

# Capitol Lake/Lower Deschutes Watershed Long-Term Management Planning Overview of Phase 1 and Next Steps

February 28, 2017

Joint Study Session with City of Olympia and City of Tumwater



### **Presentation Overview**

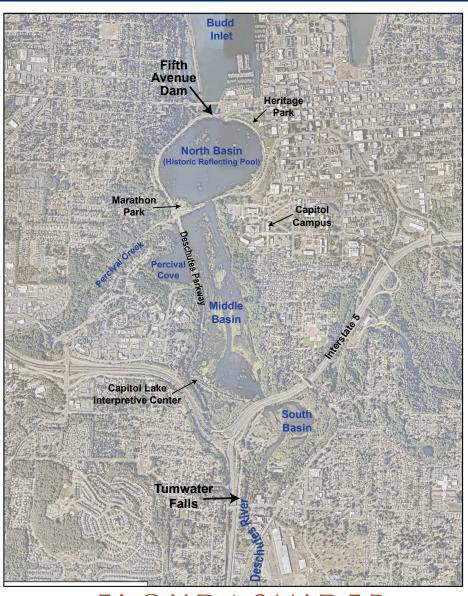
- Phases of Long-Term Management Planning
- Overview and Outcomes for Phase 1
- Broad Support and Need for Phase 2
- Next Steps and Environmental Impact Statement (EIS)







# Long-Term Management Planning for Capitol Lake/Lower Deschutes Watershed

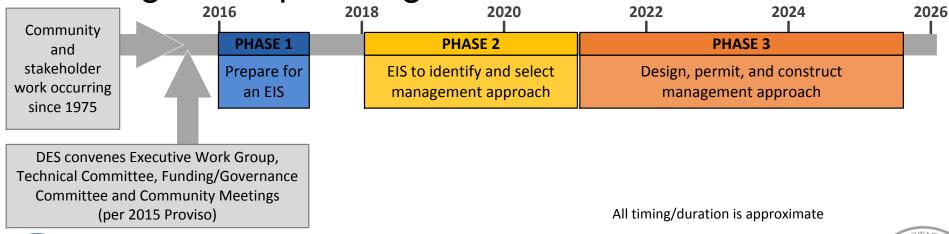






# Approach to Long-Term Management Planning

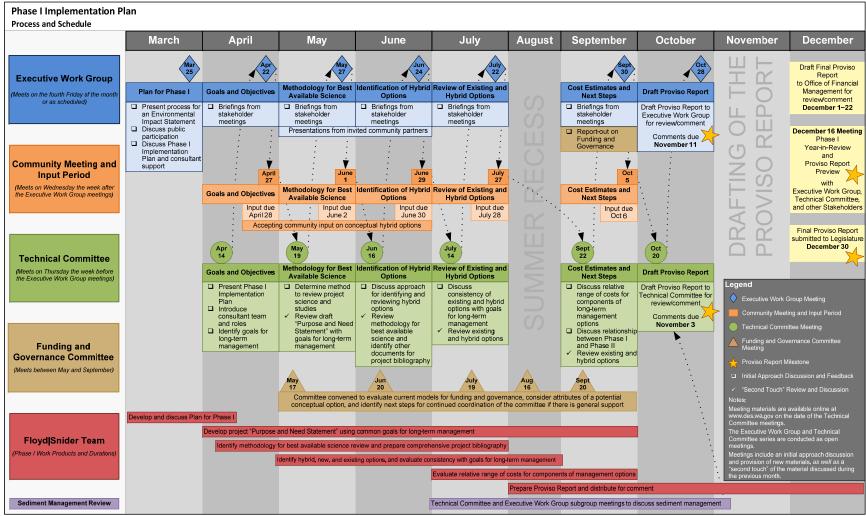
- Proviso in the 2015–17 capital budget to "make tangible progress on reaching broad agreement on a long-term plan" for the Capitol Lake/Lower Deschutes Watershed
- DES developed a phased approach to long-term management planning







# Phase 1 Process and Implementation (expedited 7-month process)



This is an adaptive process and has changed from the April 2016 plan as a result of stakeholder feedback, community engagement, and other conditions.







# Stakeholders in the Phase 1 Process (and participating members of the Cities)



FLOYDISNIDER

strategy • science • engineering

### Funding and Governance Committee

Squaxin Island Tribe
City of Olympia
City of Tumwater
Thurston County
Port of Olympia
Dept of Natural Resources

# Executive Work Group

Squaxin Island Tribe City of Olympia City of Tumwater Thurston County Port of Olympia

## Technical Committee

Squaxin Island Tribe
City of Olympia
City of Tumwater
Thurston County
Port of Olympia

Dept of Natural Resources Dept of Ecology Dept of Fish and Wildlife

Sediment Management (panel meeting and evaluation included in the Phase 1 Report)



strategy • science • engineering

Community



## Stakeholders in the Phase 1 Process (and participating members of the Cities)



FLOYDISNIDFR

strategy - science - engineering

### **Funding and Governance** Committee

Squaxin Island Tribe

City of Olympia: Steve Hall/Rich Hoey

City of Tumwater: John Doan

**Thurston County** Port of Olympia

**Dept of Natural Resources** 

### **Executive Work** Group

Squaxin Island Tribe

City of Olympia: Mayor Cheryl Selby

and Councilmember Julie Hankins

City of Tumwater: Mayor Pete Kmet and Mayor Pro Tem Neil McClanahan

**Thurston County** Port of Olympia

### **Technical** Committee

Squaxin Island Tribe

City of Olympia: Andy Haub

City of Tumwater: Dan Smith

**Thurston County** Port of Olympia

**Dept of Natural Resources** 

Dept of Ecology

Dept of Fish and Wildlife

**Sediment Management** (panel meeting and evaluation included in the Phase 1 Report)



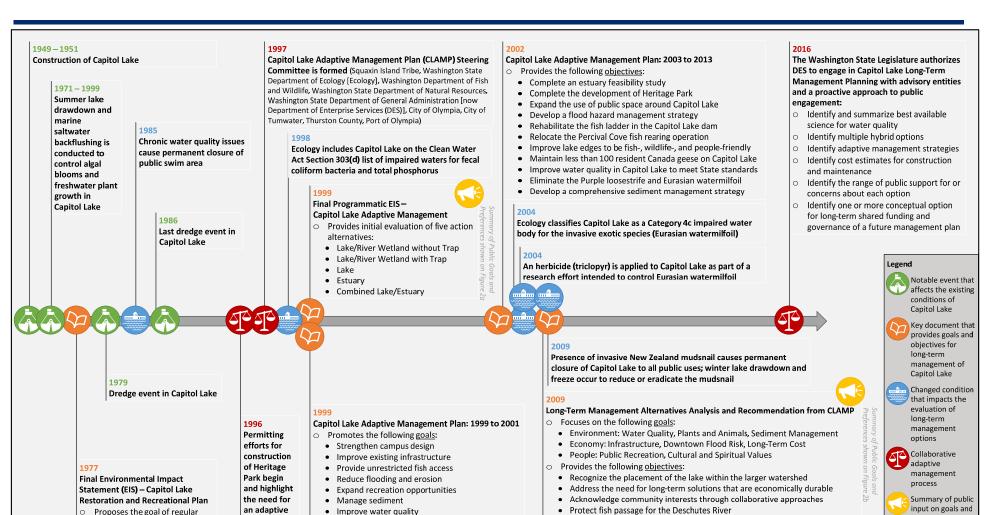


strategy - science - engineering

Community



# Capitol Lake/Lower Deschutes Watershed Timeline of Events







· Improve fish and wildlife habitat

· Reduce invasive species

• Develop a cost-sharing structure between stakeholders and beneficiaries

• Develop a sediment management strategy for the lake basin

management

process

maintenance dredging in the

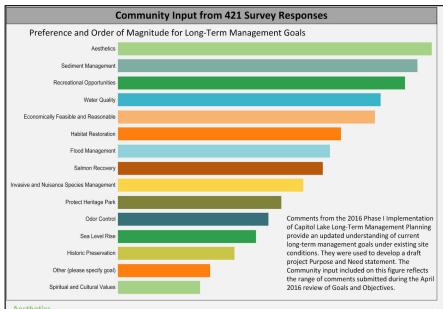
South and Middle Basins



preferences in

associated

# Goals and Objectives: Stakeholder Input Received during Phase 1



- o "The lake has been a beautiful asset and icon of our City, we should do everything possible to preserve it!"
- "When I select Aesthetics, please note that I find a natural estuary to be aesthetically pleasing."

- o "Capitol Lake has been getting worse and worse for over 30 years now. And sediment management will continue to become more difficult and costly with the addition of the zebra snail (the contaminated sediment can't go just anywhere!! We don't want to spread the problem)."
- o "Lower Budd Inlet would be ruined if the dam/bridge were to be removed. Currently it allows for great boating and other recreational water uses, and is a terrific stage for all of our local events at Percival Landing."

- o "Maintain as existing and develop to allow more community use. Row boats, kayaks, small sailing vessels, paddle boards etc., with the required shoreline infrastructure are part of my vision with the NYC Central Park lake, Green Lake (Seattle), and others as models."
- o "A combination of restoration of habitat and estuary with preservation of public use, walking trails, park, etc."

- o "The importance of the estuary for improved water quality, as explained by the Department of Ecology, should be a priority for the on-going discussions."
- o "I cannot stress how important proper dredging is (to early 1900's datum), and how that will enhance water

### **Economically Feasible and Reasonable**

- o "Sustainable long-term in terms of maintenance. This specifically relates to economically reasonable."
- o "I believe creating a mud flat will decrease, not increase, the number of visitors to the downtown area."
- "I would love to see Olympia follow in Vancouver, Canada's footsteps, and make a living estuary part of the draw to our town, incorporating good ecological management, beauty, and recreational opportunities into a tourist draw that will bring money and acclaim to our community."

### **Habitat Restoration**

- o "Habitat restoration = functional estuary. Return the estuary to its original, natural state (or as close as possible) so that it can perform all the other roles on the list."
- o "There are hundreds, if not thousands of these trees in the north basin, the middle basin at the Capitol Lake Interpretive Center, and especially the south basin, which is dominated by alder forests standing in fresh water. The best wildlife habitat at Tumwater Historical Park is freshwater-inundated forest at the north end of the park. These habitats come alive every spring with nesting neotropical migrant bird species hunting, catching, and eating freshwater aquatic insects that hatch out of the lake, and feeding them to their young."

- o "Please remember what Capitol Lake was built for flood control and as a reflective pond for the State Capitol."
- o "I would like to further support the estuary option, this is our only option for habitat restoration and flood prevention."

- "The importance of estuarine rearing habitat for non-natal salmonids from other Puget Sound rivers using the estuary. The
- importance of rearing habitat for natal salmonids (Percival Creek and Deschutes naturalized/hatchery populations) using the estuary." "One must remember there was no natural Salmon run in the Deschutes river because of the Falls."

### **Invasive and Nuisance Species Management**

o "Restoration of the estuary with natural daily tidal exchanges will remove or eliminate the invasive species."

- o "Maintain Capitol Lake and Heritage Park as attractive places for people to exercise and enjoy being outside right in downtown
- o "I would like to see the idea of expanding the park around the downtown Olympian estuary."

- o "Capitol Lake smells. Capitol Lake is a waste dump. It is awful. We need salt water influx every day to keep it clean."
- "The DES goals need to include the long-term management of this beautiful Capitol Lake and not allow it to become a smelly mudflat that no one could enjoy."

### Sea Level Rise

o "The regulating dam has been used by DES many times to prevent flooding when there are 'king tides' and heavy run off conditions. Without the regulating dam, the two would meet and inundate downtown. This will only get worse with sea level rise."

o "Our capital and the grounds that surround it are unique and very special. The dome is the 4th highest masonic dome in the world. The surrounding grounds were designed by the leading landscape designer of all time. The lake was specifically included in the landscape design much like the ponds and lakes found in the landscape design at our Nation's capital."

### **Spiritual and Cultural Values**

o "We as a society need to return to our roots as it concerns our lands, waters, and air, for without them we are a doomed species and so are many other species! It's not our right to let precious ecosystems, such as Capitol Lake and the connected area's she flows through to become non-usable due to Man's interference and non-caring attitudes for profit and other worldly endeavors that put our ecosystems at risk!"







## Goals and Objectives: Purpose and Need

### **Draft Final Purpose and Need Statement**

Capitol Lake/Lower Deschutes Watershed Long-Term Management Project

The purpose of the Capitol Lake/Lower Deschutes Watershed Long-Term Management Project is to identify and implement an environmentally and economically sustainable watershed approach that improves water quality, and manages existing sediment accumulation and future deposition. The project is also needed to improve the impaired ecological functions within the existing Capitol Lake basin and adjacent watershed. These efforts would restore and enhance community use of the resource.

The Deschutes estuary has long-standing history with active use and significance to the Squaxin Island Tribe. 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 area use and conditions changed after construction of Capitol Lake in 1951. The Capitol Lake area now supports community events such as the annual Capital Lakefair, organized athletic events, and various other gatherings. The trail system and nearby parks provide continued passive recreational opportunities that maintain the lake's edge as an important recreational center and valued amenity in the south Puget Sound area. With its central location, the area holds historical and personal value for many people.

Although the shoreline remains vibrant, active use of the waterbody has been restricted for more than 30 years due to the degraded water quality and ecological functions. An estimated 35,000 cubic yards of sediment accumulates annually within the lake basin, resulting in increasingly shallow conditions. Capitol Lake was closed to swimming in 1985 due to high bacteria levels. Water draw- down and back-flushing to control algal blooms and freshwater plant growth, due to excessive nutrient loads, continued annually until 1999 and caused temporary impacts to other recreational uses, such as boating and fishing. The presence of invasive species resulted in official closure to all public uses in 2009. Active use of the waterbody continues to be restricted today.

Water quality must be improved to meet federal law and state water quality standards, and to restore aquatic life and recreational uses, which are protected under these regulations. Restoring ecosystem functions would be supported by improved water quality, enhanced fish and wildlife habitat, and management or eradication of invasive species. The project would also include elements to manage sediment within the Capitol Lake/Lower Deschutes Watershed and in adjacent Budd Inlet. These collaborative efforts between the Washington State Department of Enterprise Services and other stakeholders would be compatible with other watershed-wide restoration and improvement plans, and would be consistent with the on-going state-led initiative to restore the Puget Sound. Once completed, the project will have a beneficial effect on the ecosystem service value, economic value and community value of the resource.

- Based on stakeholderidentified common goals
- Not biased toward any long-term management option
- Provides a screening tool for the EIS in Phase 2



# Compilation of Documents Related to Capitol Lake/Lower Deschutes Watershed

- Consistent with state guidance on preparing a bibliography prior to taking significant agency action
- Includes studies ranging from the 1970s through 2015, documenting water quality impacts and other conditions of the resource (sediment management, recreation, invasive species, etc.)

Project Bibliography for the Capitol Lake/Lower Deschutes Watershed
Long-Term Management Project

### DOCUMENT TITLE, AUTHOR, AND DATE OF PUBLICATION

History of Marine Transportation (Chronology)

Author Unknown, Date Unknown

**Nutria Control at Capitol Lake: Frequently Asked Questions** 

Washington State Department of Enterprise Services (not dated)

**Budd Inlet Cleanup Sites (Informational Handout)** 

Toxics Cleanup Program/Southwest Regional Office, July 2016

Significant Findings since the CLAMP Recommendation of 2009

Capitol Lake Improvement and Protection Association, March 2016

Capital Lake Weed Management Services, 2015 Annual Report

Northwest Aquatic Management, March 2016

Capitol Lake and Puget Sound: An Analysis of the Use and Misuse of the Budd Inlet Model

David H. Milne, PhD, February 2016

Capitol Lake and Puget Sound. An Analysis of the Use and Misuse of the Budd Inlet Model.

David H. Milne, PhD. February 2016

Aquatic Invasive Species: Fact Sheet for Potamopyrgus antipodarum (New Zealand mudsnail)

Washington State Department of Fish & Wildlife, 2016

Deschutes River, Percival Creek, and Budd Inlet Tributaries Temperature, Fecal Coliform Bacteria,

Dissolved Oxygen, pH, and Fine Sediment Total Maximum Daily Load: Water Quality Improvement

Report and Implementation Plan - Final

Washington State Department of Ecology, December 2015

Publication No. 15-10-012

Focus on Scientific Process: Undestanding the scientific process used for the Budd Inlet, Capitol Lake, and Deschutes River water cleanup plan

Washington State Department of Ecology, September 2015

Deschutes River, Capitol Lake, and Budd Inlet Total Maximum Daily Load Study: Supplemental Modeling

Washington State Department of Ecology, September 2015

Publication No. 15-03-002

Deschutes River Coho Salmon Biological Recovery Plan

Confluence Environmental (for the Squaxin Island Tribe Natural Resources Department), September 2015

Thurston County Water Resources Annual Report 2014

Thurston County, August 2015

Capitol Lake: The Healthiest Lake in Thurston County.

David H. Milne, PhD, June 2015

Approximately 200 documents total



# Technical Committee Review and Identification of Best Available Science

Technical Documents Related to Water Quality and Habitat in the Capitol Lake Basin

|  |   | MEETS<br>WAC<br>CRITERIA | PEER   |
|--|---|--------------------------|--------|
| DOCUMENT   | BRIEF SUMMARY   | FOR BAS                  | REVIEW |
| Deschutes River, Percival Creek, and Budd Inlet Tributaries Temperature, Fecal Coliform Bacteria, Dissolved Oxygen, pH, and Fine Sediment Total Maximum Daily Load: Water Quality Improvement Report and Implementation Plan - Final Washington State Department of Ecology, December 2015 Publication No. 15-10-012 | Builds upon the 2012 study involving data collection that characterized the sources and processes relevant to the existing impairments, and developed analytical tools to simulate the potential benefits of various management strategies. Provides an approach to controlling pollution in the Deschutes River, Percival Creek, and Budd Inlet, and includes detailed steps to meet those goals.  | Yes                      | Yes    |
| Deschutes River, Capitol Lake, and Budd Inlet Total Maximum Daily Load Study: Supplemental Modeling Scenarios Washington State Department of Ecology, September 2015 Publication No. 15-03-002   | Summarizes supplemental modeling analyses for Capitol Lake and Budd Inlet. States that the Capitol Lake dam causes the largest negative impact on dissolved oxygen of any activity evaluated due to the dam's combined effects of changing circulation as well as nitrogen and carbon loads. Concludes that adding advanced nitrogen removal treatment to three small wastewater treatment plants discharging to Budd Inlet, shifting the LOTT outfall north, and reducing recreational or marina boat discharges would not improve oxygen conditions significantly. Concludes that reducing Deschutes River temperature, conducting alum treatments in the lake, eliminating stormwater sources, and dredging the lake to a nominal 13 feet average depth would not improve water quality in Capitol Lake significantly. | Yes                      | Yes    |

Approximately 50 documents total

- Focuses on water quality and habitat, consistent with proviso directive
- Reviewed by Technical Committee using Phase 1 stakeholder-identified method from the Washington Administrative Code (WAC 365-195-905)



## Long-Term Management Options: **Options Existing from CLAMP Process**

Please review figure notes for relevant information

### **Managed Lake**

Similar to existing conditions, with additional management strategies for sediment accumulation. Maintains the historic reflecting pool and the Capitol Lake Basin, Fish and wildlife habitat would not substantially change compared to existing conditions, but a freshwater wetland habitat would develop in the

### Additional components:

- Retains existing Fifth Avenue dam and tide gate in its existing configuration
- · Maintenance dredging within the North and Middle Basins, and selective dredging within the South Basin
- Maintains existing recreational opportunities and potentially restores a hoat harbor



### **Hybrid Option: Dual Basin**

Adaptively Manages the basin by establishing a tidal estuary in the western portion of the north basin, and throughout the middle and south basins. Maintains a 39-acre saltwater Reflecting Pool at the north end of the basin through construction of a sheet pile retaining wall. Improves Fish and Wildlife Habitat and Ecosystem Functions by establishing estuary marsh plants throughout the basin and creating intertidal habitat along Deschutes Parkway.

### Additional components:

- Construction of a 500-foot opening at the current Fifth Avenue dam
- · Initial dredging in Capitol Lake and maintenance dredging in Budd Inlet
- Installation of elevated boardwalks within estuary and on top of retaining wall



Extent of surface water shown is based on the conclusion from technical studies completed during the Deschutes Estuary

Feasibility Study.

Existing Option: Deschutes Estuary Feasibility Study 2008

### **Restored Estuary**

Restores full tidal hydrology throughout the existing Capitol Lake Basin to restore estuarine conditions, and allows saltwater exchange within the newly formed intertidal mudflats of the North and Middle Basins. Removes the existing reflecting pool, but natural reflection of the Capitol would occur at 75 percent of tidal elevations. Restores fish and wildlife habitat through the establishment of estuary marsh plants and improves ecological functions that would support native invertebrate, bird, and fish populations.

### Additional components:

- Construction of a 500-ft opening at the current Fifth Avenue dam
- Initial dredging in Capitol Lake before estuary is restored
- Installation of elevated boardwalks within estuary



Extent of surface water shown is based on the conclusion from technical studies completed during the Deschutes Estuary Feasibility Study.

Existing Option: Deschutes Estuary Feasibility Study 2008

Existing Option: CLAMP 2009

- 1. These three options and the information included on this figure are a result of the Capitol Lake Adaptive Management Plan (CLAMP) process and have been through preliminary technical analysis and review from CLAMP participants and the consultant team. While some of the CLAMP information may represent conditions or findings that have changed, it serves as the initial design and feasibility review and still represents a basis of work that could be built upon.

  All long-term management options will require additional design and technical evaluation. That work will be completed as part of a future Environmental Impact Statement in Phase II for the options that are selected for review in that process





# Long-Term Management Options: Alternate Hybrid Option from Phase 1

Please review figure notes for relevant information.

### Hybrid Option: Dual Estuary/Lake Idea (DELI)

Adaptively Manages the basin by establishing a tidal estuary in the western portion of the north basin, and throughout the middle and south basins. Maintains a 48-acre freshwater Reflecting Pool at the north end of the basin through construction of a rock containment wall. Improves Fish and Wildlife Habitat and Ecosystem Functions through natural reestablishment of saltwater plants within the estuary and management of invasive species.

### **Additional components:**

- Construction of a 500-foot opening beneath a reconstructed Fifth Avenue
- Installation of sediment trap with pumping station and annual maintenance dredging
- Construction of new public swimming area and pedestrian walkway on top of containment

### LEGEND Estuary = OHWM Outlets - Tidal = Dredge = Sediment

The primary difference between DELI Hybrid Option and the Dual Basin Option is related to the reflecting pool. The reflecting pool in the DELI Hybrid Option is approximately

9 acres larger and freshwater input is proposed instead of saltwater.

Alternate Ontion: Community Member 2016

- 1. This option and the information included on this figure represents a concept from a Community Member. The Department of Enterprise Services cannot confirm its accuracy, feasibility, or validity because these proposed long-term management options have not been through preliminary technical analysis, design, or feasibility review.
- All long-term management options will require additional design and technical evaluation. That work will be completed as part of a future Environmental Impact Statement in Phase II for the options that are selected for review in that process.
- Several variations to the DELI hybrid option have also been proposed, including design variations such as maintaining the existing Fifth Avenue Dam to avoid infrastructure costs, increasing the size of the reflecting pool, or constructing additional pedestrian walkways in the north basin. Several additional new concepts were proposed by the Community during Phase 1; these new concepts are described in Section 3.3.2 and are included as part of Appendix C to this Phase 1 Report.







## Long-Term Management Options: New Concepts from Phase 1

Please review figure notes for relevant information.

### Managed Lake Sub-Option: Managed North Basin Lake/Wetland

Similar to existing conditions but with additional management strategies for sediment accumulation that focus dredging in the North Basin, and provide dredging of the river channel in the Middle Basin, and in Budd Inlet. Maintains the historic reflecting pool and the North Basin Lake. Fish and Wildlife would not substantially change compared to existing conditions, but a freshwater emergent wetland would naturally develop in the South Basin and along the shoreline of the Middle Basin.



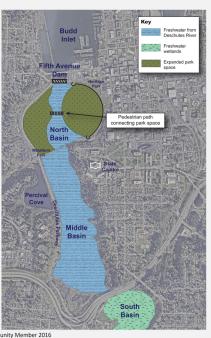
### Managed Lake Sub-Option: Nutrient Harvesting

Similar to existing conditions but with mechanized removal of soluble phosphorus and dissolved nitrogen by way of three or four Rotating Photo Bioreactors (RPBs) installed in the Middle Basin. Collectively, the RPBs are expected to improve water quality and ecological functions within the watershed by removal of phosphorus and nitrogen through the growth and harvesting of cyanobacteria grown on partially submerged rotating plates. Sediment would be managed through its removal at the entrance to Capitol Lake and its sale as nutrient-rich topsoil.



### Managed Lake Sub-Option: Expanded Park Space

Similar to existing conditions but with significantly expanded park space for additional recreational opportunities such as playgrounds and basketball or tennis courts. The historic reflecting pool would be substantially altered and the extent of fish and wildlife habitat would be reduced compared to existing conditions.



Source: Community Member 201

### Notes:

- 1. These options and the information included on this figure represent concepts from private citizens. The Department of Enterprise Services cannot confirm its accuracy, feasibility, or validity because these proposed long-term management options have not been through preliminary technical analysis, design, or feasibility review.

  2. All long-term management options will require additional design and technical review. That work will be completed as part of a future Environmental Impact Statement in Phase II for the options that are selected for review in that process.
- 3. These graphics have been prepared by Floyd Snider and are based on concepts provided by private citizens or other stakeholders. Due to the conceptual nature of these potential long-term management options, they have not been reviewed for initial consistency with project goals



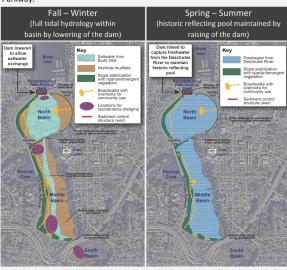


## Long-Term Management Options: New Concepts from Phase 1

Please review figure notes for relevant information.

### **Hybrid Option: Seasonal Hybrid**

Adaptively manages the basin by establishing a tidal estuary during the fall and winter seasons by lowering a reconstructed Fifth Avenue Dam. Maintains the historic Reflecting Pool during the peak recreational seasons of spring and summer by raising the dam. Improves Fish and Wildlife Habitat and Ecosystem Functions by allowing tidal exchange, by establishing estuary marsh plants throughout the basin, and by creating intertidal habitat along Deschutes



- This option is similar to a concept entitled "Capitol Lagoon."
- During the spring and summer months, the predominant configuration of the dam could be in a raised position to allow for the formation and retention of the reflecting pool and potential associated recreational activities. Alternatively, the dam could be predominately in the lowered position to ensure adequate mixing of freshwater and saltwater, and raised for periods of peak usage.

ource: Technical Committee Member 2016

### Restored Estuary Sub-Option: Expanded Freshwater Wetlands

Restores tidal hydrology throughout the existing Capitol Lake Basin, but retains freshwater wetlands in the South Basin and southern portion of the Middle Basin (potentially through construction of a retaining wall) to maintain some freshwater fish and wildlife habitat along the estuary. Removes the existing reflecting pool, but natural reflection of the Capitol would occur at 75 percent of tidal elevations.



Source: Community Member 2016

- 1. These options and the information included on this figure represent concepts from private citizens. The Department of Enterprise Services cannot confirm its accuracy, feasibility, or validity because these proposed long-term management options have not been through preliminary technical analysis, design,
- All long-term management options will require additional design and technical review. That work will be completed as part of a future Environmental Impact Statement in Phase II for the options that are selected for review in that process.

  These graphics have been prepared by Floyd | Snider and are based on concepts provided by private citizens or other stakeholders. Due to the conceptual nature of these potential long-term management options, they have not been reviewed for initial consistency with project goals.





# Long-Term Management Options: Potential Additional Components

- Continued stakeholder outreach to identify potential new components of long-term management options
- Components would increase consistency with stakeholder-identified common goals

| Matrix of Potential Additional Components of Long-Term Management Options     |  |  |  |
|---|--|--|--|
| POTENTIAL COMPONENT FOR   |  |  |  |
| CONSIDERATION   | POTENTIAL BENEFIT OF INCORPORATION   |  |  |
| Improve And Support Ecosystem Functions                                       |  |  |  |
| Fish access management <sup>T</sup>   | Ensuring that fish have access and/or passage to upstream habitat would improve ecosystem functions and enhance cultural values, and would also meet regulatory requirements   |  |  |
| Riparian plantings along shoreline <sup>X</sup>                               | Plantings and other riparian enhancements along the watershed would enhance river shading and could reduce temperatures within Capitol Lake/Lower Deschutes Watershed  |  |  |
| Control Invasive Species  |  |  |  |
| Efforts to eradicate New Zealand mudsnail <sup>T</sup>                        | Eradicating the New Zealand Mudsnail would improve fish and wildlife habitat and ecological functions, and could also result in restored opportunities for aquatic recreation  |  |  |
| Control of the resident Canada goose population <sup>T</sup>                  | Controlling the resident Canada geese to a population of no more than 100 would improve ecological functions and may also improve water quality  |  |  |
| Control of the purple loosestrife seed and Eurasian watermilfoil <sup>X</sup> | Controlling the purple loosestrife seed and Eurasian watermilfoil through chemical treatment, saltwater exposure, or hand pulling would be consistent with efforts to control nuisance and invasive species within the watershed |  |  |
| Reflect a Sustainable Watershed Approa  | ch   |  |  |
| Natural woody debris management plan <sup>T</sup>                             | Implementing a woody debris management plan, at any scale, would reflect a sustainable watershed approach by minimizing human-induced disturbances within the system   |  |  |

Could be applied to any long-term management option



### Funding and Governance Committee

- Reviewed existing models for shared funding and governance
- Developed list of attributes for a future shared funding and governance model applicable to any longterm management option
- Confirmed unanimous and strong support for ongoing work for funding and governance in Phase 2

### List of Attributes for a Potential Future Funding and Governance Model

- 1. Dedicated and secure funding sources. The chosen model needs to include adequate funding to do the job (cover capital and maintenance and operations costs) initially and in the long-term.
- 2. Those who contribute to the problem should participate in funding or paying for the solution (and possibly participate in governance).
- 3. Those who benefit from the solution should participate in funding or paying for the solution (and possibly participate in governance).
- 4. Shared distribution of costs.
- 5. It is understood that the State will participate in both funding and governance.
- 6. Watershed-wide in scale; include the entire Deschutes Watershed (extending upstream of the Capitol Lake/Lower Deschutes Watershed area).
- 7. Manageable governance structure that is sustainable and not too unwieldy. The complexity of the structure and approvals must be reasonable.
- 8. Commitment by the parties to a long-term collaborative process that will continue to address each member's interests.
- 9. Adequately resourced administration for the governing body.
- 10. Funding and governance models should support the goals and objectives of the long-term Capitol Lake/Lower Deschutes Watershed management plan, as well as goals for the future of the overall watershed.

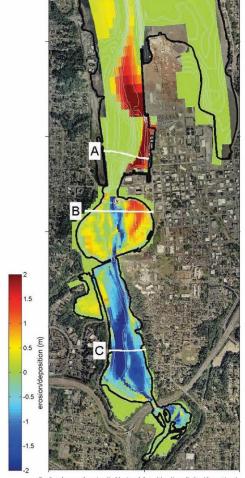


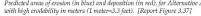




## Sediment Management

- Reviewed existing studies related to sediment management for Capitol Lake
- Determined that existing model and related data could be used in Phase 2
- Defined additional work related to sediment management that should occur in Phase 2
- Acknowledged that sediment management will be the largest cost factor for all long-term management options

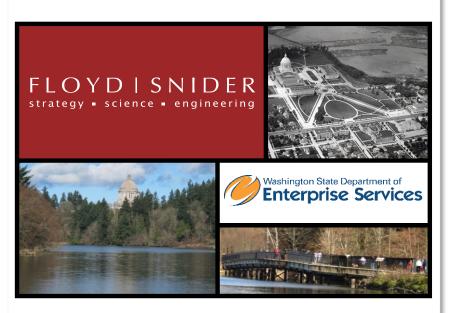






### Phase 1 Transition into Phase 2

Phase 1 Report on the Capitol Lake/Lower Deschutes Watershed Long-Term Management Planning



FINAL December 30, 2016

- Phase 1 Report to the Washington State Legislature on December 30, 2016
- Initial funding of \$4M for Phase 2 included in the Governor's Proposed 2017–19 Capital Budget, and \$940K in the 2019–21 biennium
- If funded, Phase 2 could begin in late 2017/early 2018 after a public bidding process



# DES-Proposed Allocation of Initial Phase 2 Funding

|   | Estimated Cost |            |             |  |
|---|----------------|------------|-------------|--|
| Task  | Consultants    | Agency/DES | Total       |  |
| Project Management and Project Administration also including:               |                |            |             |  |
| Project Team Meetings   |                |            |             |  |
| General Administrative Support  | \$535,000      | \$305,000  | \$840,000   |  |
| Document Production and Distribution  |                |            |             |  |
| Direct Project Expenses   |                |            |             |  |
| Agency and Tribal Coordination  | \$625,000      |            | \$625,000   |  |
| Public and Stakeholder Involvement  | \$023,000      |            | ŞU23,UUU    |  |
| Draft EIS, including:   |                |            |             |  |
| Project Scoping and Scoping Report  | \$850,000      |            | \$850,000   |  |
| Alternatives Development and Screening                                      | 7050,000       |            | 7630,000    |  |
| Constructability and Impacts Review   |                |            |             |  |
| Technical Analyses and Discipline Reports (for up to 10 Disciplines such as | \$900,000      |            | \$900,000   |  |
| Water Quality, Biological Resources, Geology, and Soils/Sediment)           | \$500,000      |            | 7,500,000   |  |
| Final EIS including:  |                |            |             |  |
| Response to Comments on Draft EIS   | \$570,000      |            | \$570,000   |  |
| Updates to Technical Analyses   |                |            |             |  |
| 2% Contingency  | \$70,000       |            | \$70,000    |  |
| Other Costs (including Legal and Grounds' Support Services)                 |                | \$145,000  | \$145,000   |  |
| Subtotal Estimated Cost   | \$3,550,000    | \$450,000  | \$4,000,000 |  |

\*An additional \$940,000 anticipated in the 2019–21 biennium to complete the Phase 2 process.







## Example Costs from Recent Area EISs

| Completion |   |         |            |
|------------|---|---------|------------|
| Date       | Project   | Costs   | Duration   |
| 2004       | Seattle Monorail Draft EIS and Final EIS        | \$3.2M  | 2.0 years  |
| 2010       | SR 520 Draft EIS and Supplemental EIS           | \$16.0M | 10.0 years |
| 2011       | SR 520: I-5 to Medina Final EIS only            | \$3.5M  | 1.5 years  |
| 2011       | SR 520 Pontoon Draft EIS and Final EIS          | \$9.2M  | 2.5 years  |
| 2012       | Columbia River Crossing Draft and Final EIS     | \$16.3M | 10.0 years |
| 2013       | Lynnwood Link Draft EIS and Final EIS           | \$6.5M  | 4.0 years  |
| 2014       | Mukilteo Ferry Terminal Draft EIS and Final EIS | \$3.7M  | 3.0 years  |







### **Broad Stakeholder Support for Phase 2**











December 13, 2016

Washington State Legislature Washington State Department of Enterprise Services

Re: Support for Capitol Lake/Lower Deschutes Watershed Environmental Impact Statement as Long-Term Management Planning Phase 2

Dear Members of the Washington State Legislature and Director Liu,

We are writing jointly, as collaborative partners in the Capitol Lake/Lower Deschutes Watershed long-term management planning effort, to express support for funding the proposed Phase 2 to complete a project-specific Environmental Impact Statement (EIS). The Department of Enterprise Services (DES) included this project in its capital budget request for the 2017-19 biennium. The EIS is a necessary step to identify an environmentally and economically sustainable long-term management plan that improves water quality, manages existing sediment accumulation and future deposition, enhances impaired ecological functions, and restores community use of this resource.

As government partners, we recommend fully funding an EIS as Phase 2. State law requires an EIS before any long-term management approach can be implemented. The EIS work will complete technical analyses, including evaluation of sediment transport and deposition. All stakeholders identified a sediment management strategy as a critical component of any future alternative. We are committed to working collaboratively with DES throughout Phase 2 to provide policy-level and technical support, continue efforts to identify options for long-term shared funding and governance to support a chosen alternative, and share information through community outreach. We have generated great momentum through the Phase 1 process -- the Capitol Lake/Lower Deschutes Watershed Report initiated by proviso in the 2015-17 Capital Budget -- which we will use to propel us forward to a solution.

In recognition of the continued work that must be done, we provide this letter as formal support for fully funding the request for the Phase 2 project-specific EIS proposed by DES. We echo broad agreement among the community and coordinating agencies on the need to implement a long-term management plan for Capitol Lake/Lower Deschutes Watershed.

Please contact any of us if you have questions or need additional information.

.

Dickison, Squaxin Island Tribe

Mayor Cheryl Selby, City of Olympia

Oin McSuga Commissioner Bill McGregor, Port of Olympi

Mayor Pete Kmet, City of Tumwate

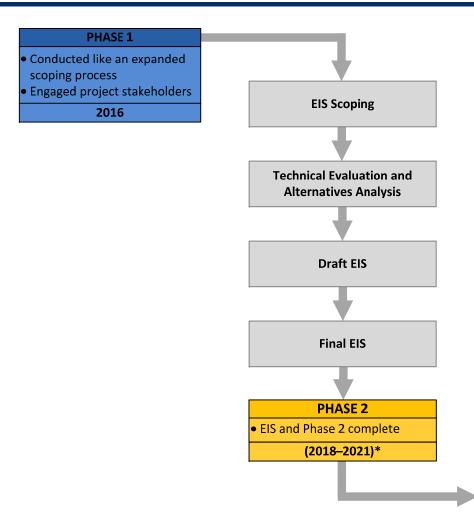
Bud Blake
Commissioner Bud Blake, Thurston County

- Letter of support signed by all members of the Executive Work Group
- Letters of support received by the Resource Agencies participating in Phase 1
- Significant support from the Community





# Phase 2: Project-Specific Environmental Impact Statement (EIS)



- An EIS is required by the State Environmental Policy Act
- An EIS must be completed before a long-term management approach can be selected for implementation
- A project-specific EIS would be completed as Phase 2

# PHASE 3 Design, permitting, and construction of preferred long-term management option

(2020-2025)

### Notes:

All durations and dates are approximate.

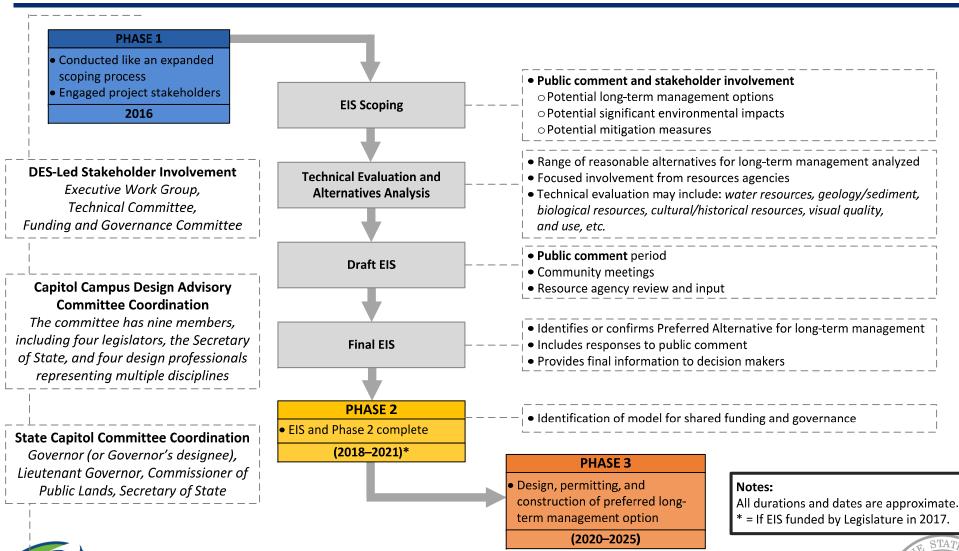
\* = If EIS funded by Legislature in 2017.







# On-Going Stakeholder Involvement during Phase 2 EIS



FLOYD | SNIDER

strategy • science • engineering

### **Presentation Conclusion**

- Phase 1 provides foundation for Phase 2
- Broad stakeholder support for Phase 2
- A project-specific EIS must be completed before a long-term management approach can be selected for implementation







## Thank You

# **Questions?**

### Contact:

Ann Larson, DES Government Relations Manager <a href="mailto:Ann.Larson@des.wa.gov">Ann.Larson@des.wa.gov</a> (360) 407-8275

Bob Covington, DES Deputy Director Bob.Covington@des.wa.gov (360) 407-9203





