



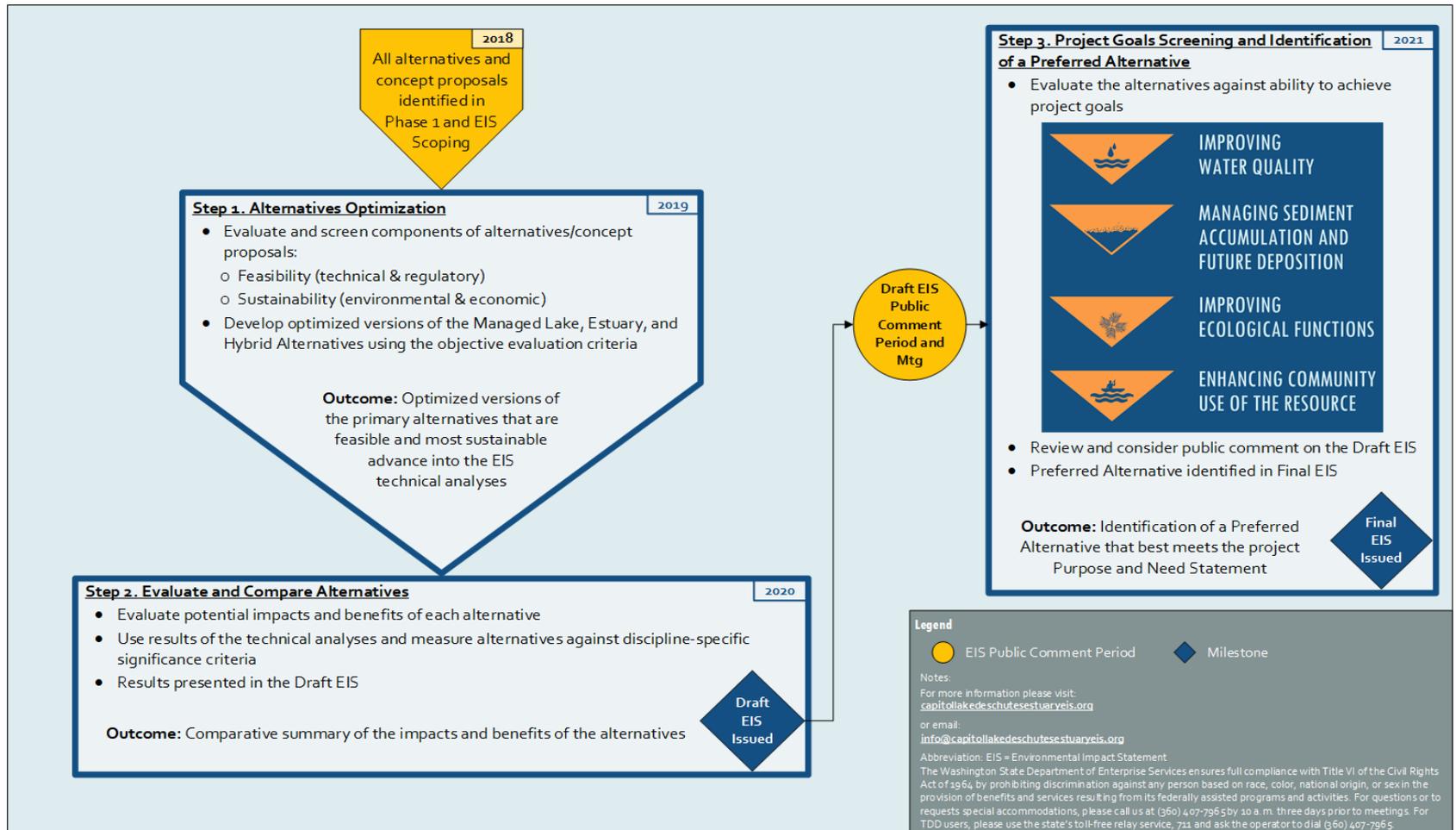
CAPITOL LAKE — DESCHUTES ESTUARY

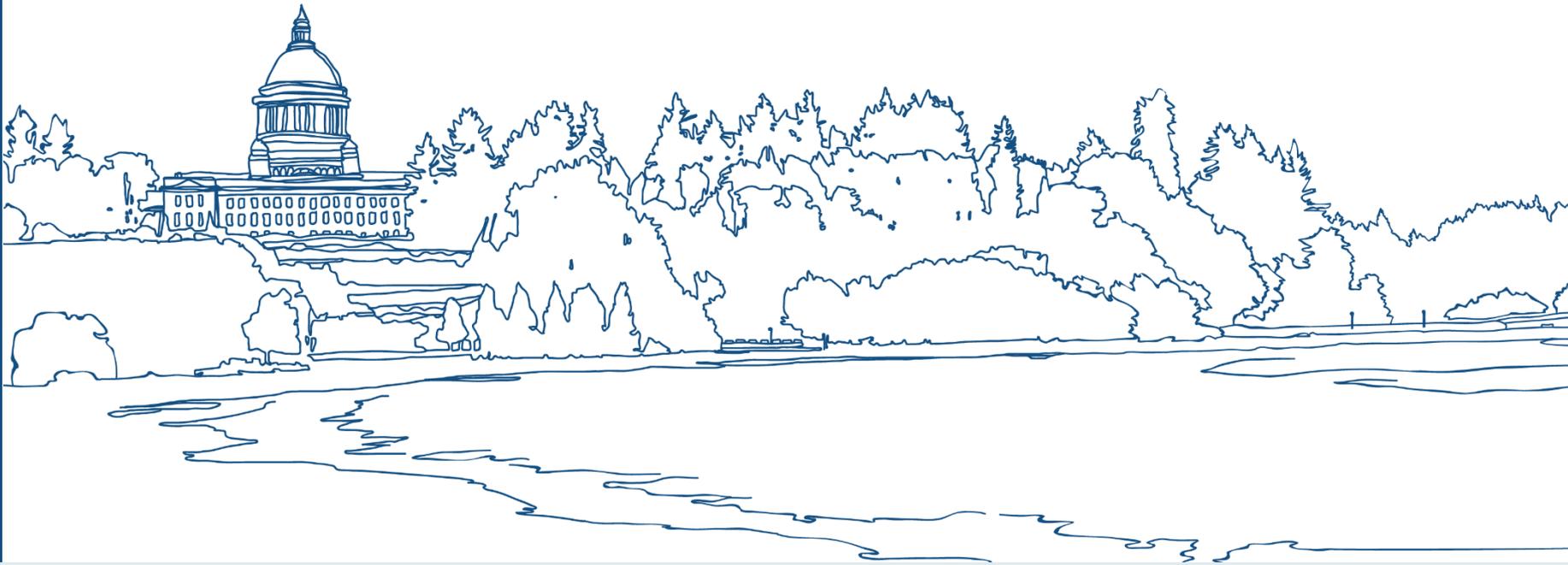
Long-Term Management Project Environmental Impact Statement

COMMUNITY SOUNDING BOARD

June 2019

Measurable Evaluation Process





CAPITOL LAKE — DESCHUTES ESTUARY

Long-Term Management Project Environmental Impact Statement

Water Quality Methodology

- ✦ Goal is to compare water quality conditions under the alternatives
- ✦ Existing data available in Capitol Lake, Budd Inlet, and Deschutes River
- ✦ Collection of new water quality samples in Capitol Lake
- ✦ Data will be used to develop a plan for lake management
 - Evaluate different approaches to achieving water quality and recreation goals
- ✦ Data will support the understanding of estuary water quality

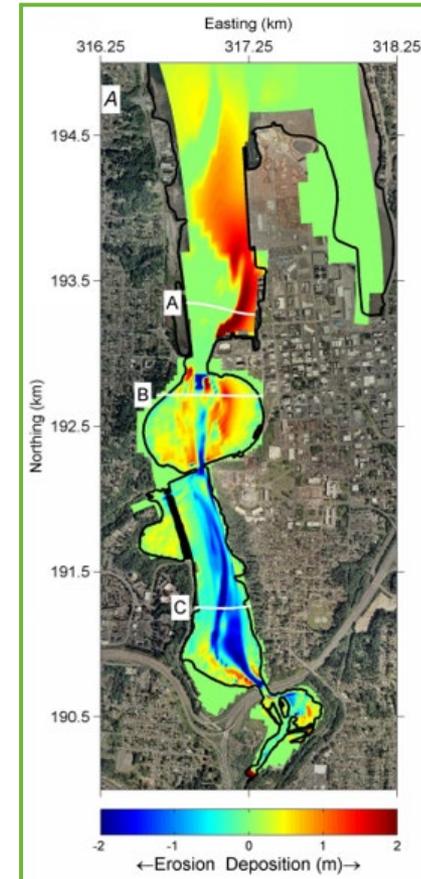
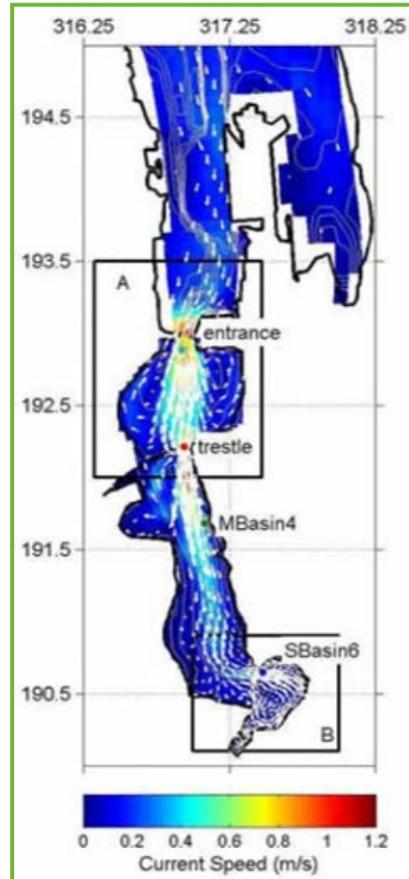
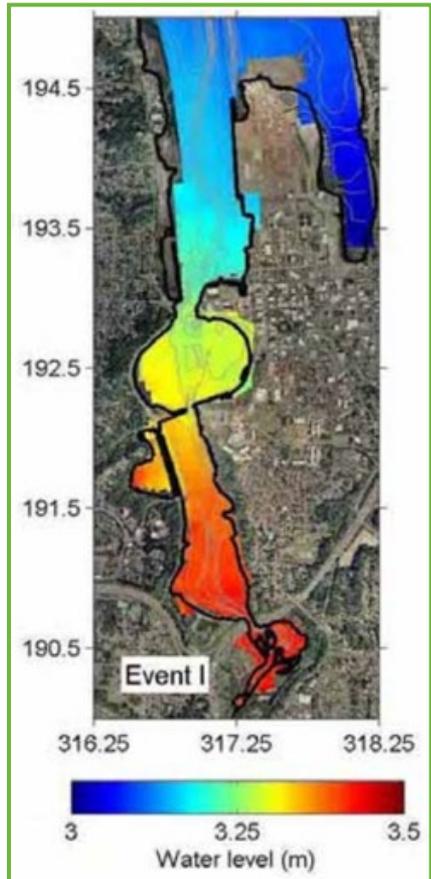


Hydrodynamics and Sediment Transport Modeling Methodology

- ✦ Goal is to compare alternatives through numerical modeling to understand:
 - Maximum water surface elevations
 - Maximum water velocity
 - Areas of erosion
 - Areas of sediment deposition
- ✦ Previous studies will also be reviewed
- ✦ Project-specific challenges to numerical modeling
 - Different sizes of sediment
 - Uncertainty in long-term morphology
 - Difference in the alternatives
- ✦ Model extends from Tumwater Falls to outer Budd Inlet



Hydrodynamics and Sediment Transport Modeling (Examples from USGS 2006)



Economic Analysis Overview

- ✦ Goal is to understand potential economic effects of the alternatives compared to the No Action Alternative
- ✦ Economic analysis is not required in a SEPA EIS
- ✦ These four categories will be analyzed
 - Potential impacts to economic activity downstream
 - Potential impacts to downtown Olympia
 - Potential impacts to recreation activity
 - Potential impacts to ecosystem services
- ✦ The analysis will be informed by work done in 2019



Wetlands and Vegetation Methodology

- ✦ Analysis of existing conditions
 - Relies on existing data (GIS/mapping, literature, wetland inventories, etc.)
 - Supplement existing data with site reconnaissance
 - Categorize/classify wetlands and vegetation
 - Existing conditions map



Analysis of Impacts – Wetland and Vegetation

✧ Wetlands

- Calculate change in area of wetland, mudflat, and deep water habitat and relative change of functions

✧ Vegetation

- Change in area of each vegetation type will be compared for each alternative relative to existing conditions

✧ Analysis will be informed by:

- Topographic and bathymetry data
- Conceptual design and modeling of the alternatives
- Tidal range information and assumptions



Fish and Wildlife Methodology

- ✧ Analysis will consider groups/species that occur in the study area
 - Anadromous fish
 - Freshwater fish – pisciverous
 - Freshwater fish – non-pisciverous
 - Marine fish – forage fish
 - Marine fish – bottomfish
 - Shellfish
 - Shorebirds/wading birds
 - Diving/dabbling ducks
 - Insectivorous birds
 - Raptors
 - Passerine birds
 - Bats
 - Freshwater aquatic mammals
 - Marine mammals
- ✧ Special attention on federally listed species and critical habitats
 - Puget Sound Chinook salmon
 - Puget Sound steelhead
 - Southern resident orca whale
 - Critical habitat



Analysis of Impacts – Fish and Wildlife

- ✧ Potential impacts and benefits will be described based on:
 - Type, extent, and magnitude of habitat change
 - Correlating changes to the species groups and species that occupy or are associated with each habitat type
- ✧ Analysis will be informed by:
 - Hydrologic and sediment transport modeling
 - Specific design components associated with each alternative
 - Habitat zone maps



Land Use, Shoreline Use, and Recreation Methodology

✦ Analysis of existing conditions

- Existing and planned future land uses
 - Assessor's data, GIS data, local comprehensive plans, local planning documents, local programs
- Parks and recreation facilities and activities
 - Local park planning documents, local comprehensive plans, master plans, GIS data
- Coordination with Community Sounding Board at June meeting
- Recreational user survey – summer and fall 2019



Analysis of Impacts – Land Use, Shoreline Use, and Recreation

✧ Land and Shoreline Use

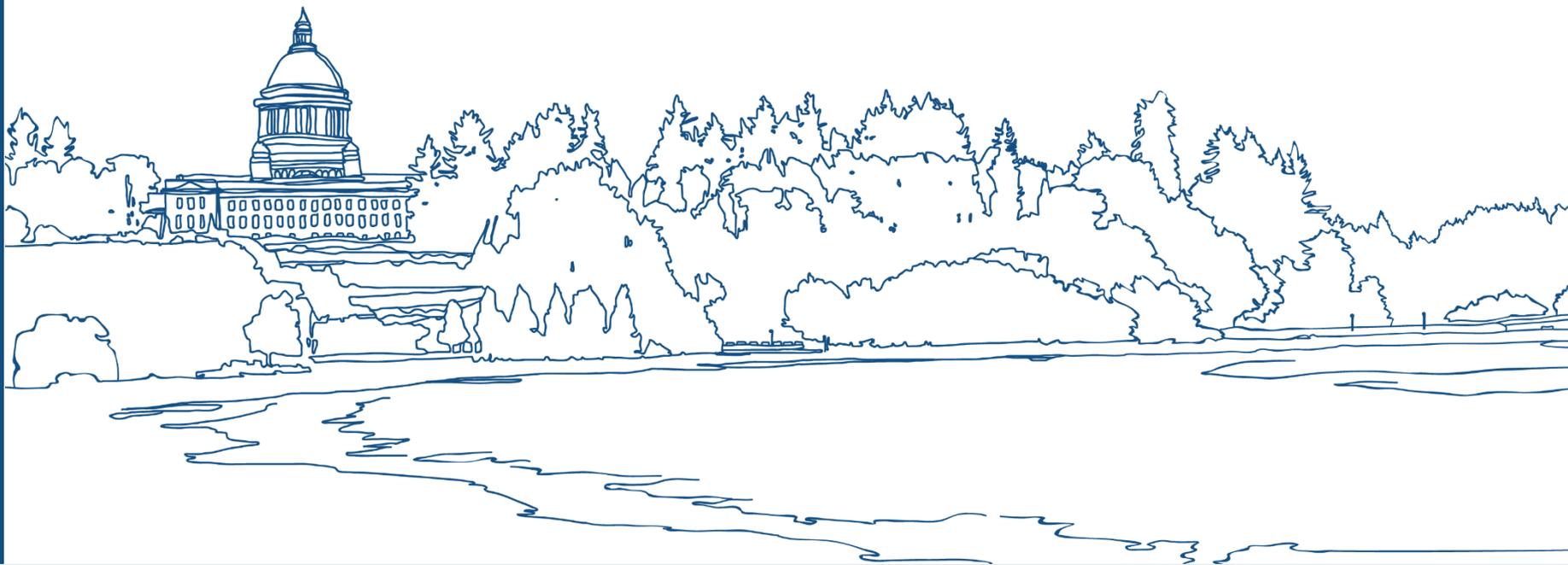
- Evaluate whether the project is expected to result in major changes to the types or numbers of users and whether such changes are likely to affect existing land use patterns
- Evaluate for consistency with adopted land and shoreline use policies and plans

✧ Recreation

- Impacts will be described in terms of changes to the types of recreation available, and to the quality of the recreational experience
- Potential effects on recreational uses would be categorized uses that would be improved, impeded, or remain unaffected by each alternative



Questions?



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Discussion Groups

1. How are you/your family using Capitol Lake and the surrounding parks (from Tumwater Fills to Priest Point Park)?
2. For those of you that used Capitol Lake in the past (before uses were restricted on the lake), how did you/your family use the lake then?
3. If the currently restricted water-based uses were restored under a long-term management option, would this change your use of waterbody?
4. If Capitol Lake was restored to an estuary or hybrid , shorelines would change (incl. vegetation, distance from trails to water, etc.). How would these changes affect your use of the project area?

