CAPITOL LAKE – DESCHUTES ESTUARY
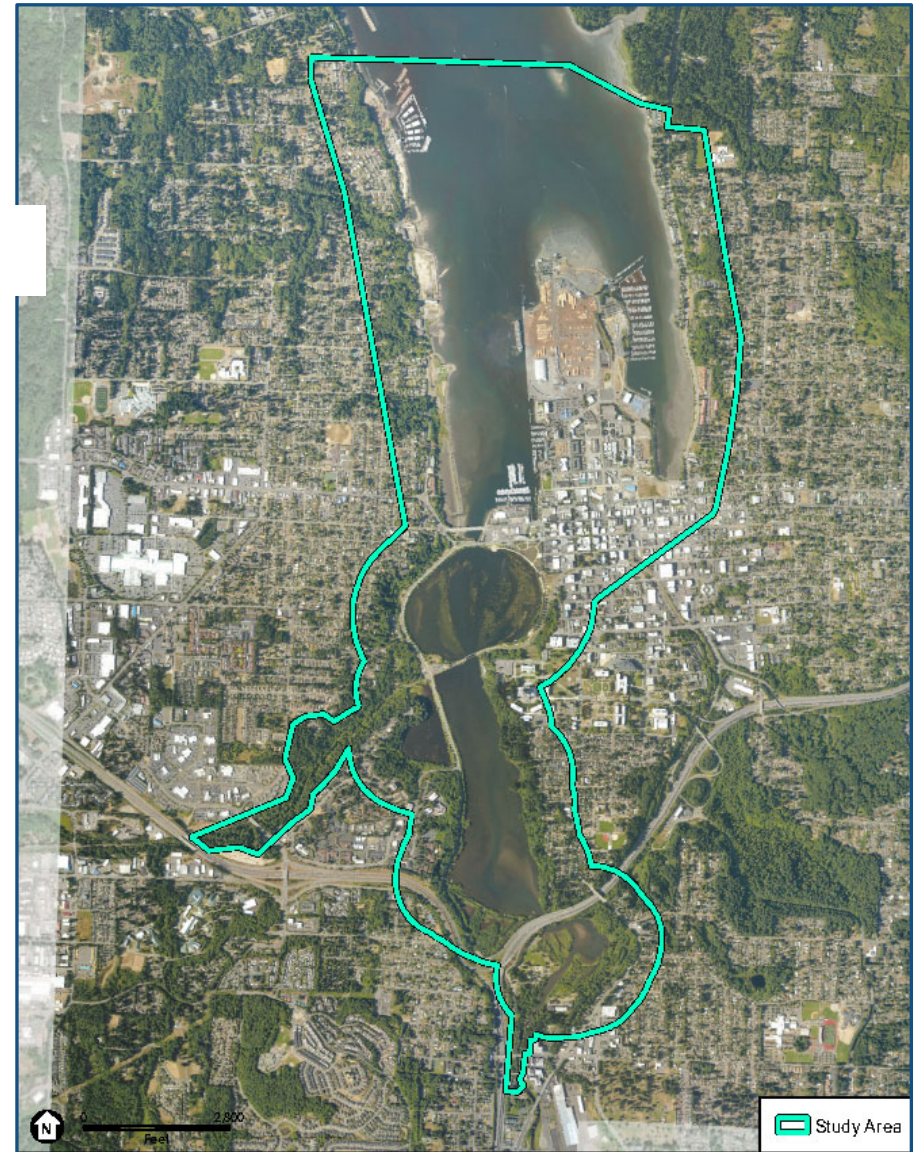
Long-Term Management Project Environmental Impact Statement

TECHNICAL WORK GROUP

November 2019

Aquatic Invasive Species

- Proposed study area
  - Extends approximately 100 feet from the water's edge
  - Extends from Boston Harbor to Tumwater Falls
  - Includes Percival Creek up to Highway 101

CAPITOL LAKE — DESCHUTES ESTUARY
Long-Term Management Project Environmental Impact Statement

Aquatic Invasive Species – Methodology

- Analysis of existing conditions relies on existing data:
  - Site-specific data:
    - Aquatic plant survey/control reports/maps
    - NZMS surveys/control reports/maps
    - Noxious weed, WDFW, marine, and other AIS databases
  - Species-specific literature:
    - Distribution, transport, habitat, growth and impact characteristics
    - Control method effectiveness

- Existing conditions map

CAPITOL LAKE – DESCHUTES ESTUARY
Long-Term Management Project Environmental Impact Statement

Aquatic Invasive Species – Analysis of Impacts

- Aquatic ecosystem and recreation impacts and benefits
- Potential impacts and benefits will be described based on:
  - Estimated change in abundance and aerial coverage for each species
  - Relative potential for transport and establishment within and outside study area
  - Control priority, eradication potential, and potential management options for each species
  - Relative effectiveness and non-target species impacts of control measures
  - Potential for short- and long-term recreational use restrictions
- Analysis will be informed by:
  - Hydrologic and sediment transport modeling
  - Specific design components associated with each alternative
  - Habitat and control zone maps

CAPITOL LAKE — DESCHUTES ESTUARY
Long-Term Management Project Environmental Impact Statement

Historic and Cultural Resources – Resource Definition

- **Archaeological resources** (encompass features and deposits located on or below the ground surface that are evidence of prior human occupation or use in a particular areas – can be precontact or historic).

- **Historic resources** (elements of the built environment, such as buildings, structures, or human-made objects or landscapes)

- **Traditional Cultural Properties** (sites or locations considered culturally important to the history of a group of people, or are locations where culturally important events or practices are known to have occurred).

CAPITOL LAKE – DESCHUTES ESTUARY
Long-Term Management Project Environmental Impact Statement

Historic and Cultural Resources — Information Sources

* **Primary Sources**
  * Meeting with Tribes, DAHP, and other stakeholders

* **Desktop Sources**
  * Compile base data of previous surveys, inventories, and historic records

* **Fieldwork**
  * Windshield survey and walkthrough to assess existing conditions
  * Historic resource surveys to prepare historic property inventory (HPI) of resources, including Capitol Lake, the 5th Avenue Bridge, the Capitol Lake Dam, and railroad bridge trestle

CAPITOL LAKE — DESCHUTES ESTUARY
Long-Term Management Project Environmental Impact Statement

Archaeological Resources – Approach

- **Process**
  - Gather data on recorded sites
  - Identify areas where potential sites may be located
  - Identify areas of previous fill - fill modeling based on existing geotech data, previous work by Squaxin Island Tribe/City of Olympia, historic shoreline maps
  - Determine impacts by evaluating if construction and operations will affect resources listed or eligible for listing in the National Register or Historic Places or are protected under Washington State law

CAPITOL LAKE – DESCHUTES ESTUARY
Long-Term Management Project Environmental Impact Statement

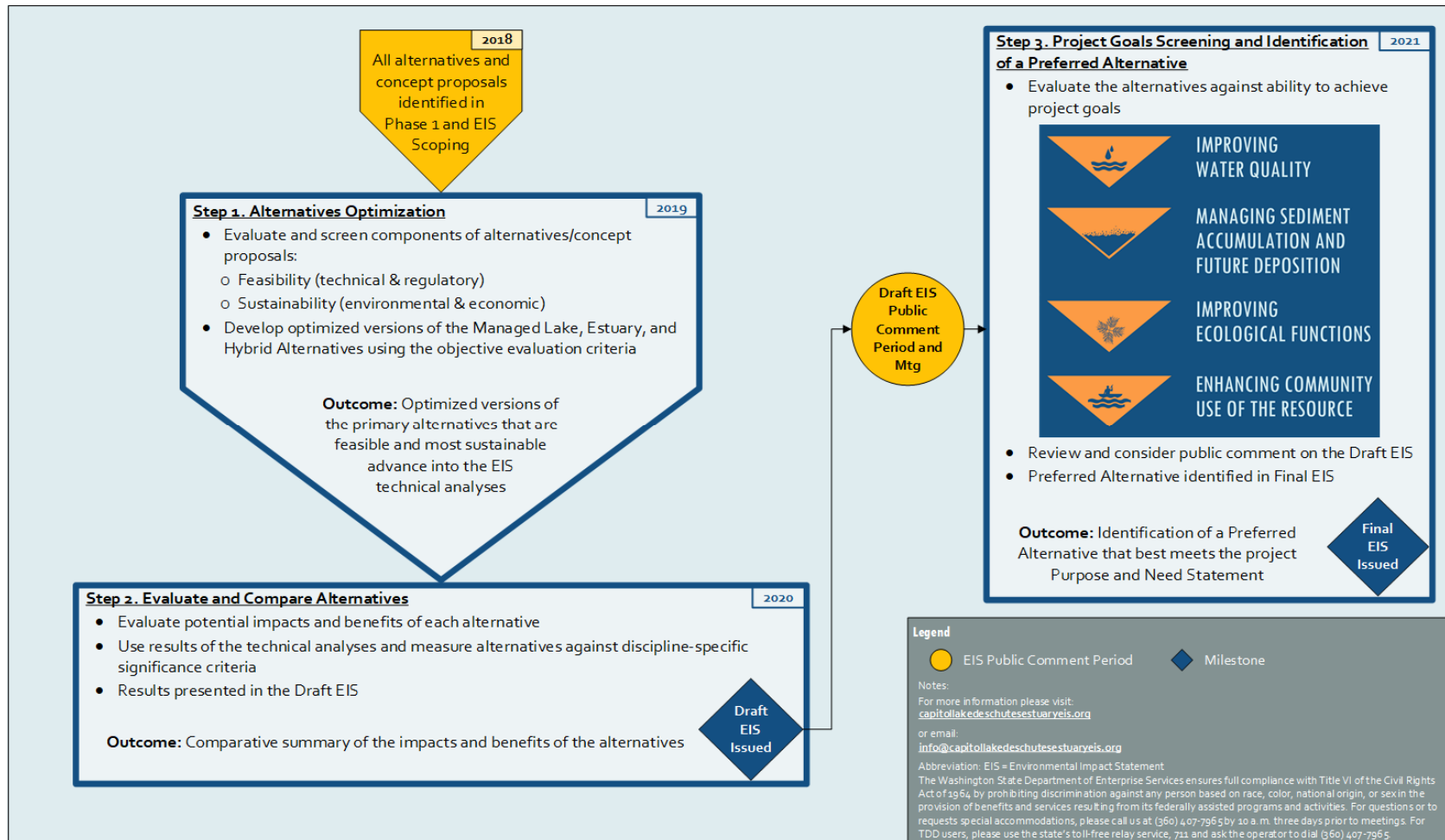# Historic Resources (Built Environment) – Approach

Process

- Develop historic context, evaluate connections, relationships
- Provide recommendations for eligibility using this data
- Conduct analysis of impacts

Key Elements

- Deschutes Estuary
  - Modified natural feature
  - Relationship with Olympia and Tumwater
- Capitol Lake
  - Designed landscape, 1937 Session Laws
  - Relationship with Olympia and Tumwater
  - Relationship with Wilder & White and the Olmsted Brothers
- Railroads
  - Trestles, track segments/causeway
- City of Olympia
  - Historic districts; listed and inventoried properties
- City of Tumwater
  - Historic district; listed and inventoried properties
- West Capitol Campus
  - Historic district, listed and inventoried properties

CAPITOL LAKE – DESCHUTES ESTUARY
Long-Term Management Project Environmental Impact Statement

Measurable Evaluation Process

2018
All alternatives and concept proposals identified in Phase 1 and EIS Scoping

Step 1. Alternatives Optimization   2019
- Evaluate and screen components of alternatives/concept proposals:
  o Feasibility (technical & regulatory)
  o Sustainability (environmental & economic)
- Develop optimized versions of the Managed Lake, Estuary, and Hybrid Alternatives using the objective evaluation criteria

Outcome: Optimized versions of the primary alternatives that are feasible and most sustainable advance into the EIS technical analyses

Step 2. Evaluate and Compare Alternatives   2020
- Evaluate potential impacts and benefits of each alternative
- Use results of the technical analyses and measure alternatives against discipline-specific significance criteria
- Results presented in the Draft EIS

Outcome: Comparative summary of the impacts and benefits of the alternatives

Draft EIS Issued

Draft EIS Public Comment Period and Mtg

Step 3. Project Goals Screening and Identification of a Preferred Alternative   2021
- Evaluate the alternatives against ability to achieve project goals

IMPROVING WATER QUALITY

MANAGING SEDIMENT ACCUMULATION AND FUTURE DEPOSITION

IMPROVING ECOLOGICAL FUNCTIONS

ENHANCING COMMUNITY USE OF THE RESOURCE

- Review and consider public comment on the Draft EIS
- Preferred Alternative identified in Final EIS

Outcome: Identification of a Preferred Alternative that best meets the project Purpose and Need Statement

Final EIS Issued

Legend

⬤ EIS Public Comment Period   ◆ Milestone

Notes:
For more information please visit:
capitollakedeschutesestuaryeis.org

or email:
info@capitollakedeschutesestuaryeis.org

Abbreviation: EIS = Environmental Impact Statement
The Washington State Department of Enterprise Services ensures full compliance with Title VI of the Civil Rights Act of 1964 by prohibiting discrimination against any person based on race, color, national origin, or sex in the provision of benefits and services resulting from its federally assisted programs and activities. For questions or to requests special accommodations, please call us at (360) 407-7965 by 10 a.m. three days prior to meetings. For TDD users, please use the state's toll-free relay service, 711 and ask the operator to dial (360) 407-7965.
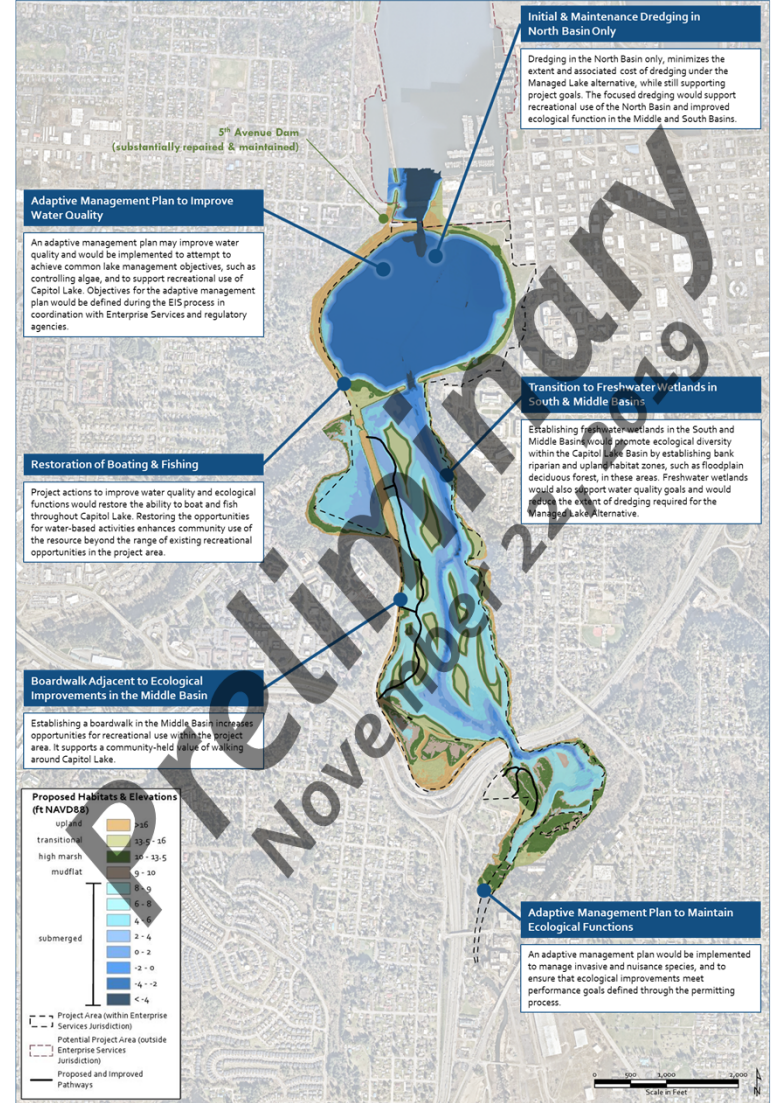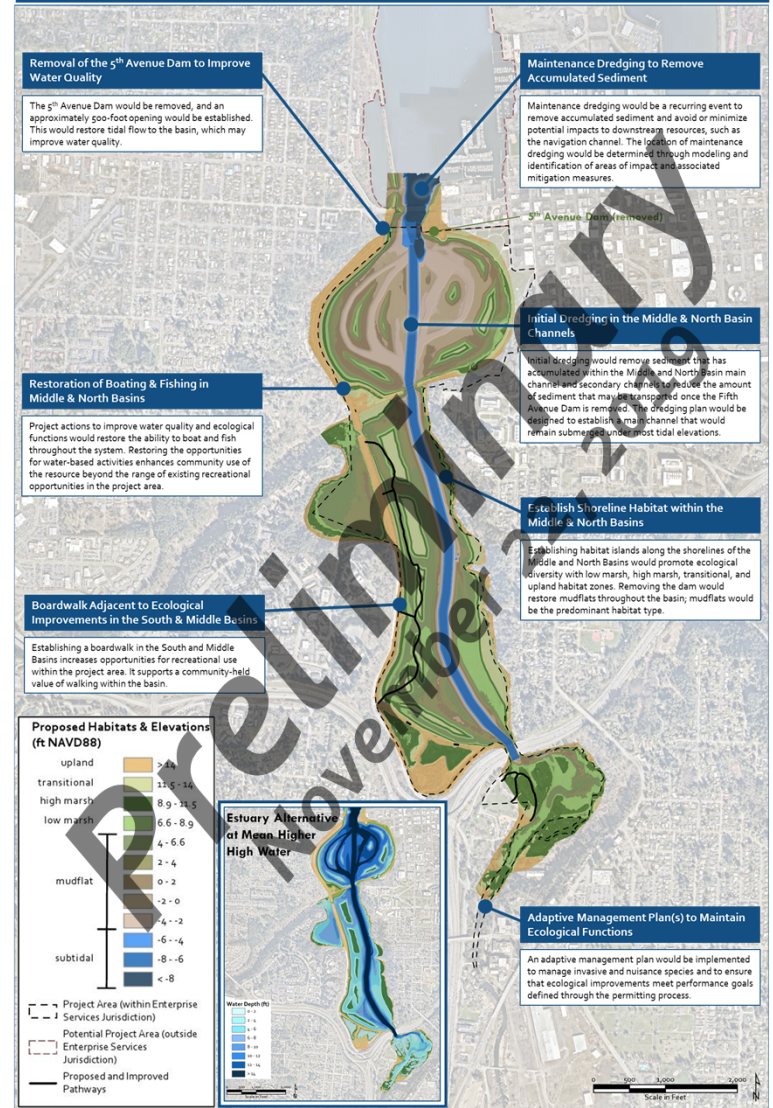
CAPITOL LAKE — DESCHUTES ESTUARY
Long-Term Management Project Environmental Impact Statement

DRAFT – Optimized Alternatives

⚡ Managed Lake Alternative
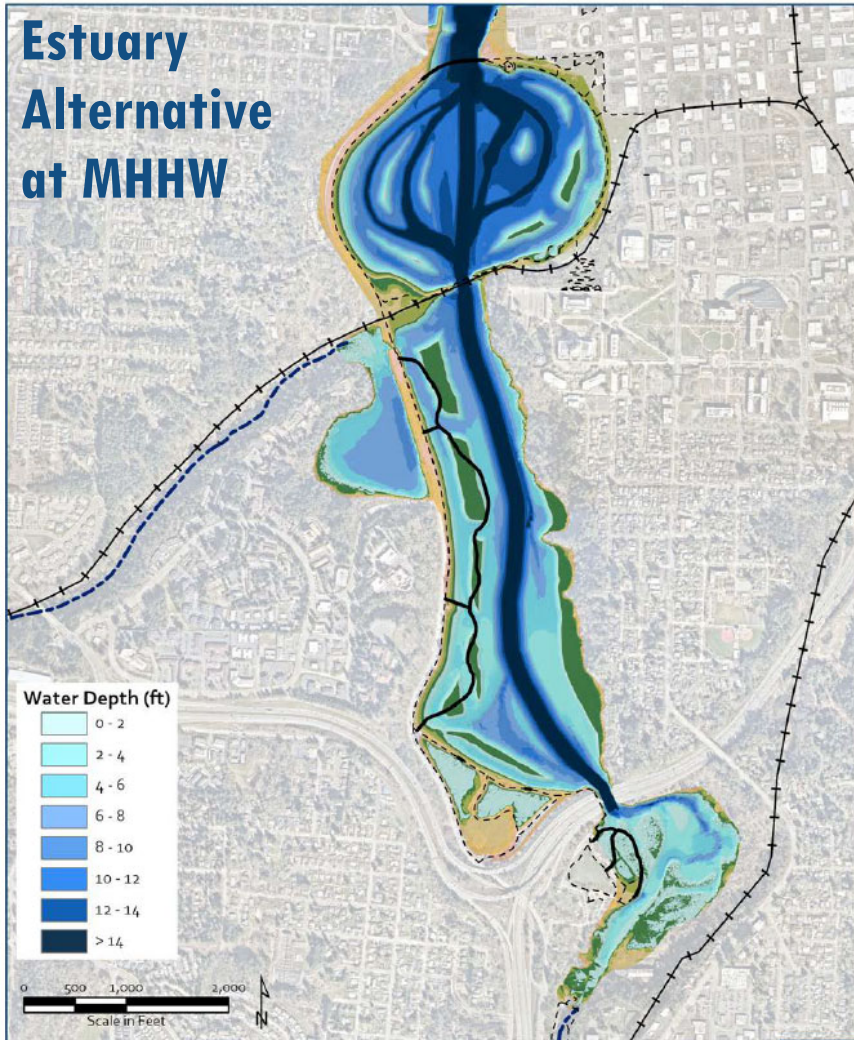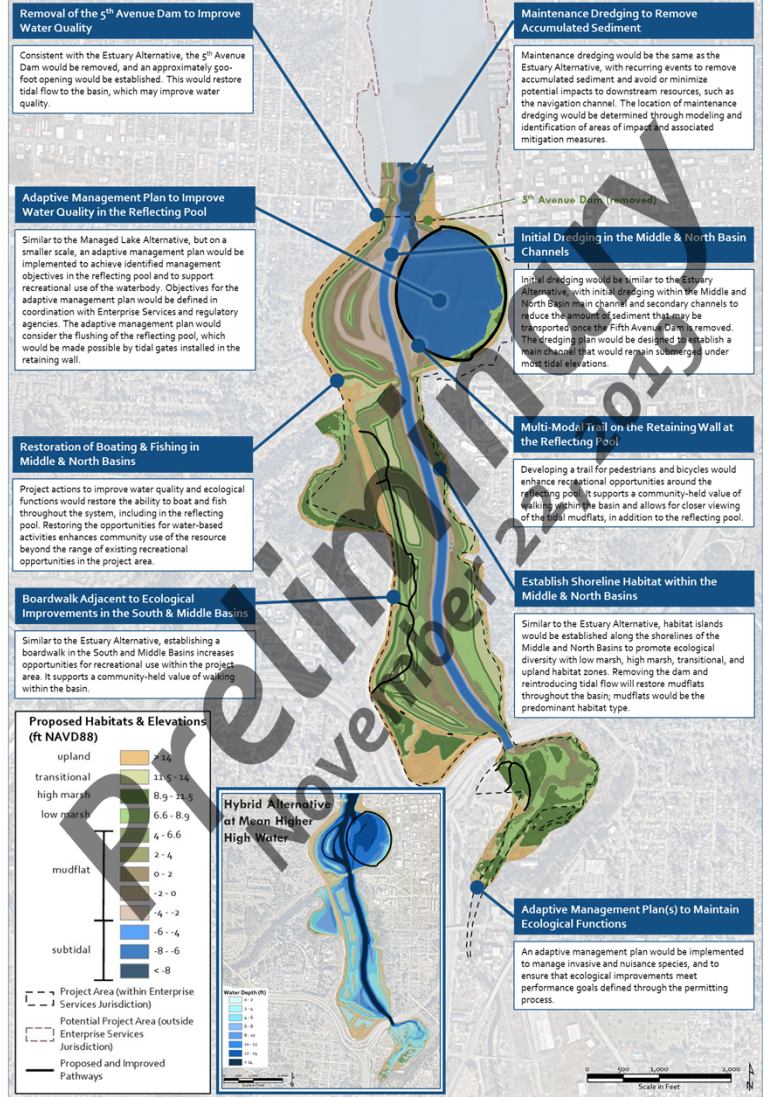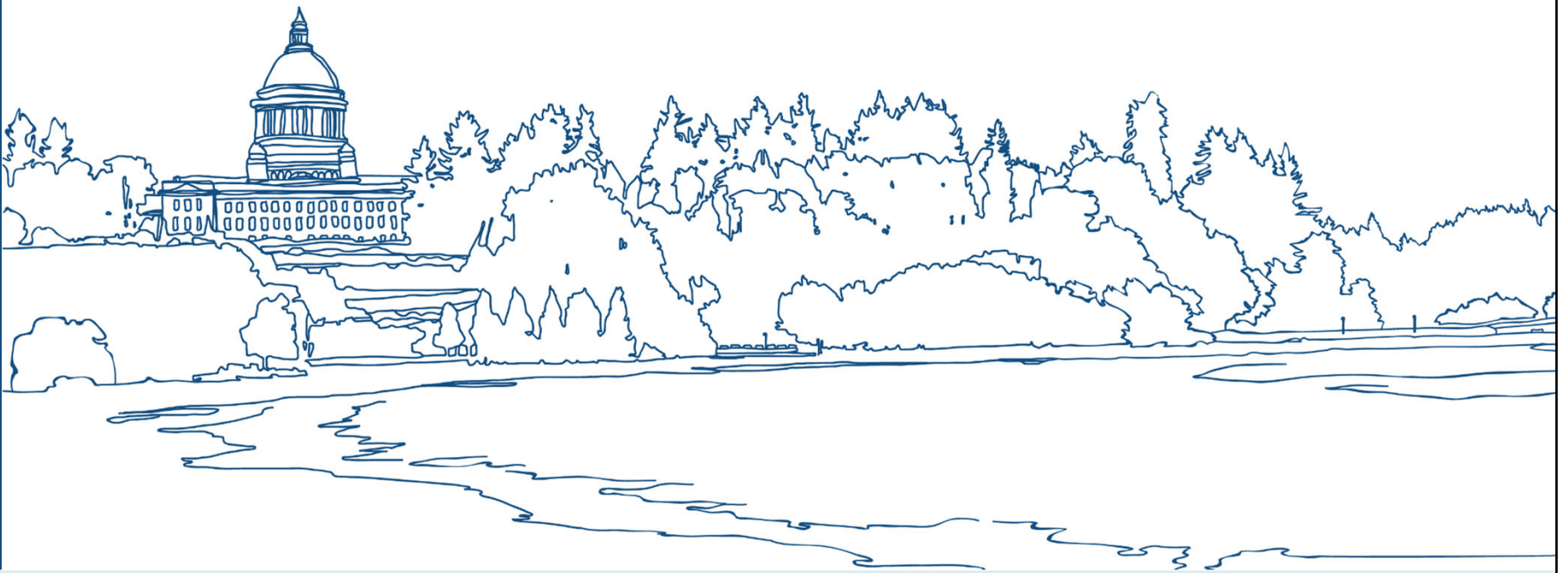
DRAFT – Optimized Alternatives

✈ Estuary Alternative

Estuary Alternative at MHHW

Estuary Alternative at MLLW

Water Depth (ft)
- 0 - 2
- 2 - 4
- 4 - 6
- 6 - 8
- 8 - 10
- 10 - 12
- 12 - 14
- > 14

CAPITOL LAKE — DESCHUTES ESTUARY
Long-Term Management Project Environmental Impact Statement

DRAFT –
Optimized Alternatives

- Hybrid Alternative

Questions?

CAPITOL LAKE — DESCHUTES ESTUARY
Long-Term Management Project Environmental Impact Statement