



# Capitol Lake – Deschutes Estuary Long-Term Management Project Draft EIS



## Draft Environmental Impact Statement Available for Public Review and Comment

Historically, what is now known as Capitol Lake was part of the Deschutes Estuary, where freshwater from the Deschutes River would mix with saltwater from Budd Inlet over expansive tideflats. The Deschutes Estuary has long-standing cultural and spiritual significance to local tribes, particularly the Squaxin Island Tribe.

Between 1949 and 1951, a dam was constructed at 5<sup>th</sup> Avenue, and without the tidal exchange, the area was transformed into a freshwater lake, fed primarily by the Deschutes River. The waterbody was renamed Capitol Lake. Capitol Lake is the 260-acre waterbody located on the Washington State Capitol Campus, adjacent to downtown Olympia, at the base of Puget Sound. Capitol Lake was designed as part of the Washington State Capitol Campus, and it quickly became an important visual and recreational resource to the community.

The newly formed Capitol Lake began to experience a range of environmental impairments after construction of the 5<sup>th</sup> Avenue Dam, eventually leading to community use restrictions that persist today. Neither short-term actions (e.g., dredging) nor construction of a long-term management alternative (Estuary, Hybrid, or Managed Lake) can be implemented until an Environmental Impact Statement (or EIS) is complete and a preferred alternative is selected.

The Department of Enterprise Services, at the direction of the state Legislature, is developing an EIS, which is an impartial, comprehensive discussion of the project goals, long-term management alternatives, potential significant impacts and benefits, and ways to avoid or minimize impacts.

The Draft EIS was published on June 30, 2021, and your feedback on the document will provide decision-makers with additional information that will be considered in the process to prepare the Final EIS and select a preferred alternative.

Governmental partners, agencies, tribes, and the community are encouraged to provide substantive comments on the Draft EIS between June 30 and August 13, 2021. Information on how to submit comments and engagement opportunities are discussed in this document and are available on the project website.

**Be sure to submit your comments by August 13, 2021, at <https://CapitolLakeDeschutesEstuaryEIS.org>.**

### How will comments be used?

Your comments will inform potential revisions to the Draft EIS and/or additional technical analysis. Responses to comments received will be provided in the Final EIS, expected to be issued in mid-2022, pending the number of comments received and additional analyses needed.

### What are substantive comments?

Comments that address a specific aspect of the project or the Draft EIS, rather than simply expressing a preference for or against the project alternatives, are most useful. Comments should be as specific as possible. It is also helpful if comments refer to chapters and pages of the Draft EIS.

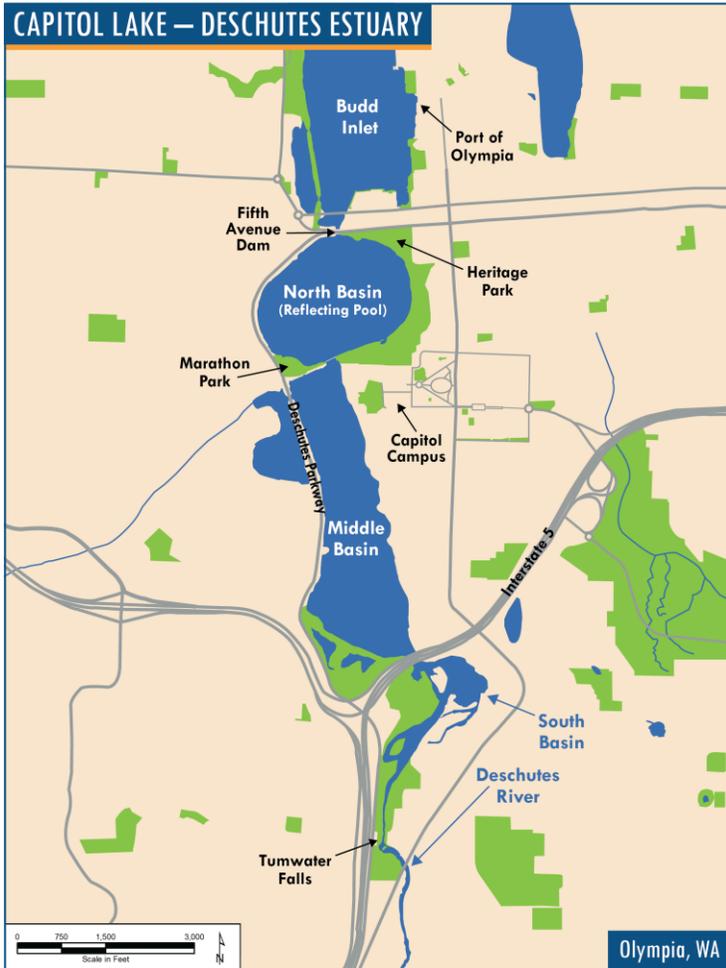
#### Learn More

<https://CapitolLakeDeschutesEstuaryEIS.org>

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## Project Background



An estimated 35,000 cubic yards of sediment are transported by the Deschutes River (and Percival Creek) into the Capitol Lake Basin each year, shallowing the lake and resulting in conditions that are visibly altered. Since construction of the 5<sup>th</sup> Avenue Dam in 1951, sediment accumulation has reached up to 13 feet thick in some areas. Water quality monitoring began in the 1970s in response to excessive growth of aquatic plants, dense algal mats, and reduced water clarity, which are caused by high nutrient levels in Capitol Lake. In 1985, the swimming beach at Capitol Lake was formally closed because of high bacteria levels, following years of intermittent closures due to water quality conditions. Beginning in the late 1980s, management strategies were implemented to address aquatic invasive species. There are now more than 15 different plant and animal aquatic invasive species in Capitol Lake. In 2009, the presence of the invasive New Zealand mudsnail resulted in official closure to all public uses.

Many of these environmental conditions persist today and active use of the waterbody continues to be restricted. The long-term management project would address the diminished beneficial uses of the waterbody, caused by accumulating sediment, historically poor water quality, algal blooms, and invasive plant and animal species.

## Engagement with Work Groups, Community Sounding Board, & State Government

Throughout the process to prepare this EIS, Enterprise Services has actively engaged the Squaxin Island Tribe and governmental and agency partners that have jurisdiction or regulatory authority within the project area. Representatives from these entities comprise the Executive, Technical, and Funding and Governance Work Groups, which were created for this project. These Work Groups met numerous times from mid-2018 through 2020 to provide feedback on a range of substantive project topics. Work Group engagement through the EIS process is discussed in more detail in the Draft EIS. Enterprise Services will also solicit input from the Work Groups on the analysis contained in the Draft EIS.

Enterprise Services also engaged with a Community Sounding Board, a group of people representing a wide range of interests who have been engaged to provide information, exchange ideas, and share individual or collective perspectives around substantive project topics.

## Partners

- City of Olympia
- City of Tumwater
- LOTT Clean Water Alliance
- Port of Olympia
- Squaxin Island Tribe
- Thurston County
- Washington Department of Natural Resources
- Washington State Department of Archaeology and Historic Preservation
- Washington State Department of Ecology
- Washington State Department of Fish and Wildlife

## Project Alternatives

There are two general approaches for management of the Capitol Lake – Deschutes Estuary: keep the 5<sup>th</sup> Avenue Dam in place and maintain a freshwater lake or remove the 5<sup>th</sup> Avenue Dam and reintroduce tidal estuarine conditions. Three long-term management alternatives emerge from the two approaches.



Visual simulation of the Managed Lake Alternative

### **Managed Lake Alternative**

The Managed Lake Alternative would retain the 5<sup>th</sup> Avenue Dam in its current configuration. The 5<sup>th</sup> Avenue Dam would be overhauled to significantly extend the life of the structure. The existing reflecting pool within the North Basin would be maintained and active recreational use would be restored there. Sediment would be managed through initial and recurring maintenance dredging in the North Basin only. Sediment from Deschutes River would continue to accumulate in the South Basin and vegetated freshwater wetlands would develop. Riparian and upland habitat would be constructed in the Middle Basin to promote ecological diversity and ultimately transition that area to wetlands as well. Boardwalks and a boat launch for hand-carried watercraft would be constructed for community use.



Visual simulation of the Estuary Alternative

### **Estuary Alternative**

Under the Estuary Alternative, the 5<sup>th</sup> Avenue Dam would be removed, and an approximately 500-foot-wide opening would be established in its place. This would reintroduce tidal flow to the Capitol Lake Basin, returning the area to estuarine conditions where saltwater from Budd Inlet would mix with freshwater from the Deschutes River. Sediment would be managed through initial dredging in the Capitol Lake Basin and recurring maintenance dredging within the West Bay of Budd Inlet. In the Middle and South Basins, constructed habitat would promote ecological diversity, although tideflats would be the predominant habitat type. Boardwalks and a boat launch for hand-carried watercraft would be constructed for community use.



Visual simulation of the Hybrid Alternative

### **Hybrid Alternative**

Under the Hybrid Alternative, the 5<sup>th</sup> Avenue Dam would be removed, and an approximately 500-foot-wide opening would be established in its place. Tidal hydrology would be returned to the western portion of the North Basin and to the Middle and South Basins. Within the North Basin, a retaining wall would be constructed to create an approximately 45-acre reflecting pool adjacent to Heritage Park. Sediment would be managed through initial dredging in the Capitol Lake Basin and recurring maintenance dredging within West Bay. In the Middle and South Basins, constructed habitat areas would promote ecological diversity, although tideflats would be the predominant habitat type. Boardwalks and a boat launch for hand-carried watercraft would be constructed for community use.

### **No Action Alternative**

The No Action Alternative is intended to represent the most likely future expected if a long-term management project is not implemented. The No Action Alternative does not meet Capitol Lake – Deschutes Estuary Long-Term Management Project goals, but it is a required component of an EIS and provides a baseline to compare potential impacts (and benefits) of the action alternatives.

Formal public swimming facilities are not included for any alternatives. However, development of formal swimming facilities in the future is not precluded.

## Assessing Environmental Impacts and Benefits

The project alternatives were assessed to determine how they would change (impact or improve) the natural and built environment of the project area. The EIS provides a technical analysis of 14 disciplines to evaluate how they would be impacted or improved by implementation of the long-term management alternatives.

These disciplines were determined and affirmed based on early scoping work performed by Enterprise Services prior to development of the Draft EIS. In this scoping period, 935 individual comments in 271 comment submissions were received via the web-based comment form, email, oral comments at scoping meetings, and hard copy comment forms or letters.

The elements identified for inclusion in the Draft EIS were based on review of the scoping comments. A consultant team was retained to perform these analyses; their work is summarized in the Draft EIS and provided in full as attachments to the Draft EIS.

## Next Steps

The Preferred Alternative will be identified in the Final EIS. The Final EIS is expected to be issued in mid-2022, pending review of comments received on the Draft EIS and additional analyses that may need to be completed in response to public comment.

## Technical Analyses

- Hydrodynamics & Sediment Transport
- Navigation
- Water Quality
- Aquatic Invasive Species
- Fish and Wildlife
- Wetlands
- Air Quality & Odor
- Land Use, Shorelines, & Recreation
- Cultural Resources
- Visual Resources
- Environmental Health
- Transportation
- Public Services & Utilities
- Economics

Enterprise Services will then seek to complete design of the Preferred Alternative. Enterprise Services will also seek the federal, state, and local environmental permits required for project construction. A 3- to 5-year duration is assumed for design and permitting for a project of this magnitude. Funding for design, permitting, and construction has not yet been appropriated by the Washington State Legislature. Based on the targeted completion date for the Final EIS and the legislative calendar, this work could begin as early as 2023, if funding is available.

Construction would begin following design and permitting, and once funding is secured. If there are no delays in this process, project construction could begin as early as 2028. Project construction could last 4 to 8 years, depending on the alternative. View the Draft EIS for more detail on this and the approach to evaluate potential shared funding and governance for the Preferred Alternative.

