sound, restoring a unique geologic and cultural feature, supporting public recreation and tourism. This direct plunge would also inject much needed oxygen directly into lower Budd Inlet. The base of Tumwater Falls was an important cultural site for local tribes as illustrated by shell middens found in the vicinity of the falls during the expansion of I-5. Removing the dam would show respect for this cultural heritage. Based on historic photos (an example is attached), when the dam is removed, the south basin would eventually return to an open water/mud flat, restoring the historic waterfront in Tumwater's National Historic District. This would also open up views of the water from the www.ci.tumwater.wa.us historic brewery area, as well as views of this area from across the river in Historical Park, complementing restoration of the historic Olympia Brewhouse and other historic buildings. Removing the dam would restore navigable access to Puget Sound from Tumwater, an important cultural feature that drew the Bush-Simmons party to this location to establish the first American settlement in Washington State. During the discussion, several Councilmembers emphasized that, while either estuary alternative would achieve these objectives, their preference is for a full estuary. Other Councilmembers noted that while they supported the full estuary alternative, they did not want to preclude the hybrid alternative, should the community and/or other governmental bodies strongly support that alternative.

Impacts on Water Quality We are also concerned that the EIS minimizes the impacts of the current Capitol Lake Dam and the benefits of removing that dam. Prior analysis by the Department of Ecology indicates the algae and plant growth in Capitol Lake, and its subsequent discharge and decomposition to Budd Inlet, is a major contributor to poor water quality in lower Budd Inlet. The LOTT treatment plant, which service area includes Tumwater, already has some of the most stringent discharge requirements for treatment plants that discharge to Puget Sound. If the dam is not removed, this could result in a
reduction in the permitted discharge limits or require LOTT to install even more expensive treatment technology, significantly increase costs to residents and businesses served by that plant.

Flooding/Sea Level Rise Please extend the flood analysis to the south basin. This should include an evaluation of whether levies or some other structure will be necessary to protect the historic structures in the National Historic District, the lift station on the south side of the south basin, and facilities in historical park on the west side of the basin. This should be done regardless of the alternative selected. During flooding conditions the Deschutes River flows northeast directly into the bluff buttressing 1-5, Capitol Boulevard, the railroad that serves downtown Olympia, a significant power line, and a major sewer line serving much of Tumwater before it makes its turn to the north under the I-5 Bridge. This area has experienced slope failures in the past and this will likely continue in the future. Regardless of which alternative is selected, the final EIS should include a requirement that options be evaluated for stabilizing the east shoreline of the south basin.

Conceptual Design of the North Basin Our understanding is that the intent of both the Hybrid and Estuary Alternatives is to retain the north basin as a reflecting pool. However, the location of the island is right in the spot where that reflection occurs. If either of these alternatives is selected, the final EIS should include a requirement that reflection viewpoints be carefully considered when determining the location and geometry of these islands during the design process. The visual representation shows trees growing on the islands in both the estuary and hybrid alternatives. Based on historical photos before the dam was built, if indeed the water is salt water, it is unlikely trees would survive. These illustrations should be revised to reflect salt water tolerant vegetation.

Trails The regional trails plan provides for a trail across the South Basin, connecting the Olympia Woodland Trail with the Tumwater-Deschutes Valley Trail (see attached diagram). This is an important future trail connection that should be incorporated into whatever alternative is ultimately selected. It would also provide better access to the south and east side of the South Basin, providing for improved recreational opportunities as well as the ability to better patrol those areas than currently exist. There are similar trails planned for the Percival Creek Corridor, as well as along the west shore of West Bay that should be incorporated into the final EIS. The final EIS should also show the existing trails around Capitol Lake, in addition to the new boardwalks, so that an integrated plan of shoreline access is presented in the final EIS. We strongly support the proposed improvement to the pedestrian/bicycle trail on 5th Avenue, which is part of the estuary and hybrid options. This would provide a significant improvement to access and trail connectivity in this area.

Utility Impacts There is a Tumwater sewerage lift station on the southeast side of the South Basin as well as a major sewer interceptor that parallels the railroad tracks in the South Basin. Those are two utilities that were not described in the report and should be included in the final EIS. A map is attached showing these and other Tumwater utilities. It would be helpful to have a similar map included in the final EIS for Olympia and LOTT utilities.

Invasive Species Should the dam be removed, the most likely location for small watercraft to launch from is the Port's Swantown Marina in East Bay. There are also small boat rentals at West Bay Marina and a boat launch at Boston Harbor. All of these facilities should have boat cleaning equipment installed,
not just the boat launches in Capitol Lake. will likely be borne largely by local residents and businesses. The final EIS should take a closer look at this issue, including extending modeling over a longer timeframe and methods to stabilize this fill to minimize migration into the Bay. There is currently a largely abandoned gravel mine off Rixie Road in East Olympia, adjacent to the railroad spur that services downtown Olympia and crosses the lake. Because dredging is a component of all active alternatives, an early action the State should consider is acquisition of this gravel pit for potential future disposal of dredged sediments. This will provide an upland alternative sediment disposal location, and minimize truck impacts, should open water disposal be impractical under any of the active alternatives. If not used initially, it can serve as reserve capacity for future dredging, should an upland disposal location be needed in the future.

Sediment Removal and Disposal Maintaining navigability for the Port of Olympia and other marine businesses in lower Budd Inlet is very important to our local economy and many users. We are pleased to see that recognized in the Draft EIS. Several of the alternatives call for dredging the lake and repositioning the sediments within the lake basin to reduce costs. While this approach to sediment management makes sense from an engineering perspective, much of that sediment will likely eventually be washed into the Bay. In essence this could transfer the cost of removing that sediment from a capital cost, which likely will be largely borne by the state and federal government, to a long-term management cost, which

STUDY AREA/SCOPE . The DEIS defines the Project Area as the 260-acre Capitol Lake that 'extends to the northern point of West Bay of Budd Inlet." The project area does not include East Bay where substantive water quality benefits are predicted to occur if the dam is removed. East Bay should be included in the project area. The DEIS defines the Water Quality Study Area as, "... Capitol Lake and its major inflow sources of the Deschutes River and Percival Creek, as well as West Bay and East Bay of Budd Inlet.' It is not clear why there is a difference in study areas, as projects completed within the project area will have an impact on water quality throughout. The project area and water quality area should match. The Water Quality analysis should be based on a study area consistent with that considered in the Budd Inlet - Capitol Lake TMDL to fully and accurately consider the impacts of the alternatives on Budd Inlet. Capitol Lake's impact on water quality does not appear to be addressed in the Water Quality Analysis. Given the connection made through the substantive TMDL work of water quality in Budd Inlet and Capitol Lake, AND the reality that water quality improvements are a key project goal, this should be considered in the water quality analysis and not just a regulatory outcome in Public Service and Utility impacts. It does not appear that the DEIS applies the same standard to the Water Quality analysis that regulation requires for impaired waters and that others will be held accountable to - the combined anthropogenic contribution cannot increase DO impairment more than 0.2 mg/L. Capitol Lake should be held to the same standard. .

WATER QUALITY ASSUMPTIONS . Water Quality Model - In Section 4.3.5.2, the DEIS notes that due to uncertainties and concerns of an overoptimistic analysis, improvements in dissolved oxygen predicted by the model would be assessed by half to reflect a 'worst-case outcome," consistent with SEPA requirements when there are data gaps or uncertainties. The model referred to here is a fully calibrated, peer-reviewed (multiple times), quantitative product, while the uncertainties raised come from a limited
data set acquired in 2019 that may have its own challenges, most notably from spills that occurred in the Deschutes River and Capitol Lake that year.

TOTAL MAXIMUM DAILY LOAD STUDY CONNECTION. The DEIS applies inadequate rationale for calling into question key findings of the Department of Ecology's Budd Inlet - Capitol Lake Total Maximum Daily Load (TMDL) regarding the impact of the lake on oxygen depletion in Budd Inlet. As noted above, one year of new data gathered in 2019 as part of a qualitative assessment is insufficient rationale to dismiss the peer-reviewed TMDL findings. The more fully vetted, peer reviewed quantitative TMDL assessment should set the standard.

The Water Quality analysis should incorporate the findings of Ecology's Budd Inlet - Capitol Lake TMDL, specifically the significant impact of Capitol Lake on oxygen depletion in Budd Inlet. As the TMDL sets the regulatory backdrop for addressing impacts to water quality in Budd Inlet, incorporating the TMDL findings provides a consistent basis for evaluating impacts from other dischargers, permit holders and project actions.

In Section 4.13.2.2, Utilities, the DEIS notes that there could be a significant regulatory response to require wastewater treatment providers to increase treatment effectiveness, which would then be passed on to rate payers - and be a significant impact under the No Action Alternative. In addition to rates, the regulatory response may also include further discharge restrictions for other permit holders, like the City of Tumwater. These impacts would also be realized under the Managed Lake scenario. Please incorporate the TMDL allocation information into the analysis on water quality. Lake alternatives. In addition to LOTT, as an organization, those “potentially significant” costs will also impact residents and businesses of Tumwater, Olympia and Lacey as LOTT rate payers. Table 7.1.1 identifies planning level costs for construction and maintenance of the project alternatives, but does not identify any escalations for future years. Please clarify the basis for these costs, e.g., 2021 dollars, and if any escalators for future costs were included in the calculations.

Table 4.3.1, Summary of Long-Term Water Quality Impacts: Managed Lake Alternative, suggests that low dissolved oxygen levels will experience “no change in impact as loading will be similar to current conditions.” This is misleading, as the TMDL study referenced by this DEIS finds the impact to be Significant. As both the No Action and Managed Lake alternatives result in similar loadings, the long term effect remains Significant and Unavoidable to Budd Inlet. In addition, there are multiple instances the DEIS states these alternatives would result in 'no changes to water quality in Budd Inlet” or impacts are 'not applicable”. These too are misleading based on the fact the impacts are part of existing conditions. While the Managed Lake Alternative would not substantively change the impact to oxygen depletion in Budd Inlet from existing conditions, compared to the Estuary or Hybrid Alternatives, its impact is significant and applicable.

COSTS / FINANCE. Table 7.1.1 notes that 'Potentially significant costs to LOTT Clean Water Alliance (LOTT) because more extensive water quality treatment is likely to be required by the Washington State Department of Ecology,' as they relate to the No Action and Managed
TRANSPORTATION The Deschutes Parkway borders the entire western shoreline and appears to only get a brief mention in the DEIS. In 2001, during the Nisqually earthquake, the roadbed liquefied in places and is known to be unstable. Some consideration of impacts of tidal action and project alternatives should be made, as this is a major route of travel from Tumwater to Olympia.

Supporting Materials (if any): [L-4_Kmet.pdf](#)

**Name (ID):** Lisa Dennis-Perez (O-12)

**Organization (if applicable):** LOTT Clean Water Alliance

**Submission Text:** Thank you for the opportunity to review the Capitol Lake - Deschutes Estuary Long-Term Management Project Draft Environmental Impact Statement. The LOTT Clean Water Alliance recognizes this is a major undertaking and reaching this milestone in the EIS process is a significant accomplishment. We commend the Department of Enterprise Services and the project team for all the work that has gone into the process thus far.

In general, LOTT finds that the Estuary Alternative would provide the greatest benefit to water quality in Budd Inlet, and this is of greatest importance to LOTT and LOTT rate payers. As the draft Environmental Impact Statement (EIS) notes, the Washington State Department of Ecology has determined Capitol Lake and the 5th Avenue dam contribute more than any other source to human-caused water quality impairment in Budd Inlet. Ecology has a legal mandate to ensure water quality standards are met, and that sources of impairment reduce their respective nutrient loading to the inlet. If the lake remains in place, its contribution would not be adequately addressed, and Ecology would have no choice but to place added requirements on LOTT's discharge.

The cost of these additional requirements is estimated to be as high as $208 million. That would result in significant impact to LOTT rate payers, who have already invested approximately $60 million over the last three decades on the construction of nutrient removal treatment system upgrades. For these reasons, LOTT finds that the No Action or Managed Lake Alternatives would have significant detrimental impact on water quality in Budd Inlet and on LOTT ratepayers.

The additional comments that follow center on the EIS Water Quality analysis, which does not appear to be an objective comparison of impacts and benefits of the various management alternatives. The analysis and narrative throughout the EIS documents appear to downplay water quality impacts to Budd Inlet from the lake and minimize the potential benefits to Budd Inlet from the other alternatives. Comments below expand on these concerns. The EIS applies inadequate rationale for calling into question key findings of the Department of Ecology's Budd Inlet - Capitol Lake TMDL regarding the impact of the lake on oxygen depletion in Budd Inlet. One year of new data (2019) gathered as part of a qualitative EIS assessment is insufficient rationale to dismiss the peer-reviewed TMDL findings - the default should be to the more fully vetted quantitative TMDL assessment. The analysis states that per SEPA, the worst-case scenario should be applied in cases involving uncertainty, but this concept seems to be selectively applied. Surely Capitol Lake indeed contributing over 60% of the human-caused oxygen depletion to Budd Inlet is the worst-case scenario, but that is not the condition that is assumed in the
analysis. Based on that scenario, it is clear that the Estuary Alternative would provide the greatest benefit to water quality in Budd Inlet. The No Action or Lake Alternative would have the greatest detrimental impact on water quality.

The EIS does not apply the same standard to the Water Quality analysis that Ecology is required to consider for impaired waters and that LOTT and others will be held accountable to the combined anthropogenic contribution cannot increase DO impairment more than 0.2 mg/L. Capitol Lake should be held to the same standard and the Water Quality analysis should reflect this. Rationale used to dismiss this standard - that water quality will still be a problem in Budd Inlet regardless of actions related to the lake - is an erroneous and inappropriate conclusion that is again inconsistent with the way other dischargers will be managed. Based on the 0.2 mg/L threshold for human-caused impairment, it is clear that the No Action or Lake Alternative have the greatest detrimental impact.

The impact of not addressing Capitol Lake's contribution to Budd Inlet water quality impairment is discussed in the Public Services and Utilities Discipline Report, including the significant impact this could have on LOTT and LOTT rate payers. It is not accounted for in the Water Quality analysis, which is one of the key project goals and is weighted more heavily than Public Service and Utility impacts. The fact that this impact is treated as a regulatory outcome rather than a key water quality impact is a major shortcoming of the analysis. The No Action or Lake Alternative have significant negative impact on water quality in Budd Inlet.

The Water Quality analysis is misleading regarding impacts to Budd Inlet from No Action and Managed Lake Alternatives. In multiple instances, the EIS states these alternatives would result in 'no changes to water quality in Budd Inlet’ or impacts are 'not applicable'. It is misleading to make these statements based on the fact the impacts are part of existing conditions (the lake is already a lake). While the Managed Lake Alternative would not substantively change the impact to oxygen depletion in Budd Inlet from existing conditions, compared to the Estuary or Hybrid Alternatives, its impact is significant and applicable.

The Water Quality analysis should be based on a study area consistent with that considered in the Budd Inlet - Capitol Lake TMDL to fully and accurately consider the impacts of the alternatives on Budd Inlet. The extent of the study area utilized is unclear - the text refers to West and East Bay, but the Exhibits show only West Bay was considered and this was also stated by the project team at the July Technical Committee meeting. Also, it is misleading to refer to “Budd Inlet' when drawing conclusions as this implies the whole of Budd Inlet was considered in the analysis. The LOTT Board of Directors feels strongly that the Water Quality analysis must be revised to fully incorporate the findings of Ecology's Budd Inlet - Capitol Lake TMDL regarding the significant impact of the lake on oxygen depletion in Budd Inlet. Impacts to water quality in Budd Inlet must be assessed on a basis consistent with that which will be applied to other dischargers, including LOTT, and that basis is the TMDL. There is no relevant basis for weighing water quality impacts of the lake against some lesser standard. LOTT staff have reviewed in full the draft EIS document and will submit detailed comments in addition to this letter. Again, thank you for the opportunity to comment.
Comment 1 The DEIS defines the Project Area as follows, "... includes the 260-acre Capitol Lake that is managed by the Department of Enterprise Services (Enterprise Services), and it extends to the northern point of West Bay of Budd Inlet. West Bay is not managed by Enterprise Services. However, project actions may occur in West Bay, so it is included in the Project Area. The parks and public space adjoining Capitol Lake and within the jurisdiction of Enterprise Services are also included in the Project Area.' (DEIS, Section 1.4, page 1-3) As stated, the project area does not include East Bay. Important water quality benefits are predicted to occur in East Bay if the dam is removed, thus East Bay should be included in the project area.

Comment 2 The DEIS defines the Water Quality Study Area as follows, "... includes Capitol Lake and its major inflow sources of the Deschutes River and Percival Creek, as well as West Bay and East Bay of Budd Inlet.' (DEIS, Section 3.3 and Exhibit 3-27, page 3-15) It is unclear why there is a difference in the Project Area and the Water Quality Study Area. LOTT contends that the Water Quality Study Area as defined above should be the Project Area. To not include it in the Project Area diminishes the importance of actions in Capitol Lake on East Bay. Exhibit 3-27 that accompanies the definition of the Water Quality Study Area does not include East Bay, which is contrary to its definition.

Comment 3 The DEIS stated that there are positive trends for water quality. "The trend analysis results indicate that Capitol Lake exhibited improving water quality from 2004 to 2014 based on significant improvement in temperature, total phosphorous, chlorophyll-a, Secchi depth, and fecal coliform bacteria.' (DEIS, Section 3.3.3.1, page 3-22) The most important water quality parameters for assessing the health of the lake and marine water quality is DO. DO shows a negative (worsening trend) in the surface water in the fall, and no other apparent trend. (Attachment 7, Table 4.1). In Capitol Lake, the trend for TP, chlorophyll and pheophytin is decreasing (improving) which may indicate an improving trend for lake water quality. There is, however, no trend for TN, which is the limiting nutrient in most marine systems and therefore a concern to Budd Inlet. (Attachment 7, Table 4.1). Taken together, the decreasing DO and the lack of a trend for TN, indicate a possible worsening of water quality in Budd Inlet. The above excerpt, also demonstrates an often used reference to improving fecal coliform and temperature measurements, even though those two parameters are expressly called out as being irrelevant to the question of differentiating between the long-term water quality effects of the project alternatives (4.3.1). The repeated use of this data bolsters a picture of improved water quality and diminishes attention on the problem of dissolved oxygen.

Comment 4 The DEIS states that, 'Comparing water quality data from 2010 through 2014 with state surface water quality standards (WAC 173-201A-602) indicates that the lake occasionally does not meet standards for temperature, dissolved oxygen, total dissolved gas, pH (Table 3.3.1).' (DEIS, Section 3.3.3.1, page 3-23) The conclusion drawn that water quality in the lake is 'generally good' is unsupported given the above statement. Also, high total dissolved gas (TDG) is a problem for fish survival. Since it does not meet standards under the current system, some mention of predicted TDG should be made for the estuary and hybrid alternatives.

Comment 5 The DEIS also states, 'Overall, the monitoring data (2010 to 2014, and 2019) indicate that Capitol Lake currently has relatively good water quality in terms of physical and chemical characteristics important to aquatic life.' (DEIS, Section 3.3.3.1, page 3-26) Table 3.3.5 shows that over half of the
parameters from the 2019 sampling, including TP, SRP, TN, NH3, NO3 +NO2, and BOD, are qualified because of the transformer and sewage spills. The parameters that are not qualified are chlorophyll, pheophytin, TSS, TOC, and DOC. The latter parameters are influenced by the former, and thus, offer little information. While the 2019 data was not used in the trend analysis, it is being used to bolster the argument that water quality is improving. Its use is questionable.

Comment 6 The DEIS states, “As described in Section 4.1.1.4 of the Water Quality Discipline Report (Attachment 7), BOD concentrations measured in 2019 were quite low in comparison to TOC concentrations in both the lake and the river; therefore, the TOC is largely made up of organic matter that is resistant to rapid decomposition. This observation implies that the decomposition of organic matter likely occurs very slowly in Budd Inlet, and it may not be contributing much to summer oxygen depletion. In summary, while Capitol Lake results in a modest increase in TOC to Budd Inlet, this TOC may not be exerting an immediate or substantial oxygen demand in the inlet during the critical summer months.” (DEIS, section 3.3.3.1, page 3-32, 33) There are many qualifiers in this statement...quite low, largely made up of, implies that, likely occurs, may not be, modest increase, may not be. This raises concern about the objectivity and scientific basis for this statement. It is questionable that the 2019 data set is adequate to discount the results of the 2012 & 2015 Budd Inlet TMDL study regarding the relative contribution of Capitol Lake to oxygen depletion in Budd Inlet. Additionally, the BOD data in 2019 were qualified, and the use of the TOC data is questionable due to the 2019 spills. The conclusion that the TOC from the lake is not contributing much to the low oxygen demand is an assumption that is not backed by solid evidence.

Comment 7 The DEIS provides a summary statement, “Budd Inlet would experience minor to moderate benefits associated with improved dissolved oxygen, and algal blooms are expected to be largely the same as current conditions.' The DEIS goes on to define substantial beneficial effects on water quality, “Substantial beneficial effects on water quality would occur if there was expected to be a substantive improvement in dissolved oxygen.” (DEIS page 4-34 inset summary on Key Findings, Table 4.3.2, page 4-35 side bar) According to Ecology's modeling efforts, approximately 2/3 of the excess DIN loading is attributable to the existence of the Capitol Lake dam. (Roberts 2015, Figure 31) The upcoming TMDL will apportion waste load allocations to each of the various sources. As the greatest anthropogenic source to low dissolved oxygen in Budd Inlet, the estuary solution is predicted to significantly increase the level of dissolved oxygen in Budd Inlet. In the absence of the estuary solution, a greater portion of the TMDL burden will fall on LOTT and this will lead to the need for additional costly infrastructure. LOTT contends that the benefit of improved dissolved oxygen from the estuary solution would be substantial from a water quality perspective, as well as from a utility ratepayer perspective.

Comment 8 The sidebar on page 4-36 defines a TMDL as follows, “A TMDL is a formal plan that outlines discharge limits of problematic pollutants to improve water quality in an impaired waterbody.” (DEIS, Section 4.3.2 Sidebar, page 4-36) This sidebar and the discussion on this page of the lake's impact on water quality in Budd Inlet is entirely lacking in context for the reader of the existing influence of the lake on Budd Inlet. While it is explained in section 3, it should be included in this discussion as vital context. The statement from page 3-25 could be added to the sidebar to address this, 'An Ecology modeling
study of Budd Inlet indicated that the largest human-caused contributor to low dissolved oxygen problems in Budd Inlet was loading of nutrients and TOC from Capitol Lake.'

Comment 9 In Table 4.3.1, Summary of Long-Term Water Quality Impacts: Managed Lake Alternative, the impact on 'Low dissolved oxygen in Budd Inlet-Effects from possible decreased TOC loading from Capitol Lake" is given as "No change in impact as loading will be similar to current conditions' (DEIS, Section 4.3.4, page 4-39) The TMDL work that is cited by the EIS project team as a reference finds the impact of Capitol Lake to be Significant, so this conclusion is misleading and inaccurate. Capitol Lake in the No Action Alternative and in the Managed Lake Alternative will result in similar TOC loadings and they both perpetuate a significant, unavoidable impact to water quality in Budd Inlet per the TMDL.

Comment 10 The DEIS states the following in the text, “While there could be measurable decreases in the algae community and fewer occurrences of algal blooms due to decreased nutrients, the changes may not be noticeable to the public. This finding is supported by scenarios modeled by Ecology. Ecology evaluated potential impacts on lake quality from watershed improvements, dredging to 13 feet, and alum treatments; the modeling indicated that these measures would not have a meaningful effect on lake water quality.” In the side-bar summary, however, the benefits to algal bloom are considered, “minor to moderate’. (DEIS, Section 4.3.4.1, Page 4-40, 41) It appears that water quality improvement for the managed lake is over-predicted in the messaging about the lake. According to the text, the potential benefits are only minor. Please also see the discussion about the definition of benefits, comment 21, in this context.

Comment 11 The DEIS states, "Although low dissolved oxygen concentrations are typical of inlets in South Puget Sound, a portion of the dissolved oxygen depletion that Budd Inlet experiences has been attributed to Capitol Lake and the 5th Avenue Dam, and this lake/dam-derived depletion would continue to occur.' (DEIS, Section 4.3.4.2, page 4-41, 42) To state that, "a portion of the dissolved oxygen depletion that Budd Inlet experiences has been attributed to' diminishes the findings of Ecology. The language differs from language used in section 3 and seems intent on minimizing this impact. The phrases, 'a portion' and 'has been attributed to' do not convey the weight and significance of the TMDL study conclusions. Rather, the statement should read, 'the majority of human-caused dissolved oxygen depletion in Budd Inlet is attributed to Capitol Lake and the 5th Avenue dam in the 2012/2015 TMDL study.' Additionally, for scientific accuracy cite the Ecology sources and list the percent depletion that has already been published.

Comment 12 The DEIS states, “The Managed Lake Alternative would have no change to water quality in Budd Inlet compared to existing conditions because there would be no changes in dissolved oxygen or other habitat conditions for cold water fish, and no change in the extent or frequency of algal blooms.' (DEIS, Section 4.3.4.2, page 4-42) Is the EIS exercise limited to a strict comparison of each alternative only to existing conditions, or is it intended as a comparison of alternatives (to each other)? In the discussions of the No Action and Managed Lake Alternatives, repeated reference to 'no change' 'no impact' is misleading as it does not recognize and convey that the existing conditions created by the lake play a significant role in water quality impairment in Budd Inlet per the TMDL. The introduction states the EIS is intended to consider the effectiveness of alternatives in meeting project goals and one of the
goals is water quality, so it does not appear this analysis should be limited to comparing alternatives to existing conditions.

Comment 13 The DEIS states, "Under the Estuary Alternative, the existing lake basin would become part of the estuary, which by design would result in extensive changes in the water quality of the lake basin to conditions typical of an estuary. Compared to Capitol Lake where dissolved oxygen concentrations are generally good throughout the basin, dissolved oxygen concentrations in this area would be very low under the Estuary Alternative during certain periods. ... In the long-term, significant unavoidable adverse impacts to the lake basin would occur under the Estuary or Hybrid Alternative because the lake basin would be converted from a well-oxygenated freshwater lake to an estuary with low oxygen conditions that would not meet numeric water quality criteria." (DEIS, Section 4.3.5.1, page 4-43, and Section 4.3.8, page 4-39). The DEIS framework regarding the applicability of dissolved oxygen standards in Capitol Lake versus Budd Inlet are difficult to understand. Capitol Lake is a man-made lake that technically is still a river. It is due to this unique circumstance that the oxygen levels in Capitol Lake are good. The north basin of the lake, on the other hand, was originally an estuary and the conversion of this estuary to a lake is largely responsible for its low dissolved oxygen. The conclusion that conversion of the lake to the estuary would have a significant unavoidable impact on the lake basin is based upon a very narrow definition that is not logical. The lake would be converted back to an estuary which has a different oxygen regime and that conversion would also increase oxygen in Budd Inlet. The oxygen criteria in the lake basin does not apply after it is converted to an estuary. The lake basin will become part of a larger body of water, the estuary and Budd Inlet. Table 4.3.2, Summary of Long-Term Water Quality Impacts: Estuary Alternative, lists "Low dissolved oxygen in lake basin-Effects of transition to an estuary" as a category of impact. This category is illogical because there will no longer be a lake basin. The categories that should replace this are "Low dissolved oxygen in estuary/ West Bay" (since this will now be one body of water) and "Low dissolved oxygen in East Bay".

Comment 14 The DEIS states, "To account for uncertainties and exercise caution to not be overoptimistic, this analysis evaluated dissolved oxygen improvements after dam removal at half of what the model predicted, based on the lower TOC concentrations measured in 2019 compared to older data used in the model. Consistent with SEPA requirements, when there are data gaps or uncertainties, an analysis should identify a worst-case outcome (WAC 197-11-080). In this case, "worst-case' can mean lower levels of water quality improvement than predicted by other analyses." (DEIS, Section 4.3.5.2, pages 4-44, 45, re-stated from Water Quality Attachment 4-40) The decision to cut the model predictions in half are not warranted. The model is a peer-reviewed and quantitative product. Models are calibrated and do not rely on the specific input values, but are designed to predict based on relationships among the different variables. The 2019 data is suspect due to the spills that occurred and as is, represents only six months of data. To cut the prediction in half is a crude method of prediction and is neither peer-reviewed nor quantitative. To provide this as a substitute for scientific work is not appropriate. It is peculiar that this DEIS should determine that there are data gaps and uncertainties with the modeling work, but not consider gaps and uncertainties with the present work on Capitol Lake, when 2019 was a sampling year marred by spills and the trends analysis is not clearcut, as described above. In fact, if this rationale is applied in an objective manner, then the worst-case test should also be applied to the Managed Lake Alternative. In that case, the worst-case would be that the findings of the
TMDL are correct or even under-estimated. In this worst case, the Managed Lake's impact on dissolved oxygen in Budd Inlet is significant and its contribution to low dissolved oxygen can be remedied via the Estuary solution.

Comment 15 The DEIS stated the following, ‘Comprehensive monitoring of the lake used by Ecology to make predictions under the TMDL was last completed over 15 years ago, and water quality has changed significantly over the past decades. The analysis of more recent data (i.e., 2004 to 2014, and 2019) indicates significant improvement in both the lake and river during that time. This information implies that the background conditions on which the model was developed likely have changed.’ (DEIS, Section 4.3.5.2, page 4-46) Because models rely on the interplay of various factors and the relationships between them, the age of the data should not be reason to discount the results of the model. The model will require updating if there is new information about how the various factors interact or more accurate ways to predict the outcome. The age of the data does not imply that the model is not valid.

Comment 16 The DEIS states, “As Ecology develops and implements its TMDL for the Deschutes River/Capitol Lake/Budd Inlet, it may modify allocations for major dischargers, which could result in more stringent permit requirements for LOTT and other dischargers. The issue of discharge allocations is complicated, and there is some uncertainty as to how Ecology would assign allocations in the future. If LOTT and other dischargers were required to implement additional measures as a result of Capitol Lake not meeting its future waste load allocations, the most stringent targets would be expected under the No Action Alternative because substantive improvements in water quality could not be expected in the absence of any long-term water quality management plan. This could result in LOTT and other dischargers being required to increase treatment effectiveness, beyond the current high levels of treatment. Increased nutrient removal and/or diversion of treated water would increase the costs for treatment of wastewater and stormwater discharges, which would be passed on to rate payers, which would be a significant impact.” (DEIS, Section 4.13.2.2, page 4-175 and Utilities Attachment, page ES-2) LOTT appreciates the discussion on the potential regulatory repercussions on LOTT if DES fails to meet a future TMDL allocation, however, this is not just a regulatory impact. It represents a major water quality impact that is not discussed or reflected in the Water Quality analysis. The fact that the TMDL is not yet complete and allocations have yet to be assigned does not diminish the findings of the 2012/2015 reports regarding the lake's impact on Budd Inlet water quality. The Managed Lake alternative would perpetuate that water quality impact. Please incorporate the TMDL allocation information into the analysis on water quality.

Comment 17 The DEIS states, “The City of Olympia, LOTT, and Port of Olympia have outlined measures that would be implemented at different RSLR projections as part of the City of Olympia Sea Level Rise Response Plan. However, overland flooding from Capitol Lake Basin for the extreme river flood event under the No Action Alternative would result in water surface elevations in the downtown area that exceed the flood protection elevations set in the Olympia Sea Level Rise Response Plan. As a result, there could be significant impacts on stormwater and other utilities that could be affected during extreme river flood events under the No Action Alternative. ... Under the Estuary Alternative, the modeled flood elevations predicted in the Heritage Park area would be mitigated by the improvements planned under the Olympia’s Sea Level Rise Response Plan. Compared to the No Action Alternative, the reduced extent
of overland flooding under the Estuary Alternative would have a minor beneficial effect on utilities.”
(DEIS, Section 4.13.2.2, page 4-176 and Section 4.13.5, page 4-178) LOTT appreciates the discussion of
sea level rise and flooding, and the ties drawn between the Olympia Sea Level Rise Response Plan and
impacts that would or would not be mitigated under the different alternatives.

Comment 18 Table 7.1.1 acknowledges the following for the No Action and the Managed Lake
Alternatives, “Potentially significant costs to LOTT Clean Water Alliance (LOTT) because more extensive
water quality treatment is likely to be required by the Washington State Department of Ecology.” (DEIS,
Section 7.1.4, Page 7-5) Please amend the statement that those significant costs will not only be to
LOTT, but to LOTT ratepayers.

Comment 19 The DEIS states, “The planning-level cost estimates presented in Table 7.1.1 have been
developed based on the conceptual design components for the project alternatives (Chapter 2.0, Project
Alternatives and Construction Approach). The accuracy of these construction and long-term
maintenance dredging estimates will increase as design is advanced further”. (DEIS, Section 7.1.4, Page
7-5) Please clarify and annotate the year for costs for all estimates. Are all present-worth costs? The
table mixes one-time costs with future periodic costs, so costs given in today's dollars would be
appropriate.

Comment 20 The DEIS states the following, 'Thurston County conducts year-round monitoring of the
river, in monthly intervals, at Tumwater Falls Park for temperature, FC bacteria, turbidity, TP,
NO3+NO2, and NH4. Although monitoring continued past 2014, the analysis was constrained to this
data set to coincide with the data set used in the assessment of Capitol Lake. This data set was used to
identify long-term trends, and to develop the phosphorus budget and to support the alternatives
analysis.' (Water Quality Attachment, 3-4) Although it makes sense to constrain the data analysis from
years 2004-2014, the additional data should be shown so that the reader can assess whether there have
been any significant change to the water quality in the river since 2014.

Comment 21 The DEIS defined long-term operational benefits in the following way: Minor-to-moderate
benefits: Beneficial effects on water quality are minor to moderate if there is an expected limited to
modest improvement in DO and limited or modest improvement in the extent or frequency of algae
blooms, as determined using standard analytical techniques, and/or limited to modest improvement in
the areal extent of aquatic plants. These water quality improvements would be expected to result in
limited to modest improvements in habitat conditions for cold water fish. Substantial benefits:
Beneficial effects on water quality are substantial if there is expected to be a substantive improvement in
DO and a visually noticeable decrease in the extent or frequency of algae blooms and/or decrease in the
areal extent of aquatic plants. These improvements would be expected to result in a substantial increase
in habitat conditions for cold water fish. (Water Quality Attachment, 3-7,8) These definitions are
qualitative and subjective. The definitions would also be more useful if they were broken out into minor,
moderate, and substantial. Currently, moderate benefits are lumped with minor benefits, which
diminishes their significance. Additionally, any benefit that helps meet the upcoming TMDL should be
seen as substantial, since Ecology's waste load allocations will need to be met. LOTT's understanding is
that both Capitol Lake and LOTT will receive waste load allocations. If DES fails to meet the waste load
allocation for Capitol Lake, water quality impacts to Budd Inlet will be substantive and more responsibility to address low dissolved oxygen conditions will fall to LOTT and its rate payers.

Comment 22 The DEIS states, “Due to concerns that these events may have impacted water quality, 2019 data were compared with those from previous years (2010-2014) (Table 4.6). The data comparison indicates that there were only minor differences in surface TN, chlorophyll, and phaeophytin; and there appears to have been a decrease in Secchi depth (a measure of transparency) in the Middle Basin, which could likely be a reflection of cleanup activity disturbance. However, the TP increased substantially; the average TP concentration in the Middle Basin in 2019 was seven times higher than the average measured in previous years, and in the North Basin concentrations were twice as high as the average measured in previous years (Figure 4.3)... Due to this issue, TP and SRP data from 2019 is not used in this analysis. Data from other parameters collected in 2019 was generally within the expected range of historically observed values (Table 4.6) and was accepted for use in this analysis.’ (Water Quality Attachment, 4-14, 15) The acceptance or non-acceptance of the data seems to be flawed for the 2019 dataset. The TP and SRP values were not in agreement with what was anticipated and these data were discarded, while the other data which were only slightly different than previous years were accepted. It does not seem prudent to accept data based on the fact that they were in line with that which was expected. The 2019 spill events could have affected all of these parameters, and so their use is suspect.

Comment 23 The DEIS states the following, 'Overall, Capitol Lake exhibits relatively good water quality when compared to other lakes in the area'. (Water Quality Attachment, 4-17). The emphasis on the good water quality of Capitol Lake is misleading. Capitol Lake is not a lake; it is a river, as is acknowledged in the Water Quality attachment, section 4.1.1. The biggest reason that Capitol Lake has good water quality is that the Deschutes River flows into it. The riverine inputs serve to mix the water and to keep Capitol Lake relatively cool and oxygenated compared to other area lakes.

Comment 24 The DEIS states, “… it was necessary to first evaluate the extent to which the spill and/or spill related activities may have resulted in increases in BOD, TN, or TOC due to either increased algal biomass and/or release or movement of additional organic matter that would increase carbon. As described above and shown in Table 4.6, there appeared to be no impact on algal biomass from the spill; chlorophyll concentrations in 2019 were similar to 2010 to 2014 data. Further, TOC concentrations measured in 2019 were lower than those measured in 2004. TN was also nearly the same in 2019 as it was in 2010-2014. Based on this, it was assumed that BOD, TN, and TOC appeared to be unaffected by the spills; and therefore, comparisons to Deschutes River data could reasonably be made.’ (Water Quality Attachment, 4-18) It is not clear that there is no impact on BOD, TN, TOC or algal biomass from the spill. The years 2015-2018 are unknown, and there is the possibility that the spill of transformer oil inhibited algal growth in 2019.

Comment 25 The DEIS states, “TOC increased by approximately 1 mg/L between the Deschutes River and North Basin which represents a 50% increase, but when compared to the range of TOCs measured in this system of (i.e., up to approximately 30 mg/L (LOTT 1998)), the 1 mg/L can be put into perspective.’ (Water Quality Attachment, 4-19) The LOTT data to which this reference refers was sampled in August 1997, and may be an outlier. Other summer values (approximately 10) taken during this timeframe were
in the 4-5 mg/L range. As well, the brewery was operational during this time, adding more TOC to the system. Comparing the increase of 1 mg/L to the older 1998 values is a misleading characterization.

Comment 26 The DEIS states, 'Sources of DIN calculated in the LOTT study are summarized in Table 3.3.7. Focusing on the summer months, which is the period of concern for low dissolved oxygen, nutrient loading estimates show that Puget Sound was by far the largest contributor of DIN to Budd Inlet and that the load from sediments was the next largest source. Combined, these two major sources were predicted to contribute all but 3% to 14% of the summer DIN load to Budd Inlet. Both Capitol Lake and LOTT are predicted to have a larger influence in inner Budd Inlet compared to the entire inlet, where combined they were predicted to contribute 5% to 22% of the summer DIN load.' (DEIS, Section 3.3.5.3, page 3-43, 44, re-stated from Water Quality Attachment 4-36) The recitation of the apportionment of DIN, according to the methods used in 1998 is concerning. The current way of thinking and of regulating nutrients is to consider only anthropogenic sources, the sources we can control. By referencing the loading from Puget Sound and sediments, the DEIS minimizes the contribution of nutrient loading from Capitol Lake and applies a different, lesser standard to water quality in Budd Inlet than that currently applied to other sources of DIN contributions.

Comment 27 The DEIS stated the following, 'Ecology predicted that, without the dam, the TOC concentration at the outflow from Capitol Lake would be substantively lower (2 mg/L) than with the dam (5 mg/L), under modeled conditions. Yet, field data from 2004 and 2019 indicate that TOC concentrations in the outflow are much less than 5 mg/L on average and trending downward; they were already less than 2 mg/L in 2019, except during fall aquatic plant dieback. Further, data collected from the lake in 2003 and 2004 and used to calibrate the model were not reflective of typical lake conditions due to a lake herbicide treatment that resulted in a mid-summer spike in TOC concentrations as well as the typical spike that occurred during fall plant die-off. Thus, the magnitude and seasonal relationships for nutrient and TOC discharges to Budd Inlet in 2004 would not have been typical. All considered, the monitoring data indicate uncertainty in model predictions of TOC and the effects of Capitol Lake on Budd Inlet dissolved oxygen depletion.’ (DEIS, Section 4.3.5.2, pages 4-46, re-stated from Water Quality Attachment, page 4-41) According to Ecology’s 2012 technical report (Roberts), the model was calibrated using data from 2004, taking into account the herbicide application. The model was then verified using data from 2001. Refinement of the model was achieved over 1500 separate model runs which explored the relationship among various factors. It does not seem prudent to discount a well-vetted model with so little evidence of its shortcomings. Text from Ecology’s 2012 report reads, “The calibration period adopted for the study was May 18 to September 30, 2004, based on the availability of boundary condition and calibration data. While not anticipated in the original study design (Roberts et al., 2004), during this period, herbicide was introduced into Capitol Lake to control invasive milfoil, the dominant macrophyte (see Appendix C for pre- and post- application plant biomass). The sudden die-off of the invasive milfoil released nutrients into the lake that contributed to excessive algal growth.... The model successfully captured the long-term system trend for nutrients and the response to the herbicide application. (p 195, 2012 Ecology) In addition the model was peer-reviewed a number of times as documented in the 2012 and 2015 Ecology publications.

Supporting Materials (if any): O-12_Perez.pdf
Submission Text: On behalf of the Port of Olympia (Port), we are submitting comments in response to the Washington State Department of Enterprise Services' (DES) Capitol Lake - Deschutes Estuary Long-Term Management Project Draft Environmental Impact Statement (DEIS) issued on June 30, 2021 as part of a State Environmental Policy Act (SEPA) review. We appreciate the opportunity to provide our comments for consideration in identifying and implementing an environmentally and economically sustainable long-term management alternative for this important community resource. Improving water quality, managing existing sediment accumulation and future deposition, improving impaired ecological functions and restoring and enhancing community use of the resource are important goals. Balancing these goals in the context of a diversity of deeply held perspectives and beliefs around Capitol Lake and the Deschutes Estuary is a significant and complex community challenge, and DES is to be commended for their on-going efforts toward achieving that balance. The Port has participated on several of the Work Groups developed to provide input and support during the development of this DEIS. Representatives of both the elected Port Commission and Port staff attended the Executive, Technical and Funding & Governance Work Groups, and we look forward to continued participation during development of a Final Environmental Impact Statement (FEIS) and selection of a Preferred Alternative. We are committed to continuing our partnership with DES and various community stakeholder groups to create innovative solutions for an economically and environmentally sustainable Capitol Lake - Deschutes Estuary Long-Term Management Plan. Ultimately, this plan must seek to conserve and restore this important community, historic, visual and recreational resource while recognizing sovereign treaty rights and tribal interests as well as Federal navigation and civil works stewardship. The amount of work and commitment to addressing this complex community issue captured in the DEIS is inspiring and the Port would like to extend our appreciation to all who have participated. The DEIS states that DES has not yet selected a preferred alternative. It is our understanding that information received during the public comment period will be used, in part, to identify additional analyses that may be needed, to modify alternatives to better meet the project purpose and goals, and to supplement the initial prioritization/weighting of the preferred alternative selection criteria. In support of this iterative evaluation process, the focus of the Port's comments outlined below is on providing information to DES to help improve the environmental analysis, to address the methodology used in the analysis, and to request additional information and evaluation of additional and/or increased mitigation measures related to various aspects of the alternatives. The Port is not taking a position on a Preferred Alternative at this time.

The Port appreciates all of the work - at both the policy and technical levels - represented in the DEIS. Still, we are concerned the current investigations, analyses and vetting of certain basic assumptions and foundational issues are incomplete. These issues significantly impact the evaluation of all three alternatives, particularly from the standpoint of regulatory compliance, costs, economic impacts and project feasibility. There are assumptions made in the DEIS that are inconsistent with our understanding of Federal navigation and asset stewardship, as well as Federal permitting processes. Additionally, we believe more detailed investigations, analyses and refinement of assumptions needs to occur related to
sediment management and disposal, community recreation uses, and implementation of mitigation measures, including funding commitments. As stated in WAC 197-11-400, one primary purpose for preparing an EIS is to assist in DES's consideration and decision making process related to this complex and significant community project action. The Port believes greater clarity around these important issues is required to ensure this purpose is being fulfilled. Without additional investigations, robust analyses, and more detailed discussions related to mitigation measures, including how and when mitigation is implemented and by whom, the Port believes it is difficult to thoroughly and objectively assess the alternatives against the stated Project Goals, and to apply the prioritized selection criteria accurately. For example, one of our concerns related to the feasibility of obtaining federal permits tests the basic assumption/statement on Page 1-19, that ‘...all three action alternatives are feasible from a technical and regulatory perspective (i.e., they have been screened for potential limitations that would make them impossible to permit, construct, or manage)...’ The Port's specific concerns, requests for additional investigations and analyses, and suggested remedies are outlined more thoroughly below.

Navigation and Maintenance Dredging Budd Inlet is the southernmost extension of Puget Sound, and the Port of Olympia has operated a marine terminal since the 1920's, currently providing ready access to local, regional and international markets. As authorized by Federal legislation, the United States Army Corps of Engineers (USACE) maintains a navigation channel into Budd Inlet that splits just north of the Port Peninsula to serve East Bay and West Bay. Additionally, USACE maintains a turning basin for large ships accessing the marine terminal within West Bay. The role of USACE, “...with respect to navigation is to provide safe, reliable and efficient waterborne transportation systems (channels, harbors, and waterways) for movement of commerce, national security needs, and recreation' (USACE Engineering Regulation 1105-100). In support of this purpose, USACE maintains these Federal assets through a variety of actions, including dredging to maintain serviceable and reliable depths and widths, as well as removing navigation hazards and underwater obstructions. Because of its' role and stated purpose, USACE is an important and integral partner and agency with jurisdiction and regulatory authority within the DEIS project area. While the Port does not presume to speak on their behalf, it is our understanding from communications with USACE staff that there hasn't yet been substantive conversation with USACE to fully vet some of the assumptions made in the DEIS. Assumptions related to both navigation (dredging) and Federal regulatory components (permitting) that fall under the purview of USACE significantly affect the overall analysis - and basic feasibility - of all three alternatives.

For example, Attachment 6 Navigation Discipline Report, makes an assumption that maintenance dredging in the West Bay navigation channel and turning basin (and other areas) will occur, ‘...within the next 10 years, prior to, or at implementation of, any of the proposed action alternatives” (page 3-3). While this is a shared, aspirational goal of the Port and USACE, it is by no means an assumption that can be made with any degree of certainty. As briefly mentioned in the Navigation Discipline Report, efforts related to maintenance dredging have most recently, “...been delayed due to the chemical quality of the sediment which would require the sediment to be disposed of at a permitted upland facility” (page 4-10). Environmental contamination in the sediments of West Bay remain a significant and complex challenge for USACE, the Port and the Washington State Department of Ecology (Ecology). Unresolved issues remain related to dredge disposal and the complex interplay of federal and state authorities and requirements. While all partners are working collaboratively to develop innovative approaches, there are
no guarantees these issues will be resolved in a timeframe allowing for the extensive analyses, permit reviews (both State and Federal) and allocation/securing of funding necessary to accomplish the maintenance dredging within a 10-year timeline.

Chapter 7 correctly identifies that the Federal navigation channel is currently impacted by sediment accumulation and needs to be dredged, which is further complicated by the presence of environmental contaminants. As indicated above, the Port, USACE and Ecology are working together to resolve the myriad of complex issues involved to enable implementation of the necessary dredging. However, the Port disagrees with the statement on page 7-12, “If this dredging does not occur, and if the Estuary or Hybrid Alternative is selected as the Preferred Alternative and is implemented, then additional sediment deposition from the project is not expected to significantly impact the Port of Olympia because navigation is already impaired.’ The DEIS contradicts this statement in several places, including in Attachment 6: Navigation Discipline Report and in the Executive Summary. For example, Table ES.2 Summary of Key Findings - Long-Term Impacts, Benefits, and Proposed Mitigation in the Executive Summary states the following with regard to navigation impacts related to the Estuary and Hybrid alternatives: ‘Navigational impacts from sediment deposition would be significant but could be reduced to less than significant if consistent funding is available for the long-term dredging program (with dredging estimated at a 6-year frequency), and with implementation of an annual sediment monitoring program to ensure that maintenance dredging is responsive to actual sediment deposition that is highly influenced by environmental conditions.

Pursuant to SEPA, the obligation to disclose, address, and mitigate impacts, particularly those created by a project action, is not negated by the existence of existing adverse conditions. The Port believes, in order to fulfill the purpose and intent of SEPA, the DEIS must assess the additional and cumulative impacts of the Estuary or Hybrid Alternatives on the navigation channel and turning basin should the assumed maintenance dredging not occur. In addition to our concerns about the identified assumptions, above, we believe a more thorough investiga and analysis of the proposed mitigation measures related to sediment monitoring plans are needed prior to selection of a Preferred Alternative. Greater clarity and refinement of which party or parties would be responsible for ensuring identified monitoring plans are implemented, and how they will be funded, is needed to fully understand the durability of a Preferred Alternative decision.

The Port is requesting the assumptions, investigations and analyses related to any maintenance dredging that is to occur in West Bay, including the navigation channels and turning basin, be more fully vetted, with USACE engaged as a collaborative partner with jurisdiction and regulatory authority. Additionally, if either the Estuary or Hybrid option is selected as the Preferred Alternative, the Port requests maintenance dredging within West Bay, including to the full authorized depths in the Federal navigational channel and turning basin, be considered a prerequisite to and required component of construction to be accomplished prior to commensurate with implementation of all other physical elements of the applicable alternatives. We are requesting the costs of performing the maintenance dredging be more thoroughly investigated, analyzed, and incorporated into the alternatives analysis prior to selecting a Preferred Alternative. Furthermore, a specific funding strategy, along with commitments to provide resources from identified funding partners, needs to be described.
Federal Permitting Chapter 9 of the DEIS provides a comprehensive listing of the various permits required by Federal, State and Local government agencies, and acknowledges the process of obtaining permits and approvals will be complex and time consuming for all alternatives. There also appears to be additional information provided in the various discipline reports describing some permits in more detail, as they may be pertinent to the specific discussion in those reports. However, a comprehensive regulatory assessment of each alternative has not been provided in the DEIS to demonstrate whether the alternatives, as envisioned, are consistent with the various applicable regulations. Without this assessment, it is difficult to evaluate the probability of securing the numerous permits required, particularly from the Federal agencies that haven’t been proactively involved in development of the DEIS. For example, USACE is required to conduct a Section 408 review on any project with the potential to alter or impact a Federal civil works project, which includes the navigation channel and turning basin in West Bay. If some component of the DEIS alternatives is determined by USACE to negatively impair the function of the navigation channel or turning basin, significant changes would have to be made to that project before it could be authorized to proceed. The Port is requesting additional investigation and collaboration with all Federal, State and Local Government permitting agencies, including USACE, be conducted to complete a regulatory assessment of the various alternatives prior to selecting the Preferred Alternative, to better understand the feasibility of implementation. As mentioned earlier in this letter, without a thorough regulatory assessment, we do not believe the statement, “...all three action alternatives are feasible from a technical and regulatory perspective (i.e., they have been screened for potential limitations that would make them impossible to permit, construct, or manage.)’ is accurate.

Sediment Management Sediment management is identified in Chapter 7 as the project component with the greatest influence on planning-level construction cost estimates, across all three alternatives. As such, the Port is requesting additional, specific analysis - and consistent application - of all sediment management assumptions to bring greater understanding and transparency to this significant cost component. Specifically, we would like to see more investigation and analysis related to the different dredge disposal assumptions (for both construction and maintenance dredge activities) for all three alternatives. This additional work needs to include detailed and substantive discussions with the State and Federal agencies that regulate and permit dredge disposal. We believe it is imperative the assumptions related to dredge material contamination and invasive aquatic species, for example, are more fully analyzed and consistently applied to the overall alternatives analysis. Because of the significant cost implications to all three alternatives, it is vitally important to ensure these assumptions are complete and defensible, from both an environmental remediation and clean up perspective, and from an economic one. The cost variant between upland and in-water dredge disposal methods is substantial, and assumptions as to which disposal methods will be required for the various alternatives needs to be consistently evaluated and applied. As such, the Port is requesting each of the alternatives be evaluated based on cost estimates considerate of both upland and in-water disposal of dredge materials.

Mitigation Implementation The Port has participated on the Funding & Governance Work Group throughout the development of the DEIS, and agrees that an Interlocal Agreement model is well-suited for on-going, long-term management of this important community asset. We are requesting further
investigation, analysis and collaboration among the potential participants in this governance model occur before a Preferred Alternative is selected. Development of a near-final draft Interlocal Agreement will demonstrate an on-going commitment to long-term management and funding by the parties to the agreement. It will also bring greater clarity and transparency to the alternatives analysis, particularly related to the viability of the alternatives requiring this governance structure, prior to selecting the Preferred Alternative. As stated in the DEIS, 'Further delay in decision-making is not acceptable to the range of engaged stakeholders.' (page 1-18). Without a clear management structure and demonstrated commitment from the parties that may be charged with long-term management and funding, the Port is concerned the feasibility of the alternatives reliant on entities other than the State of Washington may be in jeopardy.

Recreation Access The Port is concerned the DEIS may be incomplete in its analysis and consideration of certain types of water dependent recreation, including from a social justice and equity perspective. For example, swimming in Capitol Lake has been an activity that has been enjoyed by the community in the past. It is an activity that has been widely accessible to people, regardless of income level. Currently, the DEIS indicates swimming isn’t a responsibility of DES, so it isn’t addressed. By comparison, kayaking is also an important activity that can occur regardless of the alternative selected. However, because of the equipment costs involved, it isn’t necessarily accessible to people of all incomes. Kayaking also doesn’t come under the purview of DES, but it is identified and considered as an activity to be accommodated. The Port is requesting impacts to all forms of recreation, including those that limit swimming, as well as potential mitigation measures to address those impacts, be identified and evaluated prior to selection of a Preferred Alternative.

Clarification The Port would like to take this opportunity to correct the following statement in Attachment 6 Navigation Discipline Report, page 4-6, Section 4.2.2: 'The Port has indicated they would like to welcome Panamax and Neopanamax vessels (ships designed to the dimensions necessary to pass through the Panama Canal) to their berths, which could require berth deepening and widening (not presently included in the Port's near future planning documents).' In response to an inquiry from the DEIS technical team regarding the Port's long-term plans for the berth and turning basin related to accommodating different types of vessels, the Port replied: Ideally, the Port would like the ability to berth partial panamax and neopanamax vessels that can maximize their laden drafts above the limitations we see today. The choke point for vessels in Olympia is based on transit and turning basin depths (emphasis added). The above statement has been incorrectly interpreted as a desire to welcome full panamax or neopanamax vessels, which would require berth deepening or widening beyond current authorization. The Port of Olympia could currently accommodate a partially loaded panamax. In 2016, the M/V DN Vatan with a beam of 105' and DWT of 58,000 tons discharged at the Port of Olympia. It had to arrive partially loaded to make the draft. The final determination of timing safe transit through Budd Inlet and alongside at the Port of Olympia lies with the Puget Sound Pilots who have the latest bathymetry data of the channels, turning basin, and alongside at the berth. It is correctly noted that the Port's future planning documents do not contemplate berth deepening or widening beyond the current authorization. With this letter, we are confirming there has been no investigation, discussion or consideration related to seeking to increase the depth or width authorized for the Port's berthing area. We understand the DEIS does not assume an increase in the berth depth or width, and we would
appreciate a correction to the Navigation Discipline Report to more accurately reflect the Port's currently adopted planning documents.

Conclusion In conclusion, the Port of Olympia requests the additional investigations, analyses and collaborative discussions with regulatory agencies, particularly USACE, outlined in our comments above be completed prior to selection of a Preferred Alternative. We are committed to helping complete these requested additional tasks as may be appropriate, and to working with our community partners to resolve this complex community challenge and establish, finally, an actionable path forward toward a Capitol Lake-Deschutes Estuary Long-Term Management Plan.


Name (ID): Amy Hatch-Winecka (O-29)

Organization (if applicable): Thurston Regional Planning Council

Submission Text: The WRIA 13 Salmon Habitat Recovery Lead Entity (Lead Entity) supports the restoration of the estuary to the Deschutes River. The committee is responsible under RCW 77.85 to bring together tribes, municipalities, state and federal agencies, non-profits, and citizens to make science-based decisions on where to conserve and protect salmon habitat in South Puget Sound. The Lead Entity ranks projects annually, then submits them for funding through the Salmon Recovery Funding Board. South Puget Sound is a nursery for young salmon to rear, particularly Chinook salmon. Chinook salmon from watersheds throughout Puget Sound travel south to grow in the many small pocket estuaries in South Sound before heading out to the ocean. While these small pocket estuaries are crucial to salmon, the large estuaries present at the mouths of the big rivers throughout Puget Sound are essential the species survival. In addition to providing much needed estuary habitat, the restoration of the Deschutes River estuary will allow for sediment carried down the river to move into Budd Inlet and beyond, replenishing the beaches. This sediment provides places adjacent the shoreline for forage fish, such as surf smelt and sand lance, to spawn. These smaller fish are food for salmon at all of their life stages. The WRIA 13 Lead Entity is very supportive of the estuary restoration alternative.

Supporting Materials (if any): N/A

ORGANIZATION & BUSINESS

Name (ID): Joel Carlson (O-1)

Organization (if applicable): Citizens of Thurston County

Submission Text: Puget Sound is dying and we must take immediate action to save our salmon, other fish, oysters, clams, seaweed, etc. Restoring the Deschutes Estuary as a salmon and other species recovery area is the best way to do this. Restoring the Deschutes Estuary also stores blue carbon which helps reverse fossil fuel global warming. The Nisqually Estuary was restored back to health, now we must do that for the Deschutes Estuary. If we let nature restore the estuary we will start reversing the
death of Puget Sound, increasing tourism, recreation and enjoying the increased beauty of Olympia. We must restore the Deschutes Estuary now!

Supporting Materials (if any): N/A

Name (ID): Bruce Wilkinson (O-2)

Organization (if applicable): Northwest Alliance for Alternative Media and Education

Submission Text: Looking at the draft EIS of the options for Capital Lake, it seems to me that making it an estuary or a hybrid are the best choices. If there is a hybrid with a reflective lake then it should be saltwater. It actually sounds like such a lake could still be great habitat but dredging is required more often. Reading it I wonder some about whether much thought was put into really deeply enhancing the habitats. Like winding the river flow through the lake areas. Seems like if you’re going to fairly well destroy the freshwater aquatic system (not that it was particularly healthy) you might as well go all out and create many more bends in the river flow, islets, islands, large woody debris, habitat snags, small bays and large ones, and much more. This would create more shoreline, like we could create much more shoreline, which is better habitat (generally the shoreline is best for habitat) and help possibly push sediment to the edges while keeping some natural depth and some variation in speed to the flows along the winding turns. Let’s imagine more and do it right the first time if we are going to do it. Focus on really enhancing habitat. I feel pretty strongly that our restoration of areas, especially like this one that are totally altered already by humans, can be absolutely incredible if we want them to be. They can be highly functional habitat, exceptionally beautiful and enjoyable. It’ll cost more but what place is better for a truly epic display of human ecological restoration?

Supporting Materials (if any): N/A

Name (ID): Judy Olmstead (O-4)

Organization (if applicable): Bats About Our Town

Submission Text: I am the founder of the group Bats About Our Town, which maintains a website under that name. I appreciate that the report does include bats and the various impacts different lake configurations could have on them, some of them dire. Please keep on your radar that the bats using the lake are are pregnant, then nursing, female bats who feed over the lake and many make the astonishing long trip back and forth to Woodard Bay. I ask that the window of working on the lake take these bats into account--it would be exceptionally cruel to pull the rug out from under them in the midst of their cycle there, instead of doing the work when they are not around. Their cycle unfolds over the summer, and I do wonder when the report says that to prioritize salmon needs there are only about 5 months to do any work, whether this means colliding with the bats. If so, my heart breaks for species who may live for 30 years, small and unremarked as they may be to many humans. Please do everything you can do to cherish them and mitigate impact.

Supporting Materials (if any): N/A
**Name (ID): Paula Lowe (O-5)**

**Organization (if applicable):** Pattison Lake Association

**Submission Text:** Whatever you do, be sure it is something that general citizens can do around a lake. Years ago you built an extensively long cement bulkhead around the lake when no other lake resident in the state would be able to do that. Hard surfaces are discouraged around waterbodies, and permits are expensive and hard to get. Because it was dammed, it has created other problems. Address those, along with the invasive species problems. No boating or swimming in that lake.

**Supporting Materials (if any):** N/A

**Name (ID): L. Riener (O-6)**

**Organization (if applicable):** Burbank/Elliott Neighborhood Assoc.

**Submission Text:** The dam needs to be taken out. The salt water of Budd Inlet needs to come to its former home, and kill the New Zealand snail. The New Zealand snail is an invasive species in Capitol Lake, and will destroy our freshwater lakes in WA. State. The WA State funding should cover this process. I do not support the hybrid proposal. I do not support the ‘reflecting pond/lake’ idea. It is too expensive. It will not last.

**Supporting Materials (if any):** N/A

**Name (ID): Bill Robinson (O-7)**

**Organization (if applicable):** North Capitol Campus Heritage Park Development Association

**Submission Text:** APITOL LAKE DESCHUTES ESTUARY DRAFT EIS COMMENTS REGARDING HISTORIC AND CULTURAL RESOURCES BY THE NORTH CAPITOL CAMPUS HERITAGE PARK DEVELOPMENT ASSOCIATION The North Capitol Campus Heritage Park Development Association (NCCHPDA) was created in 1987 to advocate for the completion of the Wilder and White and Olmsted Brothers Plan for the State Capitol Campus with a park and promenade from the Temple of Justice north along Capitol Lake to the Puget Sound. Under the State of Environmental Policy Act (SEPA) WAC 197-11-440() (iv) Urban quality, historic and cultural resources, and the design of the built environment, the EIS needs consider the impacts to the Washington State Capitol Campus National Historic District. This is because the Capitol Lake- Deschutes Estuary is a significant part of the Capitol Campus historic district designed by Wilder and White in 1911 and the Olmsted Brothers in 1928. Currently, the Draft Environmental Impact Statement does not analyze the historically significant design principles of the State Capitol Campus, which is on the National Historic Register. Significant progress has been made toward the completion of the Wilder and White plan since 1911. Since 1991, Heritage Park has begun to take shape. The Legislature and the City of Olympia have spent twenty-five million dollars to complete land acquisition, the Arc of Statehood, the Western Washington Inlet, the Eastern Washington Butte, the North Campus Trail, the Lawn Amphitheater, the City Fountain, the City seasonal ice rink in the Isthmus Park, and the Washington State Law Enforcement Memorial. Two million dollars in private
funds have also been contributed for these City Beautiful elements of the North Capitol Campus. The Draft EIS must consider impacts to Capitol Campus National Historic District, including the design elements which define the district, the current predesign of enhancements to the Eastern Washington Butte, and the other improvements included in the plan, such as the City's Fountain Park and Isthmus Park. 16 U.S.C. 470f - Section 106 of the National Historic Preservation Act provides, The head of any federal agency having direct and indirect jurisdiction over proposed Federal or federally assisted undertaking in any State and the head of any Federal department or an independent agency having authority to license any undertaking shall, prior to the approval of the expenditure of any Federal funds on the undertaking shall, prior to the issuance of any license, as the case may be, take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register. The head of any such Federal Agency shall afford the Advisory Council on Historic Preservation established under Title II of this Act a reasonable opportunity to comment with regard to such undertaking. RCW 79.24.720 - Department of enterprise services' responsibilities. The department of enterprise services is responsible for the stewardship, preservation, operation, and maintenance of the public and historic facilities of the state capitol, subject to the policy direction of the state capitol committee and the guidance of the capitol campus design advisory committee. In administering this responsibility, the department shall: (1) Apply the United States secretary of the interior's standards for the treatment of historic properties. The Draft EIS fails to analyze the projected impacts of each of the four long-term management alternatives to the North Capitol Campus Heritage Park, as required. We ask that the statutes and regulations that protect the historic design of the State Capitol Campus be analyzed as part of the Environmental Impact Statement.

Supporting Materials (if any): N/A

Name (ID): Donald Freeman (O-8)

Organization (if applicable): South Sound Fly Fishers

Submission Text: South Sound Fly Fishers Capitol Lake Alternative Opinion Department of Enterprise Services Capitol Lake - Deschutes Estuary EIS For your consideration the members, board and particularly the Conservation Committee of South Sound Fly Fishers has thoroughly studied the published alternatives, consulted with WDFW biologists, entomologists and most importantly resident and community members who will be affected by the future of this proposal. We have considered the impacts of the decision on the costs of the alternatives, the recreational and community values provided, environmental health of the area and the wildlife impacts the several options would incur. As citizens and taxpayers, we are concerned with the costs of any construction and maintenance. Ignoring these obligations has precluded the dredging and disposal of spill for decades which has brought us to the current status. We have an unhealthy body of water contaminated by invasive species which prevent the activities the lake was supposed to provide, including swimming, boating and fishing.

Our study has led us to prefer an alternative which re-establishes the recreational use of the area, provides a healthy environment for residents, both human and wildlife, at a cost that is most likely to be supported by community resources. South Sound Fly Fishers is a local organization that has promoted conservation projects in our area for more than 50 years. Our primary interest is, of course, fishing but
this activity is dependent on a healthy environment that nurtures waterways, riparian zones and saltwater ecologies. It is also a recreational activity which means that we are committed to providing healthy outdoor opportunities for ourselves and also for our families and the non-angling community that we are no less a part of. We include this insight to illustrate that our preferred alternative is certainly the best option for fish and wildlife, but is tempered by our support for the community we share and for which we are creating a legacy that will affect our community for decades to come. We choose not to kick the can of worms our predecessors left us down the road for our children and grandchildren to correct and pay for. *Our preference is for the re-establishment of the Deschutes estuary. We can explain this decision by addressing each of the four stated objectives of the project: Improving Water Quality, Managing Sediment Accumulation and Future Deposits, Improving Ecological Functions and Enhancing Community Resources in turn. We will also address the likelihood of success of each alternative both of being chosen and long-term results.

1. Improving Water Quality A. Estuary. Initial estimated cost $179 million to $336 million. Maintenance costs are minimized. The alternatives document states “water quality will be self-managing as a brackish estuary”. This means that the constant flow of the river meeting with tidal influx of saltwater will create a semi-saltwater mix that continuously replenishes itself preventing stagnation and eliminating the New Zealand Mud snails and Purple Loosestrife plants. These are the invasive freshwater species whose presence has closed the lake to swimming and boating. B. Managed Lake. Estimated initial cost $337 million to $607 million. “Water quality plans to be developed”. This vague statement underlies the root of the current problems. Regular dredging will be required to maintain a depth and quantity that would allow healthier conditions. Aquatic vegetation may have to be controlled by using herbicides and/or mechanical removal. Most importantly, maintaining a freshwater habitat allows the survival of the most troublesome invasive species. Managing acceptable water quality would be expensive and uncertain. C. Hybrid Alternative. Estimated initial cost $249 million to $463 million. This option reduces the size of the freshwater lake but furthers the need to control weeds and water quality and to manage the chemical content of the water since the lake would be groundwater fed. Groundwater contains high levels of phosphorus which promotes algal growth and higher density of aquatic plants. Mud snails and loosestrife could persist.

2. Manage Sediment Accumulation and Future Deposits A. Estuary. Sediment from dredging the large basin would be deposited upriver in the middle and upper basins creating tideland habitat for plants and animals. Subsequent accumulation will be minimal as deposits terminate in West Bay as would have occurred naturally. Dredging in these areas such as Olympia Yacht Club will be required on a six-to-twelve-year schedule. Less accumulation will occur in federal navigation channel to be the responsibility of Army Corps of Engineers and possibly Port of Olympia. B. Managed Lake. Construction sediment will be dumped in the middle basin and will establish a freshwater wetland community. Subsequent dredging will be required on what is assumed to be a 20-year schedule. The amount removed will be greater each instance and the interval will likely decrease. This passes the expense and responsibility to future generations in perpetuity. C. Hybrid. Construction sediment will be deposited upstream to create tidelands, subsequent dredging will be required at assumed 15-year intervals. A saltwater marsh will develop in middle basin.
3. Improve Ecological Function A. Estuary. This alternative will restore the original estuary ecology to the area. Tidelands support populations of crustaceans, shellfish, aquatic plants and birds and provide a nursery for outgoing smolt of anadromous fish such as salmon and sea run cutthroat trout. The current sad condition of the lake is detrimental to the smolt released by the Tumwater salmon hatchery reducing the success of these fish in escaping to Puget Sound and eventually the Pacific where they grow and feed aquatic species such as Orca whales. B. Managed Lake. A freshwater lake does not provide substantial ecological function to our region. The benefits of the freshwater habitat includes providing a generous chironomid larvae population in the shallow muddy waters. These larvae hatch in clouds of midges that are a primary food source for the Mexican Brown Bats that roost in Woodard Bay. The freshwater lake itself attracts a rich diversity of water birds including ducks, brandts, geese and swans that provide excellent bird watching for local enthusiasts. C. Hybrid. This mixed environment provides the same benefits as both the freshwater lake and estuary, though each to a lesser extent due to the reduced scale of each.

4. Enhance Community Resource All three alternatives provide enhanced community recreational facilities and opportunities. A pedestrian bridge will allow access along fifth avenue regardless of the width of the opening to be established. Boardwalks would meander through the tidelands or wetlands to allow up close experience of the habitats and wild life. Boat ramps and docks are projected to provide access to the waters freed of invasive species. A. Estuary. One has only to experience the popularity of the estuary boardwalks at the Nisqually Wildlife Sanctuary to appreciate the value and appeal of our natural tidal ecology, unique to Puget Sound. Opening the basin to boating would benefit local anglers who could access the glut of unharvested hatchery salmon that congregate beneath the falls of the Deschutes. This fishery is produced at great cost but are not optimally harvested since access is restricted. B. Managed Lake. Swimming and boating will be part of the mix available only so long as water quality is maintained and invasive species are controlled. Visitors will continue to enjoy the reflective pool that graces our capitol landscape and observe the myriad waterfowl species that stop over on their migrations. C. Hybrid Alternative. The community will enjoy the benefits of both the other alternatives, though with a lesser impact due to the smaller reflective pool and estuary tide flats.

* A concluding statement. The opinions and observations expressed here are based primarily on the information included in the published materials presented in the submission for public input. We point out two glaring omissions which could substantially affect the success of each project and therefor the support for each. To wit: * Sea level rise. No mention or projection was made concerning the very real prospect of sea level rise. One might assume that for instance under the estuary option the tide flats would be covered for a longer period than illustrated in the study, but what effect does this have on the need for armoring the perimeters? Under the managed lake or hybrid alternative, are the projected dams and barriers adequate? There remain a number of unanswered possibilities.

* Flood water management. Very little attention has been given to the function of the lake and the dam in controlling unusually high flows in the Deschutes due to storm conditions. No references are found regarding historical downtown flooding prior to or following the construction of the 4th Street dam. Neither are there projections as to the future effects of the three alternatives regarding this issue. For this reason, it is germane to note that the preference of the estuary alternative is predicated on the
information provided but we do wish to identify these caveats. The Board and 67 Members of South Sound Fly Fishers PO Box 2792 Olympia, WA 98507

Supporting Materials (if any): N/A

**Name (ID): George Watland (O-9)**

**Organization (if applicable):** Sierra Club, South Sound Group

**Submission Text:** Dear Department Officials: The Sierra Club South Sound Regional Group representing over 7,500 members and supporters welcomes this opportunity to submit comments regarding the Draft Environmental Impact Statement (Draft EIS) for the Capitol Lake - Deschutes Estuary Long-Term Management Project. The Sierra Club strongly supports the Estuary Alternative because it is the only one that supports a healthy environment for all and encourages preservation and responsible growth for future generations for the following reasons: * The current Capitol Lake is toxic to the local ecosystem, our people and our community. * A restored estuary will bring economic, recreational and environmental benefits into the heart of Olympia. Restoring the estuary in full is the least costly option to improving water quality and will restore healthy marine wildlife habitats to the Deschutes River, the Budd Inlet, and West Bay areas of the Puget Sound.

Supporting Materials (if any): N/A

**Name (ID): Samuel Kaviar (O-11)**

**Organization (if applicable):** Kayak Nisqually

**Submission Text:** My name is Sam Kaviar and I am an ecotourism sea kayak operator who utilizes Budd Inlet for my tours as well as a generally concerned citizen. I am strongly supportive of a full estuary restoration for the habitat benefits it would have for salt marsh and eelgrass habitat, and the benefits those would provide to wildlife on both a local and regional level. At present the Nisqually delta area, attracts juvenile endangered salmon from quite a wide distance due to the low availability of salt marsh habitat throughout Puget Sound. Budd inlet supports comparatively low amounts of wildlife, restoring the estuary is one of the most important things we could do locally for our marine environment, and which would ultimately benefit Southern Resident Killer Whales. By benefiting the local ecosystem, and increasing wildlife diversity in Budd Inlet the measure would also benefit my business by improving the quality of my tours. It would increase opportunities for other eco-tourism businesses in our area. It seems to me there is also a social justice element, of restoring the ecosystem along the lines of the wishes of the Squaxin island tribe. Warm regards as you make this complex decision!

Supporting Materials (if any): N/A

**Name (ID): Neil Falkenburg (O-13)**

**Organization (if applicable):** Westbay Marina
Submission Text: West Bay Marina has been in business mooring vessels for over 60 years on the shores of Budd inlet. We recognize the amount of work and the amount of money spent maintaining the waters we Lease from the State of Washington, so our customers have a spot for their boat. Through boating, private marinas provide a special sort of access to waters of our State. The State of Washington DES is currently exploring the best alternative dealing with the basin that is the northern terminus of the Deschutes River, Capitol lake. The lake was designed to create reflecting pond in front of the state capital and allow sediments to settle before silting in lower Budd inlet. This catchment basin acted as designed, providing a fantastic element to the State Capitol Campus and did its job keeping most of the sediments flowing down river from reaching the marine waters of lower Budd inlet. Removing the Dam and allowing the river along with its accompanying estuary to free flow will cause certain damage to the lower inlet in the form of unwanted sediment load. I strongly believe the impact will be catastrophic to the downtown Olympia waterfront, the local marinas. The EIS contemplates dredging every 5-6 years. It doesn't yet focus on who pays and what really happens when whomever does pay faces budgetary constraints and decides to remove maintenance dredging from the budget. At that point the basin fills in, the marinas become useless and the gem that is our downtown boardwalk overlooks a tidal mudflat. Cities work intensely to develop walkable waterfront. Waterfront acts as the catalyst for downtown development and tourism. I'm sorry but a tidal mudflat is neither workable nor walkable. Don't wreck Olympia by removing the dam. Keep the dam, manage the lake as promised and move along. The other alternatives have too much cost and too much risk.

Supporting Materials (if any): N/A

Name (ID): Peter Schrappen (O-14)

Organization (if applicable): Northwest Marine Trade Association

Submission Text: The Northwest Marine Trade Association (NMTA) has over 700 members in the boating industry in Washington State. We speak on behalf of our membership on matters of public policy that impact the state's $7 billion recreational boating and fishing economy. With regards to the proposal for a Capitol Lake-Deschutes Estuary, we caution and urge that consideration be given to likely negative impacts on Budd Bay marinas and to the boating public at large. These waters are centered in an urban area showing rapid growth over the last 20 years. The likelihood of continuing rapid growth over the next 20 years cannot be dismissed.

We know that chemical contamination of waters results from human activity including lawn chemical and other non-point polluters. The data is clear there. We question whether the benefits envisioned from changes made at Capitol Lake can actually be achieved unless growing chemical contamination can be abated. We do not see this problem as adequately addressed in the draft EIS currently before us. We should emphasize that our membership is supportive of smart policies to enhance the beauty and cleanliness of Puget Sound and its tributary waters. Without a vibrant Puget Sound, many of our family-run business members would be out of business. However, policies that expend public resources in pursuit of benefits which may not be achievable in small local arenas where negative impacts will hurt long-standing business members should not be undertaken. We need to direct public expenditures to solving the critical issues affecting the larger body of water before trying to address the smaller, local
issues. In closing, we acknowledge that there are a plethora of other issues brought forth by the proposed changes to Capitol Lake. In the interests of brevity, we will bypass direct comment on these issues at this time. In general, we support the commentary made by others in the industry. Specifically, we are supportive of the letters received in this regard by the Olympia Yacht Club and by the Recreational Boating Association of Washington. We thank you for your attention to our comments and wish you success in finding a solution which supports our concerns.

Supporting Materials (if any): N/A

Name (ID): Mindy Roberts (O-15)

Organization (if applicable): Washington Environmental Council

Submission Text: Overall we find the DEIS contains significant flaws in the water quality analyses, which are lacking in context and surprisingly biased. For example, in several places, the report refers to 'only occasional” violations of the Clean Water Act water quality standards. Violations do or do not occur, and 'only occasional' is one example of a biased statement leading the reader to conclude that violating the federal Clean Water Act is not problematic. The report surprisingly lacks objectivity in numerous places, which undermines the technical basis of the DEIS.

Overall, and even with the flawed analyses in the DEIS described below, the Estuary Alternative provides the greatest benefits to the region and at costs below those of the managed lake or hybrid options. In addition, at this point in history, the State of Washington and the Department of Enterprise Services need to take a hard look at who benefits and who is harmed by the proposed alternatives. We do not believe that the other alternatives reflect the values of people in the region today.

Finally, from a pragmatic perspective, how the next steps would be funded is a critical question. We know of no federal funding sources that would help pay for anything other than full estuary restoration. The costs estimated for the lake and hybrid options are many times more than the entire biennial budget for salmon recovery throughout the entire State of Washington. Spending state dollars to provide a reflecting pool for the Capitol Campus would not likely be popular with residents of Washington State, particularly those outside Olympia. We offer the following specific comments.

Ecology’s TMDL represents best available science The technical analyses provided in the DEIS are presented as on par with the multi-year analyses of Capitol Lake and Budd Inlet by the Department of Ecology as part of the Total Maximum Daily Load studies. Ecology’s work has been highly reviewed and subject to paid, independent peer reviews, and reflects the current best available science. In contrast, the DEIS appears to dismiss this record of publication and opt for sub-par analyses representing poor data collection from a single year. The report needs to better reflect that Ecology’s analyses are the best available science.

Focusing on West Bay entirely misses the area of Budd Inlet most impacted by Capitol Lake The Budd Inlet model, developed by the Department of Ecology from an earlier effort funded by the Lacey, Olympia, Tumwater, and Thurston County (LOTT) Alliance, indicates that the largest impact from
Capitol Lake on dissolved oxygen in Budd Inlet occurs in East Bay, well beyond West Bay. The limited analysis in the DEIS appears to refer to information compiled for West Bay water quality, yet characterizes that as representative of Budd Inlet as a whole. Because the DEIS sets the study area as West Bay only, the entire analysis of Budd Inlet water quality impacts from the impounded lake is fatally flawed. The conclusions of limited impacts of the impounded lake to West Bay, spuriously referred to as Budd Inlet, is incorrect and inconsistent with the best available science. Therefore, the DEIS is flawed because it neglects where the worst-case impacts are in Budd Inlet. Stating that no changes to Budd Inlet water quality would occur as a result of Capitol Lake is without technical basis. Capitol Lake causes the largest negative impact to dissolved oxygen of any single source in the entire Salish Sea, which the DEIS neglects to mention. The Puget Sound region is currently considering extensive investments in water quality protections to address current dissolved oxygen violations that will only worsen in the face of population growth and climate change.

Data from a single year do not establish any lake water quality trend. Interannual variability in water quality data means no single year should be used to establish a trend. Relying on a limited glimpse of 2019 lake conditions precludes the ability to draw a conclusion that lake water quality is improving. Further, ascribing 2019 Capitol Lake water quality conditions to Deschutes River watershed improvements is unjustified, particularly without any substantial analysis of Deschutes watershed conditions. In fact, nutrients take extensive time to address in watersheds, and the DEIS is completely lacking in any justification that watershed actions are occurring and are responsible for a perceived trend. While we hope that nutrients will decline in the Deschutes River watershed, the DEIS utterly lacks any substantiation and over represents the quality of Capitol Lake.

Hybrid option will worsen water quality. The analysis of water quality around the hybrid option is entirely lacking. Analyses conducted by Ecology found that simply reducing the volume of an impounded basin, whether freshwater or saltwater, would only worsen water quality within that basin. Because of relative density, the salt water on the bottom would become anoxic with a freshwater lens on the surface. We do not see justification that this would provide salmonid refugia, particularly as water temperatures would likely rise well above safe levels for salmonids.

Interpretations of BOD and TOC are factually incorrect. Page 3-32 includes an interpretation that because biochemical oxygen demand (BOD) is low, that this means more recalcitrant total organic carbon (TOC) would be released and would have less of an impact on Budd Inlet dissolved oxygen. In general, BOD5 laboratory analyses of natural waters generally result in non-detects, unless those waters contain high amounts of sewage or other sources of high nutrients. This is why 30-day BOD tests can quantify both carbonaceous and nitrogenous BOD. However, the relative lability of total organic carbon has been addressed by Ecology's model, which includes carbon in multiple classes, ranging from labile to recalcitrant. Ecology's approach addresses impacts from more labile as well as more recalcitrant forms of organic carbon. Mixing BOD and TOC in this interpretation is incorrect, yet it appears to be the heart of some of the claims of the DEIS.

Capitol Lake monitoring program highly flawed. Page 3-34 includes a statement that because the monitoring program found low phosphorus concentrations near the bottom, Capitol Lake sediments provide negligible phosphorus loading. This contradicts general principles of lake science and is
unsubstantiated by a limited monitoring program. Sediment releases of phosphorus could produce higher concentrations near the bottom of the water column. However, there is no evidence that the monitoring program was even designed to be able to measure phosphorus concentrations within the boundary layer. Moreover, the horizontal distribution of monitoring sites does not adequately capture the enormous range of conditions present as a result of macrophyte growth and mixing beyond the thalweg. The limited number of monitoring sites and depths in the data collection program render the results unsuable to draw the conclusions presented in the DEIS. Finally, benthic flux chambers directly measured sediment phosphorus loading in previous studies by Ecology.

Impacts to LOTT are not adequately addressed Currently Budd Inlet and other parts of South Puget Sound do not meet the Clean Water Act water quality standards for dissolved oxygen. In places like southern Budd Inlet, where levels can naturally fall below certain values, the combined effect of all human activities cannot worsen oxygen levels by more than 0.2 mg/L. That would include point sources like the LOTT wastewater treatment plant discharges, nonpoint nutrient sources in the areas around Budd Inlet, and the effect of the Capitol Lake impoundment. To administer the Clean Water Act, Ecology and EPA need reasonable assurances that water quality conditions will be met. Point sources discharges like LOTT are regulated through an individual NPDES permit to discharge, and would need to invest significant capital resources if the allowable human impact is taken up because the Capitol Lake dam remains in place. Therefore, the cost estimates for the lake option and the hybrid option would need to include the capital as well as 20-year operations and maintenance costs to fully reflect the costs of that option. We encourage you to work with LOTT on those costs.

Narcissus and his reflecting pool In Greek mythology, Narcissus falls in love with his own image, reflected in a pool of water. Public monuments, such as Capitol Lake, represent a region's cultural choices at the time the monument was installed, appropriate in the context of history. However, culture evolves. Today we are witnessing a realization that these monuments may no longer serve the purposes for which they were envisioned at the time. Damming an estuary to create a reflecting pool for the Capitol would certainly not happen today because our understanding and our values, as well as our laws, have evolved. We would be burdening residents with a high cost of this freshwater symbol, while we dishonor the natural and cultural history of this place. DES is now at a crossroads to decide what path to follow. At this time in US history, maintaining an artificial lake even as a hybrid option, is not in step with the times. We believe the original vision of a reflection pool for the Capitol would be met by the Estuary alternative. Technical analyses have quantified that this pool would be available for reflection 80% of the time, including daytime and night time conditions.

Tribal Treaty Rights refer to sovereign rights reserved under treaties signed by Tribes with the US Government. Tribal Treaty Rights existed prior to the treaties and pre-date state law. In Washington, these rights include but are not limited to the right to fish, hunt, and gather at all usual and accustomed places. As parties to the Medicine Creek Treaty, the Squaxin Island Tribe and U.S. government signed contractual obligations that include the area currently covered by Capitol Lake, which is part of the Tribe's Usual and Accustomed Area. The State of Washington must honor and respect that contract. Please refer to the comment letter submitted by the Squaxin Island Tribe.
The lake option is not the best use of public funds. The DEIS, as well as previous iterations of this analysis, confirms that trying to maintain an artificial lake by damming an estuary would be the most costly at $337 to $607 million. This is roughly twice the cost of returning the area to an estuary. Further, the likelihood of federal funding is negligible, which means the bill would be paid by the taxpayers of Washington State. As stated above, the cost of the lake option is far greater than the entire biennial budget for salmon recovery throughout the State of Washington. Spending state dollars to provide a reflecting pool for the Capitol Campus would not likely be popular with residents of Washington State, and particularly those outside of Olympia.

The hybrid option meets no one’s needs and would be more costly than an estuary. The hybrid option rests on creating a limited pool for reflection while returning much of Capitol Lake to an estuary. While this may be seen as a compromise solution, the hybrid option meets no one’s needs. First, the construction costs needed to drive sheet piles through sediments the consistency of pudding are likely underestimated. Such an uncertain capital project would most likely incur unanticipated conditions and added costs. However, like the lake option, federal funding to create this pool is highly unlikely. At $267 to $481 million, that investment would also be well above the biennial capital budget for salmon recovery in the entire State of Washington. Further, as described above, impounding waters in a basin with sediments at the bottom would simply exacerbate the profuse algae blooms that occur today in Capitol Lake. Even Budd Inlet is subject to algae blooms in certain conditions because of limited flushing. The end result of spending $267 to $481 million will be even denser algae blooms that lack the aesthetic ideal envisioned in the last millennium.

In closing, we request that technical analyses better reflect the best available science. Moreover, we encourage DES to think ahead to how this decision will be reflected in generations to come.

Supporting Materials (if any): O-15_Roberts.pdf

Name (ID): Sue Patnude (O-16)

Organization (if applicable): Deschutes Estuary Restoration Team

Submission Text: DERT supports removal of the dam, and restoration of the free-flowing Deschutes River, and the Deschutes Estuary. DERT agrees with some of the major conclusions in the DEIS. Most notably: The Estuary option clearly is the best option for restoring the ecology of the area, which has been significantly degraded since the dam was built in 1951. Multiple species of birds, fish and animals, as well as plant life, would benefit. The Estuary option is the least expensive of the options, and the perpetuation of Capitol Lake is the most expensive. The DEIS estimates that, over 30 years, the Estuary alternative would cost $336 M, while the Managed Lake alternative would cost $607 M. If the planning horizon was expanded to 50-70 years, there would be an even bigger gap between the Estuary alternative and the much costlier Managed Lake option. The Estuary option would also significantly improve water quality conditions in Budd Inlet, which will not only benefit fish and wild life, but will also reduce LOTT’s future costs regarding regional wastewater discharges into Budd Inlet. If LOTT’s costs are reduced, ratepayers would not suffer the consequences of increased rates. The Estuary option would almost certainly eliminate—or at least significantly reduce—the invasive species that caused Capitol Lake...
to be closed to all recreational use decades ago. The Managed Lake alternative would almost certainly have to continue the costly battle with these species, which has in the past included applying chemicals to Capitol Lake. Relying on the use of toxic chemicals to maintain public waters is a very poor choice compared to the sustainable alternative of an estuary. DERT strongly supports the formation of a Deschutes Watershed Council. While the details of purpose, membership and funding for such a group remain to be worked out, we believe the goal of a healthy watershed meeting multiple needs cannot be achieved without a watershed-based approach that incorporates multiple interests including government, tribal, community, business and environmental.

PROCESS DEFICIENCIES DES and the consultant team responsible for authoring the DEIS apparently did not speak with many state and local agencies with extensive knowledge of conditions in the Lake and Estuary and/or include their views. It apparently does not include: . the water quality modeling done by the Department of Ecology for Budd Inlet; WDFW information and conclusions on fish and wildlife species, or a discussion and findings on archeological issues with the relevant state agency. Instead, the apparent approach by DES is to develop its own data, or use other data, and then expect the relevant agencies to respond to the DEIS. This is a highly inefficient and un professional approach to the study.

DES and the consultant team apparently did not speak with any staff at the Squaxin Tribe, despite its extensive Natural Resource professional staff, and its historic use of the Deschutes River and Estuary. In particular, the DEIS Executive Summary does not make mention of the traditional Steh-Chass, the indigenous name for the lower Deschutes River and Estuary. Nor does it mention the Steh-Chass cultural and historic significance. Instead, it refers to the 70- year-old dam as if it has cultural and historic significance. This seems to be either a gross oversight or misleading discussion.

SELECTIVE DATA USE AND APPARENT BIASES There seems to be a significant picking and choosing of data to support an apparent outcome. For instance, in the water quality analysis, the DEIS notes that Thurston County had ongoing water quality data from 2004-2014, but for purposes of the DEIS, only water quality data from 2010 to 2014 was used because there was a ‘trend’ in that five-year period. This does not seem to be a proper way to use this data and undermines any conclusions the DEIS draws from it. The DEIS should explicitly state what factors have been considered in determining that a shorter period of data is appropriate for this analysis.

There are questionable comparisons between the existing Capitol Lake and other bodies of water. For instance, the DEIS notes (almost parenthetically) that, because of the amount of sediment in the 'Lake,' and its short retention time, it is no longer actually a lake from a regulatory perspective, and is subject to water quality standards for rivers, which formed the basis of the water quality analysis. Yet the DEIS then compares the water quality in Capitol 'Lake' with water quality in naturally occurring lakes in the area --without acknowledging that the comparison is legally not valid, nor that the water quality in Capitol 'Lake' benefits from having a freshwater river flowing into and out of it constantly, which most other 'real' lakes do not have. Similarly, the water quality is compared with other 'inlets' in the South Sound, even though none of them have a freshwater river flowing into them (which would improve the other inlets' water quality).
The Executive Summary also states that water quality standards might be met in a reflecting pool--why even say this, if there is an even possibility that those same standards would not be met?

The DEIS highlights items for no apparent purpose. For instance, it calls out the potential impact on the local bat population if the Deschutes River Estuary were restored but does not point out the benefits to the populations of other species with restoration. This is inappropriate.

The Executive Summary also highlights aquatic plant life as an impact from the existing dam to the ecology of the estuary and does not discuss undesirable changes in other ecosystem functions that have been generated by the dam/lake (e.g., sediment transport, marshes, estuarine species) and should be highlighted in the analysis.

OPINIONS RATHER THAN DATA ANALYSIS The characterization of some of the DEIS's conclusions are not objective. For example, it states that water quality in the Lake is not as bad as some people think it is. That is not a scientific statement. Instead, it seems intended to promote the Managed Lake alternative. The DEIS could just as accurately have said ‘despite the constant inflow of a freshwater river, Capitol Lake has for a long period of time failed to meet water quality standards and is unlikely to do so under current conditions.’ Why one and not the other?

OMISSIONS FROM THE ANALYSIS The DEIS does not seem to fully address potential climate change effects. For instance, in analyzing impacts from different tidal events, it does not consider what would happen at extreme high tides, which will become more likely under nearly all scenarios. And it simply relies on the City of Olympia's analysis of climate change and impacts, without noting that the City's analysis is a very conservative one--i.e., does not have strategies if assumptions prove to underestimate the impacts.

The native coho salmon run in Percival Creek has been well documented and should be noted. In addition, prior to the construction of the 5. Ave. dam, fly fishing in the estuary for salmon and trout was very common, and was cause for opposition to the dam by recreational fishing interests.

More weight needs to be given to the economic, educational, and aesthetic benefits of estuary restoration including recreation of all kinds: birding, boating, paddling, fishing, education, nature walks. And of the course the intrinsic value of the estuarine environment - habitat, fish, ecosystem benefits, tidal flow and more.

Increased tourism is a significant impact. Please review the visitor numbers for Nisqually before and after the restoration began. Evaluate the benefits to local economies. Estuarine habitat restoration will provide volunteer and public engagement/involvement opportunities for the region and the state. Restoration can provide seasonal and long-term jobs as well as with the youth job corps, Vista, and Earth Corps, for example. Job opportunities will also be created during the construction phase of estuary restoration. New jobs would be created downtown as businesses benefit from increased tourism and local access to the flowing river from Budd Inlet.
RELIANCE ON SPECULATIVE ACTS The DEIS repeatedly refers to a 'Des Chutes Basin Project Historic District,' and feature it heavily in discussions of cultural resource impacts analysis for each option. There is a lack of attention in the DEIS given to Tribal cultural resources such as the Steh-Chass, the indigenous name for the lower Deschutes River and estuary, the effect being to privilege recent white people landscape architecture and infrastructure over millennia of Indigenous cultural landscapes. Archaeologists and local history scholars are unfamiliar with any area called the 'Des Chutes Basin' either as a district or as a cohesive 'basin project'. There are no references to it in state or local records and/or historic registers. According to the Deputy Director at the Washington Department of Archaeology and Historic Preservation, there is no such thing. In his words: 'We are unaware of any proposed historic district and haven't had any conversations with DES or any project proponents about such a designation (to my knowledge). At this point, I would say that a potential historic district designation has not been vetted by us, so I'm not sure what it includes or could include.' In addition, the DEIS discusses the potential for designating the Fifth Avenue Dam as an historic structure and identifies that as a consideration for maintaining Capitol Lake. To the best of our knowledge, no entity has applied for, or suggested such a designation, simply because the dam has been there for 70 years and has little architectural significance. To suggest that this be a factor in the analysis is particularly bizarre when compared with the absence of any analysis of the historical value of the submerged lands to the Squaxin Island Tribe. The purpose of the DEIS should not be to conjure speculative arguments in favor of maintaining the lake. The DEIS must include a review of the degradation of the historic sites, and the damage to the cultural and spiritual significance to the Squaxin Island Tribe.

EXECUTIVE SUMMARY There is a frequent disconnect between statements made in the Executive Summary and the actual content of the substantive chapters in the DEIS. These are errors of both omission and emphasis. We will point out some examples below. The final DEIS Executive Summary should be more accurate and unbiased in its statements. Comments on substantive elements/chapters in the DEIS that are referred to in the Executive Summary should also be considered as comments on those more detailed portions of the relevant chapters/sections of the full DEIS.

Project Area and Planning Horizon DERT would like a more thorough explanation of the project area being considered. Why does the area include West Bay, but not East Bay and the entire Budd Inlet? Clearly the entire area of Budd Inlet would be affected by the various alternatives. For instance, modeling by the WA Dept. of Ecology shows that 50% of the problem associated with low dissolved oxygen in Budd Inlet is contributed by the dam at the mouth of the Deschutes River to contain the lake. If the dam was removed and tidal flow re-established, it would benefit water quality throughout the inlet as well as reducing LOTT's future wastewater discharge issues and potentially save ratepayers significant money.

Planning Horizon: Why 30 years? The DEIS alternatives analysis is based on a 30-year planning horizon. DERT questions why 30 years and why not a longer - or even infinite - horizon. The dam has been in place for 70 years. The current lease between DNR and DES is for 30 years, expiring in 2028. It should be noted that the cost differential between alternatives would be even more pronounced with a longer planning horizon.
Dredging Table ES-1 (p. 8): The summary of the alternatives should make clear that the amount of maintenance dredging under the Managed Lake alternative is significantly higher than under the other alternatives. In fact, the table should use the term 'spot dredging' for the Estuary and Hybrid alternatives, as the main body of the DEIS says. As currently written, it appears that the amount of dredging is the same in all three alternatives, but occurs with more frequency in the latter two, which is not correct.

Table ES-1 (p. 8): Make it clear that the Habitat Enhancement Plan would not require the intensive invasive species management that the Managed Lake alternative would. What happens to the New Zealand Mud Snail eradication process if dredged material is used to build habitat islands? Are we just moving them from one place to another? Please explain using science or note if the statement is based on best professional judgement.

In the figure ES6 (p. 27), the term 'maintenance dredging' should be replaced with the term “spot dredging," which is used in the full text. Otherwise, readers might assume that the scope and extent of the 'maintenance dredging' under the Estuary Alternative would be similar to that under the Managed Lake alternative, or even more, since the DEIS states that the 'maintenance dredging' under the Estuary Alternative (and Hybrid Alternative) would occur every 5-6 years, as opposed to the predicted every twenty-year interval for the Managed Lake.

Water Quality Conditions Stratification (p. 12): The DEIS must provide information as to the rate at which the Deschutes River 'flows through' Capitol Lake, and how that rate has changed over time. There is also a question as to whether, because of sedimentation and reduced retention time, Capitol Lake meets the definition of a 'lake' under Clean Water Act standards and criteria. If it does not and cannot meet CWA standards - why even bother with this process? Just remove the dam and let the estuary heal.

In the generalizations regarding stratification of lakes, the DEIS must provide comparisons with other lakes that have freshwater rivers (by definition) flowing into them for an accurate comparison of conditions.

Please delete the phrase 'Despite what has been perceived to be worsening conditions in Capitol Lake...' (Executive Summary p. 12). This is someone's opinion, and not relevant to an objective statement of water quality condition, which the DEIS states that it is supposed to be. Please delete the last paragraph on the Executive Summary p. 12 (see quotes). It seems to be simply a paid advertisement for the Managed Lake alternative. If in fact the water quality conditions in the lake are improving, an appropriate statement in the DEIS would be some reference to cause and effect, rather than promotion of one of the alternatives over the others. This paragraph is very unprofessional. 'The interrelationship among all of the factors affecting the Capitol Lake aquatic ecosystem is important to consider in evaluating the water resources throughout the ecosystem. Perceptions of poor water quality and worsening conditions in Capitol Lake are likely based on historical impairments, the continued impacted aesthetics from aquatic plant growth, and the ongoing restrictions on recreational use, rather than on the water chemistry. These improving water quality trends reduce the level of management that would
be needed under a Managed Lake Alternative to meet lake management objectives. “If in fact water quality trends are improving, the data for that statement should be shown and the causes identified. What has changed in the last several years to bring about any changes in water quality?

Please delete the following sentence: ‘These low dissolved oxygen concentrations are typical of the long narrow inlets that comprise much of South Puget Sound.’ (p. 13) If you were just describing Budd Inlet, the statement might be relevant. However, Capitol Lake is a dammed river at its mouth and despite being constantly delivered a flow of freshwater, it has water quality characteristics of water bodies without the same significant freshwater inflow.

Figure ES.6 (p 27) should say that removal of the dam ‘would’ improve water quality, instead of ‘may.’

Please explain why, in examining long term water quality trends in Capitol Lake, the DEIS ultimately only used data collected between 2010 and 2014—i.e., ignored a lengthy historic record, and excluding more recent data. See Section 3.3.3.1.

Please explain the significance of the cessation of discharges from the Olympia brewery, and how water quality has changed up until the current date. In our research with the WA Dept. of Ecology and LOTT we have discovered the following information about discharges from the Olympia brewery and other sources: The Olympia brewery discharged industrial wastewater directly to the estuary and later to the lake dating from the brewery's original construction in 1896 until 1954, when the brewery began discharging through the City of Olympia sewer lines to the City's new municipal wastewater treatment plant (constructed in the early 1950s). Although the industrial wastewater from the brewing process was thereafter treated by the city and discharged to Budd Inlet, the brewery continued to discharge non-contact heated cooling water to the lake. Both discharges of course came to an end when the brewery permanently closed in July 2003. The lengthy history of the brewery discharges together with direct discharges to the estuary of municipal sewage, industrial discharges from historic lumber mills and other businesses, stormwater from the city streets and buildings and direct sewage discharges from houses and other buildings constructed over the water in ‘Little Hollywood’ prior to the construction of the 5th avenue dam and prior to the city municipal sewage treatment plant and stormwater collection systems all contributed to the poor quality of the estuarine waters and tide flats before construction of the 5th avenue dam created the lake. But they are all gone now except for an ever-decreasing number of stormwater outfalls.

The oft stated claim by some that returning the lake to an estuary will be a return to the conditions of the first half of the 1900's (with smelly mudflats) is an absolutely untrue and misleading statement and should be called out as such. Closure of the brewery and advances in environmental laws and programs coupled with advances in collecting and treating water pollution sources ensures that conditions in the future in a restored estuary will be vastly improved compared to earlier pre-dam conditions with unregulated and uncontrolled pollution sources. The mudflats at low tide in a restored Deschutes Estuary will in most respects be similar or the same as found in other local inlets such as Totten and Eld inlets - relatively clean and healthy.
The DEIS notes (Section 3.3.3.1) that the applicable water quality standards for Capitol Lake, at the present time, are those for rivers, because the Lake no longer retains water for at least 15 days, which would be required to meet the definition of a 'lake.' It goes on to state that if Capitol Lake were in fact a 'lake,' it would fail to meet other water quality standards, including those for phosphorus. Please explain whether, under the 'Managed Lake' alternative, the lake would have to meet these additional standards, and whether that would add to the costs of this alternative. (p. 13)

Please explain why the 'modest improvements' to dissolved oxygen in Budd Inlet (p. 13) are likely to be significantly higher under Ecology models. Please ensure that the additional costs to LOTT to address the dissolved oxygen issues in Budd Inlet caused under the Managed Lake alternative are included in the economic analyses. The DEIS appears to limit its evaluation of water quality conditions to the nearby West Bay area while excluding impacts to East Bay, which is the area most affected by the dam.

Support for Ecological functions (p 16 ff) Please explain how the proposed placement of 'construction' sediment along the shorelines would comply with current (2013) Ecology standards for sediment management. During the Key Findings presentation/briefing, the DES team simply stated that the same thing had been allowed when the lake was last dredged in 1986; Washington State's standards have been revised at least twice since 1986 and sediment and shoreline management programs have also been updated. In recent decades the filling of wetlands and marine water areas to create uplands has been largely prohibited and at the very least subject to very stringent conditions if allowed.

Explain how the Managed Lake alternative would 'best support' (p.17) the 'foraging base' for bats. Please quantify (vis a vis the Managed Lake option) the 'severe' impacts to the bat population that the other alternatives would create. Also consider, over the life of the project, the impacts to the bat population from other factors (e.g., the deteriorating/disintegrating roosting habitat for the bat colony currently residing at Woodard Bay). Please explain why the bat colony merits specific mention here, whereas the major beneficial effects on other species from the Estuary Alternative (e.g., shoreline birds) are not mentioned with the same specificity. Is there some particular significance to the bats?

Bats are well-known to forage above, along and near estuarine and riverine areas including other estuaries and inlets in our county. Is there something specific about this bat colony that precludes them from such foraging? Or is their current foraging at the lake merely a preference versus a condition for survival?

The benefits to the ecology from restoration of tidal estuaries are well written (p. 17) and needs to be emphasized. The benefits to spawning salmon are acknowledged (p. 17). The statement regarding no native species in the Deschutes River because of the Falls should be modified to reflect Tribal legend that there were salmon in the river until an earthquake created the Falls and made passage possible. There are working fish ladders leading up to the reconstructed hatchery above the lower Falls. However, the dam creates a block for salmon returning to the hatchery and hungry seals feast on returning salmon by the dozen. The seals even follow the salmon through the fish ladder and up the river.

Studies of tagged juvenile salmon by the WDFW and Squaxin Island Tribe have shown that juvenile salmon produced in rivers to the north frequently turn south when they enter Puget Sound. However,
the lack of estuarine habitat in the South Sound compared to historic occurrence is a major factor in their poor rate of success.

Estuaries can sequester carbon in the deep mud and in salt marsh vegetation. They can help mitigate flooding as they expand across river mouths. Please go to Restore America's Estuaries (estuaries.org) to learn more about Blue Carbon and the benefits of restored estuaries to mitigate climate change.

The Executive Summary should include a complete summary of the dates of closures on the Lake (e.g., swimming and boating), and not just the last one in 2009. The Lake has been ‘closed’ for a long time. Swimming will never be a viable recreational asset under most alternatives.

Recreation (p 17 ff) The Executive Summary should include a complete summary of the dates of closures on the Lake (e.g., swimming and boating), and not just the last one in 2009. The Lake has been ‘closed’ for a long time. Swimming will never be a viable recreational asset under most alternatives.

The boating ‘alternatives’ (p. 18) needs to mention that under the Managed Lake alternative, there would be no boating access from Budd Inlet into the Lake because of the continued existence of the Fifth Avenue Dam. A more accurate statement would be that boating in the Managed Lake Alternative would be limited to whatever boats could be launched south of the Dam, but under the Estuary Alternative there would be passage for boats (including sailboats) from Budd Inlet up to the bottom of the canyon depending on tidal cycles. The DEIS says that there would only be sailing under the Lake and Hybrid alternatives; that seems clearly not to be true, since there is sailing right now on tidal waters north of the Dam. In fact, removal of the dam and restoration of the river would likely increase sailing, which would be an economic benefit to the area generally, and possibly to the Port of Olympia and other marina facilities. Discuss more thoroughly the additional recreational benefits of a restored estuary, i.e., bird watching, boardwalks, the remaining trail around the estuarine shoreline, etc.

Planning and Cost Estimates (p. 20ff) There should be an explanation of why the State of Washington is assumed to bear 100% of the ongoing costs under the Managed Lake alternative, whereas under the other two alternatives the assumption is that there would be some local portion of the necessary funding. There should be an explanation of why the State of Washington is assumed to bear 100% of the ongoing costs under the Managed Lake alternative, whereas under the other two alternatives the assumption is that there would be some local portion of the necessary funding. The DEIS should also discuss that under the existing lease between DES and DNR, which expires in 2028, DES is responsible for paying the costs of any remediation necessary in Capitol Lake. This would include any contamination deposited in or on the tidelines, and any other remediation of or mitigation because of failure to meet applicable laws, standards, or regulations, including water quality standards. This obligation of DES would apply to all three alternatives.

The DEIS, in its discussion of economic impacts, does not recognize the potential flooding of downtown under the Managed Lake alternative, due to climate change and sea level rise. The City of Olympia has
already recognized that it would also need to increase Heritage Park elevations to prevent flooding even with the dam in place.

Ecology/EPA work on Deschutes River/Budd Inlet TMDL (p 22) A more accurate description of the TMDL process for the Deschutes River, be that EPA approved in part, and disapproved in part, the TMDL issued by Ecology. After litigation was filed, EPA promulgated a TMDL in 2020 for the disapproved portions and took comments until October 2020 on its revisions. After considering those comments, EPA promulgated a final TMDL in August 2021. Ecology published its technical report on water quality findings for the entire watershed, including Budd Inlet, in 2012. Ecology separated Budd Inlet from the scope of the Deschutes TMDL in deference to the DEIS process being led by DES. Its website does not show any date as a target for completing the Budd Inlet TMDL.

Climate Change and Olympia’s Sea Level Rise Response Plan (p. 23) The Intergovernmental Panel on Climate Change (IPCC) recently released its latest update and forecasts on climate change and its impacts worldwide. As is usually the case, the latest iteration documents how climate change is occurring more rapidly than had been forecast, with its impacts accelerating. Please discuss how the conclusions of the latest IPCC report relate to the DEIS’ assumptions about tidal conditions and floodwaters in the Project Area. Do the effects (e.g., additional risk of downtown flooding) weigh in favor of one alternative or the other?

Air Quality The summary (p. 32) states that the impacts and benefits for both the Estuary and Hybrid Alternatives are the same. In fact, the Estuary Alternative provides higher levels of sequestration of greenhouse gases, and the Hybrid Alternative would produce more greenhouse gas emissions during construction (as outlined in Chapter Construction Impacts.

The DEIS states in the summary that the Fifth Avenue Bridge would be fully closed for four to five years under the Estuary Alternative. Please provide the basis for this estimate, a comparison with the construction/schedule closure for the recent replacement of the Fourth Avenue Bridge, and options for use of a temporary bridge.

The Value of Estuaries (Ecosystem Services) What is the economic value of a restored estuary? There needs to be a more thorough analysis done to show how estuaries boost local economies. Hundreds of thousands of visitors to estuaries around the nation create substantial revenue to local businesses and organizations. One nearby example is Vancouver B.C. Another is the large increase in visitors to the Nisqually Estuary during and after its restoration. Estuaries provide much needed habitat for species of all kinds. When the Deschutes Estuary is restored, it will give both juvenile and adult salmon a much better chance of survival. Southern Resident Orca Whales depend on Chinook salmon to survive - and the SROs are dwindling in numbers along with Chinook. Sea birds depend on estuaries for food and reproduction. Pinnipeds venture into estuaries for food. And the “mudflats” visible at low tide are teeming with life. Connecting people with a restored Deschutes Estuary, a state treasure, will provide citizens with the opportunity to experience the estuarine environment and associated health benefits of experiencing nature. It is proven to be true: spending time in nature has a significant impact on human health and well-being. It lifts our spirits!
TABLE ES.2: Please note that all the above comments, and requested changes, apply to the summary of benefits, and impacts of the various alternatives in Table ES.2

CHAPTER ONE 1-5: The draft EIS states that the current lease between DES and DNR for the aquatic lands under Capitol Lake expires in 2028 but may be renewed for an additional 20 years. It also states that the management of the Estuary could be transferred from DES to a different authority. As noted above, DES is not entitled to renew the lease in 2028, because it has allowed the deposition of contaminants, and is and has been in violation of water quality standards. In addition, if the lease is not renewed, DES is responsible for removing any ‘improvements’ made to the underlying lands, including the Fifth Avenue Dam. And DES is responsible for paying for all of this. It appears from the lease that the authority for what to do with the aquatic lands resides with DNR, not with DES. Please also describe what the scope of management would be for a restored estuary on lands managed by DNR. Please describe the relationship of any new organization as well with the Deschutes Watershed Council, which the recently completed Deschutes Watershed Restoration and Enhancement Committee unanimously recommended be established and DERT wholeheartedly supports.

1-20: Evidently the criteria for selecting the preferred alternative were developed and chosen by DES, with ‘input’ from members of the various committees established by DES to provide assistance in developing the DEIS. DES should make a concerted effort to involve those committees in the next step of the process, particularly after DES and its consultants have completed revisions to the DEIS. As DES knows, DERT has been involved as an organization since 2009 in efforts to remove the Fifth Avenue Dam and restore the flowing Deschutes River and Estuary. At this point our only participation in the EIS process has been as a member of the Community Sounding Board. We believe DES must pay particular attention to the input from that group.

CHAPTER TWO Table 2.1.1: As noted above, please explain why a 30-year planning horizon was chosen, since clearly some facilities in the alternatives would have a longer life. And as we have pointed out, if the Managed Lake were truly to be dredged on a 20-year interval, adding a second cycle of dredging (i.e., a 40-year planning horizon) would substantially add to the costs of the Managed Lake alternative.

Tidal conditions (p. 2-9): Does the simulation of tidal conditions, and inundation patterns, reflect existing forecasts of sea level rise? Or the most recent IPCC report?

As noted above, the DEIS does not appear to consider the regulatory feasibility of sediment deposition, given the current state approach to sediment management. The DEIS states (p. 2-19) that the relevant agencies have said that existing sediments with their invasive species could be deposited along the banks of the Deschutes River. Have they said that in writing?

Table 2.3.2: The table describes the anticipated dredging schedule for the Olympia Yacht Club and other private marinas, the Port of Olympia, and the navigation channel. Please provide a comparison with their existing dredging schedule so that we may know how much of an increase in dredging frequency would occur. For current dredging at those sites, please also state how the dredging is paid for, particularly the common navigation channel. Please also state how any maintenance dredging in the Managed Lake alternative would be paid for. The DEIS should note that there is no other comparable
situation in our state where a state funded, constructed, and maintained dam and resulting lake is relied on to reduce and subsidize the dredging costs for private marinas and public ports.

Please explain the statement on p. 2-28 that the existence of dense aquatic vegetation in Capitol Lake does not indicate that water quality in Capitol Lake is ‘bad.” What does it indicate? Does it indicate that water quality standards are not being met?

Please explain the costs of mechanical harvesting under the adaptive management plan proposed under the Managed Lake alternative. Please also state whether that alternative assumes a periodic or frequent application of chemicals to the water to control the vegetative growth. If so, what effect would those chemicals have on other forms of life (e.g., birds and fish).

Please acknowledge that the statement (on 2-29) that there would only be “minor to moderate’ improvements in water quality in Budd Inlet under the Estuary Alternative is inconsistent with Ecology's determinations that the existing dam causes 50% of the pollution in Budd Inlet, and that there would be significant improvements to water quality in Budd Inlet if the dam were removed.

Please describe the rationale for removing the existing Fifth Avenue Bridge under the Estuary Alternative, and the size of the proposed replacement bridge (p. 2-48). In particular, are the additional features (e.g., pedestrian bridge) fairly allocated to restoration of the estuary, or simply an upgrade to the existing Fifth Avenue Bridge?

CHAPTER THREE Section 3.0 - Hydrodynamics Figure 3.1.1 (p. 3-3) does not apparently reflect the extreme tidal events under a king tide. The narrative refers to the 5m Avenue dam controlling the water levels in the lake. While this is what one would expect - it is not true in winter, during a King tide event when inlet waters pour over the dam into what would be the mouth of the river. The heightened tides and marine water flow back into the river, an event due to climate change and sea level rise. If the dam were to stay in place - wouldn't it have to be higher? How could a complete restructuring of the dam be permitted?

3.1 - This section speaks for climate change as it is something that will happen in future. It is happening now. Study on the impacts of climate change under current conditions - a real assessment in present time - is needed.

3.2 - Please describe the benefit of estuary restoration to navigation. When the dam is removed, recreational vessels will be able to enter the river from the estuary - an opportunity that doesn't exist with the dam in place.

3.2 - The Olympia Yacht Club is not a public moorage facility - it is a private, member only club.

Figure 3.2.3 (p. 3-12) does not include any sediment data before 1998. Does that data exist? How about sediment deposition before the dam was constructed in 1951?
Thank you for the dredging frequency information on pp 3-14 to 3-15. Is there information on frequency of dredging since the construction of the dam in 1951? Before construction? The Olympia Yacht Club has been in its current location since roughly 1906.

Exhibit 3.27 does not appear to include either West Bay or East Bay.

Cultural Resources (Section 3.9) The DEIS repeatedly refers to a 'Des Chutes Basin Project Historic District,' and features it heavily in discussions of cultural resource impacts analysis for each alternative. There is minimal attention given to Tribal cultural resources such as the Steh-Chass, the indigenous name for the lower Deschutes River and estuary, the effect being to privilege recent white people landscape architecture and infrastructure over millennia of Indigenous cultural landscapes. In fact, there are not references to the Steh-Chass in the Executive Summary. Archaeologists and local history scholars are unfamiliar with any area called the 'Des Chutes Basin' either as a district or as a cohesive 'basin project'. There are no references to it in state or local records and/or historic registers. According to the Deputy Director at the Washington Department of Archaeology and Historic Preservation, there is no such thing. In his words: 'We are unaware of any proposed historic district and haven't had any conversations with DES or any project proponents about such a designation (to my knowledge). At this point, I would say that a potential historic district designation has not been vetted by us, so I'm not sure what it includes or could include.'

The DEIS must evaluate the degradation of the historic sites, and the damage to the cultural and spiritual significance to the Squaxin Island Tribe. In addition, the discussion of cultural resources does not reflect any more recent pre-Lake historical and cultural resources adversely affected (and probably intentionally so) by the construction of the Fifth Avenue Dam and creation of Capitol Lake. These include Little Hollywood, the Chinese Community, and other water-related and dependent commercial and industrial enterprises that existed before 1951. All of these have significance to the history of the area. One need only look at the historic photos of this area to see the complexity and abundance of these activities, which have little to no recognition at the present, and apparently would not in the future under the alternatives described—particularly under the Managed Lake alternative. As we see increased new construction in downtown Olympia, these historic and cultural sites continue to be obliterated, but should be recognized and preserved to the extent possible.

On p.4-94, the DEIS states that the Estuary Alternative is less consistent than other alternatives with long-term reductions in greenhouse gas emissions. This seems inaccurate and inconsistent with other statements that the Estuary Alternative has the least greenhouse gas emissions associated with construction and operation.

On p.4-101, the statement that all alternatives are consistent with the City's Shorelines Management Program is inconsistent with other statements (e.g., on p. 4-104) that the Managed Lake alternative would be inconsistent with restoration of the estuary, and that the Estuary and Hybrid Alternatives would be most consistent with the SMP.

On p.4-174, the DEIS acknowledges the significant costs likely to be incurred by LOTT under the Managed Lake alternative to meet more stringent discharge standards for stormwater and wastewater.
Please request from LOTT and include any planning level costs that they have developed under this scenario and impacts to LOTT ratepayers in Thurston County.

Although the DEIS states that recent data show an improving trend in some water quality conditions, there is no statement as to why this might be. We fully supported the effort to develop TMDLS for the Deschutes River and Capitol Lake, but we are not aware of any significant effort by the State or by local governments or other entities to implement the approved TMDLS to such an extent that any actual change in water quality would be expected to occur. Most of the impacts to water quality in this basin (in addition to the dam) are the result of upstream nonpoint source pollution activities which are primarily subject only to voluntary improvement programs, with some exception for forestry in the upper reaches of the basin. Other than some improvements in stormwater controls by the cities and county, we are not aware of any regulatory changes to point source pollution sources that would have caused an improvement in water quality in recent years.

The reduction in DIN within the lake compared to the Deschutes River does not indicate that removal of the dam will increase nitrogen loading to Budd Inlet. Plant and algae within the lake uptake nitrogen within the lake as they grow and increase in number, and later decompose and release that same nitrogen to the inlet. The statement in the DEIS appears to assume that that nitrogen is somehow lost or removed with the dam in place, which of course is not the case, although the timing of the release to marine waters may vary. In addition, carbon uptake and release also play a large role in depletion of Budd Inlet dissolved oxygen. Please refer to the WA Dept. of Ecology TMDL and technical reports for a discussion of these.

The DEIS states that water quality in the lake in spring and fall months is improved compared to the rest of the year. Although not stated, this is likely due to increased inflow from the Deschutes River during high flow events during those time periods. In recent years rainfall during our summer months has been decreasing while air temperatures have increased. The DEIS should review and summarize rainfall, streamflow and air and water temperature records.

Please see our comments above on previous sources of point source pollution under ‘water quality conditions”. It is very clear that the historical sources of human and industrial pollution to the estuary and to the lake were very large and were largely untreated until the 1950s. Water quality in the estuary from about 1896 until 1954 was undoubtedly very poor due primarily to those untreated point source discharges along with unrestrained logging and other activities within the basin. Subsequently point sources to the lake were greatly diminished with the passage and implementation of the federal Clean Water Act and State Water Pollution Control Act but have not been totally eliminated - there are still some relatively smaller point sources in the basin, these are primarily construction and stormwater related, although the City of Olympia has made efforts to remove and redirect some stormwater outfalls from the lake to Budd Inlet. Old stormwater outfalls to the lake still exist and are difficult to treat to reduce pollution without extensive reconstruction and installation of treatment modules at a high expense.

‘Good water quality’ consists of more than just a lack of chemicals in the water and appropriate levels of oxygen, pH and temperature that will sustain aquatic life. Under our state’s water quality laws and
standards any addition of deleterious materials in the natural waters of the state can constitute a water quality violation. We urge DES not to discount the terrible effects of excessive algae and aquatic plant growth within the lake to both wildlife and humans.

With increasing temperatures due to climate change and increasing nutrients due to population growth entering both our fresh waters and marine waters, the occurrence of algae blooms and excessive plant growth is ever increasing. This leads to increases in both adverse physical and chemical effects. While many people are concerned with the purported loss of an aesthetic view of the Capitol if the estuary is restored, few seem to regard the current awful conditions of algae and plant growth and decay within the lake with the same level of concern. Modeling by the WA Dept. of Ecology has shown that no amount of dredging to deeper depths within the current lake will overcome the sources of nutrient pollutants causing these cycles of growth and decay. However, restoring the estuary will greatly diminish those cycles within the estuary and lead to improved water quality in Budd Inlet. Many lake management districts exist in our state mainly to remove excessive plant growth in the lakes caused by over enrichment of nutrients. While such removal can result in a temporary depletion of the plants, these efforts are in fact never ending and do not treat the root cause. Removal of the plants is not a solution to the problem - reducing the sources of the pollution and the causes of the plant growth will result in a more sustainable, long-term solution. Restoring the estuary is the largest part of that sustainable, long-term solution in this case, coupled with implementation of the Deschutes River TMDLs.

CHAPTER FIVE--SHORT-TERM IMPACTS AND MITIGATION In general, many statements in this section need to be reviewed by relevant state agencies for their respective jurisdictional issues, particularly the Washington Department of Fish and Wildlife and the Department of Ecology.

Section 5.9.2.1--Archeological Resources While the statements may be true regarding recorded archeological sites, the DEIS should at least recognize the need to consult with the Squaxin Tribe, and the State Department of Archeology and Historic Preservation, throughout the entire project process.

CHAPTER SIX--CUMULATIVE EFFECTS Table 6.5.1 should note that the Deschutes River TMDL has been completed by USEPA. Table 6.5.1 should include implementation of the Deschutes Watershed Restoration and Enhancement plan, completed in April 2021, with a list of projects in Thurston County to offset future exempt wells, and to restore degraded habitat in the Deschutes Watershed. Part of the implementation will include creation of the Deschutes Watershed Council. The hope is that the Council will be authorized and funded in 2022. On p. 6-16, why is the bat colony singled out for potential adverse impacts, and yet there is no discussion of beneficial effects on other bird species.

CHAPTER SEVEN--PLANNING LEVEL COSTS DERT’s sole comment on this chapter, not having been a member of the Funding and Governance Committee, is that the costs for moving forward should be calculated from the status quo ante--more specifically, the state of the river and the estuary before the 1951 construction of the dam that interfered with the natural conditions and processes. That interference has now been compounded into problems that have reached a point that they must be addressed. However, those who benefit from a restoration to natural conditions now should not be required to pay for the future costs of those who have benefited from the unnatural conditions for the
past 70 years. There should also be significant evaluation of the role of the federal government in helping with restoration costs.

Supporting Materials (if any): O-16_Patnude.pdf

Name (ID): Bob Holman (O-17)

Organization (if applicable): CLIPPA

Submission Text: PROJECT VS PROGRAMMATIC EIS For years the community has been divided on the long-term future of the Capitol Lake Basin. One issue on which the community largely agrees, however, is the need to actually begin action in the basin and bring the studies to a close. After spending an estimated $10M on various studies over the past twenty years or so, both the community and the State Legislature are ready for action. This current EI process is the most promising effort to make that happen. However, this EIS is somewhat unusual in that it combines elements of both a 'project EIS' and a 'programmatic EIS". The program elements of the project, and the desired outcomes, have been clearly outlined following a robust stakeholder and community discussion. But, unlike most projects that can then move forward to evaluate the environmental impacts of a single option, this project has three widely different approaches to reach the desired outcomes. Therefore, we have an EIS that must not only evaluate the environmental impacts of all three alternatives, it must additionally provide enough information to evaluate the merits and costs of each alternative so that a preferred alternative can be selected. It is this last requirement of the EIS that the current Draft EIS fails to provide. The Estuary and Hybrid Alternatives, in particular, have been poorly defined leading up to this current effort. This, in part, has led to some of the major deficits in the Draft EIS; namely, significant gaps in understanding the alternatives, incomplete critical data, lack of the use of local experience and expertise and the absence of defined funding sources. Compounding this problem with the Draft EIS is the position of DES as stated in the June 30, 2021 opening letter from William Frare, the SEPA Responsible Official: Neither short-term actions nor a long-term management alternative can be implemented until an EIS is completed and a Preferred Alternative is selected. How can the community's and Legislature's desire for action be met if even short-term actions must wait until a preferred alternative is selected and the final EIS approved? The Draft EIS doesn't call for work to begin until 2028, and that assumes that there are no delays in moving from the draft to final EIS. CLIPA's evaluation of the Draft EIS is that it is inadequate as it stands to provide the necessary information to select a preferred alternative. If this proves to be the case, any action will be further delayed, and further frustrate the community and the Legislature.

PHASED IMPLEMENTATION AND RATIONALE For each of the active alternatives considered in this EIS, all require a dredge of the North Basin as an initial step and a precursor of any work specific to all of the alternatives. Some of the details of this dredging operation vary with the three alternatives, but the basic features include dredging the accumulated sediment from the past 30 plus years, and placing it within the basin form habitat islands. This is essentially a 'maintenance dredge", similar to the last one done in the 1980's and consistent with the historical requirement for DES to maintain this portion of the Capitol Campus. All alternatives will continue to remain viable while this dredging is underway. Why is it necessary to commit to a preferred alternative at this stage? CLIPA suggests that DES modify their process, within the SEPA guidelines, to create a phased implementation that will allow this
'maintenance dredge' to begin promptly. This would be done concurrently with the work necessary to resolve the issues with the Draft Els so it can move forward to a final EIS with a selected alternative. We suggest that the consultant could advise DES and create a brief Project Els for the minimal environmental impacts of the 'maintenance dredge”, similar to the one used during the 1987 dredging operation. DES could then move forward to request funding from the Legislature for this limited work. The concurrent work during this initial phase would essentially be the Supplementary Environmental Review (SEIS), called for in the Draft EIS if substantial issues are raised in the Public Comments for the Draft EIS. This SEIS would include the key findings that CLIPA outlines in the following sections below (including the establishment of funding sources), plus additional items raised by other commenters on the Draft Els that are also determined to be substantial. Additional, thorough analysis for the SEIS may be required for any of these additional comments that are in conflict with those of CLIPA or others, so that all community members feel that they have been heard. Following public review of this SEIS, the recommendation for a preferred alternative would then move forward and DES could request funding from the Legislature for the specific alternative selected. By the time this funding is approved, the 'maintenance dredge” would be well underway. With this proposal to create a phased approach, the project would be better able to 'hit the ground running”, minimizing the overall project timeline. Is DES willing to work, within the SEPA Guidelines and with the Legislature, to make a phased implantation such as this to move the project forward?

To quote from the Executive Summary of the Draft EIS, Page 12: 'As part of the water quality analysis for the Draft EIS, the EIS Project Team evaluated monitoring data from 2004 to 2014 and also collected water quality samples in 2019 to compare current conditions against the historical dataset. Despite what has been perceived to be worsening conditions in Capitol Lake, monitoring data indicate that water quality conditions have actually been improving in the lake and are relatively good in terms of physical and chemical characteristics important to aquatic life. There are only occasional seasonal violations of water quality standards, primarily associated with slight changes in temperature and dissolved oxygen.' And: 'These improving water quality trends reduce the level of management that would be needed under a Managed Lake Alternative to meet lake management objectives.' This improvement in water quality is evidence that adaptive management can work. The City of Olympia and DES have worked to remove many of the sources of contamination, along with others who continue to improve upstream conditions to make Capitol Lake the cleanest in Thurston County. This adaptive management concept must be remembered as we now look to the future of Capitol Lake with respect to control of invasive plants and animal species.

PASSIVE NITROGEN REMOVAL IN CAPITOL LAKE Ecology's primary water initiative in the South Sound and the overall Salish Sea is their study, the Puget Sound Nutrient Reduction Project, which is focused on meeting the dissolved Oxygen (DO) water quality standards by reducing both the human point and non-point sources of excess nutrients. The primary nutrient impacting water quality in Budd Inlet is Nitrogen. The Draft Els failed to consider the natural effect of aquatic plants in removing a substantial portion of the Nitrogen entering Capitol Lake from the Deschutes River flow. On a daily basis in the summertime, this downstream environmental improvement rivals the summer season Nitrogen removal capacity of the LOTT Wastewater Treatment Plant, installed in about 1990 at a cost of more than $50M. The lake's cost-free Nitrogen removal will be lost with the elimination of Capitol Lake and
creation of an estuary. Focusing on LOTT, the primary Nitrogen point source discharge to Budd Inlet, Ecology's upcoming TMDL is likely to require LOTT to make up the difference in Nitrogen removal if the Capitol Lake contribution is lost. However, even with total removal of Nitrogen from their discharge, LOTT will still not be able to compensate for the large amount removed in Capitol Lake. Therefore, the result of dam removal is likely to be a degradation of water quality in Budd Inlet. Doesn't this directly conflict with the project goal of 'Improving Water Quality'? Why isn't the Nitrogen removal aspect of the Managed Lake Alternative recognized as a significant benefit?

Ironically, a confirmation of the ability of aquatic plants to remove nitrogen has been documented by LOTT at their reclaimed water wetland site in Lacey. They found the following when characterizing the incoming and outgoing reclaimed water at the site: 'It is also noted that total nitrogen and nitrate concentrations are decreased through the wetlands. For example, nitrate concentrations in the Class A reclaimed water average 6.6 mg/L over the four events, compared with concentrations in water discharging from the wetland ponds averaging 2.8 mg/L". (Page 44, Wastewater and Reclaimed Water Quality Characterization, (Task 1.3) LOTT Clean Water Alliance Reclaimed Water Infiltration Study Technical Memorandum February 7, 2017.) The DEIS alleges that an estuary would relieve Budd Inlet of DO depletion caused by Capitol Lake. The opposite is true; Lake vegetation, like the LOTT wetland's vegetation, removes nitrogen. An estuary with no comparable nitrogen removal ability would increase the Inlet's Do depletion and could force increased remedial nitrogen removal actions by LOTT at increased costs to ratepayers.' Please review this result with LOTT Technical Staff, and ask them to confirm our conclusions regarding Nitrogen removal in Capitol Lake, and the implication for LOTT if this removal capacity is lost.

SWIMMING IN CAPITOL LAKE NOT CONSIDERED Many in the community have memories of swimming in Capitol Lake (open from 1964 to 1985), and this is often cited as a desirable recreational and socializing opportunity. The Draft EIS recognizes that Capitol Lake now has better water quality than several local swimming areas, such as Black Lake and Long Lake. Obviously, only with the Managed Lake Alternative is this recreational option possible. Intertidal mudflats, or even a marine reflective pond, do not offer the same recreational benefit. DES has rejected consideration of this recreational opportunity, stating: 'Operating formal swimming facilities is not in alignment with the mission of Enterprise Services, and there are no known plans to introduce such services into the agency mission or scope of services.' Because of DES's position, the Draft EIS appears to place no value on the potential for swimming as a component of the Managed Lake Alternative. DES also did not have the mission of providing swimming during the 1960's, 70's and 80's, yet the City of Olympia saw the value to the community, and operated this swimming beach for many years. Ignoring this possibility diminishes one of the key recreational opportunities for the Managed Lake Alternative. In fairness, shouldn't the potential for swimming in Capitol Lake be reconsidered as a significant benefit? And, in general, shouldn't the community's desires be considered as an important element in any issue bearing on the selection of the preferred alternative?

NEW ZEALAND MUD SNAIL (NZMS) EVALUATION The future persistence of the NZMS is a question of key importance in the evaluation of the cost of long-term dredging, both in the freshwater of a Managed Capitol Lake and in the marine waters of an Estuary or Hybrid. Based on the Planning-Level
Cost Estimates recently provided by DES for the Draft EIS, we find some startling information based on the impact of this one question. For the Managed Lake Alternative, the difference in total cost using upland disposal (due to NZMS) versus in-water disposal (without NZMS) is projected to be $243M. For the Estuary Alternative, this same comparison results in a total cost difference of $401M. And for the Hybrid Alternative, $564M. It's apparent that we must bring all possible information to bear on this question if we are going to have any chance of making a valid preferred alternative selection. For this reason, CLIPA has examined the literature, commissioned an independent study, searched all current samples and suggested a variety of options and adaptive management approaches. The most pertinent of this information is presented in the discussion in the section on AQUATIC INVASIVE SPECIES (AND IMPERILED AND NUISANCE SPECIES). The bottom line is, the NZMS is unlikely to persist as a problem, in either freshwater or marine water by the time dredging is anticipated to occur. We have asked that DES resume the exploration of the Capitol Lake Basin immediately for NZMS to provide current data which has been missing for the last five years. We have also asked a number of questions designed to narrow the uncertainty around the NZMS persistence. Again, these critical issues must be thoroughly explored so that an informed decision on the preferred alternative can then be made.

NEXUS WITH FEDERAL CORPS OF ENGINEERS (COE) NOT DEVELOPED COE permitting is not discussed in the Draft EIS. However, the Draft EIS concluded that the Port and COE would need to complete a Turning Basin and Navigation Channel dredge before the Estuary and Hybrid Alternatives could proceed. Therefore, we assume that the Capital Lake and Deschutes Estuary Project/Program has a ‘State/Federal Nexus” and as such the COE is a critical part of the decision process. The Draft EIs does not confirm that the COE has officially been engaged in the review, and their requirements have not been integrated into the EIS process. If the pre-dredge is a prerequisite for the Estuary and Hybrid option, COE involvement and agreement is an essential first step for any dredging work. Shouldn't this discussion be included in the Draft EIS?

The COE also plays an integral part in determining disposal location and the sediment properties that are appropriate for deep-water disposal. This is again an instance of a ‘State/Federal Nexus”, and there is no discussion of this in the Draft EIS. The deep-water disposal criteria may prove to be critical in determining the disposition of up to 500,000 cubic yards of sediment over the next thirty years. Shouldn't this discussion also be included in the Draft EIS?

THE HYBRID ALTERNATIVE HAS A CRITICAL FLAW The development of the Hybrid Alternative was intended to be a compromise that would incorporate many of the most positive elements of the Managed Lake and Estuary Alternatives. In reality, however, the removal of the dam makes the Hybrid just a subset of the Estuary, with the only significant ‘Lake” feature being the addition of a barrier wall in the North Basin to create a reflecting pool. The irony of this proposal is that the imposition of the one-half mile long concrete and sheet pile barrier wall will block the view of the reflecting pool from most of the significant viewpoints along the Deschutes Parkway. Instead of the scenic view across the water to the East shore and Capitol, this industrial-scale barrier will predominate the view. The Draft EIS needs to include simulated views at both high and low tide from the Deschutes Parkway across the North Basin to fully inform the public.
FUNDING SOURCES FOR LONG-TERM DREDGING ARE NOT IDENTIFIED In a heading in one section of Chapter 7, the Draft EIS asks the question: 'What are the recommendations for funding construction & long-term management?' In answer, they provide the following background: 'Under the Estuary and Hybrid Alternatives, the primary focus for long-term funding and governance would be sediment management in impacted areas of West Bay. Recurring maintenance dredging, at a 5- to 6-year frequency, is critical to avoiding and minimizing significant impacts to downstream resources from sediment deposition. A governing body would oversee annual monitoring and ensure that dredging was coordinated across potentially impacted areas of West Bay.' ... Without shared long-term funding and governance, these management actions may not be implemented. In past planning processes, the lack of committed funds in the State of Washington budget was frequently cited as a potential significant obstacle to adequate long-term management of the Capitol Lake - Deschutes Estuary.' Despite the above, the Draft EIS fails to identify how this 'Governing Body' would function, who the beneficiaries would be (i.e., who would be expected to provide the funding) and the basics of the funding plan. Instead of providing this information to help inform the selection of the preferred alternative, the expectation is to select the alternative first, then determine the beneficiaries and develop the plan. Therefore, the Draft EIS is not heeding its own admonition concerning the lack of committed funds as an obstacle to adequate long-term management. And in the case of the Estuary and Hybrid Alternatives there is no option to adaptively manage the situation: once the dam is removed, the sediment will keep coming, and coming, and coming...

COST COMPARISON WITH THE FOURTH AVENUE BRIDGE IGNORED A review of the planning-level cost estimates for the new Fifth Avenue Bridge and Deschutes Parkway realignment reveals that both the Estuary and Hybrid Alternatives assign a cost of just under $40M, escalated to a start date of 2028. Because this is a planning level cost estimate, we don't have a good way to evaluate whether this is a reasonable number or not. However, we do have the costs for a similar 'bridge' right next door, completed in 2004. Granted, the Fourth Avenue Bridge is not an exact comparison, but both bridges span the same waterway, are about 500' in length, and one has the additional element of the elevated Deschutes Parkway approach to the bridge and round-about, while the other has the installation of the round-about itself. Overall, they are certainly similar. For comparison, the actual cost to The City of Olympia for the Fourth Avenue Bridge, with escalation to 2028, is about $87M. A text search of the entire Draft EIS makes no mention of the Fourth Avenue Bridge as a comparative cost to the new bridge. Why was this comparison ignored? This makes the nearly $50M discrepancy between the two bridges suspect, and also raises doubt about the validity of other cost estimates.

ADAPTIVE MANAGEMENT IGNORED FOR LONG-TERM DREDGING PROCEDURES AND COSTS The only long-term dredging event for the Managed Lake Alternative is scheduled at the very end of the 30 year time horizon for the project. This is a major dredging operation, to be sure, but it is not scheduled to take place until about 2050. The Draft EIS states that: **Upland disposal is the only feasible disposal option for material dredged under the Managed Lake Alternative because invasive species are expected to persist in the freshwater environment, at high densities similar to existing conditions.' This is problematic for several reasons. First, the current situation with the NZMS is unknown, because sampling is outdated and current observations show little activity. Second, and described more fully in the Invasive Species section of our comments, is the probability that eradication efforts or natural
attrition will eliminate this as a problem requiring upland disposal of sediment. Third, and described more fully in the Sediment Quality section of our comments, is the likelihood that adaptive management practices will result in procedures to allow deep-water disposal, or land disposal within the watershed that could even allow for beneficial reuse. And the community has 30 years to figure this out. This issue is critically important because of the impact that upland disposal has on the Planning-Level Cost Estimate for the Managed Lake Alternative. Upland disposal, in this case, has been determined in the Draft EIS as requiring trucking to Eastern Washington, 250 miles one-way. The "penalty" assessed for this disposal option compared to deep-water disposal ranges from $200M to $350M, using costs from Table 7.1.1.

OLYMPIA YACHT CLUB DREDGING EXPERIENCE IGNORED The Draft EIS has concluded that all long-term dredged sediment in West Bay for the Estuary and Hybrid Alternatives will likely be clean enough for deep-water disposal at Ketron Island. This has resulted in their determination that the disposal cost will be relatively minor, compared to the cost if the sediments are contaminated and must be sent to upland disposal. The cost difference between these two disposal options is estimated in the Planning-Level Cost Estimates to be $400M for the Estuary Alternative and $564M for the Hybrid Alternative. Therefore, this question of whether the West Bay sediments are contaminated is of critical importance for determining the relative overall costs for the various alternatives. The most recent dredge in West Bay, by the Olympia Yacht Club (OYC) in 2013, included 10,000 cubic yards of sediment that would have been characterized as 'clean' by the stated Draft EIS standards. However, 40 percent of the sediment was determined to be contaminated, and was sent to upland disposal at a cost approximately five times that of the uncontaminated sediment. This real-life experience raises serious questions about the Draft EIS assumptions and resulting cost estimates. We find no information in the Draft EIS that this actual experience was considered in the analysis. Can you explain why this was ignored?

COST IMPLICATIONS BASED ON THE THREE IGNORED ITEMS ABOVE Creating a new analysis for the estimated costs, based on the real-world, actual information that has been ignored in the Draft EIS, would have profound implications for the comparative costs for the three active alternatives. In round numbers, the overall cost for the Managed Lake Alternative would drop by about $260M, while the Estuary Alternative would increase by about $200M and the Hybrid Alternative would increase by about $275M. This would make the Managed Lake the least costly at somewhat less than $200M, while the Estuary would be next at about $450M and the Hybrid the most expensive at about $600M. Can the DES consultants prepare a 'most likely' cost estimate incorporating these ideas? Doesn't this provide a more realistic and defensible comparison of the alternatives?

SIMULATED VIEWS OF THE ESTUARY AND HYBRID ARE INCOMPLETE In addition to evaluating the environmental impacts of the alternatives for the Capitol Lake Basin, one of the key benefits of the Draft EIS presentation is informing the community about the nature of the three active alternatives. An important part of this public information aspect of the EIS are the visual simulations of each alternative from various locations and under varying tidal conditions. The Draft EIS does a good job of providing some of these views, but unfortunately, misses or misrepresents three key views that would provide the community with valuable information. These include: The Northwest end of the North Basin. The removal of the Fifth Avenue dam, construction of a new bridge and the changes to the Deschutes
Parkway will dramatically alter the appearance of the North end of the North Basin. The only visual information presented for this area is a small plan view of the project area. Neither the Executive Summary, or the long and short-term sections of the Draft EIS, provide any simulations of this area. Reading the text description of the area is confusing and leaves many unanswered questions. A simulated view of the Northwest shoreline along the new elevated parkway and including the new bridge would provide the community a clearer picture of the changes. The simulated view would essentially be a 'snapshot' from a couple hundred feet off shore towards the Northwest. This view should be presented as a part of the Executive Summary, as well as in the visual sections of the Draft EIS. The extensive mudflats at low tide. Although there are depictions of the Estuary and Hybrid alternatives at low tide in the long-term visual section, the Executive Summary has only one view of each at mid-tide. Because the critical difference for these alternatives is the creation of an estuary, the depiction at low tide is the key change that the public will observe. This view should be placed prominently in the Executive Summary. The Hybrid barrier wall from Deschutes Parkway. The Hybrid barrier wall is essentially the only physical change from the Estuary Alternative, and it has severe impacts on the appearance of the North Basin from any viewpoint. The most significant viewpoint is to the East from the Deschutes Parkway, due to the barrier wall's obstruction of the reflective pool. This view should also be placed prominently in the Executive Summary.

THE COMMUNITY’S QUALITY OF LIFE HAS BEEN IGNORED Capitol Lake has been described as “the soul of our community”, especially when it was maintained. For decades, it has served as a community attraction for celebrations, outdoor educational displays, boating, swimming (previously), informal sporting events, running, walking and dog walking. Unquestionably, these activities benefit human health, both physical and mental. Social cohesion for individuals and families in and outside the community are facilitated. In contrast to the conditions created by the estuary/mudflat, Capitol Lake has been and will continue to be an enormous contributor to our quality of life with the Managed Lake Alternative.

TOXIC CONTAMINANTS WILL INVADE THE ESTUARY How does dam removal affect the nature of the Capitol Lake Basin? The Draft EIS is silent on one key issue. The emptying and filling of the basin twice each day with the marine waters from Budd Bay will expose the basin to the same toxic contaminants that are now present in the bay. And we know that contaminants tend to be higher at the terminal end of estuaries. This invasion will change the character of the basin from a freshwater lake with relatively good water quality to an intertidal mudflat with Thurston County warning signs to avoid contact due to toxic contaminants and entrapment hazards. In addition to the public health hazards, fish and wildlife could be impacted, and many in the community will find the aesthetics and recreation potential diminished. These issues are explored more fully in the Specific Comments sections for Fish and Wildlife, Recreation and Aesthetics.

First, the evaluation of the alternatives in these sections suffers from the 'best case/worst case' problems that we have addressed in other comments, particularly in the sediment related sections. In brief, we find that when considering the Managed Lake alternative, the ‘worst case’ is assumed as most likely and opportunities for adaptive management are minimized. However, for the Estuary and Hybrid
alternatives, the 'best case' is assumed as most likely and potential problems are reduced to footnotes or ignored.

Second, for both the construction and transportation issues, the fundamental difference in magnitude between the Managed Lake alternative and the Estuary alternatives is not sufficiently recognized. We see this as 'allowing the trivial to obscure the obvious' and will explain this deficiency later.

Third, costs for the major elements of each alternative are not addressed in the EIS draft or the relevant discipline reports. Repeated questioning has resulted in the statement by the consultants that these costs will be developed after the preferred alternative is selected and are not available at this stage in the project. However, prominent tables in the Draft EIS and the Executive Summary have identified a range of costs for each alternative for 'Design, Permitting & Construction Costs' (Table 7.1.1) and 'Construction Costs' (Table ES.4). Where did these cost ranges come from?

Fourth, we fear that the terms that characterize the various impacts and benefits, if not properly assigned, will be used as a rating tool that unfairly influences the selection of the preferred alternative. For this reason, we will highlight several questionable rating instances in our following comments.

And finally, we have several questions regarding the viability of the proposed construction elements and sequencing for the Estuary and Hybrid alternatives.

Details and Examples: The 'best case/worst case' issue identified in the first bulleted comment is sometimes subtle, and sometimes blatant. The following is one of the more egregious examples in the construction and transportation categories. The proposed schedules for the alternatives (Figures 2.4.1, 2.4.2 and 2.4.3) appear to unnecessarily extend the Managed Lake schedule, while compressing the Estuary and Hybrid schedules. This results in making the alternatives appear to be similar in duration, rather than acknowledging that the Estuary and Hybrid alternatives are likely to take roughly twice as long to complete, due to the sequential nature of the work and the substantially increased duration for the construction of the new bridge, roadways and barrier wall. Specifically, for the Managed Lake alternative, the dredging and material placement begins in the middle of the first year and extends for four and one-half years, to the end of year five. However, the habitat island construction is shown to be complete by the end of year four, and yet the dredging extends a full year after the habitat islands are in place. The pedestrian bridge is scheduled at the end of the project, but could easily be moved earlier. It appears that the overall project completion could be a year earlier than shown. For the Estuary alternative, the same start time for the dredging is used, but completion extends further; several months into year six. This is to be expected due to the increased volume of material dredged, and the need to move a portion of it upland for disposal. However, unlike the Fifth Avenue dam overhaul, which can be done independent of the dredging, many of the major construction elements for the Estuary alternative must be done sequentially; only after the dredging is complete. These construction elements include the placement of the coffer dams, excavation of the isthmus, removal of the Fifth Avenue dam and construction of the new bridge and approaches; most of which must be done during the in-water work window. Despite this, these construction elements are shown to begin slightly less than two years into the nearly five-year dredge period. Further, the schedule shows all construction work complete just fifteen months after the end of dredging. It appears highly unlikely that the completion date in the
middle of year seven can be met, and will likely be one or two years longer. Thus, for the Draft Els estimates, which suffer from our ‘best case/worst case' concerns, the overall durations of the Managed Lake and Estuary alternatives are five and seven years, respectively. The more likely durations are closer to four years for the Managed Lake and eight to nine years for the Estuary. Please reevaluate Figures 2.4.1, 2.4.2, and 2.4.3, and make adjustments consistent with our estimates or explain why our analysis is incorrect.

We now examine (second bullet) the magnitude of the alternatives during the 'construction “ period, which encompasses roughly the first 6 to 8 years and includes the design, permitting, predredging and all construction activities. At first look, the three active alternatives appear to be somewhat similar in scope, as shown in Table 7.1.1. Using the average of the high and low estimates, the Managed Lake comes in at $125M, with the Estuary at $183M and the Hybrid at $248M. We will consider the accuracy of these costs later, but for now, they all seem to be in the same 'ballpark'. But looking a little closer, we see that all three alternatives have several common elements, which would all be done regardless of the selection of the preferred alternative. Because we have no information available for the individual cost elements (more on this later), in order to compare the true differences, we can resort to a simple description of the unique elements for each alternative. Removing the common elements, we find:

Managed Lake: Dam Refurbishing Jet grouting and buttressing the earthen dam Estuary: Permitting and Design for new bridge and roadways Property acquisition Permitting for dam removal and excavation Replacement of Capitol Lake culverts & sealing concrete Installation and later removal of two coffer dams Dam and Fifth Avenue removal and excavation for 500' opening Construction of new 500' Fifth Avenue bridge Construction of roadway connections to/from the new bridge Armoring at Fourth Ave bridge, RR Bridge, Interstate 5 Bridge Slope stabilization along Deschutes Parkway (West side of new estuary) All Estuary elements plus Permitting and design for 2600-foot barrier wall Installation of barrier wall Hybrid

It is now apparent that we are looking at three substantially different projects when the common ents are removed. For the Managed Lake alternative, we have a relatively small maintenance project, involving a small crew and minimal equipment, and estimated to take about seven weeks to complete. For the Estuary alternative, we have a major Civil Engineering Bridge and Roadway project, rivaling the largest projects seen in the Downtown Olympia Area since the replacement of the Fourth Avenue Bridge 20 years ago or the original dam installation in 1951. The project is estimated to take 5.5 years to complete. And the Hybrid adds yet another major component and additional time to the project. This fundamental difference in scope among the three projects is not apparent when reading the Executive Summary or even digging deeper into the draft document. Please make additions throughout the Draft EIS so that it is crystal clear to the public what each alternative entails. Do not let this ‘false equivalency' persist. The addition of the common elements to the tables obscures the fact that they could all be completed as a preliminary stand-alone project that would still retain the ability to pursue any of the three alternatives. Also of importance here is that most all the common elements must be done before the bulk of the construction begins. Perhaps a little 'outside the box' thinking could be of value here?

Our last comment for this section relates to our issue of 'allowing the trivial to obscure the obvious'. We are told that it is premature to provide even basic cost information for the various key elements for each alternative; information that would help the reader understand the true nature of the project
differences. At the same time, in both the construction and transportation sections, we find page after page of details regarding street networks, parking issues, transit issues, construction worker trips, street capacity and so forth. If we are truly at the conception stage, then the 12 pages in section 4 and the 23 pages in section 5, meet the criteria of obscuring what otherwise could and should be obvious.

The third bulleted comment follows up on some of the issues previously raised. Looking at table 7.1.1, someone had to determine these cost numbers and place them in the table. How was this done? Even if they were educated estimates, or even guesses, someone provided them and this should be disclosed. And to do this, the estimator would need to at least be able to provide a breakdown of the major elements that add up to the totals. For example, the Managed Lake alternative consists of several disparate elements, including dredging, constructing pedestrian walkways, building a boat launch facility and refurbishing the dam and Fifth Avenue bridge. The only one of these elements that is unique to the Managed Lake alternative is refurbishing the dam and Fifth Avenue bridge. The other elements are common to all the alternatives. Each of these discrete elements must have also been estimated to be able to develop the total cost of $89M to $160M. Therefore, the cost for refurbishing the dam and Fifth Avenue bridge should be available. Likewise for the other alternatives, the cost elements unique to each alternative should be available, even if only in the aggregate. Comparison of these unique costs for each alternative is a critical way to evaluate the alternatives, and is actually much more instructive than the overall estimated construction costs in the tables. For these reasons, we request that the Draft EIS Tables ES.4 and 7.1.1 be amended to include a column that provides these unique costs for each alternative. References to these tables in the text of the Draft EIS will also need to be amended. If you are unable or unwilling to do this, then we recommend that the Estimated Construction Cost column be eliminated. For different reasons, in previous comments for the long-term dredging chapter, we have recommended elimination of the two other cost columns in these tables. Thus, if you are not able to add the requested unique cost information, we are essentially requesting the elimination these tables in their entirety, throughout the entire Draft EIS. In short, what we are advocating for is that no cost information is better than incomplete, unsupported, potentially inaccurate and misleading cost information. Now, we have complained about this inability to obtain the cost estimates for the major elements, in particular to allow us to evaluate the relative costs of the unique parts of each alternative. But by making a few assumptions based on the comments above, we may have a way to help our understanding. We will use the average costs mentioned previously and look at the Managed Lake alternative first. Looking at the scope of the dam refurbishing and Fifth Avenue repairs, it seems reasonable to assume that these costs will be a very small part of the total $125M construction cost, perhaps one to three percent. Therefore, the balance, somewhere near $120M, is the cost of the common elements. If we now look at the average Estuary cost of $183M and subtract the common element costs that we just estimated, we are left with the remaining unique construction costs for the Estuary alternative at about $63M. Moving to the unique Hybrid alternative cost, in this case relative to the Estuary alternative, they are easier to calculate. Because every element is the same except for the barrier wall, we simply subtract the two construction cost amounts, and find the barrier wall costs to be $65M, which coincidentally, is about the same as all the Estuary alternative unique costs. If the above assumptions and calculations are anywhere near correct, the questions that now must be answered is: do the Draft EIS tables of construction costs meet the sanity test? Can the volume of work necessary to complete the Estuary alternative be done for $63M? (seems low relative to the costs for replacement of the Fourth Avenue bridge about 20 years ago)
Will the Hybrid barrier wall require an additional $65M to complete? Is it time to reconsider the inclusion of any cost data in the Draft EIs at this stage of the project?

For the fourth bulleted comment, we have several examples of questionable ratings of impacts and benefits. In Section 4.12.5 and in subsequent tables, a Substantial Transportation Benefit is claimed for the Estuary and Hybrid alternatives based on the addition of a new bridge and associated roadways. This may very well be a benefit for the City of Olympia’s infrastructure; however, this should not be considered a benefit for this project. Rather, it is a burden for the Estuary and Hybrid alternatives, required in order to facilitate the opening of the waterway to allow tidal flows. The bridge/roadway does not advance any of the four stated project goals. Therefore, we request that this benefit be deleted from any tabulation of impacts and benefits used to rate the relative merits of the alternatives.

In Section 5.12 Transportation Construction Impacts, all active alternatives are rated the same; as having significant unavoidable impacts. These impacts come from the closure of Fifth Avenue and the bridge. Although the logic for the specific impact may be reasonable for each alternative; from an overall perspective, equating a 7-week potential interruption as having the same impact as a 5.5-year complete road removal, has little credibility. This could also be described as a ‘false equivalence’. For the rating system to have any validity, it must be able to discriminate between these two widely different time periods. Please correct these transportation construction impacts to reflect the widely different impacts. Now, we could make this same type of comment regarding many other impacts, such as transit impacts, development of CTMP and Traffic Control Plans, the impact on Downstream Economic Activity and Downtown Development, and so forth. You get the idea. One of the major requirements of this Draft EIS is to compare and contrast the alternatives. Again, and particularly for the construction and transportation impacts for these two widely different alternatives, the methodologies must be able to discriminate effectively. We recommend that this system of characterizing the benefits and impacts throughout the document be reviewed and modified to more effectively reflect the true nature of the alternatives. Lacking this, we strongly request that you not use any of these characterizations to create numerical ratings or otherwise influence the selection of a preferred alternative.

As stated in the fifth bulleted comment, we have several construction related questions and comments from Chapter 2, section 2.4. Refer to Figure 2.4.4 and related text. An area of shoreline restoration is shown under the new bridge and within the 500-foot opening. Please correct.

The roadway connection from the roundabout to the Deschutes Parkway is described as being built using an MSE retaining wall structure, rather than an elevated structure. Because the bridge is an elevated structure and ties into this roadway near the elevation of the roundabout, where is the transition from the elevated structure to the MSE retaining wall structure? This West end of the project is difficult to visualize. Please provide an elevation drawing to aid in understanding how this fits together. Better yet, could you also provide a visual simulation of the bridge and roadway connection looking Northwest from a couple hundred feet offshore, similar to those provided across the North Basin from the Law Enforcement Memorial? In the visualizations across the North Basin for the various alternatives, the bridge and roadways are so far away that they can not be distinguished, one from another.
On the sides of the 500-foot opening, no transition from the bottom of the waterway to 'street' elevation is shown. Are the sides of the opening vertical walls or do they slope, and if they slope, at what angle? Is it possible that the bridge will need to be longer than 500 feet to accommodate the slope?

What waterway depth is assumed to accommodate the current and projected tidal range? Will the bottom of the waterway ever be completely exposed?

The intersection of the Fifth Avenue bridge and the roadway from the roundabout to the Deschutes Parkway is essentially a 'tee'. How will traffic be controlled at this intersection?

Parcel boundaries should also be shown on the East side of the waterway, as it appears that some will be impacted by the project. Please add these parcels to Figure 2.4.4, the related text and your analysis.

Is the overall design and specific detail for the new Fifth Avenue bridge consistent with the existing Fourth Avenue bridge? Are the relative elevations similar? Has this been reviewed with the City of Olympia?

For the Hybrid Alternative, The Draft EIS assumes the reflective basin will be filled using marine water from the estuary at high tide, but also discusses as an alternate, using freshwater. What is the source of this freshwater? If it is groundwater, have existing water rights been considered? What infrastructure is assumed for providing and treating this freshwater? Have these costs been included in the analysis?

**UPDATED COMMENTS BASED ON ADDITIONAL COST DATA PROVIDED ON AUGUST 9, 2021**

Now that we have the planning level cost estimates for each of the alternatives, some of our questions have been addressed, but the new information has also raised additional concerns. Because our original Draft EIs comments were nearly complete prior to receiving the new information, we are continuing to provide these original comments so that you can see the progression of our concerns. Our comments will focus on two types of costs as detailed in your new documents. The first are the direct costs for each item; and the second are the 'fully loaded costs', or total costs, when all the indirect costs, escalation to 2028, contingency, soft costs and engineering and permitting are included. The ratio of total costs to direct costs varies slightly with each alternative (from 2.65 to 2.81) but for simplicity, we will assume that the total cost contribution from each individual direct cost can be obtained by multiplying the direct cost by 2.75.

Looking first at the Managed Lake Alternative, we have several concerns and questions. How is it possible to spend nearly $5.7M in total cost for the dam overhaul (including mob/demob) in an estimated seven weeks? This is the first time we have seen a revetment called out for the project. Apparently, this is the rip rap required along about 400' of the West Bay side of the earthen dam. The total cost of this is shown as more than $6.5M and includes 37,500 tons of rock. That seems like a lot of rock in a small space. It is not clear what is at risk that is being protected by this revetment. We are also spending more than $4.5M for jet grouting of the earthen dam for additional earthquake protection. Is this necessary? To provide context, we can look specifically at the damage caused by the Nisqually Earthquake in 2001. The Fourth Avenue Bridge and the Deschutes Parkway were heavily damaged and required repair/replacement. No significant damage occurred to the Fifth Avenue roadway, the dam or the...
earthen dam that is adjacent. Of note is the fact that repairs to the Deschutes Parkway, totaling $5M, excluded earthquake protection due to the estimated additional cost of $9-11M. Apparently, the decision makers at that time determined that the risk of future damage was not significant enough to justify the additional expenditure. Yet, for this Managed Lake project, an additional $11M is being allocated for protection of the 400' earthen dam, which has been unaffected for the past 70 years of tidal action, and several earthquakes. Are either or both of these really necessary? Please justify why we can spend more than $11M to protect this 400' barrier. Although we are not suggesting it, would it be less expensive to install a sheet pile and concrete barrier wall similar to the Hybrid alternative barrier? (Note: on a per foot unit basis, the Hybrid wall total costs are about $6M for 400'.) There is also another inconsistency here, when comparing this earthen dam slope protection with the scour protection needed for Interstate 5, the RR Bridge, the Deschutes Parkway Bridge, the Fourth Avenue Bridge and the new Fifth Avenue Bridge. For the Estuary and Hybrid alternatives, the scour protection called out is for 2000 tons of rock, at a total cost of $300K. Not much compared to the $6.5M for the revetment. Also for reference, the entire Deschutes Parkway slope stabilization, over about 1.6 miles in the North and Mid basins, is estimated to cost slightly more than $1M. Please explain these cost inconsistencies that appear to favor the Estuary and Hybrid alternatives. Although not a significant cost item at $60K, why does an epoxy coating need to be applied to the Arc of Statehood for this freshwater alternative? It is not called out for the case that the Hybrid reflective pond is freshwater; only if it is marine water.

Moving to the Estuary Alternative, the cost of the new Fifth Avenue bridge and Deschutes Parkway reconfiguration are of most concern. The bridge direct cost is a single line item at more than $111M. No further detail is provided. Combining this cost with the parkway and bridge mob/demob and the parkway reconfiguration, the total costs for ‘the bridge” are just under $40M. Because this is a planning level cost estimate, we don't have a good way to evaluate whether this is a reasonable number or not. However, we do have the costs for a similar 'bridge' right next door. Granted, it's not an exact comparison, but both bridges span the same waterway, are about 500' in length, and one has the additional element of the Deschutes Parkway elevated approach to the bridge and round-about, while the other has the installation of the round-about itself. Overall, they are certainly similar. The design of the Fourth Avenue bridge underwent significant public comment, before the current design was accepted. It is logical to assume that the public would desire a similar design for the new Fifth Avenue bridge. Has this been taken into consideration in the basic design of the new bridge? Has the City of Olympia been consulted on this design? Are they in agreement that the design meets their expectations? Now, have you compared the final cost of the Fourth Avenue bridge with the estimated cost of the new Fifth Avenue bridge? We have found no information about this in the Draft EIS or the additional information on planning level cost estimates. Wouldn't this be an appropriate check on the accuracy of the consultant's estimate; what we sometimes call a sanity check? Lacking this information, we checked with the City of Olympia and found that the final cost of the Fourth Ave Bridge project in 2004 was about $38M. Using your consultant's annual escalation of 3.5 percent, the comparative cost in 2028 would be about $87M, or more than twice the Fifth Avenue Bridge estimate. How do you account for this discrepancy? We're looking at a nearly $50M difference with the actual current construction cost of the Fourth Avenue Bridge. For the Hybrid Alternative, the same comments apply as for the Estuary.
There is one additional discrepancy, however. On item 4, for the Fifth Avenue Dam demolition, the line-item cost for the Hybrid is $881,110, while the similar line-item for the Estuary is $2,232,836. All other line-items in item 4 are the same. Why are these amounts different? Does this difference translate to the final analysis for the Grand Total? If so, the total cost for the Hybrid is undercounted by about $3.7M.

We now come back to one final, rhetorical, question. Why does it appear that the Managed Lake costs are inflated (revetment, jet grouting, dam overhaul, epoxy coating), while the Estuary and Hybrid costs are low-balled (bridge, parkway stabilization, scour protection)? Considering our comments, a case can be made that the total costs for the Managed Lake Alternative could be from $8-15M less (using your +35%/-25% range), while the Estuary and Hybrid Alternatives could be from $40-70M more. We have also noted this bias in other areas of the Draft EIS and have characterized it as 'best case/worst case' or 'false equivalence'. This consistent pattern needs to be addressed and corrected if the Draft EIS is to be considered as an impartial document.

SEDIMENT QUALITY Our primary comment for this section is to provide an example of how inconsistency or bias in an underlying document such as this discipline report, intentional or non-intentional, can lead to a major misrepresentation as the information passes forward to the main report and on to the Executive Summary this Sediment Quality Discipline Report, the concl presented regarding quality of sediments are said be the most likely outcome for each alternative, but this approach does not provide a full analysis of other possible outcomes. For example, for the Managed Lake Alternative, this discipline report assumes that the long-term maintenance dredge material from Capitol Lake will require upland disposal by truck due to the presence of NZMS. This 'worst-case' conclusion does not allow for the possibility that NZMS populations may decrease over time, that their impact will be deemed insignificant or that adaptive management techniques or BMPs may mitigate the problem. Also, what recent research indicates that NMZS, dumped in deep salt water with dredge spoils, poses a risk of infestation of adjacent shores? If there is no such research, this should be acknowledged. If NZMS are not a problem, could dredge spoils from the North Basin be pumped under Fifth Avenue or through the dam structure to a waiting barge in West Bay for deep water disposal? Also, this single-minded approach that trucking will always be required, does not allow for the possibility that efficiencies and economy of scale will reduce costs over the next 20 to 30 years. Some questions come to mind.

With regard to hauling dredged sediment away from the Lake, why is the impact on traffic said to be 'significant' if it only occurs for a few months, once every 20 years? With regard to hauling dredged sediment away from the Lake, why is the impact on traffic said to be 'unavoidable' if it can be done using railroad cars? (The Deschutes Parkway railroad crossing could be left open while cars on the railroad bridge are loaded)

These questions are particularly relevant for this long-term dredging operation, as it is not scheduled to occur for nearly 30 years, until about 2050, which coincidentally is the project time horizon (per comment on page 7-3 of the main EIS document). Incidentally, this 2050 time horizon was selected because to predict events beyond that time would be too speculative. Isn't it also reasonable to consider that this long-term dredging event might also fall into the speculative category? On the other hand, for the Estuary and Hybrid Alternatives, this discipline report assumes that the long-term maintenance dredge material, occurring on a 5-6-year cycle from West Bay, does not require upland disposal. This
'best-case' conclusion assumes that NZMS will not be present in marine waters and sediment mixing from over dredging or upward migration of contaminants will not require any upland disposal. To be fair, this discipline report and Chapter 7 do provide some narrative regarding other options. The problem comes when the conclusions are used to create cost estimates for the project alternatives. In Table 7.1.1 of the main Els document, some other options are noted as footnotes (which by the way, are mis-numbered and confusing - please correct). And by the time the information passes to the Executive Summary in Table ES.4, the footnotes are gone. So, with this background, what would table ES4 or Table 7.1.1 look like if, by 2050, the long term dredged material for the Managed Lake Alternative qualified for deep-water disposal, similar to the Estuary alternative? Because the total amount dredged for all alternatives is based on the amount deposited by the Deschutes River over this 30-year period, the Managed Lake costs would be essentially the same as those for the Estuary Alternative, i.e., between $48M and $101M. In this case, if the conclusions regarding the quality of the sediments are reversed, the swing in overall project costs is between $200M and $345M. Conversely, what would the table look like if the long term dredged material from the Estuary Alternative did not qualify for deep-water disposal? Per the footnote for Table 7.1.1, the Estuary Alternative would increase to between $367M and $660M. In this case, if the conclusions regarding the quality of the sediments are reversed, the swing in overall project costs is between $319M and $558M. Considering the magnitude of the potential cost swings (up to one-half billion dollars) based on speculative and questionable assumptions, why aren't the Planning-Level Cost Estimates expanded to include at least the 'best case' for all alternatives and the 'worst case' for all alternatives?

Due to our concerns with this apparent bias and the lack of any nuance in the tabled long term cost presentation, we attempted to examine the Draft Els to help us understand and better evaluate the relative sediment disposal costs used to establish the tabled ranges. Because we have been given the relative amounts for dredging each alternative, having the unit costs for the alternative disposal options would provide a check on the tabled ranges. Additionally, we have current unit cost information from actual current dredging operations by the Olympia Yacht Club to verify the Draft EIS numbers. Unfortunately, we were unable to find any information on the unit costs for the various dredging scenarios. Repeated questioning at the review meetings and open house options with the consultant likewise resulted in no unit cost information. Without this, we were unable to verify the cost figures in Tables ES4 and 7.1.1, or compare them with actual current disposal costs. Further, we do not understand how the costs presented in the tables could be developed without assuming unit costs, and are left with a lack of confidence in the basis for these numbers. Please correct this deficiency or explain how the cost tables were created. Considering all the preceding issues, we have reached the following conclusions and recommendations: The extremely large magnitude of these potential cost swings, the range of possible alternate disposal techniques developed through adaptive management, the fact that these costs are dependent on projections 30 years in the future, the lack of demonstrated support for the costs and the potential impact of unknown outside influences in the future, makes the long-term costs estimates for tables ES4 or Table 7.1.1 virtually meaningless, and certainly indefensible. We recommend that the Table 7.1.1 be modified to eliminate the third column for 30-year maintenance costs and the fourth column for construction +30-year maintenance dredging totals. This would leave the second column, which includes design, permitting and construction costs. We will also have comments regarding these second-column costs, but because of their short-term nature, they are more defensible...
and provide the public with a clearer picture of the cost impact for the various alternatives. We also recommend similar changes to Table ES-4 in the Executive Summary.

We recommend revisions to the qualitative discussions in the Sediment Quality Discipline Report, Chapter 7 and the Executive Summary for consistency regarding our ‘worst case/best case’ comments, and with emphasis on the high probability that the dredge for the Managed Lake alternative in 2050 will not incur the high costs associated with upland disposal by truck.

The next comment for this section concerns the characterization of West Bay sediments as having Substantial Beneficial Effects, as described in Table E-2 of the Sediment Quality Discipline Report. This table states that ‘Minor to Substantial Beneficial Effects on natural recovery of contaminated sediments in West Bay that varies with level of existing contamination and deposition rate for the Estuary Alternative. This is a mis-characterization that gives the Estuary and Hybrid alternatives an undeserved advantage. First, there will be no ‘natural recovery of contaminated sediments” as all dredging for this long-term maintenance dredge is planned to be in sediment levels above the legacy contaminated sediments. All existing contaminated sediments will remain; there will be no recovery. Otherwise, this maintenance dredging would not qualify for deep water disposal, as concluded elsewhere in this section. Second, the case for Substantial Beneficial Effects is also advanced for the Estuary and Hybrid alternatives because the contaminated sediments will be covered by the relatively clean sediments from future deposition, particularly in the southeast, east, and northwest portions of West Bay where contamination is highest. How can this be a ‘Substantial Beneficial Effect’ if the contamination is not removed, but simply buried under the new sediments? Perhaps it could be characterized as a minor beneficial effect, but stating it to be substantial is a mischaracterization. Further, if we were looking at sediment deposition, similar to that in Capitol Lake, it might be reasonable to assume a minor beneficial effect due to layering of sediments. The layering of lake sediments might be more effective in the lake due to the one-way flowrate South to North and the relatively slow-moving currents in the wide basin. However, in West Bay, with the estuary, we have twice daily tidal flow in both directions, at times with relatively high velocity creating turbulence. And the nature of the largest sediment transporting events, which occur a couple times each winter during extreme Deschutes River flooding, would create additional turbulence. Therefore, the potential for sediment mixing is much greater here, and combined with the potential for upward migration of contaminants, raises questions of even the characterization of a minor beneficial effect. Considering this potential mixing of contaminated and clean sediments, how can a ‘substantial beneficial effect be determined? Also, in the Port area, the theory that the relatively clean new sediments will overlay the contaminated sediments and future dredging will only encounter clean material, is even more tenuous. We were reminded, in reviewing with the Port, that they service many extremely large vessels in the turning basin and along the Port docks. They describe the prop wash from these vessels and the tugs that position them as creating 'a big mixing bowl” which disrupts the stratification that might otherwise occur. Have you considered this Port experience in the analysis? Further supporting these comments is the experience of the most recent dredging operation, in the West Bay area, by the Olympia Yacht Club (OYC). Their dredge took place above the z-layer, with sediments that would be characterized as “clean” by your sediment quality conclusions. Yet, 40 percent of this 10,000 cubic yard dredge did not meet deep water disposal requirements due to contamination and were disposed upland at a cost approximately five times more than deep water disposal ($145 per cu
yd versus $30 per cu yd). This dredging experience also lends credence to our issues regarding the presentation of cost projections discussed in the earlier comment for this section. Why wasn't this OYC dredging experience taken into account in the analysis? For these reasons, we ask that the sections of Table E-2 for the Estuary and Hybrid Alternatives be changed to 'No adverse impacts' or 'Minor Beneficial Effects on natural recovery of contaminated sediments in West Bay that varies with level of existing contamination and deposition rate'.

Our third comment for this section relates to an apparent inconsistency in the Sediment Quality Discipline Report between the text on Page 2 (paragraph 3) and Tables E-1 and E-2. The text identifies a 'minor beneficial effect' based on the reduction of high sulfides in the sediments in Capitol Lake. However, for all alternatives in Table E-1 and the Managed Lake alternative in Table E-2, the impact finding was 'No adverse impacts'. Please explain or correct this inconsistency.

UPDATED COMMENTS BASED ON ADDITIONAL COST DATA PROVIDED ON AUGUST 9, 2021 Now that we have the planning level cost estimates for maintenance dredging for each of the alternatives, the new information has raised additional concerns. Because our original Draft EIS comments were nearly complete prior to receiving the new information, we are continuing to provide these original comments so that you can see the progression of our concerns. First, it should be noted that the headings on the Page 1 table 'High Level Summary' are mislabeled. Please correct. We were surprised to see that the consultant had developed detailed maintenance dredging cost estimates for the Estuary and Hybrid alternatives for Upland Disposal. Our basic question is, why wasn't this information provided or at least summarized in the Draft EIS and Executive Summary? (Other than in an obscure, mis-labeled footnote) We also noted that In-water disposal for the Managed Lake Alternative was not even a consideration, and labeled Not Applicable in the table. This is not surprising based on the Draft EIS statement in Chapter 7, on Page 7.4: 'Upland disposal is the only feasible disposal option for material dredged under the Managed Lake Alternative because invasive species are expected to persist in the freshwater environment, at high densities similar to existing conditions.

Are NZMS expected to persist for 30 years? Are existing densities high? What evidence supports these conclusions? We have explained in detail in our earlier comments why it is unlikely that the NZMS will be present, or a significant factor when the time for the long-term dredge is required; or if it is still present, how adaptive management could be used to greatly reduce the cost. Apparently, these ideas were not even considered in the Draft EIS analysis. In fact, instead of considering disposal within the watershed, or dewatering on site and NZMS desiccation, followed by disposal locally or marketing as a soil amendment, the Draft Els projected that the entire 472,000 cu yd would be transported 250 miles one-way to the Roosevelt Regional Landfill in Eastern Washington. Do none of these ideas rise to the level of being a 'feasible disposal option'? Should the author of the Not Applicable designation for in-water disposal of sediment 30 years from now have their crystal ball license revoked? Why did the Draft Els fail to consider any options other than this $250 to $450M disposal option? Do the authors of this Draft Els have so little confidence in DES, their consultants, other State Agencies, local Universities, community organizations (such as CLIPA), and the community at large to research, adaptively manage and creatively analyze this issue, over the next 30 years? If, after reviewing all the comments submitted for this Draft EIS, none are found to be substantial enough to require a Supplementary Environmental
Review, then isn't this issue alone sufficient to require such a review? We would find it incomprehensible that this Draft EIS could move to a final EIS without additional analysis. At a minimum, this analysis is necessary to recognize the high probability that the dredge for the Managed Lake alternative in 2050 will be substantially less in cost. Upland disposal in Eastern Washington by truck is a 'worst case' scenario that unrealistically burdens the Managed Lake Alternative by as much as $350M.

HYDRODYNAMICS AND SEDIMENT TRANSPORT Our first comment is one you have heard before, regarding flooding events for the various alternatives. After review of Chapter 4, we have concluded that there is not sufficient recognition of the value of current dam operating procedures in limiting high water (i.e., flooding) in areas adjacent to Capitol Lake. To briefly review our past comments, this flooding protection is accomplished by lowering the lake level and utilizing its storage capacity in anticipation of high river flows that would otherwise overflow the Arc of Statehood wall and any other low points around the lake. Please note that in Chapter 2, page 2-17, in the section describing sediment management, the following is stated: Within the 30-year project time horizon, the Capitol Lake Basin would still provide flood storage capacity, given project rates of sediment deposition and because flood storage capacity is largely controlled by early release of lake water through the 5th Avenue Dam. After searching in the Chapter 4 Hydrodynamics and Sediment Transport Discipline report, we were able to find only one reference to this procedure after reading through 44 pages in the Existing Conditions section and a second comment at page 90 in the Modeling Assumptions and Limitations. However, in Chapter 4, page 4.4, this flooding protection procedure is deemed to be insufficiently robust to remove the risk of flooding in every case, because the dam operations have the potential for failure. As a result, throughout Chapter 4, it is assumed that this procedure will not be used and therefore flooding will be more extreme in the Managed Lake alternative. Keeping in mind that a significant element of the Managed Lake alternative is refurbishing the Fifth Avenue Dam, we do not believe it is appropriate to reject this operating procedure, which has been effective in the past, and should be even more reliable in the future. The Lake Alternative should not be penalized 100 percent of the time due to the remote possibility of a mechanical failure. Although this Draft EIS does not provide sufficient detail regarding the dam refurbishment, it seems reasonable to conclude that spending nearly $5.7M in total cost for the dam overhaul for this work would include any necessary improvements in reliability and redundancies to essentially eliminate or greatly reduce the risk of failure. And after all, the name of this alternative is the Managed Lake Alternative, and using the lake for flood storage capacity is the essence of adaptive management. Why does the Draft EIS, and public statements by the EIS contractor (Daily Olympian August 1, 2021), continue to promote the idea that flooding due to the lake alternative is more severe than the other alternatives, and fail to recognize the obvious benefit of this long-standing procedure? How will removal of the dam (with its ability to mitigate downtown flooding by coincident high tides and heavy rainfall) be replaced by equivalent flood control capacity in the Estuary and Hybrid Alternatives? To correct this deficiency in the Chapter 4 analysis; Key Findings on Page 4-2, the text on the following pages and Figure 4.1.1 all require revision. Further, it would also be accurate and appropriate to state that under all high tide/high Deschutes flow conditions, the Managed Lake Alternative provides more protection from flooding than either the Estuary or Hybrid Alternatives, and sea level rise will make high tide flooding more severe and frequent. Appropriate corrections are also required for the Chapter 4 Executive Summary and in section 4.8 Land Use, Shorelines, & Recreation (Key Findings and 4.8.4.1).
Our second comment for this section is to ask for more information to allow the public to better understand the maximum velocity of the water through the new 500-foot opening for the Estuary and Hybrid Alternatives. This is important to help evaluate boating and other recreation opportunities throughout the tidal cycle. The consultant has provided substantial information on maximum depth-averaged velocity, but it is not clear how this relates to the surface velocity, which is probably most important to the public. Tables 4-22 and 4-23 show the maximum velocity through the 500-foot opening (observation point NB06) under two extreme scenarios as 1.36 and 0.79 meters per second. Conflicting with these numbers is Table 4-26, which shows 2.2 and 0.5 meters per second for the same scenarios. Here is where we have a problem. In the fall of 2006, the consultants for the CLAMP study used an earlier version of the Delft3D computer model to perform a similar 'Hydrodynamics and sediment Transport Modeling Report'. General Administration, now DES, provided Fact Sheets for the public to help understand the findings from this feasibility study. In CLAMP Fact Sheet #4, they stated: '...the restriction points of 5th Avenue, Burlington Northern Santa Fe railroad trestle, and interstate 5 would need to be reinforced to resist scour during flood or extreme tidal events. At those times, velocities up to 16 feet per second are predicted.' Converting this velocity from feet per second to meters per second, we find the CLAMP study prediction is 4.9 meters per second, or about four times greater than the current EIS consultants' estimated velocity in Tables 4-22 and 4-23. Which of these projections are correct? What is the practical impact of this velocity on safe operations at these constriction points? This discrepancy between the CLAMP study and the Draft EIS needs to be resolved. More important, however, is to put this velocity in perspective with respect to kayaking, canoeing or waterboarding through these constriction points. What percentage of the time will these activities be curtailed, both during high flow and also low water conditions? Will warning signs or restrictions be needed to ensure safe operations? How will restrictions be enforced? These are all questions that need to be addressed, and compared/contrasted with the benign boating situation in the Managed Lake alternative.

WATER QUALITY CLIPA would like to acknowledge the willingness of the consultants for the water quality discipline report (Herrera Environmental Consultants, Inc.) to look beyond the historical conditions in the Capitol Lake Basin and Ecology's questionable conclusions regarding the impact of the discharge from Capitol Lake on the water quality of Budd Inlet. The consultant's use of current sample results and the questioning of Ecology's analysis and conclusions has shed a new light on the improving water quality in Capitol Lake. CLIPA and our water quality consultants have been in the forefront of this analysis for several years, and it is rewarding to see that much of our work is now being accepted. Again, to quote from the Executive Summary of the Draft EIS, Page 12: 'As part of the water quality analysis for the Draft EIS, the EIS Project Team evaluated monitoring data from 2004 to 2014 and also collected water quality samples in 2019 to compare current conditions against the historical dataset. Despite what has been perceived to be worsening conditions in Capitol Lake, monitoring data indicate that water quality conditions have actually been improving in the lake and are relatively good in terms of physical and chemical characteristics important to aquatic life. There are only occasional seasonal violations of water quality standards, primarily associated with slight changes in temperature and dissolved oxygen.' And: 'These improving water quality trends reduce the level of management that would be needed under a Managed Lake Alternative to meet lake management objectives." And her, with regard Ecology's conclusions for water quality (particularly dissolved Oxygen [DO]) in Budd Inlet due to the lake discharge, we agree with the consultant's summary statement in the water quality discipline report,
Page 4-41: ‘Overall, the differences between predicted TOC concentrations and measured concentrations, the atypical year that was used to calibrate the model, and the apparent lack of a relationship between the onset of DO problems and changes in TOC, contribute to uncertainty in interpretation of TOC results. This is exacerbated by the general lack of TOC data, i.e., data from just 2 years that were separated by a period of over 10 years and during a time when lake conditions appear to have been changing. Comprehensive monitoring of the lake was last completed over 15 years ago and there have been significant changes in water quality over the past decades. Ecology (2012) (based on data from 1988 to 2008) indicated there were measurable trends in water quality in the river. The analysis of more recent data (based on 2004 to 2014 data reported in this study) indicates there have been improving trends in both the lake and river during that time. This implies that the water quality conditions may have changed since the modeling effort.” The consultant calls for a closer examination due to this uncertainty. We agree with this, and encourage the consultant to review the detailed report ‘Assessment of Water Discipline Section 4: Affected Environment [AE]”, prepared specifically for the Draft EIS comment request, by David H. Milne, PhD. (Faculty Emeritus, TESC, Environmental Studies). This report is provided in its entirety in the Appendices Section. Key elements of Dr. Milne’s report include: . Capitol Lake does not have the widespread negative effect on Budd Inlet shown in the water quality discipline report, Figure 4-13 027 0.47 0.90 1083 14 Max Volt Hito 187 230 233 20 -28 Max max 3.1 'Capitol Lake dam’ by Itself ‘Capitol Lake dam’ + All Other Anthro- pogenic Sources SM viols lake and total Figures Figure “Model Predictions of DO Depletion (mg/L) From (a) the Cumulative Anthropogenic Effects and (b) Solely Due to the 5th Avenue Dam Capitol Lake does not contribute more TOC to Budd Inlet (in total, and in particular during the growing season) than would an estuary. Many of Ecology’s conclusions are in error, because the extent of WQ violations attributable to Capitol Lake and throughout Budd Inlet are based on an assumption of accuracy that the model doesn't possess, on DO calculations that fail to portray critical shallow bottom water oxygen production by benthic algae in East Bay, and do not show the extent of WQ violations in 'natural' (pre-dam) Budd Inlet.

AQUATIC INVASIVE SPECIES (AND IMPERILED AND NUISANCE SPECIES) General Questions Why is removal of freshwater invasive species from the Lake not compared with arrival of marine invasive species in the Estuary alternative? Estuaries are veritable hotbeds of invasive species, brought there by shipping and other human activities. Heads of estuaries (as the Lake basin would become) are among the most species-impoverished of all familiar aquatic environments and are wide open to new invasions by every newly introduced species everywhere around the entire Salish Sea. (Several new marine invaders, including the purple varnish clam, are presently moving down-Sound in the direction of Budd Inlet.) The Lake is a species-rich environment isolated by intervening land from easy entry by new freshwater invasive species. Species-rich ecosystems are inherently much more resistant to invasive species establishment than are species-poor ecosystems. Destroying the Lake and its invasive species would bring an equal number of marine invasive species - or more-to the basin.

What, if any, advantages would be obtained by replacing the very high species diversity of the Capitol Lake ecosystem with the very low species diversity of a replacement estuary? What disadvantages? In Chapter 4, Page 187, the Draft Els maintains: ‘The action alternatives would create long-term changes in habitat quality and distribution, with a greater diversity of habitat types, including tide flats and estuarine wetlands under the Estuary and Hybrid Alternatives compared to the Managed Lake
Alternative, which would have primarily freshwater wetlands and deep freshwater habitat types. Does this diversity of habitat types translate to species diversity? Apparently not, as described in the following comments about the heads of estuaries, from Estuarine Ecology, by John Day, et al: Heads of estuaries have the lowest species diversity of any familiar aquatic ecosystems; about 25% that of lakes and shallow ocean waters and about half that of mid-estuarine waters. (Day et al, 1989) Ecosystems with high biodiversity are much more resistant to establishment of invasive species than those with low biodiversity. (Day, John W., Charles A. S. Hall, W. Michael Kemp, and Alejandro Yáñez-Arancibia. 1989. Estuarine Ecology. John Wiley & Sons, New York. 558 pp)

New Zealand Mud Snail Specific Questions and Comments When was the last lake wide survey of the distribution and abundance of New Zealand Mudsnails (NZMS’s) made in Capitol Lake? What were the findings? The last lake wide survey that determined snail population densities was (to our knowledge) in 2011 (Johannes 2011, data first examined in 2016). (Johannes, Edward J. 2011. Distribution Survey for Potamopyrgus antipodarum (New Zealand Mudsnail) in the North and Middle Basins of Capitol Lake, Thurston County, Washington. Final Report Contract #FAC 10-026. Prepared [by Deixis Consultants] for General Administration Facilities Division, Olympia WA). Do we have recent comparable data for assessing population changes?

Do populations of NZMS’s live in any of the creeks, open waters, and wetlands crossed by or adjacent to the railroad tracks going from Capitol Lake to Chehalis? This question bears on the possibility of spreading the snails to new waters by transport of sediment by rail cars. If the snails are already present, there is no new environmental risk even if the snails are known to be harmful. If the snails are not really harmful, there is no environmental risk whether they are present or not.

What population densities of living NZMS’s are found in bottom sediment from the areas that will need to be dredged to maintain a ‘Managed Lake?’ Where can those data be obtained? (This bears on the next question.) Dredged sediments will contain large numbers of dead shells from many years past as well as a lesser number of live snails of the present generation. Knowing the numbers of living snails per m³ of sediment bears on the next question. What threshold level of living NZMS’s in dredged sediment would be considered hazardous enough to warrant isolating the dredged material on land (vs dumping it in deep marine water)? What is the population density threshold below which the risk can be deemed minimal?

A widespread early rumor that they caused massive biofouling in the Idaho Power System’s cooling water intake proved false. (‘In the summer most of the [fouling] material is aquatic plants that are being moved downstream by flow. We have no idea how he [Johannes] might have estimated that half of the weight is P. antipodarum.” Pers. comm., Ralph Myers, Idaho Power Environmental Affairs, March 2017. [Johannes made this estimate but he himself couldn't remember where he’d heard it. Pers. comm.]

About 2017] Many such alarming statements proved false after that time. Please engage an out-of-state consulting firm to review all published literature identifying problems caused by NZMS’s in Washington State (if any), also review evidence from personal experience by field personnel where obtainable and reliable, and render a judgment on whether the snails are menacing enough to warrant strenuous expensive efforts to control their spread. Said consultant to begin work immediately and report to the EIS writers in time to inform their statements about management of the Lake Alternative in the final EIS.
Independent expert opinions should be sought from authorities who are not employed by Washington State agencies (WDOE, WDFW, WDNR, DES, etc.) and who have not been affiliated with those agencies by consulting or in other ways in the past. The agencies themselves could find it difficult to abandon a narrative (‘the snails are an eco-menace’) that they have promoted for a decade and in-state consulting firms might be reluctant to disagree with agencies that might employ them in the future. A truly independent, unbiased judgment should be sought. 27

This is the KEY QUESTION. Are New Zealand Mud Snails, contrary to their reputation, actually so harmless that the EIS need not consider them? This question is raised because it is CLIA’s opinion that they are harmless. If so, many very costly actions taken for granted by the DEIS would be unnecessary. The following presents evidence that they are, in fact, harmless in western Washington State. Because of the overriding cost implications of the likely status of NZMS for sediment disposal, we are providing the following detailed analysis supporting CLIPA’s position that NZMS are harmless. Summary of key points. Native predators in Capitol Lake eat introduced NZMS’s and keep their numbers low. NZMS’s were present in Capitol Lake for several years before their ‘discovery’ in October 2009; during those years waterfowl and boaters on the Lake did not spread them to any other nearby waters. NZMS’s are present in at least 30 other locations in Washington State. No ecological or other problems caused by them have (to my knowledge) ever been reported. NZMS’s have no genetic ability to evolve resistance to native predators, or to adapt to changing climate, or to adapt to any other adverse or favorable environmental factors. Where NZMS’s have increased to huge abundances, their numbers have dropped back to low levels, a pattern seen in the population histories of many newly introduced species.

Introduction. The initial reaction by state agencies when NZMS’s were first ‘discovered’ in Capitol Lake was one of hysteria. In the words of WDFW workers; ‘In addition, NZMS are relatively recent invaders to the United States and their potential invasive harm continues to evolve with each new location in which they become established, developing relationships with other invasive species, and the effects of climate change.” (Pleus and Schultz, 2015; emphasis added by me) Many similar mistaken claims were made about how abundant they would become, how easily they would be transported to other lakes by waterfowl and boaters, how disruptive they would be in native ecosystems (e.g. fish would eat but couldn't digest them and so would lose weight), how native species couldn't cope with them, how fast they would multiply, and the like. The Lake was closed to the public, the dock in Marathon Park where they were first “discovered” was immediately dismantled, and signs warning of the ‘hazard” they pose were posted around the Lake. Today, 12 years later, the Lake is still closed to public use on account of the snails. Since then we’ve learned the following - all of it supportive of the idea that the snails are actually harmless. ‘Losers,’ in a real way. Details Introduced NZMS’s have no genetic ability to adapt to native predators, climate change, or any other hostile or beneficial environmental feature. The NZMS’s in Capitol Lake are all descendants of a single female. They reproduce asexually and are all genetically identical. They have zero ability to evolve defenses (thicker shells, protective coloration, distasteful flavor, cryptic behavior, etc.) against native predators or to adapt to any other environmental factors, including effects of climate change. The claim quoted above (Pleus and Schultz) is grotesquely mistaken. Many native species in Capitol Lake were able to eat and digest NZMS’s from the moment the snails were first introduced to the Lake. One initial fear of wildlife biologists was that the snails, with their ability to close their shells and pass through predators undigested, would a) enable NZMS’s to spread as the predators - specifically ducks - moved to other water bodies, and b) starve the predators that
mistook them for suitable prey, with consequent weight loss and malnourishment. But Capitol Lake is home to many predators that can eat and digest them. Our native signal crayfish crushes its prey and eats it, and actually prefers NZMS’s to native prey in experimental tests (Brenneis et al, 2011). Mallards, all other dabbling ducks, Canada geese, and four species of native fishes - redside shiner, rillie sculpin, largescale sucker, and peamouth minnow, known from studies elsewhere to eat snails - can also digest them. The fishes and ducks have ‘pharyngeal teeth’ and gizzards, respectively, that break up snail shells. Predation by these species and others is almost certainly the reason why folks looking at clear pale surfaces (stones, white plastic, etc.) in Capitol Lake almost never see a NZMS.(Brenneis, Valance E. F., Andrew Sih, and Catherine E. de Rivera. 2011. Integration of an invasive consumer into an estuarine food web: direct and indirect effects of the New Zealand mud snail. Oecologia 2011: Sep; 167(1): 169-179. Available on line athttp://www.ncbi.nlm.nih.gov/pmc/articles/PMC31556788) Some native predators really do lose weight when consuming introduced NZMS’s - but they can evolve ways of overcoming that handicap. Rainbow trout (lacking pharyngeal teeth) are native predators that have been shown to lose weight when fed only NZMS’s (Vinson & Baker, 2008). But as sexually reproducing animals, they also have the potential for overcoming that constraint. In New Zealand, they actually did so. Introduced there (where NZMS’s are native) in ~1885, rainbow trout did not thrive at first. But they soon became much better adapted to their new habitat. In the 1990’s events occurred that resulted in a population explosion of NZMS’s in Lake Aniwhenua. The snails blanketed the bottom and crowded out nearly every other benthic species that trout could use as food (Wells & Clayton, 2001). The rainbow trout in the lake, with nothing else to eat but NZMS’s for about four years, grew huge and healthy and made the lake a magnet destination for trophy fishermen and -women for years. A classic picture shows one of the huge rainbows the anglers were catching. A similar picture shows a NZ fisherman with a gigantic brown trout - another introduced species that became adapted to eating NZMS’s. After the Lake's NZMS population was obliterated, sizes of trout there returned to normal. Rainbow trout in Capitol Lake have been exposed to NZMS’s for about 20 years now. They may already be adapted to preying on these snails ... as may other native predators that could not initially digest them. (Vinson, M., and M. A. Baker. 2008. Poor growth of rainbow trout fed New Zealand Mud Snails Potamopyrgus antipodarum. North Am. J. Fish. Manag. 28: 701-709.Wells, Rohan D. S., and John S. Clayton. 2001. Ecological impacts of water net (Hydrodictyon reticulatum) in Lake Aniwhenua, New Zealand. New Zealand Journal of Ecology 25(2): 55-63.) NZMS’s are rare in Capitol Lake (and in Lake Washington). In winter 2009-2010 an acquaintance dug up a few square feet of Capitol Lake sediment during a drawdown. After examining that sample, it was found to have only a few scattered NZMS’s. Since then we have watched for them by looking from the walls, the bridge, and other vantage points - and, even knowing what we were looking for, have never seen one. A few years ago, a colleague obtained a permit from DES to find NZMS’s in Capitol Lake and show them to a visitor from Argentina. The two had great difficulty even finding them (they were always rare and always on the undersides of stones) and asked ‘Why are these things considered a menace?’ A colleague up at Lake Washington, where the NZMS’s appeared a little before their ‘discovery’ in Capitol Lake, had the same question. In both lakes, NZMS’s have not lived up to claims made about how abundant they would become. NZMS's were present in Capitol Lake - and not noticed - long before their 'discovery' in 2009. [This fact negates two alarmist claims made about the snails; see below.] The first reported NZMS’s were ‘found’ at Capitol Lake's Marathon Park on October 22, 2009. A year and a half later (June, 2011) a mollusk expert (Ed Johannes, Deixis Consulting) surveyed the Lake for the DES to determine the presence or absence of NZMS’s at 31 locations. Five years later (2016) the Lake protection
association (CLIPA) hired Mr. Johannes to reexamine the samples and count the snails in each of them. The snails probably entered the Lake at Heritage Park about 2001 and had already spread southward past the Marathon Park 'discovery' site by October 2009. NZMS's were in the Lake for eight years before the Lake was closed - and were never spread to other water bodies by waterfowl or public users of the Lake. Surveys of the nearest 85 ponds, streams, and lakes within five miles of Capitol Lake by Johannes in 2010 showed that none of these other water bodies had NZMS's in them, despite fully eight years (2001 - 2010) of public boating and waterfowl overwintering in nearby Capitol Lake before the Lake was abruptly closed. The hazard of transporting the snails to other waters is nonexistent. The closure of the Lake for fear of spreading the snails to other waters is unjustified. (Johannes, Edward J. 2010b. Survey for Potamopyrgus antipodarum (New Zealand Mud Snail) within a five-mile radius of Capitol Lake, Thurston County, Washington. Final Report [by Deixis Consultants] Contract #10-1908. Prepared for: Washington Invasive Species Council, Washington State Recreation and Conservation Office, Olympia Washington.) Where NZMS's have been able to establish huge population densities, they have soon dwindled back to scarcity. Early worries were voiced that the snails would become so numerous on the bottom that they would displace the prey organisms of native predators. A common (not universal) feature of populations of introduced species is a huge 'spike' in numbers followed by a huge drop in numbers back to a low level that persists from that time, as exhibited by NZMS's in the Columbia River estuary. First noticed in 1990 near the Astoria Yacht Club and thereafter sampled near-yearly, they exploded in numbers to about 250,000/m² in 2000, then dropped back to 50,000/m² the next year, then dropped to a few thousand per square meter during the years after that. That pattern is a common feature of introduced species presence in newly invaded habitats. Initial scarcity - then a population explosion, then a precipitous drop as native predators 'notice" the intruders and start seeking and eating them. The intruder population is decimated and - especially for species like NZMS's that can't adapt to the native predators - the predators get better and better at finding and eating the new species. Densities of New Zealand Mudsnailes in the Columbia River Estuary at Astoria Yacht Club. 1988-2006. 300,000 250,000 200,000 150,000 100,000 50,000 lan 9 Jan 394 en 'ca on 102 Jan 02 Jan Os an 18 NZWS does Astana 95-06 NZES CENSUS lan 1 96 lan 1 w Year Figure 1. Outbreak, then collapse of NZMS population in Columbia River near Astoria. Bersine et al, 2008. (This graph has converted Bersine's log-scale graph to this one with an arithmetic scale for better visualization of the 'spike' in population density.) The snails existed at a population density of some 17,000+ per square meter at Heritage Park in 2011 (Figure 1). If they existed at that density today, there would be about 2 snails on every square centimeter of bottom at present. None can be seen on the bottom there today, (Source: Bersine, K., V.E.F. Brenneis, R.C. Draheim, A. Michelle Wargo Rub, J.E. Zamon, R.K. Litton, S.A. Hinton, M.D Sytksma, J.R. Cordell, and J.W. Chapman. 2008. Distribution of the invasive New Zealand Mudsnaile (Potamopyrgus antipodarum) in the Columbia River Estuary and its first recorded occurrence in the diet of juvenile Chinook salmon (Oncorhynchus tshawytscha). Biological Invasions 10:1381-1388.) NZMS's are present in at least 30 other locations in (mostly western) Washington. We know of no reports that they have ever caused problems in those places. Locations that come to mind are Lake Washington, a pond at Ocean Park, and Blue Slough on the Chehalis River. ( http://nas2.er.usgs.gov/viewer/omap.aspx? SpeciesID=1008)

Purple loosestrife Specific Questions and Comments Please prepare an alternative estimate of the costs of dredging and handling of Lake sediments if it were discovered that both New Zealand Mudsnailes and
Purple Loosestrife were harmless and required no special precautions. If purple loosestrife is not now or likely to pose a threat to nearby ecosystems, expensive precautions to prevent its spread would be unnecessary. The following questions examine whether purple loosestrife is unlikely to create problems elsewhere if seeds of these plants are present in Lake sediments. What recent research on the abundance of purple loosestrife at Capitol Lake has been cited as a reason for restricting sediment disposal and transportation options to avoid spreading its seeds? As a result of a sustained eradication effort started in 1988, purple loosestrife is now almost entirely absent from the shores of Capitol Lake and the Deschutes River (citation available). It is likely that the last plants will be gone by the time dredging for any of the Alternatives begins, several years from now. A survey of the Lake shores by the author and a colleague (August 8, 9, and 12, 2021) showed that these plants are even scarcer today than they were in 2018. (See the DEIS purple loosestrife distribution map for 2018 shown here, updated to 2021; DEIS Figure 3.4.1). All plants found in the survey are near the 1-5 bridge or farther south, most of them are some 100 feet from the South Basin shore at Tumwater Historical Park and unable to easily seed Capitol Lake waters. (One plant, easily removable, is at water's edge on the east shore of the Deschutes River near the old brewery building.) All are present in small patches or as single individuals. These plants are flagged for removal, which will probably happen this year (2021). Their increasing scarcity and confinement to the south end of the Lake has probably diminished the presence of their seeds in the sediments. Figure 3.4.1 Purple Loosestrife Distribution in Capitol Lake in 2018 West Bay (Budd Inlet) North Bosin (Reflecting Pool) LOD Middle Basin Interstale 5 RESULTS OF AUGUST 2021 SEARCH FOR PURPLE LOOSESTRIFE SHOWN ON DEIS 2018 MAP FIGURE 3.4.1 South Basin PRESENT IN 2018, GONE IN 2021 * PRESENT IN 2018, PRESENT IN 2021 SITE NOT INSPECTED IN 2021 0423 Bo L700 Deschote: River Seenfeet Legend Figure 1. Diminished presence of purple loosestrife at Capitol Lake. 2021. Yellow: Present in 2018, absent in 2021. Red: present in 2018, still present in 2021. Black: present in 2018, probably absent at Percival Creek (upper). Do purple loosestrife seeds sink? Accumulate in bottom sediments? If so, how long do purple loosestrife seeds remain viable in lake bottom sediments? With purple loosestrife near extermination at this time, a year remaining to finalize this EIS, and several years' lag time between the finalization and the beginning of any dredging, the last seeds now remaining in the sediments (if any) will probably be dead. The likelihood that the last viable purple loosestrife seeds will be gone by the time dredging for any of the alternatives begins has huge significance for the cost of any Lake Basin dredging. Are purple loosestrife seeds present in Capitol Lake sediments? If so, what percent of them are viable? Please have an impartial expert (say, a palynologist) examine samples of Lake sediments for evidence of viable purple loosestrife seeds. (An expert would be needed; the seeds are the size of small sand grains.) Sediment samples might already be available from recent studies (oil spill, brewery source; sewage, Percival Creek source; bathymetry study, etc.)

Eurasian Milfoil Comments As described in Chapter 3, Page 3-51: '[Eurasian Milfoil] ...is likely not significantly impacting native wildlife or recreation in and around the Capitol Lake Basin based on its current abundance and the aquatic plant habitat diversity.' It was effectively treated in 2004 with Triclopyr, and since that time has been kept under control by hand pulling where it has reappeared. These minimal maintenance procedures should continue to be effective in the future.
Imperiled And Nuisance Species Specific Questions and Comments

Northern Pikeminnows

What would be the statewide impact on native Northern Pikeminnows (Novumbra hubbsi) if Capitol Lake were replaced by an estuary? This is the only species of fish that is endemic to Washington State. Its geographic distribution includes streams and shallow ponds on the west slope of the Olympics (but also includes Lake Ozette) with its southern boundary reaching Capitol Lake. Known occurrences over its former range have been decreasing during the past decades (Mongillo and Hallock, 1999). Although this species lives in Capitol Lake (Entranco 1997, also Herrera 2004), it was dismissed by the CLAMP Report (Hayes et al, 2008) in a footnote claiming that the Lake 'is not its typical habitat.' (However, it actually lives there and ‘typical habitat” as described by Page & Burr (2011) and others reads like a description of Capitol Lake.)

Citations:

Freshwater Mussel

What would be the statewide impact on the native freshwater mussel Anodonta oregonensis if Capitol Lake were replaced by an estuary? This species, first discovered in Capitol Lake on October 22 2009, has been disappearing over its entire range in the West, including Washington waters (Nedeau et al, 2009).

Citations:

Vaux’s Swift, Purple Martens

What would be the statewide impact on Vaux’s swift and purple martens, insectivorous birds said to be imperiled in the CLAMP 2008 report but not mentioned in the DEIS?

Western Pond Turtles

Are there state-listed Western Pond Turtles in Capitol Lake? Could the Lake provide habitat for this scarce and imperiled species? If removing the Lake destroys potential suitable habitat for Western Pond Turtles, that would be a serious loss and negative impact.

Saltmarsh Mosquitoes (Nuisance Species)

What is the likelihood that the Estuary alternative will unleash saltmarsh mosquitoes on our communities? Washington’s saltmarsh mosquitoes (Ochlerotatus (Aedes] dorsalis) are day-biting far-flying ‘vicious” mosquitoes that rise to (sometimes ‘extreme’) nuisance proportions in Pacific and Island counties. The Olympia area is fortunate that this species is not found here and other species are not common enough to be bothersome. With diminished populations of bats, swifts, and dragonflies, and in the presence of saltmarshes created by the Estuary alternative, what is the likelihood that these factors will introduce that species to our area? (citations available upon request)

Background The dam creating Capitol Lake protects its waters, habitat, fish and wildlife, and shorelines from the substantial contaminants currently and continuously pervasive in the waters of Budd Inlet. If
the dam is removed, the toxics from Budd inlet derived from shore, groundwater, bottom, run-off from
the surrounding area, and southward flow of Puget Sound would infiltrate what is now a virtually toxic
free Capitol Lake. The touted ecological function of 'mixing of freshwater with marine water', would
likely become a significantly harmful characteristic to the entire basin of 264 acres. Capitol Lake will
become a Terminal Urban Estuary. According to several public health officials interviewed (state and
county), Terminal Urban Estuaries are well known for unusually high contamination. The Capitol Lake
Terminal Urban Estuary would be the southern-most estuary of Puget Sound and would be especially
vulnerable to a variety of toxics currently and continuously affecting Budd Inlet. As mentioned in
Governor Inslee's Southern Resident Orca Task Force Report of November 2018, 'Moreover, the survival
of juvenile Chinook salmon from these urbanized estuaries was 45% lower than Chinook collected from
uncontaminated estuaries.' (p.31) Consider the following from the same report: 1. Adult Chinook salmon
are a major source of persistent toxic chemicals to Southern Resident Orcas. (p.30) 2. In particular, toxics
can reduce juvenile Chinook salmon survival by reducing their growth and making them more
susceptible to disease. (p.30) 3. High levels of persistent toxic contaminants including PCB’s, PBDE’s,
and DDT’s are present in the blubber of Southern Resident Orcas potentially resulting in harmful health
effects including alterations in hormone levels, reproductive disruption or miscarriages, reduced
immunity to diseases, neurotoxicity, neurobehavioral disruptions and cancer. (p.31) 4. Isolation from
these toxins should provide a lesser likelihood that these disease inducing toxins will find their way into
the tissues of Southern Resident orcas via the food web (p. 30). The following questions immediately
come to mind: Why are these findings, which are so important to our vulnerable Southern Resident
orcas, not mentioned in the DEIS? Why weren't the negative aspects of a Terminal Urban Estuary
mentioned in the DEIS? Why would we choose to contaminate the virtually toxic free Capitol Lake
basin? These Chinook are also consumed by humans, especially tribal members. (According to Nate
Tyler- council member Makah Indian Tribe, Amy Grondin- commercial fisherman and co-owner, Duna
Fisheries, and Chris Wilke-executive director, Puget Soundkeeper Alliance ‘tribal communities consume
fish at a higher than average rate.’

At least five sources continuously supply contaminants to Budd Inlet: . Urban stormwater runoff,
( PAH’s, PCB’s, CEC’s) Effluent from LOTT Cleanwater Alliance, (PBDE’s, PCB’s -low concentrations,
CEC’s) Southern Puget Sound marine flows flowing south, Turbulence induced mixing of sediment and
legacy toxics by large port vessels in the turning basin. Legacy industrial pollutants from toxics clean-up
sites. (Listed below from Washington Department of Ecology Website.) An additional four closed sites
continue to leach contaminants into Budd Inlet: Reliable Steel site: (Westbay Drive) O Gasoline-diesel or
oil range petroleum hydrocarbons in soil or Budd Inlet sediments Toxic metals - arsenic, cadmium,
copper, lead, mercury or zinc in soil groundwater, stormwater runoff or sediments. o PAHs or
Carcinogenic PAHs - in soil, stormwater runoff or sediments. PCBs - in soil. O Phthalates - in stormwater
run-off and sediments. Industrial Petroleum Distributors site: (Westbay Drive, formerly ARCO): o
Petroleum hydrocarbons from petroleum leaks and spills. Solid Wood, Inc. : (Westbay Drive just north of
4th Ave., owned by city of Olympia): Total petroleum hydrocarbons. PAHs. Metals - exceeding
standards for soil and groundwater. Cascade Pole site: (north end of Port peninsula): Creosote
contaminants - soil and groundwater. . O o o. O Please address the contamination problems posed by
the estuary/mudflat. They appear to have been inadequately investigated. Please answer: 1) What will
be the expected carcinogenic effects (to humans and other species) of introduced West Bay Toxics? 2)
The DEIS suggests that ‘future clean-ups are planned to address this contamination’. Considering that the State is over 25 years late in dredging and maintaining Capitol Lake, how can we be sure they will address this issue in a timely manner? 3) Ecology lists five sources of toxics in Budd Bay (mostly continuous). How will the continuous nature of these toxics be stopped? Under an estuary (or hybrid option) introduction of these contaminants into the Capitol Lake basin will unquestionably create serious problems to all living organisms (please note picture above).

Because this contaminant problem will very likely do the following, please make the corrections in the Executive Summary listed in bold type. 1. Negate virtually all ecological advantages (such as ‘mixing’ and habitat improvement”) to the estuary. Page 30, Water Quality. Add ‘significant impact’ to estuary. 2. Discourage community use of this resource. This includes shellfish harvesting, fish harvesting and any form of recreation. Page 32 Land use, Shorelines, and Recreation. Add ‘significant impact’ to estuary. 3. Pose a public health threat where none currently exists. Same as 2 above. 4. Negate any advantages of an estuary to shorebirds and wading birds in the Capitol Lake basin. Page 31, Fish and Wildlife, estuary, regarding salmon, anadromous species, and marine fish, due to contamination, change from ‘substantial beneficial impacts’ to ‘substantial impacts’ 5. Negate virtually all asserted water quality advantages to the estuary due to toxic contamination. Water quality, estuary, page 30, add ‘significant impact due to introduction of toxics”. Please answer: How can good water quality be improved if it is becoming contaminated with multiple toxics? 6. At least partially or totally make meaningless the value of tribal shellfish harvesting and fishing in ‘usual and accustomed places and stations”. Thurston County Health regulations and proximity to LOTT will make the above activities meaningless. 7. Substantially reduce the value asserted in the DEIS of an estuary regarding Fish and Wildlife. Why isn’t this problem presented, addressed, and clarified in the DEIS. Same as #4 above. 8. Negate the asserted aesthetic advantage to the estuary. (Dozens of warning signs for toxics and entrapment would be necessary negating the “unified and harmonious” attribute). Page 33, Visual Resources, estuary, Change “less than significant” to ‘significant impact”. Please explain in detail why any of the above eight statements are not true and reduce the current estuary overvaluing assessments (found in the tables of the Executive Summary) in the DEIS to what is recommended above. Not recognizing the serious nature of infiltration of toxics into the Capitol Lake basin is indefensible as it misleads the public and its decision-makers. In the final or supplemental EIS report, please state the following at least in the Executive Summary, ‘The dam creating Capitol Lake protects its waters, habitat, fish and wildlife, and shorelines from the contaminants currently and continuously pervasive in the waters of Budd Inlet. Removing this barrier will be detrimental to water quality, fish and wildlife, habitat, and ecological processes in Capitol Lake basin. This is a ‘significant impact’.

Mudflats are Deemed Dangerous by Thurston County Health Department As the warning advisory on the right side of this photograph in Ellis Cove demonstrates, at low tide, mudflats are dangerous. The public will need to be advised to keep off the mudflats with multiple signs in Capitol Lake basin. ADVISORY CAUTION Water & Soil Pollution AT LOW TIDE, MUD FLATS ARE DANGEROUS PLEASE KEEP OFF Sherr marem MEET the BEACH 3 PLEASE Priest Point Park signage referencing Ellis Cove Advisory reads: ‘Water and Soil Pollution. Shower after contact with sand or water from this area.’ Please note the ‘Caution At Low Tide, Mud Flats Are Dangerous PLEASE KEEP OFF” In addition to the omission in the DEIS that toxics threaten many living organisms in the Capitol Lake basin, another

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serious omission in the DEIS is the fact that mudflats are inherently dangerous to humans and other animals. According to The Olympian, in 2016 a man became entrapped in the mudflats of Ellis Cove requiring emergency life-saving assistance. Longtime residents interviewed on this issue confirm that these entrapments are not uncommon. Here is another example of the DEIS neglecting to inform the public and its decision-makers of serious problems associated with an estuary/mudflat. Please provide a statement in the Executive Summary, Land use, Shorelines, and Recreation, estuary, page 31, stating that an estuary creates a significant danger due to the potential for public and pet entrapment at low tides. Please state clearly that this represents a 'significant impact' and remove the current characterization of 'no substantial changes' and 'less than significant impacts'.

Findings from Relevant Lake-Raised Chinook Juvenile Studies were Ignored Page 17 of the Executive Summary makes the following statement: ‘...estuarine conditions would provide productive habitat for shellfish, salmon, other anadromous species, and marine fish in the area, potentially including Endangered Species Act-listed Chinook salmon (non-hatchery) and steelhead.’ Do we know with any degree of certainty that the advantage of an estuary will increase the numbers of non-hatchery Chinook? Or steelhead, for that matter? Please read the quoted findings of Koehler, et. al., and Engstrom-Hegg studies listed below and try to provide answers within the context of those findings. For example, will the fourfold increase in 'predator favorable' compression points created by the estuary produce fish losses in excess of any benefit Chinook juveniles or steelhead straying into the Capitol Lake estuary for sustenance? Do we have any idea of what the numbers could be? Aren't the numbers likely to be very small? This becomes important when we are discussing the expenditure of hundreds of millions of dollars which could be used in much more productive habitat rehabilitation.

Michelle Koehler - According to the article Diet and Bioenergetics of Lake-Rearing Juvenile Chinook Salmon in Lake Washington, published in 2006 in Transactions of the American Fisheries Society, authors Michelle Koehler, D. Beauchamp, J. Cordell, C. Simenstad, and D. Seiler suggest that predation of juvenile Chinook is at least as important as habitat type per se for Chinook juveniles. 'Efforts to rebuild Chinook salmon populations in this basin [Lake Washington] should therefore focus on the influence of other lake related factors, such as predation, disease, and other life stages.' Dam removal would increase marine predator-friendly compression points by a factor of four (railroad bridge, Percival Creek mouth, 1-5 juncture, and Tumwater Falls. Currently only one marine pressure point exists at the base of the 5th Avenue Bridge.) Numbers of salmon and other anadromous fish (all stages) would likely suffer. Will you please provide evidence to show that the Koehler et. al report mentioned above is not valid for Capitol Lake Chinook and other anadromous fish? As reported in the governor's Southern Resident Orca Task Force, reduction in Chinook numbers would have negative effects on our endangered Southern Resident Orcas. Note: the Koehler et. al. report mentioned above was submitted (as requested by DES) to the EIS consultant authors in 2018 yet is apparently is not listed as a reference in the EIS. Considering the report's relevance to Capitol Lake Chinook, please explain why.

Additionally, the above 2006 article by Koehler, et. al. makes the following statements: 'Little is known about use of lacustrine habitats by juvenile ocean-type Chinook salmon.... To better manage existing populations and aid in designing recovery strategies for ocean-type Chinook salmon using lacustrine environments, basic information on the ecology of juvenile Chinook salmon rearing in this habitat is
needed.' Regarding the above paragraph, has 'basic information on the ecology of juvenile Chinook salmon rearing' been advanced since 2006 which might indicate the superiority of lacustrine, riverine, or estuarine rearing environments? If so, please elaborate. If not, shouldn't the following statements from Diet and Bioenergetics of Lake-Rearing Juvenile Chinook Salmon in Lake Washington likely be considered to be the current and best available science? 'Lake residence is a rare life history for ocean-type Chinook salmon (Burger et. al. 1985) but our results suggest that the juvenile salmon can feed and grow well in this habitat'. And, 'Despite the heavily altered nature of Lake Washington and the relatively short time Chinook salmon have used the system, feeding and growth performance of juvenile in littoral habitats of Lake Washington were comparable to those for Chinook salmon rearing in estuarine or riverine environments. (e.g. Healey 1982; Simenstad et. al. 1982; Rondorf et. al. 1990; Miller and Simenstad et. al. 1997; Duffy 2003). Even if the EIS report does not state the exact quotation, shouldn't the public be informed of the essence of those findings? Using broad statements such as 'better habitat for salmon' easily misleads readers with a generality which may not be true for all species. The fall Chinook run in Capitol Lake dwarfs all other runs of salmonids in this watershed and is of significant economic importance. Executive Summary, page 31, Fish and Wildlife, estuary, change 'substantial beneficial effects for salmon, other anadromous species, and marine fish to 'less than significant benefits'. How can 'substantial beneficial effects’ be valid here in light of Koehler’s and Engstrom Hegg’s (below) findings? Wouldn't the most accurate, scientifically based assessment be, 'We don't really know.'

Engstrom-Hegg. According to fisheries biologist Robert Engstrom-Hegg's report in 1955, Environmental Relationships of Young Chinook Salmon in Capitol Lake and the Deschutes River System, Washington Department of Fisheries, “The data do not indicate that the conversion of Capitol Lake to freshwater had any great effect on survival, either for better or worse.’ His report also states, “The data show growth of Chinook salmon in Capitol Lake to be extremely rapid, greatly exceeding that attained by fish of the same stock held in hatcheries.’ Note: Despite its extreme relevance to the Chinook run in Capitol Lake, the above report by Robert Engstrom-Hegg does not appear in the references for Fish and Wildlife issues. Please explain why. Note: A local fishing enthusiast with an interest in the Capitol Lake issue submitted (as requested by DES in 2018), a well-documented report, reviewed by a highly-respected, retired WDFW fisheries biologist, Hal Beecher which highlighted important findings made by Koehler, et al and Engstrom-Hegg regarding Chinook juvenile rearing in lake environments. The report was primarily intended to provide EIS reviewers with two important studies relevant to Chinook and the Capitol Lake issue. The report's title is Capitol Lake or Estuary Habitat Strengths Appear to be Equal for our Hatchery Chinook Run, October 6, 2018 by Jack Havens, DVM. A copy is being included as an attachment to this submission for your convenience. It does not appear to have been reviewed for the DEIS. Please review. Again, (this time using Engstrom-Hegg's research), Executive Summary, page 31, Fish and Wildlife, estuary, change 'substantial beneficial effects for salmon, other anadromous species, and marine fish to either 'minor benefits' or 'no significant benefits'.

It bears repeating that the hatchery Chinook salmon from Capitol Lake make up, by far, the most important salmon and anadromous fish resource in this watershed. The EIS report mentions several times that salmon habitat will be improved if the dam is removed. Yet, analyses by Engstrom-Hegg, a qualified State researcher, show no advantage for Chinook juveniles of an estuary habitat over that of a Lake habitat in this basin. How can we reconcile a theoretical habitat improvement mentioned in this
DEIS with the actual findings of this state Fisheries scientist? Please explain. Most importantly, is there
evidence that Engstrom Hegg is wrong? Shouldn't the DEIS clearly state that the conversion to an
estuary or dual basin may well have no (or even a negative) effect on Chinook salmon survival or size?
Shouldn't the EIS report state that, according to publicly funded studies, it appears likely that Chinook in
Capitol Lake will likely grow to a 'larger size than those raised in a hatchery' (which we believe to be the
Tribal/Fish and Wildlife plan)? Furthermore, shouldn't the EIS report state clearly that no conclusive
scientific evidence exists which would suggest that 'an estuary would provide the potential for an
increased salmon prey base' for Orcas as stated on page ES-6 in the Fish and Wildlife Discipline Report?
Please explain. Considering the findings of the Governor's Report on Southern Resident Orcas, isn't it
likely that more harm is done to these mammals by our toxic-ridden Chinook? Isn't it also just as possible
(according to Koehler and Engstrom-Hegg) that an estuary would provide the potential to decrease the
salmon prey base for orcas (For example, by increasing predator-friendly compression points)? Please
explain. This is why these two studies are important. The conclusions of their research should inform the
understanding by the public and decision-makers of credible information ignored by agencies we are
used to relying on. On this basis, please change in the Executive Summary, Fish and Wildlife, estuary,
page 31, estuary habitat conditions, from 'substantial beneficial effects’ to 'no significant impact'. Doing
so is more consistent with the two aforementioned studies (as well as the effect of the toxic water
associated with dam removal). Additionally, please note and state to the effect that the above findings
from Engstrom-Hegg appear to negate the saline gradient concern mentioned in the DEIS. (See Saline
Gradient, below.) Pertaining to the current plan of raising Chinook salmon to the smolt stage, again
consider Engstrom Hegg's statement, "The data.....show growth of Chinook salmon in Capitol Lake to be
extremely rapid, greatly exceeding that attained by fish of the same stock held in hatcheries. This
finding appears to negate any advantage to raising Chinook juveniles to the smolt stage in a hatchery
setting before placing them in an estuary setting in the Capitol Lake basin. It appears that adopting such
an option would likely produce smaller fish (which are presumably less likely to survive). Please explain
why this is not true. It bears repeating, the lack of the Chinook salmon food source is a main cause of the
demise of our Southern Resident Orca according to the Southern Resident orca Task Force report of
2018.

Salinity Gradient should be no problem for out-migrating Salmon Page 17 of the Executive Summary
states that Capitol Lake does not provide a salinity gradient for the Chinook juveniles transitioning from
freshwater to marine water. In fact, a permanent area of salt water exists in Capitol Lake on the south
side of the dam (Thurston County Water Resources Monitoring Report 2009-2010, 2010-2011). Perhaps
this is another factor providing for success of the Lake's juvenile Chinook as described by Engstrom
Hegg when he stated, 'The data do not indicate that the conversion of Capitol Lake to freshwater had
any great effect on survival, either for better or worse.' Also, it must be recognized that with dam
removal, juvenile Chinook released from the Pioneer Park hatchery will experience a similar saline
gradient at the base of Tumwater Falls. Please remove the above reference to the lack of saline gradient
in Capitol Lake. It is not applicable

Spawning of Salmonids Below Tumwater Falls Needs documentation The DEIS report states on page 17
of the Executive Summary, 'Prior to construction of the 5th Avenue dam, salmon and other anadromous
fish species spawned in the Deschutes River downstream of Tumwater Falls.' Please give the source of
that information and, if possible, specific evidence of where such spawning occurred below the falls. Fisheries biologists we are aware of understand that salmon spawning in marine water is exceedingly rare and highly unlikely.

The Bat Destruction Problem Please describe the mitigation plan for the likely partial or total destruction of our local bat populations, especially that of Woodard Bay?

Harvesting aquatic plants in Capitol Lake has been Ignored The report states that Capitol Lake is currently dominated by coontail, a native floating plant. Much of the carbon, nitrogen and phosphorus in those plants might be largely and inexpensively removed by annual selective harvesting if necessary. This would significantly reduce the amount of those nutrients finding their way into Budd Bay later on in the year. Harvested coontail could be dried within the Deschutes watershed virtually eliminating any significant threat of NZMS contamination spread. Aesthetics would be markedly improved which would negate the characterization of “substantial benefit” ascribed to estuary aesthetics on page 30 of the Executive summary. Why hasn’t this relatively inexpensive and beneficial harvesting concept been incorporated into the Managed Lake Plan? Over several years, the idea has been presented by many writers on this issue multiple times. Employing harvesting aquatic plants could reduce the frequency of dredging, reducing public costs.

Upland Disposal of Lake Sediment: Enormous Public Cost, Little Justification The DEIS states that the presence of the NZMS in Capitol Lake requires upland disposal of its sediments. Upland disposal is significantly more expensive than deep water disposal (approximately 5 times as expensive). Deep water disposal which is allowed for the Budd Bay marine sediment (which likely will contain both NZMS and may contain toxics leached from shore, bottom, run-off, etc.). Why is the EIS proposal to allow deep water disposal of Marine sediment but to deny it for Capitol Lake sediment? This choice seems questionable and is the principal reason for the colossal cost differential which favors dam removal. Note: It seems to reviewers of this document that extensive efforts were made to find the least costly disposal method for marine sediment disposal and did not do so for Lake sediment disposal. Please be advised that many public members have little confidence in the current justification for disposal cost estimates. Currently, disposal cost estimation in the DEIS appears indefensible. A step-by-step, detailed analysis of cost estimation is critical for public understanding and support. Please do so.

If this choice of disposal location is based on NZMS population density, what is the threshold necessary to allow deep water disposal? What source has been used to determine that density? What will be the difference in NZMS densities in 30 years (first operational dredging/disposal) between West Bay and Capitol Lake? Between Capitol Lake now and then? When was the density of the NZMS last assessed in Capitol Lake? In West Bay? What do the trend lines tell us? Will this mollusk be listed as an invasive species in 2045? The Els report should make clear in the Executive Summary and attachments the massive effect this choice has on public cost estimates and the potential risks inherent in our current lack of knowledge and use of assumptions. The public and its decision-makers should be thoroughly informed of the risks of the assumptions and guesses regarding this pivotal and contentious issue which appears to have been inadequately investigated or investigated with bias.
For example, it appears that no investigator has looked into disposing Lake sediment onto a properly bermed (contained) area within the Deschutes/Percival Creek watersheds which would markedly reduce the cost of a Managed Capitol Lake, making this alternative the least expensive management option. Rail transportation might have been investigated. This would likely be a critically important option, a cost game changer, if you will. Please explain why sediment from Capitol Lake could not be deposited in an environmentally safe manner within the Deschutes River/Percival Creek watershed thirty years from now. Perhaps adjacent to a rail line. NZMS would desiccate within days, perhaps allowing recuperation of some costs from sale of this nutrient-rich soil. Isn't this the essence of adaptive management which was supposed to provide the foundational information for this issue years ago? Why has adaptive management failed so totally? Please respond to this question. Another example: Apparently, plans are to cautiously and judiciously use an herbicide to eradicate aquatic plants in Capitol Lake. Doesn't it stand to reason to allow the cautious and judicious use of a pesticide to eradicate the NZMS? Please explain why this is not a feasible and potentially significant cost-saving tactic. By doing so, Lake sediment could be disposed of (preferably) within the watershed in a safe manner while avoiding the enormously high disposal costs of an upland depository. The public would benefit in many ways such as: 1) Substantial cost reduction (including possible sale of dried nutritious sediment), 2) Avoiding the 5-7 year-long traffic disruption at the 5th Avenue bridge, 3) Maintenance of well-documented cherished aesthetic qualities of Capitol Lake. 4) Avoiding the myriad problems caused by the toxic contamination of the Capitol Lake basin with toxics from West Bay.

Marine invasive species problem under an estuary not made clear The DEIS report states on page one of the Executive Summary that 15 plant and animal invasive species exist currently in Capitol Lake. However, we know that Budd inlet also contains many invasive species, possibly more than Capitol Lake. Why wasn't this latter statement made clear in the DEIS Executive Summary? The report's inference is that by taking out the dam, the invasive species problem will be eliminated. It will not be. More specifically, page 30 of the Executive Summary characterizes the estuary alternative as having 'a substantial beneficial impact' regarding aquatic invasive species. This appears to be misleading as it mischaracterizes the asserted advantage of dam removal by avoiding recognition that marine invasive species will invade Capitol Lake basin under an estuary management plan. Please explain this apparent oversight. Please correct the current mischaracterization regarding invasive species in the Executive Summary, estuary, page 30, from 'substantial beneficial impact' to 'less than significant impacts'. Chapter 4 mentions that the estuary will, in fact, have invasive species but infers that the problem will be of less importance than that of the Lake. How was that determination made? How are marine invasive species of less concern than those of freshwater? Please explain in detail. Additionally, what mitigation plans exist for controlling marine invasive species in the Capitol Lake basin?

This Project’s Decision Structure is illogical, financially risky, and indefensible Note: In light of the above unknowns, assumptions, guesses and the overriding importance of public costs, why are we choosing the preferred alternative in 2022? Assuming that all parameters will be the same in 25-30 years is a mistake which should be obvious to the most novice of analysts. The current rigid decision structure seems illogical and indefensible. Consider the following: Choosing the estuary/mudflat or hybrid is irreversible, final, thus non-adaptive. Choosing the Managed Lake Alternative is ‘adaptive’ as it leaves many future options open and could save the public hundreds of millions of dollars.
LAND USE, SHORELINES AND RECREATION What is the impact of water quality on Recreation? In the Executive Summary under Land Use, Shorelines, and Recreation, page 32, estuary alternative, we see the following statement: 'Improved water quality, sediment management, improved ecological functions, and increased opportunities for community use would have a substantial beneficial effect on recreation.' For the Estuary and Hybrid Alternatives, each of these assertions seem highly unlikely, and the reasons for this are described below.

Will Water Quality be Improved? Clearly, it will not. The Executive Summary states that there may be 'minor to moderate benefits’ to dissolved oxygen (DO) in Budd Inlet with an estuary/mudflat. However, total and permanent removal of aquatic plants in the north basin with an estuary will significantly increase nitrogen in Budd Inlet, which ultimately reduces DO. Additionally, marine waters typically have DO levels about one-half of the levels in freshwater such as Capitol Lake. Samples from Budd Inlet and Capitol Lake confirm this to be the case in these waters. The marine waters of Budd Inlet will flow twice daily into the lake basin giving these waters the same characteristics as found in Budd Inlet. See our Water Quality comments for details. Please modify the Executive Summary statement to reflect that with an estuary or hybrid, DO is likely to decrease to less than one-half the level currently in the freshwater of Capitol Lake.

Toxic contaminants are another water quality issue that must be addressed for the Estuary and Hybrid Alternatives. The influx of toxics from West Bay into the currently toxic free Capitol Lake will impact recreational opportunities in the basin. Please review the information on West Bay toxics and also the danger of mudflat entrapment potential. This information is covered in our documents pertaining to 'Fish and Wildlife' and 'Aesthetics'. Questions that relate to this issue include: How will recreation in the basin be impacted by the presence of these toxic conditions? What are the expected short and long term effects from carcinogens, heavy metals, and other toxics (to humans and other species) of introduced West Bay water? Ecology lists five sources of toxics in Budd Bay (mostly continuous). How will the continuous nature of these toxics be stopped? These toxics have existed in West Bay for many decades. The DEIS suggests that ‘future clean-ups are planned to address this contamination’. Considering that the State is over 25 years late in dredging and maintaining Capitol Lake, how can we be sure they will address this issue in a timely manner? How can we say that the water quality is truly improved?

Will Sediment Management be Improved? No. Under an estuary-hybrid, sediment management is less efficient. By far, the most efficient means of sediment control for a managed lake is the use of the north basin as a 'catch basin” to contain the spread of sediment. Unfortunately, this obligation has been neglected for decades by the state at great aesthetic cost to the community. For the managed lake, dredging in the north basin will be necessary every 20 years. With dam removal, dredging will be necessary, involving several entities, every 5-6 years. This dredging will take place in and around the marinas, Percival Landing, the Port Plaza and the port itself. This more frequent and complicated dredging in the marine waters of West Bay will, by its nature be less efficient. Will Ecological Functions be Improved? Considering the contamination from West Bay, and the reduced Do levels, ecological function improvement is questionable at best. Mixing marine water with fresh water is considered by some as the strongest ecological improvement to be made by the conversion to an estuary/mudflat. Regarding the Capitol Lake issue, how can we say that ecological functions in this case, the mixing of
clean river water with toxic marine water) will be improved? Please explain. Will increased opportunities for community use be improved? No. Certainly not. Increased inclinations to recreate in the Capitol Lake basin under an estuary-hybrid alternative is unlikely. In fact, recreation in the basin may be advised against by the Thurston County Health Department. Please note that under the estuary-hybrid, the signs referred to in our other documents warn specifically that swimming, clamming, mussel harvesting, and fishing are not advised. Other signs warn of the danger of human entrapment at low tides.

The usage time of water-based recreation under the estuary/mudflat would be reduced by at least 50% due to reduced tide levels. The daytime tides tend to be lower during the summer months when recreation activity peaks. Additionally, strong tidal currents below the railway bridge and at other constriction points will pose a safety hazard. Please include this information in the Executive Summary and elsewhere where appropriate throughout the Draft EIS. The lone exception might be within the reflecting pool under the 'hybrid alternative with freshwater management'; but this alternative has other serious problems and is not likely to be adopted in our opinion. Why would a rational health-minded person find advantages in recreating in toxic marine water over clean freshwater? Please change the impact statement for the Estuary and Hybrid Alternatives in the Executive Summary from 'substantial beneficial effect' to 'significant negative impact' on recreation.

Capitol Lake as a Community Attraction For decades, Capitol Lake has served as a community attraction for celebrations, outdoor educational displays, non-motorized boating and swimming (pre-1985), informal sporting events, running, walking, and dog walking. Unquestionably, these activities benefit human health, both physical and mental. Social cohesion for individuals and families in and outside the community are facilitated by the Lake. Freshwater swimming and non-motorized boating recreation in the clean, non-toxic water of Capitol Lake could easily be sanctioned by local governments. Even forgetting the toxic nature of contaminated estuary water, expecting the social cohesion value to persist with an estuary seems unlikely. Why? Consider the historical and current use of Mud Bay, East Bay, Woodard Bay, and other intertidal mudflats. The uses of those areas are a small fraction of Capitol Lake's activities.

Recreational Boating This recreational activity is generally considered outside the scope of the Draft EIS. However, it comes into play because of its economic impact when its availability is affected. Uncertainties for funding of the dredging operations required to keep the Budd Bay marinas viable are a significant concern. The importance of funding issues for long-term dredging for the Estuary and Hybrid Alternatives are discussed elsewhere in this document. And, for more complete information on recreational boating and the questions of funding alternatives, see the responses to the DEIS prepared by the Budd Bay marinas.

Swimming in Capitol Lake: The DEIS's lack of emphasis regarding the community's long held desire for a public freshwater swimming area is disappointing. This recreation feature served to define summertime fun in the area. One of the most recognizable pictures of historic Olympia, is that of approximately two hundred or so persons (mostly children) swimming and socializing in Capitol Lake. The Arc of Statehood (funded by the State) designed and dedicated a rather large section on the Lake's eastern shore specifically for this
Mudflat Entrapment and Other Safety Issues In addition to the omission in the DEIS that toxics threaten many living organisms in the Capitol Lake basin, another serious omission in the DEIS is the fact that mudflats are inherently dangerous to humans and other animals. According to The Olympian, in 2016 a man became entrapped in the mudflats of Ellis Cove requiring emergency life-saving assistance. According to interviews with long-time residents, this type of event is not uncommon. Here is another example of the DEIS neglecting to inform the public and its decision-makers of the serious problems associated with an estuary/mudflat. Please provide a section in the Executive Summary stating that an estuary creates a serious danger due to the potential for public and pet entrapment at low tides. Please state clearly that this represents a 'serious negative impact'. The narrow gap at the railroad bridge and other constricting points would likely present an additional safety problem as the speed and turbulence of tidal flows could be excessive for many boaters, sail boaters, inner-tubers, canoeists, paddle borders, and kayakers. Congregating harbor seals hunting salmon below the railroad bridge or at other predation points could pose a threat to these user groups named above. Recall the voracious harbor seals congregating at the outfall of the dam. All of the above constitute significant problems for recreation under an estuary/mudflat alternative.

Mudflat Odors A lake with its aquatic plants properly dredged or harvested produces virtually no objectionable odor. Hydrogen sulfide is a naturally occurring and odiferous molecule in mudflats. Many have experienced this mudflat odor and found it to be objectionable and inappropriate for an urban area, especially that of a capital city. Some of these people will undoubtedly avoid the shorelines and surrounding areas. Again, the DEIS fails to adequately address this common characteristic of an estuary/mudflat and specifically, that some people will avoid it. This cannot bode well for recreation and downtown economic activity. Please address the odor issue with an unbiased, scientifically developed survey of those who have experienced the odor in this urban setting. Preference surveying between Lake and estuary/mudflat odors in a capital city would be helpful. Please report the results of such a meaningful survey in the EIS.

The Capitol Lake Basin would become a Terminal Urban Estuary. How would this Impact Recreation? If the dam is removed, the toxics from Budd inlet derived from shore, groundwater, bottom, run-off from the surrounding area, and southward flow of Puget Sound would continuously infiltrate what is now a virtually toxic-free Capitol Lake. The touted ecological function of “mixing of freshwater with marine water”, would likely become a significantly harmful characteristic to the entire basin of 264 acres. According to several public health officials interviewed (state and county), Terminal Urban Estuaries are well known for unusually high contamination. The Capitol Lake Terminal Urban Estuary would be the southern-most estuary of Puget Sound and would be especially vulnerable to a variety of toxics currently and continuously affecting Budd Inlet. Why would we choose to contaminate a basin having clean freshwater, toxic-free, and productive? Please explain. A Brief Review: . . Without the dam, toxics infiltrating the Capitol Lake basin from West Bay pose a threat to humans, wildlife and fish, habitat, and ecologic functions. According to Thurston County Health Department, mudflats are inherently dangerous to humans and pets due to entrapment potential. Why would we create these two significant problems in a basin which is currently clean, safe, and productive? Their negative impact on recreation will undoubtedly be severe. Why are these threats not mentioned or adequately discussed in the DEIS? Please do so.
HISTORIC AND CULTURAL RESOURCES Pursuant to the State Environmental Policy Act (SEPA) WAC 197-11-440(6)(iv) Urban quality, historic and cultural resources, and the design of the built environment, the EIS needs to consider the impacts to the Washington State Capitol Campus National Historic District since Capitol Lake is a significant part of the Capitol Campus designed by Wilder and White in 1911 and the Olmsted Brothers in 1928. The Draft Environmental Impact Statement does not take into account the nationally significant City Beautiful Movement design principles of the State Capitol Campus which is on the National Historic Register. In 1911, the architectural firm of Wilder and White created a master plan for the Washington State Capitol Campus as part of a nation-wide design competition. This plan captured the imagination of the competition judges with its unique approach, a group of symmetrically arranged buildings in a forest, atop a bluff overlooking a reflective lake, the City of Olympia, and Puget Sound. As stated by Wilder and White in their August 29, 1911 report to the State Capitol Commission, 'a tide lock at [5th Avenue) would form a lake and the whole effect would be visible from most points of the City as well as the Sound." ‘Washington's Audacious State Capitol and Its Builders,' Norman Johnston, p. 33, (1988). Wilder and White incorporated five design principles into their plan for the State Capitol Campus. These principles include: (1) the City Beautiful Movement, (2) the Capitol Group of buildings, an unprecedented design of separate legislative, executive, and judicial buildings to look like a singular Capitol building when viewed from Budd Inlet, downtown Olympia, and the Fourth Avenue Bridge, (3) the borrowed landscapes of the Olympic Mountains and Budd Inlet to frame the design, (4) the northern orientation of the Capitol Group and Campus to Budd Inlet and the Olympics and (5) a lake to reflect the beautiful buildings on the bluff. 'It was at Olympia, Washington, that the American Renaissance in state capitol building reached its climax... Such a collection of Classical buildings on a plateau surmounting a green hill 117 feet above sea level proved an irresistible vision. It would be a spectacular monument, with Mount Rainer in one direction, the Olympic Range in another... all mirrored in the blue waters below. The City Beautiful, a concept of perfection evolved for dense urban scenes, seemed destined to achieve its finest expression in the natural landscape of the Pacific Northwest. No architect or dreamer could have asked for a more splendid setting.' Temples of Democracy, The State Capitols of the USA, Professor Henry-Russel Hitchcock (1976), pp. 257-259. The Olmsted Brothers 1928 plan for the landscape also required Capitol Lake to reflect the buildings. Maintenance of Capitol Lake as a reflective lake is necessary in order to preserve and protect the historic design of the Washington State Capitol Campus which is the best example of City Beautiful movement architectural design and urban planning outside of Washington D.C. Capitol Lake stands in the design tradition of the Tidal Basin and the other reflective bodies of water along the National Mall from the U.S. Capitol of the Lincoln Memorial, Failure to protect Capitol Lake would replace its mirroring and sparkling presence with the dismal mud flats of the past. 'To the south of the boulevard skirts the edge of a proposed freshwater lake secured by tide locks across the head of the Sound and will be a great addition to the city park system.” The American Architect, VOL CVIII, No. 2083, November 24, 1915, Wilder and White, p. 346. 'The late 1940’s was to include the beautification of the expanse at the base of the Capitol group site to its north and west. The [Wilder and White and Olmsted Brothers] plan saw this area as a grand water feature... [to replace the] plane of mudflats... The project also included the construction of a dam, the ensemble thereby creating a permanent body of water, Capitol Lake. Substantially completed in 1951, this new visual and recreational amenity became an appropriate setting for the acropolis of the Capitol group which is now so handsomely supported.'
Significant progress has been made toward the completion of the Wilder and White plan since 1911. After the Capitol Group of buildings on the West Capitol Campus bluff was completed and the Olmsted landscaping plan was instituted in the 1920's and 1930's, Capitol Lake was created by the State Capitol Committee and the Legislature in 1949-1950 with the construction of a dam and a tide gate along 5th Avenue. Since 1991, further progress has been made toward the completion of the North Capitol Campus Heritage Park along the shore of Capitol Lake with the Legislature and City of Olympia spending twenty-five million dollars to complete the land acquisition, the Arc of Statehood, the Western Washington Inlet, the Eastern Washington Butte, the North Campus Trail, the Lawn Amphitheater, the City Fountain, the City seasonal ice and roller rinks in the Isthmus Park, and several phases of the construction of Heritage Park and the Washington State Law Enforcement Memorial. Two million dollars in private funds have also been raised for construction of these City Beautiful elements of the North Capitol Campus. The predesign of enhancements to the Eastern Washington Butte at the North end of the Arc of Statehood should also be addressed in the Draft EIS. Maintaining the open water environment in the north and middle basins of Capitol Lake is the only action which is compatible with the historic 110-year plan for the State Capitol Campus. The Draft EIS does not consider the national significance of the historic design of the State Capitol Campus remaining intact by maintaining and improving Capitol Lake through regular dredging every 10 to 20 years which occurred up until 1986. 16 U.S.C. 470f - Section 106 of the National Historic Preservation Act provides, The head of any federal agency having direct or indirect jurisdiction over a proposed Federal or federally assisted undertaking in any State and the head of any Federal department or independent agency having authority to license any undertaking shall, prior to the approval of the expenditure of any Federal funds on the undertaking or prior to the issuance of any license, as the case may be, take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register. The head of any such Federal Agency shall afford the Advisory Council on Historic Preservation established under Title II of this Act a reasonable opportunity to comment with regard to such undertaking. The Nationally protected State Capitol Campus Historic District must be preserved under federal law.

Under RCW 79.24.720 Capitol Lake is designated as a historic facility of the State Capitol. RCW 79.24.720 - Department of enterprise services' responsibilities. The department of enterprise services is responsible for the stewardship, preservation, operation, and maintenance of the public and historic facilities of the state capitol, subject to the policy direction of the state capitol committee and the guidance of the capitol campus design advisory committee. In administering this responsibility, the department shall: (1) Apply the United States secretary of the interior's standards for the treatment of historic properties. Capitol Lake must be preserved under State law. The Draft EIS fails to analyze the necessary dredging and maintenance of Capitol Lake to the standard as applied by the Secretary of Interior to the National Mall in Washington D.C. Capitol Lake is the City Beautiful movement equivalent of the Tidal Basin and the reflective pools from the U.S. Capitol to the Lincoln Memorial.

The cost of dredging and maintaining Capitol Lake are extremely inflated by only including the costs of disposing the dredge spoils upland instead of in-water disposal. The Draft EIS chart on page 7-5 should include the cost of maintaining the historic Capitol Lake with the cost of in water disposal for a fair comparison of the cost of the alternatives. Whether dredging in Capitol Lake or dredging in Budd Inlet
the New Zealand mud snail will be present and those dredge spoils can be safely disposed of in-water. The dredge spoils from the Lake could also be used and sold as valuable soil and be a revenue stream to the State. The sediment disposal costs of maintaining Capitol Lake should also be shared by the State, Thurston County, the Port of Olympia, the City of Olympia, the City of Tumwater, and LOTT since all these public entities benefit from removal of sediment in Capitol Lake on a every 10-to-20- year basis just as Capitol Lake was designed. Removal of the dredge spoils in Capitol Lake will be less frequent and more economical than removing the dredge spoils from contaminated Budd Inlet. Not maintaining Capitol Lake is in violation of Federal and State Law and the Draft DEIS must analyze these issues.

VISUAL RESOURCES, AESTHETICS We suggest that Aesthetics be added to the Draft EIS heading of Visual Resources to more clearly indicate the importance of this topic. The origin of Capitol Lake was almost entirely based on mainstream aesthetic preferences at that time, and aesthetics continue to play a critical role as we move forward to develop long-term plans for the Capitol Lake Basin. Alone, 'Visual Resources' connotes an institutional concept, 'Aesthetics' humanizes it.

One of concerns we have with those who favor recreating an estuary/mudflat or hybrid option is that they have effectively removed mainstream aesthetic values from the discussion. They appear to be unaware of the aesthetic issues that led to the creation of the Capitol Campus in general and Capitol Lake in particular. They have accomplished this feat through an almost total deemphasis and devaluing of aesthetics, and replacing it with the ideal of environmental perfection, no matter what the cost. They have ignored the fact that Capitol Lake Aesthetics have contributed significantly to the community's quality of life for over 70 years. DES sponsored survey shows 'Aesthetics' as the most desired characteristic for the Capitol Lake Basin The Community Input survey of 2016 sponsored by Capitol Lake / Lower Deschutes Watershed Long- Term Management Planning Department of Enterprise Services ranked in order of importance, the top fifteen criteria for this project's management goals using 421 responses. The #1 most important criterion in this survey was 'Aesthetics’. No mention of this finding exists in the DEIS. It should be noted that this survey is one of only two (along with the Seven Wonders survey) known to seek the public's opinion on the Capitol Lake/ Estuary issue. Both surveys reveal the dominant importance of aesthetics regarding Capitol Lake. Why aren't these findings recognized in the DEIS? A thorough and unbiased report (whose job it is to educate decision-makers) would have done so. Knowledge of the community’s opinion should be of supreme importance. Please make this fact known in the report’s Executive Summary or in the Introduction, Project Background, & History. Include the factual information from 'A Brief Review' presented a few paragraphs below.

The aesthetic value of Capitol Lake to the community and state of Washington is substantial, as evidenced by the survey results. It bears repeating, the subject has been ignored in the DEIS. For example, the Executive Summary 'Visual Resources', estuary, visual resources, page 33, give an evaluation of 'less than significant impacts” with an estuary/mudflat conversion. History of the Lake's origin and the surveys indicate the above characterization is not accurate. Please review the many arguments below which suggest that the evaluation 'significant impact' for the estuary-hybrid would be most appropriate by far. Please note that the realistic term 'estuary/mudflat' for the estuary or hybrid options will be used here to emphasize an ignored but overriding important characteristic to our urban area. The term is meant to be realistic, not derogatory. Capitol Lake's urban location must be recognized.
as a paramount factor which amplifies the importance of aesthetics and differentiates it from a non-
urban location such as Nisqually Reach and Mud Bay. The community has recognized this for basically a
century, reasoning that a well-managed lake would be much more valuable to the community than an
estuary/mudflat. Quality of life would be markedly improved. However, it must be noted that some
people say they find the aesthetics of the estuary/mudflat to be equally as pleasing as the Lake. This
opinion likely represents a small minority of the general population as evidenced by the minute fraction
of visits to Mud Bay, East Bay, Woodard Bay, etc. when compared to visits to Capitol Lake. For a realistic
and revealing comparison, would Central Park in New York City enhance the aesthetic appeal of that city
if it were converted to a mudflat? Similarly, consider Lake Union, Green lake, or Lake Washington in
Seattle. A small minority might shout 'yes'. The majority (mainstream) would likely say 'no'. How
unfortunate it would be for those urban areas if the 'yea- sayers” won the day! The method mostly
employed in the creation of these comments is to use as a standard the aesthetics of a managed Capitol
Lake, then compare those to the other proposed alternatives. Obviously, a degree of subjectivity is
employed in some areas. Without data and survey results, this cannot always be avoided. However,
reasonable attempts should be made to determine the will of the public on this issue using subjective
evidence if necessary. Again, the public's opinion is important and should not be ignored. Looking at the
design elements of each alternative: The Managed Capitol Lake is a part of the Wilder-White-Olmstead
Design of the Capitol Campus and the Arc of Statehood. The substantial historical investments of our
city and state to create an aesthetically pleasing public amenity, Capitol Lake, are well documented
elsewhere and do not require a review here. The Estuary/Mudflat is an attempt to recreate a natural
setting before European settlement, and as such is not designed with aesthetics in mind. There are
significant problems with this in the current urban setting. First, there was no isthmus connecting
Olympia with the West Side, and most of the Downtown area was intertidal mudflats in these earlier
times. The mudflats were not surrounded by a dense urban core, or crisscrossed with major roadways
and bridges, railroad tracks and bridges, and an Interstate Highway. Though returning to more idyllic
times may be desirable, creating this estuary will not accomplish that. The aesthetics of these earlier
times are gone forever. And creating a Hybrid with the addition of a half-mile long industrial-looking
sheet pile and concrete barrier structure through the middle of the Northern part of the estuary, further
reduces any positive value to the aesthetics of the basin. From a design point of view, the reflective pool
may offer some limited aesthetic appeal, but the barrier wall will obscure the pool from most vantage
points.

Capitol Lake was created Primarily for Aesthetic Purposes in an Urban Area Public meetings hosted by
DES in 2016 made clear via decades-old news clippings and meeting notes that Capitol Lake was created
mostly to solve the unfortunate aesthetic dilemma posed by the estuary/mudflat. Most citizens and
legislators apparently felt the estuary/mudflat had a strong negative effect on the quality of living in
Olympia. Els authors should emphasize this important fact and remind the public that re-creating the
estuary/mudflat will, by its expensive nature, preclude a future do- over, as it is not a plan utilizing
adaptive management. Removing the dam makes this a 'one and done' and ‘no turning back” plan.
Jeffers Studio has archived several photos which show the marked extent of the mudflats prior to the
dam. Although, as in other 'quality' or subjective characteristics, the distasteful effect of the mudflats
(mud and marine debris) cannot be quantified, the community was driven to replace the mudflat with an
amenity which was viewed as overwhelmingly positive by the mainstream until its maintenance was
neglected by state caretakers. For the estuary, on page 4-126, 'Key Findings: Long Term visual Resource Impacts', the statement is made that the estuary will allow the landscape to 'remain unified and harmonious with the natural setting of the existing surroundings resulting in less than significant impacts'. This characterization regarding the estuary should be changed to 'significant impact'. Please remember that the Capitol Lake basin is now and has been for well over a century an urban area, not a wild or undeveloped or rural one. It is part of an urban state capitol campus and is surrounded by paved streets, buildings, public parks, residences, a parkway, and interstate highway. Thus, making the assertion in the Executive Summary that the estuary will 'remain' unified and harmonious reflects a biased and inaccurate assessment. Stating that the change to an estuary/mudflat will qualify as ‘less than significant' avoids the reality which is obvious to virtually everyone with an honest and objective point of view. Also see the Executive summary, Visual Resources, page 33, estuary. Again, this characterization regarding the estuary should be changed to 'significant impact'.

For the Hybrid, like the Estuary, the Draft EIS fails to adequately address urban aesthetics. However, acknowledging that the wall's dominant and ominous appearance will likely be objectionable to a substantial number of people with mainstream tastes, is positive. Compliments to the DEIS for recognizing this problem which does not meet mainstream needs.

View of Capitol Lake is the "#1 Wonder in Thurston County' A 'Seven Wonders of Thurston County' county-wide survey of 2011 sponsored by the Thurston County Commission chose the view over Capitol Lake from the Law Enforcement view platform as the #1 Wonder of Thurston County. Former Chief Justice of the Washington State Supreme Court Gerry Alexander was interviewed by then county commissioner Cathy Wolfe at the law enforcement pavilion as he explained the unusually significant value of this amenity to the community and State. The conclusion: Capitol Lake can be considered the area's aesthetic crown jewel. However, like the aforementioned Capitol Lake/Lower Deschutes Watershed, Department of Enterprise Services Survey mentioned in the first paragraph, this important fact was not included in the DEIS, concealing the community's critically important evaluation of a Managed Lake. The DEIS Report has failed the public and its decision-makers by not reporting on these two surveys. Their findings should be prominently revealed to the public in the EIS. Recognizing and validating the public's will and needs should be of paramount importance in a quality, truthful, and unbiased EIS. Note: The two surveys mentioned in this section reveal an important finding other than the strong preference of the community to keep and manage Capitol Lake. The surveys show that the mainstream members of the community, although far from being able to organize the loudest shouters, have quiet, powerful convictions. The view across the Estuary/Mudflat and Dual Basin would possibly qualify for this same distinction, but only a percentage of the time due to perimeter mud exposure and odor, unpleasant to so many in an urban environment. To summarize: Capitol Lake was created for Aesthetic Reasons County Survey in 2011 Rates Capitol Lake #1 'Wonder of County' DES Sponsored Survey 2016 Rated 'Aesthetics' as #1 Criterion for Basin A reasonable conclusion would be: Clearly, the aesthetics of the Capitol Lake basin is the most important characteristic desired by the public. Why isn't this finding reflected and emphasized in the DEIS? Shouldn't considerable weighting be given to the public's declared need? Please explain
Land Values Bordering Lakes are Significantly Higher than for Estuary/Mudflats. Our free enterprise system allows us to vote using monetary resources for items we choose. Perhaps the most objective method of evaluating the aesthetic value of a landmark amenity is to determine what property owners are willing to pay to view it. Data derived by assessor tax records, appraisers, and the opinions of multiple professional realtors in the area suggest with little question that lake-view property is almost always valued much higher than that bordering an estuary/mudflat or wetlands, all other factors being equal. Most objective observers find it disingenuous that the DEIS has failed to recognize this obvious fact that a Managed Lake provides significantly more value to the community than does an estuary/mudflat. This characteristic should be relatively easily quantified. Please do so using an unbiased methodology and fully describe that methodology. The process should be straightforward and described in detail in the EIS.

Lack of Objectionable Odor A lake with its aquatic plants properly dredged or harvested produces virtually no objectionable odor. Hydrogen sulfide is a naturally occurring and odiferous molecule in mudflats. Many persons (not all) have experienced this mudflat odor and found it to be objectionable and inappropriate for an urban area, especially that of a capital city. Again, the DEIS fails to adequately address (investigate) the effect of this common characteristic of an estuary/mudflat. The DEIS fails to understand that (despite its analysis of smelling) the human aversion to the mudflat odor will reduce the number of persons willing to be in the downtown area. Please address the odor issue with an unbiased, scientifically developed survey of those who have experienced the odor in this urban setting. Preference surveying between Lake and estuary/mudflat odors in a capital city would be helpful. Consider using the services of a respected pollster such as Elway Research Inc. Please report the results of such a meaningful survey in the EIS. Note: The DEIS analysis of human perception of types of odors is not a substitute for the opinions of those who have lived through and experienced the odors of the estuary mudflats. Attempting to ascribe the perception of objectionable odor in the mudflats solely to human causes (excrement) is not confirmable by those who lived here during that period.

Please print the following in the EIS. Positive images of urban areas have significant value for tourism, economic activity and quality of living. Consider the following cities whose images (like our state capitol) are enhanced by lakes: New York Seattle Boston Central Park Lake Union, Green Lake, Lake Washington Charles River Basin Madison, WI Washington DC Paris Oakland, CA Lake Mendota (Also supporting the state capitol) National Mall and Tidal Basin Jardin du Luxembourg, Versailles Gardens Lake Merritt The value of these commonly understood associations was not recognized in the DEIS. The value should be recognized in environmental disciplines such as ‘economics’ and ‘aesthetics”. Please do so.

Again, the Capitol Lake basin is an urban area, not a wild or undeveloped or rural one. As with the above and dozens of other cities, Olympia’s urban area is enhanced the aesthetically pleasing nature of an attractive landmark such as Capitol Lake. Again, quality of life for the mainstream is enhanced (see surveys above). If the Lake’s aesthetic needs were properly addressed with expected responsible maintenance, the urban aesthetic needs would be met and its overwhelmingly popular aesthetic appeal would be immediately restored. Note: Although proponents of the estuary mudflat will object, the DEIS should raise the question publicly as to why the aesthetic needs of Capitol Lake have been intentionally
neglected by GA and DES, and the State Legislature for decades. The issue should be investigated as it appears to be an abrogation of duty. A supportable answer should emerge and be revealed to the public. They deserve to know why the Lake looks so bad, especially in summertime. The negligence, which makes the healthy lake look unhealthy, appears to be intentional (and is shamelessly used to convince the public that it is ‘sick’). Only those desiring a different management plan would benefit from the negligence. How have they managed to prevent a normal dredging program? Aquatic weed harvesting? Why has the State Legislature, charged with maintaining Capitol Lake, abandoned its obligation without any reasonable explanation to the public (who actually own the Lake yet have no recourse but to endure its poor appearance)? The two most pertinent questions to be answered are: 1. Why the Lake has not been dredged for over 35 years? (The original intent was about a 10 year interval.) 2. Why has no selective harvesting of aquatic plants been undertaken? Again, the public deserves to know these answers which should reveal both why the Lake has been made to look like it does today and the motivation behind the maintenance prevention scheme. Estuary/Mudflat: Found to be inappropriate prior the creation of Capitol Lake. Not aesthetically acceptable. Dual Basin: Not aesthetically acceptable to the public in an urban setting due to the dominant, ominous appearing wall. A Maintained Capitol Lake Promotes Enrichment of Community Life by Improving Physical and Mental Health. The Aesthetics of the Lake Contribute Significantly to our Quality of Life. Capitol Lake has been described as ‘the soul of our community’, especially when it was maintained. For decades, it has served as a community attraction for celebrations, outdoor educational displays, boating, swimming (previously), informal sporting events, running, walking and dog walking. Unquestionably, these activities benefit human health, both physical and mental. Social cohesion for individuals and families in and outside the community are facilitated. Expecting this value to persist with an estuary seems unlikely to be true. Why? Again, consider the historical and current use of Mud Bay, East Bay, Woodard Bay, etc. The uses of those estuary/mudflats are a small fraction of Capitol Lake’s. Freshwater swimming and non-motorized boating recreation in clean, non-toxic water could easily be achieved in Capitol Lake. Sadly, for well over a decade, persistent misuse of outdated water quality data, inappropriate conclusions, rumors, along with gross mismanagement have contributed to the public’s misconception of the health of Capitol Lake. Of course, this is a commonly employed political strategy - hyperbolically create the appearance of major problems that don’t really exist, then offer solutions that serve the desires of the accusers. Thankfully most of these misconceptions, circulating among the public for so long have been almost totally disproven by independent third party reviewers used by this DEIS. The public should be thankful for these overdue corrections. As the EIS states on page 3-28, ‘Overall, Capitol Lake exhibits very good water quality.’ Yet, severe lasting damage has been done to Capitol Lake’s reputation as the public remains misinformed. Surely, a DEIS responsible to the public’s need for accurate, current scientific information would emphasize the unfortunate effect of past dissemination of false information which has tainted Capitol Lake. A paragraph in the Executive Summary dedicated to this need would be of immense help to the public and its decision-makers. Please do so. As if we need to be reminded, rumors and false information stated repeatedly as factual are the enemy of good decision-making. Comment: The existence of such extensive misinformation circulating in our community render the value of a new public survey meaningless. Many responses would be based upon inaccurate and out of date information published in the media and spoken by public officials.
Invasive toxics from Budd Bay are a threat to public health. Additionally, with dam removal, the invasion of toxics from Budd Bay into the Capitol Lake basin will create the potential for a host of problems including human health (as evidenced by Thurston County Health Warning signs posted throughout Budd Bay—see below). The currently clean freshwater and sediment in Capitol Lake will be compromised. The dozens of signs necessary to warn the public will be aesthetically unpleasant. They will negatively affect tribal cultural resources. Dredging Budd Bay should help to some degree; however, many contaminants are not stationary in the Bay sediment. They continuously arrive from outside the Bay (leaching from soil, run-off, or southerly directed marine flows or from upwelling) (See caption below). Mixing from large vessel propellers in the Port's turning basin will be another source. Thus, with the dam removed, Capitol Lake basin will receive toxics from Budd Bay twice per day with the tide. Public knowledge that the water contained in the Capitol Lake basin will be contaminated with toxics (no shellfish or fish harvesting) is a severe detriment to the aesthetics of the estuary/mudflat.

Please address these almost certain problems posed by the estuary/mudflat. They appear to have been inadequately investigated. Please answer: What will be the expected short and long term effects of the carcinogens, heavy metals, and other toxics (to humans and other species) from the introduced West Bay marine water? The DEIS suggests that 'future clean-ups are planned to address this contamination'. Considering that the State is over 25 years late in dredging and maintaining Capitol Lake, how can we be sure they will address this issue in a timely manner? They haven't so far. Ecology lists five sources of toxics in West Bay (mostly continuous). How will the continuous nature of these toxics be stopped?

Throughout the 1970's and early 80's runoff into Capitol Lake caused water quality to become a serious concern. (Swimming was curtailed in 1985.) Under a Managed Lake, water quality is now 'very good' (and support swimming). However, under an estuary alternative, with the toxic invasion, it is highly unlikely that swimming will be allowed. For a cost of hundreds of millions of dollars, we will be repeating the same mistake of allowing contaminated water to infiltrate the basin. How will we explain this blunder to the taxpayers? Do we really want to repeat the mistake?

Due to the likely introduction of toxic materials into the current lake basin, please change the Executive Summary under Water Quality, estuary and hybrid, page 30 from 'less than significant impacts' to 'significant impacts'. Change the Executive Summary under 'Economics (including ecosystem services)' for the estuary, page 35, from a non-characterization to 'significant impacts'. Change the Executive Summary, page 34, Environmental Health (primarily estuary sediment quality estuary degradation from 'less than significant impacts' to 'significant impacts'. Change the Executive Summary under Land use, Shorelines, and Recreation, page 32, estuary, from 'substantial beneficial effect' regarding water quality, improved ecological functions, and increased opportunities for community use to 'significant impacts'.

At least five sources continuously supply contaminants to Budd Inlet: . . Urban stormwater runoff, (PAH's, PCB's, CEC's) Effluent from LOTT Cleanwater Alliance, (PBDE's, PCB's -low concentrations, CEC's) Southern Puget Sound marine flows flowing south, Turbulence induced mixing of sediment and legacy toxics by large port vessels in the turning basin. Legacy industrial pollutants from toxics clean-up sites. (Listed below from Washington Department of Ecology Website.) An additional four closed sites continue to leach contaminants into Budd Inlet: Reliable Steel site: (Westbay Drive) Gasoline-diesel or oil range petroleum hydrocarbons in soil or Budd Inlet sediments Toxic metals - arsenic, cadmium, copper,
Mudflats are deemed dangerous by Thurston County Health Department As the warning advisory on the right side of this photograph in Ellis Cove demonstrates, at low tide mudflats are dangerous. The public will need to be advised to keep off the mudflats with signage to that effect. In addition to the omission in the DEIS that toxics may threaten many living organisms in the Capitol Lake basin, another serious omission in the DEIS is the fact that mudflats are inherently dangerous to humans and other animals. According to The Olympian, in 2016 a man became entrapped in the mudflats of Ellis Cove requiring emergency life-saving assistance. Here is another example of the DEIS neglecting to inform the public and its decision-makers of the serious problems associated with an estuary/mudflat. Please provide a section in the Executive Summary stating that an estuary creates a serious danger due to the potential for public and pet entrapment at low tides. Please state clearly that this represents a 'serious negative impact'. Don't these warning signs adversely affect aesthetics?

To summarize: . . Without the dam, toxics infiltrating the Capitol Lake basin from Budd Inlet pose a threat to humans, wildlife and fish, especially Chinook- and by extension, endangered Southern Resident Orcas. According to Thurston County Health Department, mudflats are inherently dangerous to humans and pets due to entrapment potential. Why would we create these two significant problems in a currently clean, safe, and productive basin? Why aren't these critically important findings described in the DEIS? . . Capitol Lake Serves as a Signature Visual Image for our State Again, Capitol Lake has been voted the "#1 Wonder of Thurston County'. It is iconic. Promotional and educational photos of Olympia, Thurston County and the Capitol Campus commonly focus on Capitol Lake. News articles, magazines and books frequently include visuals of Capitol Lake. As an example, Craig Romano's hiking book Urban Trails Olympia features a full page photo of Capitol Lake in its introduction. The Lake tends to define Olympia's outdoor urban area. This important economic information is missing from the DEIS. Please mention this Signature Visual Image for our state and local communities, and explain its economic significance. Please characterize in the Executive Summary, Page 35, “Economics (including ecosystem services)” for the estuary/mudflat as 'significant impacts”. Reduction of Sprawl with a Managed Capitol Lake

Enhancing the aesthetic appeal of downtown Olympia with improved Lake management will help to increase downtown residential and business density likely reducing residential and business sprawl into our valuable and diminishing rural areas. (See 'Land Values Bordering Lakes are Significantly higher'). This would undoubtedly be environmentally beneficial and yet it has not been mentioned in the DEIS. Note: Olympia proper will continue to grow under all the alternatives. However, in the minds of realistic city planners (such as retired City of Olympia and Thurston County Planner Peter Swennson), under a Managed Capitol Lake, our area is likely to have a much higher percentage of city/rural growth, which is
a purpose and goal of The Growth Management Act. It is important to attempt to answer the following:
Will the marginal habitat benefit under the estuary/mudflat alternative be less than or greater than the
rural habitat saved by attracting more residents and businesses to the urban area? This question must be
addressed in the EIS. Experts must be consulted. Regarding the Executive Summary, apply the
characterization 'significant impacts' to the Estuary under Economics (including ecosystem services)
page 35. Additionally, in the Executive Summary, estuary, add 'significant impact’ to Fish and Wildlife,
page 37. It is well established that sprawl significantly adversely affects rural ecosystem services due to
development pressure (increased run-off, destruction of habitat, etc.). Recognition of this pressure
should be stated clearly in the Executive Summary, Land Use, Shorelines, and Recreation, page 32
reflecting this established effect, labelling it 'significant impact' for the estuary/mudflat. As mentioned
above, please interview experienced city/county planners as to their opinion on this matter. Lack of
recognition of this long term environmental effect belies the third major goal of this project, 'Improve
Ecological Functions.'

Singular Estuary/Mudflat Pictorial in Executive Summary is Misleading to the Public The singular visual
representation of the estuary at mean tide (page 10 of the Executive Summary) reveals an image which
exists for a limited amount of time. This needs to be clarified to the public and its decision-makers. What
is the date of this mean tide depiction? Please show calculations as to how the water levels were
depicted so that impartial engineers might confirm their accuracy. Will the island grasses be green year
round? (aesthetically important). Is this pictorial consistent with the statement on page 1 of the
Executive Summary that with the estuary alternative, ‘tide flats will be the predominant habitat type.”
No, it is not. Shamelessly, no tide flats or marine debris are depicted. Note: How can the DEIS be
considered impartial in the face of this evasion of reality which hides the mudflat area? The stark answer
is, it can’t. These requests are especially meaningful because most readers of the Els document will likely
look at the Executive Summary and skip the vast majority of the 'Discipline Section' which shows more
realistically what will be visualized over the span of tide levels. Many of those who consistently view Mud
Bay, West Bay Park area, East Bay, and Woodard Bay, or Nisqually Mudflats in the daytime understand
that substantially more mud in Capitol Lake basin is likely to be revealed the vast majority of time
compared to what is pictured in this singular Executive Summary pictorial. This is particularly true of
daylight hours in the summer when more people are outside and tides are lower. A significant
percentage of readers including public third party reviewers might find this one image in the Executive
Summary to be misrepresentative. Essentially it tells the viewer, “There is no mud! There is no marine
debris.'

For the sake of credibility, show at least 4 images of the estuary alternative and hybrid alternative in the
Executive Summary with at least 2 at summer low tide, at least one of which is taken from the Deschutes
Parkway facing northeast and one from Marathon Park facing north. Marine debris should be shown as it
is part of the mudflat landscape. The public must be given the chance to visualize the massive
'significant impact' brought about by the substantial areal amounts of mudflats. Hiding this feature
reveals a significant bias toward the estuary/mudflat and needs to be corrected. After 70 years, most of
our community's institutional public memory of the unpleasant nature of the estuary/mudflats has been
lost. Furthermore, the Executive Summary Visual Resources aesthetic change assessment from Lake to
estuary should read 'significant impacts’ as regards the estuary/mudflat (page 33). Essentially, that
characterization was given 70 years ago. We are reminded that, “Those who ignore history are destined to repeat it”. Recommendation: Although the estuary mudflat has significantly impactful limitations aesthetically, doubling or tripling the number of ‘coniferous islands” would soften the stark harshness of the mudflats of this inferior alternative.

Note: In the hybrid alternative, at low tide, the wall of the reflecting pool will be up to 20+ feet above the mudflat. From the Deschutes Parkway, the reflection of the Capitol dome will be obscured by the barrier wall, substantially defeating the purpose of the reflecting pool. The wall itself, when viewed from all directions will have a dominating effect (especially at lower tide levels) and will ultimately appear unseemly and dirty with mussel growth and black colored algae-like plant growth like that of the supports of the 4th Avenue Bridge. Perhaps this problem could be alleviated with riprap (placed on both sides of the wall) of a color similar to the Arc of Statehood and short green deciduous vegetation atop. However, this would add significant expense and maintenance requirements, and would likely increase the loss of reflection from the Deschutes Parkway even further. This severe deficit in the hybrid alternative should be noted in the Executive Summary on page 33. This alternative should be disqualified on that basis alone unless it is accompanied by the above mentioned riprap and landscaping. At the July CSB meeting with DES, one CSB board member described the wall as ‘hideous’.

Horizontal elevation views of the new 5th avenue bridge and the elevated access road from Deschutes Parkway from any viewpoint have been omitted. These horizontal views are important as they should depict: The effect of the new 5th Avenue bridge if designed to ‘highway bridge” standards and its comparison to the more aesthetically pleasant urban design of the 4th Avenue Bridge. Landscape changes created by excavation and the access road to and from the Deschutes Parkway. Please provide appropriate elevation views so these aesthetic characteristics can be evaluated.

In the Executive summary, page 30 Aquatic Invasive species, for the Estuary alternative, the following statement is made, ‘Aquatic vegetation is reduced, resulting in a 'substantial benefit' by improving aesthetic characteristics of water quality' However, on page 33 of the Executive summary, Visual Resources, for the Managed Lake, the following statement says, 'Improved water quality and aquatic plant removal would have minor beneficial effects related to aesthetics.' Please address this inconsistency regarding plant removal in the lake basin under the two different alternatives. Further, aquatic plant growth and peripheral bottom debris in the lake basin account for virtually all of the Lake's negative aesthetic effect. This negative aesthetic effect will be totally eliminated under the Managed Lake Alternative (and also the Estuary Alternative) and therefore deserves a characterization of 'significant beneficial effect'. Please correct this discrepancy, or explain why it is fair to rate this removal in an estuary as a 'substantial benefit', but if it occurs in the managed lake, it is rated as a 'minor beneficial effect'? Please be fair and rate both alternatives the same. If these characterizations are to be converted to numerical scoring values, this discrepancy is of concern and must be corrected.

It appears to have taken approximately 25 years (1986-2011) for the aquatic plant growth and the debris in the north basin of Capitol Lake to produce an aesthetically unpleasant appearance. Therefore, assuming an initial dredge of that basin starting in 2025, it would be 2050 or before a similar negative aesthetic effect occurs (about the same time the first long-term dredge is scheduled to occur). If aquatic plant growth occurred sooner, a selective harvesting could markedly help the aesthetics. Therefore,
under Executive Summary, Visual Resources, Capitol Lake Alternative, page 33, a characterization of 'significant beneficial effects' would be most appropriate, rather than 'minor beneficial effects'. Please change as previously requested.

Comment: Reports are that the 5th Avenue bridge to be built is designed to the aesthetics of a highway bridge and is therefore less costly than if it were designed similar to the 4th Avenue bridge. If this is true, using the basic highway design would reduce the cost of an estuary/mudflat plan to reduce its cost disadvantage. Surely, design aesthetics in the state's capitol demand a '4th avenue type design'. Please make that intent clear in the EIS.

Comment: In the Executive summary, page 30 Aquatic Invasive species, Estuary alternative the following statement is made, 'Aquatic vegetation is reduced, resulting in a "substantial benefit" by improving aesthetic characteristics of water quality' This statement is somewhat misleading. Why? Because under all three plans of managed lake and estuary/mudflat, the north basin will be rid of plants because of dredging. The north basin is, by far, viewed by the most people and benefits little from the description described above. Additionally, the middle and south basin will become a wetland. Please change the characteristic to a 'minor beneficial effect'.

Inconsistent Construction Impact Descriptions regarding visual Impact for the Three Alternatives All three alternatives regarding construction have received a 'significant' designation for their visual impacts. This would be logical if all three had only the common construction activity of the initial dredge of Capitol Lake. However, the estuary and hybrid options create significantly more and longer (4-5 years for managed lake vs. 7-8 years for estuary/mudflat and hybrid) construction activity than the managed lake. For example, the estuary and hybrid options require the following additional construction activities as listed on pages 5-59 and 5-60. 5th Avenue Dam and Bridge Removal Construction of a new 5th Avenue Bridge for Bridge and vehicles and Deschutes Parkway alignment Slope stabilization along Deschutes Parkway Stormwater outfall replacement along Deschutes Parkway and the Arc of Statehood Culvert replacement at the Interpretive Center Barrier Wall construction in north basin (hybrid only) . All the above have additional negative visual impacts and over a greatly lengthened time-span. Using the same descriptive term for visual impact for all three options as 'significant' fails to convey the enormous differences as listed above. The common term does not tell the reader of the significant differences in impacts which the community will be required to endure. As such, it is misleading. Please correct this by using descriptive terms which convey the actual differences of the visual impact of construction activities. Again, the public does not deserve to be misled. Perhaps using 'significant impact' for the Estuary/mudflat option and 'non-significant impact' for the Managed Lake option would convey the proper difference to the public. If the characterizations used are to be converted to a numerical ranking value, please ensure that the ranking reflects the extra negative effects of the estuary/mudflat.

SPECIFIC HYBRID ISSUES We have more specific comments regarding the Hybrid Alternative in the relevant Chapters and Discipline Reports, however, in reviewing the Draft EIS, we have found two aspects of this alternative that are of over-riding concern, and have been identified as key findings important to the state decision process in the earlier section of this document. These issues must be made evident to all interested stakeholders in the Capitol Lake/Estuary project. One of the most important reasons for developing this dual-basin alternative is to preserve the iconic reflective views of
the Capitol, while still creating an estuary. The construction of a barrier wall is essentially the only difference between this alternative and the Estuary Alternative. To meet this objective of preserving the reflection of the Capitol, it should go without saying that the viewer needs to be able to see the water in the reflecting basin; and this is where we have a problem. It appears that the barrier wall, rising eight feet above the normal water level in the basin, will obstruct a significant portion of the views of the water from the Deschutes Parkway and around to the West end of the Arc of Statehood. Looking East from the Parkway across the Estuary, it appears unlikely that even the surface of the reflecting basin will be visible. Even around the North end of the basin, at the elevated feature of the Arc, called the Eastern Washington Butte, the reflection is impacted. To quote from Draft EIS Attachment 14, Page 5-42 which discusses Visual Resources: The paths next to the Eastern Washington Butte would be modified to ramp up to the barrier wall, and a guardrail would be added on the water side. As a result, the open water visible from the top of the butte would be substantially reduced. The view of the Capitol Dome would not be affected, but some of the reflection of the Capitol Dome in the water surface would be lost from this vantage point. It may be true that a few of the lucky homeowners on the bluff above Capitol Lake may continue to have reflective views, and motorists descending the Fourth and (new) Fifth Avenue bridges may have fleeting reflective views, but for those walkers, runners, cyclists and motorists on the Deschutes Parkway, the reflection could be only a memory.

And this brings us to the second over-riding concern. The one-half mile long barrier wall, including wing-walls every twenty feet for support and guard rails for fall protection, rises eight feet above the normal water level in the reflective basin, on the East side. However, on the West side, facing the Deschutes Parkway, the height of the barrier wall above the Estuary varies depending on the tide. At best, at high tide, it will be similar to the East side. But as the tide level drops, the elevation will reach about twenty feet (over two stories) above the estuary. Again, to quote from the same paragraph in Attachment 14: Its [barrier wall] scale and contrast as seen from this vantage point would be moderate to severe. It would introduce a major structural element that not only contrasts with the tree-lined shores, but also substantially reduces the scale of the basin that would remain visible. Even this statement does not do justice to the impact that a half-mile, fifteen-to-twenty-foot-high sheet pile and concrete vertical wall will have on the overall appearance of the North Basin, particularly from the Deschutes Parkway level.

As we said previously, these concerns must be made evident to all interested stakeholders. This is a case where a picture is worth a thousand words; and we don’t have the right picture. In Chapter 4, Figures 4.10.12 and 4.10.13 show that the reflective basin water surface is not visible from the walkway bridge, but provides only a limited perspective of the issues we have raised. Figures 4.10.14 and 4.10.15 provide no view of the estuary, and appear essentially the same as many other views from the Capitol overlook with the other alternatives. No other views of the Hybrid Alternative are included. At a minimum, the views from the Deschutes Parkway toward the Capitol need to be developed and placed in Chapter 4, and also included as a part of the Executive Summary. We believe the issues raised here could be disqualifying for the Hybrid Alternative. Full disclosure, both in text and pictorially, should be provided so that all stakeholders can be fully informed when they comment. You may receive significant comments from others that cause you to take a step back, make corrections or changes, and reissue a supplemental draft of the EIS for further review. If so, please take that opportunity to also consider these comments. If not, we believe that our concerns rise to the level that they should require reissuance of a supplemental Draft EIS for stakeholder comments on their own merit.
The descriptions of the Existing Conditions in the Economics section of Chapter 3 provide a thorough review and accurately portray the current conditions. Thank you for providing this review. We noted one comment in particular on Page 3.137, as follows: ‘For Capitol Lake specifically, interviewees most frequently cited the surrounding walking trails as one of its most compelling features for downtown residents, followed by the views it provides. These features would continue to contribute to attracting residential demand to downtown to the extent they are maintained in future management alternatives.’

We will have several comments supporting this important citation in the Economics sections of both the Long-term and Short-term Impacts in Chapter 4 and 5. Long-term Economics, Chapter 4 We have four significant questions regarding the statements in the Key Findings box on Page 4.181: . . Are the long-term impacts similar among all the action alternatives? Is the Managed Lake Alternative the most expensive? In the long or short term? Will LOTT have less stringent discharge requirements under the Estuary or Hybrid Alternatives? Tribal cultural values are prominently featured in these Key Findings, but there is no mention of the historical cultural value of the Capitol Campus as the centerpiece of the Capitol City and State. Both of these cultural values were described in Chapter 3, Page 3.141. Why was this second cultural value ignored? We will address each of these questions as we move through each section of Chapter 4, sub-section 14. In 4.14.3.1, Downstream Economic Activity, the relative costs of each alternative are discussed, with the Managed Lake as the most expensive, and therefore generating the most economic activity. First, as we have outlined in comments elsewhere, these relative costs do not survive a close examination, and should not be further promoted here. Second, this section describes the costs as ‘occurring over 30 years’. Looking closer, however, we see that the costs fall into two categories: those that will be incurred during the first 8 to 10 years for initial dredging and construction activities; and long term dredging costs that for the Managed Lake Alternative will not occur for about 30 years. For the first set of costs, the Managed Lake Alternative is not the most expensive, it is the least, by far. These are the costs that should be evaluated for their economic impact. The long-term costs, occurring 30 years from now, are based on a highly improbable scenario, as we have discussed elsewhere, and are likely to never materialize. The ultimate economic impact from these future speculative costs cannot be measured. The one true statement in this section is: ‘Spending for the action alternatives would likely be funded using a mix of public dollars from a variety of sources, but the ultimate funding mechanisms and cost distributions have not yet been determined.’ and ‘...the question of who pays, and how that might affect the regional economy or individual entities, is unknown.” We couldn’t have said it better.

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In 4.14.3.2, Development in Downtown Olympia, the Draft EIS summary concludes: all action alternatives are likely to produce benefits for downtown development, assuming they are implemented in a way that is attractive and accessible.’ The key here is assuming implementation in an attractive way. We all know that ‘attractive’ is in the eye of the beholder, but it appears to be nearly universally accepted that the barrier wall running the length of the North Basin will not meet any definition that includes ‘attractive’. The comment on the Hybrid reflective pool as a familiar feature, is negated by the imposition of the barrier wall as obstructing the views. Therefore, it should be stated that the Hybrid Alternative may have a negative impact on downtown development.

In 4.14.3.3, Demand for and Value of Recreation, all active alternatives are rated similarly, although there is a brief mention of the low-tide limits for the Estuary, and presumably the Hybrid Alternative. We have raised several questions previously that need to be addressed here. What is the maximum velocity at tidal change at the various constriction points, and how does that impact kayaking, canoeing and waterboarding? What percentage of the time will these activities be curtailed, both during high flow and also low water conditions? Will warning signs or restrictions be needed to ensure safe operations? How will restrictions be enforced? Shouldn't there be a distinction made between these limitations and the benign conditions for the Managed Lake Alternative?

In 4.14.3.4, Value of Ecosystem Services, there is one glaring error. This is the assignment of an Adverse Impact to the Managed Lake Alternative. The Draft EIS has failed to understand and acknowledge the natural effect of aquatic plants in removing a substantial portion of the Nitrogen entering Capitol Lake from the Deschutes River flow. This benefit of the lake is detailed in our Key Issue comments titled...
PASSIVE NITROGEN REMOVAL IN CAPITOL LAKE, and further in the general comments section for WATER QUALITY. Please review these two sections to be sure you understand this important water quality benefit that Budd Inlet realizes under the Managed Lake Alternative. Considering this feature of Capitol Lake, it should be characterized as having a Significant Beneficial Impact for utilities and their ratepayers. Further in this section, the Estuary and Hybrid Alternatives should be characterized as having an Adverse Impact for utilities and their ratepayers, because this Nitrogen removal capability will be lost without the lake. Please make these changes to the impact statements.

As we stated in our comments in the Fish and Wildlife section, there is strong evidence that juvenile salmon, reared in a freshwater environment such as Capitol Lake perform as well as those in a marine environment. Further, the increase risk of predation in an estuary with multiple compression points, and the presence of toxics from Budd Inlet into the newly created estuary, make it even more problematic to assert that an estuary is preferable to Capitol Lake for salmon enhancement. Please correct this misstatement.

And finally, in this section, we see once again the flawed conclusion that the Managed Lake Alternative exposes downtown Olympia to a greater flood risk during high river flow conditions. As we stated before, the long-established DES procedures to utilize the storage capacity of the lake, mitigate this flood risk. In fact, for all extreme river flow and high tide conditions, the Managed Lake Alternative has a lower risk of downtown flooding than either the Estuary or Hybrid Alternatives. Please reverse this beneficial effect to favor the lake versus the estuary.

In 4.14.4, What are the long-term impacts under the Managed Lake Alternative?, the Table 4.14.3 needs to be corrected to reflect the issues described above. These include recreational opportunity, LOTT utility and ratepayer costs, and salmon enhancement.

In 4.14.5, What are the long-term impacts under the Estuary Alternative?, the Table 4.14.4 requires the same corrections as previously described for Table 4.14.3. Additionally, in the last section of the table it is asserted that: ‘The 5th Avenue Dam has altered the natural system and resulted in water quality changes that have harmed species, specifically salmon, as well as plants and other animals...’. What is the basis for such a claim? If none, this comment should be deleted. In 4.14.6, What are the long-term impacts under the Estuary Alternative?, the Table 4.14.5 also requires the same corrections as previously described for Table 4.14.3. Additionally, the aesthetic value comment should be changed to significant Adverse Impact due to the imposition of an industrial-scale, 2600' sheet pile and concrete barrier wall through the middle of the North basin.

In 4.14.7, What mitigation measures would be recommended or required for the three alternatives?, adequate funding and a long-term plan for functional governance are identified as important measures to be taken, especially for the Estuary and Hybrid Alternatives. We maintain that these measures are so important that they must be established before a preferred alternative is selected. Then after selection of the preferred alternative, and before the dam is removed, if that is the choice, the funding and governance must be legally agreed upon. If funding or governance should not materialize partway through the project for either of these two alternatives, we cannot go back and start over, or allow...
sediment to accumulate without removal. Once the dam is removed, there's no going back. We get no 'do overs'.

A review of this section reveals two general conclusions that are demonstrably wrong. The first is that construction impacts will have little to no impact on economic activity in Olympia and the surrounding area. Second is that there is essentially no difference in any economic impacts among any of the alternatives. Section 5.14.2.2 states: 'Impacts on development in downtown Olympia from construction activities are unlikely to differ based on the alternative selected, and temporary disruption from construction is unlikely to have a meaningful effect on the market for downtown development. No impact is anticipated from construction activities on current or future development in downtown Olympia.' We disagree. Disrupting the major east-west traffic corridor, for up to 8 years, will most certainly impact commercial activities in the Downtown area. Brief disruptions have little impact, but years-long disruptions can cause more permanent changes in traffic and shopping patterns. Downtown Olympia has struggled for many years with developing a robust city core. The exodus to the westside commercial areas, traffic and parking problems, the impact of the Nisqually earthquake, lack of affordable housing, and most recently the homeless issues, have made this struggle difficult over the years. However, some progress has recently been made, especially with the increase in specialty stores, more affordable and market-rate housing and the addition of amenities like the Farmer's Market, Percival Landing and the Port Plaza. However, traffic remains a significant issue, and up to 8 years of disruption will be significant. Have you reviewed the loss of economic activity that occurred when the Fourth Avenue Bridge was replaced in the early 2000's? Have you considered the impact on north-south travel from Tumwater to Olympia via Deschutes Parkway for an extended period? or have you considered the connection from areas West of Olympia to the Port area? And what about the connection from the Courthouse to downtown Olympia? These construction impacts may not cause developers to eliminate future activities in the Downtown area, but they may well decide to put them on the 'back burner' for a while until this gets sorted out. And there is also the likelihood that the extended construction activity for the Estuary and Hybrid Alternatives will significantly impact the marinas, recreational boating, Percival Landing and other West Bay activities, translating directly to economic losses. And, finally, the duration of the disruption could result in the permanent closure of business and marinas.

Moving now to the second Draft EIs conclusion, is it reasonable to expect that all the alternative construction impacts will cause the same, minimal disruption and potential loss of economic activity? Does a couple months of repairs to the Fifth Avenue dam equate equally to 6 to 8 years of major construction at the bottleneck between Downtown Olympia and the Westside? We all know the answer to that question, yet Tables 5.14.2, 5.14.3 and 5.14.4 all show exactly the same description of impacts and effects for the three active alternatives. If the labelling (and rating) system that is used in this analysis cannot differentiate between a 7 week and up to a 400+ week construction period, then shouldn’t it be replaced with one that can? And in any case, the current labelling system should not be used for rating the various alternatives.

Although it's appropriate to include Table 5.14.1 as part of the analysis for this section, the costs included need be modified to reflect our comments in the Construction Section. Our analysis showed
that the Managed Lake Alternative costs were overestimated, while Bridge and Deschutes Parkway costs for the Estuary and Hybrid Alternative were grossly underestimated. Correction of these costs will further demonstrate the disparity between the alternatives. The true impact on Olympia area economics is obscured for all alternatives by the inclusion of initial dredging costs in the analysis. This initial dredging will take place primarily in the North Basin, away from any direct impact on economic activity, which is mainly due to the disruption of the major east-west traffic corridor. Limiting the analysis to only the actual construction activities will also further demonstrate the disparity between the alternatives. A similar situation exists for Recreation impacts from construction activities, and their impact in turn on economic activities. This should not be minimized. Recreation activities are one of the main draws for visitors and locals alike, and this brings additional economic benefit to the downtown area. It is important to recognize that all people do not see the duration of the disruption and resultant impact on economic activity through the same lens. While some in the Gen-Xor Millennial generations might see this multi-year activity as “short term”, to others in the Baby Boomer generation, this may seem like a 'lifetime'.

LEGAL FUNDING OBLIGATIONS OF WORKING WATERFRONT BUSINESSES The Legislature required the DES to incorporate the Economic Impacts of the Project to both the State controlled area and the surrounding Community directly impacted by the Project. The Port of Olympia and the Working Waterfront businesses were specifically named in this direction from the Legislature. Economics and cost sharing of proposed impacts will depend on the legal and contractual obligations with the impacted property owners. The assumptions made by the DEIS in cost sharing and decision making is not consistent with current Federal, State and local business contracts. The DEIS makes several conflicting general statements that leave this issue with no guidance to who will be making the final decisions on the selection of the preferred alternative. In one statement, the DEIS suggests that the State will be responsible for funding the selected project. Later in the DEIS they suggest that the COE must complete a pre dredge and then an every 5 to 6 year maintenance dredge for the Estuary and Hybrid Alternative to function as described. In other discussions they suggest shifting the future maintenance to the downstream marinas and the Port/COE. They do not mention the City of Olympia's Percival Landing Harbor, with a moorage area as large as three of the marinas. They do not mention that all of this area is owned by the State/DNR with 30 year contracts that are limited by existing State Law on how the annual Lease Fees are determined, and that half of the marinas just signed a new 30 year lease with DNR. There is no information from the COE that they are in agreement with the proposed Alternative designs and that they will accept Federal responsibility to fund and implement the 'assigned DEIS responsibilities’.

QUESTION: How did the DES and the Consultant Team determine that the State could legally transfer significant project costs to others without their concurrence, and then reduce the assumed cost transfer from the Alternative Total Project Cost?

Direct cost assignment transfer versus state financing: The DEIS fails to provide clarity of total costs of the Alternatives and then separate the cost of the total Alternative and then legally assign costs to others. The transfer of State costs to others, legally approved by the Legislature would have a very significant negative impact on the future of Downtown Olympia and its current waterfront environment. The shift in funding most likely would result in a shift from an active family oriented and commercial
waterfront to a 'tidal estuary passive environment' associated with a Tidal Estuary where only passive use of the waterfront would be the focus.

Another cost and economic impact that the DEIS did not adequately address was the indirect cost impact of the construction project projected to last up to nine years under the Estuary or Hybrid Alternative. A nine year disruption of the East-West major Olympia Arterial and all of the attendant costs to the business and routine land travel is a major consideration. The daily life for many of the Olympia and Thurston County residents over a nine year construction period will have a real cost. Daily business at the County Courthouse and the cross town transportation will be disrupted by the Estuary or Hybrid Alternative—as compared to a one year disruption by the Managed Lake Alternative. This was not adequately defined by the DEIS.

Loss of boating waterfront: The DEIS assumed the high cost transfer to the marinas and others would be a new cost of community use of the marine boating waterfront. This includes the City's Percival Landing harbor, the four private marinas, the Anthony's/Port Plaza public marina, and the Port of Olympia. The potential loss of the boating waterfront due to these new, high costs, would impact the many Community Celebrations with a waterfront focus along with the disruption or ending of the small commercial boating enterprises and family recreation that is linked to boating. An example of this cost shift in the DEIS for the Estuary Alternative is their 'footnote shift of $18 million for each routine dredge obligation to working waterfront without recognizing that the State/DNR is the owner of this land. Most of the marinas have a 30 year lease with the owner of the land--the DNR. These DNR marina leases are adjacent to the Federal navigation channel where the DEIS propose for the Estuary Project to require the COE to complete a maintenance dredge every five or six years to keep the navigational channel open for commercial and public boating use and to protect the Estuary sediment carry over from being contaminated by the Budd Bay Legacy Pollutants. The 30 year DNR marina land leases are for a small part of the harbor (typically about 300 feet by 300 feet) and obligate the leaseholders to maintain/dredge their leasehold, with the State and the COE obligated by Federal law to keep the navigational channels open. The DNR annually receives significant lease fees from each of these small land leases from each of the marinas while the DNR uses these funds for other purposes than to maintain the sites for the intended use.

State law controls DNR lease fees for marinas: Separate from the legality of the proposed new obligation proposed by the DEIS, the projected cost in the DEIS as a new obligation on the marinas that could put the marinas out of business, is a significant negative impact to the Olympia boating waterfront.

Since the routine maintenance dredge required for the Estuary Alternative would be a State requirement, the State or the City of Olympia could assume the financial obligations of the maintenance dredge of the navigational channel as an 'environmental mitigation' annual cost consistent with the Estuary project objectives.

A more comprehensive review by the Consultant to addressing an approach that builds on an 'adaptive management and decision process' is needed. Such an adaptive approach is typically part of all well engineered projects. An Adaptive Management approach combined with phased implementation would
help the Legislature and the public proceed to a more informed decision process. This Adaptive Management Approach will both reduce the chance of making a major error in decisions, and provide a much more achievable implementation and funding strategy. More strategically presented, the State and the local community could participate in the refined evaluation to establish with a degree of confidence, rather than an emotionally driven hopeful vote without the facts being known. The selected Alternative could then be implemented in a definable future; sooner rather than later.

Specific questions for the consultant: All of the following questions are related to the potential of the State and Consultant shifting project costs to the working waterfront. 1) COE concurrence of project design: Did DES and the Consultant obtain written review and concurrence from the COE on the dredging proposal in all three Alternatives? 2) Pre dredge and deep water vs upland marine sediment disposal: The DEIS requires the COE to dredge the Port Turning Basin prior to the initiation of the Estuary and Hybrid Alternatives on the premise that the Estuary Project maintenance dredges will only remove clean Deschutes Watershed sediment every five or six years. They project that these dredges could then be disposed of in a deep water location at a much reduced cost. However, with the big ship and tugboats constantly 'mixing the sediments' in the surrounding areas, and the twice daily tidal actions moving water into the Lake Basin, it is unlikely that all the sediment will qualify for deep water deposit. How does the Consultant conclude that a 'quiescent stratification of new sediments over a six year period will occur'? 3) Who pays for pre dredge and on what schedule? What is the projected cost of the COE pre dredge and then a maintenance dredge every six year with upland disposal? This is a project cost. Only as a tacit agreement by the COE to pay for this cost would the cost to the State be reduced. 4) Use of navigational channel by city and port transient moorage: The DEIS did not acknowledge the City's Transient Marina at Percival Landing and the Ports Transient Marina near Anthony's. Both of these marinas rely on the COE's navigational channel for commercial uses. How has the Consultant factored in the City and Port use of the navigational channel and confirmed the DNR requirements for maintenance of these leaseholds? 5) Marina and DNR 30 year contracts: The marinas are assessed both a DNR lease fee and County property tax for their designated leasehold. This also includes an annual leasehold tax and then they are obligated to maintain their leasehold, including dredging their leasehold. How did the Consultant differentiate the marina's current legal contract obligation with the State/DNR and determine that the Estuary Project could unilaterally assign new costs as a result of the State changing the basis on which these 30 year leases were issued? 6) Another alternative for in basin (upper) Capitol Lake sediment disposal: All three Alternatives provide for the early dredging of the North Basin with in-basin sediment disposal. The DEIS projects placement in expensive 'cells' to prevent erosion from Deschutes annual high water flows. A simple low cost alternative exists. A semi-permanent hydraulic dredge arrangement to pump the sediment to the state's six acre 'borrow pit area near both Percival Creek and the railroad tracks would enable a simple hydraulic dredge of the North Basin with dewatering at the 'borrow pit'. When the dewatered sediment is full, the sediment pond would be loaded onto nearby train cars that would travel within the basin to open land near the train tracks in the Deschutes Watershed above Tumwater Falls. Permanent farm land could be purchased for routine disposal, thus retaining all of the sediment in the basin if the NZMS is documented as a true concern. This simple alternative would eliminate most or all of the expensive 'containment cells' for all of the North Basin dredges to reduce the cost of this first phase of the project. Seasonally managed, it would also substantially reduce the cost assigned to 'Standby during Work Window Closures'. Question: did the
Consultant consider this sediment disposal alternative? If so, what was the cost comparison and cost savings throughout the life of the Managed Lake Alternative and the cost savings for the initial dredge of the North Basin for the Estuary Alternative? The DEIS analysis has some significant errors, omissions, and misleading conclusions that when corrected, the DEIS first step could lead to a much improved analysis. Additionally, a refined Adaptive Management approach will both reduce the chance of making a major error in decisions, and provide a much more achievable implementation and funding strategy. More strategically presented, the State and the local community could participate in the refined evaluation to establish with a degree of confidence (rather than a hopeful vote) that the selected Alternative will be implemented in a definable future; sooner rather than later. We look to additional comments from the Chamber of Commerce and the Economic Development Council to review the impact on the Community and the working waterfront. We have provided our engineering and environmentally based assessment on how the DEIS has erred. We are also providing a suggested way forward so that the 'State doesn't kick the can down the road one more time.'

Please review Ecology's exhaustive computer modeling of the contribution of phosphorus to Budd Inlet water quality and determine whether it is actually relevant to the evaluation of the Lake and Estuary alternatives.

What observational data are provided by Ecology to support the claim that 'pulsed flow' from the dam affects water quality in Budd Inlet (DEIS page)?

What observations support the idea that Capitol Lake is detrimental to water quality in East Bay?

What observations support the idea that East Bay's local intrinsic properties are not the cause of its seasonal low bottom water oxygen levels?

1. Misleading 'violations' calculations using WDOE's Model. (An Example cited by the DEIS.) (Introduction.) Figure 4 shows WDOE computer simulation outputs that are presented in the DEIS (as Fig. 4.13, p. 4-37, Water Quality Discipline Report). Note that these illustrations are the same as those in the DEIS but their positions are switched (due to technical difficulties at my end). The mistaken claim based on these Figures is that 'Capitol Lake has an adverse effect on water quality affecting fully half of Budd Inlet.'

The Department of Ecology did not respond to the HDR query (Clark, 2016). 2. Was Ecology's benthic algae simulation subroutine operative during their simulations of Budd Inlet? Although this question was not addressed in the DEIS (to my knowledge) it illustrates the grounds for doubting all of Ecology's proclamations about the 'damage' done to Budd Inlet by Capitol Lake, stemming from their modeling efforts. If this subroutine was not operative, a critically important mechanism for adding dissolved oxygen to the bottom water was overlooked. WORST CASE: ALL OF THEIR CALCULATED EAST BAY 'VIOLATIONS' COULD BE NONEXISTENT.

Submission Text: Two East Bay sites of these giant model failures are routinely shown to have the worst bottom water DO violations in all of Budd Inlet. These East Bay 'violations' are routinely used to brand all of Budd Inlet as 'damaged' by Capitol Lake. It is imperative that the DEIS researchers learn whether the
benthic algae subroutine was operating during WDOE's many simulations. If they were not - then ALL of Ecology's Budd Inlet simulations are suspect

**Submission Text:** What does Ecology's 'violations map' for the pre-modern, pre-dam 'Natural Budd Inlet' look like? Please obtain it and display it in the Final EIS alongside and in the same format as the '5th avenue Capitol Lake' violations map (DEIS Figure 4 above).

**Supporting Materials (if any):** [O-17_Holman.pdf]

**Name (ID): Maria Trevizo (O-18)**

**Organization (if applicable):** The Healing Circle

**Submission Text:** I could cite chapter and verse from the scientific materials we have all had access to. I could say why the reflection waters for the capital is narcissistic and misguided. I could cite the important historical importance of a free river for all tribes who accessed it since time immemorial Yet I will simply say it this way. We are done with reflecting our vanity and taking that as a Apex predator, which were not, we deserve to control everything which we shouldn't. We are in an environmental crisis With global warming and polar ice caps melting at a rate that is unprecedented. So when we free an estuary that has been dammed for more years than it should've been and create more estuary in our small part of the planet we take a step to right a great wrong. I participated in a focus group entertaining this conversation regarding the removal of the dam, So many years ago! It's about time we got off our bums And breach the damn and restore the estuary to its rightful place. We need more nature not less. It's about how we can live in harmony with nature and try not to bridle her. Thank you for considering my thoughts.

**Supporting Materials (if any):** N/A

**Name (ID): Dannielle Knutson (O-20)**

**Organization (if applicable):** Budd Bay Café, Olympia Oyster House & River Edge restaurants

**Submission Text:** My name is Dannielle Knutson, majority share owner of the Budd Bay Café, Olympia Oyster House & River Edge restaurants. I would like to express concern that the 5th Avenue Dam will be removed, exposing our establishments to the direct flow of water from Capitol Lake and to the natural surges of water flowing into the Bay during times of flooding. Flood waters are very powerful and carry all manner of debris with them. To see such debris dumped into Budd Bay is a disturbing prospect. The injection of such a mess into the Bay would make the lives of many marinas difficult. Many boaters may find moorage in Budd Bay is no longer attractive.

My business and many others here on the waterfront depend on a lively, attractive and vibrant waterfront. Many years ago, this area was nothing like this. It was basically a run-down section of Olympia that did not attract tourists or local patrons looking for a nice lunch beside an attractive waterfront. Please do not try to fix that which is not broken. It took years of effort by city and civic leaders to bring about the attractive area that exists now. I can assure you that having dredge equipment...
move into the Bay every 3 or 4 years will not be a benefit to any of downtown Olympia, especially waterfront businesses.

My business, along with many others, is struggling to recover from our recent pandemic. We do not need to experiment with another stressful change. Please support the retention of the 5th Avenue dam and the current plans to manage Capitol Lake. Thank you for your kind attention.

Supporting Materials (if any): N/A

**Name (ID): Doug Mah (O-21)**

**Organization (if applicable):** Thurston Chamber of Commerce

**Submission Text:** Page 15 of the executive summary states: All action alternatives include initial dredging during construction to remove some of the sediment that has accumulated within the Capitol Lake Basin over time”. Should this initial action occur in advance of selecting a preferred alternative?

In total it is reported that the construction and 30-year maintenance costs range between $179 million and $607 million. How does this cost range compare to other projects with similar goals? How should this EIS be used to ensure decision makers can compare the Capitol Lake - Deschutes Estuary project/investment against other potential investments in Puget Sound? How “competitive” is this project compared to other projects of state-wide importance?

What are the financial costs due to the disruptions associated with a construction window of four to eight years? What is the cost to mitigate these disruptions? (Section 5.14)

How can the EIS include the likely cost impact associated with the disruption of the surface transportation system in and around the project areas, specifically the replacement of the 5th Avenue bridge and utilities? (Section 5.14)

The draft EIS includes about 27 instances where actions and alternatives result in “significant unavoidable impact”. What is the financial cost associated with each significant unavoidable impact? Can the mitigation or solution and cost be calculated? What is the risk of litigation from impacted parties for each significant unavoidable impact?

Can the threat and risk of litigation be assessed for each alternative and the financial impact of any lawsuit to the project be calculated based on similar court challenges? Does one alternative present a greater legal challenge compared to another alternative?

In Section 4.14.3.2 it states, “From the research conducted for this evaluation, there is no clear signal that implementing any action alternative, including the Estuary or Hybrid Alternative, would reduce demand for residential or commercial development in downtown Olympia”. However, the analysis does not appear to assess where residential or commercial development would occur or become displaced upon implementation of any action alternative. Should the EIS address potential zoning changes necessary to sustain assumed residential densities beyond the project area?
In section 4.14.3.2 it states, “The Estuary Alternative represents the most visual and environmental changes in the downtown area. These changes have the potential to create uncertainty, at least initially, among investors, developers, and residents in downtown Olympia.” Can the EIS quantify lost opportunities and investments, and the added costs for project delays resulting from the period of "uncertainty? In Section 4.14.3.2 it states, “all action alternatives are likely to produce benefits for downtown development, assuming they are implemented in a way that is attractive and accessible. Can the EIS clearly describe, define, and articulate what is “attractive” and by which stakeholder(s) the term is most likely attributed to?

Can the EIS provide a single table showing the summary of long-term impacts for all the alternatives side-by-side? (Section 4.14)

What are the 'other economic factors” that have more influence on market conditions for development in downtown Olympia than changes in the Capitol Lake Basin? Can the EIS provide a market assessment that includes and excludes conditions associated with the Capitol Lake Basin? (Section 4.14)

Construction for all action alternatives would include a period in which the 5th Avenue Bridge is closed. For the Estuary and Hybrid Alternatives, the bridge would be closed for approximately 4.5 years for replacement. What is the cost and negative financial impact associated with adverse traffic impacts, traffic increases along the 4th Avenue detour route, and other congested related impacts resulting from a 4.5-year closure? (Page 5-68)

What is the estimated cost to address the following items that are common to all alternatives: Consulting with local police, fire, and emergency response to develop and implement emergency response plans, establish emergency vehicle routes, and ensure that general emergency management services are not compromised. Determining the extent and type of temporary protective measures that must be implemented to prevent construction damage to surface and subsurface utilities. Coordinating with utility companies and other relevant agencies before construction to locate existing utilities and avoid damage. Providing notification of any potential interruptions in services to the appropriate agencies and customers. Staging utility relocations to minimize interruptions in service. Requiring contractors to prepare traffic control plans for construction activities that may affect road rights-of-way. Traffic control plans include advertising of planned lane closures, warning signage, flag person to direct traffic flows when needed, and methods to ensure continued access by emergency vehicles (Section 5.13.6.)

The Estuary Alternative (Section 2.2.2) states that the alternative also includes stabilization along the entire length of Deschutes Parkway to avoid undercutting or destabilization from the tidal flow. Existing utilities and other infrastructure would be upgraded and/or protected from reintroduced tidal hydrology and saltwater conditions.” (page 2-8) Can the risk or likelihood of undercutting or destabilization of Deschutes Parkway be calculated for all three alternatives?

All action alternatives include initial dredging during construction to remove sediment that has accumulated within the Capitol Lake Basin over time (page 2-17). Should this initial dredge be excluded
from the cost estimates for all alternatives, considered out of scope for the EIS, and instead be considered as part of regular maintenance of the facility?

What is the negative financial impact to limiting vessel access, berth and slip use during maintenance dredging for all alternatives in the long-term? (Section 4-2)

How can the long-term costs provided in Table 7.1.1 be amended to include other potential maintenance responsibilities, such as conditions within the alternative-specific adaptive management plans, habitat enhancement plans, or other operations and maintenance associated with restored recreation? Awareness of the fiscal impact should influence the selection of a preferred alternative. (Page 7-3)

What is the maintenance cost to sustain the current design between 2022 and 2026, before construction begins? (Page 7-5)

Should the “downstream economic activity” area be the same as the “recreation area boundary” so that comparable short and long-term impacts can be measured and reported in a consistent fashion?

Did the EIS include outreach to affected private property owners around the south basin, including, but not limited to the Olympia Tumwater Foundation?

Funding and Governance Work Group members and specifically that one-quarter of the total costs will be funded by the US Army Corps of Engineer (USACE) (Table 7.1.1) What is the estimated range of potential additional costs associated with project permit conditions? (Page 7-6)

What is the estimated range of potential additional costs associated with project permit conditions? (Page 7-6)

What are the potential maintenance costs to offset potential temporary or permanent impacts to wetlands, fish, or other ecological functions if the regulatory agencies do not consider the project benefits to outweigh the potential impacts and the project is not considered “self-mitigating”? (Page 7-6)

On page 7-11 is states: The FNC is currently impacted by sediment accumulation and needs to be dredged to reestablish authorized depths and unrestricted navigation in the waterway. Dredging has not been completed by the USACE and Port of Olympia because of known sediment contamination within the FNC. These entities are evaluating potential approaches to conduct maintenance dredging despite the presence of contaminated sediment. This need for dredging and dredging action is separate from, and not related to, the long-term management alternatives for the Capitol Lake - Deschutes Estuary. If this dredging does not occur, and if the Estuary or Hybrid Alternative is selected as the Preferred Alternative and is implemented, then additional sediment deposition from the project is not expected to significantly impact the Port of Olympia because navigation is already impaired. Costs for the sediment dredging that is currently needed should not be added to this project” (italics added for emphasis). Why would the reestablishment of authorized depths and unrestricted navigation in the waterway be excluded from the project? Should the reestablishment of authorized depths and unrestricted
navigation be included as part of the Guiding Principles #10 to “Support the goals and objectives of the long-term management plan and the future of the overall watershed” and seeks to identify an... alternative that will improve environmental conditions and enhance community use of the resource? (page 7-11)

Is the statement, “Without shared long-term funding and governance, these management actions may not be implemented. In past planning processes, the lack of committed funds in the State of Washington budget was frequently cited as a potential significant obstacle to adequate long-term management of the Capitol Lake - Deschutes Estuary’ (Page 7-7) fact or speculation? Is it more accurate to amend the statement to read, “Without shared long-term funding and governance, action by the State Legislature and State Agencies, including, but not limited the Department of Enterprise Services, these management actions may not be implemented. In past planning processes, the lack of committed funds in the State of Washington budget was frequently cited as a potential significant obstacle to adequate long-term management of the Capitol Lake - Deschutes Estuary” (page 7-7).

Why would the State of Washington no longer “serve as the primary governing and funding body” for the for long-term management of the Capitol Lake - Deschutes Estuary or Hybrid Alternatives? Does the shift to a shared governance model also assume a shift in liability associated with possible harm or damages to those using facility? (page 7-9)

Interlocal Agreements under Washington's Interlocal Cooperation Act (RCW 39.34) are typically not items brought forward as ballot measures to be voted on my those impacted by funding or paying for the solution. How does this “agreement” meet the guiding principles # 2 and 3? (7-9)

Will the envisioned contributions, partnerships, and small contributions from the entities represented on the Funding and Governance Work Group increase their exposure, liability, and the risk of litigation from private entities or organizations harmed by the preferred alternative? (page 7-8)

On Page 7-10 it is stated, “If selected, an Interlocal Agreement regarding governance of a Capitol Lake - Deschutes Estuary project would outline functional and administrative requirements of the signatories, responsibilities for operations and maintenance of a resource, and the collection and contribution of funding. Should this statement also include “liabilities, and risks” so that it reads: If selected, an Interlocal Agreement regarding governance of a Capitol Lake - Deschutes Estuary project would outline functional and administrative requirements, liabilities, and risks of the signatories, responsibilities for operations and maintenance of a resource, and the collection and contribution of funding? (page 7-10)

What successful funding allocation and governance models meeting the characteristics identified in Chapter 7 exist in Washington State? Can a public facilities district, or some equivalent revenue sharing structure, be explored, and assessed with the goal of directing the State portion of the sales tax revenue generated by the project be directed back to the Thurston community?

Supporting Materials (if any): O-21_Mah.pdf
**Name (ID):** Myra Downing (O-22)

**Organization (if applicable):** Olympia Yacht Club, Fiddlehead Marina, Martin Marina, One Tree Island Marina, and the Recreational Boating Association of Washington.

**Submission Text:** Our organizations' primary concern with the consideration by DES of alternative management approaches for Capitol Lake is rooted in a matter of fundamental fairness. The State of Washington has failed to adequately manage water quality and other environmental conditions in Capitol Lake for the last 30 years. Now, the State is poised to significantly modify the operation and ecological functions and values of the Lake with alternatives that may shift and transfer those same challenges, burdens, and costs onto other private and public entities. The DEIS acknowledges that some of the alternatives evaluated will result in a ‘cost/burden shift” but it is silent on exactly who those stakeholders are and thus does not adequately convey the significance or sustainability of the cost impacts that would result. Without proper economic and cost analysis and transparent future funding commitments from the state and federal governments, a blatant cost shift to other affected stakeholders would be fundamentally unfair and could jeopardize the future existence of Olympia’s vibrant, urban working and recreational waterfront. Accordingly, should DES move forward with either the Estuary Alternative or the Hybrid Alternative, our organizations must be held harmless from all the impacts of future dredging work, permitting, and all associated costs.

Economic Analysis Mandated in Capital Budget During the OYC briefing by DES staff and its consultants, a presenter commented that an economic analysis had been done even though it was not required as part of the DEIS. In fact, an economic analysis of the expanded area was mandated in the Capital Budget provisos that funded the DEIS. The 2018 Supplemental Capital Budget (SSB 6090) and corresponding proviso (Sec. 1036) passed by the Legislature (reappropriated in the 2020 Supplemental Capital Budget --ESSB 6248, Sec. 1026)), reads in part: “...The environmental impact statement must also consider an expanded area around Capitol Lake and Budd Inlet including the Port of Olympia for the economic analysis. The environmental impact statement must consider the use of equal funding from nonstate entities including, but not limited to, local governments, special purpose districts, tribes, and not-for-profit organizations.”

Economic Analysis Inadequate in DEIS Appendix 18, the Economic Discipline Report, does an inadequate job of factoring into the analysis the significance of the recreational boating industry to our community and region. Although OYC and a couple of the marinas are described, there is no attempt to quantify their direct or indirect economic impacts or to explore in any depth the value that Budd Inlet and its public and private facilities provides to recreational boaters. The economics of operating marinas in the West Bay not only has a positive direct impact on their members, owners, and lessees, but also a significant beneficial impact on the state and local governments that rely on tax and fee-based revenues from marinas and boaters, the businesses supported through goods and services procured by marinas and boaters, and the broader community organizations and residents that receive intangible benefits from marina programs and facilities. In addition, the DEIS neglects to address and quantify the adverse impacts that multiple years of demolition/construction and frequent maintenance dredging under the Estuary and Hybrid Alternatives would have on water-based recreation within Budd Inlet. Instead, the
Economic Discipline Report focuses on Capitol Lake recreation and reiterates the unsupported “assurance” that: “Maintenance dredging in West Bay would avoid or minimize impacts to navigation in Budd Inlet... Recurring sediment removal would ensure that each entity is able to maintain operations and continue to generate economic value for the local and regional population and economy.” The Final EIS should fix these foundational gaps. There needs to be a serious evaluation of the likely economic impact of each Proposed Alternative on the continued existence of recreational boating in the West Bay and on the directly related taxes, fees, payment of goods and services, and other financial benefits accruing to governments, businesses, the Olympia waterfront, and the community. As a starting point for the baseline economic impact, we recommend the following relevant studies that have been completed in the past six years. Recreational Boating Industry Data in US and by State (National Marine Manufacturers Association, 2018). Washington Statewide: 241,760 registered boats, $6.9 billion annual economic impact, supports 22,872 jobs and 1,433 businesses. * Congressional District 10: 18,248 registered boats, $324 million annual economic impact, supports 1,232 jobs and 63 businesses. Economic Analysis of Outdoor Recreation (Washington State Recreation and Conservation Office, 2015) Of $21 billion in annual expenditures for outdoor recreation in Washington state, the highest expenditures are for recreation associated with public waters. Boating statewide generates $4.48 billion in terms of equipment and trip-related expenditures annually, with 2.1 million participants and 27.3 million participant-days. Eighty-six percent of total boating expenditures are for motorized boating.

In addition, the economic analysis should factor in: The lease fees (nearly $4.1 million from 2019 through 2021) paid by private marinas statewide to the Department of Natural Resources (DNR) that not only support management of state lands but fund aquatic-related projects throughout Washington. Thurston county projects funded through DNR’s Aquatic Lands Enhancement Account have included: Percival Landing; Woodard Bay restoration; Frye Cove enhancements; Olympia’s West Bay Park; and an exhibit at the Billy Frank Jr. Nisqually Refuge. Annual watercraft excise tax and registration/licensing fees that bring in about $30 million/year statewide.

Value of the Olympia Waterfront Olympia's waterfront is a key element in Olympia’s and Thurston County’s economic vitality, character, and culture. While the Economics Discipline Report does acknowledge some of these elements, it does an inadequate job of addressing and quantifying the adverse impacts that multiple years of demolition/construction and frequent maintenance dredging under the Estuary and Hybrid Alternatives would have on our “working waterfront” in general. * Olympia's waterfront is a key factor driving over $200 million in public and private investment in downtown in recent years, including the development of more than 900 market rate housing units built, or in planning or permitting. . Businesses located on the waterfront or that service recreational boaters include marine repair shops, boat sales brokers, grocers, restaurants, art galleries, and other businesses that attract residents and tourists. * Many of Olympia's top tourist draws are located on or near the waterfront, including Percival Landing, the Olympia Farmer's Market, the Port Plaza, and the Hands-on Children's Museum. . Historic and cultural activities reliant on Olympia's waterfront include: Harbor Days and Tug Races; Wooden Boat Festival; Parade of Lighted Ships; Tribal Canoe Journeys; and Dragon Boat Festival. * Visiting boats moor at Percival Landing, the Port Plaza dock, or at OYC, using these dock facilities as a base from which to patronize Olympia’s downtown restaurants and other businesses.
Recreational Boating Marinas in the lower West Bay Area: There are four recreational boating marinas with a large footprint and history in the lower West Bay area. Collectively, they provide 453 boat slips for use within Olympia and house 37 liveaboards. The following sections describe these marinas and the amenities and benefits they bring to our community.

1. Olympia Yacht Club Background: The Olympia Yacht Club (OYC) has been in existence at its current location for over 117 years since 1904. OYC has been an important partner with the public and local governments in providing for a high quality of life and recreational opportunities in Olympia and Thurston County. OYC has 238 moorage slips in its marina, houses 13 liveaboards, and currently has 480 adult members and 6 junior members. OYC Marina is Green Marina-designated.

Economic Impacts: As a non-profit organization, OYC spends nearly $1 million per year that generates positive economic effects in the community, region, and state. Examples include: $159,000 - DNR Lease and Leasehold Excise Tax (government). $41,000 - Real Estate Excise Tax (government). $270,000 - Payroll for 4 full-time employees and 17 part-time employees. $295,000 - Insurance, professional services, facility and OYC boat maintenance, and events (businesses). $53,500 - Permitting costs (governments). On top of OYC expenditures, individual boat owners positively impact the economy through the payment of the following taxes and fees: Watercraft excise tax at 1/2 of 1% of fair market value, which is collected by Department of Revenue and deposited in the state general fund. Sales and use tax on vessels as well as on equipment, goods and services related to boating (government and businesses). Property tax on member boathouses at OYC (government).

Intangible Benefits OYC Brings to the Broader Community: Our organization values and prioritizes opportunities to engage with the broader community to achieve important objectives, such as: * Sailing Education Program (SEP): Sponsored in conjunction with Olympia Parks and Recreation, this Program has trained thousands of area youth and adults. The Summer Learn to Sail Program attracts 425 people, including 385 youth. Highly successful middle and high school race teams compete regionally and nationally. OYC pays for the staff and owns/houses the SEP boats. The SEP exemplifies the spirit behind Governor Inslee's 'No Child Left Inside' initiative. Strongly supported by RBAW and OYC, "No Child Left Inside" encourages outdoor recreation to be incorporated into kindergarten through 12th grade core curriculum because "the outdoors is humanity's first classroom, laboratory and gym." Events for Specific Communities: December Holiday Cruise for adults with disabilities; Foo faraw Cruise for active duty military co-sponsored since 1964 by Thurston Chamber and Chehalis Tribe; COVID Medical Personnel Appreciation Cruise; Wounded Warrior Cruise co-sponsored by South Sound Sailing Society; Transfer of Salmon Smolt on OYC land in support of Squaxin Tribe salmon-raising.

2. Martin Marina Background: Martin Marina was built in 1979 -- 42 years ago. It was sold to the current ownership in February 2021. There are 85 moorage slips in the marina, 8 of these slips are live aboard occupancy. Martin Marina is designated as a Clean Marina.

Economic Impacts: Martin spends nearly $225,000 per year that generates positive economic effects in the community, region, and state. There is an additional $1.2 million of improvements scheduled over the coming 10 years, including piling and dock replacements, bank armor, and maintenance dredging.

3. Fiddlehead Marina Background: Fiddlehead Marina was redeveloped in its current location in 1981 -- 40 years ago. It was sold to the current ownership in December 2020. There are 80 moorage slips in the marina, 16 of these slips are live aboard occupancy. Fiddlehead Marina is designated as a Clean Marina.

Economic Impacts: Fiddlehead spends nearly $350,000 per year that generates positive economic effects in the community, region, and state. There is an additional $1.5 million of
improvements scheduled over the coming 10 years, including piling and dock replacements, bank armoring, and maintenance dredging. (4) One Tree Island Marina Background: One Tree Island Marina has 50 slips. Economic and Social Impacts: . $24,000 - DNR Lease (government) . $25,000 - Insurance, Professional Services, and Maintenance Services (business)

D. Preferred DEIS option (Managed Lake) Of the three Action Alternatives considered by the DES, our organizations support the Managed Lake Alternative. This Alternative would build upon the Capitol Lake water quality improvements noted in the DEIS: “Despite what has been perceived to be worsening conditions in Capitol Lake, monitoring data indicate that water quality conditions have actually been improving in the lake and are relatively good in terms of physical and chemical characteristics important to aquatic life. These improving water quality trends reduce the level of management that would be needed under a Managed Lake Alternative to meet lake management objectives.” The Managed Lake Alternative, in terms of construction costs and timelines, is the least expensive and least disruptive to the community. And if there is a funding lapse after construction, adverse impacts of the Managed Lake Alternative would be restricted to North Basin recreational opportunities rather than the irreversible, broader adverse impact on West Bay navigation resulting from dam removal and the resultant sediment transport and deposit. Our support for the Managed Lake Alternative is also grounded in substantial concerns about the unknowns connected to the Estuary and Hybrid Alternatives, which are described in the following section.

E. Concerns with the Hybrid and Estuary Alternatives. (1) Sediment Dredging Assumptions and Costs: We appreciate the efforts by DES and its consultants to quantify and estimate the long-term sediment management requirements that would impact OYC and the other marinas in West Bay. OYC has reviewed the sediment management assumptions and costs assumed in the DEIS. Our analysis follows. As noted above, our organizations' primary concern with the DEIS and the Hybrid and Estuary alternatives include assumptions regarding sediment deposition, erosion and dredging that would result from the removal of the 5th Avenue Dam. Specifically, we've reviewed the following relevant Chapters of the DEIS: 2-52, 3-1, 4-14, 4-1, 5-2. Our specific concerns include the data in Table 4.2.4 (pg.4-21), which is supported by the technical data in Attachment 5 to the DEIS (Hydrodynamics and Sediment Transport Discipline Report), Table 5-16 (pg. 5-60) and Table 5-17 (pg. 5-66). While we appreciate the time and effort that went into this work, our review of this data suggests that for the DEIS analysis, the consultants erred on the side of including a range of the most conservative data and assumptions in their analysis, which would result in the least amount of/best case scenario for sediment exiting Capitol Lake and entering West Bay. Specifically, the DEIS analysis for sediment deposition includes data with sea level rise and only Event A. The range did not ultimately include data without sea level rise or Event B. This omission is important because the peak annual discharge for Event A is the lowest measured daily discharge for an annual peak in the last 10 years. Therefore, Event A represents a low flow scenario and consequently, a lower bound for sediment erosion/deposition. On the other hand, the peak daily discharge for Event B is the highest daily discharge on record. Event B represents a high flow event and, consequently, an upper bound for sediment erosion/deposition. These two events were defined to bracket the possible range of erosion/deposition within Budd Inlet upon removal of the 5th Avenue Dam. Of course, the answer on sediment deposition likely lies somewhere in the middle. But without this complete range of pertinent data, the DEIS is incomplete, and DES cannot fairly and accurately assess all
alternatives. The DEIS also does not address the sediment accretion at other locations in the West Bay, including Percival Landing, Port Plaza Dock, or the waterway between the marinas and the Port of Olympia Turning Basin. As a result, we believe the information and data range in the DEIS wholly underestimates how much sediment is likely to be deposited (and the corresponding dredging costs associated therewith) in West Bay under the Hybrid or Estuary Alternatives. By contrast, to illustrate the broad range of omitted possible outcomes in the DEIS, we’ve evaluated a Capitol Lake/West Bay sediment deposition analysis without sea level rise and with Event B. Marina Moorage Area No. of slips

| RATE OF SEDIMENT ACCRETION/YEAR MANAGED LAKE ESTUARY ALTERNATIVE HYBRID ALTERNATIVE ALTERNATIVE OYC Martin Marina (sq.ft) | 450,000 | 138,000 | 93,000 | 238 | 85 (cm/yr) | 8.4 | 8.4 | (in/yr) | 3.3 | 3.3 | (cy/yr) | 4,593 | 1,499 | 997 | 29.8 | 29.8 | 29.8 | 11.7 | 11.7 | 11.7 | 3,657 | 1,314 | 37,149 | cy/yr | Please note: With these quantities, we believe portions of our marinas would likely need to be dredged every one to two years. Using these assumptions and the data available in the DEIS (Figure 5-31), the estimated sediment deposition rate at OYC under both the Estuary and the Hybrid Alternatives is nearly double the amount represented in the DEIS. Based on our sediment deposition figures above, we’ve run the following unit and overall cost estimates that are not reflected in the DEIS but must be included and considered in the final EIS. The cost estimates are based on the 2013 dredging work at OYC, assuming inflation at 3%/year. Estimated Unit Costs for Dredging After 5th Avenue Dam Removal in 2027 2013 base year costs 2035 2040 2045 2030 initial dredge $125.62 $145.63 $168.83 $195.72 In-water disposal $30/CY (60%) Upland disposal $145/CY (40%) Avg. cost at $76/CY 60/40 inflated at 3% from 2013 Est. permitting 20% Sand overlay/CY $4.30 for contaminated per acres at 60/40 $25.12 $7.10 $29.13 $8.24 $33.77 $9.55 $39.14 $11.07 Estimated Costs of Dredging West Bay Area 2030 2035 2040 2045 Totals: CY/five years $23,333,287 $27,050,044 $31,359,328 $36,354,011 $4,665,914 $5,410,752 $6,272,609 $7,270,059 Estuary Alt. Avg. direct dredge costs Est. permitting costs Est. sand overlay costs Total: $4,318,790 $1,530,539 $1,773,865 $2,056,197 $29,317,991 $33,993,335 $39,405,802 $45,680,268 $148,395,395 $221,305 $27,800,334 $32,228,647 $37,362,923 $43,313,815 $5,559,182 $6,446,615 $7,473,470 $8,661,878 Hybrid Alt. Avg. direct dredge costs Est. permitting costs Est. sand overlay costs Total: $1,571,266 $1,823,553 $2,113,463 $2,449,846 $34,930,781 $40,498,815 $46,949,856 $54,425,539 $176,804,991 In addition, neither the DEIS nor our calculations include analysis of the need for boats/boat houses to be moved temporarily for dredging. There would be significant logistical challenges and cost associated with this fact. Remediation of marina facilities to meet permitting requirements are also not included in the DEIS or our analysis. To have potential dredge costs of $148 million or $177 million, respectively, over the first 15-year period is a daunting prospect, and begs the critical question: how will costs at this level, or even at the conservative level reported in the DEIS, be paid for?

Who Benefits/Who Pays: Chapter 7 of the DEIS focuses on “Planning-Level Costs, Funding Recommendations, and Other Considerations.” It assumes that the State, as the entity who built the dam and owns much of the surrounding area, would be primarily responsible for most construction costs under the Estuary and Hybrid Alternatives. As for the long-term maintenance dredge, Table 7.1.1,
footnote 7, says that the project-related maintenance dredge costs above the historical baseline are assumed to be shared by the Funding and Governance Work Group and U.S. Army Corps of Engineers. Section 7.2 on page 7-7, acknowledges that: "Under the Estuary and Hybrid Alternatives, the primary focus for long-term funding and governance would be sediment management in impacted areas of West Bay. Recurring maintenance dredging, at a 5- to 6-year frequency, is critical to avoiding and minimizing significant impacts to downstream resources from sediment deposition... Without shared long-term funding and governance, these management actions may not be implemented. In past planning processes, the lack of committed funds in the State of Washington budget was frequently cited as a potential significant obstacle to adequate long-term management of the Capitol Lake-Deschutes Estuary." Further, Section 7.2.1 on page 7-8 has a list of Guiding Principles that include: '1. 2. 3. Dedicated and secure funding sources. Those who contribute to the problem should participate in funding or paying for the solution. Those who benefit from the solution should participate in funding or paying for the solution." Our marinas welcome the above acknowledgements, assumptions, and principles. Unfortunately, the DEIS then immediately punts on the long-term management structure, identification of beneficiaries, and a funding plan, when Section 7.2.2 states: "Balancing a potential contribution from a State legislative appropriation for construction costs, the Funding and Governance Work Group suggests that an equitable and efficient outcome could be that funding for long-term management is provided by those who benefit from the solution. This would operationalize guiding principal #3 with details to be determined based on the selected alternative once it is known and beneficiaries can be more clearly identified (our bolding added)." It would be wholly unacceptable to allow the EIS to be finalized and a Preferred Alternative selected without first answering the questions of "who benefits? who pays?" for each Alternative. Until those questions are answered, it is impossible for OYC, other marinas, or anyone to judge the economic sustainability of the Alternatives. The increased sediment deposits resulting from the Estuary and Hybrid Alternatives make the OYC and other marinas the most impacted entities in West Bay. The lack of transparency on this critical issue makes the future existence of our organizations and the potential economic impacts on Olympia's waterfront, uncertain and at risk. As for the long-term maintenance dredge, Table 7.1.1, footnote 7, says that the project-related maintenance dredge costs above the historical baseline are assumed to be shared by the Funding and Governance Work Group and U.S. Army Corps of Engineers. Section 7.2 on page 7-7, acknowledges that: "Under the Estuary and Hybrid Alternatives, the primary focus for long-term funding and governance would be sediment management in impacted areas of West Bay. Recurring maintenance dredging, at a 5- to 6-year frequency, is critical to avoiding and minimizing significant impacts to downstream resources from sediment deposition... Without shared long-term funding and governance, these management actions may not be implemented. In past planning processes, the lack of committed funds in the State of Washington budget was frequently cited as a potential significant obstacle to adequate long-term management of the Capitol Lake-Deschutes Estuary." Further, Section 7.2.1 on page 7-8 has a list of Guiding Principles that include: '1. 2. 3. Dedicated and secure funding sources. Those who contribute to the problem should participate in funding or paying for the solution. Those who benefit from the solution should participate in funding or paying for the solution." Our marinas welcome the above acknowledgements, assumptions, and principles. Unfortunately, the DEIS then immediately punts on the long-term management structure, identification of beneficiaries, and a funding plan, when Section 7.2.2 states: "Balancing a potential contribution from a State legislative appropriation for construction costs, the Funding and Governance Work Group suggests that an
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Until those questions are answered, it is impossible for OYC, other marinas, or anyone to judge the economic sustainability of the Alternatives. The increased sediment deposits resulting from the Estuary and Hybrid Alternatives make the OYC and other marinas the most impacted entities in West Bay. The lack of transparency on this critical issue makes the future existence of our organizations and the potential economic impacts on Olympia's waterfront, uncertain and at risk.

A very specific “who pays” question was asked, but not answered, at the DEIS Presentation to the OYC. The commentary surrounding the invasive species of New Zealand Mud Snail was presented as something that will cause the Capital Lake sediment dredge to be treated as contaminated material, and therefore subject to upland disposal. It was also noted that the snail would not be eradicated under any of the alternatives and would likely migrate into the Budd Bay Inlet if the Estuary or Hybrid models were adopted. This prompted the question from our local marinas - If our marinas have clean sediment now, and under normal circumstances our dredging would be subject to deep water disposal, but the snails cause upland disposal, who is paying that upcharge when they migrate into the Budd Bay Inlet? The presenters were unable to answer this question and asked that we submit the same formally for further discovery. 10

Another serious concern is the lack of documentation backing the assumption in the DEIS and in briefings that the U.S. Army Corps of Engineers (USACE) will pay 25% of the total dredging costs: “Approximately one-quarter of the sediment that would be dredged as part of the project would be from the FNC and turning basin, and that dredging is the responsibility of the USACE. Therefore, it is assumed that one-quarter of these total maintenance dredging costs would be paid by USACE.”(DEIS, Chapter 7, page 7-6). The USACE has not expressed a clear position of commitment to this project. A key part of evaluating the Preferred Alternative must be documentation of official USACE support for Fifth Avenue Dam removal and a commitment to prioritize its share of funding for the long-term maintenance dredge components of the project.

It should be noted that the Puget Sound Nearshore Ecosystem Restoration Project (PSNERP) has in the past rejected the Deschutes Estuary Restoration proposal because of adverse impacts to the maintenance of the federal navigation channel. In line with PSNERP's concerns, which reflect the perspectives of the USACE and the Washington Department of Fish and Wildlife, the Puget Sound Partnership (PSP) - the lead State agency on restoring Puget Sound - gave the Deschutes Estuary Restoration project a low priority (Tier 3, #318 out of 510 projects) in its 2018-2022 Action Plan. Further,
a more detailed review of PSP’s 2018-2022 Near Term Action Plan show the Deschutes Estuary at $113 million to be the single most expensive project on their comprehensive list of remediation actions by a factor of 2.5X. Many less expensive, higher priority and higher impact Puget Sound restoration projects in the PSP’s Near-Term Action Plan could be completed for the cost of this one project.

Actions speak louder than words. The decision of the Funding and Governance Workgroup to not identify beneficiaries, funding partners, and sources as part of the Preferred Alternative selection process, mirrors the failed history of action and funding for Capitol Lake management. It should be easy to understand our mistrust that long-term maintenance dredging will be taken care of by some yet to be determined quasi-entity using yet-to-be determined funding source(s) from unidentified beneficiaries. We are concerned that once the dam is irreversibly removed, responsibility for maintenance dredging would likely fall on our organizations. None of our organizations is in a financial position to handle multi-million-dollar dredge projects every five or six years. And so, the other conclusion stated throughout the economic analysis of the Estuary and Hybrid Alternatives - ‘No Effect on Downstream Economic Activity’ - is also unsupported unless and until the ‘who benefits/who pays?’ questions are answered.

Impact of Each Alternative on Nitrogen Load Discharge into Budd Inlet: In Chapter 3 of the DEIS, ‘Existing Conditions’, Table 3.3.5 and Figure 3.3.2 do an excellent job of showing how the Lake dramatically reduces the Deschutes River’s high Nitrogen concentrations in the critical summer months. These Nitrogen concentration figures should be applied to the River’s cfs flow rate to calculate the Nitrogen load being discharged into Budd Inlet under each of the different alternatives. There should then be a discussion in the text on the impacts of this Nitrogen loading to the work of the Department of Ecology’s current Nitrogen Nutrient Reduction Forum and LOTT’s water discharge permit requirements.

Railroad Bridge: Why was this bridge and its impediment to the natural ebb and flow of the river not addressed? In the Estuary and Hybrid options, this bridge, and its embankments will be as much of an impediment to the natural ebb and flow of tidal changes as the Fifth Avenue Gate is currently.

Railroad Transport Option: An active rail line runs through the project area. There is a six-acre state-owned upland site on the west side of the Deschutes Parkway adjacent to this rail line that could be used for dewatering the sediment and transporting them at a much lower cost than trucking.

Water in the Estuary 80% of Time: Graphs throughout the DEIS show that under the Estuary alternative, the Basin would be covered with water 80% of the time. This is based on a 24-hour day and over the course of a year. The tide flats start showing when the tide level is +4.0 feet. In the summer, at the height of water-based recreation in this area, the +4.0 feet low tide exposures occur primarily during the daylight hours. July 2021 alone had 28 days with tide levels +4.0 feet or less during daylight hours, or 90% of the days when tide flats will be exposed. For the final EIS, misleading assumptions and graphs in the DEIS must be clarified and supplemented to show the real impact. For example, the image on page 10 of the Executive Summary is deceptive to the reality at mid- to low tide in the Basin. There need to be complementary photos of the Estuary alternative at low tide included in the Executive Summary. The photos below of the historic natural state of Capitol Lake (note the lack of a dam) and Budd Inlet need to be included in the Final EIS background summary, as does a future rendition of the lake at low water. It is also imperative to review the historical results from former impact studies: ‘...opening the system to
tidal exchange will result in the re-establishment of predominantly mudflat and channel habitat. ('Deschutes Estuary Feasibility Study Independent Technical Review', October 2007, Page 9, Section 6.1.1). As for the low tide conditions in Lower Budd Inlet, the graphic below is a historic navigational chart that depicts the natural state of Budd Inlet at low water.

Recreational Vessel Usage of Budd Inlet. We encourage the consultants to revisit the incomplete methodology used to produce the graph on Page 3-9 in Chapter 3.0 of the DEIS, “Existing Conditions and Affected Environment,” The coloring of the graph estimates vessel usage in Budd Inlet at no more than 200 vessels per year. As the text explains, this figure counts only those vessels equipped with AIS and tracked by the Coast Guard. The problem is that a high percentage of recreational boats have no AIS or receive-only AIS. This limited methodology dramatically undercounts vessel usage and triggers a misleading conclusion that downplays the very active use of Budd Inlet by recreational boaters who are community residents or tourists. The fact that the four marinas in Lower Budd Inlet permanently moor vessels in over 450 slips and that two public docks offer space for 40 visiting boats daily also calls into serious question the 200/vessel/year estimate in the DEIS.

“Recreational Equivalency”. An associated concern is the Statement in Chapter 4.8.5.2: “Under the Estuary Alternative, there would be qualitative differences in some recreational activities compared to the No Action Alternative or the Managed Lake Alternative. Most activities in the study area would remain the same, while some would continue with modifications that would have equivalent beneficial recreational value (our bolding added).’ There is no reference to physical risk associated with tidal activity, nor the impacts of each alternative on different public recreational use. The focus of the DEIS analysis is on current and potential Lake/North Basin recreational activities. Since the “study area” includes Lower Budd Inlet, so should the recreational analysis. Without that, it is not possible to claim “equivalent beneficial recreational value”. Each alternative needs to identify and evaluate the impact on existing and potential activities in the entire “study area” -- both West Bay and the North/Middle/South Basins such as recreational boating, swimming, paddle boarding, and remote-control hobby boating.

* Swimming Beach and Sailing Lessons: Chapter 2.3.4: We understand that developing a swimming beach is not in scope, so not evaluated, however, the Estuary alternative eliminates the future option to develop a safe, fresh-water swimming beach. This is a significant limitation to potential public use and potential revenue for the City. Another use of the Lake as an urban resource that supports the “No Child Left Inside” Initiative is all-day safe access for youth sailing lessons. Public “opportunity costs” like swimming and sailing need to be identified and called out in the final EIS.

The DEIS drafters apparently support the Funding and Governance Work Group recommendation to not identify ‘who benefits/who pays“ for long-term maintenance dredging until after the Preferred Alternative is selected. How can the “economic sustainability” of each of the three ‘action alternatives“ be rigorously evaluated and compared one to the other without naming and assessing the most viable funding sources for each?

(b) What is the justification for punting on this critical aspect of the decision-making process? Chapter 7 of the DEIS assumes that the US Army Corps of Engineers (USACE) will pay for 25% of the total maintenance dredging costs. Has DES, the DEIS drafters, the Funding and Governance Work Group, or
any other entity received written communications from the USACE documenting its intention and commitment to cover these costs if the Estuary or Hybrid Alternative is selected? If so, please provide copies of any such correspondence.

(c) Why are the current economic impacts of Lower Budd Inlet recreational boating and the working waterfront minimized in the DEIS?

(d) Why are the clear adverse economic impacts of 7-8 years of Estuary/Hybrid Alternative demolition and construction similarly downplayed in the DEIS?

(e) Why doesn't the DEIS address the total cost of dredging all of the marinas located in West Bay of Budd Inlet, including the waterway between the marinas and the Port's turning basin?

(f) The draft EIS has assumed that any future dredging under the Managed Lake Alternative would require the far more expensive upland disposal due to contamination. That expense appears to be the primary driver of the higher cost associated with that alternative vs. the others. How does releasing that contamination directly into Puget Sound not result in a similar expensive disposal cost when deposited in the West Bay under the Estuary and Hybrid options?

(g) The Draft EIS notes the extended demolition and construction period and frequent maintenance dredging for both the Estuary and Hybrid Alternatives. Why does the Draft EIS fail to address the economic impacts of these on water-based recreational activity in the West Bay?

(a) If our marinas have clean sediment now, and under normal circumstances our dredging would be subject to deep water disposal, but the New Zealand Mud Snails cause upland disposal, who is paying that upcharge when they migrate into the Budd Bay Inlet?

(b) To have potential dredge costs of $148 million under the Estuary Alternative or $177 million under the Hybrid Alternative over the first 15-year period is a daunting prospect. How will costs at this level, or even at the conservative level reported in the DEIS, be paid for?

Why was the railroad bridge and its impediment to the natural ebb and flow of the river not addressed?

Why does the Draft EIS not consider the existing active rail line in the Capitol Lake basin as a vehicle for disposal of contaminated future dredging under the Managed Lake Alternative?

The Hydrodynamics and Sediment Transport Discipline Report states the sediment transport will be significantly greater the first few years after the dam removal. Shouldn't the sediment transport and dredge intervals be adjusted to reflect the increased sediment deposits that are anticipated one or two years after the dam removal?

The Hydrodynamics and Sediment Transport Discipline Report states the sediment transport will be significantly greater the first few years after the dam removal. Shouldn't the sediment transport and dredge intervals be adjusted to reflect the increased sediment deposits that are anticipated one or two years after the dam removal?
The Hydrodynamics and Sediment Transport Discipline Report identifies sediment deposition as being lower considering Sea Level Rise. Assuming dam removal in 2028, is the time frame of the impact analysis consistent with anticipated 2-feet of sea level rise in 7 years?

The work will be completed prior to the sea level rise impacts. Why didn't the DEIS evaluate the impacts of sediment transport with no sea level rise?

(i) Why has the Draft EIS failed to include available historical photographs of the Capitol Lake Basin and the West Bay taken pre-dam? Why would they not be the best available representation of the reality of the Estuary and Hybrid Alternatives?

Why does the Draft EIS fail to recognize the likelihood that, under the Estuary and Hybrid Alternatives, the Deschutes River will not remain in its dredged channel but rather will meander through the existing sediment exacerbating the siltation and contamination in the West Bay in the early years after dam removal?

Why does the Draft fail to consider nitrogen flowing into Capitol Lake that is captured there that would flow directly into the West Bay and Puget Sound under the Estuary and Hybrid Alternatives?

Why does the Draft EIS fail to recognize and address the recreational risks and public hazard represented by the tide flats that will replace Capital Lake under the Estuary and Hybrid Alternatives? (That danger is clearly marked on warnings posted currently at Priest Point Park.)

Supporting Materials (if any): O-22_Downing.pdf

Name (ID): Samuel Merrill (O-23)

Organization (if applicable): Black Hills Audubon

Submission Text: BHAS supports the Estuary Alternative. Seventy-five percent of river delta tidal wetlands in Puget Sound have been degraded or lost. The Puget Sound Partnership’s goal of restoring estuaries by 2020 was reached by only 20%. Restoration of the Nisqually estuary was presumed to be upwards of 80% of that figure. The Deschutes delta has lost 51% of its shoreline length to development. A restored Deschutes estuary will re-establish a functional, resilient estuary and increase habitat for seabirds, shorebirds, salmon, shellfish, and marine life. The visual benefits to the city and its residents and tourists of a healthy estuary once again, will have long-term economic gains for Olympia. The Estuary Alternative has significant beneficial effects of restoration for tribes - ecological, cultural, heritage, spiritual, and educational.

BHAS would like to see the Deschutes/Capitol Lake project developed in a landscape context since the functioning of the system is dependent on what happens upstream and throughout South Puget Sound. Natural communities of wetland, sea, wading and shorebirds and other animals are associated with its habitats, from wetlands and riparian forests to nearby communities, farmlands and working lands. By restoring historical habitat, the estuary will provide a safety factor for rearing fish. Conversion to an
estuary would substantially benefit anadromous fish. Mudflats are teeming with life. There will be a shift in avifauna and wildlife, but there won't be any overall loss.

Three major steps are necessary to restore the historic estuary, e.g. both west and east bays of Budd Inlet - cleaning up toxic sediment, removing non-point pollution from stormwater and leaky septic systems, and restoring water input from historical tributaries. The value of wetlands, rivers, marshes, tideflats, and uplands as ecosystem services are reduced when contaminants are present in habitats or water (page 3-139). The project described in the DEIS is an opportunity to clean up non-point pollution from 50 water outfalls into Capitol Lake. It is also an opportunity to ensure the federal government cleans up sediments with dioxins and PAHs in west Budd Inlet before new sediments are delivered by the free-flowing Deschutes River (see explanation below). These projects are a necessary first step. However, to restore the historic Deschutes estuary, the FEIS must include a plan to remove toxic sediments from the entire delta, to focus current programs to cleanup septic tanks and stormwater on developments along all its shores, and to daylight and restore water volume to its tributaries. Consider restoring Moxlie Creek to have inflow to East Bay and reconnect upstream for salmon use again. Connection with historical tributaries is critical in returning length to the shorelines. The Deschutes delta historically had a shoreline of roughly 11 miles; it now has a current length of about 5.6 miles, as many delta tributaries have been lost. Restoration would mean the Deschutes estuary would, once again, be the next largest in South Sound. No longer will migratory salmon fry have to travel a long way to find habitat when they leave the Nisqually estuary. We ask all the parties involved in the EIS to apply NOW for grants to restore the entire historic delta of the Deschutes Estuary. State and national governments make grants available for estuary restoration projects. Since native salmon runs in the Deschutes Estuary are currently at historic lows, other funding should also be explored. Tribes and foundations have supported other dam removals in Washington that restored fish habitat. They may be able to make considerable contributions for this project, particularly regarding the steps suggested below to speed up the permitting and dam breaching process.

Estuary Alternative We urge Department of Enterprise Services, parties that serve on the Work Groups, and Washington State agencies to expand the scope and continue the momentum of the Deschutes Estuary/Capitol Lake project as described in the DEIS. Modeling Model the settling and accretion of sediment throughout the three basins of Capitol Lake, West Budd Inlet and beyond. Expand the current northern border of the project area to include the entirety of Budd Inlet. Hydrodynamic and sediment transport models, along with historic maps, help determine where flow conditions would re-create existing tidal sloughs from transported sediments. Popular birding destinations, sloughs are braided channels where tidal saltwater and freshwater mix in estuaries. River sloughs form in old river channels. Sloughs act as buffers from waves and weather events, and as protective habitats for juvenile salmon, other young fish, and marine species. Sloughs also serve key functions in pollution control. Once cleanup is assessed and accomplished, sloughs could be established in East Bay to aid in its restoration. Modeling can determine where sediments would accrete. Good modeling of the historic estuary will create also more certainty for many kinds of planning: for the initial and periodic dredging of the Deschutes Estuary and siting its new amenities; for Budd Inlet's shoreline buildings, parks, boat launches, docks, and roads; and for the frequency and extent of dredging Budd Inlet, whether for private and public marinas or for the Port of Olympia's marine channel and turnaround basin.
Sediment contaminants Contaminants must be removed before the dam is breached. Low levels of chemical exceedances in contaminated sediments can become cumulative over time. Sediment contaminants must be removed from West Bay and all exceedances before the dam is removed. Does the statement that West Bay sediments would be “the clean sediment deposited from the Deschutes River, rather than the existing West Bay sediment” (page 2-23) presume the federal government/DMMP will have removed contaminants from existing sediment before dredging? This statement about federal regulations pertaining to West Bay contaminants must come earlier in the DEIS: “...this [West Bay] sediment contamination is expected to be addressed through a separate regulatory process before long-term operation of the selected alternative” (page 4-154). Instead, it must say ‘before the dam is breached.” Clarify the potential conflict on page 4-150 to match this information. Create a timeline with the federal government/DMMP to ensure they conduct their regulatory sediment removal process before the dam is removed. Add the timeline to this project as well, and list timeline dates in the FEIS.

Dredging Please be mindful of human effects of long-term maintenance dredging on Budd Inlet’s marine environment. Spot dredging for sediment placement during restoration should have no major effects. The Port of Olympia marine channel/turning basin must be maintained. However, the risk of sediment quality degradation from recurring maintenance dredging throughout the project area is not necessarily low (page 4-150).

Dredged sediment quality loses its capacity to hold dissolved oxygen (DO). During dredging, organic material (aquatic plants and planktonic algae) in bottom sediments is re-suspended. Oxygen is lost to the air, causing significant reductions in the DO concentration in a tidal waterway. When bottom waters do not flush into surrounding waters, oxygen is used up in the bottom sediments when bacteria eat excess organic material. Low DO levels can affect migration and spawning for salmon, reducing hatching success and causing direct mortality to adult and juvenile salmon.

Dredging impacts marine organisms by degrading their habitat, introducing noise, and remobilizing contaminants. It creates sedimentation issues including increases in suspended sediment, where invertebrates, eggs, and larvae are most vulnerable. High turbidity levels from suspended sediments cause waterways to fill in faster.

Marinas Dredging for shoaling and navigation is known to reduce DO levels, aside from creating turbidity and destroying vegetation and marine life. The Sediment Management Standards and Water Quality Standards do not consider habitat issues. In the case of private marinas, dredging will not promote natural system recovery. Shoaling means vessel-generated waves cause boats to erode the banks and seabed, removing substantial amounts of sediments, aquatic plants, and marine life. Low DO would be enhanced without dredging or shoaling. All three West Bay marinas experience shoaling and/or sediment accumulation to some extent (page 3-15). Consider moving marinas to a location where dredging is not required. Limiting or moving private and public boating and marina facilities away from the tidal zone and east Budd Inlet removes some of the need to maintenance dredge. Habitat to support estuarine functions could then be established, to the benefit of all citizens, particularly in the tidal/freshwater mixing area at the breached dam and at East Bay. Does maintenance dredging due to private boat mooring preclude the possibility of sloughs in East Bay? Consider establishing mitigation for DO on permits for private uses, such as marinas. BHAS applauds DEIS efforts to have the Port and
marinas conduct sediment monitoring as mitigation (page 4-106). However, monitoring for sediments alone would not truly mitigate the environmental damage caused by moored boats. Dredging for navigation, port development and maintenance, and marinas leads to significant changes in the functional arrangement of the seabed and a reduction in DO. While it serves navigational purposes, dredging has no benefits supporting ecological functions (Chapter 2).

Water pollutants Use the construction project to restore the water quality of Budd Inlet, which is more contaminated than most other Puget Sound estuaries. The current construction plan for the Estuary alternative will simply replace the approximately 50 stormwater outfall pipes along the shore with pipes made of a material that will not corrode in saline water. However, these outflows are known sources of “non-point” pollution from tire residues, vehicle oil leaks, lawn pesticides and fertilizers, and a host of other pollutants. The perfect opportunity to monitor stormwater pollutants is when the outflow pipes are dug up and exposed. The pipes can then be directed to move stormwater into underground retention facilities that will clean the stormwater before it flows into the Deschutes Estuary. Restoring a clean Deschutes estuary would be a tremendous net ecological gain for Puget Sound estuaries.

Bat Habitat Please document the “severe” impact to bats with conversion of Capitol Lake to an estuary. One bat species is a state Species of Concern, but not state- or federal-listed. Is there best available science/data supporting the loss of Capitol Lake as a “severe impact” to bats? BHAS supports the protection of bats in their natural habitats and encourages the protection of freshwater wetlands, but not in converted historic estuaries. Freshwater wetland mitigation could also be acquired near Woodard Bay. If the Estuary Alternative is chosen, mitigation for removal of the freshwater Managed Lake habitat for bats may be necessary. Creating freshwater habitats to serve bats upstream would improve overall diversity. Find places upstream to restore freshwater wetlands with bat habitat. Consider protection or restoration of freshwater wetlands upstream and inland. Ponded riparian areas may be suitable for amphibians, such as tree frogs. Can wet meadows be provided for upstream? Acquisition can steer the plan’s freshwater direction for the Estuary Alternative. Work with Capitol Land Trust to acquire restorable lands along the Deschutes River.

Construction Breach the dam earlier in the process to help conserve salmon. Estuarine habitat loss is one of the greatest threats to native salmon runs. The current construction plan for the Deschutes Estuary alternative involves 2 to 3 years on the FEIS and 5 years on permitting. At the very end of the 7 to 8 year construction period, the construction plan will release the dam and let the Deschutes River flow freely. Under the proposed plan, assuming no delays, the dam will actually be opened 15 to 16 years from now! Start construction in 4 years instead of 8 years. To speed up the end goal of opening the 5th Avenue dam, we urge fast-tracking of the FEIS and permitting process. Modeling of shore accretion and other changes, including changes to East Bay, can begin as soon as the Estuary alternative is chosen. Similarly, permitting of some construction pieces can begin before the FEIS is completed. All of the permitting can be expedited - similar to emergency bridge repairs. Permitting must be more clearly defined in the EIS. The statement 'management activities to maintain water quality and ecological functions would be defined during permitting' (page 2-53) is vague. Describe the levels of permitting involved for these activities. Describe how management activities would be defined in the permitting process, particularly since it has been shown time and time again that no net loss of wetland ecological
functions, applied during permitting, has not been achieved. To speed up the process of dam release and removal, the first step before the estuary construction project begins must not be moving and extending Deschutes Parkway. Instead, consider moving and extending Deschutes Parkway after Capitol Lake is dredged, outfalls are secured, and the dam is breached. It is not clear from the DEIS whether increased water flow from the un-dammed Deschutes River will require moving Deschutes Parkway. The current intersection of Deschutes Parkway SW and Olympia Avenue SW is certainly not ideal, and we applaud the desire to improve it. Yet if the Deschutes Parkway will not be at risk, consider moving and extending the parkway to improve the intersection after the dam is breached. Revise the construction plan to open the dam as soon as the three basins of Capitol Lake are dredged to create a channel. Building the 5th Avenue bridge can be done without a coffer dam, or with a coffer dam that allows the river to flow freely or almost completely freely. The amenities - 5th Ave. pedestrian bridge, fishing dock, boardwalk, boat launch and decontamination station - can be added after the river is flowing. Speed up the construction process by removing the dredge spoils off-site from Capitol Lake instead of using them to create habitat. Creating artificial habitat such as islands and artificial shores with the dredge spoils may not be feasible if New Zealand mud snails and pollutants are too numerous. Artificial islands or shores may simply disappear if not modeled accurately. Over the years, the river will ebb and flow with high and low tides and droughts and floods. Very likely these artificial “habitats” will be moved around, just like other sediments. Instead, with native plantings along the shores to support the system, let the river create its own shoreline habitat. With careful planning, the dam could be opened by 2027, not 2037.

While BHAS emphatically prefers the Estuary Alternative, we would like to comment on some problems with the description of the Managed Lake Alternative. When the 5th Ave. dam was built in 1949, the Deschutes was actually transformed into a damned river impoundment, an artificial reservoir, not a lake. Comparing Capitol Lake to lowland lakes is like comparing apples to oranges. The EIS must provide comparisons to other damned lowland river impoundments, not lakes. Regarding flooding: we can't step back to the historical floodplain, but we can get closer with mitigative actions. Consider any potential overflow channels, or natural processes (as in Percival Creek), and enhancements needed to increase flow frequency, to create small ephemeral (from rain runoff) wet meadows upstream. An adaptive management plan with monitoring for invasive species will probably be needed in the Habitat Enhancement Plan.

Delete the sentence on page 12: “Perceptions of poor water quality and worsening conditions in Capitol Lake are likely based on the impaired aesthetics from aquatic plant growth and the ongoing restrictions on recreational use, rather than water chemistry.” Impaired aesthetics is a subjective term, and perceptions must be left to public comment. The next sentence “However, recent monitoring data indicate that water quality in Capitol Lake is relatively good.” Relative to what? Other impoundments? Freshwater impoundments are not directly comparable to saltwater habitats. Capitol Lake’s water quality is only as good as what comes out of the outfalls. It is best not to compare freshwater DO in an impoundment to a tidal saltwater delta. Under the Estuary alternative in Table ES.2, the DEIS compares Capitol Lake, a freshwater impoundment, to Budd Inlet, south Puget Sound, for DO. Briefly explain the dynamics of how estuarine water is “inherently” different than freshwater. Without an explanation, a comparison of a freshwater impoundment is not comparable to a saltwater habitat, particularly when freshwater vegetation is part of the problem.
HAS is pleased to learn re-established estuarine conditions would reduce the extent of overland flooding from river floods. Consider a pumping station, if necessary, to move water to Budd Inlet during extreme flood events if the Managed Lake or Hybrid Alternative is selected as the Preferred Alternative.

Stepping back, the EIS should consider the integrity of the lower Deschutes Watershed and Budd Inlet ecosystems as an active estuary for future generations. BHAS urges DES and its partners to keep this perspective as our comments are reviewed.

Supporting Materials (if any): O-23 Merrill.pdf

Name (ID): Jenifer Rees (O-24)

Organization (if applicable): Friends of Seattle's Olmsted Parks

Submission Text: We, the Friends of Seattle's Olmsted Parks (FSOP), wish to comment on the draft EIS for Capitol Lake-Deschutes Estuary. We are an advocacy and education group focusing on historic Olmsted landscapes in Seattle and throughout the Pacific Northwest. The Washington State Capitol campus in Olympia was designed by the Olmsted Brothers firm with initial study in 1911-12 that was further developed into the full campus in 1927-31. A significant feature of the State Capitol campus is its north-south axial arrangement aligned with Budd Inlet, the southernmost navigable section of Puget Sound and regionally important for commerce. Today, the North Basin lies between the Capitol and the city's harbor at Budd Inlet and serves as a focal area and feature for adjacent parks and trails as well as foreground for views both to and from the Capitol building and terrace. The North Basin also serves as a reflecting water feature for views to the Capitol buildings. As referenced in the West Capitol Campus Historic Landscape Preservation Plan (GA project # 08-099, June 2009), John Charles Olmsted recognized the importance of these regional views with the siting of the Capitol. One proposal included a rail station and park near a proposed passenger steamer landing on Budd Inlet, creating a setting wherein “all visitors coming to Olympia either by steamer or by railroad will have a fine symmetrical view of the Capitol and its group of buildings” (p. 58). This particular view is today realized at Heritage Park Fountain (see Attachment A, photo #4). He also proposed “a connected series of park spaces between what is now Sylvester Park and the proposed location for the railroad station” and a “small harbor view park between the two waterways.” The report concludes that “in addition to creating a publicly accessible and symmetrical view of the Capitol within its setting, John Charles Olmsted was looking for opportunities to extend the healthful influences of the Capitol development to the surrounding community through a connected series of parks and open spaces along the water. ...’ Also in the report is an aerial photo of the campus that shows Capitol Lake as an estuary, fluctuating between mud flat and salt water basin, before mid-century construction of the dam. Fig. 4.1 ca. 1930s aerial view of West Campus (Source: Washington State Archives) In reviewing the proposed alternatives for the North Basin in the draft EIS, FSOP primarily considered view impacts both to and from the Capitol building across the North Basin, but we also explored impacts to existing recreational use around the Basin and read through the document's Cultural Resource section for acknowledgement of the historically significant siting and design of the Capitol campus.
View Impacts Of the three proposed alternatives, only the Estuary Alternative might change view opportunities to and from the Capitol building. In this alternative, the largest of the proposed islands as currently shown would eventually obscure views to the city's harbor and would also prevent any chance for reflection of the Capitol in the water, even at high tides. That said, FSOP feels that estuarine islands can be located to preserve select view corridors (please refer to Attachment A for additional graphic information). Regarding the DEIS alternatives, we recommend that: 1) unobstructed views be maintained between the Capitol building and the city's harbor and Heritage Park immediately adjacent (DEIS Photo Pt #2, Fig. 3.10.1); 2) unobstructed views likewise be maintained between the Capitol building and the viewing platform at the west end of Heritage Park (DEIS Photo Pt #1, Fig. 3.10.1); 3) with the Estuary Alternative, the larger island be located nearer the basin's north shore and outside or between these two view corridors (as illustrated in Att. A); and 4) the FEIS include simulated views toward the Capitol from Photo Pt #2 in Heritage Park. Additionally, we note that in the Hybrid Alternative, the proposed multimodal trail atop a retaining wall (separating the basin from the Deschutes), as it's depicted in DEIS Fig. 4.10.12 and 4.10.13, creates a visual obstruction to the water basin from Marathon Park. We suggest that: 5) for the Hybrid Alternative, a visually softer (greener) treatment of the trail/retaining wall be considered, perhaps by creating a landscaped berm sloping to the water's edge.

Recreational Impacts There is an existing pedestrian loop that circles the North Basin, incorporating the sidewalk along Deschutes Parkway, and crosses the Deschutes River at Marathon Park. In the draft EIS, it is unclear whether the bridge at Marathon Park is to be retained to keep this loop intact. Figures 2.2.1 (Managed Alternative), 2.2.3 (Estuary Alternative), and 2.2.5 (Hybrid Alternative) show no bridge at this juncture. 1) Please clarify whether the Marathon Park boardwalk/bridge will be retained in each alternative. If it is not proposed to be retained, we believe it is important to provide a loop pathway around or connecting through the North Basin (in the case of the Estuary alternative, this might be accomplished by providing boardwalks between islands and the north and south shores). We appreciate your careful study of the Deschutes Estuary and surrounding areas and your efforts to consider all impacts. FSOP believes that a preferred alternative accommodating significant historic views and recreational use as well as restoring the estuarine environment can be reached.


Name (ID): Michael Cade (O-25)

Organization (if applicable): Thurston Economic Development Council

Submission Text: Thank you for your attention: The following comments and input are provided by the Thurston Economic Development Council based upon the environmental impact analysis conducted by ECONorthwest and provided to the Washington Department of Enterprise Services in June of 2021. Our comments assume the report provided by ECONorthwest is accurate and objective. It is not within the expertise of the Thurston Economic Development Council to evaluate ecological or environmental concerns and, as such, defers to the analysis provided in the DEIS as to those issues. Our comments are formed with these primary considerations in mind: * Honoring currently existing investment within the downtown core of Olympia. * Supporting on-going investment in the downtown core of Olympia. *
Protecting existing and developing additional access to recreational amenities in the downtown core. * Developing a sustainable and equitable economy in alignment with regional environmental and social values.

Based upon our review of the analysis provided in the DEIS, the Thurston Economic Development Council believes that in the long-run, the economic outcomes associated with the hybrid option are likely to produce the largest economic returns on investment when compared with the managed lake and estuary options. The hybrid plan also represents a significant opportunity to implement carbon sequestration initiatives that could allow for a more flexible and resilient economy as carbon becomes increasingly economized. As such, the Thurston EDC believes that the hybrid option strikes the best balance between economic, social and environmental outcomes related to the future of Capitol Lake.

Impact to the Port of Olympia The continued success of the Port of Olympia is critical to the Thurston County economy. Any solution or planned action for management of Capitol Lake must consider the impact to the Port of Olympia and the long-term operation of the marine terminal. It is unclear to the EDC at this point who will bear the fiscal responsibility for the regular dredging that will be required for the hybrid or estuary options and what financial constraints the Port of Olympia may encounter in meeting those future dredging requirements. The EDC is very concerned that some or all of the costs of more frequent dredging will fall disproportionately on the Port and by extension Thurston County taxpayers. It is clear that all of the alternatives outlined within the DEIS will have impacts upon the operations of the Port of Olympia.

Impact of Construction and Maintenance According to the DEIS report, the majority of construction spending associated with any changes to Capitol Lake will not provide meaning positive economic impact on Thurston County as local firms are not likely to have significant expertise in the type of work required and use out-of-region firms would be required. Across all four options presented, the hybrid option is expected to require the most amount of public investment. Currently, however, there is a lack of clear funding and governance structure that would detail in what way funds would be raised. ECONorthwest articulates this in their report and concludes that it is then impossible to calculate the net economic impacts of any option presented in comparison with alternative uses of public funding. As such, the EDC cannot properly evaluate construction and maintenance impacts with these comments.

Impact on Downtown Investment The DEIS concludes that all alternatives will have minimal impact on the long term investment for residential or commercial activity within the downtown core. Investment into the downtown core of Olympia is (primarily) determined by generalized market conditions and is unlikely to be significantly impacted in the long run by any action. However, uncertainty generated by radical changes in the downtown landscape may drive away investment in the short run and is most relevant should the estuary option be selected. It is unclear if the hybrid option offers an opportunity to keep the reflecting pool downtown, preserving some of the established character of Capitol Lake that existing investment has relied upon. As a result, the hybrid option may decrease uncertainty investors have in the future aesthetic of the downtown core, helping to mitigate upfront risks and potential losses of downtown investment.
Impact on Recreation Value All proposed actions have been found to significantly impact recreational value of downtown in the short-term. While the development of the hybrid option is estimated to take the longest amount of time to complete, and therefore the largest amount of initial disruption - it could also generate the highest long-term return on investment as it retains the two most prominent features of both the managed lake and the urban estuary. While both the estuary and the hybrid option expand access to water recreation into the Capitol Lake Basin, the hybrid option is likely to provide increasing economic value as it retains the majority of the offerings of a managed lake, while increasing access to water recreation. This access to recreation, in the long-run, is projected to grow in value over time as the downtown core is developed. Both the hybrid option and the estuary option could significantly decrease the chance of flooding events, which would reduce long-term uncertainty and support continued investment.

Impact of Social and Environmental Outcomes While it is not the expertise of the Thurston Economic Development Council to evaluate environmental or social outcomes, both are closely tied to economic policy. In addition to the economic factors discussed above, based upon our review, we believe that the hybrid option is most consistent with the local community values of protecting and improving tribal communities, improving water quality and addressing climate change.

Supporting Materials (if any): N/A

Name (ID): Karen Tvedt (O-27)

Organization (if applicable): The League of Women Voters of Thurston County

Submission Text: No Action Alternative The Thurston League cannot support further consideration of the No Action Alternative. Current operations of Capitol Lake perpetuate unhealthy and undesirable conditions. We agree with the findings of Section 2.2.4 that the No Action Alternative fails to achieve adopted project goals and those of Section 4.14.2 which find no long-term beneficial outcomes and a variety of adverse impacts associated with current operations. While the No Action Alternative is useful as a baseline of deliberations and analysis, it has no practical application for the future.

Democratic Governance

The League supports policies that achieve water quality essential for maintaining species populations and diversity. We believe that the overriding consideration should be protecting the quantity and quality of the water resource. For decades, the League has supported a watershed-based approach to water resource management, an approach that is consistent with the intent of Washington State's Watershed Planning Law (RCW 90.82). Further, the League has always worked to promote the values and processes of open, accountable, representative, and responsive government. The League of Women Voters believes efficient government requires competent personnel, a clear assignment of responsibilities, adequate financing, and effective coordination among the different levels of government.
Guiding Principles - With these positions in mind, the Thurston League finds all ten of the "guiding principles for a future funding and governance model", which were identified in the 2016 Phase One Report, to be well-reasoned and critical to success. Those guiding principles are:

1. Dedicated and secure funding sources, 2. Those who contribute to the problem should participate in funding or paying for the solution, 3. Those who benefit from the solution should participate in funding or paying for the solution, 4. Shared distribution of costs, 5. State participation, 6. Watershed-wide in scale, 7. Manageable governance, 8. Commitment to a long-term collaborative process, 9. Adequately resourced administration, 10. Support the goals and objectives of the long-term management plan and the future of the overall watershed. 11. In addition, we suggest that federal participation and equitable representation in decision-making are critical elements for this endeavor.

Watershed Scale - We recognize that actions within the Project Area must not be disconnected from the people and the natural systems that make up the entire watershed. For this reason, we are concerned with the findings of Section 7.2, which conclude that in each of the action alternatives ‘the primary focus for long-term funding and governance would be sediment management in impacted areas' (emphasis added). By limiting its considerations to the impacted Project Area, the DEIS misses the mark for real economic and environmental sustainability. A watershed-scaled approach to collaboration, governance, financing, and ecosystem stewardship will allow concerns to be addressed at their source, resulting in more effective and efficient outcomes. A geographically limited approach, which focuses principally on the Project Area, fails to pursue an objective effort to ‘identify and implement an environmentally and economically sustainable long-term management alternative that improves water quality and manages existing sediment accumulation and future deposition’, which is the stated purpose of the EIS process. Representative and responsive governance requires a watershed-based approach to water resource management.

Responsiveness - The League believes responsible government should be responsive to the will of the people and promote the conservation and development of natural resources in the public interest. We concur with the finding in Section1.12, that a decades-long political stalemate has impeded progress in the Deschutes watershed and further delay is not acceptable. The unhealthy and undesirable conditions of current operations are compounding, as time moves on. We are concerned that the eleven-to-fifteen-year timeline, which has been estimated for project completion, is not an adequate response to serious harms. Ecological, cultural, and economic injuries attributed to business-as-usual management require prompt action. We appreciate the role of careful analysis, design, and permitting; however, we encourage simultaneous processes and efficient construction techniques.

Cultural Contributions of Indigenous and Chinese People The League recognizes that systemic and institutional racism exists at all levels, is endemic within our political and social order, and that an authentic reckoning requires acknowledgment and recognition of the injustice and cruelty that brought us all to the current day. The history of the Capitol Lake - Deschutes Estuary area is central to the history of Olympia and its people. If we hope to make informed decisions about this area, we must consider where we are and how human history provides a context for the future. The Cultural Resources Discipline Report attempts to reckon with the ethnic and cultural context of the Project Area. Section 4.2 provides a thorough and useful accounting of the built environment and the early days of Tumwater,
Olympia, and the surrounding area. Section 4.1 provides a broad and sweeping overview of the prehistory of the region. Section 4.3, however, takes an odd turn, here the cultural resources initiative relies upon a single, 12-year old report offering interviews with a small handful of representatives of current-day ethnic minorities. The referenced 2009 report, “Study of Cultural & Spiritual Values Associated with Future Alternatives for Capitol Lake Basin’, is useful but falls far short of the standards expected for documenting traditional cultural properties and contributions. This discipline report has failed to recognize the significance of hyper-local history and the experience of the cultures that shaped the Project Area and their descendants, who are members of our community.

Indigenous People - The Steh-chass people lived in a village at the base of Tumwater Falls for thousands of years in a permanent settlement of gabled cedar plank homes.' The village was a sacred site, where people gathered for ceremonies, feasts, potlatches, and to harvest and preserve the abundant natural resources of the area.’ Those people are now recognized as the forebearers of at least five tribes - the Nisqually, Squaxin, Chehalis, Suquamish, and Duwamish. Maps of Budd Inlet from the mid-1800s show the Steh-chass Indians lived along the shores of the entire inlet, with another key village located near, what is today, the corner of 4th Avenue and Columbia, in Olympia.' The Steh-chass village at Tumwater Falls became the first permanent settlement of European people in Washington State, and soon those settlers took over the Indian village and the entire peninsula comprising Olympia and the State Capitol of today. As more settlers arrived, they could not get free title to land. Federal law said that the Indians held legal claim to the land. Soon territorial officials sought to extinguish Indian ownership of the land and remove the Indians. The egregious Medicine Creek Treaty of 1854 resulted in the expulsion of all Indigenous people from the Project Area and displaced an estimated 10,000 Indians who were living west of the Cascades. Some 400 people from five major South Sound villages were forced onto Squaxin Island, a small piece of land, some four and a half by one-half miles in area. The Medicine Creek Treaty set the stage for the horrific Indian Wars of 1855 and 1856 and the forced expulsion of Indians from the Project Area, which set the stage for today's social and cultural conditions.

Chinese People - Like much of the American West, Olympia found substantial economic benefits from the large immigration of Chinese workers in the mid-1800s. These laborers are best known for their contribution to the construction of the Transcontinental Railroad but they found work in agriculture, mining, the timber industry, as domestics, and wherever workers were needed. By the 1880s, more than 100,000 Chinese had come to the West. Olympia's Chinese residents were predominantly from the Lok family villages near the town of Shuibu in Taishan County of Guangdong Province in southern China. Olympia's earliest Chinatown was on 4th Avenue between Columbia and Capitol Way, including a hand laundry, stores, and lodging for residents. In the 1880s the Hong Yek Kee Company, Quong Yeun Sang Company, and the Hong Hai Company relocated to the waterfront at the corner of 5th Avenue and Columbia Street. Still later, five buildings were moved to the northwest corner of 5th Avenue and Water Street, which was the final location of Olympia's Chinatown. The Chinese expulsions from Tacoma and Seattle (1885 and 1886 respectively) were not localized events. In Tenino, the homes of Chinese American railroad workers were burned to the ground on Christmas Eve, 1885. Olympia's Chinese community faced a riotous group of agitators on February 9, 1886, who unsuccessfully demanded their expulsion. These events fit a pattern of national anti-Chinese sentiment. The US Chinese Exclusion Act of 1882 reinforced economic and racial tensions in the West during a time of severe economic
contraction. Many whites felt the Chinese were taking away jobs by agreeing to work for less. Some argued that lower-paid Chinese workers would lower the standard of living for average Americans. XV Race riots and labor camp massacres by nativists and labor organizers continued into the 1900s. xvi Widespread anti-Chinese sentiment and anti-immigration policies led to substantially reduced numbers of Chinese in the West. xvii Some Chinese Americans stayed in Olympia and some Chinese American business activity continued, but the cultural composition of the community and the Project Area was markedly impacted by the social and political upheaval of this period. xvi The Cultural Resources Discipline Report misses the mark by glossing over the ethnic and cultural context of the Project Area. By perpetuating an underdeveloped history this Environmental Impact Statement squanders an opportunity for cultural understanding and risks moving forward with a preferred action alternative that is uninformed and insensitive, thereby compounding inherent biases and institutional racism in our community. We agree with the finding in the Executive Summary that some alternatives carry environmental justice concerns.

Best Available Science On issues of resource management, the League supports comprehensive long-range planning and believes that wise decision-making requires adequate data and a framework within which alternatives may be weighed. The 2014 Ruckelshaus Center 'Situation Assessment for Capitol Lake Management' identified disagreements on certain basic facts related to scientific and financial data. It concluded with a recommendation to establish 'a common information base before pursuing efforts to initiate a collaborative process', saying 'it will be important to gain agreement on both scientific data and cost estimates to serve as a foundation for generating and agreeing on management actions or priorities'. This recommendation informed the 2016 'Phase One Report on the Capitol Lake/Lower Deschutes Watershed Long-Term Management Planning'. A great deal of effort and expense has been put forth to establish a common information base that is built upon the best practices of scientific inquiry and analysis. The current Water Quality Discipline Report alone contains more than 260 pages of technical analysis with tables, figures, appendices, and references. Yet, after reviewing the DEIS and its supporting documents, we remain concerned that the information required to provide agreement on certain basic facts is still lacking. Analysis of water quality management scenarios for the Deschutes River, Capitol Lake, and Budd Inlet has been ongoing for many years. This process has generally followed a methodical progression by building upon prior findings and creating a better understanding of the complex processes and interactions of the watershed. Critically low dissolved oxygen levels in lower Budd Inlet have been a primary focus. Although the public is waiting for the completion of Ecology's Budd Inlet ‘Total Maximum Daily Load' report, which will establish water pollution clean-up requirements, the progression of reporting has resulted in a general understanding of how this natural system works and the development of an implementation plan that can address identified deficiencies in water quality. . . Some of the summary findings from these many years of work can be found in Ecology's 'Deschutes River, Capitol Lake, and Budd Inlet Total Maximum Daily Load Study Supplemental Modeling Scenarios' of 2015. Key conclusions included: Current human activities cause violations of dissolved oxygen standards throughout most of Budd Inlet. The Capitol Lake dam has the single largest negative impact on dissolved oxygen in Budd Inlet. The dam produces pulsed releases from the lake increasing the amount of time that water stays in Budd Inlet. The increase in residence time of the water contributes to lower dissolved oxygen levels in southern Budd Inlet than would occur without the dam in place. Carbon loading from Capitol Lake produces substantially more oxygen-
demanding organic carbon than would occur in a natural estuary. As the excess organic carbon decays, oxygen is used up in the process. This causes lower oxygen levels than would occur without the dam in place.

As prescribed by the Water Resources Methodology report (July 2019), Section 4.1.1.2.2.1 of the Water Quality Discipline Report explains that the current analysis sought to 'provide more recent data and to augment the historical dataset with additional analytes' through sampling in 2019. However, the Discipline Report explains that sampling was likely impacted by the distressing spill of 600 gallons of electrical transformer oil (containing toxic PCBs which are bioaccumulative and not biodegradable) and the associated cleanup activities, which extended from February through July of 2019. The cleanup activity involved the extensive disruption of vegetation and sediments, at a cost of $9 million.

Further, two high-volume sewage spills in May of 2019 disrupted biotic conditions in Capitol Lake. The first occurred at South Puget Sound Community College and lasted for an undetermined duration. The broken line may have carried as much as 200,000 gallons of raw sewage per day. The second leak in Percival Canyon is estimated to have run for five days and released as much as 232,560 gallons of ewage into the lake. The EIS analysts determined that the total phosphorus concentration in the Middle Basin throughout all of 2019 averaged seven times higher level than the average measured in previous years. However, the authors of the Discipline Report found that, aside from phosphorus, 'data from other parameters collected in 2019 was generally within the expected range of historically observed values and was accepted for use in this analysis' (Section 4.1.1.2.2.1). The unfortunate fouling of the lake during the analysis period and the subsequent need to normalize the data is understandable, even as it challenges the audience of the DEIS to consider the accuracy and precision of the findings. However, these same 2019 samples are then used to support an entirely new interpretation of the complex bio-nutrient interactions of Capitol Lake and Budd Inlet.

Section 4.1.1.4 says, 'One of the main objectives of the 2019 data collection effort was to compare biochemical oxygen demand, total nitrogen, and total organic carbon between the lake and river to evaluate the extent to which the lake is a principal contributor ... to low [dissolved oxygen] in Budd Inlet'. Section 5.5.2.1 then states "in consideration of lower [total organic carbon] concentrations measured in 2019, a [dissolved oxygen] improvement of half of what the [2015 Ecology] model predicts is assumed for this analysis'. The Draft EIS discounts by 50% the beneficial impacts of dam removal on dissolved oxygen based upon a single set of fouled nutrient samples. The authors are asking us to set aside years of prior work and professionally reviewed findings and insert a new understanding of bio-nutrient dynamics based upon data that has been corrupted with several hundreds of thousands of gallons of nutrient-rich municipal waste and six months of active sediment disturbance.

League members are not prepared to perform the required analysis on a series of complex datasets to support or refute these latest findings, yet it is clear that DEIS has not been successful in providing a 'common information base... to serve as a foundation for generating and agreeing on management actions or priorities" as called for in the Ruckelshaus Center "Situation Assessment'. On the contrary, the uncertainty that this report brings to a principal water quality consideration has left us with general discomfort, affecting our confidence in other technical and financial findings. It has been our fervent hope that this Phase Two process would provide clarity and closure, allowing the community to move
forward with a generally supported preferred alternative. We are quite disappointed in these results. We regret the time lost if a credible process must wait for the completion of Ecology's Budd Inlet TMDL analysis.


Name (ID): John Kersting (O-28)

Organization (if applicable): JustUs Productions

Submission Text: From the wealth of materials and information gathered from the major stakeholders in this outstanding EIS, it is unimaginable a rationale can be produced for not choosing the Estuary Option. I have provided a letter with the letterhead with my nonprofit organization JustUs Productions who are a consortium of friends from TESC, The Procession of the Species and Fraternal Order of Eagles producing all-ages, nonprofit benefits for charity and disaster relief. The single point to be made is that the present Managed Capitol Lake Basins are a complete disaster in almost every conceivable context. The damage done culturally, environmentally and our future depend on making the strongest effort possible to correct the wrongs made in the past and to insure we make the strongest effort not with a 30 year view, but a seven generations view in providing remedial actions to heal the health of Olympia, the Puget Sound and internationally. This study must consider the global impacts of developing cleaner water, healthier ecosystems and a community that understands the importance of restoration of the natural world is our responsibility.

Having lived in the Olympia area for over 40 years studying the environment as a four- year News/Public Affairs Director at TESC's campus radio station, two years as a feature writer on environmental issues with the South Sound Alliance monthly magazine and as a founding staff member of the Procession of the Species, I am intimately aware of the critical problems with choosing any other alternative than the Estuary Option. Change is difficult, but this is a critically damaged area. The Estuary Option simply must be chosen and done with all due haste to have the greatest possible positive impact. The cultural, environmental and community needs demand recreating a different, healthy and affordable community resource. Each of the other options is too expensive, may have unintended significant issues or ignores that something must be done for Puget Sound's critical health problems and done NOW.

I have been running around or along each of the basins of Capitol Lake and anyone claiming the lake is healthy and has a more pleasant smell than an estuary is dead wrong. The evidence of the pollution and effect of invasive species is clearly in the surrounding odor. A cursory look at the collected waters particularly in the Middle and South Basin clearly show how unhealthy the waters are right now. This study seems to be short on the historical pollutants that only an estuary can begin to remediate including pollution flowing from the Cascade Pole site, sewage from innumerable unknown sources and the historical dumping of paint and other items by military, corporate and government sources. Those should be in it.

Reviewing the Cultural Resources Discipline Report, particularly the statements in Appendix B, the interviews were rambling and dated. Most were poorly facilitated and merely show the event producer's
attachment to their event but also the critical need for large public gathering spots needed for our ever-
growing city and that also must be developed- ELSEWHERE. As a 40 year event producer, I know the
needs, the Estuary Option is needed MORE! However, the descriptions by the Squaxin Island
representatives Charlene Krise and Jeff Dickison in their interview clearly illustrate the invaluable vitality
and beauty of estuaries. Appendix E has several comments taken in 2008 that are just as relevant today
as they were then, this letter is an effort to restate that we must take the option that is for the greatest
good, for the health of our environment, community and brings the new treasures only a new set of
actions can bring us. Ironically, this can be done by restoring the historical nature of our Estuary. The
comments submitted by Paul Allen MD and Jana Wiley summarize the important values an Estuary will
provide and the present almost catastrophic problems that the science in the IES provides. Since the
effects of the community, recreational and spiritual activities that could be held I do think the study
should have considered the thoughts of the entire Puget Sound Tribal leaders in that it would be
Restorative Justice to add to the list of values a rejuvenated estuary would provide statewide or even
nationally. Having worked as a teacher at Wa He Lut Indian School, I have no doubt our principal, Harvey
Whitford could provide local historical perspectives, if he has commented, and you should seek his input.
(360) 456-1311

The study is also shortsighted in not providing a comparison to other restored estuaries such as the
recreational, cultural and environmental effects of the Nisqually Delta restoration efforts. It is
reasonable to believe that without restorations such as these and others, Puget Sound Orcas and a
number of other Puget Sound Marine Life Forms will soon be extinct.

The study is overwhelming and intimidating to me and I can imagine that it is to others. I think a
reasonable thoroughness was achieved, but the limitations in voices, global impacts and the clout of
stakeholders fearing change seem significant. Last, but not least, it may come down to being forced by
the evidence you have provided by suits filed by environmental organizations, which I also do not see
represented by this study in a substantial manner. For the monumental effort and thoroughness of what
you have produced, let me thank you and I am assured you love our area as much as I do.

Supporting Materials (if any): O-28_Kersting.pdf

Name (ID): Todd Cutts (O-30)

Organization (if applicable): Olympia Downtown Alliance

Submission Text: Position on the future of Capitol Lake The Olympia Downtown Alliance supports
future configurations of Capitol Lake complete with all of the following considerations:

- Aesthetically pleasing - Both the body of water itself and areas adjacent to the lake should be
  visibly attractive and clean.
- Environmentally conscious - The body of water should be healthy, supporting a vibrant
  ecosystem of area plants and wildlife.
- Community amenity - The body of water and surrounding area should be an accessible space for
  our community to assemble and recreate.
• Connected to Downtown—This space should be connected and accessible to our Downtown, featuring intuitive corridors bridging these community assets.

Supporting Materials (if any): N/A

**Name (ID): Melinda Hughes (O-31)**

**Organization (if applicable):** Thurston Climate Action Team (TCAT)

**(Submission Text):** Thurston Climate Action Team is the leading grassroots nonprofit in Thurston County, partnering with our community to restore earth’s climate and create a healthy, just, and joyous world for all people and our planet. We acknowledge that the area in question is the traditional territory of our Squaxin Island neighbors, and we seek to nurture our relationship with our Coast Salish neighbors and our shared responsibilities to this place - their homelands - where we mutually abide. As such, we support the removal of the 5th Avenue dam and the ultimate restoration of the Deschutes Estuary. Removing the dam would have significant benefits to the health of the ecosystem, benefiting the native flora and fauna.

Supporting Materials (if any): N/A

**Name (ID): Sean Dixon (O-32)**

**Organization (if applicable):** Puget Soundkeeper Alliance

**(Submission Text):** A major omission of the DEIS is a failure to acknowledge the 70 years of cumulative and continuing ecological, habitat and water quality degradation caused by the destruction of the Deschutes estuary, and subsequent negative impacts on both sovereign tribal treaty rights and the greater Puget Sound ecosystem. Today, any proposal to dam an estuary on Puget Sound for the purpose of creating a reflecting pool would never be seriously considered - let alone permitted. An inherent bias in the DEIS is exemplified in the project description 'The waterbody has long been valued community amenity'(pg. 5 Introduction), referring - imprecisely and without basis, no less - to outmoded lenses through which only some members of the community view this 1951-built artificial impoundment. Additionally, the DEIS includes an unsubstantiated opinion (presented as a statement of fact) that 'All action alternatives would improve ecological functions within the Project Area', overstates the potential benefit of maintaining an artificial pool and failing to acknowledge the ecological damage from the historic and on-going loss of the estuary.

The Deschutes Estuary has long-standing cultural and spiritual significance to local tribes, particularly the Squaxin Island Tribe. The 70 years of loss of the estuary has cultural, religious, and economic significance, and does not adequately consider these sovereign tribal treaty rights. This omission would have significant impacts on permitting, schedules and cost which are not adequately considered in the DEIS, although they are acknowledged in an addendum, 'The Managed Lake Alternative would also perpetuate historic and continued loss of tribes' and tribal members' connection to the natural environment. Removal of the 5th Avenue Dam under the Estuary Alternative (and the Hybrid
Alternative, to a lesser extent) would have beneficial effects for ecological, cultural, heritage, spiritual, and educational value for tribes. Tribal populations would likely experience the beneficial effects of restoration of the Capitol Lake Basin to an estuarine system most significantly. The Estuary and Hybrid Alternatives would restore the Capitol Lake Basin to an estuarine system similar to historic conditions. Estuarine wetlands are rare in the region and provide additional functions that are not available in freshwater deep-water habitats, and there would be a substantial beneficial effect. Puget Soundkeeper fully agrees with these statements regarding the real costs of the Managed Lake Alternative and supports the full restoration of the estuary as the only alternative that supports tribal rights and the restoration of regional ecological functions in Puget Sound. These issues should be emphasized in the Executive Summary and included in Table ES-1 and the DEIS should be modified to better characterize the cost and benefits of the proposed alternatives.

While the DEIS contains a substantial amount of information, the DEIS and addendums do not appear to have been read in their entirety for analytical consistency, extent of the study area, descriptions of impacts, or for a consistent application of available literature or datasets. Many statements of opinion are presented as conclusions that are unsupported either by data, analysis or the scientific literature. Comments such as 'water quality standards 'might be met' or 'water quality in the Lake is not as bad as some people think it is' are unsubstantiated conjecture and diminish more scientifically supported conclusions. Many of the conclusions in the addendums are not consistent or accurately reflected in the DEIS.

Study Area inconsistencies: The study used in the DEIS is too circumscribed to adequately evaluate impacts of the different alternatives. This inadequacy is functionally acknowledged in the DEIS when much of the analysis is based on data from the upper watershed and includes data from outer Budd Inlet (site BUD005). East Bay the entire Budd Inlet and upper watershed should be included in the study area as well to be consistent with the TMDL modeling done by Ecology and be consistent with hydrologic reality. A much larger study area would reflect the actual areas that would be impacted by the selection of any of the proposed alternatives. Ecology modeling indicated that half of the DO impacts in Budd Inlet resulted from the dam. As the DEIS is intended to evaluate alternative that include keeping or removing the dam, it would be more reasonable to acknowledge a more accurate and expanded study area.

There are multiple statements that low DO is typical of South Sound estuaries, but those estuaries are not specifically identified, nor is it reported if any of those 'typical' south sound estuaries have a major river inflow. It would have been more appropriate to select the Nisqually estuary as a reference site as it has a major river inflow.

Data Quality: There are inconstancies in the use of various annual datasets and conclusions that are presented in the DEIS. This inconsistency in data use makes any conclusions in the DEIS less viable. Sample sites are inadequate to represent macrophyte dominated systems (discussed in more detail under water quality). The DEIS notes that Thurston County had ongoing water quality data from 2004-2014, but for purposes of the DEIS, only water quality data from 2010 to 2014 was used because there was a 'trend' in that five-year period. This does not seem to be a proper way to use this data and undermines conclusions the DEIS draws from it. The DEIS should explicitly state what factors have been
considered in determining that a shorter period of data is appropriate for this analysis. The data collected for the single growing season in 2019 is presented as refuting the Ecology model trend results. The selective use of a single annual to dismiss the trend data is not supported by statistical methodology. The statement that the 2019 Capitol Lake water quality conditions resulted from improvements in the upper watershed are not supported and a further reason that the watershed should be included in the study area and that multiple years of data collected (and standard statistical procedures applied) before claiming changes in trends. The TMDL developed by WDOE included loadings from the watershed, was peer reviewed, and is accepted as the best available science. It is unlikely that a single growing season dataset collected at two sites in the open water of a macrophyte dominated basin would change the conclusions to the peer reviewed study.

303d listed parameters: All of the listed 303d water quality parameters should be used in the alternative analysis. The focus on impacts to dissolved oxygen criteria simplifies the water quality considerations and ability to adequately evaluate the alternatives. The criteria should be evaluated based on lake criteria (see discussion below).

Macrophyte dominate waterbodies: The DEIS reports Capitol Lake has dense growths of aquatic macrophytes, dominated by Elodea Canadensis and Ceratophyllum demersum. These macrophytes create dense canopies of vegetation that have very strong impacts on the water quality of both lakes and rivers in Washington not addressed in the DEIS. Capitol Lake is described as having very dense growths of aquatic macrophytes, Elimination of water mixing and increased detention times within the macrophytes beds is documented in the scientific literature as are associated changes to water quality such as increased dissolved oxygen within the actively photosynthesizing upper layer, decreased dissolved oxygen beneath the dense canopies, increased sedimentation, elevated pH and increased internal loading of phosphorus. The use of single sampling sites in open waters is inadequate to characterize the water quality in macrophyte dominated waterbodies and brings into question the accuracy of the open water collected data as representative of this macrophyte dominated water body. The statement in the DEIS (pg. 2-28) that the existence of dense aquatic vegetation in Capitol Lake does not indicate that water quality in Capitol Lake is 'bad' is an unsubstantiated opinion and does not take into consideration macrophyte induced water quality changes that will not be quantified with single samples in the open water. Also, the lack of winter data collection also misses the annual senescence of these macrophytes and seasonal loading of detritus and impact to downstream TOC loading and BOD. The water quality sampling sites (Figure 3.1) shows the single sampling sites for the North and Middle basin located along the thalweg which is likely to be open and faster flowing waters than in the areas of dense macrophyte. Only bacteria samples were collected at the near-shore sampling site. The purported reduction in DIN within the lake compared to inflows from the Deschutes River should also be considered based on the minimal sampling design (single sample in open water, no winter sampling) used in the DEIS. Lack of winter in-lake data when most of the senescence and mineralization of plant material occurs adds substantial uncertainty to any assumptions on loading or export of nutrients from the basin. The lake is unlikely to act as a perpetual TIN sink and the TIN and TOC dynamics will impact the attainment or not of the dissolved oxygen criteria in Budd Inlet.
BOD and TOC: The DEIS states that (pg 3-32) because BOD (biochemical oxygen demand) is low, more recalcitrant total organic carbon (TOC) was released and had less of an impact on Budd Inlet dissolved oxygen. It is not clarified whether this is BOD5 or BOD30 which are used to answer different questions and would likely give different results. Multiple forms of TOC were included in the WDOE model and would be a more accurate source of information on dynamics and forms of TOC and specifically on impacts to BOD30. The data discussed in the DEIS was not collected during the winter, which in a macrophyte dominated system such as Capitol Lake would be when much of the TOC resulting from macrophyte senescence would be exported. This statement in the DEIS requires substantial additional analysis and explanation, particularly in light of the support this opinion gives to the 'managed lake' alternative.

Lake vs River: The discussion on whether Capitol Lake is a river or a lake is based on inflow and basin calculations which ignore macrophyte induced short circuiting and most likely the functional detention time is greater than the 15 days in the water quality standards Capitol Lake should be evaluated based on lake criteria.

Reference sites and ‘typical south sound inlets’: Water quality in Budd Inlet is compared with other unidentified inlets in the South Sound. If the inlets are to be assumed to be those identified in Figure 4-10 as not meeting DO criteria, none of these inlets have a freshwater river flowing into them. The Nisqually estuary close to Budd Inlet does have a major freshwater river inflow and did not exceed the DO criteria, this inlet should have been used as the reference site for comparison with the Deschutes.

Invasive Species: The DEIS states (Table ES-1 and addendums) that the New Zealand mudsnail is not expected to be eradicated entirely under any alternative, so decontamination stations are assumed for the Managed Lake, Estuary, and Hybrid Alternatives. Capitol Lake is ground zero for the spread of New Zealand mudsnails in the Puget Sound basin. The DEIS acknowledges that there would be a greater population (density) of the New Zealand mudsnails under the Managed Lake Alternative, 'but distribution may be wider under the Estuary and Hybrid Alternatives'. This is highly unlikely as saltwater inundation is used as a control measure and this opinion has no scientific support and the opposite result is far more likely an outcome of opening up the basin to natural saltwater flows.

Aesthetics: The primary benefit of the managed lake alternative is to maintain the reflection of the capitol building, a symbol of our state government. An Estuary, which would restore tidal flow to conditions similar to the historic Deschutes Estuary would have water in it approximately 80% of the time. The managed lake alternative benefit is to provide a reflecting pool for and additional 20% of the day. Currently, this reflection occupies the specific location that for millennia provided spiritual, and subsistence resources to the Squaxin Tribe. This cultural bias is acknowledged in the DEIS 'Tribal populations would experience disproportionately adverse impacts from the Managed Lake Alternative, raising environmental justice concerns. The Managed Lake Alternative would have a continued impact on Usual and Accustomed Fishing Grounds and Stations, (Draft EIS June 2021 Executive Summary pg 17) and 'The status quo conditions perpetuate historic inequities, particularly for tribal populations that have experienced ongoing adverse impacts from changes to the ecosystem since nonindigenous settlement of the region occurred. Improvements to culturally and economically important species and habitat functions in the Estuary and Hybrid Alternatives, particularly from the removal of the 5th Avenue Dam,
have the potential to result in substantial beneficial effects for tribes.' The managed lake alternative and hybrid alternative place the additional 20% time for the reflecting pool above the cultural and environmental justice impacts that the elimination of the estuary created.

Managed lake option: The impacts of this alternative are not adequately addressed in the DEIS. It is acknowledged that Capitol Lake causes the largest negative impact to dissolved oxygen of any single source in the entire Salish Sea and is the most expensive option; based on Table ES.4 total costs would of the Managed lake Alternative would be $337,667 and for the estuary $179- $336, the estuary would be half the cost of the managed lake. The managed lake option also assumes that the management portion of this alternative will be funded in perpetuity. This is unlikely and the experience with the current management of the basin shows that the management strategies committed to are often not carried out. DES has a very poor track record of fulfilling these obligations.

Hybrid option: ‘Under the Hybrid Alternative, the barrier wall for the reflecting pool would mitigate impacts on historic resources related to the 5th Avenue Dam and 5th Avenue Bridge removal to less than significant levels' - this statement is not supported and will result in the loss of usual and accustomed fishing and hunting areas. The aesthetically unappealing sheet pile wall pounded into outwash sediments is not accurately costed out and would likely cost substantially more that estimated. The creation of a saltwater detention tank/reflecting pool will potentially create a low DO solar collector with minimal mixing that instead of being a 'salmonid refuge' would more likely be low DO high temperature a mortality trap.

Conclusions In closing, there are numerous technical questions with the data and analysis submitted in the DEIS. The conclusions appear to provide a biased, unscientific evaluation of several of the options that - at all turns - leans on the idea that this mirror lake is beloved by the people and thus is and always has been good. A significant revision of this document would be required if it were to adequately evaluate the alternatives' ability to improve water quality, manage sediment, improve ecological function and enhance community use of the resource. Several modifications to this document would enhance the applicability of the DEIS for making these evaluations to the alternatives. Most importantly, what option will provide the greatest benefit to not just the local Olympia area (let alone an unknown subset of local Olympians that favor the retention of this mirror lake regardless of tribal, economic, or environmental costs), but to the entire Puget Sound ecosystem and the State of Washington.


STATE AGENCY

Name (ID): Mark Schoesler (S-1)

Organization (if applicable): WA State Senate

Submission Text: I write today in full support of the Managed Lake Alternative and in opposition to the Estuary and Hybrid options. Having served in several different capacities as a state legislator over the last 28 years, including multiple roles with oversight over the Capitol campus and the capital budget,
I am familiar with the long history of the Lake and the endless debate over its future. While much of the discussion over the years has been at the local level, the future of Capitol Lake is really an issue of statewide concern and importance. All Washingtonians deserve to enjoy the beauty of their state capital. With the right management and care, Capitol Lake can be allowed to reach its full potential - that of an iconic reflecting pool and public watershed that highlights the beauty of our capitol, as well as the scenic wonder of the surrounding area. Beyond simply the superior aesthetic benefits, a well-managed lake would facilitate recreational opportunities and economic incentives. Proper stewardship of the Lake would include a dedicated sediment management effort. This would ensure drastically improved water quality over the Lake's currently underutilized status. Flora and fauna - including salmon, birds, and even Olympia's local bats - could thrive, while providing the region a picturesque resource area for the enjoyment and entertainment of the community and residents across the state. To understand why the estuary or hybrid options would be inferior, one just has imagine the idea of visiting the Capitol Building on a sweltering summer day at low-tide. Converting Capitol Lake into swampy mudflats would be an odoriferous detriment to the Capitol campus, the downtown Olympia urban corridor, waterfront businesses, and the many existing local parks along the lakeside. I want to thank you for your continuing work on this long-standing project. It is one that has taken many years to get this far, and one that may take many more if a viable path forward cannot be reached.

Supporting Materials (if any): N/A

Name (ID): Larry Phillips (S-2)

Organization (if applicable): Washington Department of Fish & Wildlife

Submission Text: Numerous Aquatic Invasive Species (AIS) occur in Capitol Lake, of which the New Zealand Mud snail (Potamopyrgus antipodarum, NZMS) has proven particularly difficult to manage. WDFW experts agree that the 5th Avenue dam does not currently function as a barrier preventing the spread of mud snails into West Bay. Removal of the 5th Avenue dam is not expected to create additional colonization opportunities beyond what currently exists (Johannes 2021). It should be noted that a version of the hybrid alternative with a freshwater reflecting pool would likely harbor mud snails and provide possible recolonization opportunities and therefore should be avoided. Furthermore, please see ‘attachment 8’ for edit suggestions that are critical to making the DEIS technically accurate for NZMS and general AIS issues.

Capitol Lake is used by bats from Woodard Bay and other maternity colonies in the region. Converting the area from a freshwater lake to an estuary would reduce the amount of forage habitat available to these bats. It is possible but unknown if this population of bats would shift to forage on other bodies of freshwater nearby if the lake were converted to an estuary. We suggest that an interdisciplinary group of experts is brought together to develop a plan to further understand impacts to bats and mitigation that could offset those impacts.

Removing the dam under the estuary alternative would restore tidal circulation to the basin, enabling the restoration of estuary processes and functions long forgotten to this watershed. These benefits would not only be seen in the newly restored estuary, but the effects of restored processes would be felt...
throughout the Puget Sound. The estuary option compliments all other efforts being made in Budd Inlet and southern Puget Sound to support salmon. WDFW has previously expressed support for the estuary alternative (2009 CLAMP letter) and maintains that position after reviewing the 2021 DEIS materials.

**Supporting Materials (if any):** S-2_Phillips, S-2_Phillips2

**Name (ID):** Garrett Peck (S-3)

**Organization (if applicable):** Washington State Department of Ecology

**Submission Text:** Thank you for the opportunity to comment on the Capitol Lake - Deschutes Estuary Long-Term Management Project. Ecology's comments are attached. [Statewide SEPA Register No. 202103537]

Thank you for the opportunity to comment on the draft environmental impact statement (EIS) for the Capitol Lake - Deschutes Estuary Long-Term Management Project. The Department of Ecology (Ecology) reviewed the environmental checklist and has the following comment(s):

**SOLID WASTE MANAGEMENT:** Derek Rockett (360) 407-6287 All removed debris and dredged material resulting from this project must be disposed of at an approved site and be in compliance with Chapter 173-350 WAC, Solid Waste Handling Standards. Contact the local jurisdictional health department for proper management of these materials. **TOXICS CLEANUP:** Thomas Middleton (360) 407-7263 The proposed Capitol Lake - Deschutes Estuary Long-Term Management Project has the potential to impact a large number of known or suspected contaminated sites as well as exposing previously unknown contaminated sites downstream of the proposed project. To search and access information concerning the known sites see http://www.ecy.wa.gov/fs/ and https://fortress.wa.gov/ecy/gsp/SiteSearchPage.aspx. The number and type of sites impacted is highly dependent on which alternative is selected. If contamination is suspected, discovered, or occurs during the future Capitol Lake - Deschutes Estuary Long-Term Management Project, testing of the potentially contaminated media must be conducted. If contamination of sediment, surface water, soil, or groundwater is readily apparent, or is revealed by sampling, the Department of Ecology must be notified. To notify Ecology, contact the Environmental Report Tracking System Coordinator at the Southwest Regional Office at (360) 407-6300. For assistance and information about these sites, contact Sandy Smith with the Toxics Cleanup Program at the Southwest Regional Office at (360) 407-7269.

**WATER QUALITY/WATERSHED RESOURCES UNIT:** Greg Benge (360) 690-4787 Erosion control measures must be in place prior to any clearing, grading, or construction. These control measures must be effective to prevent stormwater runoff from carrying soil and other pollutants into surface water or stormdrains that lead to waters of the state. Sand, silt, clay particles, and soil will damage aquatic habitat and are considered to be pollutants. Any discharge of sediment-laden runoff or other pollutants to waters of the state is in violation of Chapter 90.48 RCW, Water Pollution Control, and WA 173-201A, Water Quality Standards for Surface Waters of the State of Washington, and is subject to enforcement action. Construction Stormwater General Permit: The following construction activities require coverage under the Construction Stormwater General Permit: 1. Clearing, grading and/or excavation that results
in the disturbance of one or more acres and discharges stormwater to surface waters of the State; and 2. Clearing, grading and/or excavation on sites smaller than one acre that are part of a larger common plan of development or sale, if the common plan of development or sale will ultimately disturb one acre or more and discharge stormwater to surface waters of the State. a) This includes forest practices (including, but not limited to, class IV conversions) that are part of a construction activity that will result in the disturbance of one or more acres, and discharge to surface waters of the State; and 3. Any size construction activity discharging stormwater to waters of the State that Ecology: a) Determines to be a significant contributor of pollutants to waters of the State of Washington. b) Reasonably expects to cause a violation of any water quality standard.

If there are known soil/ground water contaminants present on-site, additional information (including, but not limited to: temporary erosion and sediment control plans; stormwater pollution prevention plan; list of known contaminants with concentrations and depths found; a site map depicting the sample location(s); and additional studies/reports regarding contaminant(s)) will be required to be submitted. For additional information on contaminated construction sites, please contact Carol Serdar at Carol.Serdar@ecy.wa.gov, or by phone at (360) 742-9751.

Additionally, sites that discharge to segments of waterbodies listed as impaired by the State of Washington under Section 303(d) of the Clean Water Act for turbidity, fine sediment, high pH, or phosphorous, or to waterbodies covered by a TMDL may need to meet additional sampling and record keeping requirements. See condition 58 of the Construction Stormwater General Permit for a description of these requirements. To see if your site discharges to a TMDL or 303(d)-listed waterbody, use Ecology's Water Quality Atlas at: https://fortress.wa.gov/ecy/waterqualityatlas/StartPage.aspx. The applicant may apply online or obtain an application from Ecology's website at: http://www.ecy.wa.gov/programs/wq/stormwater/construction/ - Application. Construction site operators must apply for a permit at least 60 days prior to discharging stormwater from construction activities and must submit it on or before the date of the first public notice.

WATER RESOURCES: Charlotte Lattimore (360) 407-6066 Under RCW 90.03.350, if the Capitol Lake, Deschutes Estuary Long Term Management plan includes the removal of the Fifth Avenue Dam, this project will require a Dam Safety construction/decommissioning permit for this project. This permit can be found by entering the following link into your search engine: https://apps.ecology.wa.gov/publications/summarypages/ecy07038.html.

Supporting Materials (if any): S-3_Peck

Name (ID): Lawrence Sullivan (S-4)

Organization (if applicable): Washington State Department of Ecology

Submission Text: The Washington Department of Ecology (Ecology) appreciates the opportunity to provide comments on the Department of Enterprise Services (DES) Draft Environmental Impact Statement (EIS) for the Capitol Lake - Deschutes Estuary Long-Term Management Project. The Deschutes/Capitol Lake/Budd Inlet watershed is a critical natural resource and it is ecologically...
important to Puget Sound, but it also suffers from water pollution problems that will be exacerbated as
the area continues to grow. Ecology is currently developing a water cleanup plan (also called a Total
Maximum Daily Load, or TMDL) for the marine waters of Budd Inlet. Additionally, a water cleanup plan
for the Deschutes watershed upstream from Capitol Lake has been developed by the Environmental
Protection Agency (EPA). The lake management alternatives considered in the DEIS Capitol Lake will
have important impacts on water quality in the area and especially on Budd Inlet. The general comments
in this letter, along with the specific comments provided in table format stem from an initial review of
the DEIS by Ecology’s Environmental Assessment Program, Water Quality Program, Toxics Cleanup
Program, and Shorelands and Environmental Assistance Program. Although Ecology understands the
intent of the DEIS is to cautiously compare long- term management alternatives, DES must also comply
with state water quality standards. Budd Inlet will only meet water quality standards if all sources
contributing to oxygen depletion do their part. We look forward to working with DES to address these
issues as you move toward issuing the final EIS. Most of the general comments below are specific to
Attachment 7, Water Quality Discipline Report (WQDR) of the Draft Capitol Lake-Deschutes Estuary
Environmental Impact Statement (DEIS). The WQDR is the foundation for material presented in Section
3.3, of Chapter 3 (Existing Conditions and Affected Environment) and Section 4.3 of Chapter 4 (Long
Term Impacts, Benefits and Mitigation). The WQDR analysis builds upon several approaches and
assumptions that have misapplied the science. As a result, some DEIS statements regarding benefits or
impacts of alternatives with respect to water quality and compliance with water quality standards are
inaccurate. We suggest that the WQDR and relevant portions of the chapters be revised so that the
document provides objective context to the DEIS process We are submitting both general and specific
comments on the WQDR. The general comments provide a big picture characterization of concerns
relating to the WQDR. Some details are provided in the general comments section. The specific
comments section connects statements made in the WQDR with our suggested edits and supporting
details. Though comments presented cite specific portions of the WQDR, they also apply to
corresponding segments of Chapters 3 and 4, as mentioned above. We recognize the considerable effort
invested in developing the DEIS. Coalescing the large body of work conducted over decades by
researchers from multiple entities is an enormous task. Ecology stands ready to offer technical
assistance and any clarification that would be helpful. We look forward to working with DES as you
move toward the creation of the final EIS.

General Comments 1. Unsupported assumptions about the impact of Capitol Lake The Budd Inlet
model, a mechanistic model originally created for the Budd Inlet Scientific Study and then further
developed and used for Ecology studies, provides predictions about the impact of Capitol Lake on
dissolved oxygen depletion in Budd Inlet. The DEIS states an intent to ‘avoid potentially overstating
improvements from the dam removal” (WQDR, page 75). Accordingly, DEIS qualitatively adjusts Budd
Inlet model predictions (Table 5.2 in WQDR) by ‘assuming half of the improvement”, according to the
footnote. Such an assumption lacks a basis and leads to unsubstantiated estimates of the impact of the
Capitol Lake dam. Moreover, such a qualitative value adjustment suggests that a considerable amount
of human-caused oxygen depletion within the inner inlet is unrelated to the dam- implying little to no
capacity for other discharges into Budd Inlet. That claim is not supported by detailed water quality
mechanistic modeling. In addition, there are other specific approaches, assumptions or interpretations
that are either unclear or flawed which relate to the impact of Capitol Lake. We present comments specific to those in the detailed comments section.

2. Limited comparison leads to incomplete context about Budd Inlet dissolved oxygen depletion The DEIS generalizes that other South Sound inlets experience similar levels of oxygen depletion as Budd Inlet. Figure 4.12 (page 4- WQDR) shows the cumulative days of model predicted dissolved oxygen noncompliance reported in Ahmed et al. 2019. The WQDR states: ‘These model results also indicate that the low DO issues of Budd Inlet are not atypical for Inlets in South Puget Sound...” However, Budd Inlet is atypical with respect to its DO depletion magnitudes compared to those of other regional inlets. The DEIS omits another figure and text also contained in Ecology’s 2019 report. Budd Inlet is the location with the maximum predicted magnitude of human-caused dissolved oxygen depletion in the region (refer to Figure 26 and page 64 in Ahmed et al., 2019).

3. Reported Capitol Lake trends in DEIS may not be reflective of longer-term data Using monthly Thurston County data from 2004-2014, the WQDR implies (Section 4.1.1.1) that conditions in the lake have improved because of various temporal trends including an apparent slight tendency towards lower chlorophyll and greater Secchi depths suggesting improvements in visibility. However, by omitting observations prior to 2004 and omitting variables that influence water quality such as flow, the analysis is incomplete and appears to unduly hinge on data used as the starting point. Ecology obtained the entire Thurston County dataset and conducted a Kendall rank correlation analysis for four parameters: Secchi depth, chlorophyll (Chla_a), total phosphorus (TP) and total nitrogen (TN). We used the same approach as was used for the WQDR. As in the DEIS, we used a p-value of 0.05 as the threshold for statistical significance. The statistics in the table below show that no discernable trend can be ascribed to the concentrations of any of these parameters using the same monthly dataset that was used in the DEIS, but over its whole timeseries (1999- 2014). Furthermore, we also find no clear, discernable trend in estimated chlorophyll loads, as shown in the figure below. To estimate chlorophyll loads, we used river flows corresponding to each day of the complete Thurston County monthly North Basin Capitol Lake data set (from 1999 to 2014). The long-term tendency (blue line) in the chlorophyll load vs. time plot suggests a small increase in chlorophyll over time (an adverse trend with respect to water quality instead of an improving trend as the DEIS reports). However, we do not consider this result to consist of a discernable trend because the Kendall’s Tau for the chlorophyll load data set (0.09) reflects poor agreement, and the p-value (0.25) reflects a moderate probability of that result arising randomly. Further work should be done to look for any potential seasonal load trends using the entire dataset. It is important to note that there were two extremely high outliers in terms of chlorophyll loads observed on May 16, 2001 and October 13, 2004. These outliers are much greater than 1.5 times the interquartile range. It is unclear what caused those outliers, but it is clear that the October 2004 outlier exerts influence on the reported 2004-2014 trend because it is so extreme and it occurs at the beginning of that period. Incorporating into the analysis just a few more data points available for the second half of 2003 changes the statistical significance of the weak trend reported in the DEIS for chlorophyll, making it non-significant using the same p-value threshold used in the DEIS, as further detailed below. The reason cited in the DEIS for starting the trend analysis in 2004 is that the Olympia Brewery had stopped operating. It seems arbitrary to use that event to segregate the data. Nonetheless, an article published by The Olympian indicated that the Olympia Brewery stopped operating in June 2003. Ecology
conducted the same analysis as in the DEIS for chlorophyll in the lake starting July 2003. We added the available four more monthly data points from the latter half of 2003 to the data series used in the DEIS. Results indicate no discernable trend for chlorophyll concentrations or loads in the lake using the mid-2003 to 2014 time series (Kendall's Tau=- 0.109 and -0.029 and p-values are 0.23 and 0.75 for concentration and load, respectively). In summary, several weak temporal concentration trends highlighted in the DEIS do not hold up when the longer-term data set is analyzed. The DEIS reported trends are influenced by data from an extremely high outlier event at the beginning of that time period selected for analysis. Rather than representing water quality improvement as the DEIS implies, the reported trends appear to be an artifact of the time period selection as well as the choice to not account for climatological and hydrological influences reflected via covariate factors such as flow. Therefore, the assertion in the DEIS that Capitol Lake’s “water quality is improving” does not seem to adequately characterize the available long-term data.

4. Description of Capitol Lake’s water quality in DEIS is misleading The DEIS concludes that water quality in Capitol Lake from 2010-2014 and 2019 is “relatively good” in terms of “physical characteristics important to aquatic life” (page 4.15, WQDR). However, data presented in the DEIS itself clearly shows that the lake is eutrophic. The trophic state index of a lake is an indication of its water quality. The trophic state index of Capitol Lake, particularly the North Basin, which has consistently had a trophic state index greater than 50 (Thurston County, 2014), is more indicative of poor rather than good water quality. For example, the WQDR (page 4.4) does point out that: ‘A dense community of aquatic plants has existed in the lake for decades.” In contrast, a lake with good water quality is one that would have clear, cool waters with little or moderate planktonic and aquatic plant growth. The relatively good water quality description in the DEIS is associated to a comparison with other Thurston County Lakes pointing to instances in which individual parameters in Capitol Lake are deemed better. However, the Thurston County lakes used for comparison possess much different hydrological attributes and exhibit water quality impairments of their own. The relevance of such a comparison is questionable. Differences in water quality among lakes due to degree of stratification and wetland influence are to be expected. Lakes used for comparison in the DEIS are deeper than Capitol Lake and have experienced consistent stratification for periods of several months. On the other hand, Capitol Lake is thought of as a well-mixed lake in which stratification occurs with less frequency. Furthermore, two of the lakes used in the comparison (Black and Long Lake) are influenced by extensive wetland systems, and the other (Ward Lake) is a spring-fed kettle lake. Consequently, this set of lakes constitute fundamentally different water bodies that are not suited for comparison with Capitol Lake, a shallow, eutrophic lake fed by a river at the entrance to an estuary. Ecology’s most recent water quality assessment includes Capitol Lake in the list of impaired waters, or 303 (d) list, for total phosphorus, ammonia, fecal coliform and non-native aquatic species. Additionally based on the 2019 data presented, the DEIS states that during the summer the lake occasionally does not comply with the state standards for temperature, pH, DO, and total dissolved gas (TDS), and that it continually exceeds the trophic-state Action Level for TP for Puget Sound lowland lakes. As repeatedly detailed in Thurston County’s annual monitoring reports, Capitol Lake does not fit a “good water quality description. In fact, Thurston County scientists classified Capitol Lake’s water quality as “poor” in every report they authored corresponding to the five-year period cited in the DEIS as qualifying as “relatively good” (Thurston County Lake Report 2009-2011, Thurston County Capitol Lake Report, 2013 and Thurston County Capitol Lake Report, 2014). Furthermore, 2019
observations, which are slightly worse for chlorophyll-a and Secchi depth in the North Basin compared to those reported for the mean of the 2010-2014 period, do not generally depart from those of previous years. So, stating that the water quality in Capitol Lake is ‘relatively good” during any of those years stands in disagreement with the most recent scientific reports about the lake.

5. The DEIS does not adequately address compliance with water quality standards in Budd Inlet. The intent of the DEIS is to compare long-term management alternatives. One key aspect of such comparison must be compliance with water quality standards. While the DEIS includes some information about water quality standards, it does not make clear that full compliance with water quality standards in Budd Inlet, including the anthropogenic dissolved oxygen depletion limit contained in the standard, is a necessary goal. While meeting state water quality standards may not be a requirement of the DEIS, it is essential to the health of Budd Inlet and it is also important that state agencies continue to work together to ensure that state standards are achieved. Budd Inlet will only meet water quality standards if all sources contributing to oxygen depletion do their part. The approaches used in the WQDR are largely qualitative and general. While such approaches may provide insights, they do not capture complexity inherent in Budd Inlet’s biogeochemistry. So, the WQDR approaches are not adequate for demonstrating how alternatives under consideration will perform in terms of water quality standard compliance. For example, to demonstrate compliance of an alternative with both parts of the dissolved oxygen standard, detailed mechanistic modeling analysis should be conducted. The DEIS is erroneously describing the impact on Budd Inlet dissolved oxygen. Section 4.2.2.1 of the DEIS correctly identifies the applicable water quality standards from WAC 173-201A. It correctly states there are two parts to the standards. The first part is a one-day minimum dissolved oxygen limit, and areas of Budd Inlet do not meet these standards under natural condition. The DEIS also correctly identifies a second part of the standard that allows for human-caused depletion in such situations. WAC 173-201A-210(1)(d)(i) states: “When a water body's D.O. is lower than [the one-day minimum) and that condition is due to natural conditions, then human actions considered cumulatively may not cause the D.O. of that water body to decrease more than 0.2 mg/L.” In this situation, the estuary, as the natural condition, by definition is in compliance with the water quality standards. Any human action (either a singular action or actions considered cumulatively) that causes the DO of the waterbody to decrease by more than 0.2 mg/L is in violation of the water quality standard. When sections 5.4.2.1 (managed lake) and 5.5.2.1 (estuary) of the DEIS are taken together, the DEIS predicts that lake would cause 0.25-0.75 mg/L lower dissolved oxygen in Budd Inlet than the estuary. While Ecology believes these estimates are under predictions, they are clearly above the allowed 0.2 mg/L allowance and would singularly violate the water quality standards in WAC 173-201A-210(1)(d)(i). In Section 8.0, the DEIS states: ‘changes in DO would be considered an improvement if DO levels generally were expected to increase in the lower inlet. The change would be considered a major improvement if it is predicted that DO would change from frequently not meeting criteria to nearly always meeting criteria in the majority of the inlet.” By definition, the natural estuary always meets the water quality criteria. The DEIS identifies a 0.25-0.75 mg/L depression in Budd Inlet DO caused by the lake, which exceeds the allowed 0.2 mg/L. Therefore, the impact is clearly significant. However, the DEIS mistakenly identifies the impact as “minor to moderate”, despite it clearly being significant according to the EIS’s own findings and definitions. Please correct the impact finding to “Significant” to accurately describe the EIS’s findings. It is unclear if the hybrid alternative would meet water quality standards as the EIS only identifies downstream DO impact
as “similar” to the estuary. Water quality modeling would be needed to show if the hybrid meets water quality standards. The mitigation measures mentioned in the DEIS is section 5.7 are unlikely to bring a managed lake into compliance, but water quality modeling would be needed if they are used in an attempt to meet water quality standards.

Thank you again for the opportunity to comment on the DEIS. We look forward to the opportunity to engage and work with you on this important effort. Please don't hesitate to contact me at xx or Lawrence Sullivan at xxx.

The DEIS states that operational impacts are described in terms of water quality standards: ‘Operational impacts are described primarily in terms of water quality standards ... The water quality standards assessment specifically focuses on dissolved oxygen (DO) because low DO concentrations have been a long-term problem in Budd Inlet and it has been the focus of water quality improvement planning efforts, including those of this project.’ However, the analysis does not accomplish that. The DEIS contains only a qualitative analysis rather than detailed quantitative analyses to understand the impact of alternatives on meeting water quality standards. Re-write sentence to reflect that: The operational impact assessment in the DEIS is based on qualitative judgements. In terms of impacts to water quality standards in Budd Inlet, the DEIS assessment does not account for biogeochemical patterns that can produce low DO events. The degree to which the operational impacts of alternatives result in exacerbation of low DO events cannot be ascertained without a detailed, quantitative analysis able to replicate key biogeochemical patterns within the inlet.

The DEIS states: ‘Eventually there may be impacts on Budd Inlet water quality due to increased nutrient and sediment loads (derived from the river) when the lakes capacity to retain sediments is lost.’ Why is there no mention that the existing condition has impacts to Budd Inlet now, instead of eventually? Other DEIS sections cite results from studies that point to current impacts related to nutrient loads coming from the river and the lake as well as dynamics of water movement from dam operations. But this point is not mentioned in the executive summary. Re-write the italicized sentence to improve context about the nature of the current impacts upon Budd Inlet from the lake and river. The DEIS states: ‘In lower Budd Inlet, there would be no change in impact on water quality compared to existing conditions...’ According to Table ES-2, there is no long-term impact in Budd Inlet under both no action and the managed lake alternative. However, it is important to note that improvements are needed upstream of Budd Inlet for the inlet to meet water quality standards. If there is no improvement to Budd Inlet water quality, how will water quality standards be met in Budd Inlet? Modify sentence and Table ES-2 to note that no changes in water quality in Budd Inlet from the no-action and managed lake alternative would mean that water quality standards are expected to continue to not be met under that alternative.

The executive summary does not mention total dissolved gas (TDG) and its expected levels within the context of evaluating alternatives. Though TDG is discussed in other sections (page 4-11) it is also left out of the Analysis of Impacts section (page 3-6). The total dissolved gas in the lake can, at times, higher due to enhanced productivity. That is not mentioned as part of the water quality evaluation of the lake. Lower productivity, when accomplished under an alternative, would lead to lower TDG, which would be a positive impact. Include a section discussing the impact of high productivity on TDG, associated with a
eutrophic system, under each of the scenarios. DEIS states that under the managed lake alternative pollutant sources would eventually be reduced through Deschutes TMDL. However, since a primary source of phosphates is from the sediments (see comment #34), large reductions of phosphates are much harder to accomplish in this system. Include the following: Sediments are a primary source of phosphates—which the Deschutes TMDL implementation may not readily reduce.

The DEIS states: ‘In Budd Inlet there is expected to be modest improvement in DO conditions due to changes in circulation patterns and potential changes in nutrient loading after the dam is removed.’

Based on water quality mechanistic modeling, Roberts et al. 2015 found that the additional organic carbon load from the lake and the difference in hydraulic regimes result in large magnitudes of bottom DO depletion within inner Budd Inlet. Instead of this statement in the DEIS, include information directly from Roberts et al. 2015 that discusses in detail the impacts in Budd Inlet based on water quality mechanistic modeling. The DEIS states that the removal of the dam will replace the well oxygenated lake water with low DO inlet water. This qualitative statement does not capture the complexities of the system. There is a difference between a well-oxygenated lake and a lake that, at times, has TDG levels that are too high—as can happen in a eutrophic system. As shown in the DEIS in Table 4.3, median TDG values in the lake were around 125%, with a maximum observed value around 168%. Additionally, it is important to mention when referring to dam removal, that it is predicted to reduce the seasonal organic carbon load to Budd Inlet by preventing freshwater algal proliferation that is currently present in the lake. Incorporate more information about DO levels regarding alternatives that incorporate dam removal. Suggested overview about this topic is below: Changes in DO levels under a dam removal scenario are best examined via process-based mechanistic modeling. Dam removal is predicted to reduce the seasonal organic carbon load to Budd Inlet by preventing freshwater algal proliferation and reducing organic detritus that is currently present in the lake. Consequently, dam removal is predicted to result in significant (greater than 1 mg/L) improvements to bottom DO particularly in lower Budd Inlet during the critical period (late summer/early fall).

The DEIS states that there may be a possible increase in algae in Budd if dam removed. It is important to note that this can only be examined in detail via water quality mechanistic modeling. Published modeling results in Roberts et al. 2015 indicate that overall water quality in Budd Inlet is improved when dam is removed. Include information in executive summary from Roberts et al. 2015 regarding improvements in Budd Inlet water quality if dam is removed.

An addition is needed to the statement about freshwater reflecting pool. DEIS states it would require active management to avoid impacts to public health and visual quality. But the DEIS does not mention consideration of water quality downstream in Budd Inlet. Downstream water quality, in Budd Inlet, needs to be considered for all alternatives. Add a statement that downstream water quality is a consideration for all alternatives. In the case of the freshwater reflecting pool, management should include consideration of water quality downstream in the inlet.

Impacts listed in Table ES-2 separate water quality impacts into: “DO concentrations and algae blooms” and “aquatic plants”. This breakdown of water quality impacts constricts understanding of whole ecosystem changes and the resulting water quality. For instance, the DEIS descriptions about Table ES-2 referring to DO concentrations focus solely on simply higher DO levels as being better. However, if DO
levels become too high, that cannot be considered an improvement. Evaluation of multiple key biochemical parameters at adequate temporal and spatial scales is needed to fully describe water quality impacts. What Table ES-2 does not provide is a clear, process-based indication of how each of the alternatives’ long-term changes to physical channel morphology, water movement, and the deposition of dredged materials within the channel will affect the biota and the water quality. A process-based, or mechanistic, understanding of how the underlying chemistry and the mix of phytoplankton, macroalgae and rooted aquatic plants will shift with each of these alternatives is needed to evaluate the degree of human-induced eutrophication and water quality. Describe the limitations of the current DEIS approach and consider revising Table ES-2 to better incorporate a whole ecosystem approach.

Table ES-2 lists benefits in terms of DO and algae blooms in Capitol Lake Basin with the no-action alternative as “minor to moderate”, states a “significant impact” in terms of aquatic plants and states “no adverse impact” in long-term WQ in Budd Inlet (DO conc, algal blooms). The basis for the categorizations in Table ES-2 are not clearly spelled out. What is meant by “minor to moderate benefit” in terms of water quality in the Lake from a no-action alternative? Benefit with respect to what and when? Is the premise that a shallower lake, with more sediment deposition, results in better water quality? Can the impact of a progressively shallower lake from a water quality perspective be both “minor” and “significant”, as this table implies? It is also unclear what is meant with “No adverse impact”, as there currently already are adverse impacts. Mechanistic modeling has shown strong influence of the lake on Budd Inlet’s water quality due to: 1. Algal blooms and organic detritus in the lake are a significant source of organic carbon load to the inlet. 2. Dam changes the hydrodynamics in Budd Inlet Revise table ES-2 so that the no-action alternative is more accurately reflected in terms of current impacts and potential future impacts. Table ES-2, shows the no action and the managed lake alternative impacts categorized as “No significant and unavoidable adverse impact” with respect to Budd Inlet. Since the baseline is the current condition, and the DEIS states that there will be no change in impact under the managed lake alternative, the table inaccurately shows “No significant adverse impacts” in the last column for both alternatives. Roberts et al. 2015, using process based, mechanistic water quality modeling, reports on the downstream impacts of the lake to Budd Inlet. Note in Table ES-2 that the no-action and managed lake alternatives do present significant impacts downstream (Budd Inlet).

Scope of potentially impacted permits is larger than what is listed (those in Deschutes watershed), and could include all those draining to Budd Inlet. Revise language to indicate that the scope of potentially impacted permits is larger than what is listed.

East Bay does not appear to be included in the study area in Figure 3-1. Include East Bay in the study area designated in Figure 3.1, as described in the narrative.

The DEIS references the South Puget Sound Dissolved Oxygen Study: Water Quality Model Calibration and Scenarios (Ecology, 2014) used to compare Budd Inlet to other South Puget Sound Inlets. It is important to note that that this study does not include the impact of Capitol Lake in Budd Inlet. In addition, although page 3-3 states this study was used for comparison of inlets, the DEIS more used Ahmed et. al. 2019 report for that purpose. Change the reference in page 3-3 to Ecology’s 2019 report (Ahmed et al.2019), which is the study used for the comparison.
The WQDR (page 3-4) states that lake and river data utilized for analysis starts in 2004 but does not mention that earlier data are available. Page 4-5 states: “The year 2004 was selected as the starting date to eliminate water quality data collected before 2004 when the brewery was still in operation.” It is unclear why the closure of the brewery would dictate the time series for analysis of a long-term trend. Without clearly establishing that the brewery was a key driver to water quality trends in the lake, it does not make sense to segregate data. Discarding several years of data without a clear justification is not appropriate when trying to understand long term trends. Nonetheless, even if one wanted to segregate data before and after brewery discharges, one would not use 2004 as the delineation point, as was done in the DEIS. The selected time period in the DEIS for starting the trend analysis does not actually correspond to when the Olympia Brewery closed. The reported time when the brewery closed is June 2003 (www.theolympian.com/news/local/article248752770.html). The extremely large outlier event in October 2004 (which may be tied to large nutrient release from plant die-off following herbicide application in the lake that year) further confounds the trend analysis reported in the DEIS. I comments section on this topic. Re-consider the timeline used for the long-term trend analysis. Use the entire dataset which begins in 1999 for completeness and objectivity. Consider conducting further trend analyses for loads, rather than concentrations, using the entire data set. Discuss why it is appropriate to include the full data set (1999-2014) in order to understand if there are any changes in the lake’s long-term trend.

The DEIS states: ‘Future long-term adverse impacts and beneficial effects associated with water quality conditions and management actions for each of the four project alternatives are evaluated using a combination of information on long-term trends, current conditions, and model predictions of environmental factors affecting water quality.’ See comment #10. An analysis of future long term adverse impacts and beneficial effects for all alternatives requires more work. The limitations of the current analysis are not spelled out. The trend analysis is misleading and based on an arbitrary starting point with a very large outlier. Mechanistic model predictions were overlooked or not appropriately considered. List the limitations of the DEIS analysis with respect to future long-term adverse impacts in this section. This section contains descriptions of the qualitative approach used to define various operational classifications: No Change, less-than-significant, and significant impacts, minor-to-moderate and substantial benefits. This approach may lead to the conclusion that existing conditions are good. However, existing conditions are already causing an adverse water quality condition. Apparently, here, the “no change” means impact perceived to not going to get any worse than it currently is. However, such an approach has obvious limitations. Using this approach, the DEIS cannot adequately address which alternatives meet water quality standards. Discuss limitations of the approach taken. How does the DEIS address situations when existing condition has been shown to be adverse, such as impairing downstream marine waters? Include information relevant to how the DEIS addresses assessment of impact with respect to water quality standards. For example, in the case of downstream impacts, when DO concentrations in Budd Inlet are predicted to be naturally below the numeric criteria, cumulative impact of all anthropogenic loads/activities cannot deplete DO by more than 0.2 mg/L below reference conditions. When analyzing alternatives, the entire water quality standard should be considered. Replace the definitions of significant and substantial to “if it is predicted that DO would change from frequently not meeting criteria to nearly always meeting criteria in the majority of the inlet.” This definition is already used in section 8.0. The criteria from the state’s water quality standards
are regulatory (codified in WAC 173-201A), objective, and quantitative. They are Washington State’s water quality standards established under the federal clean water act. Use the criteria from the water quality standards for the definition of “significant adverse impact” and “substantial benefits”.

The DEIS states: ‘The fact that there were strong trends for key parameters indicates that data from earlier in the data record is not representative of current conditions and therefore is not appropriate to use to evaluate current conditions.’ It is unclear what this sentence is referring to. More specificity is needed--which parameters, which trends are qualified as “strong”, and why? The presence of a large outlier event at the start of the period puts in question whether the reported trend is real. The analysis performed for the DEIS has not demonstrated a strong improvement in key trends in water quality in the lake. The statistic mentioned, p-value, does not signify the underlying trend in rank is “strong” or “weak” but rather represents the probability of the trend occurring randomly. Ecology analyzed the full Thurston County data set for chlorophyll, secchi depth, TN and TP starting in 1999. We do not see strong trends. Tau values, which represent the degree of agreement of the rank correlations, fall below an absolute value of 0.33-an agreement that Kendall (1948) qualified as “poor”. Furthermore, when using the entire data set, the p-values fall below the level of significance defined as the threshold of significance in the DEIS. As a result, we don't see discernible trends for chlorophyll, secchi depth, TN and TP for the entire data sets. Further analyses should be conducted for loads, rather than concentrations, using the entire data set. Discuss that the choice of starting point makes a difference in estimated trends. Specify thresholds for what could be considered a strong or a weak trend and why. Instead of disqualifying data for what appears to be an arbitrary reason, use the entire data set to conduct analysis.

The DEIS incorrectly cites Ecology 2020 as source of Capitol Lake detention time calculation, this is US EPA. No reference for Ecology 2020.

DEIS states that detention time is 0.6 to 7.9 days when not considering low flow conditions. Use low flow (recent data) to estimate detention times for dredged lake. This would be the critical condition for the lake detention times.

The DEIS states: ‘Conversely, a positive trend in DO would also signify that DO is increasing but would represent an improving trend in water quality.’ However, if DO in a lake increases beyond supersaturation (due to increased productivity), it is not a positive trend. The DEIS later on, in page 4-11, does state that DO can also be too high and this could be referenced in the trends section. Consider a sentence modification: 'Conversely, a positive trend in DO may signify improving trend in water quality.' Also, reference information from page 4-11 in page 4-5. The paragraph in page 4-11 of the DEIS that addresses this is the following: 'DO can also be too high and result in supersaturated conditions that can also be a hindrance to aquatic life. This is measured as total dissolved gas or TDG. The TDG standard was established due to concerns with super-saturated conditions at dam spillways and the impact on fish. However, supersaturated DO is also common in eutrophic lakes and is associated with high rates of photosynthesis by plants and algae.'

Of these parameters, surface pH (negative Tau), surface TP (negative Tau), chlorophyll-a (negative Tau), and Secchi depth (positive Tau) all indicate lower productivity and an improving water quality trend. The trend analysis was done on concentrations, and do not necessarily reflect lower productivity.
Concentrations vary depending on lake volumes, which depend on river flow, and for chlorophyll and algal growth parameters depend on other climatological factors such as temperature and light. Furthermore, only the sign of \( \tau \) is mentioned, not the magnitude of the rank correlation values themselves which are not in a range that signify clear, strong agreement between the rank order for time and concentrations. Lastly, the analysis appears to be heavily influenced by the starting date of the analysis, which includes at least one large data outlier near the beginning of the time series. Re-word this sentence with qualifiers that incorporate the limitations of the analysis conducted.

The DEIS states that WQ in lake is relatively good, while also acknowledging that lake is eutrophic (Table 4-4). The DEIS states: 'Overall, the lake data (2010-2014 and 2019) indicate that Capitol Lake currently has relatively good water quality in terms of physical characteristics important to aquatic life' This sentence is inconsistent about what is known regarding eutrophic systems and habitat. A eutrophic lake is not considered 'relatively good' for various aquatic organisms, including salmonids. See for example, Colby, P.; Spangler, G.; Hurley, D.; McCombie, A. Effects of Eutrophication on Salmonid Communities in Oligotrophic Lakes, Journal of the Fisheries Research Board of Canada, Vol.29. 1972 Re-word this sentence to reflect impacts of a eutrophic lake to salmonids and other aquatic life. The DEIS states: “Chlorophyll concentrations are also relatively low, especially in light of the lake’s eutrophic condition.” However, observed chlorophyll concentrations are firmly within the range of eutrophic conditions. Note that Table 4.4 in the DEIS shows observed average chlorophyll concentration in Capitol Lake between 2010-2014 is 12.3 ug/L, and the eutrophic range shown in the same table is between 7.1 and 20 ug/L.. Re-word or remove sentence. The DEIS states: ‘Overall, Capitol Lake exhibits relatively good water quality when compared to other lakes in the area. The chlorophyll concentrations are low and Secchi depths are moderately good...’ Comparison of Capitol Lake with other deeper lakes with much different hydrology is not a meaningful comparison. Refer to general comments section about this topic. Re-write or remove this section. If the section remains, discuss how this comparison, with lakes that are deeper and hydrologically much different, is relevant to determining impacts and benefits of Capitol Lake/Deschutes Estuary management alternatives.

Although the DEIS acknowledges that TOC in the lake is consistently higher than in the river, it does not put into perspective the difference in the additional load. Consider these DEIS statements: “TOC increased by approximately 1 mg/L between the Deschutes River and North Basin...” “While TOC in the lake is consistently higher than the river through most of the summer, they are both generally low overall (below 3 mg/L), with the important exception of the peak that occurs in the lake during late summer or early fall due to plant die-off.’ The first statement does not focus on the critical season when differences between the river and the lake are most accentuated, in the late summer/ early fall during and following aquatic plant senescence. The second DEIS statements below refers to the 2019 monthly observations and qualifies the difference between the river and lake as being “generally low overall”, without a basis for that qualifier. Re-write this section. Put in perspective the human-caused TOC loads in the system by comparing lake loads with other anthropogenic discharges. For instance, consider the difference in TOC load between Capitol Lake and Deschutes River that can be estimated from 2019 measurements-particularly during the critical late summer/early fall season. The calculated mean difference of the TOC concentration between the lake (North Basin) and the river during the critical season using 2019 data from the DEIS is 2.21 mg/L. This is based on data from Table B-1 in the WQDR
for surface and bottom TOC observed during September and October 2019, and the corresponding data from Table B-2 for Deschutes River. Calculating the additional TOC load from Capitol Lake using that difference in concentration between the lake and the river results in an estimated mean of about 1280 lbs/day during September-October 2019. That value is based on the mean daily Deschutes River discharge measured by the USGS (107.3 cfs) for that period. For comparison, the mean TOC load that LOTT discharged during September-October 2019 is estimated to be about 885 lbs/day. So, the additional TOC load from the lake compared to the river was roughly 144% larger than the TOC load coming from LOTT during September-October 2019. Reference is made in the following sentence to an outlier TOC value measured in 1997. To accurately represent differences between lake and river measurements, temporal consistency of lake/river observations are important. From DEIS: “TOC increased by approximately 1 mg/L between the Deschutes River and North Basin which represents a 50% increase, but when compared to the range of TOCs measured in this system of (i.e., up to approximately 30 mg/L (LOTT 1998)...” Comparison of a 2019 TOC average increase in the lake to a 1997 lake TOC outlier doesn’t provide a clear picture. Additionally, comparisons between lake and river concentrations should correspond to the time period each was taken to be meaningful. Why compare a relative difference from one year with an absolute value outlier measurement from another? Year to year variation in climatology, hydrology and oceanic conditions is a key driver for water quality experienced in the river, the lake and the inlet. Inter-annual variability differences matter. For example, March of 1997 was wetter and warmer than 2019; September 1997 also had a greater number of days higher than 70F and more precipitation than September, 2019. Additionally, during a few days in late July 1997, precisely when the outlier mentioned was observed, the lake experienced a drawdown. Rewrite sentence. If comparing to data from other years, use consistency in comparisons of statistics (temporal relative lake/river average differences to corresponding lake/river relative average differences). Discuss causes for inter-annual variability. Be cautious when comparing to outliers, and if doing so, point it out.

The DEIS states: “Although an increase in TOC was noted in the lake it did not appear to result in a commensurate increase in BOD. Theoretical relationships related to stoichiometry and respiration can be used to estimate potential DO demand from TOC (Welch and Jacoby 2004). Based on these relationships, the mass ratio between oxygen and carbon is 3.89." It is unclear how the 3.89 mass ratio between oxygen and carbon mentioned in the DEIS was obtained. The methodology to estimate TOC from BOD-5 is the following: Assuming that the BOD-5 samples reported were unfiltered, one would need to use a reaction rate equation and estimated rate of reaction to convert to ultimate BOD, from which organic carbon could be then estimated. Welch and Jacoby (2004), the reference cited in the DEIS, contains a first order equation for BOD. Using the Welsh and Jacoby (2004) first order rate of reaction equation, and an estimated reaction constant of 0.09 (estimated from values used for mechanistic modeling of the lake), a 2 mg/L BOD-5 value can be estimated to be about 5.5 mg/L ultimate BOD, which in turn can be estimated to be around 2 mg/L TOC. This is using the stoichiometric relationship of 2.67 grams of oxygen per gram of carbon. It is important to note that ultimate BOD was not measured, and so unfiltered BOD-5 conversions to TOC are rough estimates, not considering the hydrolysis rate of particulates in the calculation, and that the QAPP does not specify whether TOC analyses were derived from the same sample used for the BOD-5 observations. Re-write the paragraph starting with the italicized sentence in the DEIS, using reaction rate equations to describe the relationship between BOD-
5, ultimate BOD and organic carbon. Suggested language to include in the new paragraph is below:
Since ultimate BOD values were not measured, unfiltered BOD-5 samples can provide only a rough estimate of TOC. Assuming TOC analyses were derived from the same sample as the BOD-5 observations, 2 mg/L of BOD-5 in the lake, can be estimated to be around 5.5 mg/L of ultimate BOD, and would be expected to be about 2 mg/L of TOC.

The impact in Budd Inlet of TOC derived from the lake cannot be understood by solely considering the BOD-5 measured within the lake. Again, note that ultimate BOD was not measured. Additionally, the reporting limit for BOD-5 in the DEIS QAPP Addendum (Table C-1 in Appendix C) was 4 mg/L, a relatively high reporting value for lake or river waters. Furthermore, and more importantly, we are interested in BOD increases in the Budd Inlet side of the Capital Lake outlet, where freshwater algae die and exert an additional BOD. It has been documented that the dead algae exert 2.55 times the BOD compared with live algae (BOD of algal suspensions, Stanley Dea, PhD dissertation, Arizona State Univ. 1963). This additional or secondary BOD, implicit in TOC measurements, impacts Budd Inlet, but the DEIS does not mention it. Instead, the DEIS states: 'A further indicator that TOC concentration increases in Capitol Lake are not driving large changes in BOD are the BOD values themselves.' This statement overlooks the fact that secondary BOD -- the term used in Welch and Jacoby (2004) -- as well as lack of ultimate BOD data and high reporting limits for BOD-5 all limit the amount of information that can be derived from the 2019 BOD measurements. Remove this sentence from the DEIS: 'A further indicator that TOC concentration increases in Capitol Lake are not driving large changes in BOD are the BOD values themselves.', since the data presented does not support the assertion made.

Figure 4.6 contains an error. The line drawn across all months, compared with 2004 and 2019 observations, and labeled:' Estimated post-dam conc (Ecology 2015 b)' is an inaccurate interpretation of the reference cited. The reference cited (Roberts et al., 2015) shows that the prediction corresponds to 1997 conditions and does not show a constant estimated 'post-dam' concentration of TOC. Instead, it shows that TOC is predicted to vary seasonally, in line with the observations. TOC during late summer with the dam was predicted by Roberts et al. 2015 to be above 5 mg/L at its peak in September 1997. Conversely, for the estuary scenario, during the same 1997 peak period, TOC was predicted to be around 2 mg/L. Mechanistic model predictions are specific to conditions occurring in each of the model timeframes. Mechanistic models account for inputs such as atmospheric temperature, solar radiation, precipitation, flow-among other variables. The use of a near-peak prediction value for a 1997 scenario as a constant to represent the “estimated post-dam concentration” and then the comparison with the monthly lake observations from two other years with different hydrology/climatology is not meaningful. For additional information refer to comment #41. Remove line labeled:' Estimated post-dam conc (Ecology 2015 b)', as it is not accurately representing results from the study cited.

The DEIS states: “The trends are determined to be positive or negative from the calculated Tau for the related time series. The Tau value indicates the sign of the trend and can be either positive (increasing) or negative (decreasing).” This description misses one important component of the Tau value—it’s magnitude. Kendall (1948) makes it clear that the absolute magnitude of Tau directly relates to how small (weak) or large (strong) the trend is. Point out that the absolute magnitude of Tau values relates to
the strength of the trend. Kendall (1948) considered magnitudes of around 0.60 “substantial”, and of
around 0.30 “poor”. Kendall, M. Rank Correlation Methods, 1948

DEIS states that: "Ecology estimated that concentrations would be approximately 2mg/l without the
dam as compared to approximately 5 mg/l with the dam (these estimated concentrations appear to
represent an approximation of average conditions during summer months)...” The concentrations
mentioned in that sentence refer to near peak loads, in September 1997. Peak loads occur when TOC is
accentuated due to senescence of aquatic plant material. The maximum difference between the lake
and the estuary (no dam) is expected during late summer/early fall, though the magnitude of the relative
difference is expected to vary as a result of interannual variation. For additional information refer to
comment #41. Clarify in the italicized sentence that the concentrations referenced for lake and estuary
(without the dam) represent predicted conditions in September 1997 during near peak loads. Inter-
annual climatological and hydrological variations impact the magnitude of that difference.

The DEIS states: “Internal loading of phosphorus (derived from release from the sediments) was not
calculated or accounted for as part of the phosphorus budget. In many lakes this is a significant source of
summer TP loading (Nürnberg and LaZerte 2016), but in Capitol Lake the high DO and relatively low
phosphorus concentrations measured in the bottom waters indicate that loading from sediments was
not significant.” Research conducted and reported on PO4 sediment fluxes was not used in this analysis.
Consider revising and including the following points: 1. Roberts et al. 2012 reports on measured PO4
fluxes from sediments in the different regions of the lake. The total PO4 load into the lake waters from
sediment fluxes in summer months (May-Oct) is 955.7 Kg. Consider revising Table 4.10 so that it includes
this load to Capitol Lake. 2. The residual TP in Table 4.1 is labeled as sedimentation. Note that this would
also include phosphorus taken up by algae and macrophytes existing in the lake. 3. Consider re-analyzing
the phosphorus budget in terms of bioavailable P (PO4). A large portion of TP leaving the lake may be
entirely due to algal P which is derived from PO4. Less than half of TP from Deschutes River is PO4. The
PO4 flux from the sediments may be sufficient to support a healthy algal population. The DEIS states
there were likely relatively constant inputs of total phosphorus (TP) to the system that were not
specifically represented in the TP budget. We agree with this assessment. That constant input is the
phosphorus flux from the sediment that is not included in the TP budget. Point out that the expected
constant input of total phosphorus is most likely the phosphorus flux from sediment that is not included
in the TP budget. May cite Ecology’s studies and observations regarding this.

The DEIS states: “The supplemental data [Ecology] collected represents a comprehensive data set for
some of the analytes such as TOC, BOD, and DIN that are key to the modeling predictions. As
documented in the study, an herbicide treatment was performed in the summer of 2004 to eliminate
Eurasian watermilfoil....Thus, the magnitude and seasonal relationships for nutrient and TOC discharges
to Budd Inlet in 2004 would not have been typical.” We agree that 2004 was not a typical year, and it
should not be used as the starting point for a long-term trend analysis as the DEIS does. With respect to
the use of 2004 data for lake model calibration, Roberts et al. 2012 (Appendix H) reports that Ecology
accounted for the herbicide application, and developed kinetic rates for pre and post the application.
Only the pre-application rates are used for further lake modeling. See other information about this in
comment #43. Re-write paragraph and point out that Ecology controlled for the atypical 2004 year in
the modeling conducted. Ecology used pre-herbicide rates for model verification using 2001 data, per Roberts et al. 2012. Those pre-herbicide rates were also used for modeling conducted for 1997. The WQDR italicized language stating that 2004 was not a typical year for the lake is accurate, and clear grounds to re-consider the starting point of the DEIS trend analysis. As pointed out previously, the extremely large outlier in October 2004 could be the result of excessive amount of plant tissue senescence due to the application of herbicide in the lake that summer.

States that if EPA target for Deschutes TMDL for TP are met then water quality in lake will greatly improve. Phosphorus sediment fluxes have been measured and shown to be significant (see information provided in comments 34 and 35). This source of phosphorus is not readily reduced. Note that sediment fluxes may provide ample phosphorus for excessive algal growth.

The DEIS states: “Generally, the concentrations of nitrogen are higher in the river than in the lake. Similarly, in 2019 (Table 4.7), the mean TN concentration in the lake was only 62% of what was measured in the river.” Table 4.7 compares 2019 Deschutes River TN values with 2010-2014 average TN values for North Basin. Use temporally consistent data for TN in Table 4.7.

Table 4.12 does not adequately convey when the applicable water quality standard is met or not. The portion of the standard referred to in Table 4.12 is limited to the numeric criteria. The second part of the DO standard, when natural conditions are below numeric criteria, is not addressed in that table. Clarify that Table 4.12 is comparing only to one part of the DO standard (the numeric criteria) and is missing information about compliance with the second part of the criteria.

The DEIS states: 'The average total organic carbon (TOC) concentration in Budd Inlet is 3.7%, which slightly exceeds the typical range of 0.5 to 3.5% for Puget Sound (Ecology 2019a).' The sentence above does not clearly convey observational records. Budd Inlet sediment TOC content does stand out compared to all the long-term sediment stations monitored in the Puget Sound. Partridge, et. al. (2018) point out that 95% of the long-term Puget Sound sediment stations have TOC levels less than 3%. They also point out that Budd Inlet observations show the highest organic carbon percentage among all long-term Puget Sound stations. Modify sentence to provide a fuller picture: Budd Inlet sediments have the highest total organic carbon observed among long-term sediment monitoring stations in Puget Sound. Furthermore, few benthic animals are found at the Budd Inlet station. Taxa richness and abundance at Budd Inlet are the lowest of the long-term monitoring stations. (Partridge, V., S. Weakland, M Dutch, D. Burgess, and A. Eagleston; Sediment Quality in Puget Sound: Changes in chemical contaminants and invertebrate communities at 10 sentinel stations, 1989-2015, WA Department of Ecology publication 18-03-005,https://apps.ecology.wa.gov/publications/documents/1803005.pdf

DEIS states that: "TOC is already within Ecology predicted range for an estuary. Under the modeled conditions (Ecology 2015b) it was predicted that without the dam the TOC concentrations at the outflow from Capitol Lake would be substantively lower (2 mg/L) than with the dam (5 mg/L). Yet, field data from 2004 and 2019 both indicate that average TOC concentrations in the outflow are already close to 2 mg/L (Figure 4.7).” The inconsistencies of this argument are explained above (see comments 31, 33). Ecology predictions as reported by Roberts et al. 2015 are used incorrectly. Incongruently, the DEIS
states that lake TOC averages for the years 2004 and 2019 are compared to a predicted value which is actually close to the peak TOC predictions for an estuary (without dam) scenario in September, 1997 reported by Roberts et al. 2015. The most critical period in terms of dissolved oxygen in Budd Inlet is late summer and early fall. The TOC observations fluctuate throughout the year, and in 2019, TOC is not 2 mg/L near the lake’s outlet (North Basin) during the critical period of late summer/early fall. Actually, the 2019 observed North Basin lake average (surface and bottom) TOC concentration were 3.6 mg/L and 6.3 mg/L in September and October, 2019, respectively. It is misleading in the DEIS to state that TOC concentrations are “already close to 2 mg/L” without qualifying when. The maximum observed North Basin lake surface TOC concentration in 2004 (Figure 4.7) was about 7.5 mg/L and in 2019 was about 6.7 mg/L. The predicted lake scenario maximum concentration was just under 6 mg/L in 1997 (Roberts et al. 2015). The timing of the maxima is late summer/early fall-for 2019 it is shown in Figure 4.7 in October. However, Figure 4.7 depicts only surface TOC data for 2019. The September 2019 TOC data for the lake bottom is reported in the DEIS as 5.3 mg/L. So, 2019 observations show that TOC North Basin lake levels, on a water column average, were higher in September than in the earlier part of that year. Estuary (without dam) TOC concentration predictions are not available for 2004 nor 2019. For 1997, the estuary TOC concentration predicted to occur at the time period corresponding to the lake maximum prediction was about 1.5 mg/L. The 1997 TOC estuary prediction fluctuated between above 2 mg/L and below 1 mg/L during that year (Roberts et al. 2015). This is inconsistent with the constant line drawn in the DEIS in Figure 4.7 at 2 mg/L and depicted as representing predicted conditions for 2004 and 2019. Remove this misinterpretation, and the entire paragraph in page 4-41, from the DEIS. It is a misinterpretation of Ecology’s modeling work. Make appropriate changes to conclusions in other sections of the DEIS.

The DEIS states TOC levels in lake and river are not substantially different than river. The term “substantially” is subjective. See comment #27. Observations from 2019 show the largest TOC build up in the lake happens in late summer or early fall—as expected. This coincides with the critically lowest DO period in Budd Inlet. But the observed lake concentrations are higher than the river’s at other times of the year as well. Re-word to better reflect the difference between TOC river and lake. Remove the phrase “not substantially different”, as it does not appear to have an objective basis. The late summer/early fall TOC build-up from the lake coincides with the critically lowest DO peak in Budd Inlet.

The DEIS states: “Another factor contributing to uncertainty is that data collected from the lake in 2003-2004 that was used to calibrate the model were not reflective of typical lake conditions. As noted by Ecology (Ecology 2012), a lake herbicide treatment to kill aquatic plants produced immediate algae growth in the lake and increased TOC concentrations in the period following the applications. Additionally, the aquatic plant biomass grew back entirely over the summer and therefore was present to decompose in the fall and contribute to another increase in TOC release from the lake (Ecology 2012). Thus, the magnitude and seasonal relationships for nutrient and TOC discharges to Budd Inlet in 2004 would not have been typical.” The first sentence in this paragraph reflects an incomplete understanding of how Ecology calibrated, verified and has applied the lake model. Ecology recognized the need to account for potential differences in model kinetics due to pre and post herbicide application. Roberts et al. 2012 reports that to replicate behavior pre and post herbicide application, two sets of kinetic rates were developed. One set represented the pre-herbicide period, and the second set represented the post-
herbicide period. In addition, as mentioned in Roberts et al. 2012, to verify the calibrated lake model, the verification period used was from 2001, based on the availability of boundary condition and verification data. During model verification the pre-herbicide kinetic rates from the calibration period were used to model the nutrients and phytoplankton growth in the lake. Accordingly, these pre-herbicide kinetic rates are also used for all subsequent modeling work, including Roberts et al. 2015. Remove the first sentence in the italicized this paragraph, as it is misleading due to an incomplete understanding of how Ecology calibrated, verified and has applied the lake model. Instead, note that Ecology controlled for the 2004 herbicide application during lake model calibration, verification and application.

The DEIS states that: “The TOC data for 2019 also do not indicate that there was a relationship between TOC in the lake and decreased DO in Budd Inlet. TOC concentrations were fairly consistent and low throughout the summer in the lake and then increased in late summer or fall (Figure 4.7). Low DO concentrations in Budd Inlet start in July (Figures 4.10 and 4.11), well before the TOC concentration in the lake increases. The argument presented is disjointed for the following reasons: 1) The qualitative DEIS argument implies the relationship between TOC in the lake and DO in the inlet can be understood by simply comparing concentrations and disregarding the dynamics of the system. That is a flawed approach. Multiple biogeochemical factors promote low DO events in marine waters-among them temperature, stratification, sediment and water column fluxes. To best understand the relationship between TOC in the lake and DO in the inlet, the analysis has to include all these other variables. Process-based mechanistic models coupled with observations have the ability to do that. Anthropogenic influences can exacerbate low DO events resulting in lower DO particularly near the bottom. For these reasons, the water quality standard restricts the anthropogenic influence in terms of dissolved oxygen to not more than 0.2 mg/L. 2) The DEIS is not comparing 2019 observations in the lake with corresponding 2019 observations in the inlet. Figures 4.10 and 4.11 contain data from Budd Inlet from 1999-2017. Recognition of inter-annual variability is part of a comprehensive analysis. Re-write the paragraph to recognize the inherent complexity of the biogeochemical system that cannot be described by simply comparing concentrations. Remove the argument presented which is flawed. The DEIS states: “TOC did not exert the impact on DO demand that is predicted by stoichiometric relationships.” In 2019, BOD was not measured in the inlet so this statement is apparently based on previous statements about the relationship between TOC and BOD-5 measured in the lake. The reasons why this statement is incorrect are stated above (see comment 30.) Revise sentence for accuracy or remove it.

In a paragraph referencing dredging for the estuary alternative, DEIS states: “The suspended sediments/plants would result in temporary and localized increased turbidity, decreased DO (due to increased BOD from suspended and dissolved organic matter), and reintroduction of previously buried nutrients to the waterbody.” It is assumed that these impacts would result from any dredging operation under any alternative. Please clarify. Clarify what is the impact of dredging operations under construction for all alternatives.

The DEIS states that one objective of managed lake would be meeting applicable water quality standards. Previously, and in page 5-9, the DEIS states that there would be no changes to water quality under the managed lake alternative. These two different assertions are incongruent. Both assertions cannot be correct. Either water quality standards are met because managed lake water quality is
improved compared to current water quality or standards are not met. If indeed, the managed lake alternative will meet water quality standards, specificity is needed as to how the managed lake will meet water quality standards, particularly in Budd Inlet. Incorporate specificity as to how the managed lake alternative will meet water quality standards, particularly in Budd Inlet. Or, remove the objective under the managed lake alternative about meeting water quality standards-as implied from language in page 5-9 and elsewhere in the DEIS that points to no changes in water quality under a managed lake alternative.

DEIS states: “...a DO improvement of half of what the model predicts is assumed for this analysis. “ This assumption was projected in the DEIS in Table 5-2. The adjusted improvement value in the DEIS seems entirely arbitrary. It appears to be based on inaccurate assumptions or misinterpretations about reported model results in Roberts et al. 2015. Remove this assumption from the DEIS and remove or make appropriate changes to Table 5-2. Accordingly, revisit the “minor to moderate benefit” qualification in the DEIS for water quality impacts from the estuary alternative.

The report cover page is dated June 2021 (final version), but the report footer date is November 2020. Please provide a consistent date for the report

Section 2.2.2 summarizes anticipated comparisons of sediment analytical data to MTCA cleanup Method A to evaluate sediment beneficial reuse scenarios, and refers to use of MTCA Method A to evaluate sediment for upland beneficial use. The report states chemical concentrations will be compared to Methods B or C cleanup levels for chemicals without Method A cleanup levels. However, the more appropriate criteria for evaluation of upland beneficial use of dredged sediments is MTCA Method B since there are no MTCA Method A values for some contaminants of concern, such as dioxins/furans. In general, MTCA does not allow mixing of methods when Method A is proposed and use of MTCA Method C generally would not be allowed for evaluation of upland beneficial use of dredged sediments. Method A is typically used at smaller, more straightforward sites, with relatively few hazardous substances. Project proponents should work closely with regulatory staff, including Ecology TCP, to evaluate the likelihood and feasibility of upland beneficial reuse of dredged sediments.

Section 2.2.2 proposes comparing sediment data to fresh water sediment criteria during construction within Capitol Lake. Protection monitoring of contaminated sediments that may be encountered during construction must be compared to both marine and fresh water sediment criteria because of interaction of fresh and marine waters within the Capitol Lake and Budd Inlet system, especially if the estuary or hybrid alternative is constructed. The more stringent of the fresh or marine sediment criteria would apply. If the estuary or hybrid alternative is constructed, comparison to both fresh and marine criteria, and application of the more stringent criteria, also will be required in the estuary areas formed in the current lake footprint. If the estuary or hybrid alternative is constructed, comparison to both fresh and marine criteria, and application of the more stringent criteria, also will be required in the estuary areas formed in the current lake footprint.

Section 2.2.2 states sufficient data are not available to establish regional background concentrations for bioaccumulative chemicals (other than dioxin/furan and carcinogenic polycyclic aromatic hydrocarbons [cPAH] TEQs). However, Ecology’s Toxics Cleanup Program (TCP) has not made a determination
regarding the sufficiency of data available to develop South Puget Sound regional background concentrations for chemicals or chemical groups other than dioxin/furan, cPAH, and PCB congener toxic equivalent quotients (TEQs). Ecology estimated dioxin/furan TEQ and cPAH TEQ regional background sediment concentrations in 2018. PCB congener TEQ sediment data available during preparation of the 2018 regional background report were determined to be insufficient to calculate regional background for South Puget Sound. Use correct data for regional background concentrations for bioaccumulative chemicals. Section 2.2.2 states that only regional background concentrations for dioxins/furan and cPAH TEQs in Budd Inlet were used for evaluating potential impacts of sediment quality to humans and higher trophic levels. The basis for this statement appears to be that other applicable regional or natural background values have not been established by Ecology for South Puget Sound. This approach is inconsistent with the SMS requirement to consider all bioaccumulative chemicals in sediment to protect human and environmental health (WAC 173-204-560). Other bioaccumulative chemicals, in addition to dioxin/furan TEQ and cPAH TEQ, should be included in evaluations of sediment quality for Capitol Lake and Budd Inlet. This comment also applies to evaluations presented in Appendix A.

Data used in the analysis not uploaded to the EIM Database. Please submit sediment data obtained during the 2020 sediment study (Herrera 2020a) to Ecology to be uploaded to EIM, per Ecology Policy 840, available at the following link: https://apps.ecology.wa.gov/publications/documents/1609050.pdf.

In Section 3.2.2, PCBs as Aroclors were compared to SMS benthic protection criteria. Sediment PCB congener data also would be required to evaluate bioaccumulative risk. Include sediment PCB congener data in the evaluation of bioaccumulative risk.

Section 4.1.1. States “the spill was cleaned up and remaining sediment does not exceed sediment quality criteria.” Please revise this and similar statements in other sections of this discipline report, the main body of the DEIS, and other attachments in which they may appear to reflect the spill response was performed to address PCBs.

Section 4.1.2 incorrectly uses average chemical concentrations in middle and north basin samples to compare to cleanup criteria. Chemical analytical data should be compared to SMS benthic protection criteria point-by-point. Bioassays may be appropriate for further comparison. For chemical analytical data comparisons to bioaccumulative criteria, a surface weighted average concentration (SWAC) is used within a defined site or sediment cleanup unit.

Remedial actions recently re-started for Hardel Mutual Plywood based on new information received by Ecology of additional contamination. Please revise the discipline report to include the changed cleanup status for Hardel Mutual Plywood.

Section 4.2.2 incorrectly compares average chemical concentrations to SMS cleanup criteria. The appropriate comparisons for sediment data are point-by-point for SMS benthic protection criteria, and surface weighted average concentration (SWAC) for bioaccumulative criteria. Please use the correct comparisons for the analysis.
Summary statements presented in this section are inappropriate, because Budd Inlet is an active TCP cleanup site and remedial actions in Budd Inlet are ongoing. Please revise this summary to reflect that sediment remedial actions are ongoing in Budd Inlet. In Section 4.2.4, West Bay SWACs are provided from the Final Investigation Report, Port of Olympia Budd Inlet Sediment Site, dated August 2016 for the Study Area; however, these SWACs were developed prior to establishing site boundaries or sediment cleanup units (SCUs). These SWACs may include areas below sediment cleanup criteria, lowering the SWAC. After site boundaries or SCUs are identified, SWACs for comparison to sediment cleanup criteria will be estimated only within those areas. Please use the correct SWACs for the analysis.

Figure 5.1 uses the wrong title. Please revise the title for this figure to identify the alternative being presented (possibly the estuary alternative?). Please include additional figures as appropriate to present estimated sediment deposition for other alternatives.

Section 5.5.2 states, "Sediment cleanups are being investigated only for the east portion of West Bay in the Port of Olympia Marine Terminal and Navigational Channel Turning Basin" is an incorrect statement and should be revised or deleted from the report. Sediment areas associated with multiple Budd Inlet waterfront sites, including the Port of Olympia Marine Terminal and Navigational Channel, are still being investigated and areas requiring cleanup have not yet been finalized. Please correct language.

The term ‘high quality’ used throughout the sediment discipline report in reference to sediment conditions in Capitol Lake, West Bay, and Budd Inlet does not have meaning under the Sediment Management Standards (SMS). Using this term is misleading because it implies no sediment contamination exists within Capitol Lake, West Bay, or Budd Inlet. Suggest the term ‘high quality’ in reference to sediment be removed from the sediment discipline report, the DEIS body, and other attachments in which it may have been used.

For the Tumwater SMP, it states that the permit/approval would be an SDP, but in the regulatory trigger, it says that CUP requires Ecology approval. If the project will require a CUP, that should be stated in the permit/approval column. Correct language in DEIS. For the Olympia SMP, the DEIS says the project will need an SDP, CUP, and exemption. If any portion of a project requires an SDP, the entire project requires an SDP. It is not an option to grant a portion of a project an SDP exemption. Please note that a CUP requires a final decision from Ecology. Correct language to state, “Under the state’s Shoreline Management Act (SMA), each city and county that contains a state shoreline or shoreline of statewide significance adopts a Shoreline Master Program (SMP) that applies to those waters and the adjacent land. Each SMP is based on SMA goals to protect the public trust by ensuring public access, protecting shoreline ecology, and accommodating water-dependent uses. This is accomplished through regulations in the SMP that establish shoreline environment designations, and corresponding use and development standards.”

Figure 3.8.3. Incorrect language is used in the key for the figure. Island and Natural should be removed from the key, as they are not depicted on the figure.

The DEIS states, “The barrier wall in the Hybrid Alternative would also fill approximately 1.2 acres (0.49 hectares) of estuarine deepwater habitat. Like the Estuary Alternative, the removal of the 5th Avenue
Dam structure would restore approximately 3.3 acres (1.3 hectares) of a water of the U.S. A net loss of waters of the U.S. is not expected; however, the barrier wall would result in more fill than the Estuary Alternative. Overall, habitat complexity would be increased, and water quality and hydrologic functions would improve compared to the No Action Alternative. The habitat type that would be most affected (freshwater deepwater habitat) is relatively common in the region and would be replaced with a rarer habitat type (estuarine deepwater). Thus, direct impacts from fill and indirect impacts from shade under the Hybrid Alternative would be less than significant.” This is reiterated in Table 4.6.3. The assertion seems to be that 1.2 acres of fill in the lake would offset by removal of the dam, so it’s therefore not significant. However, given the definition of “significant impacts” in the DEIS, which is “permanent loss of more than 0.5 acres of wetlands or the loss of wetland function that cannot be replaced through mitigation,” 1.2 acres of fill is significant. Please note that all impacts to wetland area and functions will need to be sufficiently offset by compensatory mitigation. Please note that all impacts to wetland area and functions will need to be sufficiently offset by compensatory mitigation.

Supporting Materials (if any): N/A

TRIBAL ENTITIES

Name (ID): Bill Patton (T-1)

Organization (if applicable): Northwest Indian Fisheries Commission

Submission Text: Restoring the Deschutes River estuary is the only ecologically sound option. A restored estuary will address the invasive species problem and provide critical habitat needed to recover salmon runs to the river and other nearby drainages. It is also the most cost effective option. Supplanting the natural estuary with an artificial lake was a failed experiment. It is now time to correct this shortsighted mistake.

Supporting Materials (if any): N/A

Name (ID): Scott Steltzner (T-2)

Organization (if applicable): Squaxin Island Tribe

Submission Text: The Squaxin Island Tribe appreciates the opportunity to review the draft environmental impact statement (DEIS) for the Capitol Lake-Deschutes Estuary Long-Term Management Project. We commend the Department of Enterprise Services and the consultant team for gathering and analyzing an impressive amount of data. The Squaxin Island Tribe is descended from maritime people who have lived and prospered along the shores of the southernmost inlets of the Salish Sea for millennia. Their leaders signed the Medicine Creek Treaty with the U.S. Government in 1854, reserving the right to hunt, gather and fish at all usual and accustomed places. Tribal members continue to this day to exercise their Treaty rights for subsistence, ceremonial and commercial purposes. The original reservation was established on Squaxin Island in the center of the South Salish Sea. The Usual and accustomed fishing area has been recognized in federal court proceedings and encompasses all the
waters south of the Tacoma Narrows, including the seven southern inlets—Case Inlet, Hammersley Inlet/Oakland Bay, Totten/Little Skookum Inlet, Eld Inlet, Budd Inlet, Henderson Inlet, and Carr Inlet. The Steh-Chas people were the occupants of the Budd Inlet area into which the Deschutes River drains. The Tribe has for many years advocated for the restoration of an estuary environment. It is quite clear from the available information that an estuary would be better for fish, better for water quality, function better as an ecosystem, and be better for the culture and lifeways of the Squaxin Island Tribe. We believe that the information presented in this DEIS supports this concept, even though it is presented in such a way as to downplay information that would support an obvious conclusion. The Department of Enterprise Services has done a remarkable job of appearing neutral in this effort to evaluate future management options for the mouth of the Deschutes River, even going so far as to decline to identify a preferred alternative for the DEIS. However, as we shall point out, this perceived neutrality has resulted in a skewed representation of the facts and how they would influence the selection of a preferred management option. The Tribe submits the following comments on the DEIS and its implications for the Squaxin Island Tribe.

Water Quality The water quality report does not present an objective analysis that is useful in comparing the proposed options. The report downplays the extensive work done by the Department of Ecology over many years that was vetted by multiple technical teams and went through an exhaustive public peer-review process. The report also does not incorporate an appropriate study area to truly gauge the impact of management actions on Budd Inlet water quality. Additionally, the report makes inappropriate comparisons to other bodies of water to show that Capitol Lake has ‘good’ water quality. The document characterizes the existing body of water and the managed option as a lake. However, due to flow and residency time, this body of water has been designated as a river associated with the Deschutes. This is a regulatory description; it is not open for interpretation. All analysis and comparisons should proceed as having to meet river water quality standards.

The comparison of Capitol Lake to other lakes in Thurston County makes no sense. The body of water has to meet river water quality standards, not those of a lake. No other lake in Thurston County has a large river flowing into and through it. This makes any comparison inappropriate.

The DEIS compares lower Budd Inlet water quality to that of other unnamed inlets in South Sound. This is an inappropriate comparison as Budd is unique in that it is the only South Sound inlet to have a river system flowing into it; all of the rest are associated with small streams. The influence from a river likely has measurable effects on circulation and dissolved oxygen, along with other water quality parameters, that are not present in inlets with streams.

The DEIS appears to favor the analysis performed by the consultant over the TMDL administered by the Washington Department of Ecology. The TMDL represents an almost decade-long effort that underwent review by Ecology, local technical teams, and a rigorous and public peer-review process by outside nationally recognized experts. If there is a perceived discrepancy between Ecology and the consultant, deference should be given to the Ecology process.
The Tribe appreciates the field data collection that was done as part of the EIS. This provided valuable environmental information. However, this effort only represents one year of monitoring, and this occurred during an extensive cleanup effort due to the transformer oil spill from the Olympia Brewery. Information gathered during this period should be evaluated in this context.

The DEIS, for the most part, only considers water quality impacts to West Bay. The document does mention some other water quality stations outside of West Bay; however, the write-up is inconsistent and confusing. As was done in the Aquatic Invasive Species Report, the study area should be expanded to encompass areas most impacted by existing conditions or changes proposed under different management options. We suggest including all of Budd Inlet to Dofflemeyer Point. Alternatively, at a minimum, the analysis area should include the lower Inlet to the line where the regulatory water quality standards change for dissolved oxygen.

The water quality report gives little consideration to Budd Inlet water quality impacts from the existing lake or the managed lake option. Characterizing the existing or managed lake as resulting in 'no changes to water quality' is disingenuous. The existing condition is currently causing water quality violations that must be remedied. Any management action chosen should not continue or contribute to future water quality violations.

There is not enough information on the water quality impacts from the dual basin option to make any kind of an informed opinion. The presence of a large impoundment with limited circulation will likely have profound effects on Budd Inlet water quality.

Fish and Wildlife The DEIS generally does a good job analyzing impacts on fish and wildlife species. However, the document does not acknowledge that the managed lake alternative essentially maintains the status quo in regards to species abundance and health by only improving a few categories and only by minor amounts. This is not acceptable. We need to be aggressively pursuing the recovery and restoration of fish and wildlife to achieve Tribal, Federal, and State recovery goals. As clearly outlined in the document, the estuary restoration is the only alternative that allows for substantial beneficial improvements to fish and wildlife populations.

The current lake configuration promotes concentrations of harbor seals at the fish ladder on the fifth avenue dam. These seals are a significant source of predation on returning adult salmonids and a nuisance to Tribal fishermen in lower Budd Inlet. The Tribe is concerned that this predation choke point will continue for the managed lake option or be transferred to the tide gates of the dual basin option. The document includes a detailed definition of Nuisance Species. Harbor seals fit this definition. They should be added to the list, and salmonid predation and harassment analyzed for each of the options.

The DEIS states that the existing fish ladder is considered passable by the State of Washington and is not a barrier. While this may be true for adult salmonids, it is not for juveniles. The fish ladder represents a barrier to migration for multiple fish species. Impacts should be analyzed for the various scenarios, including the proposed tide gates of the dual basin option.
The DEIS includes no analysis of the fish entrapment problems presented by the dual basin option. Juvenile and adult fish will likely enter the reflecting basin when the tide gates are open. These fish will face unknown water quality issues and be a target for predation. This is akin to the existing West Bay trestle basin, where fish become entrapped and are subject to concentrated bird and mammal predation and harassment.

There is no discussion of the likelihood of the constructability of the proposed tide gates for the dual basin option. What is the likelihood that permitting agencies will allow for new structures that impede fish passage?

Sediment Management The presentation of information regarding sediment management is confusing. In part, this is due to the fact that it is divided up into different sections rather than be presented as a coherent whole. There is one section concerning the condition and quality of sediments in the existing lake basin and how they would be managed under different schemes. There is an entirely different section that addresses the sediments, present and future, that occur in the marine environment of Budd Inlet. While these are indeed two separate pieces of the puzzle, the information is not woven together in a coherent fashion that supports decision making. One is left with questions about what true options exist. Is sediment eligible for open water disposal or not? It depends according to this analysis. The DEIS generally does a good job of characterizing the erosional and depositional patterns of sediment movement within the basin. It makes clear that the best mitigation for these effects of returning the system to an estuary environment is a regular maintenance dredging program in West Bay to sustain the boating and shipping activities that are currently supported. Even though the current lake basin acts as a sediment trap, it too shall eventually fill and transfer sediment to the marine environment necessitating a dredging program. It only delays the inevitable of a dredging program, which is commonplace where marine infrastructure is located at the mouths of rivers. We would like to see a better analysis of the beneficial use of dredge materials. While there is contemplation of moving sediment material within the existing basin footprint, it may also be possible to use material north of the dam location along the shorelines that have been deprived of a sediment source for many decades. Specific work has been performed to evaluate shoreline restoration activities along the western shore of West Bay. Much remains to be learned about the quality of dredge spoils to be removed from the lake basin. There is reason to believe there may be both biological and chemical contamination in some of those sediments. The implications of invasive plants and animals are likely to have an effect on beneficial uses and disposal options.

Treaty Rights The Squaxin Island Tribe was signatory to the Treaty of Medicine Creek with the United States government in 1854 before Washington was a state. This treaty reserved rights by the Tribe, some of which have been litigated in U.S. v Washington and known as the Boldt decision. Federal agencies and arguably the state government are bound by a trust responsibility to uphold and protect these reserved rights. The Squaxin Island Tribe holds exclusive rights to Usual and Accustomed fishing stations in Budd Inlet. The DEIS should be revised to reflect this fact, which is inaccurately stated in the section on Fish and Wildlife. Permitting authorities, like the Army Corps of Engineers administering Section 404 of the Clean Water Act are required to incorporate paramount protection of Tribal treaty rights when they evaluate actions for permitting. Accordingly, no action can be undertaken that impacts
or undermines these protected rights. It is apparent that some of the contemplated actions are inconsistent with the protection of these reserved rights. The DEIS does not effectively convey the magnitude of treaty rights protection. It should do a better job of considering the consequences of the various alternatives when weighing the likelihood of successful implementation. Treaty rights will be a major influence on a preferred alternative and on pursuing the necessary funding for long-term implementation. Tribal staff have reviewed the document and will submit additional specific comments. The Squaxin Island Tribe looks forward to the completion of the EIS and the subsequent restoration of the Deschutes River estuary.

There is no discussion of ethno-historic and early historic subsurface cultural resources. From the work that has been conducted just north in the City of Olympia, we generally find cultural resources that are late pre-contact, ethno-historic, or early historic. In particular, the west bank of the Middle and Southern Basins study areas are highly likely to encounter ethno-historic and early historic cultural resources.

What is meant by a field inventory? This is not clearly defined in the report. While additional survey work is never a bad option, please understand that the Area of Potential Impact of this project could be different than the USACE jurisdictional APE. This means that if you are relying on the USACE's 106 process, parts of the project with ground disturbance may not be under the Section 106 Appendix Cumbrella and would still be under State SEPA and EO 05-05 (EO 21-02). Meaning that the state will need obtain an excavation permit.

More information and evidence is needed before a historic district can designated. While we do think the earthen dam under 5th avenue could be a historic property under Criteria A and B, more information is needed to for a historic district. Additionally, the designation of a 1950s historic district could minimize the known precontact sites and the two nearby historic districts (City of Olympia and the City of Tumwater).

From this department's history working and reviewing projects in Olympia, we are generally opposed to monitoring until some level of inventory has been done. Generally, when sites are identified during monitoring, it usually leads to project delays. Additionally, monitoring only really works in Olympia when an inventory has been conducted and an understanding of the where the fill layer vs the natural sediments are in the project area. The current report does not identify the fill vs. natural sediments.

There is a large assumption that all potential mitigation will be covered by the USACE's Section 106 process. Please note that the USACE Area of Potential Effect is jurisdictional in nature. Thus meaning, there is a possibility that some of the project may not be covered by the Section 106 process.

The Cultural Resource Department of the Squaxin Island Tribe (CRD) has had only one meeting with the DES that took place on 10/25/2019. Since then, the CRD has not been invited to any meetings regarding this EIs process or has had the DES reach out to us in regards to addresses sing our original concerns.

There is almost no discussion regarding the pre-contact period or the Ste-Chass.
Due to the very high likelihood that cultural resources (Archaeological Resources) are within the project area, why was an archaeological inventory never conducted?

While the report mentions the 1970s and 80s dredging, it briefly mentions the extensive dredging and filling activities that occurred in the 1890s. This dredging and filling covered up pre-contact, ethnohistoric, early historic sites under 3 to 9 feet of sediment in the Middle Basin, North Basin, and west bay areas. The development of the City of Olympia coincides with the burial of these cultural resources. It is critical that the report covers the historical development of the Cities of Olympia and Tumwater in detail in regards to the dredging and filling activities.

While that statement is generally accurate about the northern portion of the North Basin, also realize where the 1870s shore line connects to the modern shoreline or upper dry land area, the chances of encountering subsurface cultural resources are very high. This includes a little bit of heritage park, the western/south western half of Marathon Park, both shores of the middle and southern basins, and the western shore of the North Basin. Also due note, historically Bud Inlet and the Deschutes Estuary had extensive mudflats and the potential for buried intertidal cultural resources is high (fishing weirs etc.). Generally, the report should discuss this

The document does not provide sufficient documentation/evidence to support creation of a Deschutes Basin Project Historic District. Nor does the site form. The creation of a historic district does require extensive evidence and consultation with consulting parties. The Cultural Resource Department of the Squaxin Island Tribe was never consulted on this.

Why is there no discussion about the known pre-contact sites located within study area?

The Full restoration of the Deschutes Estuary alternative does not take into consideration the possible benefits it would have on the two existing historic districts (restoration of setting to the historic districts).

Generally, this area can almost be identified as a cultural landscape due to the complex pre-contact and historic period activities that occurred. However, the report does not look at the study area cumulatively in regards to all known cultural resources. The report instead focuses on the post 1940s development of Capitol Lake and some of the nearby historic structures.

While shovel probing, auger probing, etc. are valid methods for shallow cultural resource investigations, based off of the history of dredging and filling in Olympia, the best way to identify these sites is to conduct deep trenching investigations. From our experience working in the sediment regime in the City of Olympia, archaeological monitoring does not work that well and normally causes larger project delays without some prior level of cultural resource investigation.

The first part of this bullet point implies that the DAHP has the final say of recommendations in regards to cultural resources. This completely leaves out the Tribes.

Why is this discussion of cultural resource methods under mitigation measures for construction? Under NHPA and EO 05-05, the mitigation is either through an agreement document (MOA or Excavation
permits) that list stipulations after a cultural resource site has been found. These mitigation methods become agreed upon via consultation and are usually more in the realm of either data recovery or lab analysis. The cultural resource methods of investigation should be located in a methods discussion area and not directly tied with mitigation. This bullet point does imply that these methods will only be used after a cultural resource is identified after ground disturbance has occurred.

We are generally opposed to the development of MIDP (Monitoring and Inadvertent Discovery Plan) until after a cultural resource investigation is conducted. Generally, these sites are deeply buried (4 to 9 feet below the ground surface). This discussion should focus more on a discussion on cultural resource deep trench excavations with a flat bucket excavator conducting controlled excavation than mitigation and monitoring.

The document defines nuisance species as that 'may be native or nonnative and may cause ecological and economic harm'. Harbor seals, congregate at the bottom of the 5th avenue dam fish ladder. These seals harass, kill, and eat adult salmon returning to the Deschutes River. Harbor seals have been seen chasing salmon up through the fish ladder into Capitol Lake. This has a significant effect on salmonid survival. Harbor seals should be classified as a nuisance species and the proposed actions analyzed for effects on seals and subsequently salmon survival.

Are there AIS present locally that have not been found the project area? How likely are these to expand under different management scenarios?

The 50% threshold between Less-than-Significant and Significant seems arbitrary. For example, using this standard, a change in a metric may be statistically insignificant yet could lead to a change in the significance binning. There may be a good reason for doing this. If so, a better explanation would be helpful.

What about motorized boat access from Puget Sound?

The existing impoundment does not really meet the definition of a freshwater lake. Due to flows from the river and short water retention times, the Department of Ecology classifies it as a river and requires that the area meet river water quality standards. Additionally, at high tides, saltwater enters what is called Capitol Lake through the dam.

The hatchery release information is incorrect. Limited releases of coho into the upper watershed are continuing.

Should the lamprey be Pacific and not Western Brook?

Did you mean WRIA 13 and not 14?

Is 1 cfs measured the Tumwater gauge correct? This seems far too low.

Can you elaborate how channel migration cause sediment deposition in just the South Basin?
Does the 'Lake' meet required river standards for temperature? Juvenile salmon have been found in South Sound and Budd Inlet from further north than the Green River. Salmon from as far north as the Wallace River have been recorded. Personal communication, Scott Steltzner, Squaxin Island Tribe, Natural Resources Department.

As noted, the orcas typically seen in Budd Inlet are transient. Transients primarily eat mammals, not Chinook salmon, as stated.

It is noted that high productivity ‘likely enhances Capitol Lake as a producer of flying insects.’ What percent of this productivity comes from open water, and how much from the edge habitat? If there is a difference, how will this change for each scenario?

The Medicine Creek Treaty acknowledged certain rights held by the tribes. It did not establish them.

The U&A areas referenced from the Attorney General document on page 4-31 are inconsistent with the assigned U&A found on page 4-32. It should read ‘Squaxin Island Tribe …..appears to coincide with the project boundaries’. By Treaty, the Squaxin Island Tribe holds exclusive rights to Usual and Accustomed fishing stations in Budd Inlet.

It is incorrect to say that current migration is not precluded. The existing dam may be considered passable for adults; however, it is a severe impediment for juveniles.

If you are going to call out ESA-listed Chinook as benefiting, you should also add ESA-listed steelhead.

The estuary alternative would likely reduce seal predation on returning adults by removing a choke point. There may also be a benefit for juvenile salmonids as a wider opening would allow for a greater chance at dispersal from predators during out-migration. If you are going to call out ESA-listed Chinook as benefiting, you should also add ESA-listed steelhead.

Effects on Fish Movement from the Reflecting Pool Wall (5-39). The reflecting pool wall and associated tide gates will impede juvenile and adult movement and will likely increase predation. Incoming tides are likely to flush in juvenile and adult salmon that would then be trapped in the reflecting pool. These fish would be subject to predation from birds, fish, and mammals. Fish attempting to leave through the tide gates and into the estuary would be funneled into discrete areas and would be subject to further predation. It is not clear from the document if the installation of fish-blocking tide gates would even be allowed by permitting agencies.

Supporting Materials (if any): T-2_Steltzner.pdf