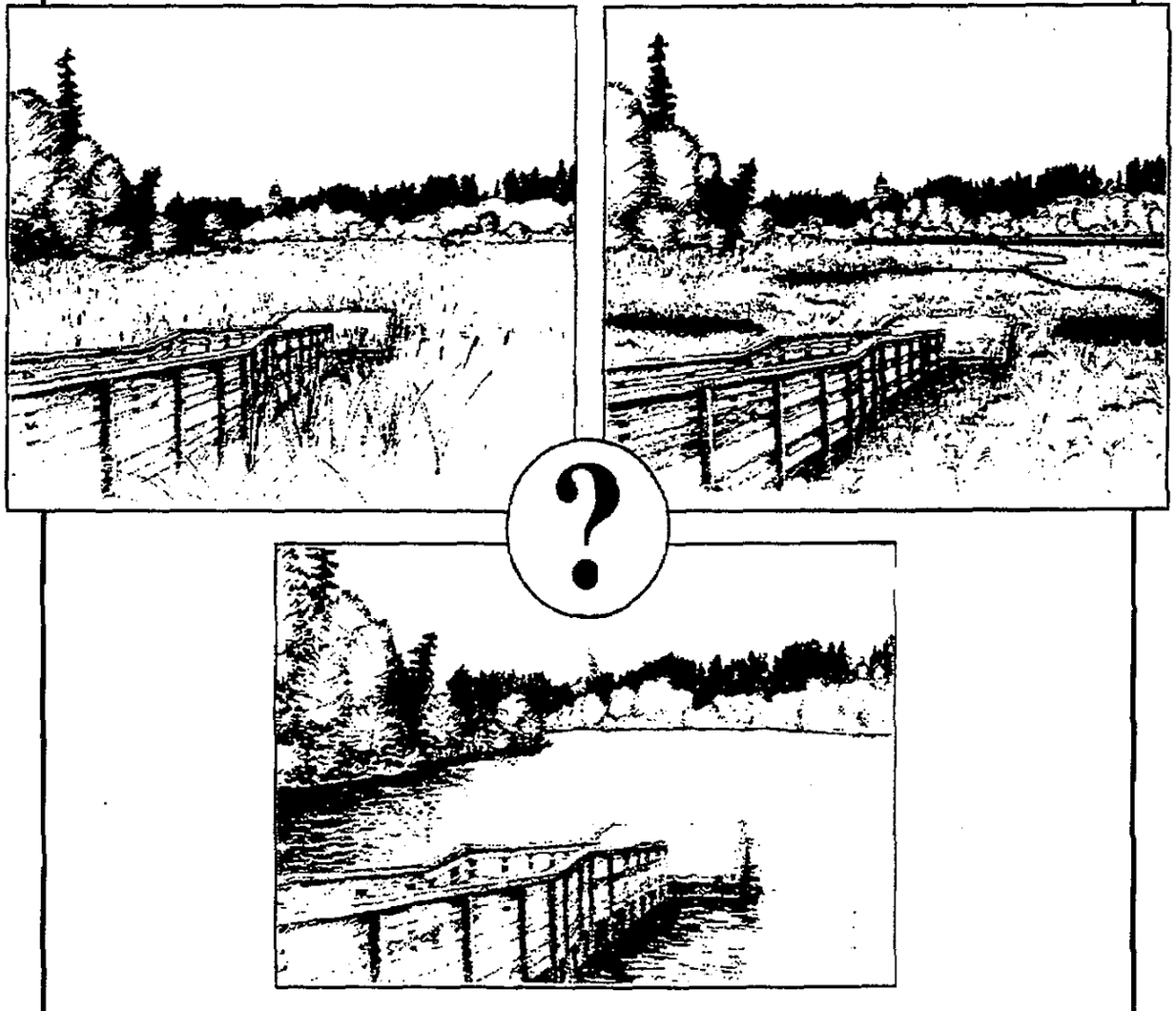
Capitol Lake
Adaptive Management Plan
Final Environmental Impact Statement



May 1999

Fact Sheet

Title

Capitol Lake Adaptive Management Plan - Programmatic Environmental Impact Statement.

Description of Proposal and Alternatives

Existing conditions, five action alternatives, and the No-Action Alternative are addressed in this programmatic, non-project Environmental Impact Statement (EIS). The alternatives addressed are:

- Lake/River Wetland Without Trap
- Lake/River Wetland With Trap
- Lake
- Estuary
- Combined Lake/Estuary
- No Action

The key features distinguishing the alternatives are related to the following questions:

Would the system be a freshwater or estuary (brackish water) dominant system?

Would the tide gate at the Capitol Lake dam at 5th Avenue be retained or removed (or locked in the open position)?

Would maintenance dredging be part of the alternative and if so where and when?

Would modified drawdown/saltwater backfill be continued or not?

Using these key features, the five action alternatives were developed. Each one looks at a different combination of these features and how the lake, or estuary, would evolve over time.

Proponent/Lead Agency

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Licenses and Permits Potentially Required

Recommendation from Capitol Lake Adaptive Management Plan - Steering Committee

Approval by Director of Department of General Administration

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Date of Issue of Draft EIS

October 23, 1998

Date of Hearing on Draft EIS

November 18, 1998
GA Auditorium
11th Avenue and Columbia Streets
Olympia, Washington

End of Draft EIS Comment Period

November 23, 1998

Date of Issue of Final EIS

May 20, 1999

Location of Background Information

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Cost to Public of a Copy of the Final EIS

$5.00

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Figures

Chapter 1. Summary

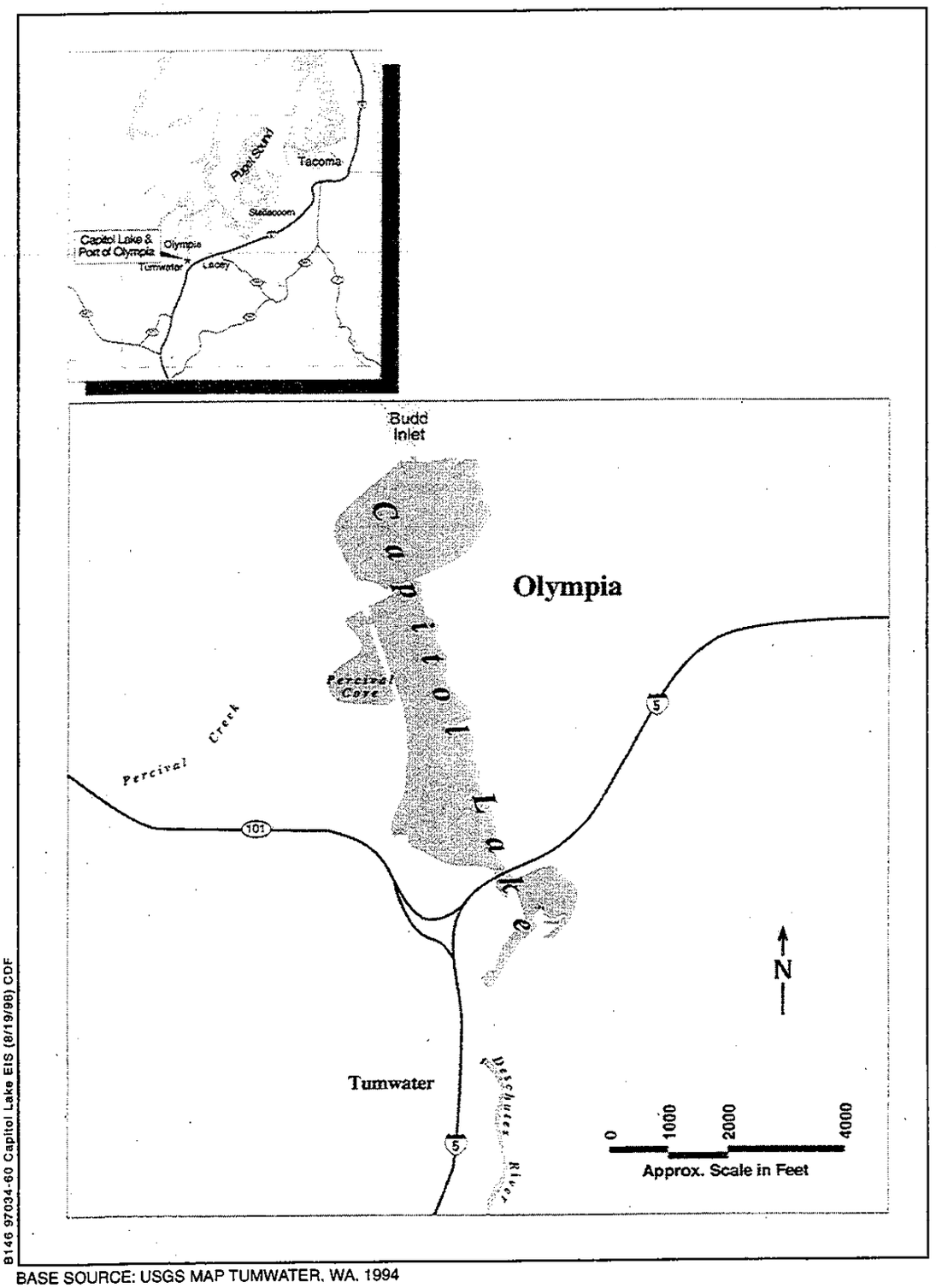
INTRODUCTION

Prior to 1951, the area occupied by Capitol Lake, located in north Thurston County within the cities of Tumwater and Olympia (**figure 1-1**), was a tidal estuary of the Deschutes River. The character of the estuary was different than present lake conditions, its brackish waters being influenced by both the salt water tidal action of Puget Sound and freshwater flow from the Deschutes River. Capitol Lake was created in 1951 with the construction of a dam and tide gate along 5th Avenue. The lake, which is actually a freshwater reservoir of the Deschutes River, was formed to serve as a reflecting pool for the State Capitol Building as envisioned by architects White and Wilder in the 1911 Capital Campus Plan. Since its formation, the Washington State Department of General Administration (DGA) has been the lead agency responsible for operation and maintenance of the dam and tide gate, and other management activities in and around Capitol Lake. Past management activities have involved coordination with other state agencies, local governments, tribal interests, and the public (e.g., **Thurston Regional Planning Council 1988**).

What is the Capitol Lake Adaptive Management Plan?

With recent efforts to obtain permit and environmental approvals for the construction of Heritage Park on the eastern shore of the North Basin (**Portico 1997**), and for maintenance dredging of Capitol Lake in the Middle Basin and Percival Cove (**Entranco 1996**), various agencies and organizations expressed interest in developing a Capitol Lake Adaptive Management Plan.

The Capitol Lake Adaptive Management Plan (the Plan) will be a written document, developed by an interagency/jurisdiction Steering Committee, to provide guidance on how Capitol Lake will be managed and operated in the future. A key question to be addressed in the Plan is "Should Capitol Lake be restored to a tidal estuary?", or "Should it continue to be maintained as a freshwater lake?" The reason the Plan is called "adaptive" is because it will be frequently updated and possibly modified as studies are triggered and more is learned about how the water resource responds to different management/operational strategies.



BASE SOURCE: USGS MAP TUMWATER, WA. 1994

Figure 1-1
Project Vicinity Map

To date, key features of the Plan process have been to:

- promote coordinated agency participation,
- rely upon best available science,
- identify how and when necessary technical data will become available,
- outline the implementation roles for each jurisdiction, and
- commit to a continuing process of updating the Plan based on new data.

Broad participation has been promoted by DGA and is reflected in the membership of the Adaptive Management Plan Steering Committee:

- Washington State Department of General Administration (DGA)
- Washington State Department of Ecology (Ecology)
- Washington State Department of Fish and Wildlife (WDFW)
- Washington State Department of Natural Resources (DNR)
- Squaxin Island Tribe
- Thurston County
- City of Olympia
- City of Tumwater
- Port of Olympia

Relationship of this Environmental Impact Statement to the Capitol Lake Adaptive Management Plan

A Plan has not yet been formulated and is expected to be available in February 1999. However, the key aspects of the Plan, as currently envisioned by the Steering Committee, are included in this Environmental Impact Statement (EIS). The planning process, which began in June 1997 and will continue into the future, gives interested parties the opportunity to provide input on a range of management/operational alternatives for the lake (refer to Chapter 3, Alternatives).

The EIS, including public comments, will be used by the Steering Committee to formulate the draft and final Capitol Lake Adaptive Management Plan in the next several months.

Proposed Action and SEPA Requirements

The proposed action is the adoption of a management plan to optimize the beneficial uses of Capitol Lake, or Capitol Estuary, and to provide DGA with operational certainty over the next 10 to 20 years.

Under the rules of the State Environmental Policy Act (SEPA), two types of "actions" are recognized: "project" and "non-project". Since the adoption of a management plan represents a program, as opposed to a specific construction project, this EIS follows SEPA guidelines for a non-project action. As a result, the level of detailed environmental analysis has been limited, compared to a typical project EIS.

The purpose of this Capitol Lake Adaptive Management Plan and EIS is to fulfill the requirements of SEPA by:

- Presenting a number of alternative planned actions, plus a no-action alternative.
- Evaluating the impacts of the alternatives.
- Presenting mitigation measures for identified impacts.

As a non-project action, the proposed action would not of itself, have a direct impact on land uses or the environment in the planning area. Additional SEPA review would be required for actions authorized by the Plan. Nonetheless, the Plan will provide a framework to guide future management of Capitol Lake or the Capitol Estuary for the next 20 years and beyond. The Plan will also help to define future shoreline uses surrounding the basin.

How You Can Become Involved in the Capitol Lake Adaptive Management Plan Process

The SEPA process is one way you can become involved in the Capitol Lake Adaptive Management process. The SEPA review was initiated with a public scoping meeting on November 20, 1997. During this meeting, preliminary alternatives were presented, key environmental issues were identified, and the public was provided the opportunity to comment. Following issuance of the Draft EIS,

additional community input will be obtained at a public open/house and hearing, where citizens can comment on relevant concerns. All meetings of the Steering Committee are open to the public and the agenda allows for public comment. Please contact those listed on the EIS Fact Sheet for a schedule of the planning process.

DESCRIPTION OF THE ALTERNATIVES

Existing conditions, five action alternatives, and the No-Action Alternative are addressed in this non-project EIS. The alternatives are briefly described in the following pages.

The time involved in realizing each alternative's full impact is referred to as "the time of maturity[1]." At the time of maturity, it is assumed that wetland vegetation—either freshwater or brackish estuary[2]—would almost completely occupy any basin that would not be dredged and would be allowed to fill with sediment, and that the only remaining open-water habitat would be restricted to the remaining river channel. Figures of the alternatives depict how the basins would be expected to look at the time of maturity. More detailed figures for each alternative are provided in Chapter 3. These detailed figures provide a breakdown of the different vegetation types conceptually illustrated in this Summary. Renderings are included with the descriptions that illustrate how the environment would appear from a view point located at the Capitol Lake Interpretive Center in the southwest corner of the Middle Basin.

The following impact and mitigation discussion refers to dredging in one location or another, as a key component of all alternatives. The level of detail in this discussion has been kept general to facilitate a clear comparison of the relative impacts between alternatives. Please note there are several technical options within dredging components that could affect the degree of impacts.

1. All estimates of time of basin filling (also referred to as time of maturity), are based on estimated sediment loading rates from the Deschutes River, which can vary from year to year. Therefore, actual times of filling could vary significantly from estimates provided.

2. Brackish water is a mixture of saltwater and freshwater that has lower salinity than saltwater.

Lake/River Wetland Without Trap Alternative

Under this alternative, the tide gate would remain and there would be no maintenance dredging in the South and Middle basins. These basins would evolve into freshwater wetlands over a period of 50 to 85 years as the lake filled with sediment from the Deschutes River. Once the South and Middle basins have filled with sediment, the North Basin would be retained as an open-water area by maintenance dredging in this basin (repeated every 2 years). Refer to **figures 1-2** and **1-3** and **3-2** for a full size map with legend.

Figure 1-2
Conceptual Illustration of Habitat Types at Maturity for Lake/River Wetland Without Trap Alternative

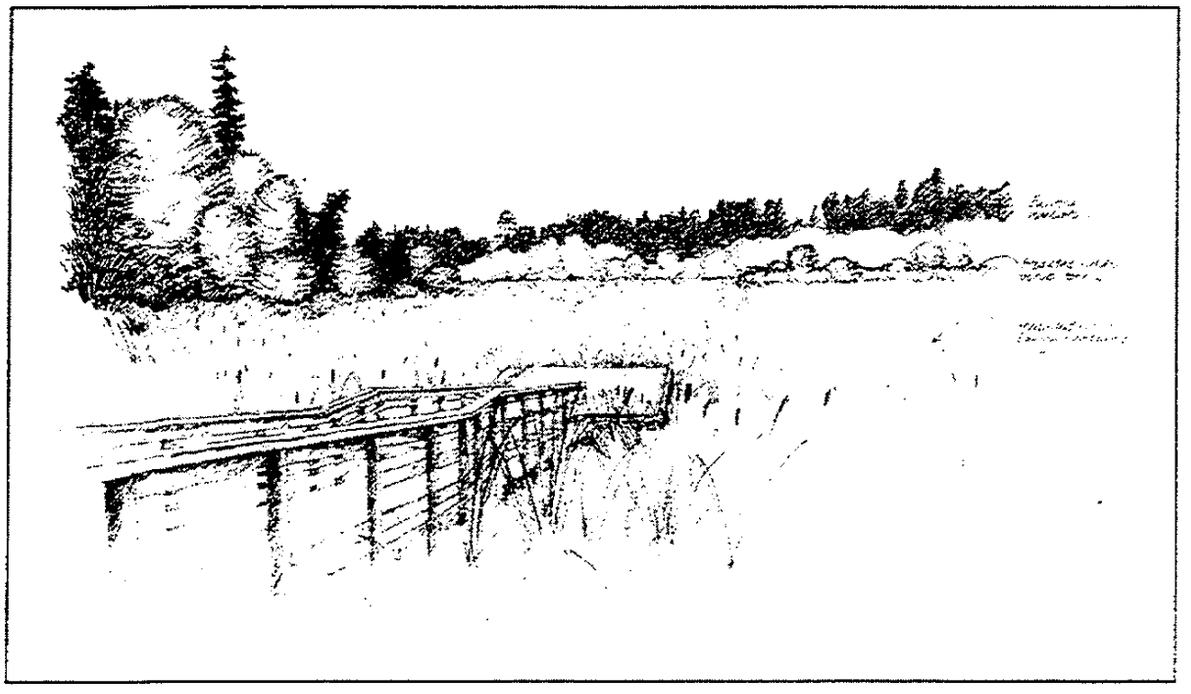
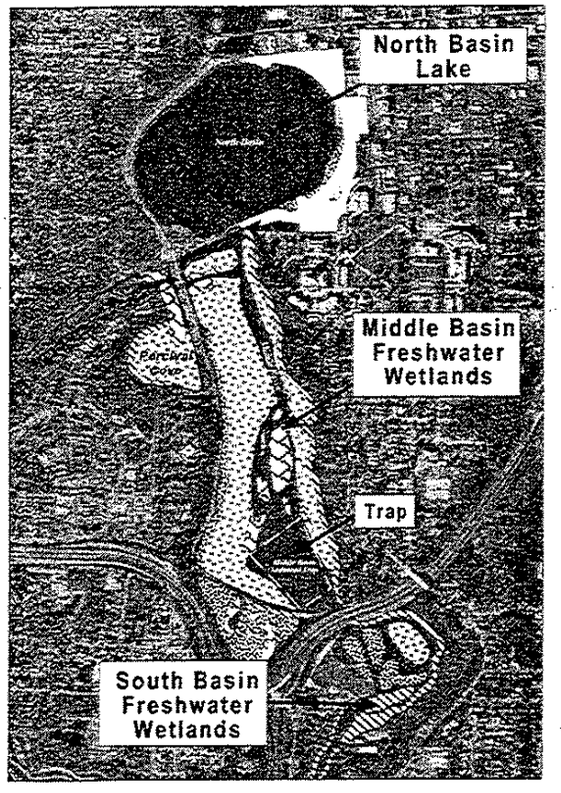


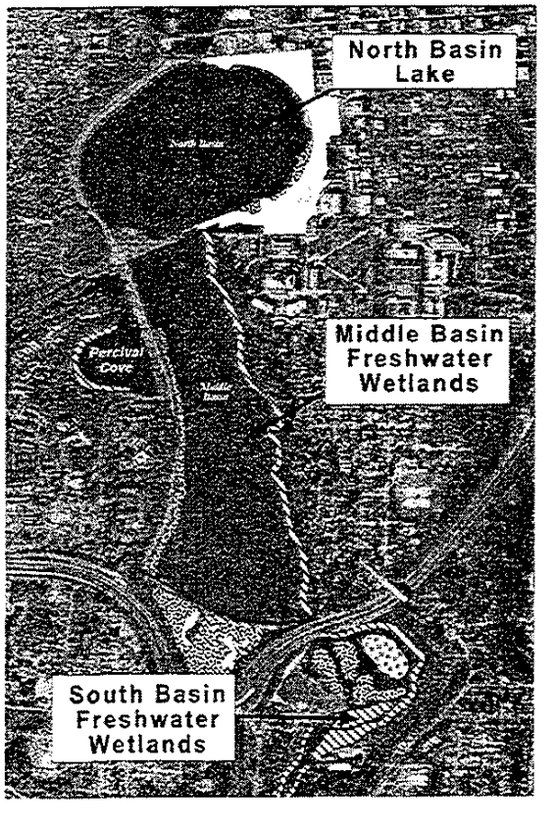
Figure 1-3
View from Capitol Lake Interpretive Center of Both Lake/River Wetland Alternatives at Maturity



Lake/River Wetland With Trap Alternative

This alternative would be similar to the Lake/River Wetland Without Trap Alternative, except the Middle Basin sediment trap (located at the south end of the Middle Basin) would be dredged every 6 to 10 years. The principal effect would be to extend the amount of time it would take for wetlands to develop (75 to 115 years). At the end of this period, maintenance dredging would begin (repeated every 2 years) in the North Basin. Refer to **figures 1-3** and **1-4** and **3-3** for a full size map with a legend.

Figure 1-4
Conceptual Illustration of Habitat Types
Lake/River Wetland With Trap Alternative



Lake Alternative

This alternative would retain the lake as it presently is—open water throughout the Middle and North basins. Maintenance dredging would be initiated in two years in the Middle Basin and Percival Cove and would be repeated every 2 years. This alternative would also involve annual lake drawdown and saltwater backfill, using the modified procedure developed by DGA in 1997. Refer to **figures 1-5** and **1-6** and **3-4** for a full size map with a legend.

Figure 1-5
Conceptual Illustration of Habitat Types
Lake Alternative

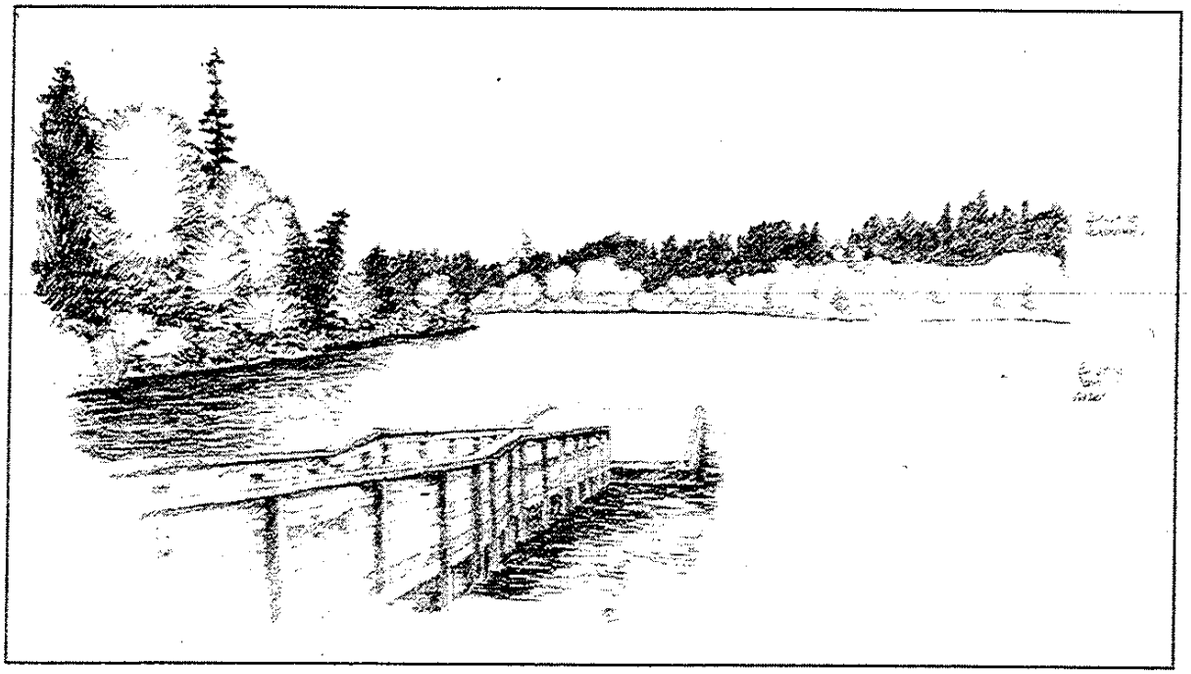
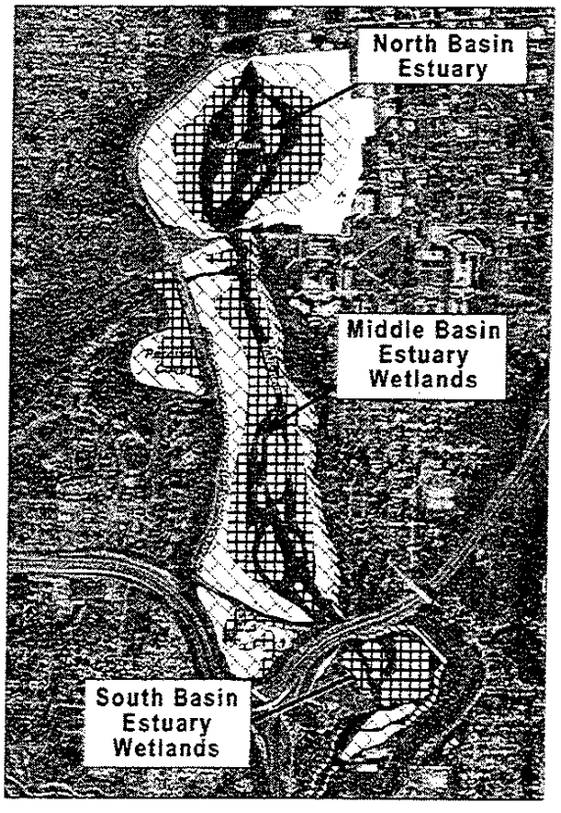


Figure 1-6
View from the Capitol Lake Interpretive Center of the Lake Alternative

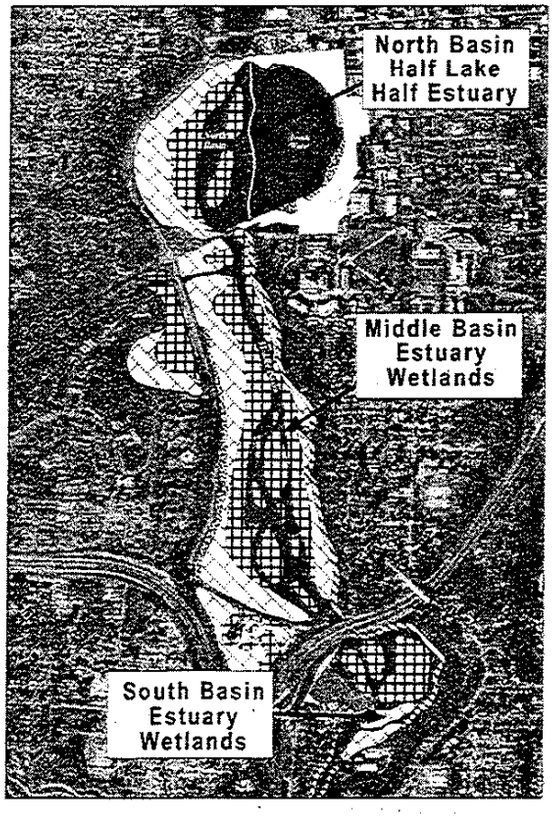


Estuary Alternative

This alternative would involve removing the tide gate to allow tidal action throughout the basin. No dredging would be performed within the basin. At maturity, in 100 to 150 years, brackish estuary marsh plants would occur throughout the basin. At maturity, dredging operations would begin in Lower Budd Inlet to maintain boating and shipping activities (dredging frequency would be determined by monitoring). Short-term dredging may be required as mitigation in Lower Budd Inlet. Refer to **figures 1-7** and **1-8** and **3-6** for a full size map with a legend.

Figure 1-7
Conceptual Illustration of Habitat Types Estuary Alternative

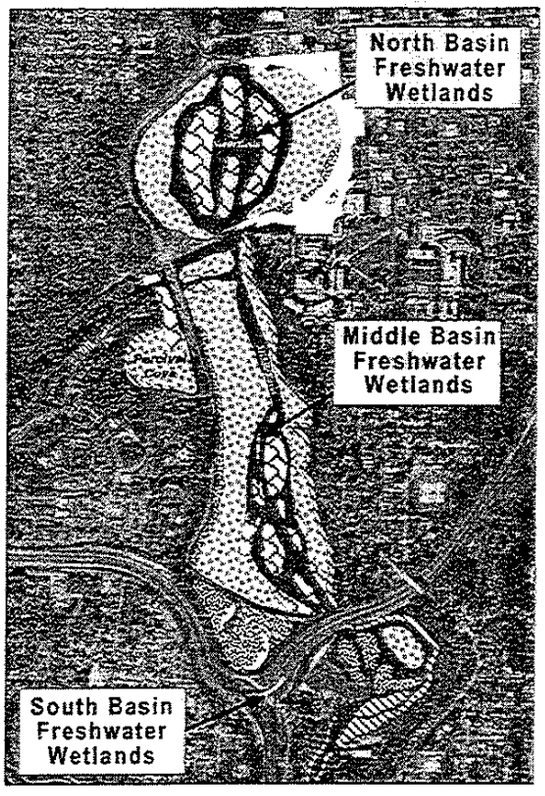
Figure 1-8
View from Capitol Lake Interpretive Center of the Estuary and Combined Lake/Estuary Alternatives at Maturity



Combined Lake/Estuary Alternative

This alternative would be similar to the Estuary Alternative, except that a reflecting pool dam would be constructed north to south along the center of the North Basin. This would provide a permanent, freshwater reflecting pool on the eastern half of the North Basin, adjacent to Heritage Park. High quality water would be added to maintain good water quality in the new lake. At maturity, in 100 to 125 years, brackish estuary marsh plants would occur throughout the lake basin, with the exception of the eastern half of the North Basin, which would support freshwater aquatic and wetland plants. At maturity, dredging would begin in Lower Budd Inlet to maintain boating and shipping activities. Short-term dredging may be required as mitigation in Lower Budd Inlet. Refer to **figures 1-8** and **1-9** and **3-8** for a full size map with a legend.

Figure 1-9
Conceptual Illustration of Habitat Types Combined Lake/Estuary Alternative



No-Action Alternative

Under this alternative, the tide gate would continue to be operated as it presently is, to maintain freshwater conditions upstream of the 5th Avenue dam. No maintenance dredging would be performed and all three basins would gradually evolve into freshwater wetlands over a period of 100 to 150 years. At the time of maturity, dredging operations would begin in Lower Budd Inlet to maintain boating and shipping activities. Refer to **figures 1-10 and 1-3** and **3-10** for a full size map with a legend.

Figure 1-10
Conceptual Illustration of Habitat Types
No Action Alternative

SUMMARY OF IMPACTS AND MITIGATION

The key features distinguishing the alternatives are summarized in **table 1-1** and a summary cost comparison is provided in **table 1-2**. More detailed descriptions are provided in Chapter 3, Description of the Alternatives. Please note that the costs contained in these summaries are limited to those associated with dredging, and which directly impact the Department of General Administration.

A summary of the impacts and proposed mitigation measures for the action and no-action alternatives is presented in **table 1-3**.

	Existing Conditions	Lake/River Wetland Without Trap Alternative	Lake/River Wetland With Trap Alternative	Lake Alternative	Estuary Alternative	Combined Lake/Estuary Alternative	No-Action Alternative
Dredging Scheme	Major lake dredging occurred in 1978. Trap maintenance dredging in 1986.	North Basin to be dredged once the South and Middle basins have in-filled with sediment in 50 to 85 years.	Dredge Middle Basin trap every 6–10 yrs. Dredge North Basin when other two basins fill, in 75 to 115 years.	Dredge 2 sectors in the Middle Basin and Percival Cove beginning now and repeated every 2 years.	Maintenance dredging of Budd Inlet when entire lake basin filled with sediment in 100 to 150 years. Short term dredging may be needed in Budd Inlet as mitigation	Maintenance dredging of Budd Inlet when entire lake basin filled with sediment in 100 to 125 years. Short term dredging may be needed in Budd Inlet as mitigation	No dredging in the existing lake. Begin maintenance dredging in Lower Budd Inlet when lake basin fills, in 100 to 150 years.
Time of Maturity	N/A	50 to 85 yrs	75 to 115 yrs	Mature now	100 to 150 yrs	100 to 125 yrs	100 to 150 yrs
Tide Gate Retained or Removed[3]	Retained	Retained	Retained	Retained	Removed	Removed	Retained
Freshwater or Estuary System	Freshwater	Freshwater	Freshwater	Freshwater	Estuary	Estuary with freshwater in east half of the North Basin	Freshwater
Open-Water Habitat[1]	241 acres	140 acres	149 acres	236 acres	56 acres	89 acres	72 acres
Freshwater Wetlands[1]	48 acres	149 acres	140 acres	53 acres	20 acres	22 acres	216 acres
Brackish Estuary Wetlands[1]	0 acres	0 acres	0 acres	0 acres	213 acres	178 acres	0 acres
Modified Drawdown	As needed[2]	As needed[2]	As needed[2]	Yes, annually	No	No	No

1. The total of 290 acres represents 270 acres of lake surface and 20 acres of adjacent wetlands.
2. Drawdown would be used only to provide limited flood control until the South and Middle basins fill with sediment. There would be no saltwater backfilling.
3. The tide gate may be removed or left in an open position.

Table 1-1
Key Distinguishing Features of the Alternatives

	Existing Conditions	Lake/River Wetland Without Trap Alternative	Lake/River Wetland With Trap Alternative	Lake Alternative	Estuary Alternative	Combined Lake/Estuary Alternative	No-Action Alternative
Dredging Scheme	Major lake dredging occurred in 1978. Trap maintenance dredging in 1986.	North Basin to be dredged once the South and Middle basins have in-filled with sediment in 50 to 85 years.	Dredge Middle Basin trap every 6–10 yrs. Dredge North Basin when other two basins fill, in 75 to 115 years.	Dredge 2 sectors in the Middle Basin and Percival Cove beginning now and repeated every 2 years.	Maintenance dredging of Budd Inlet when entire lake basin filled with sediment in 100 to 150 years. Short term dredging may be needed in Budd Inlet as mitigation	Maintenance dredging of Budd Inlet when entire lake basin filled with sediment in 100 to 125 years. Short term dredging may be needed in Budd Inlet as mitigation	No dredging in the existing lake. Begin maintenance dredging in Lower Budd Inlet when lake basin fills, in 100 to 150 years.
Costs for the First 20 yrs	N/A	$0	2 to 3 dredging cycles = $1.1 to $3 million[1]	10 dredging cycles = $7 to $15 million[1]	Tide gate removal = $0.5 million; Dredging in Budd Inlet - $0 to $15 million[1] **Total** = $0.5 to $15.5 million[1]	Tide gate removal = $0.5 million; Dam construction = $9.4 million; Dredging Budd Inlet - $0 to $15[1] **Total** = $10 to $25 million[1]	$0
Cumulative Costs in 50 to 85 yrs	N/A	$0[2]	5 to 14 dredging cycles = $3 to $13 million	25 to 42 dredging cycles = $18 to $64 million	Begin Lower Budd Inlet dredging $0.5 to $15.5 million	Begin Lower Budd Inlet dredging $10 to $25 million	$0
Cumulative Costs in 75 yrs to 115 yrs	N/A	Dredging in North Basin – 20 cycles – $9 to $23 million	Dredging switched to North Basin - 20 cycles = $12 to $36 million	37 to 57 dredging cycles = $26 to $86 million	$18 to $31 million	$17 to $40 million	$0
Cumulative Costs in 100 to 150 yrs	N/A	Up to 37 dredging cycles = $18 to $49 million	Up to 37 dredging cycles = $21 to $62 million	50 to 75 dredging cycles = $35 to $113 million	$24 to $64 million	$24 to $56 million	$0
Cumulative Costs in 150 to 250 yrs	N/A	Up to 62 dredging cycles = $35 to $124 million	Up to 62 dredging cycles – $38 to $137 million	75 to 125 dredging cycles = $53 to $188 million	$59 to $139 million	$68 to $150 million	$0

1. Dredging costs range due to variables in sediment loading rates and costs for different dredging methods. Costs are in 1998 dollars. For Lower Budd Inlet, dredging costs are highly variable due to the uncertainty of when and where sediment will be deposited.
2. No dredging costs accrue until after the South and Middle basins are completely filled at the time of maturity.

Table 1-2
Alternative Cost Comparison Summary

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Date: 06/24/2003 08:36 AM

Subject: New email address

Effective Monday, June 30, 2003, Jeff Jaksich, President of the East Bay Drive Neighborhood Association, will have a new email address. Jeff's present email address is eastbay4@attbi.com <mailto:eastbay4@attbi.com> . Jeff's new email address will be eastbay4@comcast.net mailto:eastbay4@comcast.net> .

It was recently brought to my attention that the labels for N.A. Presidents and Vice-Presidents available to you in the 'gg on calvin' Public Folder did not properly format to fit Avery #5161 address labels. You are correct, the labels did not convert from the database into the Word document as expected. I worked on the problem and think I have alleviated it. I successfully printed the labels and found they fit the Avery #5161 formatting. If you have problems with these attachments, PLEASE let me know.

	 Lake/River Wetland without Trap Alternative	 Lake/River Wetland with Trap Alternative	 Lake Alternative	 Estuary Alternative	 Combined Lake/Estuary Alternative	 No-Action Alternative
IMPACTS	• No dredging for the next 50 to 85 years. • Open-water areas of South and Middle Basins allowed to fill with sediments and convert to freshwater wetlands. • Dredging resumed in North basin after Middle basin filled in 50 to 85 years. Increased truck traffic and increased noise associated with truck traffic and use of dredging equipment.	• Sediment trap dredging (south end of Middle Basin) every 6 to 10 years over the next 75 to 115 years. • Dredging resumed in North basin in 75 to 115 years. Increased truck traffic and increased noise associated with truck traffic and use of dredging equipment.	• Dredging required to maintain open-water environment in North and Middle basins beginning now and repeated every 2 years to remove sediment loading from Deschutes River. Increased truck traffic and increased noise associated with truck traffic and use of dredging equipment.	• No dredging would be performed. Most of the North and Middle basins would eventually fill with sediment and convert to brackish marsh. • Possible transport of sediment from the former lake basin to Lower Budd Inlet during periods of low tide and high river flows, especially following removal of the tide gate. • Dredging would be required in Lower Budd Inlet after 100 to 150 years. Increased truck traffic and increased noise associated with truck traffic and use of dredging equipment. • Opening the dam to tidal action would result in increased erosional forces at the tide gate dam, railroad trestle, and along Deschutes Parkway.	• Similar to Estuary Alternative, except a reflecting pool dam would also be constructed in the North basin so that the east half of the North Basin would remain open freshwater. The remainder of the basin would gradually convert to brackish marsh over a period of 100 to 125 years. • Dredging would be required in Lower Budd Inlet after 100 to 125 years. Increased truck traffic and increased noise associated with truck traffic and use of dredging equipment. • Dam construction would place 120,000 cubic yards of rock, gravel, and earth fill and would replace 4 acres of aquatic habitat. • During dam construction there would be truck traffic, pile driving, and associated noise impacts. • Temporary construction access roads would disrupt Heritage Park. • The dam could also experience potential erosion, settling and earthquake damage following construction.	• No dredging would be performed. The lake would fill with sediment and convert to a freshwater wetland over a period of 100 to 150 years. • Dredging would be required in Lower Budd Inlet after 100 to 150 years. Increased truck traffic and increased noise associated with truck traffic and use of dredging equipment.
MITIGATION	• Schedule work consistent with state and local noise ordinances. • Develop traffic control plan for trucks.	• Schedule work consistent with state and local noise ordinances. • Develop traffic control plan for trucks.	• Schedule work consistent with state and local noise ordinances. • Develop traffic control plan for trucks.	• Conduct further analysis of potential for erosion and appropriate control actions. • Annual inspections at potential erosion sites and repairs as needed. • Schedule work consistent with state and local noise ordinances. • Develop traffic control plan for trucks. • Dredge Lower Budd Inlet to compensate for increased sediment load in first few years due to tide gate removal.	• Schedule work consistent with state and local noise ordinances. • Develop traffic control plan for trucks. • Use appropriate dam engineering and construction methods to mitigate erosion, settling, and earthquake damage. Implement repairs if needed. • Restore Heritage Park following construction of the dam. • Dredge Lower Budd Inlet to compensate for increased sediment load in first few years due to tide gate removal.	• Schedule work consistent with state and local noise ordinances. • Develop traffic control plan for trucks.

Table 1-3
Summary of Earth Impacts and Mitigations

	 Lake/River Wetland without Trap Alternative	 Lake/River Wetland with Trap Alternative	 Lake Alternative	 Estuary Alternative	 Combined Lake/Estuary Alternative	 No-Action Alternative
IMPACTS	• Intermittent water quality impacts due to dredging, dewatering and disposal of dredged materials when dredging is resumed in the North Basin in 50 to 85 years. • Higher temperatures, nutrient concentrations and algal growth, and reduced dissolved oxygen levels in shallow wetland habitats with poor water circulation. • Reduced lake volume over time could lead to increased flood impacts.	• Water quality and flooding impacts would be similar to the Lake/River Wetland Without Trap Alternative, except as noted below. • Minor impacts due to dredging would occur in the vicinity of the trap in the south end of the Middle Basin beginning now and repeated every 6 to 10 years. • Additional dredging impacts would occur when dredging resumes in the North Basin in 75 to 115 years.	• Intermittent water quality impacts due to dredging, dewatering and disposal of dredged materials beginning now and repeated every 2 years. • Intermittent water quality impacts during modified drawdown.	• Temperature, nutrient, algal growth, and dissolved oxygen would likely improve with tidal flushing. • Intermittent water quality impacts following removal of the tide gate due to river disturbance of bottom sediments at low tide. • Impacts due to dredging and loss of flood storage similar to the Lake/River Wetland Without Trap Alternative, except that (1) dredging would occur in Lower Budd Inlet at maturity, and (2) loss of flood storage volume would be increased with filling of the North Basin.	• Impacts similar to the Estuary Alternative except that (1) only half of the North Basin would be filled, and therefore, potential flooding impacts would be lower, (2) additional turbidity impacts would occur with construction of the reflecting pool dam, and (3) there would be potential water quality impacts in the new freshwater basin (east half of North Basin) depending on quantity and quality of water supply.	• No water quality impacts due to dredging in the lake basin. • Dredging water quality impacts would eventually occur in Lower Budd Inlet in about 100 to 150 years. • Other water quality and flooding impacts similar to the Lake/River Wetland Without Trap Alternative, except that the North Basin would also be filled and potential flooding impacts would be greater.
MITIGATION	• Monitor water quality and determine appropriate actions, as needed. • As filling progresses and wetlands develop, use tide gate to produce freshwater "tidal" action for enhanced circulation and water quality during summer months. • Use silt curtains and water quality treatment to reduce impacts of dredging. Limit time of dredging to avoid water quality impacts to fish. • Conduct further analysis of potential for flooding impacts and corrective actions. • A Canada goose management program is needed to limit their impact to water quality.	• Same as the Lake/River Wetland Without Trap Alternative.	• Use silt curtains and water quality treatment to reduce impacts of dredging. Limit time of dredging to avoid water quality impacts to fish. • Eliminate modified drawdown. • A Canada goose management program is needed to limit their impact to water quality.	• Perform further analysis of water quality impacts of opening the tide gates and identify corrective actions. • Use silt curtains and water quality treatment to reduce impacts of dredging. Limit time of dredging to avoid water quality impacts to fish. • Conduct further analysis of potential for flooding impacts and corrective actions. • A Canada goose management program is needed to limit their impact to water quality.	• Same as the Estuary Alternative, plus • Additional mitigation (silt curtains, silt fences, etc.) to control turbidity during construction of the reflecting pool dam. • Conduct further analysis of source water for freshwater pool in North Basin.	• Same as Lake/River Wetland Without Trap Alternative.

Table 1-4
Summary of Water Resources Impacts and Mitigations

	Lake/River Wetland without Trap Alternative	Lake/River Wetland with Trap Alternative	Lake Alternative	Estuary Alternative	Combined Lake/Estuary Alternative	No-Action Alternative
IMPACTS	• Increased wildlife diversity and species richness with gradual shift over time (50 to 85 years) from open water to freshwater wetland habitat in the South and Middle basins. • Intermittent disturbance of wildlife due to dredging and dredge disposal operations in the North Basin when dredging resumes in 50 to 85 years. • Abundance of Canada geese may increase during lake filling due to the increase of wetland food sources. At maturity of this alternative, however, dense wetlands may reduce geese abundance because they prefer open water habitat.	• Similar to Lake/River Wetland Without Trap Alternative, except for minor disturbance of wildlife due to sediment trap dredging every 6 to 10 years in the Middle basin over the next 75 to 115 years. • Similar disturbance of wildlife in the North basin when dredging resumes there in 75 to 115 years. • Abundance of Canada geese may increase during lake filling due to the increase of wetland food sources. At maturity of this alternative, however, dense wetlands may reduce geese abundance because they prefer open water habitat.	• Temporary disturbance of wildlife in the Middle basin due to dredging and dredge disposal operations, beginning now and repeated every 2 years. • Abundance of Canada geese will likely stay similar to existing conditions.	• Rapid shift in wildlife to species preferring estuary habitat. • Gradual increase in species abundance and richness with conversion from open water to brackish wetland habitat over 100 to 150 year period. • Temporary disturbance of wildlife in Lower Budd Inlet in 100 to 150 years when dredging begins. • Abundance of Canada geese will likely decrease because they prefer freshwater habitat over estuarine (salt water) habitat.	• Rapid shift in wildlife to species preferring estuary habitat throughout the basin, except for the 40 acres of freshwater habitat retained on the east half of the North Basin. • Gradual increase in species abundance and richness with conversion from open water to brackish wetland habitat over 100 to 125 year period. • Temporary disturbance of wildlife in Lower Budd Inlet in 100 to 125 years when dredging begins. • Abundance of Canada geese will likely decrease because they prefer freshwater habitat over estuarine (salt water) habitat.	• Gradual shift in species abundance and richness over 100 to 150 years as North and Middle basins convert to freshwater wetlands. • Temporary impacts (e.g., noise disturbance of wildlife) in Lower Budd Inlet with dredging and dredge disposal operations in 100 to 150 years. • Abundance of Canada geese may increase during lake filling due to the increase of wetland food sources. At maturity of this alternative, however, dense wetlands may reduce geese abundance because they prefer open water habitat.
MITIGATION	• Provide large woody debris and wetland plantings as sediment in-filling progresses. • A Canada goose management program is needed to limit their abundance and interference with human activities.	• Provide large woody debris and wetland plantings as sediment in-filling progresses. • A Canada goose management program is needed to limit their abundance and interference with human activities.	• A Canada goose management program is needed to limit their abundance and interference with human activities.	• Provide large woody debris and wetland plantings as sediment in-filling progresses. • A Canada goose management program is needed to limit their abundance and interference with human activities.	• Provide large woody debris and wetland plantings as sediment in-filling progresses. • A Canada goose management program is needed to limit their abundance and interference with human activities.	• Provide large woody debris and wetland plantings as sediment in-filling progresses. • A Canada goose management program is needed to limit their abundance and interference with human activities.

Table 1-5
Summary of Wildlife Impacts and Mitigations

	Lake/River Wetland without Trap Alternative	Lake/River Wetland with Trap Alternative	Lake Alternative	Estuary Alternative	Combined Lake/Estuary Alternative	No-Action Alternative
IMPACTS	• Gradual shift over 50 to 85 years to more riverine habitat in the Middle Basin, with concurrent shift in species to anadromous fish favoring riverine habitat. • Increased shallow water wetland habitat in the South and Middle basins favoring the Olympic mudminnow (a State candidate species). • In the absence of maintenance dredging in Percival Cove, the 200,000 yearling chinook net pen operation and the chinook fingerling feeding/imprinting program would be displaced. • Intermittent fish passage problems at the existing fish ladder at the tide gate dam under certain lake level/tide conditions. • Intermittent impacts to fish and fish habitat during dredging operations, which would begin in the North basin in 50 to 85 years.	• Gradual shift over 75 to 115 years to more riverine habitat in the Middle Basin, with concurrent shift in species to anadromous fish favoring riverine habitat. • Temporary impacts to fish and fish habitat during dredging operations, which would resume in the North basin in 75 to 115 years. • Other impacts similar to Lake/River Wetland Without Trap Alternative.	• Intermittent impacts (every two years) to fish in the Middle Basin during dredging operations, beginning now and continuing into the future. • Intermittent fish passage problems at the existing fish ladder at the tide gate dam under certain lake level/tide conditions. • Fish kills during modified lake draw-down operations.	• Rapid shift in species favoring brackish estuary habitat and loss of freshwater fish, including the Olympic mudminnow (a State candidate species). • Gradual shift over 100 to 150 years to estuarine wetland habitat in the South, Middle and North basins, with concurrent shift in species favoring estuarine habitat. • In the absence of maintenance dredging in Percival Cove, the 200,000 yearling chinook net pen operation and the chinook fingerling feeding/imprinting program would be displaced. • Intermittent impacts to fish and fish habitat during future dredging operations, which would resume in Lower Budd Inlet in 100 to 150 years.	• Impacts would be the same as those for the Estuary Alternative except that (1) some freshwater habitat would be retained in the eastern half of the north basin with construction of the reflecting pool dam, and (2) the gradual shift in habitat is expected to occur over a period of 100 to 125 years.	• Gradual shift over 100 to 150 years to more riverine habitat in the middle basin, with concurrent shift in species to anadromous fish favoring riverine habitat. • Increased shallow water wetland habitat in the South, Middle, and North basins favoring the Olympic mudminnow (a State candidate species). • In the absence of maintenance dredging in Percival Cove, the 200,000 yearling chinook net pen operation and the chinook fingerling feeding/imprinting program would be displaced. • Intermittent fish passage problems at the existing fish ladder at the tide gate dam under certain lake level/tide conditions. • Intermittent impacts to fish and fish habitat during dredging operations, which would begin in Lower Budd Inlet in 100 to 150 years.
MITIGATION	• Provide replacement rearing, feeding, imprinting facilities for loss of Percival Cove operations. • Reconstruct the fish ladder to eliminate existing fish passage problems. • Perform future dredging operations during periods of least fish and water quality impacts (December through February).	• Same as Lake/River Wetland Without Trap Alternative	• Perform dredging operations during periods of least fish and water quality impacts (December through February). • Reconstruct the fish ladder to eliminate existing fish passage problems. • Discontinue modified lake draw-down events	• Modify the Heritage Park wetland mitigation site (southwest end of Middle basin) to provide adequate shallow freshwater habitat for the Olympic mudminnow. • Provide replacement rearing, feeding, imprinting facilities for loss of Percival Cove operations. • Perform future dredging operations during periods of least fish and water quality impacts (December through February).	• Mitigation would be the same as for the Estuary Alternative, except that additional mitigation for impacts to the Olympic mudminnow would be implemented in the freshwater side of the north basin.	• Same as Lake/River Wetland Without Trap Alternative.

Table 1-6
Summary of Fisheries Impacts and Mitigations

AQUATIC AND WETLAND VEGETATION						
	 Lake/River Wetland without Trap Alternative	 Lake/River Wetland with Trap Alternative	 Lake Alternative	 Estuary Alternative	 Combined Lake/Estuary Alternative	 No-Action Alternative
IMPACTS	• Gradual shift over 50 to 85 years with emergent and scrub-shrub habitat increasingly replacing submerged aquatic plants in the South and Middle basins. • Sediment accumulation in the lower Middle Basin eventually would clog culverts (25 to 50 years) and would cut off the main water source to the Heritage Park wetland mitigation site (behind the dike in southwest corner of Middle Basin). • During the interim period, there could be increased submerged aquatic plants.	• Impacts would be similar to the Lake/River Setland Without Trap Alternative, except: • Gradual shift over 75 to 115 years with emergent and scrub-shrub habitat increasingly replacing submerged aquatic plants in the South and Middle basins. • During the interim period there could be increased submerged aquatic plants.	• Minor increase in freshwater emergent wetlands in the south basin. • Possible increase in submerged aquatic vegetation throughout the North and Middle basins due to modified draw-down control.	• Rapid elimination of all submerged freshwater aquatic plants in the basin. • Probable adverse saltwater impacts to the Heritage Park wetland mitigation site (southwest Middle Basin). • Gradual in-filling of the South, Middle and North basins with brackish marsh habitat over a period of 100 to 150 years. • Large woody debris could be flushed into Budd Inlet during flood events.	• Same as the Estuary Alternative, except that: (1) the east half of north basin would remain as freshwater habitat, and (2) the time for conversion to brackish marsh habitat would be over 100 to 125 years. • Large woody debris could be flushed into Budd Inlet during flood events.	• Same as the Lake/River Wetland Without Trap Alternative, except that: (1) the gradual transition from submerged aquatic plants to freshwater emergent and scrub-shrub habitat would affect the North Basin as well as the South and Middle basins, and (2) the period of gradual transition would be 100 to 150 years.
MITIGATION	• Maintain water flow through culverts or provide alternative water supply to maintain hydrology in the Heritage Park wetland mitigation site.	• Same as Lake/River Wetland Without Trap Alternative	• If aquatic plants reach nuisance levels, develop an integrated aquatic vegetation management plan for the lake.	• Alternative water supply to maintain hydrology in the Heritage Park wetland mitigation site • Additional harbor maintenance to remove large wood debris.	• Same as the Estuary Alternative.	• Same as Lake/River Wetland Without Trap Alternative.

Table 1-7
Summary of Aquatic and Wetland Vegetation Impacts and Mitigations

LAND USE, RECREATION, AND SHORELINE USE

	 Lake/River Wetland without Trap Alternative	 Lake/River Wetland with Trap Alternative	 Lake Alternative	 Estuary Alternative	 Combined Lake/Estuary Alternative	 No-Action Alternative
IMPACTS	• Long term preservation of the North Basin as a reflecting pool. • Eventual loss of the Middle Basin as a reflecting pool for the Capitol Building. • Consistent with Shoreline Master Program (SMP). • Recreational use of the Middle Basin would change gradually from open-water recreation (boating & fishing) to riverine recreation, over a period of 50 to 85 years. • At the time of maturity, increased lake and shoreline vegetation could become a public safety issue for Deschutes Parkway or shoreline trail users.	• Same as the Lake/River Wetland Without Trap Alternative regarding reflecting pool, Shoreline Master Program, recreational use, and public safety. • Gradual transition from open-water recreation to riverine recreation in the Middle Basin would occur over a period of 75 to 115 years.	• Long-term preservation of both the Middle and North basins as reflecting pools. • Consistent with Shoreline Master Program (SMP).	• Immediate partial loss of the reflecting pool function of the Middle and North basins with twice daily tidal exchange. • Gradual reduction in reflecting pool area to the remaining open-water river channel over a period of 100 to 150 years. • Consistent with Shoreline Master Program (SMP). • Recreational use of the Middle and North basins would change gradually from open-water (with twice daily tidal exchange) recreation (boating & fishing) to riverine recreation, over a period of 100 to 150 years.	• Same as the Estuary Alternative, except that: (1) the eastern half of the North Basin is retained as open-water reflecting pool , and (2) the time of maturity is estimated at a 100 to 125 years. • Consistent with Shoreline Master Program (SMP).	• Gradual loss of the reflecting pool function of the North and Middle basins, over a period of 100 to 150 years. • Gradual conversion from open-water recreation (boating and fishing) to riverine recreation in the North and Middle basins. • At the time of maturity, with increased scrub-shrub vegetation, public safety could become an issue for shoreline trail users. • Consistent with Shoreline Master Program (SMP).
MITIGATION	• Increased illumination, cut back shoreline vegetation and increased police patrols for public safety.	• Same as Lake/River Wetland Without Trap Alternative.	• None required.	• Same as Lake/River Wetland Without Trap Alternative.	• Same as Lake/River Wetland Without Trap Alternative.	• Same as Lake/River Wetland Without Trap Alternative.

Table 1-8
Summary of Land Use, Recreation, and Shoreline Use Impacts and Mitigations

	Lake/River Wetland without Trap Alternative	Lake/River Wetland with Trap Alternative	Lake Alternative	Estuary Alternative	Combined Lake/Estuary Alternative	No-Action Alternative
						
IMPACTS	• The Middle Basin portion of the historically significant Capitol Lake reflecting water body (originally conceived by architects White and Wilder as part of the Capitol Campus Plan) would eventually be lost in 50 to 85 years. • Gradual conversion from open-water habitat to emergent wetlands in the middle basin would provide an additional source of wetland plants historically used by Native Americans.	• Same as the Lake/River Wetland Without Trap Alternative, except that the reflecting pool function of the Middle Basin would be lost over a period of 75 to 115 years.	• No impacts to cultural resources.	• Immediate conversion to a tidal estuary in which the permanent freshwater reflecting pool would be replaced by alternating views of open-water and tidal mud flats twice daily. • The Middle and North basins of the historically significant Capitol Lake reflecting pool (originally conceived by architects White and Wilder as part of the Capitol Campus Plan) would eventually be reduced to the area of the remaining river channel in 100 to 150 years. Loss of freshwater wetland plants used by Native Americans.	• Same as the Estuary Alternative except that: (1) the eastern half of the North Basin would be retained to function as a reflecting pool for the Capitol Building, and (2) the time of conversion to brackish tidal marsh for the remainder of the basin would be 100 to 125 years. • Loss of freshwater wetland plants used by Native Americans, except for the area in the eastern half of the North Basin.	• Gradual loss of the reflecting pool function (originally conceived by architects White and Wilder as part of the Capitol Campus Plan) of the North and Middle basins over a period of 100 to 150 years. • Gradual conversion from open-water habitat to emergent wetlands in the Middle and North basins would provide an additional source of wetland plants used by Native Americans.
MITIGATION	• None proposed.	• None proposed.	• None required.	• None proposed.	• None proposed.	• None proposed.

Table 1-9
Summary of Cultural Resources Impacts and Mitigations

	 Lake/River Wetland without Trap Alternative	 Lake/River Wetland with Trap Alternative	 Lake Alternative	 Estuary Alternative	 Combined Lake/Estuary Alternative	 No-Action Alternative
IMPACTS	• Gradual conversion of open-water vistas to views of dense emergent and scrub-shrub wetland vegetation in the Middle Basin over a period of 50 to 85 years.	• Same as the Lake/River Wetland Without Trap Alternative, except: (1) a small area of open-water habitat would be retained over the sediment trap in the south end of the Middle Basin, and (2) the gradual conversion of views in the Middle Basin would occur over a period of 75 to 115 years.	• No impacts	• Tidal exchange would expose mud flats twice daily. • Gradual conversion of open-water vistas to views of dense brackish marsh vegetation in the Middle and North basins over a period of 100 to 150 years. • Undesirable odors may be experienced when tidal mudflats are exposed.	• North Basin views modified by the addition of the reflecting pool dam. • Otherwise, the same as the Estuary Alternative except that open freshwater habitat would be retained in the eastern half of the North Basin.	• Gradual conversion of open-water vistas to views of dense emergent and scrub-shrub wetland vegetation in the Middle and North basins over a period of 100 to 150 years.
MITIGATION	• None proposed.	• None proposed.	• None required.	• None proposed.	• None proposed.	• None required.

Table 1-10
Summary of Aesthetics Impacts and Mitigations

Chapter 2. Lake Description and Related Activities

INTRODUCTION

The Budd Inlet-Deschutes River Watershed includes Capitol Lake, a 270-acre freshwater reservoir in northern Thurston County, within the cities of Olympia and Tumwater (**figure 2-1**). As of 1973, the lake had an average depth of 9 feet. Typical summer depths for the North, Middle, and South basins are[1]:

North Basin.....0 to 14 feet
Middle Basin....0 to 10 feet
South Basin.....0 to 3 feet

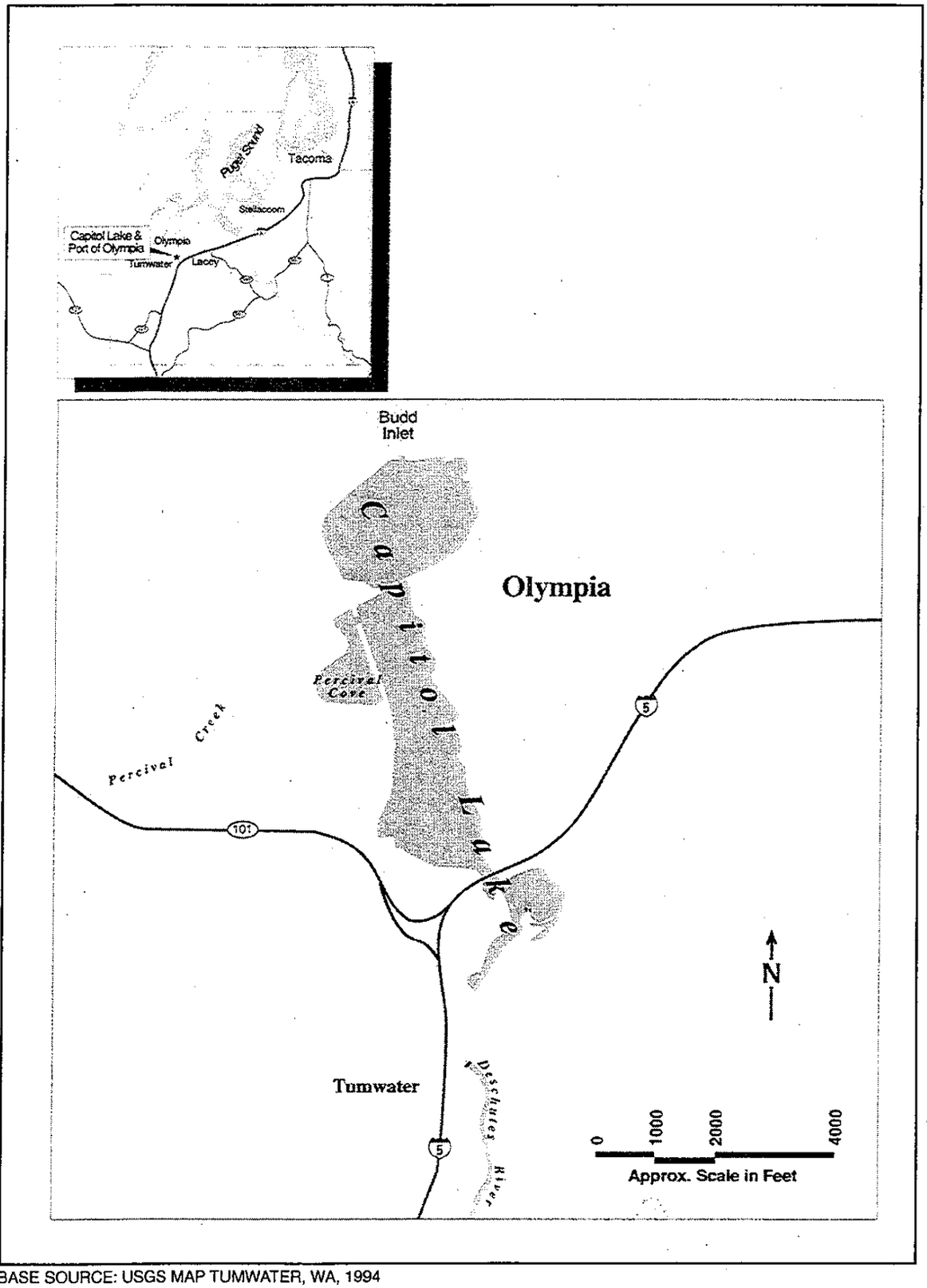
The lake is at the mouth of the Deschutes River and has a drainage area of 185 square miles.

Prior to 1951, the area occupied by Capitol Lake, which is located in north Thurston County, was a tidal estuary of the Deschutes River. The character of the estuary was different than present lake conditions, with brackish marsh vegetation being influenced by both the salt water tidal action of Puget Sound and freshwater flow from the Deschutes River. The lake was formed to serve as a reflecting pool for the Capitol Building and was first envisioned by architects Wilder and White in their conceptual design for the Capital Campus in 1911. Construction of the lake was authorized by the State Legislature in the late 1930s and funding was authorized to build the tide gate and dam along 5th Avenue in 1947. The lake project was completed in 1951.

The perceived benefits of forming the lake included:

- A Capital Campus reflecting pool and improved aesthetics
- Public access and recreational uses such as swimming[2], boating, and fishing
- Limited flood control for the City of Olympia during high tides and for less intense floods
- New fish rearing facilities in Percival Cove

1. Typical depths are for areas outside the river channel, which is somewhat deeper. In addition, there is a small, deep hole near the tide gate, which is approximately 40 feet deep.
2. Swimming was discontinued in 1985 due to high fecal coliform levels and poor water clarity.



B146 97034-60 Capitol Lake EIS (8/19/98) CDF

BASE SOURCE: USGS MAP TUMWATER, WA, 1994

Figure 2-1
Project Vicinity Map

- Elimination of tide flats and associated odors

There were also some negative impacts with lake formation, including:

- intermittent fish passage problems at the tide gate,[3]
- excessive aquatic plant growth,
- reduced water circulation, and
- increased algal growth and reduced water clarity.

Since the lake was constructed by the State of Washington, it has been managed by the Washington State Department of General Administration (DGA). Management activities have historically been coordinated with the Washington State departments of Ecology, Fish and Wildlife; Thurston County; and the cities of Olympia and Tumwater.

As early as 1970, DGA recognized that sediment accumulation in the lake would have to be actively managed if the lake's beneficial uses were to be maintained. Walker and Byrne (**1970**) estimated that 739,000 cubic yards of sediment had accumulated in the lake between 1949 and 1970, or the equivalent of 41,000 cubic yards per year. Since the Walker and Byrne report (**1970**), various investigators have estimated the annual sediment load to the lake at between 20,000 to 57,000 cubic yards per year[4] (**Entranco 1990a**).

Based on further studies by Washington State University (**Orsborn et al. 1975**), plans were proposed to remove as much as 360,000 cubic yards of sediment from the lake during an initial sediment removal project, and to construct sediment traps in the South and Middle basins. This led to development of the Capitol Lake Restoration and Recreation Plan (**CH2M Hill 1977**).

Recent estimates of sediment accumulation, which compared 1983 and 1991 aerial topographic lake bottom surveys (performed when the lake is drained and most of the lake bottom is exposed), indicate a sedimentation rate of approximately 35,000 cubic yards per year. Based on this average annual rate, it is estimated that a total of 1.5 million cubic yards of sediment have been deposited in the lake since its formation in 1951. Deposition has occurred primarily in the

3. A fish ladder was constructed to allow fish passage around the tide gate.

4. The broad range is due to the application of several different methodologies, and the innerent variability caused by year-to-year changes in land use, rainfall, river discharge, etc.

South and Middle basins where as much as 71 to 78 percent of the sediment load accumulates.

CAPITOL LAKE AND ITS BENEFICIAL USES

The residents of Olympia, Tumwater, Lacey, Thurston County, and Washington State place a high value on the visual and scenic qualities of Capitol Lake and the surrounding area. The lake and shoreline environment is also highly valued for recreation. The lake itself is used for fishing (salmon, trout, and bass), boating, canoeing, and other aquatic recreation. Shoreline parks include Capitol Lake Park, Marathon Park, Capitol Lake Interpretive Center, and Tumwater Historical Park. These parks are all connected by pedestrian trails along the north and western shorelines of the lake. There is also a pedestrian trail parallel to the Burlington Northern Railroad crossing that separates the North and Middle basins. Walking, jogging, bicycling, bird-watching, picnicking, canoeing, fish-watching (salmon runs at the fish ladder), and other recreational activities are enjoyed at these park facilities. Each year, the lake becomes the central attraction of Lake Fair, a community event that attracts more than 75,000 visitors and features many activities focused on the lake and adjacent shorelines. Other community events occur in the lakeside parks, inciuding Fourth of July celebrations, the Bon Odori Japanese Cultural Celebration, state employee picnics, and outdoor concerts (**CH2M Hill 1977, Entranco 1990a**).

Tourists and visitors to the state capitol, along with local residents, participate in the annual Lake Fair and other community events. This fair also stimulates the local economy through sales of gas, food, lodging, crafts, souvenirs, etc. Jogging trails and parks around the lake also mean that running shoes, clothing, and picnic supplies are needed and supplied by local merchants.

The lake provides fish habitat for various life stages of chinook, coho, sockeye, and chum salmon; steelhead; cutthroat and rainbow trout; largemouth bass; and carp. Anadromous fish pass upstream into the lake from Budd Inlet through a fish ladder at the dam, while downstream migrants pass through the tide gates or over the fish ladder. Each year, two million chinook salmon fry (juveniles less than one year of age) are planted in Capitol Lake/Percival Cove in March and April. The fry are fed by the Washington State Department of Fish and Wildlife (WDFW) from mid-April to late May or early June. Between late May and early June, the fry begin their migration out to Puget Sound. The WDFW and the Olympic Salmon Club also raise 200,000 yearling chinook salmon (juveniles greater than one year old) in two net pens in Percival Cove, adjoining Capitol Lake. The

lake is thus an important rearing habitat for commercial, sport, and Indian salmon fisheries.

Some rainbow trout planted in Black Lake also migrate down Percival Creek and reside in Capitol Lake along with steelhead and other resident fish such as cutthroat trout, largemouth bass, and carp. This abundance of fish also makes Capitol Lake an important sport fishery (**Entranco 1990a**).

Sport fishing contributes to the local economy through the sale of licenses, boats, motors, and other fishing gear. Hatchery, net pen, and feeding operations support commercial, sport, and Native American salmon fishing operations and are a very important source of economic support to both the state and local economy.

When this area was a tidal estuary and no human development encroached on the floodplain, flood waters would disperse over the entire inlet. Once the inlet began to be filled and developed, including the constriction provided by the Capitol Lake dam, flood waters have had a limited area for dispersement and flooding began to occur. The Capitol Lake dam tide gate provides limited flood control for the City of Olympia. The tide gate prevents high tides from flooding downtown Olympia for some flood events. During the 100-year storm, flooding can occur near the northeast shore of Capitol Lake under conditions of high tide and concurrent, high winter Deschutes River discharge.

However, Capitol Lake is managed by the DGA to minimize flood impacts. The winter elevation of the lake is one foot below the summer lake level. As needed, the tide gate at the Capitol Lake dam is opened to lower the lake level and to provide additional flood storage prior to major rainstorms. The lake is lowered during a low tidal cycle, providing additional flood storage during the period when high tides prevent discharge from the lake. Although flooding can still occur during extremely large flood events, like the 100-year storm, flooding can be reduced or prevented for flows of lower magnitude (**Entranco 1990a**).

CAPITOL LAKE ADAPTIVE MANAGEMENT PLAN

With recent efforts to obtain permit and environmental approvals for the construction of Heritage Park on the eastern shore of the North Basin (**Portico 1997**), and for maintenance dredging of Capitol Lake in the Middle Basin and Percival Cove (**Entranco 1996**), various agencies and organizations expressed interest in developing a Capitol Lake Adaptive Management Plan (the Plan).

The Plan will be a written document, developed by an interagency/ jurisdiction Steering Committee, to provide guidance on how Capitol Lake will be managed and operated in the future. For example, a key question to be addressed in the Plan is, "Should Capitol Lake be restored to a tidal estuary?" or "Should it continue to be maintained as a freshwater lake?" The reason the Plan is called "adaptive" is because it will be frequently updated and possibly modified as studies are triggered and more is learned about how the water resource responds to different management/operational strategies.

The following sections present projects or activities that are planned in the Capitol Lake area.

RELATED ACTIVITIES

Heritage Park

The entire eastern shore of the North Basin of Capitol Lake is the setting for the new Heritage Park, sponsored by DGA. Heritage Park is the realization of one major element of the original Capital Campus plan prepared by New York architects Wilder and White.

The park encompasses 46 acres, including part of the North Basin. A key feature of the park is the Arc of Statehood, a large semicircular, tree-lined walkway, which encompasses the entire eastern shoreline of the lake (**figure 2-2**). A network of trails connects the new shoreline trail with the Capitol grounds to the south and Olympia's Heritage Fountain and Percival Landing (a marine waterfront park on Budd Inlet) to the north. The park plan includes new aquatic and wetland habitat on the eastern shore of the North Basin, as well as newly constructed and enhanced wetlands in the southwestern corner of the Middle Basin (**figure 2-2**).

Park construction started in summer 1998 and Phase I is scheduled for completion by fall 1999. Construction of other park elements could extend into the year 2000 or 2001.

New Market Historic District

Tumwater's New Market Historic District borders most of the South Basin of Capitol Lake. A master plan for this district was adopted by the City of Tumwater in 1993. It describes future land uses, shoreline improvements, and cultural and recreational facilities planned for the district. Key components of the master plan include expansion of the City's Historical Park to include a trail system around the

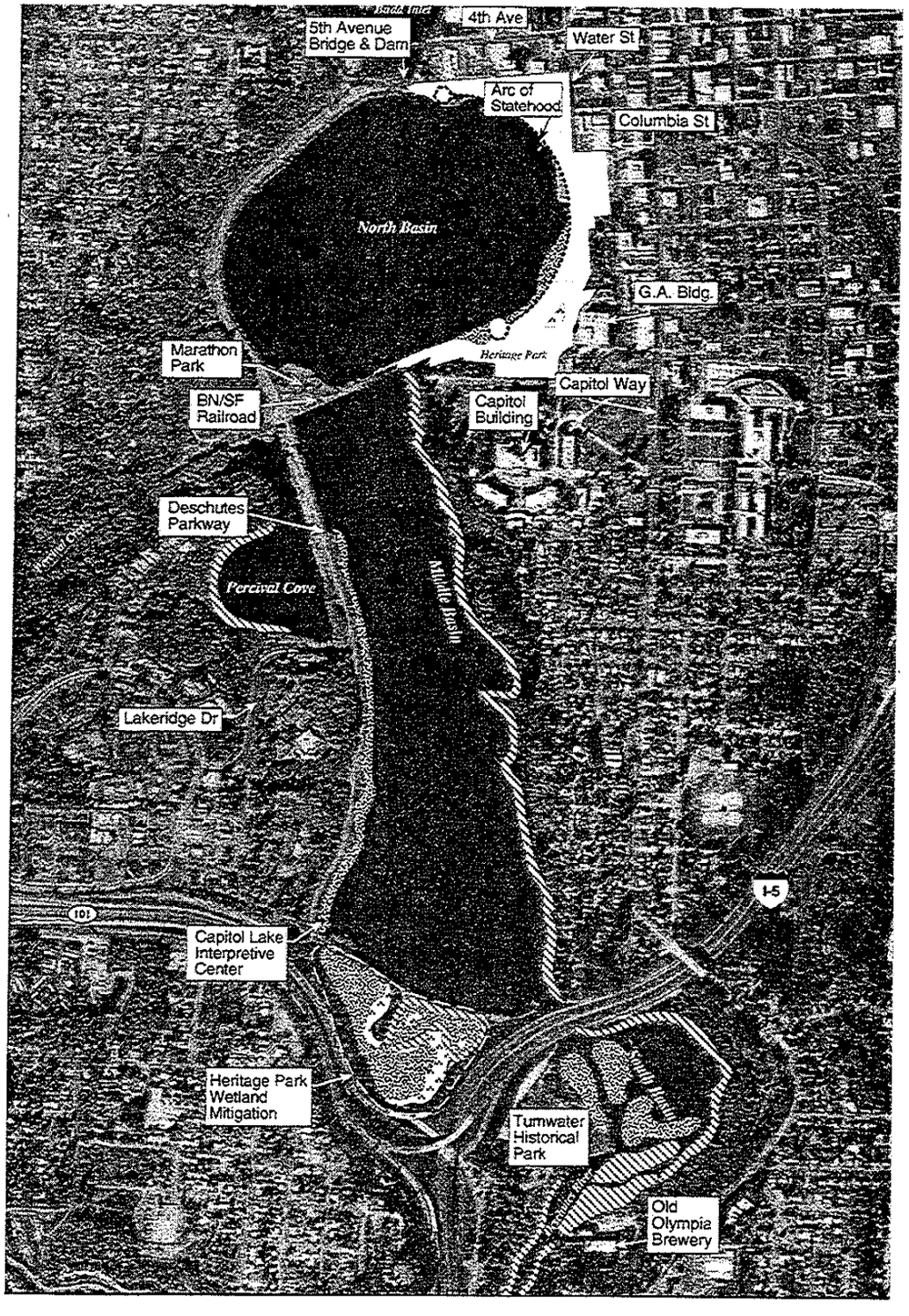


Figure 2-2
Capitol Lake
Existing Conditions

south basin (including pedestrian bridges over the Deschutes River and Capitol Lake near the Interstate 5 bridge), and rehabilitation of the Old Olympia Brewery buildings for beneficial use to the public. Other existing and future cultural and archaeological resources of the district also are identified in the master plan.

Deschutes Parkway Improvements

A recent study (**JWMSA 1997**) was performed to evaluate the existing condition of the Deschutes Parkway, which runs along the entire western shoreline of Capitol Lake. This two-lane roadway was constructed between 1949 and 1952 to improve transportation access between Olympia and Tumwater. The roadway is 8,550 feet long and extends from Interstate 5 (I-5) on the south to 5th Avenue on the north.

The recent assessment shows that the roadway continues to show damage from being built almost 50 years ago and an earthquake in 1965. Various repairs are recommended for Deschutes Parkway, including a combination of roadway reconstruction, roadway reinforcement, roadway structural support, slope retaining structures, and toe/roadway drainage. Estimated construction cost is $9.9 million. A date for construction has not been established.

Since stormwater runoff from the existing roadway is not treated currently, the proposed upgrade should provide for stormwater treatment.

Currently the only utility corridor along Deschutes Parkway is the pressurized sewer line from the Westside Lift Station to the Lacey-Olympia-Tumwater-Thurston County partnership (LOTT) Treatment Plant in downtown Olympia. The Westside Lift Station is located west of Marathon Park and serves the sanitary sewer needs of a large portion of West Olympia. This facility is currently rated at 6 million gallons per day (mgd) and needs to be upgraded to 12 mgd. In a related sewerage improvement, the Washington State Department of Ecology has notified LOTT that the emergency repairs to the Southern (Tumwater) Interceptor, currently on the eastern hillside of the South Basin, will not be an adequate long-term solution. Therefore, LOTT is seeking an alternative route to the treatment plant.

The most appropriate alternative appears to be a route extending along Deschutes Parkway from Tumwater to the Westside Lift Station. Such a proposal would require an additional upgrading of the Westside Lift Station from 12 to 24 mgd and a new, parallel

pressure line from the lift station to the general area of the Olympia Center where it flows by gravity to the treatment facility. Plans for these facility improvements have not been finalized, but preliminary discussions indicate that this work would require the temporary closure of the western 20 feet of Deschutes Parkway. Also, any utilities constructed within Deschutes Parkway would need to be constructed to withstand future seismic events. Therefore, these lines would have to be designed to withstand vertical and lateral failures.

Another upland project, which may occur in the South Basin vicinity, is the Olympia Woodland Trail. This urban trail would extend the existing bikeway along I-5 from Tumwater Historical Park to the Chehalis Western trail head near Lacey. A new pedestrian bridge would need to be constructed across Capitol Lake, just south of the I-5 bridge. Once completed, the trail would be 3.8 miles long. Timing is subject to funding availability.

Capitol Lake Restoration Report and Action Plan (1988)

Developing a management plan for Capitol Lake is not a new idea. The *Capitol Lake Restoration: Committee Report and Proposed Action Plan* was completed in 1988. A summary of this existing plan is provided below to provide historical context to the new Capitol Lake Adaptive Management Planning Process. The *Capitol Lake Restoration: Committee Report and Proposed Action Plan* was prepared by an intergovernmental staff committee. The committee's goal was to address the water quality degradation in the lake that was adversely affecting recreational activities in the lake and led to the closing of the swimming beach at Capitol Lake Park. The Action Plan contained four goals and 21 action recommendations, aimed at improving the water quality of Capitol Lake. The process predated many other nonpoint pollution rules and planning processes, which occurred in adjacent watersheds and later within the Deschutes River/Capitol Lake watershed.

There was little incentive for the state departments or local jurisdictions, which helped prepare the 1988 Action Plan, to actually adopt it as a decision-making document. Therefore, any implementation of its recommendations has been an indirect result of other ongoing water quality activities or projects. For example, the *Budd Inlet - Deschutes River Watershed Action Plan* responded to the need for a watershed planning process (Rec. 21). The Steering Committee for the Capitol Lake Adaptive Management Plan process could also be considered the interjurisdictional guidance body suggested in the first recommendation.

Regarding water quality, monitoring has been done on a limited basis within the watershed (Rec. 5), stormwater outlets to Capitol Lake have been sampled in several intensive monitoring operations by the Thurston County Health Department (Rec. 12), and the NPDES permit for the Olympia Brewery was updated (Rec. 10). A stormwater basin plan for Percival Creek has been prepared (Rec. 19) along with an evaluation of Black Lake water quality (Rec. 18). Implementation of these basin plans have resulted in the construction of a new stormwater treatment facility at Mottman Road.

New stormwater facilities are now required to meet new treatment standards (Rec. 6 & 7) and the Thurston County Conservation District has targeted the Deschutes River as a priority area for new farm plans (Rec. 15 & 16). The Budd-Deschutes Plan and Long-Term Forestry zoning have identified the extent of forestry in the watershed (Rec. 14), and the Timber-Fish and Wildlife process has been adopted in to the Forest Practices Act (Rec. 13). Wetlands throughout the watershed were mapped in 1995 (Rec. 20); an evaluation of creating a wetland in the middle basin was completed (**Entranco 1990a**) and is being re-evaluated under the current planning process (Rec. 22).

Even though a majority of the recommendations have been addressed, there are still unresolved issues. The first is the lack of "maintenance dredging on a planned and regular basis" (Rec. 3); this is one reason for the current planning process. The County and State have adopted a number of new water quality regulations, but providing adequate staffing level and enforcement of those regulations is still difficult (Rec. 8). Ineffective enforcement may also lower voluntary compliance for actions such as implementing farm plans (Rec. 15 & 16). It is unknown if nutrient loading from the Percival Cove fisheries operation has been monitored or reduced (Rec. 11), and correcting erosion problems along the Deschutes River is and will continue to be a long-term water quality issue (Rec. 17).

Watershed Activities for Erosion and Sedimentation Control

Recognizing that the rate of sediment delivery to Capitol Lake is partially determined by land and water use management activities in the watershed, DGA contracted work to identify and mitigate erosion in the watershed (**Thurston Conservation District 1984 and 1994, Entranco 1990b**). Timber practices historically involved clear-cutting and construction of erosion-prone logging roads. These practices were believed to have a significant influence on erosion

and changing hydrology in the watershed. Other sources of erosion/sedimentation were livestock trampling of river/stream banks and clearing and grading activities associated with urban development.

A recent investigation of erosion/sedimentation concerns in the Deschutes River was completed by Collins (**1994**) on behalf of the Squaxin Island Tribe and the Thurston Conservation District, in which the following conclusions were drawn regarding reductions in sediment loading to Capitol Lake:

> "While it is worth reducing land-use sources of erosion as a means to reducing sedimentation to the lake (and for meeting other objectives such as improving aquatic habitat by improving riparian conditions), it may be more sound for the watershed's overall habitat to emphasize dredging rather than a widespread program of bank protection, and the tradeoffs between the two need to be evaluated."

This comment was supported by an assessment of the relative contributions of natural and man-induced erosion/sedimentation problems in the watershed. Collins (**1994**) also concluded that natural sources of erosion/sedimentation were considered greater than those due to man-related activities such as forestry and agriculture.

The DGA is also involved in cooperative efforts with the Thurston Conservation District, Ecology, WDFW, and other organizations to install bioengineering improvements—river bank stabilization efforts involving vegetation plantings and related work—on a total of seven upstream reaches of the Deschutes River. This is referred to as the Upper Deschutes River Sediment Reduction Project. Three of these improvements were installed in 1993 (**Thurston Conservation District 1994**) and four were installed in 1994 (**M. Turner, personal communication**). Several farm management plans were also developed and implemented as a part of the sediment reduction project.

These efforts, and the efforts of other state, federal, local, and tribal interests are expected to reduce Capitol Lake's sedimentation rate in the years ahead. The amount of sediment load reduction expected from these efforts is uncertain. However, it is clear that some degree of erosion and sedimentation will continue, primarily due to natural causes, despite the benefits of improved control efforts in the watershed. The report concludes:

> "Therefore, the maintenance sediment removal of Capitol Lake is expected to be a long-term, ongoing need, even with the best watershed management practices in place."

Deschutes River Watershed Action Plan

A long-term Watershed Action Plan for the Budd Inlet-Deschutes River watershed was completed by Thurston County (**Thurston County Advance Planning and Historic Preservation 1995a**). The problem of erosion/sedimentation in the Deschutes River and the associated filling of Capitol Lake is recognized in the plan.

In the Flooding, Sedimentation and Bank Erosion (SED) chapter of the action plan there are 18 action recommendations which seek to improve the river ecosystem. Since the adoption of the Watershed Action Plan, moderate progress has been made to address this topic. Thurston County will conclude its "reach scale analysis" of the river habitat (Action Recommendation SED 4) by mid-1999. This project targets areas of existing off channel rearing habitat and erosion concerns (SED 11) and has built on data already collected by the Squaxin Island Tribe on the distribution of large woody debris along the mainstem of the river.

Funding for suggested restoration projects has been less available. Currently unfunded projects are the Conservation District riparian revegetation program (SED 3), bioengineering projects (SED 6), new farm plans (also include revegetation) (SED 8), and the City of Tumwater riparian vegetation restoration project along the Tumwater Valley Golf Course (SED 10). The Stream Team has been active along the river and helped to replant streamside vegetation in Tumwater's Pioneer Park. The Capitol Land Trust has set aside funds for protecting riparian vegetation on a few properties along the river (SED 7) and for a small property in the South Basin of Capitol Lake. The Weyerhaeuser Corporation and the Washington State Department of Natural Resources (DNR) have not yet begun a Watershed Analysis process in the upper watershed (SED 1). Also, the entire forest practices industry, including DNR, is re-evaluating streambank stability with respect to salmon habitat (SED 16).

As indicated by these action recommendations, the intent is to minimize erosion and sedimentation in the Deschutes River watershed to the extent feasible using available local, state, tribal, and federal resources. Depending on the degree of success, and the funding availability for implementation, these actions are expected to result in some reduction in sediment loading to Capitol Lake over time.

The Watershed Action Plan also includes recommendations on agricultural practices, wastewater management and stormwater quality which, if implemented, would result in improved water quality in the Deschutes River and Capitol Lake over time.

Chapter 3. Alternatives

INTRODUCTION

This chapter expands the description of alternatives presented in Chapter 1, Summary.

The SEPA review process was initiated with a public scoping meeting on November 20, 1997. During this meeting, preliminary alternatives were presented, key environmental issues were addressed, and the public was provided the opportunity to comment. Following issuance of this Draft Environmental Impact Statement (EIS), additional community input will be obtained at a public meeting, where citizens can comment on relevant concerns.

Existing conditions, five action alternatives, and the No-Action Alternative are addressed in this non-project EIS. The alternatives described in detail are:

- Lake/River Wetland Without Trap
- Lake/River Wetland With Trap
- Lake
- Estuary
- Combined Lake/Estuary
- No Action

The key issues distinguishing the alternatives involve the following questions:

1. Would the system function as a freshwater or estuary (brackish water) dominant ecosystem?
2. Would the tide gate at the Capitol Lake Dam at 5th Avenue be retained or removed (or locked in the open position)?
3. Would maintenance dredging be part of the alternative and if so, how, where, and when?
4. Would the modified drawdown/saltwater backfill operation be continued or discontinued?

Each action alternative was developed using a different combination of these features to determine how the keep basin would evolve over time.

Freshwater or estuary system, retention or removal of the tide gate, dredging, and continued drawdown all have a role in how long it would take for the full impact of the alternatives to be realized. These factors also would determine the relative amounts of open-water, freshwater, and estuary habitats that would distinguish the alternatives (see ***figures 3-1 to 3-10*** under Alternatives Description).

The time involved in realizing the alternatives' full impacts is referred to as "the time of maturity." At the time of maturity, it is assumed that wetland vegetation—either freshwater or brackish (a mix of fresh and saltwater with medium salinity)—would almost completely occupy any basin that was not dredged and was allowed to fill with sediment, and open-water habitat would be restricted to the remaining river channel. The time of maturity is based on measured sedimentation rates in Capitol Lake, caused by inflows primarily from the Deschutes River.

This EIS uses the phrases short-term, intermediate or interim, and long-term impacts. Short-term impacts refer to those that would occur immediately or within the first 20 years. Intermediate or interim refers to the period from 20 years up to the time of maturity, and long-term refers to conditions at the time of maturity. All figures depicting the alternatives show how the basins would be expected to look at the time of maturity. In addition, the figures showing the Combined Lake/Estuary and Estuary alternatives (see **figures 3-6** to **3-9** under Alternatives Description) show the conditions that would occur during high tide.

Freshwater or Estuary Dominant System/Tide Gate

A key distinguishing feature between alternatives is whether the existing tide gate at the Capitol Lake dam at 5th Avenue would be retained or removed. The tide gate and dam were constructed in 1951 and resulted in the creation of the lake and its separation from the saltwater of Lower Budd Inlet. Retention of the tide gate would maintain freshwater ecosystems in the existing lake basin (all alternatives except the Estuary and Combined Lake/Estuary alternatives). Removal of the tide gate would re-establish a tidal estuary—this would occur with the Estuary and Combined Lake/Estuary alternatives. Re-establishment of tidal circulation could be accomplished by raising the tide gate and leaving them in the open position or by physically removing the tide gate from the dam.

Maintenance Dredging

Two important distinctions between alternatives are the timing of dredging and whether or not maintenance dredging is included as a part of the alternative description, or it is proposed as mitigation. There are two alternatives that include short-term dredging in Budd Inlet as potential mitigation: the Estuary Alternative and the Combined Lake/Estuary Alternative. These alternatives would allow sediment from the Deschutes River to accumulate in the South, Middle, and the North basins until they become completely filled except for the river channel. As indicated in **table 1-1**, it is estimated that this would occur over a period of 100 to 150 years. However, with these options, the removal or permanent opening of the tide gate would allow sediment to be flushed into Budd Inlet during high river flows. This may require mitigation dredging before maturity.

Under the Lake/River Wetland Without Trap Alternative, sediment would be allowed to accumulate in the Middle Basin until it becomes full (time of maturity is estimated at 50 to 85 years); maintenance dredging would then resume in the North Basin every other year to maintain an open-water habitat. The Lake/River Wetland With Trap Alternative would dredge the Middle Basin sediment trap every 6 to 10 years for the foreseeable future. The Middle Basin would eventually fill under this alternative but it would take longer—estimated at 75 to 115 years.

It should be noted that visible changes in the amount of wetland vegetation—either freshwater or brackish—would probably be minor during the first 20 years. However, as time goes by, it is expected that wetland habitat could increase and open-water habitat would decrease in those basins allowed to fill with sediment.

Under the Lake Alternative, dredging would be initiated in ten sectors throughout the Middle Basin and Percival Cove. Of these sectors, two sectors would be dredged every other year for the foreseeable future. With this alternative, the existing lake would be maintained. No regular maintenance dredging would be performed in tne South Basin, but may be performed in the event that sediment accumulation causes flooding, interferes with park uses, or blocks boat ramp access to the lake.

Summer Lake Drawdown

Another key distinguishing feature is whether modified lake drawdown/saltwater backfill would occur. Between late 1971 and 1995, Capitol Lake was drawn down (tide gate was opened at low tide and

all freshwater drained from the lake) every summer and the lake was then refilled with saltwater on the incoming tide. Drawdown and saltwater backfill was practiced to:

- Control freshwater plants and algae.
- Assist outmigration of juvenile salmon (discontinued in the mid 1980s).
- Facilitate in-lake or shoreline construction projects.

In 1996 and 1997, the drawdown/backfill practice was modified to limit the volume and upper vertical limit of saltwater backfill. This was done to avoid adverse saltwater impacts on shallow freshwater aquatic and wetland plant communities, especially the wetlands in the North and Middle basins that were required as mitigation for the Heritage Park project. This modified practice would continue with the Lake Alternative only.

ALTERNATIVE DESCRIPTIONS

Each alternative is described in detail in the following sections.

Lake/River Wetland Without Trap Alternative

Under this alternative, the South and Middle basins would be allowed to fill with sediment and would slowly evolve into freshwater wetlands (**figures 3-1** and **3-2**)[1]. The North Basin would be retained as open-water habitat and would function as a reflecting pool for the Capitol Building. Heritage Park and its freshwater mitigation wetlands (wetlands created to mitigate impacts of park construction) would be integral elements of this alternative.

There would be no maintenance dredging under this alternative and sediments would gradually in-fill the South and Middle basins. The time of sediment infilling for the South Basin is estimated at 20 to 25 years, and 50 to 85 years for the Middle Basin. During the first 20 years, there may be little visual evidence of change in the Middle Basin; but during the interim period (20 to 50 years), freshwater emergent and scrub-shrub wetlands would begin to replace open-water habitat. It is predicted that the most mature wetland vegeta-

1. Lake bottom sediments are comprised primarily of silts, sands, and clays. There is some sorting of material within the lake. Sand and gravel-sized material settles out in the South (upper) Basin; sand is the dominant material in the Middle Basin trap (just north of the I-5 bridge), while the remainder of the Middle and North basins is characterized by a sand/silt/clay mixture. Sand and gravel material may have some commercial value for structural fill.

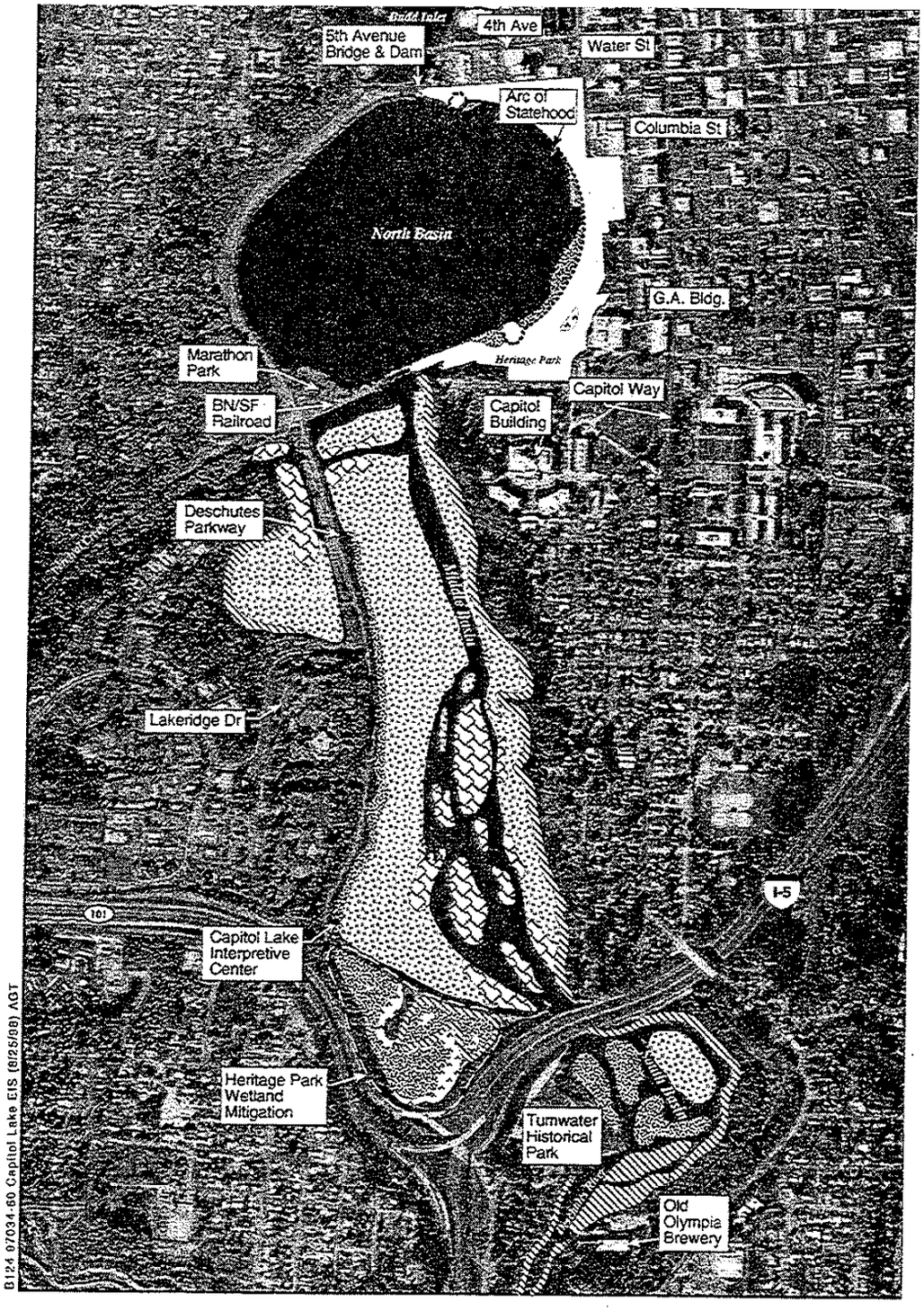


Figure 3-1
Lake/River Wetland Without Trap Alternative

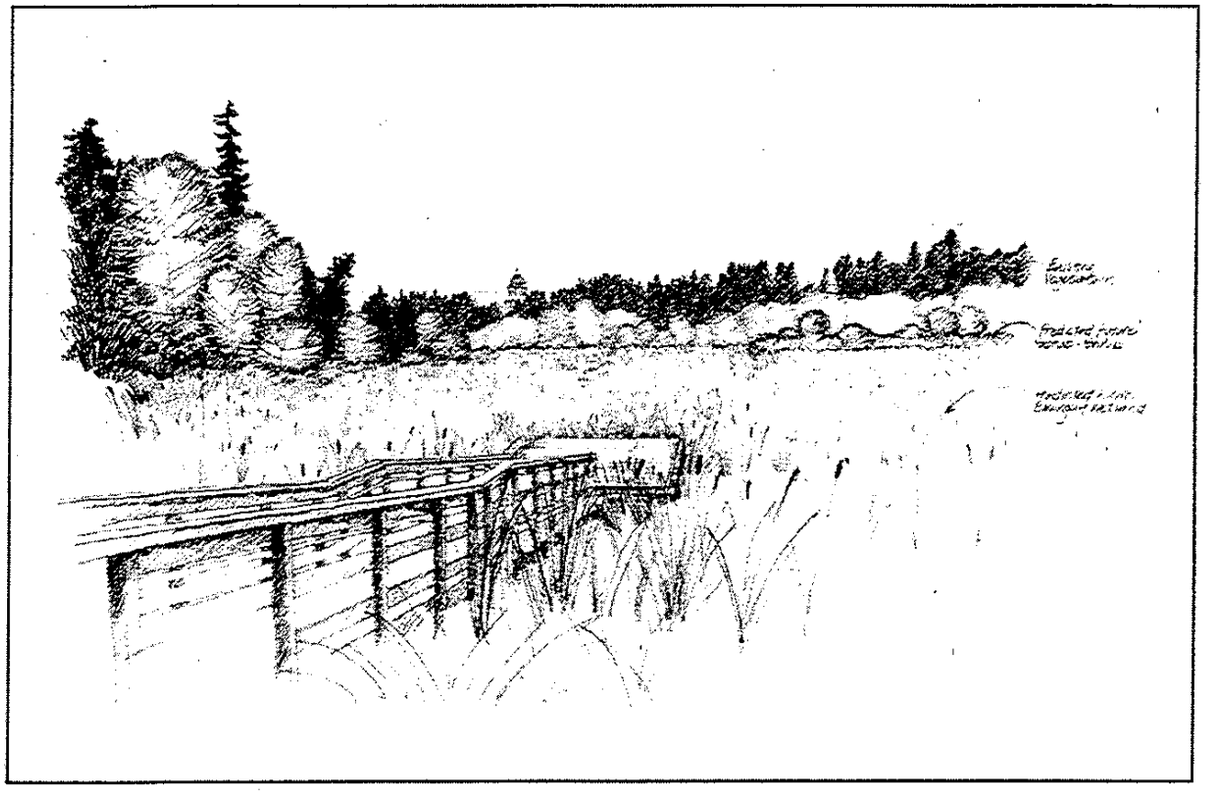


Figure 3-2
View from Capitol Lake Interpretive Center of Both Lake/River Wetland Alternatives at Maturity

tion communities (scrub-shrub wetlands) would develop along the central axis of the Middle Basin on sandbar islands created by the deposition of sediment delivered by the Deschutes River. Emergent wetland vegetation is expected to grow along the shorelines of the sandbar islands and progress shoreward as sediment continues to fill the basin over time. Freshwater wetlands (emergent and scrub-shrub) would occupy much of the South and Middle basins at the time of maturity (**figures 3-1 and 3-2**).

Once the Middle Basin is filled with sediment, maintenance dredging would be required to maintain open-water habitat in the North Basin. It is assumed that North Basin dredging would require removal of an estimated 70,000 cubic yards every two years to keep pace with sediment loading from the Deschutes River.

Under this alternative, mitigation steps could be taken to place large woody debris in locations that would enhance development of wetland and/or shoreline fish and wildlife habitat. This material would be anchored in place to avoid impacts to downstream structures.

Dam operation would be used to provide limited flood control benefits until the South and Middle basins are filled with sediment. Once these basins are filled with sediment, flood storage capacity would be substantially reduced and there would probably be no value in drawing the lake down prior to predicted flood events.

Lake/River Wetland With Trap Alternative

As with the Lake/Wetland Without Trap Alternative, the South and Middle basins would be allowed to fill with sediment and would slowly evolve into freshwater wetlands (**figures 3-2** and **3-3**). With periodic maintenance dredging in the Middle Basin sediment trap, the rate of sediment loading would be reduced and the time to maturity for the Middle Basin wetlands would be extended. The time of sediment filling for the South Basin is estimated at 20 to 25 years, and 75 to 115 years for the Middle Basin. During the interim period (20 to 75 years), the Middle Basin would be increasingly occupied by emergent and scrub-shrub wetland vegetation similar to the process described for the Lake/River Wetland Without Trap Alternative. The North Basin would be retained as open-water habitat and would function as a reflecting pool for the Capitol Building. As with the Lake/River Wetland Without Trap Alternative, Heritage Park and its mitigation wetlands would be included as integral elements.

Maintenance dredging would be performed in the Middle Basin sediment trap (**figure 3-3**) on a 6- to 10-year cycle, and at the mouth of Percival Creek. Freshwater wetlands (emergent and scrub-shrub) would occupy much of the South and Middle basins at the time of maturity (**figures 3-2 and 3-3**). Once the Middle Basin completely filled with sediment, maintenance dredging would be required to retain open-water habitat in the North Basin. It is assumed that North Basin dredging would require removal of 70,000 cubic yards every two years to keep pace with sediment loading from the Deschutes River.

Dam operation would be used to provide limited flood control benefits until the South and Middle basins are filled with sediments.

Lake Alternative

Under this alternative, the North Basin, Middle Basin, and Percival Cove would be retained as open-water habitat (**figures 3-4** and **3-5**) and would function as a reflecting pool for the Capitol Building. The South Basin would experience additional sediment filling and

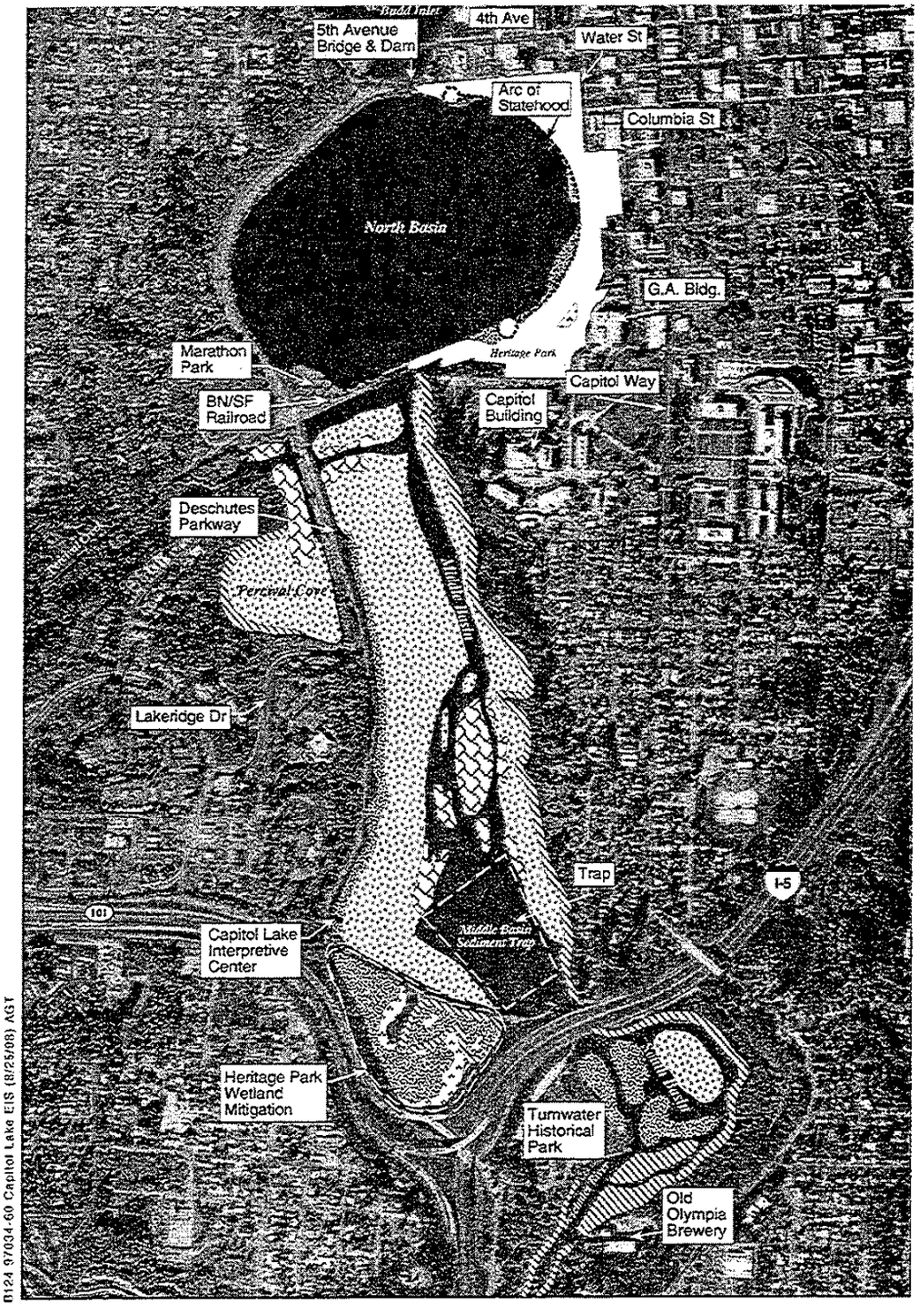


Figure 3-3
Lake/River Wetland With Trap Alternative

wetland habitat development over a period of approximately 20 to 25 years. Heritage Park and its freshwater mitigation wetlands (wetlands created to mitigate impacts of park construction) would be integral elements of this alternative.

Open-water habitat in the Middle Basin and the mouth of Percival Cove would be preserved by maintenance dredging of approximately 70,000 cubic yards of sediment every other year. Maintenance dredging would occur in two different sectors during each cycle, rotating the dredging so that the entire Middle Basin and Percival Cove would be dredged twice over a 20-year period, after which dredging would start again at the original two sectors. Existing nearshore wetlands and riparian habitat would be retained and would not expand significantly due to maintenance dredging (**figure 3-5**).

For purposes of alternative comparison, modified lake drawdown is assumed for only the Lake Alternative. It also could be used for the Lake/River Wetland With and Without Trap alternatives. Annual summer lake drawdown and modified saltwater flushing would be practiced similar to the procedure used in 1997 (**Entranco 1997**). This modified drawdown procedure would minimize saltwater impacts to freshwater plants and would facilitate near-shore construction and maintenance operations.

Under the Lake Alternative, flood control operations at the dam would remain unchanged, and the lake would be drawn down to provide increased flood storage prior to expected high rainfall and river discharge.

Estuary Alternative

Under this alternative, the tide gate would be removed[2] from the dam at the 5th Avenue Bridge to restore tidal flushing to the entire basin and return the ecosystem to an estuary. During high tides, the basin would continue to function as a reflecting pool for the Capitol Building. However, twice per day, at low tide, mudflats would be partially exposed with the remaining open-water river channel providing a limited reflection function. Heritage Park would be an integral element of this alternative but its freshwater mitigation wetlands in the North and Middle basins would be displaced by vegetation that would tolerate brackish water conditions (see **figures 3-6** and **3-7**).

There would be no dredging in the North, Middle, or South basins, and the entire basin would gradually fill in with sediment from the

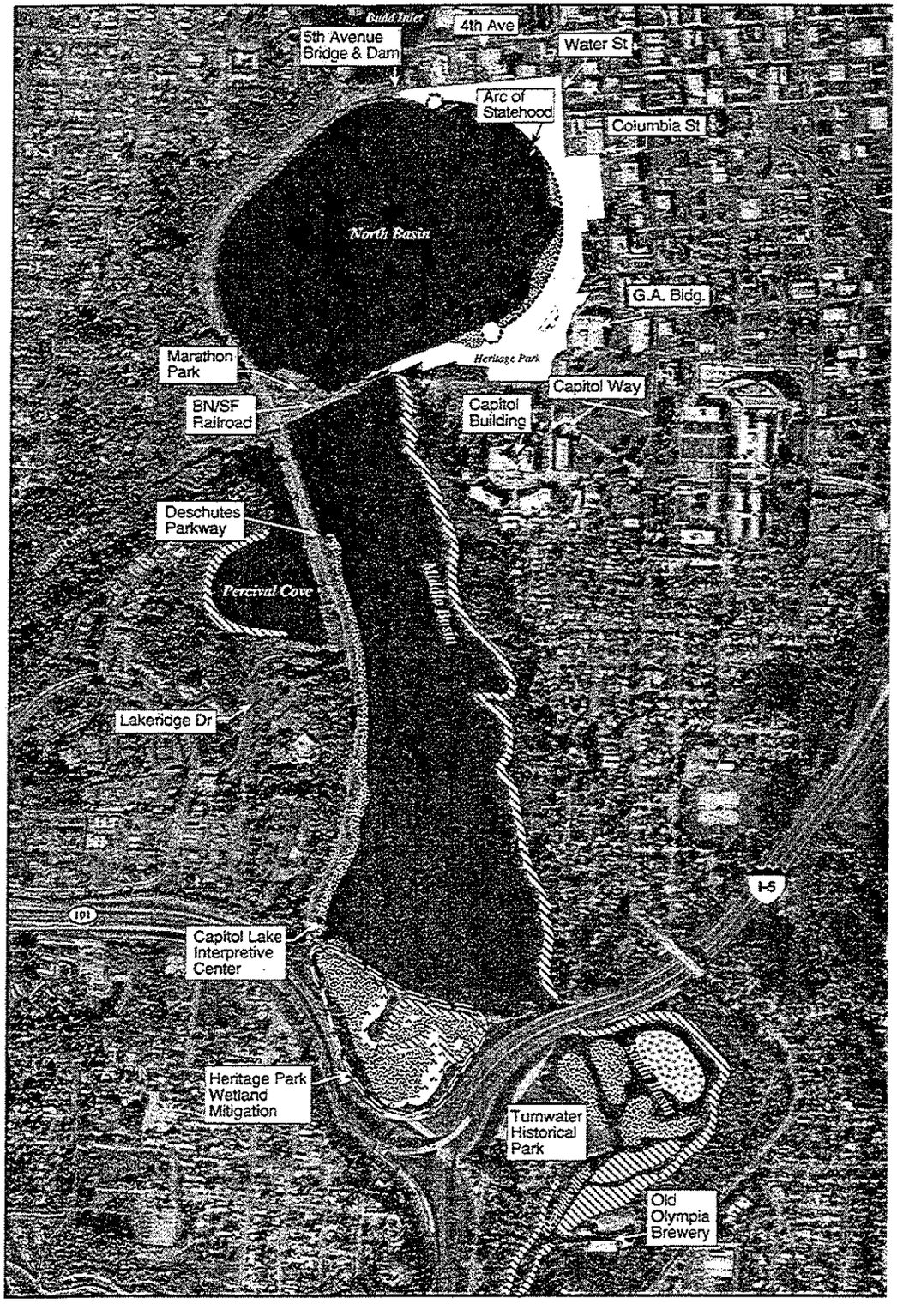


Figure 3-4
Lake Alternative

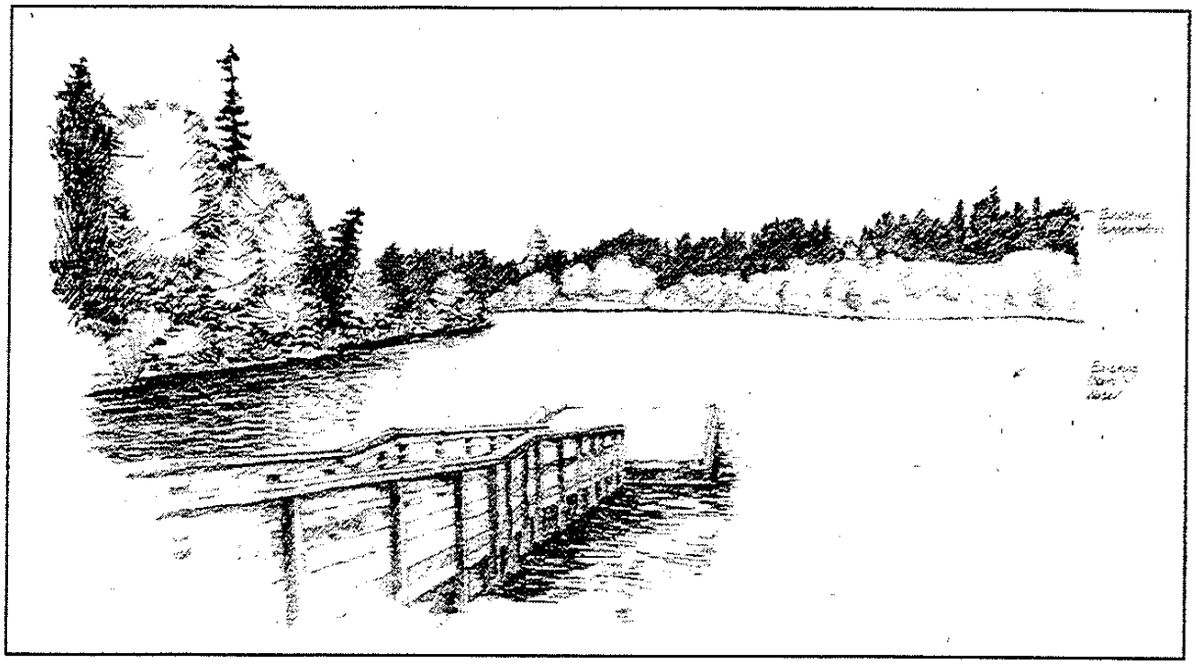


Figure 3-5
View from the Capitol Lake Interpretive Center of the Lake Alternative at Maturity

Deschutes River. With the tide gate removed and downstream sediment transport, maintenance dredging could be required in Lower Budd Inlet at maturity. It also is possible that in the short term dredging may be required as mitigation in Lower Budd Inlet.

Estimated times of filling for the South, Middle, and North basins would be 100 to 150 years. During the interim period (20 to 100 years), sand bars would be expected to form along the central axis of the Middle Basin, and later the North Basin, and would be colonized by wetland vegetation that would tolerate brackish water conditions. Sediment filling and wetland plant communities would be expected to gradually move shoreward over time. At maturity, much of the entire basin would be occupied by low brackish marsh and high brackish marsh (**figures 3-6** and **3-7**). At the time of maturity, open water with a reflecting pool function would be limited to the remaining river channel during high tide.

Existing constricted areas in the lake (Capitol Lake dam, railroad trestle, I-5 bridge, and the edge of the Deschutes Parkway) may have to be armored to prevent increased erosion from tidal action.

2. Another option, which would be explored if this alternative was selected as the preferred alternative, would be to simply open the tide gate and leave it in the open position.

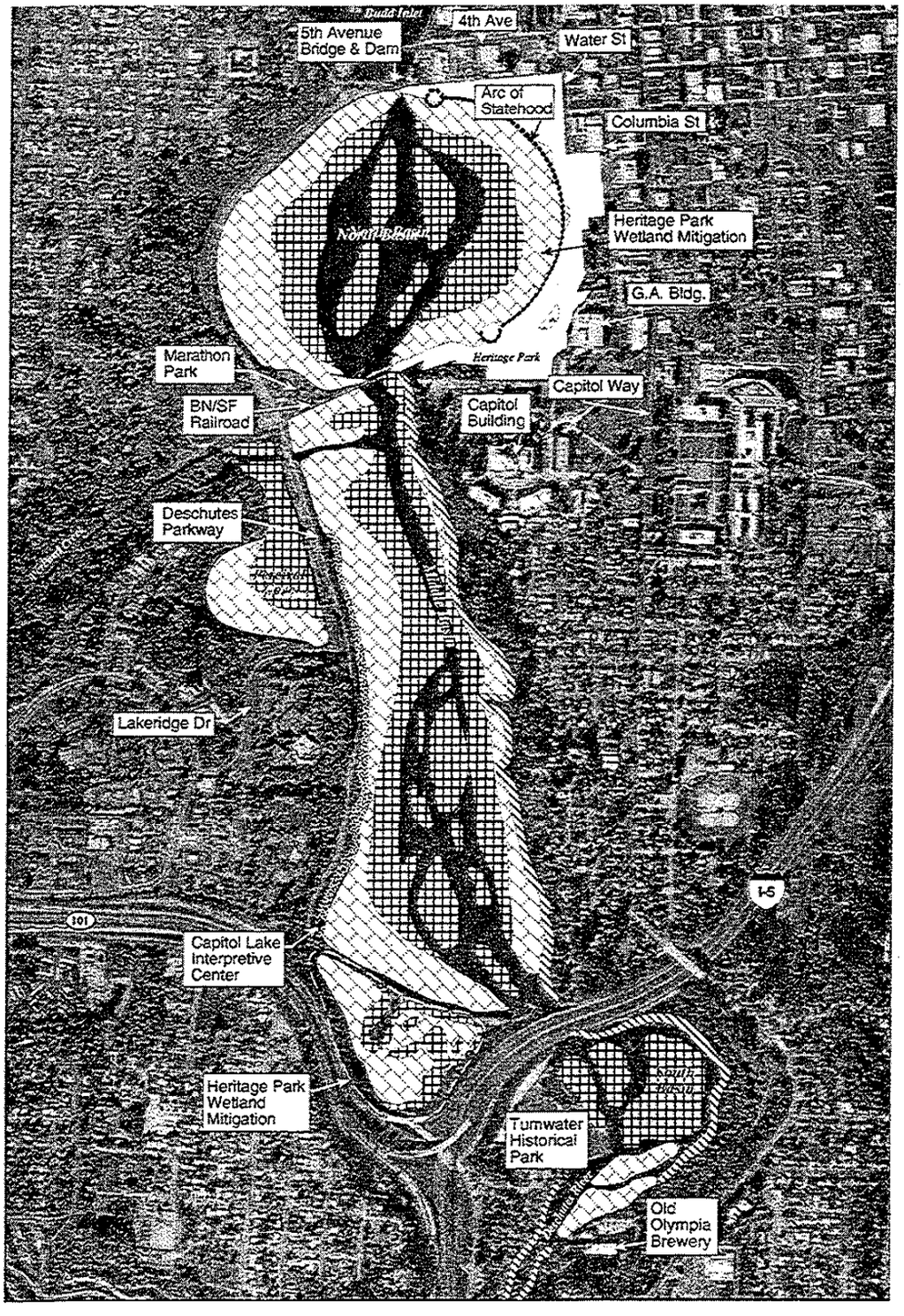


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Figure 3-6
Estuary Alternative

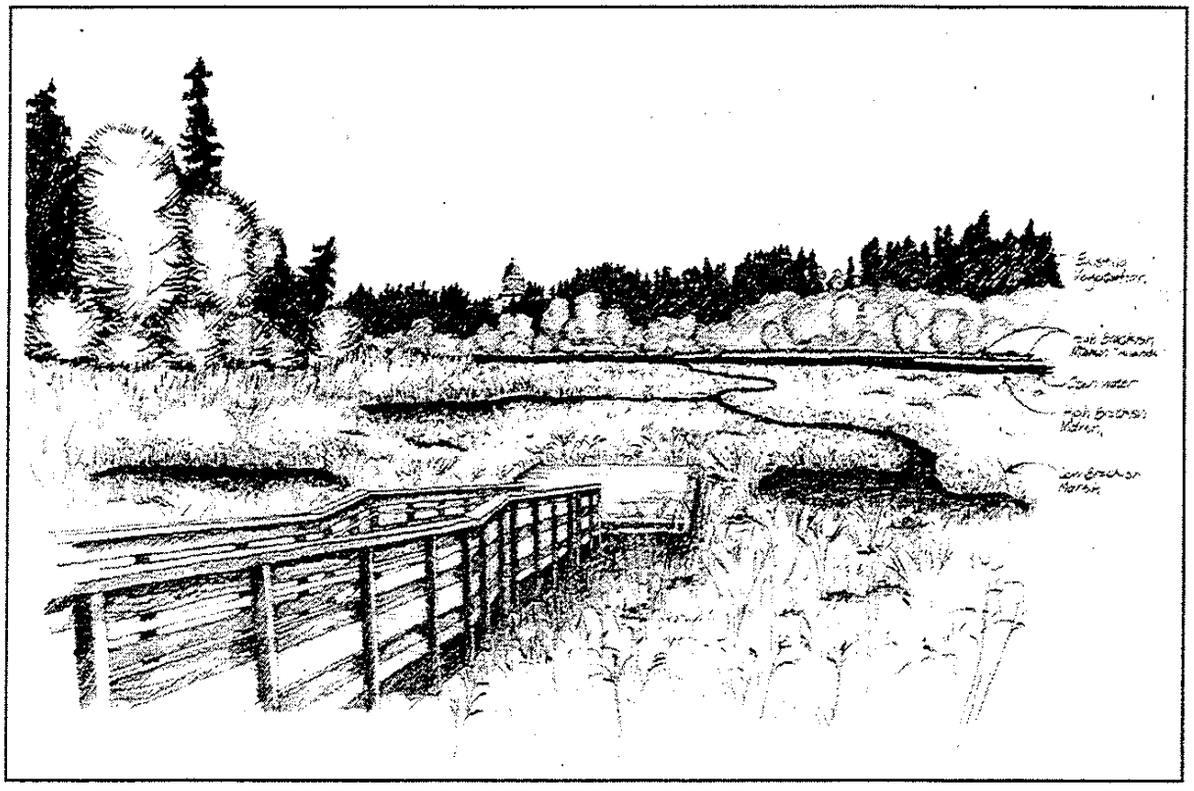


Figure 3-7
View from Capitol Lake Interpretive Center of the Estuary and Combined Lake/Estuary Alternatives at Maturity

Combined Lake/Estuary Alternative

This alternative would be similar to the Estuary Alternative, except the eastern half of the North Basin (approximately 40 acres) would be separated from tidal influence and preserved as a freshwater reflecting pool for the Capitol Building (**figures 3-7** and **3-8**). The saltwater and freshwater environments would be separated by constructing an earth-fill dam as shown in **figure 3-9.** There would be no dredging and the entire basin, except the east half of the North Basin, would gradually fill in with sediment from the Deschutes River. The time of maturity is estimated for the South Basin at 20 to 25 years, the Middle Basin at 50 to 85 years, and the North Basin at 100 to 125 years. At maturity, dredging could be required in Lower Budd Inlet to maintain boating and shipping activities. It also is possible that in the short term dredging may be required as mitigation in Lower Budd Inlet.

Construction of the new dam would require engineering measures to supply freshwater flow to the eastern half of the North Basin. The

DGA, LOTT Partnership, and the City of Olympia are considering the Class A reuse water from the LOTT treatment system as a source for irrigating lawns at Heritage Park and the State Capitol Campus. Another use of this water may be to serve as the source of water for the freshwater reflecting pool in the North Basin. It may also be possible to provide water:

- from the Deschutes River during low tide conditions by:
  a. using a gravity-flow pipe system
  b. pumping water from the river during low tide conditions
- from an in-lake spring source
- from a groundwater source

If the Combined Lake/Estuary Alternative is selected as the preferred alternative, further analysis of source water for the freshwater pool in the North Basin would be needed. This analysis would have to consider the quality and quantity of the supply sources, as well as the relative influence of other inputs (e.g., stormwater) to the reflecting pool.

The elevation of the top of the dam would be set at 12.0 to 13.0 feet mean sea level (MSL) and would minimize, or possibly eliminate flooding in historically flood-impacted areas of the north and east side of the North Basin. Further analysis of the potential for flood impacts and corrective actions are needed for the dam design. This analysis should consider the possible effects of fluctuations in sea level due to changing climate.

Preserving freshwater in the North Basin would make it possible to retain the Heritage Park freshwater mitigation wetlands in the North Basin; however, the mitigation freshwater wetlands in the Middle Basin would by displaced by salt-tolerant plant species.

As with the Estuary Alternative, tidal action may require armoring of selected areas within the basins.

No-Action Alternative

Under the No-Action Alternative, there would be no dredging of the lake as part of the proposed action and the tide gate would remain in place. Eventually, in approximately 100 to 150 years, the entire lake basin would become filled with sediment and would develop into emergent and scrub-shrub wetlands (**figure 3-10**). At maturity, dredging would begin in Lower Budd

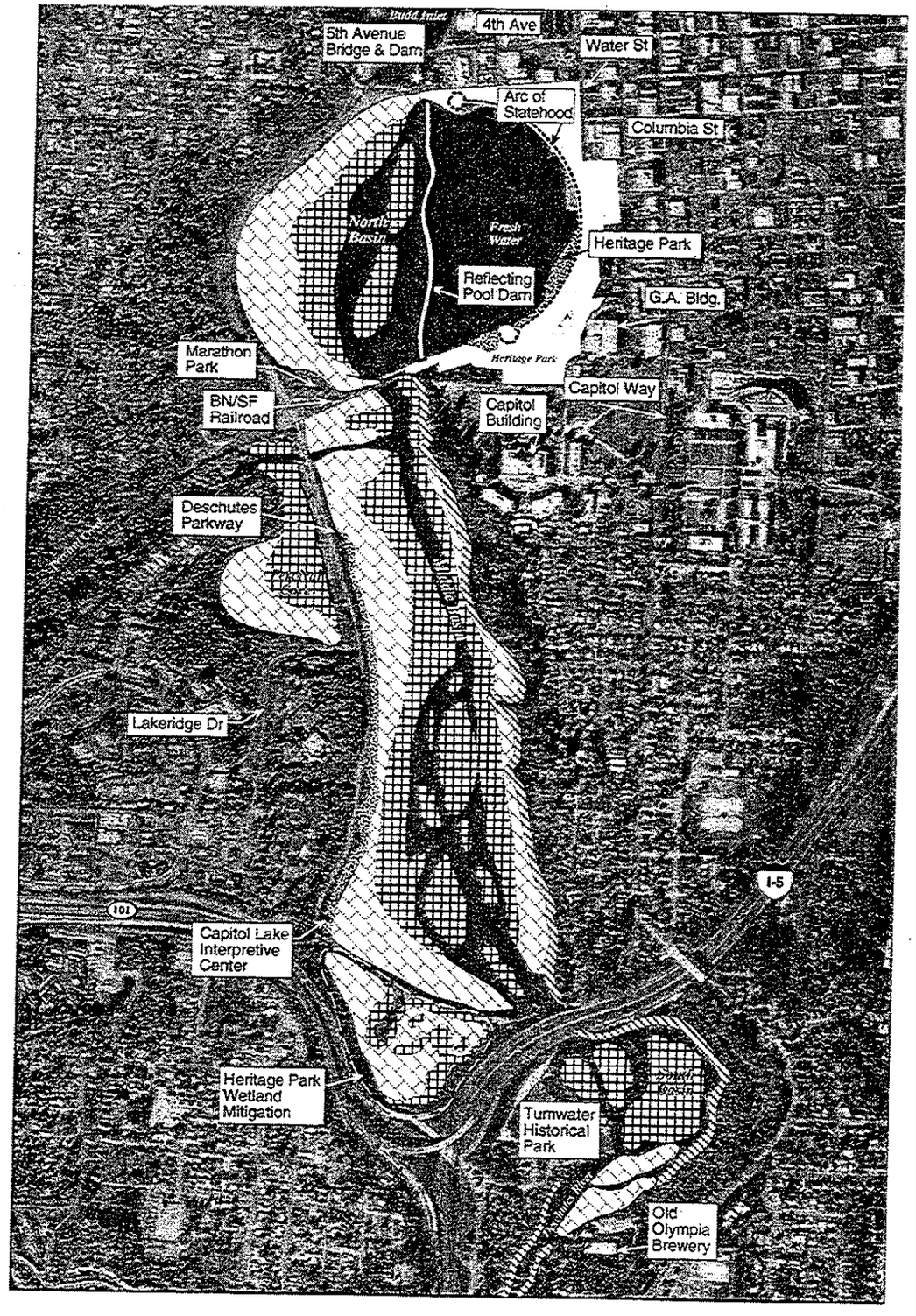


Figure 3-8
Combined Lake/Estuary Alternative

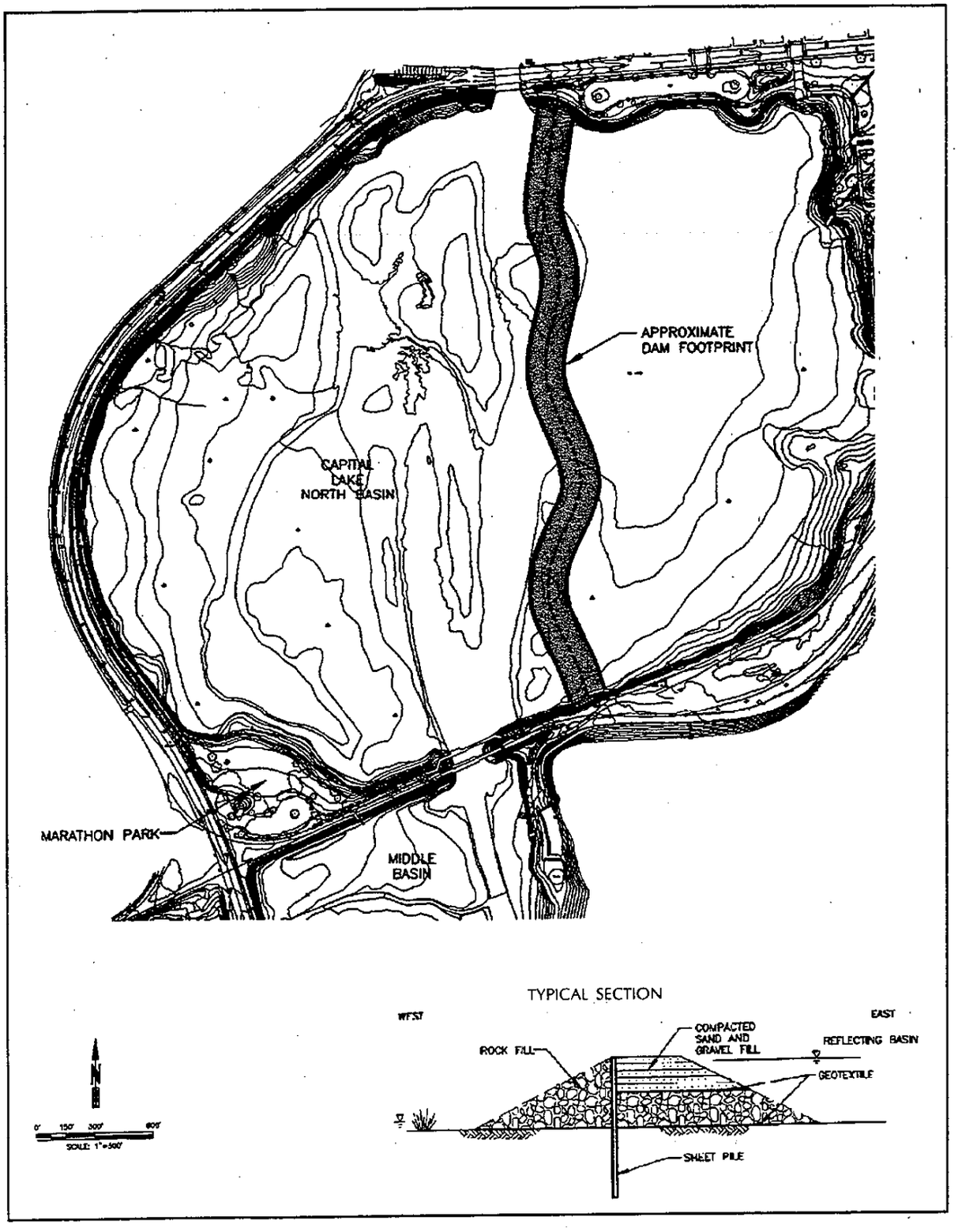


Figure 3-9
Conceptual Layout of Dam for Reflecting Pool

Inlet to maintain boating and shipping activities. During the interim period (20 to 100 years), wetland communities would gradually begin to replace open-water habitat in the Middle and North basins as described for the Middle Basin under the Lake/River Wetland Without Trap Alternative. Additional wetlands would also be expected to develop in the South Basin.

Annual summer lake drawdown and saltwater back-flushing would no longer be practiced. Filling of the entire lake basin with sediments would eliminate flood control benefits because there would be no significant live flood storage volume remaining.

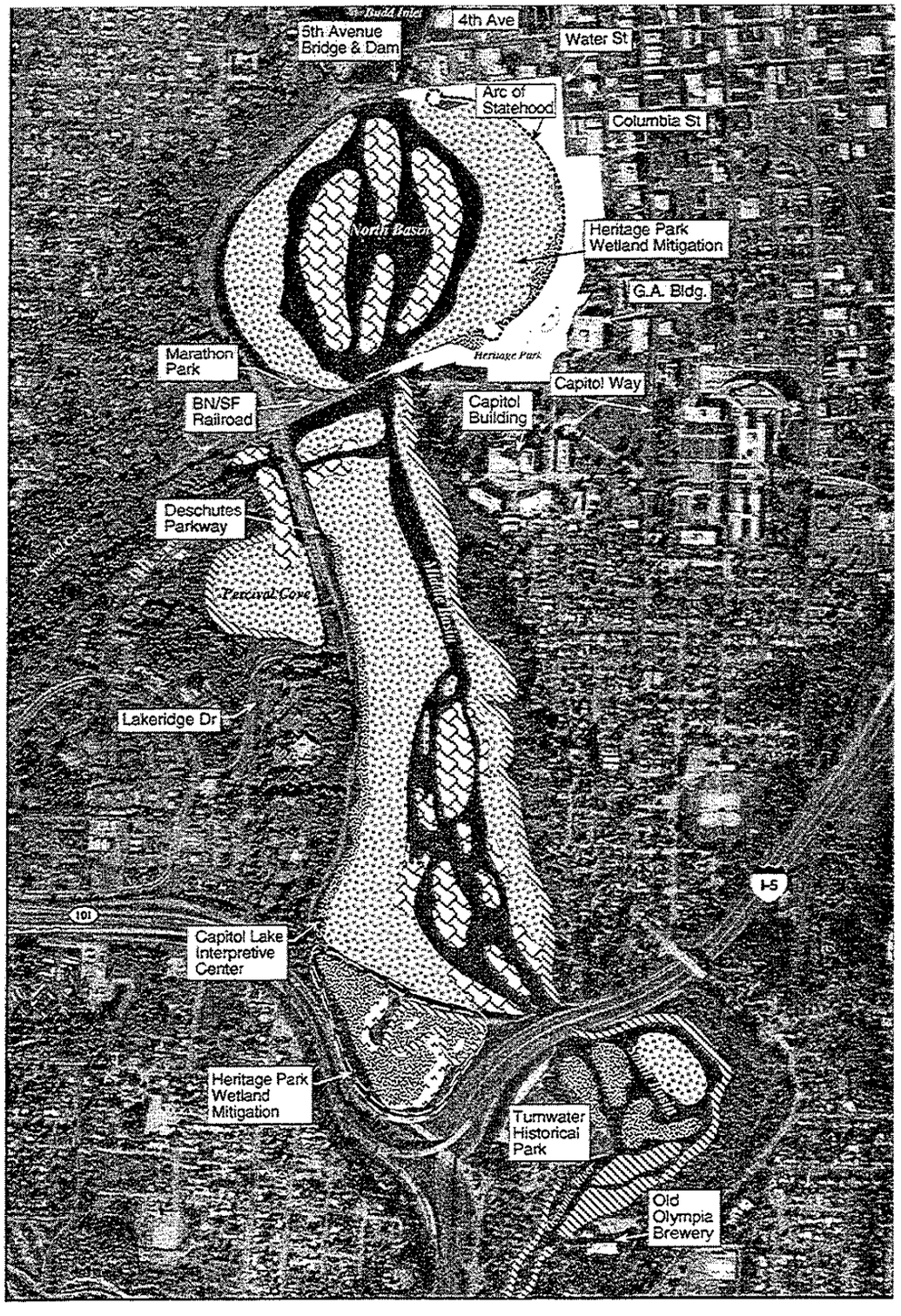


Figure 3-10
No-Action Alternative

Chapter 4. Comments from the Public

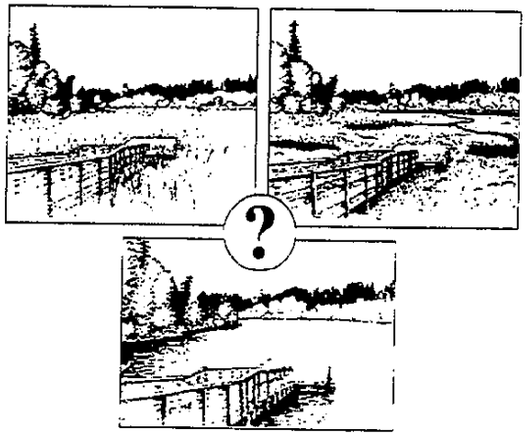
This Chapter contains all tne comment letters, e-mail and postcards received on the Draft Environmental Impact Statement. It also includes the minutes of the Public Hearing from November 18, 1998. There were 158 comments on the Draft EIS. Most of these were received before the comment deadline of November 23, 1998.

Comments were grouped into one of the following seven categories.

- Letters from the Steering Committee,
- Letters from other State and Local Governments,
- Letters and E-mails from Community Groups and Associations,
- Letters from Interested Parties,
- E-mail from Interested Parties,
- Postcards from Interested Parties, and (NOTE: Only one postcard has been copied)
- Speakers at the November 18, 1998 Public Hearing.

All comments were numbered (#1 - 158) on the first page of the comment. Where comments contain several parts, these were lettered separately (A - Z). The original comment letters and e-mail were labeled to identify the corresponding comment (A - Z).

Responses to these comments are contained in the following Chapter, and in the same order as this Chapter. The number on the first page of the comment is the key to navigating between the comment letters (in this Chapter) and its response (in the next Chapter).



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City of
OLYMPIA

900 Plum Street, P.O. Box 1967, Olympia, WA 98507-1967

November 18, 1998

NOV 19 1998
THURSTON REGIONAL
PLANNING COUNCIL

COUNCIL

Bob Jacobs, Mayor

Mark Foutch Mayor Pro Tem

Stan Biles

Holly Gadbaw

Jeanette Hawkins

Margaret McPhee

Laura Ware

CITY MANAGER

Richard C. Cushing

Mr. Steven W. Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW #B
Olympia, Washington 98502-6031

RE: Olympia City Council's comments on the Capitol Lake Adaptive Management Plan Draft Environmental Impact Statement (DEIS)

Dear Mr. Morrison:

The Olympia City Council commends the State Department of General Administration for convening the special study committee to review options to better manage Capitol Lake. The Lake is an important community focal point worthy of the attention the Capitol Lake Management Steering Committee members have paid to its care since January.

The Council is most pleased the Committee has been able to arrive at this important juncture in its mission to develop management options for the lake with so much constructive, collaborative participation among the members. We are certain this spirit will continue as they take the next steps to evaluate the comments from tonight's Public Hearing and actually develop tools to manage the lake resource.

The Olympia Council has conducted three study sessions to review the strategies being considered to manage Capitol Lake. We met initially this summer to review the Steering Committee's work progress, and then twice this fall to review the Draft Environmental Impact Statement (DEIS). As a result of those reviews, the Council believes that the "Lake Alternative" option is the best choice for lake management. The Council finds no data in the DEIS to refute the conclusion that other options would create severe environmental consequences for the community today and in the future.

In addition to flooding and health concerns, the Council is very concerned that if non-lake options are considered, there will be a tremendous loss of the Lake's beauty. The loss of this aesthetic value to the community as the Lake transitions to a wetland or estuary would occur not over days, but would take 25 to 75 years to accomplish. The

City Council	753-8430	Community Planning & Development	753-8314	Police	753-8300
City Manager	753-8447	Fire	753-8348	Public Works	753-8362
City Attorney	753-8449	Human Resources	753-8442	Area Code	(360)
Administrative Services	753-8325	Parks/Recreation/Cultural Services	753-8380		

aesthetic impacts would be most visible and felt most strongly in Olympia's downtown, in Heritage Park and in the South Capitol Neighborhood.

A The Capitol campus and Olympia's downtown is a single integrated area that culminates at the Lake. The architectural design of the Capitol seeks to bring the state government campus and the Olympia downtown together in a complementary and harmonious way. Capitol Lake plays a key role in linking state government with the community in which it is located. Its contextual fabric is urban, not rural. The Lake is physically connected to the downtown. The Lake provides a visual backdrop to the downtown area. We celebrate at its edges. We are developing a park to honor our Statehood along its shoreline. Our most important community event, Lakefair, is centered around the Lake. Now, as many American communities are attempting to bring water features to their downtowns to attract more economic development and create a greater sense of place and community, we should not consider returning our lake to a marsh environment.

B In addition, the transition of the Lake to non-lake options would begin just as a number of important actions are being taken to bring more visibility and revitalization to Olympia's downtown. Non-lake wetland or estuary options at this point would, in the Council's opinion, be completely contrary to the viable image the community is attempting to create for downtown Olympia and its associated areas such as Heritage Park and the South Capitol Neighborhood.

In addition to our concerns with the relationship of the non-lake options to the downtown, Heritage Park, and South Capitol Neighborhood, there are several specific impacts that we believe cannot be mitigated. These are:

C • Park, trail, and recreational impacts, especially the loss of the pleasant park setting the lake provides.

D • The health implications of additional insects and other nocturnal animals (e.g., bats and small crawling creatures) that may come with an estuary or a wetland.

E • Downtown Olympia flooding impacts, especially flood liability and increased erosion of 5th Avenue.

F • The hydraulic and engineering impacts to the train trestle and the 4th/5th Avenue bridges.

G • The water quality impacts from the Lake, as they may relate to the potential increased LOTT discharge into Budd Inlet.

H In addition, we are concerned about the lack of information regarding the disposal of sediments inside and outside the lake system.

Our decision to choose only the "Lake Alternative" does not mean we are no longer interested in working to find better ways to manage the Lake. The Council reaffirms its commitment to participating as an active member on the Steering Committee and believes that through that process we can find the management tools to best preserve the future we all desire for Capitol Lake.

Thank you for the opportunity to comment on this very important environment impact statement. If you have questions or need further clarification regarding the Council's observations on the DEIS before the November 23rd comment closure date, please contact Mr. Dick Cushing, City Manager at 753-8447.

Sincerely,

Bob Jacobs
Mayor

cc1899n

CITY OF
JMWATER
ington's First Community.

WATER CITY HALL
UAEL ROAD SW
/ATER, WA 98501-6558

60/754-4126

NISTRATION
Y ADMINISTRATOR
YOR AND COUNCIL
/754-4120

RNEY
/754-4121

LOPMENT SERVICES
LDING PERMITS
NING & ENGINEERING
/754-4180

LDING INSPECTION
QUEST LINE
/754-4189

NCE DEPARTMENT
Y CLERK
/754-4130

NICIPAL COURT
/754-4190

DEPARTMENT
/754-4170
: 360/754-4179

RAL SERVICES
SONNEL
/754-4132
LINE: 360/754-4129

E DEPARTMENT
/754-4200
: 360/754-4198

Y & PLANNING
NG RANGE PLANNING
/754-4161

LDING & GROUNDS
KS & RECREATION
/754-4160

IC WORKS
GINEERING
/754-4140
: 360/754-4142

ERATIONS &
INTENANCE
/754-4150

CIPAL GOLF COURSE
UMWATER VALLEY DR SE
/ATER, WA 98501
5-9500
60/943-4578

TOWN CENTER
2ND STREET SW
/ATER, WA 98512
4-4122
60/754-2063

November 23, 1998

NOV 24 1998
THURSTON REGIONAL
PLANNING COUNCIL

Steven W. Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW, #B
Olympia, WA 98502

Thank you for the opportunity to review the Draft Environmental Impact Statement (DEIS) for the Capitol Lake Adaptive Management Plan. Tumwater has appreciated the opportunity to be a member of the Capitol Lake Steering Committee and to help craft a strategy for the effective management of this important community resource for many years to come. The City Council and planning staff have both reviewed the DEIS and have a number of comments for you to consider before preparation of the Final EIS and selection of a preferred alternative for consideration by the Department of General Administration.

The following comments will focus on the more technical aspects of the DEIS. The City Council wishes to defer our recommendation on a preferred alternative until all comments are received on the DEIS so that we may benefit from the wisdom of the public. After that, we intend to discuss this issue again in order to forward a preferred alternative through our representative on the CLAMP, Councilmember Parsons.

A 1. We are concerned about potential flooding in the South Basin, in particular Historical Park resulting from sedimentation infilling in the South Basin under all options. It is mentioned as a possibility in the future on pp. 4.22-4.23. Tumwater would like to see more definition and specificity as to the extent of the flood potential. We

B are concerned that as infilling of the South Basin continues over time that eventually significant flooding impacts could occur in Historical Park and across the river at the Old Brewhouse site.

C 2. Tables 1-2 and 4-1 – Cost Summary (which are identical) include only costs of actual lake operations and Budd Inlet maintenance operations. In effect, this identifies costs only for the State of Washington and the Port of Olympia. These figures should also include secondary costs to adjacent land uses and infrastructure. If this proves to be economically infeasible under the parameters of the study, then at a minimum it should be clearly stated in the

C document that the costs shown are for lake management only, not total costs.

D 3. Land Use, Recreation, and Shoreline use impacts should include impacts to Historical Park and future Historic District Master Plan facilities resulting from future flooding increases.

E 4. Cultural Resources impacts (pg. 4.88) should include archaeological resource impacts, of which there is currently no mention. This section should also include historic resources on adjacent uplands in the South Basin, and planned facilities to enhance visitors' enjoyment of these resources. Please refer to Tumwater's New Market Historic District Master Plan.

F 5. Aesthetics impacts (pg. 4.101) should include a description of the impacts at Viewpoint 5 (South Basin) for the estuary and lake/estuary alternatives.

G 6. Given that, over a long term, there is a good possibility that Mean Sea Level could rise as much as 3-5 feet due to the effects of global warming, perhaps some mention of the impacts of this should be mentioned regarding possible flooding impacts.

H 7. Given the rather unique circumstance of creating a lake by damming a river, it seems imperative to include a more detailed examination of hydraulics for the various alternatives. For example, the DEIS does not adequately address concerns regarding bank erosion associated with tidal action on the estuary alternatives, or whether the current dam, train trestle and Marathon Park obstructions would allow sufficient flow to allow for true tidal action. Without a detailed hydraulic analysis, the DEIS is seriously flawed, making it impossible to make an informed decision among the various alternatives.

I 8. The DEIS has acknowledged the existing floodgate as a detriment to salmonid runs by delaying upstream migration, exposing the fish to additional predation by marine animals and birds. More analysis should be conducted to determine if a more fish-friendly design is necessary.

J 9. Pages 4.57 and 4.58 state that some of the alternatives allow for sediment infilling of the Percival Cove net pen facilities. What are the costs to the Washington Department of Fish and Wildlife for operating this facility? How do the return rates of the Chinook compare to other similar facilities?

K 10. Page 4.58 states that all freshwater alternatives will require reconstruction of the fish ladder at the dam. These costs should be identified in the document.

11. An introductory section should be included on the natural system for the entire Budd-Deschutes basin, particularly the upstream activities along the Deschutes River and its tributaries. These activities affect Capitol Lake.

12. Figures 1-2, 1-4, 1-5, 1-7, 1-9, and 1-10 should include some explanation of the patterns that are included on those figures. Addition of a legend would be helpful.

Councilmember Parsons, as the Tumwater representative to the CLAMP, has some additional technical comments that will be forwarded under separate cover.

Sincerely,

RALPH C. OSGOOD
Mayor

MM:LB:kj

Port of Olympia

3

November 23, 1998

Steve Morrison
Thurston Regional Planning Council
2404 B Heritage Court
Olympia, WA 98502-6031

Dear Mr. Morrison:

Thank you for the opportunity to comment on the Capitol Lake Adaptive Management Plan DEIS. Also, you have our compliments on a thorough and illustrative DEIS.

The Port is primarily concerned about the adverse impacts to Budd Inlet under those alternatives that release sediments into lower Budd Inlet. We are concerned about potential impacts to recreational boating and shipping activities as these sediments move beyond the current dam and into Budd Inlet. While it is clear that these impacts would likely occur, it is unclear how these impacts would be dealt with. We understand that an examination of these impacts is beyond the current scope of work, but want this concern to be noted and dealt with in the event either one of the dam removal alternatives is pursued.

Attached you will find a prior letter from the Port that further elaborates on this concern.

Thank you.

Sincerely,

Andrea Fontenot

Andrea Fontenot
Director of Engineering & Planning

915 Washington Street NE, Olympia, WA 98501-6931 Tel (360) 586-6150 Fax (360) 586-4653 inquiries@portolympia.com | Executive Director, Nick Handy

Port of Olympia

December 2, 1997

Steve Morrison
Thurston Regional Planning Council
2404 Heritage Court SW #B
Olympia, WA 98502-6031

Re: Capitol Lake Adaptive Management Plan EIS Scoping Comments

Dear Steve:

We want to thank Grant Fredricks and the Steering Committee members for including the Port in the planning process for Capitol Lake. While we get up to speed on the broader lake management issues, we want to highlight a few issues associated with our main concern at this time, and that is the potential release of sediments into Budd Inlet. As I offered at the committee meeting on 11/20/97, we are available to follow-up with a presentation to the committee on Port operations.

A In general, those alternatives that allow the release of sediments into Budd Inlet would likely trigger the need for an adaptive management plan for Budd Inlet, for a number of reasons. If sediments are released into West Bay, it is likely they will settle in West Bay, which could impact landowners and users* in the area. These include the Port, Dept. of Natural Resources, Corps of Engineers, City of Olympia, US Fish & Wildlife Service, and the various marinas that likely lease their tidelands from DNR. (The Corps represents the federal ownership of the navigation channel, and the US Fish & Wildlife Service holds a Port-granted easement for wildlife on the area known as the Port Lagoon.)

B It would therefore be useful to understand and distinguish how much sediment would be associated with each alternative. As you suggested, computer modeling might also indicate how the sediment would settle to better determine areas of impact.

C To follow through with a sediment release scenario, it is possible that some form of dredging in Budd Inlet would be necessary for those impacted landowners and users to continue current uses. Dredging in Budd Inlet raises many issues, including the potential for encountering contaminated sediments, and the ultimate disposal of contaminated sediments. Just as dredging raises habitat and wildlife issues within the lake, dredging in Budd Inlet poses similar impact issues as well. This is a significant and complex issue

* The various natural resource agency representatives can best speak to potential impacts to fisheries.

[illegible] | Executive Director Nick Handy

that warrants careful consideration in the upcoming EIS and management process.

In sum, we are concerned that a potential solution for Capitol Lake may pose a burden for Budd Inlet, and obviously, the Port as well as other users. Again, we realize that the management issues for the lake are complex and inter-related, and as I mentioned above, we want to develop a better understanding of these issues. We look forward to contributing to the development of an adaptive management plan for the lake.

Please let me know of an appropriate time for us to present information to the committee about the Port and its operations.

Thank you for considering our comments.

Sincerely,

Andrea Fontenot

Andrea Fontenot, AICP
Senior Planner

Cc: *Dick Malin*
Nick Handy

Oral Comments from Public Hearing of November 18, 1998 - Jeff Dickison, Squaxin Island Tribe - Mr. Dickison Commented to issues raised in the EIS that need more clarification, rather than to a specific alternative:

1. Flooding - the contention represented in the DEIS is that the lake/dam acts as a flood control device. The Tribe does not believe this to be true, nor is it an accurate depiction of the nature of the situation. The Tribe contends that the dam creates the flooding potential. Tidal height of the bay, he said, never gets to flood height of the river; so, if there were no dam and the river were allowed to flow freely into the bay, it would never be high enough to flood downtown Olympia (notwithstanding future sea level rising). **A**

2. Reference was made in the DEIS to capture of adult salmon at the fish ladder at outlet of the north basin for spawning activity. That facility is not used for that purpose. All the spawning occurs at Tumwater Park. The facility's use was described inaccurately. The Tribe's principle interest is relative to fish and fish rearing - sustaining and artificial runs of salmon need to be maintained. Management of the lake, in the past, have resulted in conditions and environments not in the best interest of the fish. He said it is clear that some of the alternatives would pose dramatic changes to the management of enhanced Chinook production in the lake. He said it is clear some alternatives that some other mitigation strategy would have to be proposed (i.e., construction of new facilities). One or more activities will have to occur to maintain Chinook production in or around the lake. **B**

3. Regarding fish references made in the DEIS. Mr. Dickison said it is bothersome to him and the Tribe that there are a number of references made to fish in the system with parentheticals following that indicate that the Tribal biologist may have a differing opinion. He said this reference attempts to subordinate the Tribe's management responsibility which is equal to the state's. The Tribe and Mr. Dickison, personally, is affronted by that representation. He said he believes more work is needed to accurately reflect the management regime. **C**

Mr. Dickison, speaking personally, thanked everyone for coming to this public hearing. He said he has been working for the Tribe for over 12 years evaluating EIS's. Tonight's turnout is the best he has ever seen at an EIS public hearing.

20:sp\caplake\dickison

THURSTON COUNTY
WASHINGTON
SINCE 1852

5 Judy Wilson
District One
Diane Oberquell
District Two
Dick Nichols
District Three

BOARD OF COUNTY COMMISSIONERS

November 25, 1998

Mr. Steven W. Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW #B
Olympia, WA 98502-6031

RE: Thurston County's recommendation for the preferred Capitol Lake Management Alternative

Dear Mr. Morrison:

The Thurston County Board of County Commissioners commend the State Department of General Administration for convening the Capitol Lake Management Steering Committee to develop the management plan for Capitol Lake. The Draft Environmental Impact Statement (DEIS) for the Capitol Lake Adaptive Management Plan (CLAMP) is a very thorough and a well thought out document. The six alternatives provides an adequate range of management options that the community needs to consider.

The Thurston County Board of County Commissioners has chosen as the "Lake Alternative" as the preferred alternative for the following reasons:

1. A The DEIS lacks enough detail to accurately assess flooding impacts from each of the alternatives, therefore it is prudent to continue using the lake as a flood control reservoir unless further studies prove otherwise.

2. B Downtown Olympia has been developed since the early 1950s with the lake providing an aesthetic amenity, flood control, and as a sediment trap. We recommend continuing managing the lake for the purposes as originally envisioned.

3. C Whether the lake/reservoir serves as a sediment trap or becomes an estuary, without further studies to determine exactly where the sediment will settle, it is most likely that removing the dam will move the sediment loads into areas such as the Olympia Yacht Club, Percival Landing, the Port's turning basin, and lower Budd Inlet. Dredging will need to occur regardless of which alternative is chosen.

Building #1, Room 269, 2000 Lakeridge Drive SW, Olympia, Washington 98502-6045 (360) 786-5440
T.D.D. (360) 754-2933

D A more accurate description of Capitol Lake is a reservoir not a lake. One characteristic of reservoirs is they have a larger ratio of watershed area to lake surface area which means more sediment deposition. Reservoirs are man made by damming rivers. "Sediment removal, coupled with land management and the construction of devices to trap silt, would constitute a reservoir restoration and protection" (p. 10; Restoration and Management of Lake and Reservoirs, Cooke, Welch, Peterson and Newroth.)

E 4. The DEIS also lacks information to accurately determine the true cost and scope of removing the dam to form an estuary. Since the width of the dam opening is much smaller than the original natural opening, one could speculate there would be shoreline erosion due to the velocity of the water flowing back and forth four times a day? Further information would

F need to be included in the DEIS to fully understand the hydraulic characteristics and impacts of lowering or removing the dam.

Even though our decision is based on current information we are looking forward in participating in the "adaptive management" concept to help make future decisions.

Thank you for the opportunity to comment on this Draft Environmental Impact Statement. If you have further questions please contact Dick Blinn our county representative or Mark Swartout his alternate at 357-2491.

BOARD OF COUNTY COMMISSIONERS
Thurston County, Washington

Dick Nichols
DICK NICHOLS, Chairman

Judy Wilson
JUDY WILSON, Commissioner

Diane Oberquell
DIANE OBERQUELL, Commissioner

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6

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

P.O. Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300

November 23, 1998

NOV 25 1998

THURSTON REGIONAL PLANNING COUNCIL

Mr. Steven W. Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court Southwest, #B
Olympia, WA 98502

Dear Mr. ~~Morrison~~ Steve:

Thank you for the opportunity to review the Draft Environmental Impact Statement (DEIS) for the Capitol Lake Adaptive Management Plan, describing six possible alternatives of how Capitol Lake could be managed in the future. We appreciate the tremendous effort that you and the Department of General Administration have put towards development of a visually-oriented, well-organized, and readable document. I expect that it will be used as a model for future projects, particularly where public involvement is such an important component of a responsible decision. Because we have been involved throughout the development of the DEIS, we have few comments. They are as follows:

A (1) Hydrologic data should be included to evaluate the feasibility of the Estuary and Lake/Estuary alternatives. It is possible that existing constrictions at 5th Avenue and the railroad trestle would severely reduce the exchange of fresh and salt water necessary for the creation of estuarine conditions. We would like to know how much water could pass through the dam in a typical tidal cycle and the relative in-lake elevations of those volumes.

B (2) The costs of gravity dewatering associated with the dredging would be significant. It is stated in the DEIS (Appendix A) that these costs are not included in the projections. Some reasonable estimate of these costs should be included.

C (3) The fill-time projections in Appendix A, Table 2, are extended to six decimal places. One decimal place would imply estimates in months, rather than fractions of a second. This may be a more reasonable estimate.

D (4) On page 4.115, the DEIS states that "an open-water body has to be greater than 20 surface acres to be defined as a lake under the SMA." This implies that a lake is defined by the area of open water. Ecology regulations define a lake as a body of standing water in a defined depression; the presence or absence of vegetation in the water is irrelevant. It is most likely that as long as the tide gates remain in place at 5th Avenue, Capitol Lake will remain jurisdictionally and biologically a "lake" under the Shoreline Management Act.

E (5) For the Estuary and Lake/Estuary Alternatives under Cultural Resources, page 4.91 states that "The estuary that existed prior to the formation of Capitol Lake would be restored..." This is perhaps too optimistic. Without restoring the hydrologic conditions that previously existed, the historic estuary cannot be restored. Historically, the mouth of the estuary extended from the base of hill on the west side of the lake to at least Water Street on the east. The mouth of the Deschutes River (i.e., 5th Ave. Bridge) has been reduced to a fraction of its original size.

F (6) There are several references to the possible loss of hydrologic continuity between the lake and the Heritage Park mitigation site under certain alternatives. However, no objective information is provided on the likelihood or a possible time frame for this occurrence.

G (7) There is a discussion of flooding issues on page 4.15; the last paragraph discusses water level management for the 100-year flood. However, it does not state what period of time this is referring to (e.g., 24 hours, 48 hours, one week, etc.).

H (8) In the water quality discussion on page 4.18-4.20, low dissolved oxygen levels in the South Basin are mentioned as a concern by the department of Fish and Wildlife. No information is provided as to how this may change under any of the alternatives. It is our understanding that conditions in the South Basin will remain virtually identical (i.e., no different than the present) under any of the alternative management strategies. Also, most of the discussion of water quality compares conditions in Capitol Lake to Class A water quality standards (WAC 173-201A-030 (2)). The appropriate criteria for Capitol Lake would be Lake Class (WAC 173-201A-030 (5)).

I

J (9) Finally, there are many references made throughout the DEIS that control measures may be taken for "excessive growth" of aquatic and emergent vegetation as a mitigation approach for several of the alternatives. We are concerned with this sentiment for two reasons: first, there is no indication or definition of "excessive." Second, since several of the alternatives rely on a natural progression of habitat development, it seems inconsistent to presume vegetation control would be necessary. If, however, this is intended to address problem vegetation such as purple loosestrife or Eurasian water-milfoil it should be stated as such.

K

We look forward to working with you and other members of the Steering Committee to develop a consensus recommendation on a preferred alternative. Ecology's perspective on the six alternatives will be shaped by the goals of our agency. They are to prevent pollution, clean-up pollution, and support sustainable communities and natural resources. Please call me or Perry Lund at (360) 407-7260 if you have any questions.

Sincerely,

Sue Mau

Sue Mauermann
Southwest Regional Office
Regional Director

cc: Perry Lund, SWRO
Abbe White, SWRO

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
P.O. Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300

December 16, 1998

Mr. Steve Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court Southwest, #B
Olympia, WA 98502

Dear Mr. Morrison:

While we are woefully past the deadline for submitting comments on the Capitol Lake Adaptive Management Plan Draft Environmental Impact Statement, and previously submitted comments, we have more. The following comments relate to our agency's responsibilities under the state's water quality laws, and we are providing them with the hope that they may be useful in future discussions.

The Deschutes River, Capitol Lake, and Budd Inlet are all on Washington's 1996 Clean Water Act Section 303d list of impaired water bodies. (The primary listing for the Deschutes River is for fecal coliform bacteria, Capitol Lake is listed for total phosphorus, and related listings in Budd Inlet include dissolved oxygen and fecal coliform bacteria.) According to the LOTT partnership's recent Budd Inlet study, Capitol Lake contributes 50 percent of the fecal coliform loading to Budd Inlet, and a vast majority of the non-marine nitrate plus nitrite loading and biological oxygen demand to the inlet. Nutrients increase algae growth, and decaying algae depletes dissolved oxygen, especially in late summer/early fall.

The lake management alternative eventually chosen needs to be evaluated for its water quality impacts to Budd Inlet. We recommend using LOTT's Budd Inlet model for this evaluation. Impacts on water quality from dredging should be included.

The input of nutrients from the Deschutes watershed will increase algae growth in the lake. If a freshwater lake alternative is chosen, the Department of Ecology will be interested in water quality impacts of management options for controlling algae growth. The historical lake drawdowns depleted oxygen in Budd Inlet. Herbicide applications may be harmful to aquatic life, and would need to be carefully evaluated.

We look forward to helping the Capitol Lake Management Plan Steering Committee determine the best management plan for water quality, natural resources, and the community. Thank you for considering this late addition.

Sincerely,

Sue Mauermann
Regional Director

7

NOV 25 1998

State of Washington
DEPARTMENT OF FISH AND WILDLIFE
THURSTON REGIONAL PLANNING COUNCIL

Region 7 Mailing Address: 600 Capitol Way N - Olympia, Washington 98501-1091 - (360) 902-2808
Region 7 Office location: Natural Resources Building - 1111 Washington Street SE - Olympia, Washington

November 23, 1998

Thurston Regional Planning Council
Steven W. Morrison, Senior Planner
2404 Heritage Court SW, #B
Olympia, WA 98502

Dear Mr. Morrison:

SUBJECT: State Environmental Policy Act Document; Washington Department of General Administration (DGA) Proponent, Draft Environmental Impact Statement (DEIS) - Capitol Lake Adaptive Management Plan, Capitol Lake, Tributary to Budd Inlet, Thurston County, WRIA 13.0028

The Washington Department of Fish and Wildlife (WDFW) has reviewed the above-referenced DEIS document received on October 23, 1998, and offers the following comments. Other comments may be offered as the project progresses.

We support the development of the Capitol Lake Adaptive Management Plan as necessary for concerned agencies and the public to jointly make the best informed decision for future configuration and management of the lake, especially for natural fish and wildlife resources that use the lake and estuarine habitats and the WDFW chinook salmon culture program currently existing in Percival Cove and immediately upstream of Tumwater Falls adjacent to the Deschutes River. The DEIS was generally well written but needs necessary clarification. Below we have included general issue comments and specific issue comments:

General Comments:

1. A Upon review of the DEIS, we believe that the estuary alternatives appear best for water quality and fish and wildlife life and habitat. Therefore, we are encouraged that these alternatives have been given careful review and will be seriously considered in the public and agency review and decision-making process for a final adopted lake management plan.

2. B We reaffirm, as stated in the DEIS, that for all alternatives that would result in either an abrupt or, over-time, partial or full loss of the WDFW chinook fish culture program in Percival Cove, a corresponding mitigation replacement program should be included in the plan. The Deschutes/Percival Cove chinook culture program is one of the most

successful chinook culture programs in Puget Sound and is an important contributor of chinook to the state non-Indian and Indian commercial and sport fisheries.

Currently, the Percival Cove chinook culture program includes two parts:

a. 200,000 yearling chinook are transferred from other hatcheries in late November and are confined in anchored net pens in the cove until the following spring (late April-early May); a delayed release program part.

b. 2,000,000 fingerling chinook are transferred from other hatcheries in the natural cove in April, fed by boat, and allowed to volitionally out migrate in late spring; a short- time feeding and imprinting program part.

Mitigation alternatives for loss of the Percival Cove chinook culture program have only been preliminarily investigated as follows:

a. A possible option to replace the 200,000 chinook yearling would be to develop the 12 acre area directly north of Percival Cove. This facility would either be supplied by 8 cubic feet per second (cfs) water from Percival Creek or LOTT pipeline water and include constructed concrete raceways plus other associated rearing equipment and housing. A preliminary cost estimate is upwards of $1,000,000 although costs may be reduced if LOTT water is obtained. An upriver Deschutes River/tributary facility for the yearling production has not been investigated yet, although it is expected that an upriver site may be more costly.

B

b. A possible option to replace the 2,000,000 fingerling chinook production is to explore potential upriver Deschutes River site(s) for constructed raceways or pond(s). A preliminary cost estimate is also upwards of $1,000,000.

c. If water is made available by LOTT at the Tumwater Falls/Deschutes WDFW rearing facility, then plans can be submitted to expand the concrete raceway rearing facilities in this area, similarly to the other noted options. This area has limitations in area that may restrict its expansion; it is surrounded by Tumwater Falls Park. Also, because of current chinook production here, area restrictions, and the multiple use facets of the park, the Department of Ecology and City of Tumwater may restrict additional development and/or require additional permitting requirements. If determined feasible and permitted, facility expansion costs here may also approach or exceed $1,000,000.

3. In prior correspondence, based on information at that time, we had informed you that we did not believe that the Deschutes/Capitol Lake chinook salmon hatchery-managed stock would be affected by the proposed Puget Sound chinook salmon listing under the

C

C Endangered Species Act (ESA). Based on recent new information from the National Marine Fisheries Service (NMFS), concerning watersheds containing only hatchery-managed chinook salmon, we inform you that no decision has yet been made by NMFS as to the listing status of the Deschutes/Capitol Lake chinook salmon stock under the ESA. If the Deschutes/Capitol Lake stock is eventually included in the listing, it is our understanding that a watershed recovery plan may be required.

4. D For all alternatives that include a form of lake environment and corresponding existing fish ladder at the dam, it is important that DGA reconstruct the fish ladder as necessary to ensure upstream fish passage throughout the year. Depending on further design and biological review, this may be modified for very short time periods when additional lake flood storage is needed during an anticipated extreme flood event.

5. E For all alternatives that include a form of lake environment, significant lake drawdowns that expose a significant part of the lake bottom or extreme shallow water should be restricted unless it is reasonably determined that a drawdown and partial saltwater backfill is necessary to maintain lake water quality. Also, significant drawdowns for facility construction and maintenance should be restricted, unless it can be demonstrated that an extreme economic benefit is gained and mitigation can be gained for a fish kill. We do not support a directed fish kill that has been demonstrated in significant lake drawdowns.

6. F The effect of a summer significant drawdown and release of algae into Budd Inlet was not well discussed in the DEIS. We question on what basis has it been determined that lake water quality is improved by a summer significant drawdown/backfill? Is it perceived or real? Please elaborate, especially in regard to Budd Inlet water quality impacts. We are aware that the water quality of Budd Inlet was studied by LOTT during the significant lake drawdown in the summer of 1997 and adverse water quality affects were observed. We believe that this should be a very important consideration for all lake alternatives and written in the final EIS.

Specific Comments by Page:

G
2.4, para. 4- Chinook fry are planted and reared in Percival Cove only at the present. Also, the fry are fed from the time of planting to late May-early June.

2.5, para. 1- Add: the yearling chinook salmon are typically planted in mid November and reared until the following spring.

4.18, para. 1- WDFW does not believe that adult chinook salmon numbers in the lake will cause lower dissolved oxygen because of their oxygen consumption. Although reduced dissolved oxygen (DO) levels in the south basin are a concern and can potentially cause a fish kill, we are skeptical that concentrations of live adult chinook in an open lake environment would measurably further reduce DO levels.

4.41, para. 1- Chum and coho salmon, and cutthroat trout are not planted in the Deschutes watershed.

G

4.42, para. 2- No plantings of coho in the Deschutes watershed has occurred since a very small plant in 1990, and previous plant in 1986. Currently, the Deschutes watershed is not planted with coho because it is used as a south Puget Sound natural coho spawning study watershed.

4.42, para. 2- Chum salmon are not planted in the Deschutes watershed.

4.54, para. 4- Please delete "WDFW would not release chinook fry directly into the estuary." I had given you this statement earlier this year but it was in error. We do release cultured salmon into estuaries at various locations in Puget Sound and Hood Canal.

If you have any questions, please contact me at telephone (360) 664-4670

Sincerely,

Jim Fraser

Jim Fraser
Area Habitat Biologist

cc: SEPA Coordinator, WDFW
Sara Laborde, Director, Region 6, WDFW
Steve Keller, Region 6, WDFW
Keith Keown, Region 6, WDFW
Paul Seidel, Region 6, WDFW
Tim Flint, Region 6, WDFW
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SEPA Coordinator, DO

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STATE OF WASHINGTON
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November 23, 1998

NOV 23 1998
THURSTON REGIONAL
PLANNING COUNCIL

Mr. Steven Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court-SW #B
Olympia, WA 98502-6031

SUBJECT: Capitol Lake Adaptive Management Plan – DEIS

Dear Mr. Morrison:

A review of the Draft Environmental Impact Statement for the Capitol Lake Adaptive Management Plan has prompted a compilation of observations and questions relevant to GA's operational responsibilities for Capitol Lake. We therefore submit the following questions and points for consideration by the Steering Committee:

A • Impacts of a chosen alternative on existing permits for the Heritage Park Development Project are unknown at this time. Permitting requirements associated
B with the implementation of any changes to the lake or to the operation of the dam are also unknown at this time.

C • Conflicting information regarding the impact of the dam in mitigating flooding conditions in downtown Olympia needs to be resolved. Operational experiences by GA staff have demonstrated that under certain conditions, utilization of the dam has controlled or limited the flooding of downtown Olympia. The effects of river volume, lake levels and tide levels on downtown flooding require further study and analysis.

D • The Deschutes Parkway and Heritage Park Project were constructed in anticipation of relatively static lake levels. Studies should be made on the impact of a selected alternative on shoreline erosion, the hydro-geology under roadbed, dam, or bulkhead structures, on the viability of Marathon Park, and on the stability of the BNSF railroad trestle.

E
F
- The alternative selected could present certain risks. Those risks could arise from property damage, public safety issues, loss of lake access, consequences of flooding or personal injury. Economic losses could accrue to the public at large, to surrounding property owners, or to tenants under commercial leases in Budd Inlet. Assignments/indemnification of risks need to be identified and quantified where possible, and clear solutions described.

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- The selection of an alternative could also impact GA operational costs associated with grounds maintenance. A change from a fresh water to salt water environment would require a plan for the re-vegetation of the shoreline. Issues surrounding the maintenance of a fresh or salt-water wetland environment would include the mitigation of noxious or invasive vegetation. Public safety issues resulting from dense growth or hidden wetlands require identification and a plan for resolution. The scale of environmental change represented under the selected alternative could significantly impact operational expense.

H
- The selection of any alternative will result in an implementation cost. All issues surrounding the relocation/construction of any facilities or infrastructure, and the allocation of all related costs to the affected agencies, jurisdictions and stakeholders must be identified and resolved as part of a final agreement.

GA is dedicated to participating in the implementation of a selected alternative by the Steering Committee. In the event of a lack of consensus by the Steering Committee, GA is prepared to offer a supportable approach. Recent discussions within GA suggest that a modification to an existing alternative is also available for consideration by the Steering Committee.

Thank you for the opportunity to comment on this matter.

Sincerely,

William G. "Bill" Moore
Assistant Director

BM:as

WASHINGTON STATE DEPARTMENT OF
Natural Resources

JENNIFER M. BELCHER
Commissioner of Public Lands

November 23, 1998

Mr. Steven W. Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW #B
Olympia, Washington 98502-6031

Dear Mr. Morrison,

The Capitol Lake Adaptive Management Plan (CLAMP) efforts have been a major undertaking for General Administration, Thurston Regional Planning and for the members of the Steering Committee. The Department of Natural Resources (DNR) appreciates the work done so far and offers the following comments and attachment related to the Draft Environmental Impact Statement (DEIS) for consideration in selecting a preferred alternative and development of the final EIS.

The specific comments presented in this letter which relate to the DEIS are a collaborative effort on the part of agency employees from DNR's Aquatic Resources Division, primarily Bill Graeber - Natural Resource Scientist, and Central Region personnel. As agreed upon by members of the Steering Committee, this letter represents the agencies official response to the DEIS. I want to acknowledge the work of Bill Graeber and his efforts to articulate scientific and ecological concerns in a manner by which public policy can be crafted.

COMMENTS:

At this point in our state's environmental history, it is important to attempt to remedy previous shortcomings. Our collective societies have at hand today more knowledge about ecological systems around us than our predecessors had. And, I'm quite sure that people who follow us will have at their disposal far greater information from which to make decisions then we do today. Therefore, based on what we know today about our ever changing nature, DNR supports appropriate attempts to return the Deschutes River to its natural condition. This being said, DNR also is very aware of the importance Heritage Park plays in the decision making process. There are a couple of alternatives presented in the CLAMP Draft EIS that provide a balance to providing for Heritage Park and a natural estuary/river system. DNR supports the selection of either the Estuary Alternative or the Lake/Estuary Alternative.

Besides the aesthetics associated with any lake/river system in an urban environment, a major social question needs to be asked of the Legislature and the people of this state. That question is,

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A "To what extent are you, the people of this state, willing to pay to continually fight mother nature's natural process of filling in Capitol Lake with silt?" This question needs to be asked because of the dredging requirements of many of the options presented. Is the Legislature willing to continue to provide millions of General Fund-State dollars to the Department of General Administration, on a biennial basis, to remove the sediments that are trapped by an artificial blockage at Budd Inlet, and to improving water quality in Capitol Lake, and/or provide for the social amenities of the local community? If the answer is yes, than any of the proposed alternatives which provide for retaining the existing conditions or variations of the existing conditions could move forward. If not, then serious consideration should be given to allowing a naturally flowing river restore itself.

SUSTAINABLE ECOSYSTEM MANAGEMENT

B DNR, as an aquatics land trustee for the citizens of Washington, is striving to promote sustainable communities. Definition and implementation of tools for ecosystem management is, however, a difficult and moving target. None-the -less, ample guidance exists for assessing the impacts of Capitol Lake Adaptive Management Alternatives on ecosystems at several scales. In approaching the question of management alternatives for the Capitol Lake reservoir site, DNR refers to recent developments on applications of sustainable ecosystem management principles. An adaptation of a July, 1998 staff report to the Northwest Power Planning Council, synthesizing the scientific literature on sustainable ecosystem management into a proposed scientific foundation as a regional framework for fish and wildlife restoration, is attached.

Decisions on management of the Capitol Lake reservoir site are constrained and influenced by ecosystem processes in the Deschutes watershed and Budd Inlet. The Deschutes Watershed in turn is one several tributary systems to the Puget Sound Basin. The human uses of the watershed and aquatic lands landscapes will significantly influence the ecological functions of the Basin as a whole and the services it can provide to the human residents. A site scale decision making process without a context for implications at different ecosystem scales will not serve the needs of DNR, as a proprietary trustee, for information upon which to make decisions that we can defend as meeting our mandate and as in the best interest of the citizens of the state. Ecosystem processes and functions occur at multiple landscape scales as well on a site scale. Habitats are supported by nested ecosystem processes. We need to develop an analysis and decision making process that is defensible at multiple scales of space and time.

Salmon Restoration and Recovery Context

Our agency is working to approach salmon restoration from a comprehensive and long-term sustainable ecosystem management perspective using landscape and watershed management tools.

C We view estuaries as a critical link in restoring both sustainable healthy watersheds and salmon, particularly chinook and chum populations. The some of the salient points DNR is using to guide decisions relative to estuary restoration are:

- Salmon are a key large scale nutrient transport vector that generally fuels watershed productivity.
- Estuaries are critical nutrient and materials sinks that help drive the coastal basin's productivity by capturing and repeatedly recycling nutrients and carbon.
- The overall context for protection, remediation, and restoration actions in an estuary is provided by the river continuum concept, ecosystem management concepts, and sustainable watershed management principles.
- Restoration elsewhere in the watershed continuum will not substitute for the loss of the estuary "link".
- The historic condition of the estuary and the resource production the watershed sustained in that state serve as a template for restoration planning.
- Chinook and chum salmon and cutthroat trout can be used as a very effective indicators of watershed and estuary health. Chinook, chum and cutthroat generally fully utilize estuarine habitats for extensive periods. The production capacity of a watershed for these three species is, therefore, strongly influenced by the areas and functions of the estuary and can be used as a performance measure for estuary function.

Landscape Analysis

DNR uses a landscape perspective to assess management and restoration issues affecting rivers, estuaries and embayments to achieve and sustain healthy watershed ecosystems. We agree with a recent statement by US Fish and Wildlife Service which indicated that, while numerous uses of historic estuary habitats may be provided elsewhere in the watershed, intertidal habitats can only be restored in the estuary. We feel that restoration of native habitats and the natural processes to sustain them needs to take priority over impacts to current environmental conditions to facilitate the salmon recovery process.

D The DEIS process is somewhat short-sighted because it is using only site specific information to make a decision which will constrain salmon recovery options that have regional significance. Other recent exercises in Puget Sound demonstrate that a site-by-site scale opportunistic approach to restoration efforts cannot get us to either a comprehensive approach to salmon recovery or to protection and restoration of ecosystem functions in Puget Sound. The comparison of the estuary restoration alternative to other potential uses of the Capitol Lake reservoir site as an issue identification exercise is valid and useful in facilitating further discussions on the trade-offs of various management options for Puget Sound estuaries. However, it is

premature to close the door on any potential large scale estuarine habitat protection or restoration projects and constrain possible options for responding to salmon ESA listings and for incorporation in the state salmon recovery strategy.

Restoration strategies for estuaries and marine shorelines has been identified as a priority by the Wild Salmonid policy. And yet, the site scale analysis of the draft EIS has not incorporated the potential for a comprehensive approach to restoring a continuum of estuarine sub-ecosystem components at the streams mouths that could sustain the various habitats we are interested in restoring. This may point to a serious mis-match in institutional scaling for decision making, and a disconnect between salmon recovery efforts and guidance on large scale projects in historic estuarine areas.

Cumulative impacts assessment

E The draft EIS has not adequately considered the magnitude of the historic losses of estuarine habitats and their value as critical habitats for salmonids and other wildlife. The cumulative impacts of current and proposed uses of the area should be considered at both the watershed and regional scales. The adaptive management plan needs to consider how the federal Endangered Species Act (ESA), the Clean Water Act, and salmon recovery effort needs will be factored into comprehensive planning and decision making. General guidance from National Marine Fisheries Service has been that the minimum threshold for habitat protection on in-water activities [given salmonid listings, proposed listings, recovery efforts and Clean Water Act requirements] needs to be shifted from "no net loss" to "a net gain in habitat area and function". DNR, therefore, will not support a premise that this site is not a valuable asset for salmon recovery as an estuary without substantial assurances that adequate substitutes have been committed to replace the restoration potential of the Deschutes watershed.

MANAGE HABITATS AS PART OF THE STATE'S INFRASTRUCTURE

DNR has proposed that we treat habitat and ecosystem function like any other part of the state infrastructure. Rephrasing the concept in development terms may help make the significance of the concept more apparent. Just as a city, port, or private party may see merit in development or redevelopment of assets along the waterfront, the DNR sees merit in protecting and developing the natural resource production base assets to achieve our mandate and to arrive at a solution that is again defensible as in the best interest of the citizens of the state as a whole. To reach a balance between urban development and natural resource production will require some integration and agreements as to the various visions of desired future conditions of the landscape. To do that will require discussions of tradeoffs as to where land uses fit best on the landscape. There are areas where ecosystem function is critical and needs to be protected or restored as a necessary primary

land use. Other land uses will need to be considered only as potential secondary uses. Location is everything for ecosystem functions just as it is for industry or business locating on the right parcel of property.

Production based renewable aquatic resource management
DNR has proposed a production-based focus for ecosystem protection and restoration where production goals for a species or suite of indicator species or species of interest would be used to as the basis for developing habitat investment strategies and objectives. The use of the historic land coverage patterns in conjunction with production capacity estimates is a powerful mechanism for scaling the area and functions of habitats needed for restoring ecosystem processes and patterns of sub-ecosystems; even if the scope of the restoration is only a fraction of the historic system.

Defined level of services
What are the services the local community and the citizens of Washington expect from the Deschutes watershed and the project site?

In considering healthy salmon populations as one of the potential services the site can provide:

- what role can/should the Deschutes river watershed play in the response to the Puget?
- Sound chinook ESA listing?
- what role can/should the Deschutes river watershed play in the broader scale salmon recovery strategy response to the Puget Sound chinook ESA listing?
- address development of natural resource production sites as well as other development needs. The community will need to redevelop renewable natural resource production capacity along with the other land uses to reduce the overall conflicts between competing aquatic land uses within both the watershed and the region.
- just as with any other redevelopment, location is key to ecosystem restoration.

Cost effective use of public resources and monies to maintain desired services
F The department supports cost-effective and responsible use of the limited public salmon restoration and management dollars that are and will be available. Restoration will be futile unless and until this state adequately protects both existing habitats and areas useable for future recovery efforts. DNR wants to discuss in more detail the costs and benefits of the alternatives and associated actions that could further expand intertidal restoration.

G The draft EIS does not adequately research the merits and drawbacks of the alternatives from the perspective of potential salmonid natural production capacities and the significance of the alternatives on the states ability to redevelop natural production of salmonids in the Puget Sound Region. The management alternatives decision provides an opportunity to direct management focus toward development of sustainable production of naturally produced salmon populations. Certainly in the face of ESA listings and salmon recovery efforts, the high potential of the estuary alternative to restore sea run cutthroat runs and substantial wild chum runs, improve estuary migration conditions for the existing healthy population of naturally produced coho and for wild steelhead and to establish a substantial naturally produced chinook population needs to be assessed more thoroughly.

The freshwater wetland/Lake alternative will not result in improved productive capacity for salmonids for the next 50 years to 75 years until wetland off-channel habitats have developed through natural succession. In the interim, habitat conditions for salmonids will be expected to degrade.

The estuary alternative will result in an immediate increase in productive capacity for estuarine dependent salmonids - chinook, chum, and sea run cutthroat. The literature documents the value of estuarine mudflats as critical habitats for salmonids and highly productive for preferred prey. The nutrient and carbon fixing functions of the estuary occur to a large degree on mudflats as well as the marshes. Mudflats in Puget Sound have been demonstrated to have primary production rates as high as vegetated wetlands. The mudflat areas will be supported by flows of water, sediment, detrital materials, nutrients, and woody debris moving downstream from the watershed. The transport and storage functions along the nearshore area will sustain this highly productive type of habitat over extended periods of time until the area matures into estuarine marshes.

Under the estuary alternative, conditions in Percival Creek will be similar to South Sound tributaries such as Kennedy and Perry Creeks that currently support adult chum runs of tens of thousands. It is reasonable to expect that Percival Creek with an estuary would support adult chum runs in the of tens of thousands. Chinook currently spawn below the Deschutes falls and this area may support substantial additional chum spawning. A preliminary review of production capacities of mudflats for chinook migrants indicates that the estuary alternative may be able to rear in excess of 100,000 juvenile chinook migrants. This information indicates the watershed should be capable of sustaining a small (a few hundred) natural chinook run.

H The opportunity to restore the mouth of the Deschutes River to estuarine function is likely one of the most cost effective potential estuary restoration projects in Puget Sound. The loss of estuary habitats in Puget Sound has been recognized as a major factor in loss of overall ecosystem health

and productivity. Loss of estuarine habitats has also been recognized as major factor for decline of salmon populations in the Northwest. Returning the present reservoir site to its natural intertidal hydrology would allow a small portion (perhaps 10 - 20%) of the historic Deschutes River estuary to be restored. Natural habitat forming processes would be restored, and habitats critical to several species of salmonids would be reconnected to migratory corridors. The size of the site (270 acres) is large enough that the full functions of a Additional restoration activities on-site and adjacent to the area in the south end of Budd Inlet could further improve estuary functions.

RECREATION

The estuary alternative presents an excellent salmon viewing and interpretive opportunity that was not noted as a public use benefit. Both the Tumwater Park area below Deschutes falls and Percival Creek will provide rare prime viewing sites for salmon spawning in the core of the Thurston County urban area. The popularity of similar sites indicates that such an opportunity in an urban core area could eventually attract as many or more visitors per year than current activities such as Lakefair.

I Another unique opportunity exists at Capitol Lake. While a majority of the bedlands are currently First Class Tide Lands and subject to statutory leasing requirements, the possibility of a Natural Resource Conservation Area exists. The Legislature could provide funds to General Administration or DNR to acquire replacement tide lands and convert the lake ecosystem into a NRCA.

AESTHETICS

J Capitol Lake Adaptive Management plan represents an opportunity for the community and the citizens of the state to reconcile our perspective on the productive native ecosystems of the Northwest with our sense of aesthetics. At the turn of the century, the reflecting pond vision for the Capitol Campus Plan failed to recognize the inherent value of the Deschutes River estuary that the Capitol is built around. In 1911, the planners saw only stinking mudflats and a rundown waterfront in the way of growth and progress. Today we need to realize the critical role the site, as an estuary, can play in the function of the watershed and southern Puget Sound. Managing the Deschutes watershed in a sustainable manner should begin by putting all the links of the river continuum back together. We cannot and need not restore the entire estuary but returning the reservoir site to intertidal conditions will restore a small but fully functional estuary to the mouth of the Deschutes River. If we are to have a chance of recovering the abundant healthy and harvestable salmon populations that are the icon of our Northwest quality of life, then we will

need to seize effective opportunities such as this to protect and restore them.

K As to Heritage Park, it seems most appropriate that the Arch of Statehood should look out over a restored, fully functioning and sustainable estuary and watershed as we approach the new millennium. A restored watershed given enough room to meet the sea in an urban center and still function in a sustainable manner to produce services to all sectors of the state economy is a very important heritage message we can and should deliver to our children and theirs.

L It is time we put away the artificial aesthetic of the full reflecting pond notion that has wasted too much of the natural capital of the Deschutes estuary and watershed over the last 50 years and learn to live within the native environment. The state government needs to set a strong example for the citizens, to grow past the belief that humans could sustain themselves apart from the watersheds and begin to implement sustainable ecosystem management.

SPECIFIC POINTS OF CLARIFICATION

M 1. The DEIS indicates or leaves the impression that General Fund-State dollars used for dredging would continue with the Lake/Estuary Alternative and Estuary Alternative. Dredging of sediments that flows from the Deschutes River and Capitol Lake into Budd Inlet becomes the Port of Olympia and Army Corp. of Engineers responsibility. Further evaluation of economic impacts should be done to clearly identify the dollar impact to General Administration as well as the Port or the Corp. of Engineers.

N 2. Throughout the DEIS, deep, open-water marine disposal of dredge materials is considered as an option. The DEIS fails to clearly articulate that with the current benzoic acid contamination of sediments in Capitol Lake, marine disposal would not be allowed. There is a perception throughout the DEIS that Puget Sound Dredge Disposal Area (PSDDA) disposal is an automatic. Additionally, marine disposal would not be allowed until the issue related to purple loosestrife (*Lythrum salicaria)* is resolved.

O 3. Discussions related to the recyclability of dredged materials for commercial purposes failed to recognize that ownership of dredge materials lies with DNR and not with GA. It should be noted in the DEIS that a majority of Capitol Lake is First Class Tide Lands managed by the Department of Natural Resources as an Aquatic Trust. General Administration owns some of the tidelands under Capitol Lake but leases a majority of the lake bottom from DNR.

P 4. Found on pages 4.16 and 4.17 is a description of the tide gate crater. Starting on page 4.17, first paragraph, third sentence, are comments related to a 1981 release of hydrogen sulfide gas

P which caused a fish kill in Lower Budd Inlet. Question - how could the fish kill have been in Lower Budd Inlet when the creation of hydrogen sulfide gas occurs in the tide gate crater, in Capitol Lake and not in Budd Inlet?

Again, thank you for the opportunity to comment.

Sincerely,

Howard P. Thronson

Howard P. Thronson, Manager
Forest Practices Division

HPT

Attachment

c: Commissioner Belcher

A REGIONAL FRAMEWORK FOR FISH AND WILDLIFE RESTORATION

A PROPOSED SCIENTIFIC FOUNDATION FOR THE RESTORATION OF FISH AND WILDLIFE IN PACIFIC COASTAL RIVER BASINS

The role of the scientific foundation

The scientific foundation provides a broad, scientific basis for developing and evaluating fish and wildlife recovery strategies. By stating an explicit conceptual foundation, there is a clear basis for decisions and a scientific starting point for future investigation. The scientific foundation distills a set of general principles about ecosystems, and then discusses important ecological patterns and interactions.

The scientific foundation described here has two major parts. Part I provides the scientific principles— a set of broad, scientifically based statements concerning the relationship between organisms, including humans, and their ecosystems. These provide an explicit set of general principles to guide development of specific strategies and actions. In Part II of the scientific foundation, these principles are applied to a description of the river as an ecosystem. As the framework process moves forward, it is intended that Part II will continue to be developed. A set of analytical tools based on Parts I and II, remain to be developed. The scientific foundation does not represent a series of political judgments, nor does it indicate the course of fish and wildlife recovery in a river basin. The foundation informs these judgments, however, by depicting the scientific principles and ecological setting for recovery efforts. The principles reflect the weight of scientific evidence, thus the foundation is developed through scientific synthesis and peer review.

Part I. The Scientific Principles

Principle 1: The abundance and productivity of fish and wildlife species reflect the conditions of their ecosystems.

Intuitively, we can appreciate the relationship between plans, animals and their environment. In natural ecosystems, these conditions develop and are maintained by processes related to geology, hydrology and natural selection. Because of this close relationship between species and their ecosystems, goals for individual species, such as salmon, resident fish or wildlife, are achieved by allowing the ecosystem to develop in a manner consistent with the biological needs of the target species.

Implications: Making progress toward goals for fish and wildlife species requires certain ecosystem conditions.

Principle 2. Natural ecosystems are dynamic, evolutionary and resilient

Natural ecosystems are dynamic and constantly change in response to internal and external factors. For many ecosystems, change is an essential feature. Many human actions seek to moderate or eliminate these factors that structure biological systems.

However, while change is characteristic, ecosystems also have a certain stability. Ecosystems evolve in the sense that they show describable, if not precisely predictable, patterns of development over time.

Implications: A management program that focuses on specific species within ecosystems should anticipate change. Management programs need to anticipate change and include evaluation mechanisms that permit adaptation over time.

Principle 3. Ecosystems are structured hierarchically

Discussion: Ecosystems are like Russian dolls that can be opened to find a smaller doll within. An Ecosystem is composed of small er scale ecosystems and is also a component of a larger-scale ecosystem. However, while each doll is a discrete entity, ecosystems are a continuum from the large-scale to the small-scale. At any point on this continuum, the ecosystem reflects the behavior of smaller scale components and is constrained by the larger-scale system. Scale in this sense refers to both geographic and time dimensions. By analogy to a camera lens, we can zoom in to consider fine scale details and pan out to consider the ecosystem as a whole. To solve large-scale problems, we need to filter out smaller-scale data. On the other hand, questions concerning small-scale components cannot be addressed by looking at large scale data appropriate to the entire basin.

Implications: This principle provides an ecologically based way to structure fish and wildlife recovery. A recovery program must first define the ecosystem at the point in the ecological continuum appropriate to the problem. We may bound an ecosystem at different places depending on the questions we ask. The ecosystem at that point reflects the characteristics of the features nested within, and it is also constrained within the contest of larger systems. Consideration of the ecosystem in isolation provides and incomplete picture.

Framework elements developed at any level need to be consistent with elements developed at larger and smaller scales. Goals set at the level of the basin need to constrain goals at the watershed level. Regional goals collect and reflect goals set at the watershed level. Similarly, the scientific foundation at the watershed level needs to be consistent with the scientific foundation for the basin as a whole. Because the river is a *system* of nested elements, there need to be a logical consistency in policy, science and action as we zoom in or pan out to address problems at different scales.

Principle 4. Ecosystems are defined relative to specific communities of plant and animal species

Discussion: The dimensions, relevant components and condition of the ecosystem can be identified with respect to specific species of interest and their associated biological communities. Species do not exist as isolated elements of the physical habitat. Instead, they interact closely with other species and the environment to form a system. Ecosystems and their conditions are defined in relation to a community or assemblage of interacting species rather than by individual species. The dimensions and elements of the ecosystem with respect to a population of Bull Trout, for example, includes the interacting community of aquatic and terrestrial plant and animal species that collectively define the conditions needed for success of the population.

Implications: Defining the ecosystem with respect to a distinct community of interacting species allows us to identify and quantify the ecological conditions needed to address the goals of specific species of interest. The physical and biological needs of the community provide a composite index of the conditions needed to meet goals for specific individual species.

For example, achieving goals for a specific salmon population listed under the, requires not only certain water quality, sediment and other habitat characteristics, but also the aquatic and terrestrial conditions needed to allow development of a compatible community of plant and animal species. Continuum of needed physical and biological interactions can be developed that encompasses the entire life cycle of a species.

Principle 5. Biological diversity accommodates environmental variation

Discussion: The physical and biological template of the environment shapes species and populations. Variation in biological characteristics helps species cope with the range of environmental variation in their ecosystems. A more biologically diverse species has a greater range of possible solutions to the challenges posed by variation in the environment. Generally speaking, greater diversity in species and populations leads to greater ecological stability.

Implications: Human actions can reduce biological variation. Confronting a dynamic and complex ecosystem, we try to simplify and constrain it to make it more compatible with our needs. The complexity of many natural habitats has been simplified.

If we accept that diversity within species enhances the ability of the species to sustain itself productively over time, then we should manage our activities to allow natural expression of biological diversity. While diversity can be quantified, determination of the "proper" level of biological diversity is likely not possible. The challenge is to manage human activities to minimize our impacts on selection and allow diversity to develop accordingly.

Principle 6. Ecosystem conditions develop primarily through natural processes.

Natural ecosystems are created, altered and maintained primarily by natural processes operating at a range of scales encompassing the entire life history of species of interest. Habitats develop in response to the local hydrology, geology and climate. Species and communities in turn develop to match the template provided by the physical and biological conditions. Human actions that constrain or alter these habitats have a biological consequence: native species and

populations are lost Management of ecosystems to achieve goals for specific species implies allowing normal ecological processes to operate an develop an appropriate environment.

Implications: Natural ecosystems cannot be managed in the sense that we manage the artificial environment. They develop through natural processes and react to outside constraints including the impacts of human actions. Attempts to engineer these conditions have generally been unsuccessful. Ecosystem management more often involves managing human impacts on the ecosystem than managing the natural environment to force it into a particular configuration.

Take, for example, efforts to create fish habitat in streams using in-stream flow structures. In almost all cases, these efforts have failed to provide habitat over the long-term.

This principle stresses that the needed conditions would develop naturally *if we moderate the constraints on the system.*

Principle 7. Ecological management is adaptive and experimental.

The complexity and variability of ecosystems argues for the idea that ecological management is inherently experimental. Our knowledge of ecosystem functions is incomplete. More importantly, we have only recently begun to appreciate the river as an ecosystem. For most of this century we have thought of the river as a machine that can be adapted to meet our needs. Management of ecosystems presents special challenges to adaptive management. Ecosystem level experiments may be impractical, infeasible or pose equity questions. We may be unwilling to experiment with beleaguered fish and wildlife populations. Nevertheless, an explicit, directed approach to learning is essential. Experimental management does not mean passive "learning by doing," but, rather a directed program aimed at understanding key ecosystem dynamics and the impacts of human actions

Implications: This principle argues for management that constantly experiments and probes to better understand the ecosystem. Order to provide relevant information regarding these factors, monitoring and evaluation need to be built into management programs from the ground up.

Principle 8. Human actions can be key factors structuring ecosystems.

Discussion: Humans are key biological component of ecosystems. Like other organisms, humans structure and control their ecosystems to enhance their own needs. Unlike other organisms, we can consciously control our actions to allow needed ecological conditions to develop. Ecological principles apply to human interactions with ecosystems as much as they do to the interactions of fish and wildlife species and the ecosystems.

It is a reasonable assumption that for most species, the ecological conditions that are most conducive to their long-term survival and productivity are those under which they evolved. Human impacts on ecosystems can be managed to move the system to a state that is more compatible with the needs of other species. It is simply a question of the type of environment in

which we choose to live and how much we are willing to limit our actions to achieve these objectives.

Implications: These scientific principles suggest ways to view our role in ecosystems. In highly developed ecosystems, human actions and technology will continue to dominate the system. However, those actions can be managed in a manner consistent with the needs of other species. Recognizing the importance of biological diversity (principle 5) counsels against practices that narrow the range of biological traits in a population. Developing conditions needed by specific species is more a matter of relaxing human impacts on land and water rather than attempting to engineer alternative environment.

1. The natural system

The river systems in a basin form a complex,, dynamic gradient from the headwater to the mouth encompassing terrestrial as well as aquatic features. Four critical habitat types: riverine (the open river), riparian (the terrestrial area adjacent to the river), hyporheic (the network of underground habitats associated with the flow of water through sediments of the river and flood plain beds) and terrestrial uplands. The drainage system forms a longitudinal continuum of habitats from the headwaters to the river mouth. Four aquatic habitat variables are key: water quality; properties of flow; geological and topographic features; and cover. They also nurture aquatic plants, bacteria, fungi, stream substrate, and other fish.

Fragmentation and destruction of habitat can disrupt regional metapopulation organization, leading to the collapse of core populations and isolation of remaining populations. In turn, this may significantly reduce population persistence and stability.

Adapted from: *Development of a Regional Framework for Fish and Wildlife Restoration in the Columbia River Basin*, Northwest Power Planning Council Report NWPPC 98-16.

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NOV 13 1998
THURSTON REGIONAL PLANNING COUNCIL

STATE OF WASHINGTON
DEPARTMENT OF COMMUNITY, TRADE AND ECONOMIC DEVELOPMENT
Office of Archaeology and Historic Preservation

420 Golf Club Road SE, Suite 201, Lacey • PO Box 48343 • Olympia, Washington 98504-8343 • (360) 407-0752
Fax Number (360) 407-6217

November 10, 1998

Mr. Steven W. Morrison
Thurston Regional Planning Council
2404 B Heritage Court S.W.
Olympia, Washington 98502

In future correspondence please refer to:
Log: 111098-01-GA
Re: Capitol Lake Adaptive Management Plan Draft Environmental Impact Statement

Dear Mr. Morrison:

The Washington State Office of Archaeology and Historic Preservation (OAHP) is in receipt of the Draft Environmental Impact Statement (DEIS) for the above referenced proposal. From the document, I understand that the Department of General Administration (GA) proposes changes in management of the South, Middle, and North Basins of Capitol Lake.

In response, OAHP staff including Restoration Designer Stephen Mathison, State Archaeologist Rob Whitlam, and I have reviewed the DEIS to assess impacts upon historic and archaeological properties in the project vicinity. Based upon this review, I concur with the recommendations in the DEIS pertaining to the archaeological sites in the project vicinity. Whichever course of action is pursued, these sites should be protected. Any ground disturbing activity should be monitored in the event archaeological resources are discovered.

In regard to the historic built environment, I support alternatives which retain the open water of at least the North Basin. As is referenced in the DEIS, the open water of Capitol Lake is derived from the Wilder and White plan for the Capitol Campus. It is desirable to retain the reflective value of the lake as an important expression of the Wilder & White scheme which was based upon early 20th century planning principles.

Thank you for the opportunity to review and comment on the EA. Please feel free to contact me at (360) 407-0766 should you have any questions.

Sincerely,

Greg Griffith

Gregory Griffith
Comprehensive Planning Specialist

GAG

Cc: Shanna Stevenson

Thurston
Conservation District
Local solutions to local problems

Our New Address Is:
2400 Bristol Ct SW Ste 100
Olympia, WA 98502
360-754-3588
Fax: 360-236-0941

18 November 1998

Steven Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Ct SW #B
Olympia, WA 98502

Dear Mr. Morrison,

The Thurston Conservation District has taken a lead role under EHSB 2496 to foster salmon habitat recovery in the Deschutes Watershed. With this in mind, the District Board of Supervisors would like to offer a couple of comments on the Capitol Lake Adaptive Management Plan Draft EIS.

A The mission of the Conservation District is to conserve and sustain the beneficial use and protection of our natural resources. This means the District views salmon habitat as the highest priority for management of Capitol Lake. However, there is insufficient analysis in the draft EIS to determine which alternative, in the long run, will provide the best habitat for salmon. The analysis, in part, depends upon the how much emphasis is placed on hatchery runs of chinook versus naturally spawning runs of coho, steelhead, and searun cutthroat. This question is beyond the scope of the DEIS and unfortunately, complicates the choice of alternative. However, we respectfully suggest that the Capitol Lake Adaptive Management Plan Steering Committee, to the extent possible, take a

B further look at salmon issues and choose the alternative that most favors salmon habitat.

C Secondarily, the tide gate at the entrance to Budd Inlet is clearly a fish passage problem. The Board of Supervisors urges the Department of General Administration to move forward expeditiously to solve this problem for the benefit of salmon, steelhead, and cutthroat.

The Board of Supervisors looks forward to working with the Capitol Lake Adaptive Management Plan Steering Committee and the Department of General Administration to improve salmon habitat in the Deschutes Watershed.

Sincerely,

Doug Rushton

Doug Rushton
Vice-Chair, Board of Supervisors

6128 Capitol Blvd. • Olympia, WA • 98501-5271 • Fax (206) 753-8085 • (206) 754-3588

Black Hills Audubon Society
P.O. Box 2524
Olympia, WA 98507

12

November 23, 1998

Steve Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW, #B
Olympia, WA 98502

Dear Mr. Morrison,

I am writing on behalf of the Black Hills Audubo Society regarding the Capitol Lake Adaptive Management Plan Draft Environmental Impact Statement.

A We support the Estuary Alternative as the benefits derived from this alternative far outweigh any benefits from the other alternatives. By allowing what is now Capital Lake to return to its original estuarine habitat, water quality will be improved, species will increase in diversity and abundance, the problematic Canada Goose population will resolve as Canada Geese prefer freshwater habitat, costs of periodic dredging will be avoided, and flooding impacts may be reduced due to the removal of the dam. The estuary option will allow the reeemergence of an environment that is **B** becoming increasingly rare, and provide the opportunity to experience a more dynamic and educational environment than the other options. The Lake Alternative provides none of these benefits while providing only a marginal aesthetic quality.

There are also questions regarding the Draft EIS which was unclear on certain points.

C According to the Draft EIS, the cost of dredging for the Estuary Alternative was estimated as potentially equaling that of the Lake Alternative. Dredging costs for the Estuary and Combined Estuary/Lake Alternative were not itemized as the dredging costs for the Lake Alternative were. How were these numbers determined?

D The Draft EIS anticipates increased erosional forces at the tide gate dam, railroad trestle, and along the Deschutes Parkway. How could this occur concurrent with the "loss of flood storage volume" anticipated by the EIS?

E Conflicting statements in the EIS indicate that abundant Canada Geese will likely decrease due to preference for freshwater habitat over estuarine, yet go on to say that a Canada Goose management program is necessary for the Estuary Alternative.

F The Lake Alternative states a possibility for "an integrated aquatic vegetation management plan for the lake". What would this involve? Specifics should be included in the EIS for public scrutiny.

G The issue of flooding was not adequately addressed. Mitigation of potential flooding was included in all but the Lake Alternative. In view of flooding events of downtown Olympia subsequent to the development of Capitol Lake, the Lake Alternative should include this issue as well. Perhaps a potential dollar cost should also be evaluated.

Thank you for the opportunity to respond.

Sincerely,

Regina Murray
Black Hills Audubon Society

Black Hills Audubon Society
P.O. Box 2524
Olympia, WA 98507

13

Capitol Lake Towers

1910 Evergreen Park Drive, SW
Olympia, WA 98502
Tel: 360-943-4200
18 November 1998

To: Capitol Lake Adaptive Management Plan Steering Committee

Att: Steven W. Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW #B
Olympia, WA 98502-6031

The residents of Capitol Lake Towers, a 45-Unit Condominium on Evergreen Park Drive, S.W., Olympia, WA, are deeply concerned about alternatives that would destroy Capitol Lake.

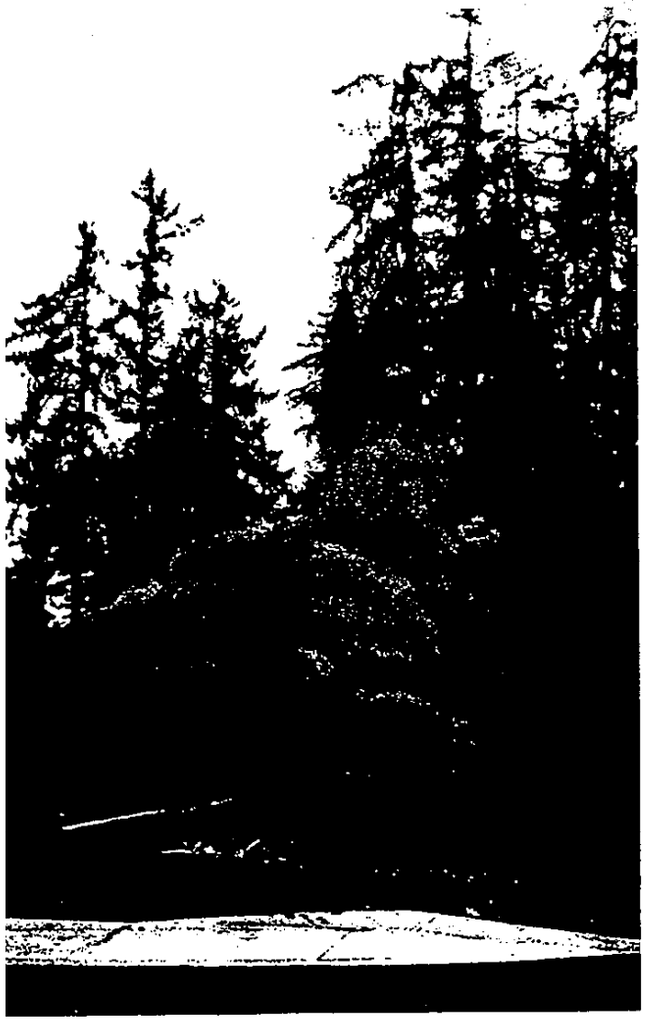
From our Condominium we have beautiful views of Capitol Lake, the State Capitol, Mt. Rainier, Mt. Adams, Mt. St. Helens, and the Black Hills.

Please don't destroy our picturesque Capitol Lake!

Sincerely,

Maurice A. Click,
Chairman

Enclosures



ARPER ASSOCIATES

17 Evergreen Park Lane SW
ympia, WA 98502

NOV 13 1998

THURSTON REGIONAL PLANNING COUNCIL

November 9, 1998

Mr. Steve Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW #B
Olympia, WA 98502-6031

Mr Gary Larson, Senior Facilities Planner, State of Washington
Department of General Administration,
Division of Capitol Facilities
206 General Administration Bldg.
PO Box 41012
Olympia, WA 98504

Gentlemen:
On behalf of the residents of the Evergreen Park Association, please accept our views concerning the alternatives for management of Capitol Lake, as presented in the October 23, 1998 Draft Environmental Impact Statement.

A The Executive Board of the Association met November 7,1998 and unanimously voted to support the "Lake Alternative" option presented in the Draft EIS, for the following reasons:
This option

- maintains the middle and north basins as a beautiful setting for the State Capitol and Olympia
- maintains the open-vista presently afforded to Deschutes Parkway, which is used everyday by visitors, motorists, walkers, joggers, birdwatchers, photographers, bicyclists, etc.
- is an integral element of the Heritage Park plan conceived by architects White and Wilder as part of the Capitol Campus Plan, which is nearing completion on the eastern shore of the north basin
- maintains the 200,000 annual Chinook salmon rearing facility
- is marginally more costly than several of the other alternatives, but is simply the right thing to do

The Executive Board authorized and made a commitment to actively lobby support for this alternative and the necessary funding from the legislature for its implementation.

B As a specific comment on the Draft EIS, nowhere in the Executive Summary is the cost of moving or replacing the salmon rearing facility shown . Unless the salmon facility is to be abandoned, the costs of moving it to another location should be added to all of the alternatives except the "Lake Alternative". Thank you for your consideration.

Jerry L. Harper

Jerry L. Harper, P.E., President
Evergreen Park Association
w/enclosure

Telephone (360) 943-6769 ■ FAX (360) 943-4670

NOV 1 3 1995

HOUSTON REGIONAL
PLANNING COUNCIL

November 10, 1995

Mr Nick Cockrell
Department of General Administration
P O Box 41019
Olympia, WA 98504

Dear Mr. Cockrell

I am responding to the article in the Olympian concerning removal of sediments in Capitol Lake. On behalf of the residents within the Evergreen Park Association, who live just west of Capitol Lake, please accept our views on the sediment issue.

I have enjoyed the beauty of Capitol Lake since its early formation. I have also observed the build-up of sediments in the upper and middle basins of the Lake. I am sure it was anticipated by the designers that sediment which previously washed into Budd Inlet would instead settle in the Capitol Lake impoundment, and would need to be removed periodically to maintain the Lake as a lake. This same material, were it not for Capitol Lake, would need to periodically be dredged and removed from Olympia Harbor in order to maintain the Port of Olympia shipping channel at safe operating depths.

C My point is this. Without the 5th Avenue dam and Capitol Lake, the sediment coming down the Deschutes River ends up in Olympia Harbor and Budd Bay, and would be dredged for shipping and navigation purposes. With the dam, the material settles into Capitol Lake, but still needs to be dredged in order to maintain the beauty and integrity of Capitol Lake. In either case, the dredged material should be disposed of in a Corps of Engineers-approved deep water spoils disposal site in Puget Sound. There are safe ways to remove and dispose of the material that will not harm juvenile salmon or waterfowl in the Lake.

Keeping Capitol Lake as a beautiful, open body of water to reflect the State Capitol, City of Olympia, and Mt. Rainier far outweighs any benefits of letting the Lake fill and become a marsh. Please accept this as the views and position of the Evergreen Park Association. Thank you for your consideration.

Sincerely,

Jerry L. Harper, P.E., President
Evergreen Park Association

The Millennium Carillon

The Millennium Carillon Association

360.786.5001
FAX 360.786.0536
jmknudson@msn.com

603 Plymouth Street S.W.
Olympia, WA 98502-5338

November 20, 1998

NOV 23 1998
THURSTON REGIONAL PLANNING COUNCIL

Mr. Steve Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW #B
Olympia, WA 98502-6031

Dear Mr. Morrison:

This letter will serve as the Millennium Carillon Association's comments on "The Capitol Lake Adaptive Management Plan – Draft Environmental Impact Statement", October 1998. Thank you for the opportunity to make comments on this ambitious effort to engage the community in this dialogue about Capitol Lake. Our Association is siting and designing a 54-bell carillon and slender bell tower around Capitol Lake to celebrate the past millennium and to honor the coming millennium. As an instrument, the carillon will provide free music to the public in Heritage Park; currently our schedule calls for the bell tower to be complete in late 2000.

A The MCA's perspective of the alternatives for Capitol Lake is mainly aesthetic: we cannot envision Heritage Park without North Capitol Lake in its present form. For the no action and estuary alternatives, Heritage Park would take on the look of a lighthouse stranded inland by the shifting shoreline. For the Lake/River Wetland and Combined Lake/Estuary alternatives, we also believe that views of the Capitol from the west and south would be seriously compromised. We therefore favor the Lake Alternative. We envision that canoeists, kyakers and other boat users will use the Lake as a listening area for the carillon. Tide flats would destroy that opportunity at all times except possibly at high tide and that opportunity would be fleeting. We believe that such a perspective would also be shared by the thousands of visitors increasingly attracted to Capitol Lake as they complete their tour of the West Capitol Campus.

In this respect we agree with Mayor Jacobs that the setting for Capitol Lake is urban and that fact needs to be considered in setting the purposes for which the Lake is to be used. The restoration of saltwater marsh seems to make much more sense for the Nisqually Delta, a wildlife refuge in a rural setting. I understand that refuge managers there are also reviewing options to determine how much of that delta is to be subject to saltwater influence. Perhaps adaptive management for Capitol Lake should take the form of watching the Nisqually Delta experiment before plunging too quickly into changing Capitol Lake. Also, those who are attracted to the estuarine aesthetic have the opportunity to enjoy that delta.

B In a more general vein, the EIS did not seem to address siltation, runoff and land use patterns upstream. Capitol Lake is the unfortunate victim of such upstream abuse, largely rural, or suburban, I suspect. Prevention is certainly a theme that is being heard very loudly in the environmental community these days. I would also suggest that each alternative be looked at for its "reversibility" – that is the degree to which it gives future generations with as many choices as we have today. For example, dredging of the lake "as we go" still allows future decision makers a lot of options. However, allowing sedimentation to proceed over many decades, may prevent a "return" option from being realized because of the enormous expense of moving and disposing of so much material at one generation's expense.

C Lastly, I did not see any attempt to determine what impact sea-level rise might have on the alternatives. If the Steering Committee would liked additional information about our project or our views, please do not hesitate to call upon us.

Sincerely yours,

James C. Knudson

James C. Knudson, President
The Millennium Carillon Association

cc: Mayor Bob Jacobs
Allen Miller

North Capitol Campus Heritage Park

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November 17, 1998

NOV 1 9 1998

THURSTON REGIONAL PLANNING COUNCIL

Mr. Steve W. Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW #B
Olympia, WA 98502-6031

Dear Steve:

As President of the North Capitol Campus Heritage Park Development Association, I submit these comments on the draft Environmental Impact Statement on the Capitol Lake Adaptive Management Plan on behalf of the Board of Directors. In summary, the key question to be addressed in the Capitol Lake Adaptive Management Plan is "Should Capitol Lake be maintained as a fresh water lake?" The answer is yes.

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. Their 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 Puget Sound, a reflective lake, and the City of Olympia. The continued maintenance of Capitol Lake as a fresh water lake will fulfill the original vision for the Washington State Capitol.

Significant progress has been made toward the completion of the vision since 1911. After the buildings on the West Capitol Campus were completed and landscaping done in the 1920s and 1930s, Capitol Lake was created by the Legislature in 1950 with the construction of a dam and tide gate along 5th Avenue. Since 1991, significant progress has been made toward the completion of the North Capitol Campus along the shore of Capitol Lake with the Legislature authorizing a total of $10.4 million dollars to complete land acquisition, predesign, permitting, design, and the first phase of the construction.

During the current 1997-1999 biennium, a portion of phase 2, the Arc of Statehood, is being constructed. This next April 1999 the park's new shoreline edge and the wetland mitigation required by the environmental permits will be completed. The aesthetic and recreational opportunities provided by Capitol Lake will be lost if the open water concept is lost.

The state and the local community are very pleased and excited to see the vision of Wilder & White finally take form and become a reality. The lake alternative in the draft Environmental Impact Statement, which maintains the open water environment in the north and middle basins, is the only alternative which is compatible with the ninety year plan for the Capitol Campus.

Very truly yours,

Allen Miller

Allen T. Miller, Jr.
19:ap

North Capitol Campus Heritage Park Development Association
2404 Heritage Ct. S.W.#B Olympia, WA 98502-6031 360 786 5745

November 17, 1998

Mr. Steve W. Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW #B
Olympia, Washington 98502-6031

Dear Steve:

As President of the Olympia Thurston Chamber of Commerce, I submit these comments on the draft Environmental Impact Statement on the Capitol Lake Adaptive Management Plan on behalf of the Board of Trustees. In summary, the key question to be addressed in the Capitol Lake Adaptive Management Plan is "should Capitol Lake be maintained as a fresh water lake?" The answer is an affirmative yes.

In 1911, the architectural firm of Wilder & White created a master plan for the Washington State Capitol Campus as part of a nation-wide design competition. Their 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 Puget Sound, a reflective lake, and the City of Olympia. The continued maintenance of Capitol Lake as a fresh water lake will fulfill the original vision for the Washington State Capitol and downtown Olympia.

Significant progress has been made toward the completion of the vision since 1911. After the buildings on the West Capitol Campus were completed and landscaping done in the 1920's and 1930's, Capitol Lake was created by the Legislature in 1950 with the construction of a dam and tide gate along 5th Avenue. Since 1991, significant progress has been made toward the completion of the North Capitol Campus along the shore of Capitol Lake with the Legislature authorizing a total of $10.4 million dollars to complete land acquisition, predesign, permitting, design, and the first phase of the construction.

OLYMPIA/THURSTON COUNTY CHAMBER OF COMMERCE
P.O. Box 1427 ■ Olympia, WA 98507 ■ 360/ 357-3362 ■ Fax 360/ 357-3376
Homepage - http://www.olympiachamber.com
Email - Olywaccc@orcalink.com

During the current 1997-1999 biennium, a portion of phase 2, the Arc of Statehood, is being constructed. This next April 1999 the park's new shoreline edge and the wetland mitigation required by the environmental permits will be completed. The flood control, aesthetic, and recreational opportunities provided by Capitol Lake will be lost if the open water concept is lost. Downtown Olympia would be a much less attractive place and a less viable commercial district should the open water concept be destroyed.

The Chamber is very pleased and excited to see the vision of Wilder & White finally take form and become a reality. The lake alternative in the draft Environmental Impact Statement, which maintains the open water environment in the north and middle basins, is the only alternative which is compatible with the ninety year plan for the Capitol Campus and downtown Olympia.

Very truly yours,

Allen T. Miller, Jr.

ALLEN T. MILLER, JR., President
Olympia/Thurston Chamber of Commerce

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Steve Morrison
Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW, #B
Olympia, Wa 98502

November 23, 1998

NOV 25 1998

THURSTON REGIONAL PLANNING COUNCIL

Re: Capitol Lake Management Plan Draft EIS

Dear Mr. Morrison:

On behalf of the 526 members of People for Puget Sound in the Thurston County area, I thank you for the opportunity to comment on the Draft EIS for the Capitol Lake Management Plan. We would support the selection of either of the two estuarine options as preferred approaches for managing this area into the next millennium.

PEOPLE for PUGET SOUND

South Sound Office

1063 Capital Way So

Room No. 201

Olympia, WA

98507

(206) 754-9177

Fax 786-5054

Ecological Issues:

As you know, the loss of estuarine habitat in Puget Sound and the ecosystem that it supports has been dramatic over the past 100 years. In many urban bays around the Sound, the loss of physical near shore habitat has been almost complete. Unfortunately, Budd Inlet is no exception. In fact, while we lack the industrial development found on the Duwamish and the Puyallup, the destruction of estuarine habitat that accompanied the damming of the Deschutes in 1951 was far more dramatic than in these other, more industrialized areas. Both the Puyallup and the Duwamish, for example, still have native runs of Chinook, while the runs on Percival Creek are long gone. The Duwamish and the Puyallup still contain estuarine ecosystems. The difference is, of course, that these other rivers still drain directly into the Sound and allow for tidal interchange. Saltwater marsh and mudflats are still present to a limited extent.

The decision to dam the Deschutes had profound implications. In 1951, we did not fully appreciate this; we thought we could reengineer a major natural system and make it better. Today we know better. Fortunately, we have the ability to reverse the physical damage and, over time, reestablish much of that original ecosystem.

A decision to perpetuate the current system of management would, on the other hand, be as damaging as the original decision to create Capitol Lake in 1951. We do not feel that the Draft EIS fully addresses this issue. The decision to continue management in this fashion has significant *on-going* impacts on the health of the Sound and a wide range of aquatic species. Species such as the Olympia Oyster, that are struggling to survive today, will face increased risk of extinction if restoration of this sort is not accomplished. While the benefits of restoration of estuarine habitat under the Estuarine and Estuarine / Lake options are examined in the EIS, the on-going negative impacts to the overall estuarine ecosystem in Puget Sound under the range of Lake options are not addressed. The fact that this is a programmatic, as opposed to a project, EIS makes the need for this analysis even greater. We are not looking at impacts that occur at one point in time, but over a longer period of on-going management. This is a serious flaw in the document. We do not believe that these impacts can be mitigated.

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Moreover, the EIS inaccurately characterizes ecological benefits that would result from the Estuarine and Estuarine / Lake options. On page 4.53, the authors state that the Estuarine options would "likely" benefit anadromous fish. The fact of the matter is that there would be significant and definite benefits from these options including reduced threat of predation, improved rearing habitat, and dramatically improved water quality. Even more disturbing is the error in the following paragraph in which the authors suggest that "from a habitat perspective, there would be little improvement" in the first 50 years following the introduction of saltwater. Actually, there would be immediate and significant improvement in the number and biological production of estuarine species, including aquatic plant and invertebrates that form the base of the food chain (J.A. Miller and C.A. Simenstad: "A Comparative Assessment of a Natural and Created Estuarine Slough as Rearing Habitat for Juvenile Chinook Salmon;" Estuaries, Vol. 20, p. 796-86; 1997). While it may take up to 100 years or so to fully establish all the natural characteristics of the salt water marsh and the river system, we would see immediate re colonization of these areas by a large variety of animals and plants. Within 1 year, much of the saltwater vegetation would become established and contribute to ecosystem health. With limited effort, this time frame could be accelerated by plantings. Dramatically increased federal and state funding for this purpose is very likely in the next several years.

E

In addition, the EIS seems to suggest that the value of the freshwater habitat in the Lake is equal to the value of the habitat that would be created under the estuarine options. This is clearly not the case. The tremendous productivity of the estuarine environment combined with the rarity of these areas makes them tremendously valuable. On the other hand, the almost sterile, highly polluted lake is not a very productive area. Nor is this type of habitat rare or unusual. The fact that it supports non-native fish such as carp and bass that prey on native species should be viewed as a detriment rather than a positive aspect of this environment. The EIS should be revised to clearly distinguish between the value of these separate environments. In fact, a return to an estuarine system will only cause impacts on non-native or introduced species which should not be allowed in the Deschutes and which, by their very nature, create imbalance in the system. In this sense, all the "impacts" attributed to the estuarine systems are, in fact, beneficial and should not be described as adverse. Conversely, the continued existence of non-native and introduced species under the Lake alternatives has an on-going impact on native species which should be addressed by this document.

F

Finally, the EIS does a poor job of describing the full impacts of the water quality problems caused by the confined, non-flushing lake environment. Increased temperature, BOD, and other water quality problems are not present to anywhere near the same extent in the estuarine environment. The authors continuously use the term "brackish" water to describe estuarine waters, which has, ironically, a connotation of being stagnant.

<u>Impacts from Flooding and Dredging:</u>

G

The issue is far more than an environmental issue, however, there are dramatic fiscal and social impacts associated with the maintenance of Capitol Lake. The creation of the Lake has lead to flooding problems and the need for dredging at a cost of tens of millions of dollars --- problems which did not exist prior to 1951. We believe that the Estuarine alternatives have clear advantages in respect to these issues as well.

H

In fact, the Estuarine / Lake alternative is the only option which will eliminate all forms of flooding of the downtown area, both from tidal influence as well as from stormwater problems associated with the Deschutes. Given the concerns over flooding, this benefit should be more clearly identified with that alternative.

I In terms of dredging, there is currently no clear alternative for Lake dredge disposal. The cost of dredging under these options will, therefore, likely be higher than anticipated. The need to dredge Budd Inlet in the short-term is not well characterized under this document. We do not believe it is at all clear that this will need to occur.

Recreational Issues

J Throughout the document, the authors seem to emphasize the tremendous recreational opportunities provided by the Lake and suggest that these will be lost under an estuarine option (see, for example, p.4.85). This is a bias which has no basis in fact. All such references should be removed from the document. Actually the popularity of marine recreational areas, such as Priest Point Park, exceeds the popularity of similar freshwater recreational areas. Recent surveys and polling that we have reviewed confirm this. The existence of mudflats and low tides twice a day do not cause people to avoid these areas. In fact, extreme low tides often draw large numbers of people to observe exposed sea stars, sand dollars, and other creatures.

K As for recreational fishing opportunities, the EIS does not clearly recognize that, over time, nothing will do more to enhance the fishery resource than the restoration of the natural system. This approach will cause native and naturalized stocks to rebound over their currently depressed numbers due to improvements in physical habitat and water quality. With regard to the hatchery, it is assumed that it must be eliminated under all but the Lake alternative. We question whether it might be maintained under the various other alternatives. The EIS should examine the possibility of relocating the hatchery as well as the obvious benefits to taxpayers associated with elimination of the hatchery. Is the hatchery cost-effective?

L In terms of recreational boating, the EIS suggests that the Lake provides greater and better opportunities for boaters. The fact of the matter is that many owners of kayaks and canoes would much prefer to paddle in a natural environment. The current lake is viewed by many boaters as akin to swimming pool due to the lack of overhanging vegetation and other natural features. Restoration of the estuarine environment would likely increase use of this area by many boaters. While some boaters prefer or require more open water, the close proximity of Budd Inlet provides opportunities for these individuals.

The estuarine options will also increase the amount of vegetation and the diversity of species, thereby increase recreational opportunities to observe wildlife. It is no more difficult to maintain a trail system in this environment that in a freshwater environment.

Aesthetics and Odor

M On the matter of aesthetics and odor, we believe that the authors of the EIS have, again, a serious bias which has no basis in fact. If the odor of low tide and the view of mudflats were so undesirable, why do so many people flock to Percieval Landing each weekend? Why did Anthony's Home Port recently locate a new restaurant within a few hundred feet of the mudflats in Budd Inlet? Why do so many people seek to own homes on Puget Sound? Why do those same individuals pay almost twice as much to live near saltwater mudflats than do people who own homes near fresh water areas such as Pattison Lake? For those who do object to low tide, it is important to keep in mind that these areas also experience high tide twice a day.

M

The odors that residents experienced prior to the construction of the Lake are now thought to be largely associated with raw sewage that was discharged directly on to the tide flats at that time.

We believe that this document in its current form gives credence to these myths about the estuarine environment and should be adjusted accordingly.

N

Finally, on the matter of integration with Heritage Park. We recognize that many members of the community are interested in maintaining the North Basin as a reflecting pool, especially given the amount of effort that has gone into the Heritage Park project. For this reason, we have supported the Estuarine / Lake Alternative. We believe that this is a good compromise for those who desire to have a lake. The North Basin is what most people in community identify as Captol Lake. We would, however, suggest that you consider several adjustments to the current alternative:

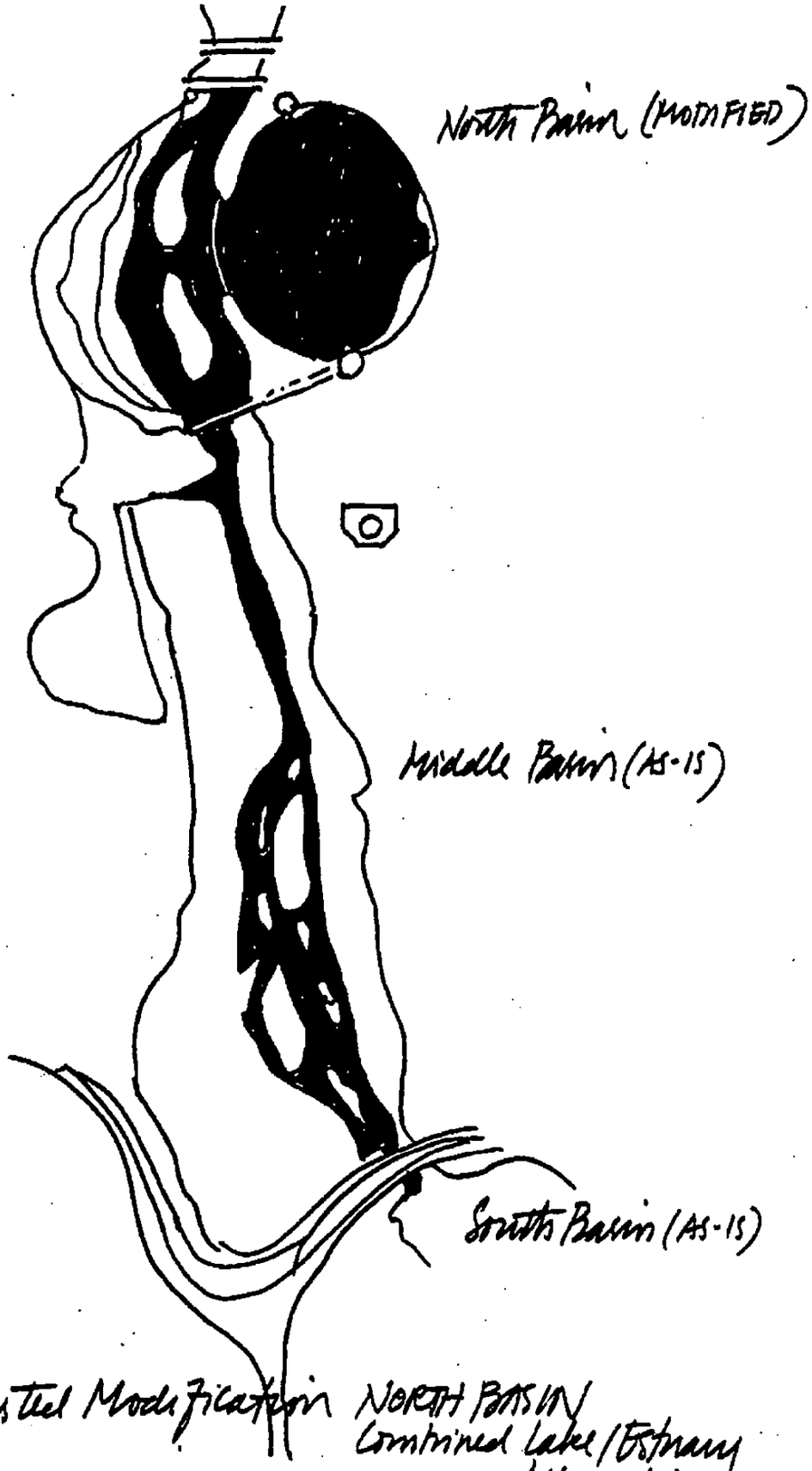
1. Curve the dam forming the western end of the reflecting pool so that it forms more of a circular pool. The idea is to improve aesthetics. The current alternative is very unattractive (see attached diagram).

2. Consider a saltwater reflecting pool which experiences some tidal flushing to exchange water and reduce water quality problems.

Thank you for considering our comments. If you have questions please feel free to contact me at our Olympia Office (754-9177).

Yours,

Bruce Wishart
Director
South Sound Office
People for Puget Sound



Suggested Modification NORTH BASIN
Combined Lake/Estuary
Alternative
Figure 4

19

From: "Knutson, Peter" <pknuts@sccd.ctc.edu>
To: "'Morriss@co.thurston.wa.us'" <Morriss@co.thurston...
Date: 11/23/98 4:17pm
Subject: Capitol Lake

Mr. Steven Morrison, Sr Planner
Thurston Regional Planning Council
2404 Heritage Court SW #B
Olympia, WA 98502
Morriss@co.thurston.wa.us

Dear Sir:

I am writing to express my concerns for the future management plan for what is now known as Capitol Lake. I write as the official representative for the Puget Sound Gillnetters Association. We are the largest commercial fishing organization in the state.

Our preference for this plan would be to return the area to it's rightful former self, the Deschutes River Estuary. The benefits to threatened wild salmonids and native trout by breaching the dam and allowing the return of natural tidal action are indisputable. Other estuary dependent wildlife will also benefit. The cost savings to the states taxpayers will add a much appreciated bonus. The message to the rest of the state, and to the Federal Government, by returning this area closer to it's natural state will be one of good stewardship and a willingness to address habitat problems without Federal interference.

Again, we strongly endorse the estuary option.

Thanks,

Peter Knutson

Environmental Coordinator
Trustee
Puget Sound Gillnetters' Association

CC: "'peterknutson@home.com'" <peterknutson@home.com>

20

NOV 24 1998 November 21, 1998

THURSTON REGIONAL PLANNING COUNCIL

Steven W. Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW, #B
Olympia, WA 98502

Dear Mr. Morrison:

The Sasquatch Group is the local affiliate of the Sierra Club, a national conservation organization whose mission is "to explore, enjoy, and protect the wild places of the earth." We submit the following comments on the draft EIS for the Capitol Lake Adaptive Management Plan.

We believe that the Estuary Alternative has the greatest environmental benefits because it would bring back a tidal salt marsh that was completely destroyed by the construction of the tidal gate. According to a 1997 report by People for Puget Sound, 73% of Puget Sound's tidal wetlands have been destroyed or greatly modified. Thus, preserving and restoring salt marshes should be a high priority for Washington State.

A We realize, however, that lower Capitol Lake is intended to be a reflecting pool for the Capitol building and a complement to Heritage Park. Therefore, we find the Estuary/Lake Alternative acceptable, although of higher cost and less environmental benefit than the Estuary Alternative.

For either of the above alternatives, serious consideration should be given to active restoration. Both alternatives rely on slow, natural recovery of the estuary. But we feel there would be great public interest in hastening this process through planting of native salt marsh species and other projects, many of which might be accomplished with volunteer labor. In addition, if the State is willing to sink money into building a dam across Capitol Lake, shouldn't it be willing to fund estuary restoration?

B The EIS is one of the best-organized and best-written that we have seen, and we commend the editors for a job well done. We have a few minor comments. First, the cumulative impacts section on water quality should consider the combined effects of each alternative on LOTT's plan to increase sewage treatment plant discharge into Budd Inlet. Second, the

C vegetation section should consider the possible need to control purple loosestrife for the freshwater wetland alternatives, and Spartina for the estuary alternatives. Finally, as best as we

D can ascertain, there is no consensus as to whether listing of Puget Sound chinook will require a recovery plan for the Deschutes River chinook. The EIS should be up front about this ambiguity.

Thank you for this opportunity to comment.

Sincerely yours,

Jeffrey R Foster

Jeffrey R. Foster
Sasquatch Group Sierra Club
P.O. Box 474
Olympia, WA 98507

21 NOV 23 1998
THURSTON REGIONAL PLANNING COUNCIL

Tom Badger and Wendy Gerstel
1802 Pine Avenue NE
Olympia, WA 98506
(360) 754-2409

Steven Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Courts SW #B
Olympia, WA 98502-6031

November 22, 1998

Dear Mr. Morrison and members of the steering committee,

We thank you for this opportunity to comment on the Capitol Lake Adaptive Management Plan. After reviewing the alternatives outlined in the Executive Summary of the draft EIS we are struck by the importance of selecting one that is projected to improve the water resources and the fish and wildlife habitat of the Capitol Basin. Washington residents have a responsibility, as stewards of the land, to act on our acknowledgement that natural ecosystems are in serious trouble and in need of our help.

It seems meaningless to list various bird, mammal, and anadromous fish species as threatened or endangered, if we do nothing to improve the conditions in which they must live. With the Capitol Basin we have the exciting opportunity to set an example for environmentally progressive stewardship of public lands.

The value of an **adaptive** management plan such as this is in its concept of progressive thinking and willingness to evolve with a growing body of scientific knowledge. The result is an ability to tailor land management decisions to reflect a better understanding of the workings of an ecosystem. If we say that this is an adaptive management plan in which we will "rely upon the best available science", how can we give such weight to an idea that was born 87 years ago!? Science has progressed since then in ways that could never have been imagined by Wilder and White. To implement their vision, built not only on the ideas of **their** time but also on the ideas of an east coast metropolis, would be to ignore everything we'd learned since then.

We would like to add the following points:

A

- Comments regarding the "terrible stink" of the pre-lake mud flats disregard the fact that in the years before the lake was created, and even for a time after, raw sewage was discharged into the basin. It was essentially an open-air septic system. In our opinion, an estuary would

smell just as nice as the coastal smells so integral to all that keeps us loving and living in the Puget Sound region.

B

- We are disturbed that the detail level of environmental analysis for this "non-project" has been less than for a "typical project EIS". We see no reason not to apply the highest standards for Capitol Lake/Capitol Estuary planning. It is a long term project of environmental importance that deserves the application of whatever scientific information is needed to make informed land management decisions.

C

- Cumulative costs over the next 50-100+ years for the lake alternative far exceed all others. Realistically, one must project at least that far to make the cost comparison. Twenty years out means nothing.

D

- Assuming we are improving our land management practices upstream, as mandated by law, the rate of sediment accumulation in Capitol Basin should decrease through time. Therefore, it would be incorrect to base estimates on past rates.

So, as posed in the draft EIS, "Should Capitol Lake be **restored** to a tidal estuary?", we offer two strong **YES** votes! When do we stop focusing on human wants and start paying more attention to global health and the wonders that lured us all to the Northwest.

We urge you in your alternative selection to consider the habitat needs of our treasured northwest fish and wildlife, and not to appeal to the short-sighted human aesthetic sense and perspective.

Again, we thank you again for the opportunity to comment.

Sincerely,

Wendy Gerstel

Tom Badger

22

NOV 23 1998

THURSTON REGIONAL PLANNING COUNCIL

Ginny Broadhurst
3224 Lorne St SE
Olympia, WA 98501

Steve Morrison
Thurston Regional Planning Council
2404 Heritage Ct
Olympia, WA 98502

Dear Steve:

Thanks for the opportunity to comment on the proposed changes to management of Capital Lake. I am writing to encourage TRPC to restore the lake to estuarine habitat and to no longer perform dredging of the lake. Long ago, the idea of a reflecting pond for the Capital probably made sense, from an aesthetic point of view. Today when we have lost such a tremendous amount of estuarine habitat (as much as 98% in some of Puget Sound's river deltas), the idea of an artificial lake with dredging needs and water quality problems makes no sense.

Capital lake currently serves an important recreational function for local residents and visitors. I enjoy walking the trail as much as anyone, but I would enjoy it even more if there was a trail around a natural water body where I could get a glimpse of ecological processes as they ought to be. The U.S. Fish and Wildlife Service is currently considering alternatives to the artificial freshwater wetlands that are at the Nisqually and I think this is a similar management situation. USFWS is striving to be forward thinking, to undo an unnatural system that requires expensive maintenance in order to increase the function and value of that area to fish and wildlife needs. With development causing so much loss of habitat for fish and wildlife, it is incumbent upon decision makers and the public to restore high value habitats where possible. Capital lake is an extraordinary opportunity.

I know that it is difficult to undo what has been done and to change a place that the community knows and loves. But these are changing times and we must have the courage to correct past mistakes. I believe that in the long run, local residents will also learn to love an updated, more ecologically correct estuary.

I believe that a restored estuary will help to improve water quality by reducing the fecal coliform counts and will also provide important habitat for fish and wildlife. Thank you for your efforts on this important issue.

Sincerely,

Ginny

November 10, 1998

Steven W. Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW, # B
Olympia, WA 98502

Re: Capitol Lake Restoration

Dear Mr. Morrison:

I support the Estuary Option (Option 5) or the Estuary/Lake Option (Option 6).

For fifteen years or so, I've walked around the lake four or five times a week. Also, I've fished in the lake and years ago took my children there to swim and use the playground facilities. It is definitely one of the areas in Thurston County that is important to me and my family. In addition to the obvious environmental benefits of these options, I believe that either option, but especially the Estuary Option, would enhance the lake's recreational and scenic attractions.

The State has passed important laws having the purpose of protecting and enhancing wetlands. The Department of General Administration should act consistent with that purpose.

Finally, as a taxpayer I'm concerned about the continuing and substantial costs of dredging the lake.

I appreciate the opportunity to comment on this.

Sincerely,

Tim Burke

Tim Burke
7513 Cooper Point Road NW
Olympia, WA 98502

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NOV 2 3 1998

THURSTON REGIONAL PLANNING COUNCIL

November 23, 1998

Capitol Lake Steering Committee
C/O Steven Morrison
Thurston Regional Planning Council
2404 Heritage Court SW #B
Olympia, WA 98502-6031

Dear Mr. Morrison and Steering Committee Members:

I wish to add a brief statement of support for the Lake Alternative.

I grew up in Vallejo, California, a waterfront community where the freshwater Napa River flows into the north shore of San Francisco Bay. Sadly, over the course of 150 years of development, the delightful aesthetic and recreational opportunities offered by this mix have been blunted by various inept or short-sighted human building schemes.

From this experience, I find that many of the arguments in support of the Estuary alternatives have a compelling resonance. Preserving and restoring natural, tidewater ecosystems is highly laudable.

However, this is no longer an isolated estuary for an undisturbed watershed. The lake forms the very core of our urban community. I am convinced that the Lake Alternative provides the best opportunities for long-term successful management.

A First, the sediment that is rapidly filing in the three basins must be dealt with. I doubt the long-term viability of simply "transferring" the problem from the lake to Budd Inlet, as the Estuary alternatives would do. There must be steps we can take regionally to help reduce or mitigate the impacts of human activity in the Deschutes/Percival watersheds that would also alleviate some of the sediment concerns.

B Secondly, I have heard sharply divergent views regarding flood risks in downtown Olympia. Proponents of the Estuary argue that the dam and lake create a higher water level, thereby posing a higher risk. However, it seems important to preserve the ability to control flow out of the lake via the dam, releasing excess water into Budd Inlet when needed. The Estuary alternatives seem likely to curtail the capacity of the system to accommodate excess water once the basins have silted up.

C Finally, I am impressed by the balance in Olympia's waterfront, providing a successful transition between a vibrant urban freshwater lake ringed by Heritage Park and the teeming Budd Inlet boat docks and boardwalks. As far back as the original capitol campus plans, this balance has been evident. If Vallejo's waterfront illustrates how fragile and difficult a task this can be, Olympia's represents a sustaining vision and achievement of which we can be justifiably proud.

I urge the Steering Committee to preserve Capital Lake.

Sincerely,

Martin D. Casey
Olympia

25 NOV 23 1998

THURSTON REGIONAL PLANNING COUNCIL

Julie S. Clougherty
PO Box 1631 - Olympia, WA 98507

Steve W. Morrison and the Capitol Lake Adaptive Management Plan Steering Committee
Thurston Regional Planning Council
2404 Heritage Court SW #B
Olympia, WA 98502-6031

23 November 1998

Re: Draft EIS for Capitol Lake Adaptive Management Plan

Dear Mr. Morrison and Steering Committee,

I would like to comment on the future of Capitol Lake and the draft EIS plan for it. I was at the public hearing last week and found the quality of arguments in favor of keeping the estuary flooded as a "lake" alarmingly short-sighted and anthropocentric. The original planners in 1911 (and some people at the hearing, apparently) were operating under an archaic attitude that all of nature is subject to human domination, and can be subdued and made to do as humans wish. We have proof every day that this attitude is dangerously naïve as well as ecologically unsound. Deforestation, overgrazing, and damming rivers all destroy habitat that we cannot afford to lose, and have costly, deadly consequences to us.

Comparing higher levels of habitat destruction to one river estuary in Puget Sound may seem extreme, but with over 90% of the Sound's estuaries destroyed to date, we must make every effort to restore what we can. Washington has an opportunity to set an example of progressive decision-making based on scientific and ecological rationale, with concern for species other than *Homo sapiens*. As I said at the hearing, who but concerned humans will speak for the voiceless plants and animals whose very survival depends on having a place to survive? Washington must stand firm in its commitment to saving diversity and doing the most good for the most creatures at the lowest cost. Otherwise, we will show the world that all we care about is maintaining a so-called "lake" for a handful of humans' viewing pleasure, at unacceptably high costs.

Concerns about mosquitoes, odor, safety, and loss of recreation do not stand up to factual scrutiny; in fact, they pale in comparison to the costs to endangered and other species of keeping the estuary flooded as a "reflecting pool" for a building. What a short-sighted, selfish goal!

Finally, it is incorrect to call this matter a decision on whether to keep Capitol Lake. In reality, the argument is over whether to restore the Deschutes River estuary. The Draft EIS clearly outlines the feasibility of this restoration, and I urge the committee to consider the facts, not the selfish interests of folks who live and play on the currently sterile, expensive, flooded estuary called "Capitol Lake". My vote: the estuary should be restored.

Thank you for the opportunity to comment.

Julie Clougherty

5 pm

NOV 19 1998

PLANNING COUNCIL

26

John L. Dean
1910 Evergreen Pk. Dr. S. W.
Olympia, Wash., 98502

Gentlemen,

In regards to the various plans to waste the State's money to beautify the area known as Capitol Lake, I offer the following suggestions:

1. Dredge the entire lake bed and use the silt for fertilizer where needed.
2. Remove the railway causway and the dam that now blocks the ebb and flow of the daily tides.
3. Remove the fill and buildings that now block the free flow of water from the presently dammed area and allow the Budd inlet to extend to the Interstate 5 bridge and fill.
4. Convert the waste area in the southwest to a fish hatchery.
5. Widen Deschutes Way where it has been narrowed.
6. Allow Percival Creek to flow unimpeded into the inlet and fill in the old fish hatchery area for use as a park or a future municipal swimming pool and recreation area.

These improvements would correct the fifty year old mistake of damming the free flow from the Deschutes river and allow the Budd inlet to return to its former boundaries, except for the I-5 corridor. These improvements might also solve the problem of the geese's year round habitation of the area and provide more tidal areas for the growth of Olympia oysters. Returning the now poluted lake area into a free flushing tidal basin of Budd inlet would also improve the natural habitat of the wild life that the present lake area has ruined.

Regards,

John L. Dean

John L. Dean

NOV 1 3 1998

PLANNING COUNCIL

27

November 10, 1998

3338 Gull Harbor Rd. NE
Olympia, WA 985

To the Thurston Regional Planning Council:

I am writing to express my support for Options 5 and of the DEIS for Capitol Lake. I especially favor Option 5. I think the greatest showcase for our Capitol building would be a restored wetland where Capitol Lake is now. The present lake is visually and biologically sterile as well as high maintenance. Many Olympians walk, canoe, and fish in the wetlands upstream from the lake-few visit Capitol Lake. For me the beauty of native wetland plants and especially migrating salmon is a fitting and truly Pacific Northwest setting for the Capitol.

Sincerely,

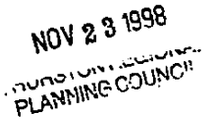
Shelley Ferer

28

20 November, 1998
804 Narnia NW
Olympia, WA 98502

CAPITOL LAKE CHOICE: ESTUARY

Steve A. Morrison, Senior Planner
THURSTON REGIONAL PLANNING COUNCIL
2404 Heritage Court SW #B
Olympia, WA 98502-6031



Dear Steve Morrison,

I attended the hearing on Nov. 18th about the various possibilities for "developing" Capitol Lake. When I went I had no preconceived ideas because I felt I didn't know enough about it. But as the hearing went on, I began to feel more and more certain that we have an opportunity now to create a real nature preserve, and not just an artificial lake, no matter how beautiful that is. It is a rare and unique opportunity which may be more timely than we can know, to put back the landscape in as natural a way as we can. As was pointed out, an estuary is extremely valuable in many ways, and we are losing these environments too quickly and too completely.

It's my opinion that a naturally growing extuarial environment is even more beautiful than a lake. When you look at Mud Bay, even when the tide is out, you can see reflections in the wet mud...you can even see clouds passing by when the sky is light. The grasses and other native plants provide a constantly changing vista of movement and color and grace, whereas the lake is pretty much always the same.

For the walkers - could there not be a raised wooden boardwalk through a section of the natural growth, bringing the walkers right into the midst of nature, in that way providing a real experience of the beauty of nature, (as in the DNR's McLane Creek Nature Trail with its wetlands). There would be small distinctive signs telling the walker what is growing, what to look for, how birds and animals make their homes there, and for contemplation, benches along the way. And could not the present walkway along the edges of the lake remain for the runners?

ESTUARY

As one speaker said, who speaks for the wildlife? Or who speaks for the plants? Many people who enjoy walking, viewing the lake from their homes, valuing their property because of the lake's view, and enjoying the "quality of life" the lake provides...couldn't they also find great pleasure in a natural setting which also provides wildlife with a livable home? Do we not learn from the creatures too, and would we not be more able to observe and understand some of the miracles of life from such a natural setting?

If there must be a partial lake, please try to keep it small and in proportion to the estuarial setting - and consider the shape as well as the size.

Hopefully,

Nancy

Nancy G.B. First

FUNKHOUSER
826 South Percival Street
OLYMPIA, WASHINGTON 98502
(360) 943-3493

NOV 19, 1998

To: Capitol Lake Committee,

after reviewing the options for the future of Capitol Lake, I strongly favor continuing the lake management as it is at present, with dredging to continue in the south basin & the reflecting pond in the north basin.

Thank you

RF Klos

George Ging/Joanne Stellini
1828 27th Avenue NW
Olympia, WA 98502

November 23, 1998

Steve W. Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW #B
Olympia, Washington 98502-6031

Re: Comments on Capitol Lake Adaptive Management Plan DEIS

Dear Mr. Morrison:

We would like to express our support for the adoption of a longterm management plan for Capitol Lake. In particular, we support the fifth option, or Estuary Alternative above all others.

We believe that implementation of the Estuary Alternative is consistent with habitat restoration and recovery efforts being pursued and funded at both federal and state levels. We believe that while White and Wilder's 1911 plan was a good vision at that time, it is no longer appropriate after eight decades, given our ever-increasing knowledge of the environment, fish and wildlife habitat needs, and the costs associated with on-going maintenance of aritificial systems.

We support the removal of the 5th Avenue dam and the return of Capitol Lake to its former estuarine condition. We do not believe that property values or people's enjoyment of the area will be much diminished as estuarine waterfront anywhere in Puget Sound continues to command high resale and tax value, and attract recreationists year round. As local residents, we would thoroughly enjoy the lake's return to estuary and delight in watching its restoration to its former natural condition and its increased species diversity. We believe that this restoration would provide ample opportunities for research, education, and outreach to the local community and its educational institutions. We believe Olympia could serve as a model for providing the leadership needed to take serious steps in a positive direction which help restore fish and wildlife habitat in the Pacific Northwest.

We would also be supportive of efforts to tie the Estuary Alternative in with other habitat restoration, trail development, and wildlife corridor development efforts.

Lastly, given the time lag anticipated between dam removal and future dredging (100-150 years), we would support the development of a fund to help ensure those costs are easily covered by future generations, as we will be enjoying the benefits of restoration now.

Sincerely,

George Ging

Joanne Stellini

31

Questions and comments should be directed to:

NOV 04 1998
THURSTON REGIONAL PLANNING COUNCIL

Steven W. Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Courts SW #B
Olympia, WA 98502-6031
Phone: (360) 786-5480 Fax: (360
Email: morriss@co.thurston.wa.us

Mrs. Alan E. Goldberg
301 - 21st Avenue SW Olympia, WA 98501

O:sp\caplk.fly

My earnest desire to keep Lake with water - with many years of pleasure

Dec. 6, 1998

Mr. Steve Morrison

Dear Sir:

This is to voice my vote to retain Capitol Lake as it is now. It is one of the reasons Olympia and the view of the Capitol Campus are so beautiful - also downtown Olympia would lose much of its appeal if it were changed.

Having lived near the type of estuaries planned I have seen that they never quite live up to the promised result and end up being unattractive & unpleasant.

Sincerely,
Marjorie Dalgren

33

P. N. Halgren
3824 Cntry Clb Dr NW
Olympia WA
98502-3710

DEC 10 1998
THURSTON REGIONAL PLANNING COUNCIL

12/8/98

Mr. Steve Morrison
Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW #B
Olympia, WA 98502-6031

Dear Mr Morrison,

Thank you for taking my phone call. As a told you, I am not a hydrologist, oceanographer etc but I have lived in Washington a long time and think I am familiar with the Sound and its environs.

Perhaps I don't understand the Capitol Lake vs Estuary discussion but the issues being raised seem unduly complex. Stated simply:

1.) Retention of Capitol Lake will:
   a.) Require periodic dredging of known cost.
   b.) Attention will continue to be required for preservation of water quality for swimming and wading.
   c.) Continue to take advantage of sunk costs made at Capitol Lake Park & Tumwater Park
   d.) We know the cost, the view the odor etc.

(2) Estuary alternative will:
a) Create a brackish mud flat headed for salt marsh unless substantial dredging is done - regularly
1) Obscure Capitol Lake when the water is drawn down.
2) The "clean water estuary" envisioned by some will only be possible if extensive dredging is done.
3) As far as I know mud will continue to accumulate and I very much doubt the "Tidal action" causing complete flushing
a) A good example is "beautiful" Mud Bay
b. Ultimately, a decision will have to be made whether to live with an increasing mess or take remedial action at open ended cost.

As I see it we would trade a known situation, with addressed problems for a mess of unknown proportions and cost potential

Odor is in the nose of the beholder but no one can successfully argue that extensive mud flats won't have substantial odor, particularly on warm days.

Either we accept the change in asethetics - ie Lake to Salt Marsh or when it gets bad - we get to reverse the whole thing optional at extra cost.

As far as "wading in the warm Budd Inlet water and walking on the many raised board walks through the marsh" (see Letter Mr. MacCready) OK if you like wading in mud and someone better check liability before we have "extensive board walks."

Yours very truly

Peter N. Holgren

Margaret R. Hellberg
112 18th Avenue S.W.
Olympia, Washington 98501

November 20, 1998

Mr. Steve Morrison
Senior Planner
Thurston Regional Planning Council
2404 Heritage Court S.W. #B
Olympia, Washington 98502

Dear Mr. Morrison:

As a resident of the City of Olympia for nearly 24 years and of the South Capitol Neighborhood for 20 years, I am writing to strongly urge the State of Washington and affected jurisdictions to select the Lake Alternative as part of the Capitol Lake Adaptive Management Plan. I support the Lake Alternative for the following reasons:

First, the state and the City of Olympia are investing millions of taxpayer dollars for the construction of Heritage Park. One of the primary purposes of the new park is to fulfill the original vision of architects Wilder and White in the 1911 Capital Campus Plan. It links the Capital Campus with downtown Olympia and our city's historic waterfront. A critical element of the Wilder and White plan was to complement the park and the Capital Campus with a reflecting pool for the State Capitol Building. If the Lake Alternative is not selected as the preferred option, one of the primary elements of the overall plan for Heritage Park and the Wilder and White plan will be lost. The basic concept behind Heritage Park was Capitol Lake. To lose it now would seriously undermine the benefits of this important project and betray the citizens, legislators, and city leaders who worked so hard to make it possible.

Second, Olympia has in Capitol Lake an unparalleled visual and recreational asset. To have a lake in the middle of your city with an active fishery, surrounded by parks, and hiking, running, and biking trails, is a significant esthetic and recreational advantage every city would envy. To consciously eliminate that asset and replace it with a salt marsh (and possibly one with offensive odors) would do a disservice to the thousands residents of Olympia who enjoy daily the beauty and recreation that the lake affords.

And third, to eliminate Capitol Lake would destroy one of the most prominent visual features in the city's landscape – one that has become an integral part of the city's heritage. It became a part of our landscape when the state of Washington dammed the Deschutes River nearly 50 years ago. It also resulted in the establishment of a freshwater habitat conducive to a variety of marine life and wildlife that have become a fixture in

this community. It would be unconscionable to destroy these features for the questionable benefits that may result from the other alternatives.

Thank you for this opportunity to comment on the proposed Capitol Lake Plan. I hope the state and the other affected jurisdictions realize the magnitude of the loss for this community if Capitol Lake is destroyed.

Sincerely,

Margaret R. Hellberg

Margaret R. Hellberg

35

November 16, 1998

NOV 18 1998
THURSTON REGIONAL PLANNING COUNCIL

1525 Evergreen Pk. Ln.
Olympia, WA 98502

The Regional Planning Council
Senior Planner
2402 Heritage Court St. #B
Olympia, WA 98502

Sir:

It seems prophetic that Capitol Lake had to be drained at this time, due to a problem with an upper dam. Now it is glaringly evident to everyone what it would look like if an upcoming proposal is allowed. The Heritage Park plan (which unfortunately involved destruction of several invaluable parking lots) touts the creation of a large, grassy area overlooking the lake. It should never overlook mud flats.

Sincerely,

Winona Henderson

(Winona Henderson)

cc: Editorial Section,
The Olympian

November 11, 1998

Steven W. Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court, S.W., #B
Olympia, Washington 98502

Re: Capitol Lake Restoration

Dear Mr. Morrison:

Since a prior committment will prevent our attending the November 18 public hearing, we are expressing our support for Option 6, Estuary/Lake Option, by mail.

We consider Capitol Lake to be one of the very special and aesthetic features of Olympia, and we would hate to see all of Capitol Lake disappear. We recognize the need for restoration of some of the esturine habitat, and we feel that Option 6 will accomplish that while retaining the beauty and recreational aspects of lower Capitol Lake. The natural estuary flowing along its western edge toward Puget Sound will make the entire area even more appealing. We urge that there be a provision in the plan for some of the water to flow through lower Capitol Lake to the Sound. This will continually renew the fresh water in the lake so it will not become a stagnant pool.

We appreciate the opportunity to express our support of Option 6 by mail. Thank you.

Sincerely yours,

James G. Horacek

Sharon G. Horacek

[illegible] Governor Stevens Ave. SE
Olympia, WA 98501

November 23, 1998

Mr. Steven Morrison, TRPC
2404 Heritage Court SW No. E
Olympia, WA 98502-6031

NOV 23 1998
[illegible] REGIONAL
PLANNING COUNCIL

Re: CLAMP DEIS

Dear Steve:

We would like to offer the following thoughts for the official record:

We strongly prefer keeping Capitol Lake, and keeping it in a useable state. This would include regular dredging to maintain sufficient depths for recreational activities, e.g. at least six feet of depth in the entire middle basin.

Our reasons for this position are as follows:

1. Capitol Lake is an integral part of the state capitol campus as designed by Wilder and White. Thus it is an important part of this state's heritage. It also contributes to the exceptional beauty of our capitol campus.

2. Capitol Lake is a central feature of the City of Olympia and Thurston County. The city has grown up around it and it is heavily used for many purposes including boating and local festivals. It also helps to protect the downtown from flooding.

3. Capitol Lake represents a large majority of the total publicly-owned freshwater shoreline in Olympia and in fact in the urban core of Thurston county and possibly in the entire county. Freshwater shoreline that is available to the public at no cost is a vital public resource.

4. The lake covers a relatively small area, and thus the potential for environmental gains are quite limited as compared with other local areas like Nisqually Delta. Our efforts should be aimed at areas where there is more gain to be made.

In summary, it seems to us that the net environmental gain that could be made by destroying Capitol Lake, if any, is outweighed by the recreational, aesthetic, and flood control benefits of retaining the lake.

Sincerely,

Bob & Bonnie Jacobs

Bob and Bonnie Jacobs

Mark Johnson
422 Cushing St SW
Olympia, WA 98502
(360) 357-8590

November 22, 1998

Mr. Steve Morrison
Thurston Regional Planning Council
2404 Heritage Court SW, #B
Olympia, WA 98502

Dear Mr. Morrison:

I would like to provide you with my comments on the management alternatives proposed for Capitol Lake. First, I would like to thank you and the Committee for putting together such a comprehensive document. You have provided a very thorough document that clearly explains the alternatives. Now, I wish you as much success in making a decision; it won't be easy. My recommendation to the committee, the legislature, and the citizens of Olympia (and all taxpayers) is to go with the Lake/River Alternative (without the trap, of course). I will provide you with several arguments supporting this position and against the other Alternatives.

Not that it is a sure sign of success, but the Lake/River Alternative seems to offer the best compromise between all the competing interests - the environment, cultural and historical values, and financial costs. This alternative will maintain the North Basin of Capitol Lake as a reflective pool for the Capitol Dome and as an integral part of Olympia's identity. It recognizes the historic and present natural and cultural conditions in the Capitol Lake system. According to the time lines presented, there is hardly a person now living in Olympia who will be alive when the physical changes to Capitol Lake will be noticeable. This alternative will saves citizens tens of millions of dollars in the immediate future and over 100 million dollars long-term compared to the other Lake Alternatives.

From a natural landscape perspective, environmental benefits of the Lake/River Alternative are significant. The ultimate creation of a scrub/shrub and forested riverine environment in Middle Basin will lead to improved fish habitat and the creation of diverse habitat for birds and other wildlife species. Water quality should improve in the Middle and North basins as exposed sediments are replaced with vegetation; the water quality benefits of wetlands are well documented. Most existing recreation opportunities on and around the lake are not compromised and new opportunities are created.

In the long term, the Lake/River Alternative is the most readily "adaptable" alternative. By adopting a give-it-time approach for the near-term it allows for any of the other alternatives to be implemented at any time. From the physical landscape perspective, it is the most likely alternative to be successful with least amount of immediate and ongoing manipulation. The South Basin by Tumwater's Historical Park provides an example of the expected results of the expected lake/river interactions; the popularity of this park can offer some insight into the public's appreciation of this kind of setting. The slow progression from lake bed to riverine environment will permit nature to make changes when and where appropriate.

Given the circumstances, the Lake/River Alternative is as close as we can hope to get to a natural ecosystem in Capitol Lake. I recognize that we can never expect to reclaim a completely natural system in a setting as urbanized as downtown Olympia. We also cannot, however, continue maintaining Capitol Lake as a sterile reservoir, spending millions of dollars to fight a losing battle.

The other alternatives may have good points, but should not be considered for the following reasons:

Lake Alternative – This should really be called the Sterile Reservoir Alternative. Although it maintains the physical appearance of Capitol Lake as it presently exists it requires the most physical manipulation of the lake for the immediate and long-term. It is the most expensive option proposed for the immediate and long-term. It is the least environmentally beneficial alternative for the immediate and long-term. And, it includes the most significant

secondary issue - how to continue the dredging cycle and what to do with the dredge material? It should be so obvious that the *status quo* has not worked that it should not even be an issue for discussion.

Estuary Alternative – This may be the most attractive alternative from an idealistic standpoint, but would be physically and politically impossible to implement. It would entail the most radical physical change to the appearance of Capitol Lake by turning it "from a beautiful lake to stinky mudflats." Although it includes the most desired environmental outcome - restoration of historic conditions - the physical restrictions that have been placed on what used to be the estuary at the dam, rail bridge, and I-5 would prevent an adequate exchange of salt/fresh water to support an estuarine environment.

The present "mouth" of the Deschutes River at 5th Ave. is only a fraction of what it was when Capitol Lake functioned as an estuary. The historic hydrology cannot be restored to Capitol Lake without restoring the mouth of the river. The mouth of the river cannot be restored without taking out everything from the base of the west-side hill to Water Street. Without a wider egress channel in the North Basin, the Deschutes River will not spread in the classic pattern expected in the mouth of a river, and will instead remain channeled along the western shore. Without the necessary salt/fresh water interchange, estuarine morphology and vegetation and animal communities cannot form.

More information is necessary on the expected hydrologic patterns associated with an estuary. I have a hard time believing that enough water could make it through the dam in each tidal cycle to make a real estuary. Although this alternative appeals to the romantic notion of returning to mother nature what is her's. it cannot be accomplished on Capitol Lake and we should look to more reasonable restoration alternatives.

The Lake/Estuary Alternative may eliminate some of the concerns over salt/fresh water interactions in the North Basin and retains a portion of the reflective pool for the Capitol Dome, it would require a massive amount of in-water fill and would require extensive hydrologic engineering to maintain a freshwater pool in an area where presently the only input is untreated stormwater from downtown Olympia. It is still unlikely that the restricted tidal flow through the dam would allow for enough marine water into Capitol Lake in each tidal cycle to create and support an estuarine environment that would extend into the Middle Basin. I believe this alternative has far too many faults to be considered a viable compromise between the "keep it" and "leave it" sides of the issue.

Perhaps the best suggestion I can make to the committee is to apply the K.I.S.S. principle – keep it simple, please. Do not take the attitude that just because Capitol Lake is there we have to do something with it. The Lake/River alternative will allow us to sit back for a great many years and do nothing. If we can control our itchy fingers for that long, we may well find that doing nothing for a while is the best approach. Thank you for your consideration.

Sincerely,

Mark Johnson

39

2325 Schimlp NW
Olympia, WA 98502
November 19, 1998

NOV 23 1998
THURSTON REGIONAL
PLANNING COUNCIL

Steven W. Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW, #B
Olympia, WA 98502

Dear Steve Morrison:

Concerning the Capitol Lake Restoration, I am in favor of Options 5 or 6, restoring estuary habitat.

My family has owned property here since 1950. Growing up here I recall the abundance of salmon in Puget Sound. I want to see salmon runs increase. Open the Deschutes River so that wetlands can develope on the Capitol Lake site.

Yours sincerely,
Landal Johnson

40

Karen Kargianis
6532 Elizabeth NW
Olympia, WA 98502
360-866-1939

NOV 2 3 1998

PLANNING COUNCIL

Nov. 23, 1998

Dear Mr. Morisen,

I am writing to support the preservation of Capital Lake in its present state. I am against returning it to an estuary, except for the upper third portion (that closest to Tumwater Falls). Though there may be benefits to a river estuary, I feel that our community often underestimates the value of beauty, and the beauty of this lake is a great asset to the capital, the towns of Olympia and Tumwater, and to the park that embraces it. I feel the lake should be preserved.

Sincerely,

41

NOV 1 3 1998

PLANNING COUNCIL

November 10, 1998

Steven W. Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Courts SW #B
Olympia, WA 98502-6031

Dear Mr. Morrison

Twenty eight years ago, we moved to Olympia, immediately impressed with the beauty and location of one of the city's crown jewels, Capitol Lake. Our appreciation for this city's valuable asset has continued to grow and it is one of the area's highlights that we like to show our visitors, new to Olympia.

It would be a major blow to the city's attraction should Capitol Lake not be retained in it's present form. We just cannot imagine having to look at expanded wetlands. We are impressed and delighted with the Heritage Park Plans. Please, please, do not allow added mud flats with the accompanying foul odors to diminish the prospect of additional beauty for this region.

We strongly support the "Lake Alternative" concept as laid out in Table 1-1, Capitol Lake Adaptive Management Plan Draft Environmental Impact Statement.

Sincerely Yours

Ross G. Kincaid

Mr. & Mrs. Ross G. Kincaid
1607 Evergreen Park Lane, SW
Olympia, WA 98502

NOV 23 1998

THURSTON REGIONAL
PLANNING COUNCIL

November 20, 1998

Steve W. Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW #B
Olympia, WA 98502-6301

Re: Capitol Lake Adaptive Management Plan

Dear Mr. Morrison:

Please enter this letter into the public record on the above matter. We, the undersigned, want to retain Capitol Lake as a lake; therefore, we want the committee to recommend the Lake Alternative.

Sincerely,

Signature with Address:

Lisa L. Lageschulte	4717 8th Ave NE, Lacey 98516
George [illegible]	8041 Afflerbaugh Ct SE Lacey 98503
Susan D. Wise	6345 Hawks Pr. Rd SE Olympia 98516
Janet C. [illegible]	7341 Greendale Ct SW Olympia, 98512
Suzanne L. Elliott	2350 Cain Rd. SE Olympia 98501
[illegible] Swanson	2545 Kempton St SE Oly Wa 98501
[illegible] L. [illegible]	6518 Turnberry Ln. S.E. Oly. WA 98501
Beverly D. Kildow Schaffner	8035 Jim Ct SE Olympia, Wa 98503
Al Swanson	2545 Kempton SE Oly 98501
Bevenna English	2342 Gravelly Bch Lp NW, Olympia 98502
[illegible] E. [illegible]	3624 Long Lake Dr. SE, Olympia 98503
Donna Cederlund	433 Wildcat SE Olympia 98503
C Beth Davis	5912 Prospector Pl SW Tumwater WA 98512
Joyce M. Beckwith	5500 Kim Jan ct. SE, Lacey WA 98503

CHARLES E. LINK
1604 EVERGREEN PARK LANE
OLYMPIA, WASHINGTON 98502

To Whom It May Concern:

Fifty years ago the State of Washington Legislature, with wisdom and foresight, approved legislation to create Capitol Lake as a beautiful addition to the Capitol Campus.

Capitol Lake has proved to be an aesthetic landmark for our State Capitol and the City of Olympia. It has been a source of pride and enjoyment for all of its citizens. Residents of Olympia at the time of the lake's creation recall how delighted they were to see an end to the smelly, ugly mud flats that prevailed prior to that time. Capitol Lake has provided countless people recreation in the form of fishing, boating, sailing, canoeing, kyacking, hiking and jogging.

For many of us, the view of Capitol Lake played an important part of our decisions to purchase homes overlooking the area. We willingly continue to pay increased tax assessment for this view property.

It is reasonable to assume that the State Legislators knew at the time of the lake's creation that there would be an ongoing maintenance cost as there always is in dealing with natural resources.

To let Capitol Lake revert to wetlands or estuary in whole or in part would be a travesty and an unwise use of resources.

Heritage Park will be a great step forward. Destroying Capitol Lake is two steps backwards.

Charles E. Link

Parker MacCready, Ph.D.
6815 Zangle Rd. NE
Olympia, WA 98506

(360) 956-3216
parker@ocean.washington.edu

November 8, 1998

Steve W. Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW #B
Olympia, WA 98502-6031

RE: Capitol Lake Draft EIS

Mr. Morrison and others involved in Capitol Lake planning,

I have looked at the draft EIS for the Capitol Lake Adaptive Management Plan. Thank you for putting together such a thorough choice of options for the citizens of our County and State.

I write in strong favor of the Estuary alternative, for the following reasons. Allowing the natural ebb and flow of our tidal waters would, as the report points out, be beneficial to the water quality of the Lake area. Currently the Lake is unusable for even wading, a constant disappointment to my four-year-old daughter when we visit the otherwise-excellent Capitol Lake playground. Having salt water would also deter the geese which foul the lawns there. Further, the presence of a tidal estuary in the heart of downtown Olympia would be a beautiful affirmation of our respect for and enjoyment of the natural beauty of the Puget Sound ecosystem.

I am a Professor in the Physical Oceanography department at the University of Washington. I teach the graduate class on Estuarine Circulation, and conduct estuarine research as well. Estuarine circulation is remarkable for its ability to continuously flush and renew the water in a bay. The flushing occurs at a much greater rate than would occur due to river flow alone, constantly bringing in ocean water at depth, mixing it with river water and sending the mixture back to sea near the surface.

I see that concern for the smell of the mudflats has been raised. In my many explorations of our local intertidal areas I have never found the smell to be strong or objectionable. I think this is the result of our relatively well-flushed general Puget Sound circulation, and the mild summer temperatures we enjoy.

I hope that you will take this tremendous opportunity to bring back to life one of the most productive and diverse parts of our natural landscape. My daughter and I look forward to walking the natural shoreline, wading in the warm Budd Inlet water, and walking the many raised boardwalks through the marsh which will be certain to beautify this gem in the downtown scenery.

Finally, I think the Capitol would look best reflected in natural, clean salt water, celebrating our position at the head of the Sound, and accentuating our twice-daily connection with the motion of the Sun and Moon.

Sincerely,

Parker MacCready

24 Steve - rec'd this today. Phone msg to cc Council Council. For record.

November 20, 1998

B.J.

45

sm

DEC 01 1998

PLANNING COUNCIL

Jan McKenzie
lives in Lacey since 1952
re: Capitol Lake

Saw when it was a marsh and river going through town

Thinks we have gone to expense of beautifying this area, perfect background for capitol - it's beautiful downtown, before it was very smelly

The dredging of the lake is going to be a "minor problem" expense because if all that silt goes into the port - it will cost more money to dredge the port than it would to dredge the upper lake.

Environmentalist who likes wetlands

We've gone too far - maintain what we've got - new Heritage Park is an expense too.

If salmon did not go up stream they couldn't get up the falls, it its put back to a river, not sure the connection and the river and the ladders is going to let the fish proceed.

Mary

46

3209 Lorne Street SE
Olympia, WA 98501

Mark Maurer

November 17, 1998

Steven Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW, #B
Olympia, WA 98502

Dear Mr. Morrison:

I would like to express my support for Alternatives # 5 & 6 in the DEIS of the Capitol Lake Restoration. We have lost most of our salt-water estuaries due to development. I would like to see us be progressive and restore one where we can (and save money in the end).

I have enjoyed running, walking and driving by the drained lake in the past few days. My children have also enjoyed seeing the lake in its present condition and have begged to go down there to walk around. It is amazing to see the birds on the mud flats and I can imagine the plants recolonizing them as well.

I have some experience in restoring estuaries so I know it can be done. I designed an estuary creation site on Bainbridge Island. This estuary has been a wonderful success as habitat and with the community. Whenever I meet someone from the island, it seems they know of the site. It is a wonderful place and very alive. I'm sure that the basin that is now Capitol Lake can be the same.

Please enter my comments in the public record. If I can be of further assistance in the restoration efforts please contact me.

Sincerely,

Mark Maurer, LA

Luck is being ready for opportunity when it arrives.

MEYER LAW OFFICE
U.S. BANK BUILDING
402 SOUTH CAPITOL WAY
OLYMPIA, WASHINGTON 98501

MARTIN D. MEYER

CODE 360
TELEPHONE 357-6335
FACSIMILE 357-8488

November 23, 1998

Steering Committee
Capitol Lake Adaptive Management Plan
c/o Steven Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court S.W. #B
Olympia, Washington 98502-6031

Dear Mr. Morrison,

In addition to the public comments I made in favor of retaining Capitol Lake in both the North and Middle basins at the public hearing on November 18, 1998, I would like to make the additional comments.

After I left the hearing, it occurred to me that no one mentioned that Moss Lake was drained when I-5 was constructed. Moss Lake was a very deep lake which covered an area from approximately 14th Avenue to the North side of the current I-5 bridge over Capitol Lake and was a very popular swimming location.

At the time, Mrs. Worthington had constructed 2 homes on Hillside Drive and 1 home on 27th Avenue, which were on the lake. She fought against draining Moss Lake at the time. After the lake was drained, and I-5 constructed, it was determined that it would have been cheaper to simply build a bridge over Moss Lake.

Please do not drain another lake. Aesthetically, there would be no substitute for Capitol Lake.

Very truly yours,

Martin D. Meyer

MDM/mm

SM

DEC 1 0 1998

December 9, '98

Sir:

Portland, Tacoma, D.C. St Louis - etc. all cities admired for their use of shoreline. The Capital Lake is a selling point for down town business and gives our area Central meeting attraction. A mud Shore line where activities would not be as welcome, is hard for me to imagine why it is even considered.

As you plan the future please consider the beauty of the lake - Improvements on fish ladders can be made.

Sincerely,
Mrs. P. Monroe

49

November 2, 1998

Steven Morrison
Thurston Regional Planning Council
2404 Heritage Courts SW, #B
Olympia, WA 98502-6031

Dear Steve:

I regret that I will be unable to attend the public hearing on November 18, 1998, regarding Capitol Lake. Were I there, I would certainly want to offer comments to support the option to keep Capitol Lake (at least between Marathon Park, Heritage Park, and the Fourth Avenue bridge) open as it is now, rather than being filled in.

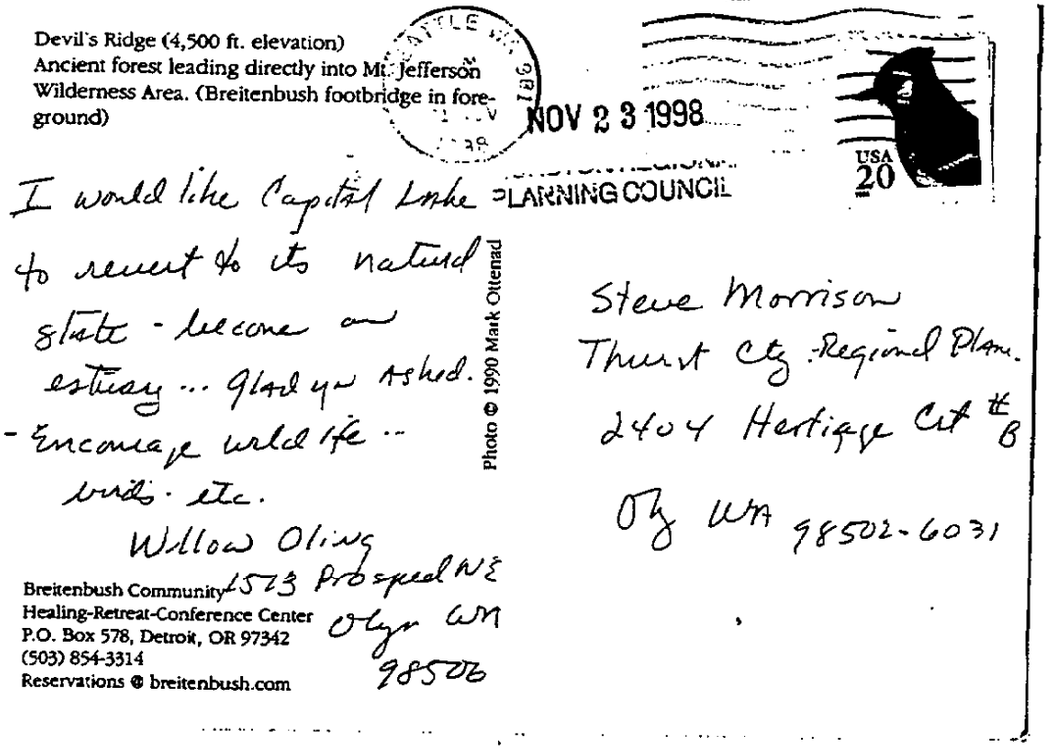
This lake is a landmark and is one of the true beauties of Olympia. It should not be allowed to be destroyed.

I have no strong feelings about the area of the lake north of the freeway. It can revert to its natural condition if it will continue to cost us a fortune to keep dredging it.

Sincerely,

Bob Morse

Bob Morse
1515 Lakemoor Loop
Olympia, WA 98502
(360) 943-8600



Devil's Ridge (4,500 ft. elevation)
Ancient forest leading directly into Mt. Jefferson Wilderness Area. (Breitenbush footbridge in foreground)

NOV 2 3 1998

PLANNING COUNCIL

USA 20

Photo © 1990 Mark Ottenad

I would like Capitol Lake to revert to its natural state - become an estuary ... glad you asked.
- Encourage wild life ... birds · etc.

Willow Oling
4573 Prospect NE
Olym WA
98506

Breitenbush Community
Healing-Retreat-Conference Center
P.O. Box 578, Detroit, OR 97342
(503) 854-3314
Reservations @ breitenbush.com

Steve Morrison
Thurst Cty. Regional Plan.
2404 Heritage Ct #B
Olym WA 98502-6031

November 22, 1998

Steve Morrison
Thurston Regional Planning Council
2404 Heritage Court SW No. B
Olympia, WA 98502-6031

Dear Mr. Morrison,

Thank you for the opportunity to comment on the draft environmental study for the approach to managing Capitol Lake. We are writing to support the river/estuary option for management of the Deschutes River and Capitol Lake. We support returning Capitol Lake to a natural river and estuarine environment for the following reasons:

- **Returning Capitol Lake to a natural river and estuary would be better for aquatic life.** Habitat for fish and other wildlife would be improved by maintaining a natural river and estuarine environment. We believe that the improved health of the fish and wildlife would also be an aesthetic improvement in the environment as well, compared with an artificial lake that is relatively unhealthy for aquatic life and other wildlife.

- **A natural river and estuary would be better for water quality in the estuary and in Budd Inlet.** The recent study of water quality in Budd Inlet by LOTT showed that the current management of Capitol Lake may be depleting dissolved oxygen in Budd Inlet during the summer. If Capitol Lake is returned to a natural estuary, then the dissolved oxygen in Budd Inlet would probably be improved. Also, water quality in the natural river/estuary system would be better than in the artificial lake.

Sincerely,

Greg Pelletier
Tammy L Pelletier

Greg and Tammy Pelletier
2939 Central ST SE
Olympia, WA 98501
phone: (360) 352-4601
e-mail: greg@halcyon.com

Dear Steve,

First I would like to say that I appreciate the opportunity for public commentary on this issue, although I do wish that there could be more time for people to react to the article in the paper.

I am in full support of restoring the true historic landscape of the Deschutes River/Budd Inlet estuary. I think that such a habitat would be far more flattering than the reflectic of Capitol Lake, for the capitol campus and heritage park. I believe that the estuary process could be less expensive; especiall since cl would guess that many environmental groups, schools, non-profit organizations would offer volunteer support. (I know I would!)

I am no scientist or civil engine but it seems that an estuary would

prevent flooding of downtown businesses, bridges and roadways and the increased water quality would lessen the sometimes foul smell of Budd Inlet in and around town.

And finally, as a future teacher I can not tell you how exciting it would be to have a natural classroom such as this (on the busline no less!)

Once again thank you for this opportunity, and your time and work spent on the issue.

Sincerely,
Betsy Perkins

Perkins
219 Percival St.
Olympia WA. 98502

53

NOV 2 3 1998

THURSTON REGIONAL PLANNING COUNCIL

Eika Petermann
4018 MacAdam Court SE
Olympia, WA 98501

November 22, 1998

Steve Morrison
Thurston Regional Planning Council
2404 Heritage Court SW, #B
Olympia, WA 98502-6031

Dear Mr. Morrison:

I am writing concerning the future of Capitol Lake and wish my voice to be registered in favor of returning the lake to a river estuary if that was its original form. I am increasingly distressed about the negative impact our way of life has on the environment and it is obvious we humans can not improve on nature. In fact, we fail miserably at managing it.

In the face of the salmon crisis, I can't believe the lake option is even being considered. If reverting to an estuary (the key word being revert) is a way to improve fish and wildlife habitat and water quality, what is there to debate? We Olympians could be a roll model to the rest of the state and the nation by giving back to nature instead of taking away from it all the time. If salmon is a symbol of our state and we're worried about our "image" because of a dwindling salmon population, what could be better for our "image" than a capitol that is more concerned with function than fashion?

If nature had intended for Capitol Lake to be a lake, it would've been one without the building of a dam and the need for dredging every two years at taxpayer expense. Let common sense prevail and allow the lake to take back its original form.

Sincerely,

Eika Petermann

Eika Petermann

11/20/98

Mr. Steve morrison.
Thurston Regional Planning Council
2404 Heritage Ct. SW. No. B
Olympia WA. 98502-6031.

Re: Capital lake

Dear Mr. morrison,

In regards to the Future of capital lake. I would like to see it returned to a more natural state As An estuary.

Benefits provided;

1. A natural setting incorporated into An urban environment.

2. Avoid the cost of repetative dredging of the lake.

3. A more conducive Environment For waterfowl, ie get them of the road.

4. Easier access For the salomon During the Fall/Spring runs.

page 1.

11/20/98

Thankyou For your considerataon. I hope these are convincing reasons to return Capital lake to An Estuary.

Sincerely,

Ken Petersen

Concur:
Donald F. Petersen
Norma J. Petersen

Ken Petersen
423 Ranger Dr. SE.
Olympia WA 98502. Page.

November 22, 1998

Steve W. Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW, #B
Olympia, Washington 98502

Dear Mr. Morrison:

Since I was unable to attend the November 18th public hearing for the DEIS on the Adaptive Management Plan for Capitol Lake, I would like to provide my written comments. I would like to go on record as a citizen supporting the Estuary Alternative.

The reflective pool that is now Capitol Lake has outlived its original design. In fact, we now know that by changing the natural function of the Deschutes River's estuary, the costs far outweigh any æaesthetic' benefit that was originally planned.

By returning the lake back into an estuary, sediments for the most part will be flushed out into the bay. Water quality should improve since pollutants will not be trapped in the lake.

Water Quality -
Estuarine plants will help filter out pollutants. These saltwater-loving plants will help reduce the goose population as well. Geese prefer lawns and a lake environment. Reducing the goose populations will also help reduce the fecal coliform levels.

Benefit to Fish and Wildlife -
The estuary will benefit a diversity of birds, amphibians and other aquatics. The braided channel will provide habitat for anadromous fish. While coho and chinook are not native to the Deschutes, there are now coho that have been introduced and that utilize areas above the falls using the fish ladder as passage. In the last few years, these fish have been decreasing in numbers. They do not do well in an artificial lake environment, especially one that constantly has water quality problems. However, returning the lower Deschutes to an estuary would provide habitat for returning salmon as well as smolts migrating out to saltwater.

A more diverse population of birds, amphibians, and small mammals would be able to utilize an estuary, making the area far more productive than it is now. This would also provide those property owners who have built in the area an aesthetic, as well as an

educational experience with
nature. While now there are mainly coots, mallards and geese, a large assortment of other shore
birds mostly likely would breed, feed and swim within their view.

Costs -
Draining and dredging throughout the lake's life time is, and will continue to be, extremely costly.
The cost of not only the actual dredging, but cost of disposal of dredge materials and loss of fish
and wildlife habitat also needs to be considered.

Natural Processes
There is also the cost to continue to deal with flooding that the lake encourages. Sediment
buildup encourages flooding. By lowering the natural corridor from a lake to an estuary
floodplain, some of the high flows will be absorbed by the estuary. Additional flows, along with
sediments will move into the bay. Higher than normal tides, during the few times these occur, can
be controlled by lowering the gates in needed. More likely, this situation will not be necessary
except in extreme cases.

The dredging process also causes stagnant organic mud to be stirred up, releasing anaerobic
odors. The normal smell of an estuary should not be noxious! It is only when there is either
sewage discharged directly intc the salt marsh, or when there is constant turnover of decayed
matter that unpleasant odor is created.

In Summary, it behooves the Thurston County Planning Council, City of Olympia and the State
General Administration to try to repair the damages of an unknowing æviſion' of the past. The
Governor directed the state to address anadromous fish. Capitol Lake as it is, does not do this.
An estuary does. The æviſion' for a æCultural Resource' in a reflective pool that is degraded is not
much of a cultural resource. A functioning, productive estuary right in our mist is a far more
cultural resource. Please, I urge you to choose the Estuary Alternative.

Thank you for allowing me to respond.

Cynthia R. Pratt
5021 21st Ave. SE
Lacey, Washington 98503
360-456-4862

1910 Evergreen Pk. Dr. S.W. #903
Olympia, WA 98502
December 5, 1998

Mr. Steven W. Morrison
Senior Planner
Thurston Regional Planning Council
2404 Heritage Court S,W, #B
Olympia, WA 98502-6031

ATT'N: Members, Capitol Lake Alternative Management Plan Steering Committee RE: Draft EIS and alternatives.

Dear Members:

It is completely unbelievable to me that anyone could even consider the destruction of our beautiful Capitol Lake--truly the jewel of Olympia and of the State Capitol!

I am sure I am one of the few still around who remembers exactly what the area was like before the lake was developed. My parents would not go near that horrible smelling tide and mud flats. The odor was so offensive noone would want to live or even walk anywhere near it. When the tide went out it was at its worst.

When the plan was developed to turn this offensive swamp into a lake, noone could believe how beautiful it would turn out to be. Without a doubt, except for our magnificient State Capitol Building itself, the lake is the most beautiful spot in Olympia.

Don't destroy any portion of the lake to make an ugly estuary or wetlands. If the lake is turned back into a smelly mud and tide flats again, the property values of all property adjoining or viewing the lake would have to be reduced considerably with the property taxes dropped accordingly. The cost of dredging the lake wouldn't be nearly as much as the taxes that would be lost if the lake is gone. The dredging costs mentioned in the impact statement are highly exaggerated at one million dollars every two years. As I recall, the lake has been dredged only twice in twenty years, Why are we now told it must be done every two years, other than to show a higher maintenance cost than the other plans proposed. Please don't believe there will be no maintenance costs for the other plans. Don't forget the debris that will be washed down the river and will accumulate in the swamp left where the lake once was.

I am amazed to hear of the support that has suddenly appeared for the estuary and wetlands alternative plans. I hope thst you will carefully analyze the signatures of the supporters of these plans. Are these people long-time permanent residents, property owners and property taxpayers? Or are they recent and/or temporary residents -- students etc.who should have no imput in this matter.

I remember a speaker at the November 18th hearing on this matter commenting that he could obtain the signatures of five hundred persons against the "lake alternative". Perhaps he has promoted a letter-writing campaign on this issue--from whom? Students?

I feel certain the majority of permanent, long-time taxpaying residents of Olympia support retaining the lake as it is now. All of the people I have talked with are horrified to think that our beautiful lake could be replaced with the ugly wetlands and estuary. However, if signatures are necessary to indicate their support for retention of the lake, I am sure I could easily obtain many more than 500 signatures of permanent residents of the city.

If the students and others who want an estuary and wetlands and wish to "enjoy" and study these conditions, they have only to go to the Nisqually Delta where there is an abundance of such areas.

If any changes are made at the lake, I believe the emphasis should be on improvements and development of additional recreational uses, such as provisions for boat and canoe rentals, sailing, fishing, and maybe someday further consideration of a swimming beach area. Perhaps one of the current experts can solve the pollution problem.

I thank the committee for allowing our imput in connection with this extremely important matter, which could result in the destruction of one of OLympia's most valuable assets.

Very truly yours,

Lucile Rohrbeck

Lucile Rohrbeck

xc: Margaret McPhee
Council member,
City of Olympia

ALEX ROSENKRANTZ
Mr. & Mrs. Alex Rosenkrantz
1418 Eveegreen Park Lane, S.W.
Olympia, Wash. 98502.

November 5, 1998.

To Whom It May Concern:

Many years ago we came to Olympia looking for a place to live that offered beauty and serenity. We found it in our condominium overlooking Capital Lake. While the purchase price was higher than other property we could have purchased, the view of Capital Lake and the activities that occur around it captivated us. To this day, the splendor and pristine nature of the Lake continue to make the higher taxes we pay bearable.

Not only have we benefited from the Lake, but so has every citizen of Olympia. The year-round activities the Lake supports are wondefully varied. From leisurely strolls during lunch hours to canoe races on weekends, the Lake offers a diversity of escapes for all of us. To take these activities away by allowing the Lake to revert to its natural state would take the very heart out of Olympia. It would also violate the trust placed in the people of Olympia by the Washington Legislature when it approved Capital Lake.

While people who allow nature to take its course have a right to their opinions, allowing those opinions to prevail in this instance would be an unwise use of this City's most valuable resource. If the Lake reverts to its former state, a swamp, the City will lose a beautiful landmark. By not preserving the Lake in its present state, people currently visiting the Lake will be forced to go elsewhere for their leisure activities. This will deprive Olympia of important economic and recreational benefits.

A swmp will cause a decline in the market value of the homes surrounding the Lake. This in turn will reduce property taxes thereby reducing the City's economic base.

We strongly encourage you to not allow the reversion of the Lake. Please keep the Lake as it is now, a splendid asset to the City of Olympia.

Alex and Suzanne Rosenkrantz

November 24, 1998

Steve Morrison
Thurston Regional Planning Commission
2404 Heritage Court
Olympia, WA 98502

Dear Mr. Morrison:

I understand the Thurston Regional Planning Commission is investigating the possibility of changing the management strategy for Capitol Lake. I encourage TRPC to carefully consider whether it is possible to restore the lake to an estuarine habitat with no further dredging of the sediments entering the lake. If it is feasible, I would strongly support this change. With so much estuarine habitat lost forever, the Capitol Lake system offers an invaluable opportunity to regain viable estuarine habitat.

Restoring the lake to an estuary could greatly increase the value and function of the area for fish and wildlife habitat while maintaining its recreational value. Many people live in this region because they highly value the natural resources and ecosystems present. As people learn about the significance and function of the estuarine environment, they begin to value this type of habitat more. Current issues involving water quality, water quantity, salmon and numerous related issues make this an opportune time to seriously investigate the options, educate the public and take action toward restoring Capitol Lake to an estuary.

Sincerely,

Rochelle Rothaus

Rochelle Rothaus

1801 Evergreen Park Drive #18
Olympia, WA 98502

November 20, 1998

TO WHOM IT MAY CONCERN

I would like ask that Capital Lake be left in it's present state and that it be adequately maintained to preserve it as a lake. I offer the following reasons:

1. The Lake is an integral part of the identification of this community. Our downtown is linked to it as are many neighborhoods.

2. The present Lake provides recreational opportunities for many people. Joggers, walkers, picnickers, fishers as well as many more recreation users rely on the lake and use it year round.

3. The Lake is part of the vision for the Capital Campus. It not only reflects the buildings but the spring trees, fall colors, and other flora and fauna.

In closing I would like to say I consider myself an environmentalist and support creation and maintenance of natural habitats. However, I don't see that lake falls into this category. Dredging is a reality whether it is in the upper lake, lower lake or Budd Inlet. We don't have critical habitat and we aren't harming fish. If maintenance of any habitat is a reality why not maintain a social, civic, and recreational site for the citizens of this community?

Thank you for the opportunity to address this issue.

Sincerely,

Carla Rutz

Carla Rutz

60

November 20, 1998

TO: Steve Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW, #B
Olympia, WA 98502

Subject: Comments on draft Capitol Lake Adaptive Management Plan

Thanks for the opportunity to comment on this very comprehensive DEIS.

After studying this document, the **Estuarine Alternate** makes the most sense of the 6 alternatives, and its advantages are apparent-solves the water quality problems, is cheaper, with little action being required for 100-150 years. It also provides a wonderful outdoor opportunity for the residents to enjoy the natural activity associated with an estuary.

What it avoids is spending millions of dollars every year or two for dredging costs and eliminates the unimaginable truck traffic associated with dredging - 33 truck trips per day for 65 days every 2 years. Imagine the future problems with permits, additional mitigation, finding a disposal site etc.

It would also preserve an open view over the long term, and fulfill the reflecting pool concept a good portion of the time. In addition , it would allow some time for the various watershed plans to be put into place and have a beneficial effect on the soil erosion problem. Perhaps that would greatly reduce the need for any saltwater dredging, or greatly minimize it. If dredging is required, it would take place in Budd Inlet, and be done with barges and not disrupt the community.

This option also provides some stability to the natural system, and lets it develop increasing ecological value and increased productivity. Flooding a freshwater lake and marsh with saltwater every year to control the weeds, as is currently done, is extreme manipulation - wonder how the Olympic mud minnows (and other critters) stand up to the effects of that treatment.

I appreciate the chance to help in developing a long term plan.

Sincerely

Jim Schafer
4214 Shincke Road
Olympia WA 98506

Ellen S. Silverman
1212 Olympia Avenue NE
Olympia, WA 98506
(360) 236-0177

24 November 1998

Steven W. Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW, #B
Olympia, WA 98502

Dear Mr. Morrison:

I am writing you regarding the Capitol Lake Restoration Project. I have reviewed the options presented at the public hearing on November 18, 1998. After careful consideration, I would like to recommend the Lake/Estuary Option. However, I believe further environmental studies are indicated in order to insure a safe environment.

Aesthetically, the Lake/Estuary option is in keeping with the Puget Sound Region's natural beauty. Capitol Lake, though considered visually appealing, is "sterile". This lake could be almost anywhere. By adopting the Lake/Estuary option, we would regionalize our "look" rather than adopting some standardized view of Olympia's appearance. Further, to address the concerns of smell, we now have a sewage treatment facility which was lacking in 1911.

Currently, Capitol Lake is unsafe due to pollution. Further, Lakefair's motor boat racing is less than desirable. By adopting the Lake/Estuary option, we could offer regionally appropriate activities such as hiking, kayaking and canoeing without the interference of pollution-making water vessels. Further, the Lake/Estuary option offers an opportunity to assist the Governor in carrying out the initiative of saving the salmon.

The notion that people need to conquer and change their environment to suit their needs and not those of the environment is hopelessly outdated and has environmental implications. We have learned a great deal about manipulating the environment since 1911. I hope that by adopting the Lake/Estuary option, we can put our knowledge to work in a way that benefits the entire community.

Thank you for the opportunity to offer my comments.

Sincerely,

Ellen S Silverman

62

Rickard C. Smith
3104 10th Avenue NE
Olympia, Washington 98506

NOV 24 1998

PLANNING COUNCIL

November 22, 1998

TO: Steve Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW, #B
Olympia, WA 98502

Subject: Comments on draft Capitol Lake Adaptive Management Plan

Thanks for the opportunity to comment on this very comprehensive DEIS.

I am in favor of the **Estuarine Alternate.** It solves the water quality problems and is less costly. It also provides a wonderful outdoor opportunity for the residents to enjoy the natural activity associated with an estuary.

What it avoids is spending millions of dollars every year or two for dredging costs and eliminates the unimaginable truck traffic associated with dredging - 33 truck trips per day for 65 days every 2 years. Imagine the future problems with permits, additional mitigation, finding a disposal site etc.

It would also preserve an open view over the long term, and fulfill the reflecting pool concept a good portion of the time. In addition , it would allow some time for the various watershed plans to be put into place and have a beneficial effect on the soil erosion problem. Perhaps that would greatly reduce the need for any saltwater dredging, or greatly minimize it. If dredging is required, it would take place in Budd Inlet, and be done with barges and not disrupt the community.

This option also provides some stability to the natural system, and lets it develop increasing ecological value and increased productivity. Flooding a freshwater lake and marsh with saltwater every year to control the weeds, as is currently done, is extreme manipulation - wonder how the Olympic mud minnows (and other critters) stand up to the effects of that treatment.

Sincerely

Rick Smith

63 NOV 23 1998

THURSTON REGIONAL PLANNING COUNCIL

Dear Steering Committee,

I would like to add to my spoken testimony.

1st: MONEY

- It seems in this age of MITIGATION that some large firm in this state would happily help pay for re-establishing some or all of the lake area to estuary in EXCHANGE for some ecological travesty elsewhere.

I'm sure DEPT. of ECOLOGY could give you a long list of candidates desperate for an inexpensive opportunity as this.

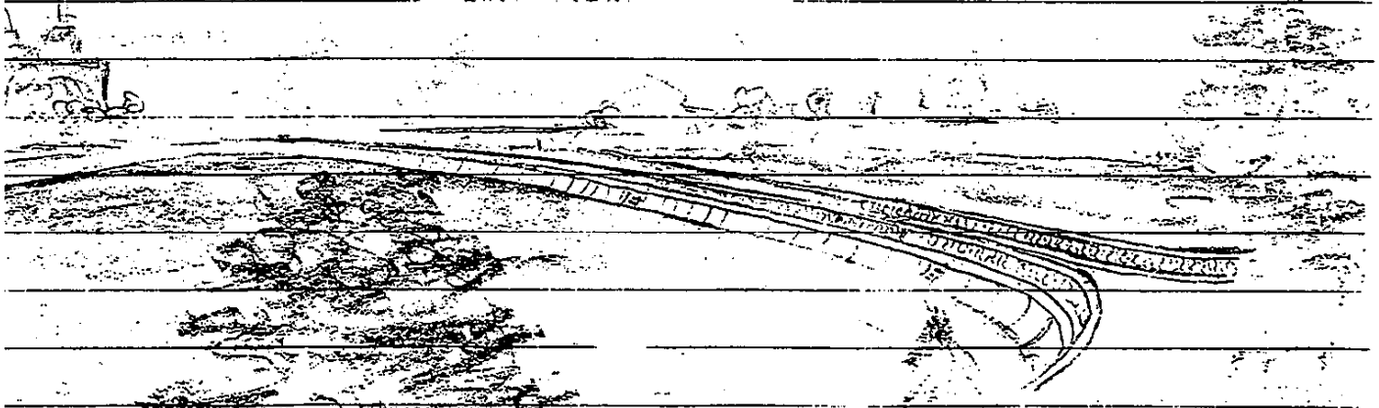
2ND: ARCHITECTURE

- If the lake-estuary proposal gets ~~to~~ accepted please concieve of the barrier not as a dam (not too glamorous) but as a sea-wall with some boldness to its sweep around the reflecting lake and details to mimic the capitol campus for grace. The simple classic look of the CONCRETE balustrade is not beyond our techonological capability as witnessed by the lovely 4th Ave. bridge (LONG MAY IT STAND!).

3rd : USE

By all means encourage the use of the area by promoting swimming FRESH OR SALT WATER with access & beaches and boating of all sorts with again access and floats and docks. Help get people out of their cars and into communal areas of activity. Therein lies the life, the verve of the community. It would also enhance the picturesqueness of the scene as compared to the static expanse of open water we have now.

The breakwater could include: benches, tables, trees, lamp posts, access to fresh water access to salt water, definitely egress ladders built in from fresh water.



Good luck doing the Right Thing,
Dave Spademan
520 Frederick St SE.
Olympia WA 352-3682 98501

November 20, 1998

Capitol Lake Adaptive Management Plan Steering Committee
c/o Steve Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW, #B
Olympia, WA 98502-6031

Dear Steering Committee Members;

I would first like to take this opportunity to thank you for your involvement in this very important project. I respect the time, energy and expertise you bring to the process and I appreciate your efforts.

I attended the public hearing last Wednesday, November 18th, and I must say I was surprised by the support shown for the option to "Stay The Course" with the plan initiated in 1911. While I have tremendous respect for the accomplishments of architects White and Wilder and the Capitol Campus Plan in general, I believe we have learned much about our relation to the natural order of the earth since that time.

The Capitol Lake project was truly a feat of engineering when it was implemented back in the early 1950's. And I believe the project was in keeping with conventional wisdom of that time, i.e.; we could bend nature to our will and to please our artificially developed sense of esthetics. But this is 1998 and we have come a long way since then. We now understand that there is a natural balance of ecosystems that is necessary to sustain life on earth as we know it.

There is no greater engineer than Mother Nature. And we are beginning to understand that we must do all we can to mitigate the damage that our arrogance has wrought and move toward returning our environment back into the capable hands of Mother Nature. For this reason, I support returning this area to its pre-development state and allow an estuary to return.

As you debate this issue and make your recommendation, please pay careful attention to the greater view of our natural ecosystems. This is not an issue of "It looks pretty" or "My property values will drop" or "Our city celebrates this lake", but rather an issue of sustaining the natural order of nature that ultimately sustains us all.

I thank you, once again, for your time and energy and willingness to participate in this crucial endeavor.

Sincerely,

Wendy Sternshein

Wendy Sternshein
1213 Edison NE
Olympia, WA 98506

Monday, November 23, 1998

To Whom It May Concern:

We wish to register our objections to any proposed changes to Capital Lake at this time.

We are among residents of the east side of Capital Lake who would be most adversely affected. First, we generally experience, temporarily, an unpleasant odor when the lake is drained. The idea of this on a regular, daily basis is objectable..

Second and third, when we purchased our properties on the east side, we paid a 'premium' for a lake view. As a professional Realtor of more than twenty years, I can state that 'changes to the lake will adversely affect the property values of taxpayers who live on the east side of Capital Lake, with a view of the lake.

Thank you.

Sincerely,

M. D. Stinson
2509 Columbia Street SW

Cara J. Stinson
2509 Columbia Street SW

Karen Strand Phone: (360) 493-1552
4308 29th Avenue S.E. Lacey, Washington 98503

A RIVER RUNS THROUGH IT

Nature. It's wonderful, isn't it? Nature walks...nature's way...staying natural...

But if Capitol Lake reverts to a saltwater estuary, it won't be so wonderful.

We'll end up with a little river running through complete with mud flats, mosquitoes and "natural" vegetation taking up the excess. In short it will be ugly.

BUT A LAKE IS BETTER

At one time, folks decided to create a lake and that's what should remain. Capitol Lake needs to be dredged, cleaned up and preserved, continuing its present role of providing a place for leisure activity (lakeside events and the walking path) and as an esthetic complement to Heritage Park.

(Contrary to some comments I've heard, Capitol Lake is not a "cesspool." It has fresh water running into it continually.)

WHICH CONVERSATION?

This

"I'm glad you could visit, Uncle Fred. To the left is Capitol Lake - right near the center of town!"

Or

"I'm glad you could visit, Uncle Fred. Look at the ship channel to the right...No! Don't look to the left. Oh, all right, those mud flats over there are what used to be a beautiful lake. I know it smells funny but gee, Uncle Fred...no town is perfect..."

YOU CHOOSE

WordPower7@aol.com

November 23, 1998

NOV 2 3 1998
THURSTON REGIONAL PLANNING COUNCIL

Steve Morrison
Thurston Regional Planning Council
2404 Heritage Court S.W., No. B
Olympia, WA 98502-6031

Dear Steve;

As a resident of the Deschutes Watershed for many years, I wish to take this opportunity to express my personal opinion regarding the future of Capitol Lake. I have attended some of the public meetings and have reviewed the draft environmental impact statement and feel strongly that the lower portion of Capitol Lake should be maintained as an open fresh water lake.

Allowing the lake to revert to an estuary would not best serve the public interest nor the natural resources of the basin which are under even greater threat from declining water quality. Although I can understand individuals and groups who strongly back the estuary concept, I believe that if one examines all of the environmental, social, and economic considerations they would come to the same conclusion as I. The estuary proposal would in time pose additional flood hazards to our downtown community, limit the future prospects of our deep water port, displace current recreational activities and community events to just name a few of the items of concern. In contrast, I believe that the Nisqually Basin affords a better opportunity for the restoration of an estuary area with tremendous benefits.

Leaving the lower portion of the lake a fresh water lake has disadvantages as well but would maintain the multipurpose nature of this area while balancing the stewardship of our natural resources. I would encourage the committee to at least maintain the lower portion of Capitol Lake as an open fresh water lake. If the goal of our community as a whole is to improve fish and wildlife habitat, then we should focus our efforts on the declining water quality of this watershed.

Sincerely,

Jeff Swotek

Jeff Swotek
1113 North Street SE
Tumwater, WA 98501
(360) 357-8037

Curtis D. Tanner
717 Puget St. NE
Olympia, Washington 98506

November 23, 1998

Steve Morrison
Thurston Regional Council
2404 Heritage Ct.
Olympia, WA 98502

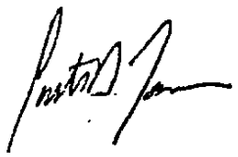
Dear Steve:

I am writing to express my views on plans for restoration of Capitol Lake. While I understand our community's attachment to the lake, I also see a need to move forward on plans to restore a significant portion of the lake to estuary conditions. Certainly the lake is a landmark which we've all become accustomed to, and the possibility of change is always daunting. However, the opportunity to restore intertidal habitat for the benefit of fish and wildlife resources makes this difficult trade off worthwhile. The loss of mudflat and saltmarsh habitat is a well documented problem throughout Puget Sound; restoration of Capitol Lake provides a significant opportunity to reverse this trend.

As you know, the National Marine Fisheries Service recently proposed placing chinook salmon on the list of animals threatened with extinction. This should serve as a wake up call to communities throughout the State that all is not well, and difficult choices and sacrifice lie ahead if we are to insure the survival of salmon. It would seem a fitting testament to Washington's commitment to our natural resources to restore habitat upon which salmon and other wildlife depend in our own "front yard". Perhaps someday when our children ask "what happened to Capitol Lake?", we can reply that we gave it back to the fish.

Thank you for considering these comments as you seek to resolve the difficult issue of Capitol Lake restoration.

Sincerely,



69

Nov 23 1998

NOV 24 1998

I do not think the City of Olympia should drain Capitol Lake and let it revert back to smelly mudflats!

Years ago a thoughtful and permanent decision was made to create this place of beauty and to manage the wetlands and dredge the bottom of the lake as necessary.

We should be proud and set ourselves up as an example to other cities. IT IS possible to have beauty + style and still maintain and preserve our precious wildlife.

This is not the time in our history to revert back just because it would (on the surface) appear to be easier. The price would be too high in the long run. Let's put up the money and invest in the future so our children can continue to enjoy what we have enjoyed for so many years.

Barbara Thomas
360 352-9839

November 20, 1998

Steve W. Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW #B
Olympia, WA 98502-6031

Re: Capitol Lake Adaptive Management Plan

Dear Mr. Morrison:

After attending the EIS Hearing and reading the executive summary we want the public record to show that we are for the Lake Alternative. Thank you.

Sincerely,

E. Sue Victory and Carl K. Holman
3117 Capitol Blvd.
Tumwater, WA 98501

Cc: Chris Parsons, Councilmember
City of Tumwater
555 Israel Rd. SE
Tumwater, WA 98501

9530 Johnson Point Rd. NE
Olympia, WA 98516
November 22, 1998

Steven W. Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW, #B
Olympia, WA 98502

Dear Mr. Morrison:

These comments are in response to the Draft Environmental Impact Statement (DEIS) for the Capitol Lake Adaptive Management Plan.

I support the proposed Estuary Alternative or Combined Lake/Estuary Alternative.

As you may be aware, estuarine and coastal wetlands are the most ecological diverse and seriously threatened wetlands on the Pacific Coast. Since Euro-American settlement, coastal urban areas have lost 90-98 percent of their estuarine wetlands (DNR 1998).

One of these two options should be chosen based on salmon restoration in the Puget Sound Basin. As you are aware, Puget Sound chinook are soon to be listed for protection under the ESA. Clearly described on Table 4-6 in the DEIS, the estuary and combined lake estuary would offer the most positive features for salmonids and marine fish. As described in the DEIS, restoration of estuarine habitat in the lake basins would likely benefit anadromous fish species including chinook, chum, coho, steelhead and cutthroat trout. High quality feeding and rearing habitat would be created through the estuarine options. Also described in the DEIS, natural shellfish community, particularly bivalves such as clams, mussels and oysters would also benefit. The restoration of a natural estuarine community would also help decrease the population of Canada geese that have overpopulated the present lake area.

Based on the long-term benefits for salmonids and other species, I support the restoration of the estuarine community.

Thank you for considering these comments.

Sincerely,

Lauri Vigue

Lauri Vigue

Reference

Washington State Department of Natural Resources. 1998. Our Changing Nature. Olympia. 75 pp.

COLONEL JAMES M. WEIDNER
UNITED STATES MARINE CORPS (RET.)
1410 EVERGREEN PARK LANE, S.W.
OLYMPIA, WASHINGTON 98502

2 November 1998

Senior Planner
The Regional Planning Council
2404 Heritage Court St., #B

Deputy Director
Dept. of General
Administration

Gentlemen:

I write this letter, actually a joint letter to both of you, regarding some contemplated changes in the status of Capitol Lake.

Actually, my memory goes back quite a few years to when I attended Lincoln School and Olympia High School. Having no money to spend, and no television, some of us would take walks on weekends to kill the time. Frequently, this involved going across the railroad trestle over the slough (mudflats twice a day when the tide was out), and out the then railroad tracks to the old brewery site. Once, in fact,we "borrowed" a railroad handcar and were duly apprehended at our intended destination.

With the construction of the dam at 5th Avenue, this all changed; the float houses (and some other "houses)") were demolished. Good riddance.

When I retired from the Marine Corps and returned home, we lived in the South End; later, we purchased, while under construction, a condominium at Percival Point. Superb view, etc., and priced accordingly I might add. Also the taxes reflected that, which we didn't mind, all things considered.

Now, instead of tide flats and a slough, we have a superb view of the lake, the Capitol, and, when the sun shines, Mt. Rainier. What a pleasure to see the lakeside walkers and other various actiivities, all possible because of the lakeside road.

Please don't change that! Let the lake and adjacent areas remain as is! In addition to reducing property values, it will have a most deleterious effect on the scenery.

I write this letter with two "hats" on - One as a property owner and the other as President of the Percival Point Property Owners' Association.

Thank you for your consideration.

Sincerely,

From: "Jon. Anderson and Marty Chaney" <festuca@olywa.net>
To: "'Morriss@co.thurston.wa.us'" <Morriss@co.thurston...
Date: 11/22/98 12:44pm
Subject: Testimony: Capitol Lake Adaptive Mgmt Plan EIS

Mr Steven Morrison, Sr Planner
Thurston Regional Planning Council
2404 Heritage Court SW #B
Olympia, WA 98502
Morriss@cc.thurston.wa.us

Dear Steve,

As I was unable to attend the public hearing regarding the DEIS for the Capitol Lake Adaptive Management Plan, I appreciate the opportunity to comment.

I continue to strongly support the Estuary Alternative, as the management option that will provide the most benefits for fish, wildlife and water quality for the residents of the Olympia area and Budd Inlet.

The original plan by White and Wilder in 1911 to have a reflecting pool for the state capitol building, was realized in 1951. While this is a monument to the engineering abilities of the 1950s, it has resulted in a water quality, water quantity, and fisheries and wildlife habitat debacle here at the end of the 20th century.

My reading of the several alternative management plans reaffirms my belief that the estuary of the Deschutes River can best be managed for the needs of the human and the fish and wildlife communities by restoring the lake to its original, estuarine condition. Habitat for the enhanced salmon and trout populations of the Deschutes River will be bettered. Estuarine habitat has been degraded or lost throughout the Puget Sound region, and the restoration of this habitat will provide habitat and feed for not only the salmonid populations of the Deschutes estuary, but for the greater fish and wildlife ecosystem of Budd Inlet and southern Puget Sound.

My comments on the various alternatives described in the DEIS are thus:

General

A I am somewhat dismayed that the only cost comparisons made were for the costs of dredging sediment from the lake and transporting it to alternative sites. Many costs and benefits will be accrued with whichever alternative is chosen. These costs include fish and wildlife habitat losses and gains, water quality, facilities maintenance, and recreation.

Lake/River Wetland Without Trap Alternative
Lake/River Wetland With Trap Alternative

B To maintain dredging for the "mirror pond" will be, easily, as expensive as maintaining dredging in the current situation. I will be pleasantly surprised if the dredging costs will be low throughout the first 50-115 years, as stated

in this evaluation. As the middle and south basins fill in with sediment, these unproductive mud flats and artificial "wetlands" will continue to be fouled with pollutants and nutrients from throughout the watershed. The freshwater wetlands will become a breeding ground for mosquitoes, leading to discomfort (if not a health hazard) for the people of Olympia. The bugs, of course, can be mitigated by use of dangercus pesticides...

B

Lake Alternative

The status quo is clearly unacceptable. Capitol Lake, as the terminus of the Deschutes River, is polluted and unhealthy. As wildlife habitat, it is marginally useful as a roosting area for geese and sea gulls and for ducks in the winter. As fish habitat, it supports an artificial rearing pond for introduced stocks of salmon and is a great habitat for the introduced Common Carp. Today, children cannot swim in the lake without expecting to contract some vile disease - indeed, I must demand that my children stay out of the water. Even when getting splashed with lake water while canoeing on the lake, I must insist that my kids wash their hands.

The lake is expensive to maintain. The sediments have no useful application, and must be removed (to fill wetlands away from the lake and enhance runaway regional growth?). Even the current "rehabilitation" of Capitol Lake park did not use dredged sediment in total, but relied on imports of the local hillside to further fill the old estuary bed. This loss of opportunity to use the accumulated sediments appears to have been an oversight on the part of the Park Developers?

Combined Lake/Estuary Alternative

This alternative combines the worst characteristics of the existing lake management, as well as allowing further filling of the estuary zone, and reducing its effectiveness in providing quality habitat and water quality benefits.

No Action Alternative

It would be folly to maintain the "lake", while neglecting to manage the tons of sediment accruing from the River. Allowing the estuary to fill in with sediment will surely result in water quantity problems during periods of high river flows. The estuary was not designed by nature to function as an artificial freshwater "wetland". The uses of the estuary to human use would not be offset by the benefits gained for fish and wildlife habitat and water quality improvement that are expected with the Estuary Alternative. I am skeptical of the estimate of no dredging costs necessary for the next 250 years with this alternative, although I have no hard information to the contrary.

B

Under the heading of Earth impacts and mitigation on Table I-3, I might suggest that the need to dredge the north and middle basins in the near future might be reduced if sediment were to be removed now, while the "lake" basin substrate (mud) is not productive. The sediment can be removed, and the costs of the next dredging can be postponed while allowing deeper water in the estuary for a longer time.... prolonging the usefulness of the improved

habitat type.

C

Under the Water Resources impact and mitigation Table I-4, the suggestion that *A Canada goose management program is needed to limit their impact to water quality* is given similar weight in the Estuary Alternative to that of the current "lake" situation. I believe that the use of the saline estuary by Canada Geese will be significantly lower than the current use of the freshwater lake. The use of freshwater uplands by Canada geese at Nisqually NWR is significant throughout the winter, yet goose use of the salt marsh is minimal.

I also believe that a management plan for the geese will likely be necessary for any and all Alternatives, if the current use of open, short English-style lawn is maintained in the *Heritage* parks. If the park management requires lawns, the geese will continue to view the lawns as their lunch table, and the public will continue to have problems with their defecations.....

The impacts and mitigation Table I-7, Aquatic and Wetland Vegetation, might note that the conversion of the 'lake' to estuary would likely reduce the current abundance of the agressive freshwater weed, Purple Loosestrife in the lake basin.

D

To refer to the freshwater reflecting pool as a *Cultural Resource*, as referenced in Table I-9 gives this structure more legitimacy than it deserves. The reflecting pool was a poor idea when conceived, an idea that had not improved when implemented, and has no current or future redeeming value. The reflecting pool just reflects. Other than that, it functions as a cesspool for the nutrient overload of the entire Deschutes basin.

Table I-9 also notes under impacts that there will be a loss of freshwater plants used by the Native peoples. This is spurious! If the original vegetation was estuarine, the Native Americans were not using freshwater vegetation there! What has been lost by building the reservoir are the estuarine plants and animals that sustained the Salish culture for thousands of years. Freshwater wetland plants have been lost throughout the south Puget Sound region by the filling and draining of the natural freshwater wetlands during the conversion to our current land-uses.

E

In Table I-10, I am again dismayed about what appears to be a "scare tactic" statement: *Undesirable Odors*. The Olympia natives who remember the stench of the estuary prior to the advent of sewerage facilities are inflamed by this concern. I would maintain that the essence of a salt marsh is healthy. Having the habitat flushed by the twice-daily tides, and effluent nutrients used by the benthic organisms of a functioning estuarine wetland will not result in the stenches of the 1930s.

F

The potentials for flooding concern me, with any of the alternatives. While I strongly support a return to an estuary situation, I am wondering if the Steering Committee has considered and analyzed the potential for maintaining the flood gates as a mechanism to block high tides during the few times that a *100-year flood* (every few years?) occurs during extreme high tides.

G

Page 2.6 RELATED ACTIVITIES - Heritage Park It seems that the planning and construction of Heritage Park have proceeded with the intent that the status

quo *Lake* Alternative will be the one chosen. Construction has commenced that may or may not have been altered with the need for considerations of daily tidal flows if the estuary was restored. Shorelines constructed in the park with landfill of sediment over gravel/rock may not be adequate to the erosive actions of moving water.

I am surprised that the Collins report (Page 2.11) recommended that it is better to try to clean up a problem (dredge the "lake") rather than protect the watershed from the harmful effects of erosion and sedimentation. This appears to be a backward step in the understanding and application of land and water conservation. Dredging would inconvenience fewer people in the watershed than would the implementation of land-use provisions, and would spread the costs of cleaning up the sediment to the entire community. What a good deal, for those causing the problem.

G Tide Gate - Page 3.2 Again, I might suggest that, even with a return to estuarine conditions, the tide gate might be maintained or modified to function as a flood control mechanism during those 0-3 days each year that it might be needed. Ah, I see that this option is footnoted, although obliquely, on page 3.11

Freshwater Wetland Alternatives - Pages 3.4 to 3.8 I do not like the idea, 50+ years hence, when the basin will be filled with stagnant mud and cattails, and the entrance to the wetlands from Budd Inlet will be via a several-foot waterfall. This will cause maintenance problems for the tide gate, and will surely impede fish passage.

Combined Lake/Estuary Alternative - Pages 3.14 to 3.17 Maintaining the "reflecting pool" in a smaller area will compound all of the ills of the current "fresh" water lake into a more compact, polluted, stagnant pond adjacent to the new *Heritage* park. Not a pretty sight.... Also, there is no need to add further fill to the estuary basin to maintain the out-dated concept of a reflecting pool.

H In conclusion, I urge the governments to fully restore the Deschutes Estuary, for the health and well-being of the citizens of this community and for the health and well-being of the fish and wildlife resources of the watershed.

Thank you.

Jonathon D. Anderson
Fish and Wildlife Biologist
2102 Walnut Road NW
Olympia, WA 98502

The following persons have requested that their names be added to this letter in support of restoring the Deschutes Estuary:

Linda & Lanny Carpenter
4210 Shincke Rd.
Olympia, Wa. 98506
LRossCar@aol.com

Tom Foote (Tom is moderator of the KAOS Radio Program:
Lab II "Bird Talk" at 8:00 p.m. Wednesday nights)
The Evergreen State College
Olympia, WA 98505
(360) 866-6000 x6118
footet@elwha.evergreen.edu

From: <LRossCar@aol.com>
To: R-PLANNING.TRPC(Morriss),Thurston.SMTP("governor.l...
Date: 11/23/98 9:42am
Subject: Capitol Lake Management Plan

23 November 1998

Mr. Steven W. Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW. #B
Olympia, WA 98502

Mr. Morrison,

In the matter of proposed changes to the management of the lower portion of the Deschutes River, I favor of the estuary option for the following reasons.

1) This option offers the return of the highest percentage of the former estuaries natural function.

2) This option offers the greatest benefits to those species of wildlife that are dependent on estuary for part or all of their life histories.

3) This option is the least costly alternative and requires the least amount of manipulation in the future. Millions of taxpayer dollars will be saved with this option.

Considering the efforts of Governor Locke and the Salmon Recovery Team I really don't see how it would be defensible to continue the current destructive management of the Deschutes Estuary while calling for voluntary efforts (on the part of others) to speed the recovery of our fisheries resources. I can see the headline now "Capitol City Excuses Itself From Salmon Recovery Efforts". The state capitol should be leading the way toward recovery efforts and not present itself as an example of self-serving unwillingness to contribute. The symbolism of this decision cannot be ignored.

Thank you.

Lanny Carpenter
4210 Shincke Rd.
Olympia, WA 98506
home phone # 360-438-9355

From: Thad Curtz <curtzt@olywa.net>
To: R-PLANNING.TRPC(morriss)
Date: 11/26/98 5:23am
Subject: Capitol Lake Restoration

Dear Mr. Morrison:

I'm writing to support Option 5 or Option 6 of the proposals for restoring Capitol Lake. I'm in favor of supporting salmon populations. As a taxpayer, I'd like to see an end to the expensive endless cycle of dredging out the sediment the dam piles up. As a frequent walker around the lake, either of these options would suit me fine:

Yours,
Thad Curtz
113 East 17th Street
Olympia, WA 98501

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From: "deenie.dudley" <deenie.dudley@olywa.net>
To: R-PLANNING.TRPC(morriss),Thurston.SMTP("deenie.dud...
Date: 11/22/98 6:33pm
Subject: DEIS comment

Dear Sir:
My apologies for not contacting you sooner. I was not able to attend the public hearing on Nov. 18th, but I have been following this issue in newspapers and newsletters.

I would like to voice my support for Option #6. The reflecting pond in front of the Capitol has many uses, not the least of which is as a prime "photo shoot" location. I would hate to see us lose the beauty and opportunity to put the very best face on our Capitol when people come to see us/ take pictures for the folks "back home" (which can be anywhere in the world). There is something to be said for appearance.

But appearance alone is not enough reason to support this option. I believe it will regenerate our wetland ecosystem by allowing for the continuous ebb and flow of salt and fresh waters into this wonderful setting. This is a unique chance to undo some of the ecological damage we have done to the wetlands, and show that development does not have to mean destruction. If there is any chance to restore a salmon run, we must take it, and not just for the children but for ourselves. The salmon nurture our spirit as well as our bodies.

I am in full sympathy with homeowners who may oppose this proposition. We too often do things for "the common good", forgetting that it is the individuals who take the risk of investing in an area. I fully support a large property tax reduction for the homeowners whose view would be affected by this plan. Depending on how the regrading and rescaping is done, they might actually take some pride in pointing out to visitors the rejuvinating wetlands for which they have sacrificed. The wetlands may serve as a prime area for bird-watching or other activities that even the homeowners would enjoy. I hope that they will eventually be able to take some real pride in helping to restore some of the natural balance in our area.

Thank you for the opportunity to comment. P.S. I and my family have been in this area for several generations, I do live and work and pay taxes in this area, and I vote in every election for which I am eligible.

From: <SueDonOly@aol.com>
To: R-PLANNING.TRPC(morriss)
Date: 11/17/98 8:49am
Subject: Capitol Lake

This message is to provide comment for the meeting on Wednesday, November 18 on the future of Capitol Lake, as we are unable to attend the meeting.

As residents of Thurston County we are interested in seeing as much of the county as possible retain or be restored to a natural state. In the case of Capitol Lake, it seems that Option 5, allowing the Deschutes to flow freely, and hopefully allowing the area to return to a somewhat estuarine state, is the best option.

The benefits of this would seem to go far beyond the environmental aspects and would include improved flood control for the businesses near the lake.

It is too bad all this did not occur before the decisions were made regarding Heritage Park, but we can think of worse places to have a park than along a truly natural setting.

Please include these comments in your consideration of this issue.

Sue Minahan

Donna Ewing

522 Titan Court SE
Olympia

From: "Permaculture West" <permawest@olywa.net>
To: R-PLANNING.TRPC(morriss)
Date: 11/21/98 5:57pm
Subject: Capitol Water Impoundment

Dear Mr. Morrison,

I've recently become aware of the debate over the future of the Capitol Water Impoundment (AKA Capitol Lake). As a voter in the state of WA I would like to express my concerns over this issue. I have seen pictures of this area before it was vainly altered to create a "reflecting pool" for the capitol. Natural estuaries are one of the most beautiful environments that grace the landscape. Aside from their essential ecological function as water filters they also provide habitat and breeding grounds for countless numbers of wildlife. Wouldn't a prestine restored wetlands reflect more on the integrity of the capitol and its inhabitants than a manufactured water impoundment that costs the states citizens millions of dollars to maintain in its artificial state? The management of the estuary that once graced the foot of Budd Inlet stands as a powerful symbol of the mindset that has reduced the natural wonders of this part of the world to their present state of collapse.

Please register my vote in favor of returning this former estuary to a state of grace.

Regards,
Kirk Hanson

Kirk Hanson
C/O Permaculture West
72 Mattson Rd.
Oakville, WA 98568
ph./fx. (360) 273-7117
e-mail: permawest@olywa.net

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From: "Diane Kurzyna/Alan Reichman" <reichman@thurston.com>
To: "Steven W. Morrison" <morriss@co.thurston.wa.us>
Date: 11/8/98 8:41pm
Subject: Comments on Capitol Lake Restoration DEIS

Dear Mr. Morrison:

Regarding the above-referenced DEIS, I support Options 5 or 6, both of which would restore estuarine habitat that is important to the function of Puget Sound. Please adopt either Option 5 or 6 as the final alternative for action to restore Capitol Lake. Thank you for your consideration of my comments.

Sincerely,
Diane Kurzyna
3307 Quince Street SE
Olympia, WA 98501

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From: "Stephen M. Langer" <nwbtsml@ix.netcom.com>
To: "Steve Morrison" <morriss@co.thurston.wa.us>
Date: 11/17/98 10:52pm
Subject: Re: Capitol Lake

Steve:

Sorry I will not able to make the meeting tomorrow on the Capitol Lake Restoration DEIS due to other professional committments.

But I did want to weigh in on the issue and would urge the relevant agencies to return the area to esturine habitat which we have lost so much of already in this area. Therefore I would urge the adoption of Option 5, or if necessary to maintain "Heritage Park" and the "Arc of Statehood", Option 6. It is the least we could do to atone for the armouring of the water's edge with cement on the east side of the lake.

Steve Langer
3238 Lindell Road N.E.
Olympia, WA 98506
(360) 352-9352

S. Langer, Ph.D.
Northwest Brief Therapy Training Center
1021 Legion Way
Olympia, WA 98501-1522 USA
(360) 357-4225 FAX(360) 352-9352

From: Cox/Lee <vision@olywa.net>
To: R-PLANNING.TRPC(morriss)
Date: 11/17/98 6:47pm
Subject: Capitol Lake Restoration

Steven,
Our family feels strongly that the lake should be allowed to revert to a natural estuary. That would be the best outcome for the lake and the community. I believe option 5 is preferable, and option 6 would be a second choice.
Thanks for the opportunity to contribute our opinions.
Joanne Lee
Ron Cox
Ry Thompson

Joanne Lee/EcoCoachingWorks
120 STATE AV NE #1444
OLYMPIA, WA 98501
360/352.3856
vision@olywa.net
Everyone deserves a coach. Have you got yours?

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From: "Hans Littooy Jr. Sr." <jalittooy@olywa.net>
To: R-PLANNING.TRPC(morriss)
Date: 11/22/98 1:08pm
Subject: Comments to Capitol Lake EIS.

HANS A. LITTOOY, LA
6732 Alpine Drive SW
Olympia, WA 98512
360-352-0366
E-mail : jalittooy@olywa.net

Olympia, November 21, 1998
Steven W. Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW, #B
Olympia, WA 98502

Dear Steve,

I appreciate that e-mail correspondence is accepted for responses to the "Capitol Lake Adaptive Management Plan, Draft Environmental Impact Statement".

In line with most of the testimony provided during the hearing on Thursday night, I will provide you with my opinion for a preferred alternative. I do not comment to the specifics of the Draft EIS.
The thorough documentation, the long project horizon of up to 150 years, and consideration of six different alternatives is to be commended though. It provides for a solid decision making background.

It is my believe that during the next century we our highest priority will be the life of our planet for ethical and our own survival reasons. In consideration of the enormous destruction and changes to the earth our species has brought on, the direction of our activities will not only be guided by the need to reduce impacts on the natural environment, but by the positive restoration of our earth environment. A living earth for all creatures should be our goal.

In this light I do not consider any alternative that is dependent on dredging and that does not restore a natural environment viable. Dredging not only is expensive in dollars, it uses enormous amounts of polluting energy and does environmental damage at the "lake" location as well as spoil areas.
Thus the "Lake Alternative" is not acceptable.

The "Estuary Alternative" is my preferred alternative. It allows for the highest ecosystem restoration results. I expect this alternative also to be the least costly.
If society does not change in 50 to 100 years there may be associated dredging in Bud Inlet. However, I assume that Bud Inlet will also be re-evaluated by that time and be allowed to naturalize. The predicted need for Bud Inlet dredging may not pan out. It certainly should not involve trucking of spoils as per the EIS.

In order to facilitate historical perspectives and the new Heritage Park, I do consider the " Combined Lake/Estuary Alternative" an acceptable option. The proposed dam may be a one time expense and impact.
I do suggest though that this "dam" be designed to facilitate the reflecting pool function in a formal fashion. It may be desirable to design an "architectural" shoreline on the pool side with man made materials and strong lines dominating the structure. It can be made into a large ornamental water feature of great statue. Not a semi-natural lake. The presently suggested alignment in the illustrations does not seem acceptable if the reflection pool concept is to be maximized.

Last but not least; Capitol Lake is of a larger significance than local interests may consider. The decision makers ought to weigh the comments by adjacent property owners and governments against the overall good.
Also, most of us will not see the realization of alternatives that allow the lake to restore itself to a natural ecosystem. This is truly a decision for future generations.

Sincerely,

Hans A. Littooy

From: Shelby Majors <smajors@earthlink.net>
To: R-PLANNING.TRPC(mcrriss)
Date: 11/14/98 7:38pm
Subject: Capitol Lake- Support Option 5

Mr. Morrison,

I wanted tc send you a brief note stating my hopes regarding the future management of Capitol Lake in downtown Olympia. I regret that I will not be able to attend the November 18th hearing- I am an Assistant Supervisor for a crew under the Shorelands and Coastal Division of Department of Ecology and my crew works on spike at Mount Rainier during the work week. Hopefully you will find this note a suitable replacement.

Recently the Washington State Government has made numerous proclaimations regarding the situation of our dismal water quality, destruction of watersheds, loss of shell fish and Salmonid habitat, and their hopes and intentions of righting such wrongs. To prove that this is more than elequent speech writing action will have to ensue.

While our own Capitol Lake/Deschutes River in Olympia is not the superfund site Commencement Bay, as threatening as Hanford, or as politically 'grounded' as the Elwha River it is a chance to prove that we are sincere in making improvements in how we manage our water resources. By opting for Option 5 of the DEIS (this includes the breaching of the 5th Avenue dam and re-establishment of the estuary) we would be making the appropriate steps in restoring a viable watershed and making steps in the right direction of water management. Furthermore, it seems only logical that we correctly manage our resources within our own capitol city. It strikes me ironic to see any political representative atop Capitol Hill preaching how we must right our water management wrongs yet fail to see hte problems with the watershed they use as a backdrop.

Capitol Lake has had its fair share of problems. Due to pollution swimming has been prohibited and most sane people do not fish from the lake any longer. Mud flows off of Capitol Hill have further polluted a system that has been given weak cfs in water flow due to the dam structure. One such slope failure resulted in 200 yd3 of sediment pollution. There has also been sewage contamination of the Lake. One sewage-line break resulted in the discharge of 6 million yd3 of sewage into Capitol Lake. Capitol Lake is no longer the beautiful reflection lake that it has been argued to be.

I believe that restoring the Deschutes River/Budd Inlet estuary would be a positive step in ensuring the correct management of this system. Option 5 is the best approach to the preservation of this system. I know that many groups will support you if this path is taken.

Thanks for your time.
Sincerely,

Shelby Majors
915 Capitol Way S, #3
Olympia, WA. 98501

From: Noelle Nordstrom <NORDSNN@dfw.wa.gov>
To: R-PLANNING.TRPC(morriss)
Date: 11/16/98 11:07am
Subject: Capitol Lake Restoration

Dear Mr. Morrison,
I just wanted to urge you to choose management option 5 or 6 for Capitol Lake, either of which will restore estuarine habitat to the lower Deschutes River. I think option 5 is the best, because it is the most natural, and will require the least amount of maintainance. Also, I was curious if anyone had considered how the water level will effect the Canada goose population around Heritage Park. Perhaps if the reflecting pool was gone, the geese would be less inclined to camp out on the lawn and cover it with excrement.

If option 6 is chosen, what predictions are there for water quality? Will people be able to swim in it, or will it be just as full of algae and carp as it is now? If it becomes swimmable, option 6 would be an excellent choice.

I am very excited that these two options are being considered, and look forward to hearing what the steering committee decides.

Thanks for the opportunity to comment!
Noelle Nordstrom

Noelle Nordstrom
209 17th Ave.
Olympia, WA. 98501

From: "Dick Pelto" <pelto@eskimo.com>
To: R-PLANNING.TRPC(morriss)
Date: 11/24/98 4:26pm
Subject: estuarine

Please include either of the estuarine options as preferred approaches in the Capital Lake plan. Richard Pelto

Richard Pelto, 16629 Simonds Rd. N.E., Kenmore, 98028.

From: "Pickett" <fraxinus@olywa.net>
To: R-PLANNING.TRPC(morriss)
Date: 11/19/98 11:30pm
Subject: Comments on Capitol Lake

Steven W. Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW, #B
Olympia, Wa 98502

Dear Mr. Morrison:

I am strongly in favor of returning the "Capitol Lake" impoundment to a natural wetland and tideflat system. It is the most cost effective system and supports the return of natural flora and fauna. So much of the Puget Sound salt marsh systems have been lost, restoration of this drowned inlet is of vital importance. Continued management of an artificial impoundment is not a good use of taxpayers dollars.

The following comments are also made in support of my position.

What exactly is Capital Lake? It is:

1. A drowned salt marsh and mud flats, formerly an arm of Budd Inlet.
2. A reservoir, which fills up during storm runoff and floods neighboring businesses if the tide is also high.
3. A river, filled with the materials transported from upstream, including sediment, nutrients, and bacteria.
4. A settling pond, capturing the sediments and nutrients that are carried from its watershed.
5. A freshwater wetland, as it fills up with sediments.
6. A duck pond, attractive to water fowl who like to leave bacteria-laden deposits.
7. A boating basin, for those who don't want to go to a larger or more attractive lake.
8. A swimming pool, for those who don't mind dealing with 2 through 7.
9. A money sink, for collecting taxpayer funds to deal with 2 through 8.
10. A reflecting pool, for the vanity of politicians.

Paul Pickett
4040 Gull Harbor Road
Olympia, WA 98506

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From: <Dukealumni@aol.com>
To: R-PLANNING.TRPC(MORRISS)
Date: 11/9/98 4:29pm
Subject: Estuary/Lake Option or Estuary Option

What I'm interested in supporting is the Estuary/Lake Option. My second choice would be the Estuary Option. I think wetland mitigation is essential, but the small lake infront of the Capital would be really attractive as well. Thanks.

Elise M. Robinson
1434 Summit Lake Shore Rd., NW
Olympia, WA 98502
866-2029

From: <Ritarr@aol.com>
To: R-PLANNING.TRPC(morriss)
Date: 11/22/98 11:01pm
Subject: Capitol Lake

Hi,

I am writing as a citizen of Thurston County to let you know my opinion about Capitol Lake.

I think it should be left as it is. The lakes offers recreational opportunities. I enjoy walking around the lake several times a week. I look forward to the Heritage Park construction being completed so I can do that again.

While salmon recovery is extremely important, I think the state, county and cities in the area need to put their scarce resources into areas that are less urban.

Thanks for the opportunity to offer input.

Rita R. Robison
3722 Hoadly Loop S.E.
Tumwater, WA 98501

From: Rudeen <bikefour@mail.tss.net>
To: R-PLANNING.TRPC(morriss)
Date: 11/18/98 10:57pm
Subject: comments on Capital Lake alternatives

To: Steven Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW, #B
Olympia, WA 98502

Dear Mr. Morrison:

On my most recent weekly walk around Capital Lake, I had time to reflect again on the various options available for its management. I'd like to acknowledge that those making this decision face a knotty problem, and sincerely hope that they'll choose option #5 or #6, which would restore estuarine functions to all or part of the current Capital Lake basin.

Estuaries in other urban areas have been so heavily diked, paved and industrialized that they are nearly irretrievable -- consider the Puyallup estuary in Tacoma and the Duwamish Waterway in Seattle. But the Deschutes River/Percival Creek Estuary, slumbering beneath fifty years of "lake-dom", may be unique in all of Puget Sound for its potential for restoration. Despite its urban setting, the shoreline is mostly undeveloped and the vegetated buffer between the built environment and the shore is generally quite large.

Natural resource management practices that looked good fifty years ago are beginning to lose their luster. Port Angeles and the folks of the Elwha Valley know that it's time to say goodbye to Lake Aldwell and Lake Mills, but that in doing so they'll welcome the return of salmon runs and the delivery of vital river sediments to Ediz Hook. Residents of the Snake River Valley are being asked to consider restoring the river and its functions by breaching four dams. Other communities, too, are having to take a hard look at resources in their care -- and then step up the the plate to change management practices for the good of future generations. I believe that we should do the same, and restore our share of Puget Sound's lost estuaries.

Sincerely,

Shelley Kirk Rudeen
3110 NE 10th Avenue
Olympia WA 98506

From: Bette Shultz
To: R-PLANNING.TRPC.MORRISS
Date: 11/18/98 2:13pm
Subject: Capitol Lake Restoration

Unfortunately I can not attend the public meeting tonight regarding the Capitol Lake Restoration project. For the record, I support Option 6. If you have any questions, I can be reached at 754-3360 or via email.
Bette Shultz

From: MS JEAN R SHAFFER <PHRL33A@prodigy.com>
To: R-PLANNING.TRPC(morriss)
Date: 11/17/98 9:41pm
Subject: hello Steve

Hello Steve

I'm emailing you to request the General Administration steering committeein to choose in favor of Esturine Options 5 or 6. Just so you can place a face to a name I used to be Jean Stam.

Thanks a lot. I know you will do your best.

Happy Holidays

Jean Shaffer

From: Toby Thaler <loupIoup@wolfenet.com>
To: R-PLANNING.TRPC(morriss)
Date: 11/19/98 10:37am
Subject: Capitol Lake

Steven W. Morrison, Senior Planner
Thurston Regional Planning Council
2404 Heritage Court SW, #B
Olympia, Wa 98502
email: morriss@co.thurston.wa.us

November 19, 1998

I am writing because I have been informed that you are conducting an environmental review of options for Capitol Lake on the Deschutes river.

I have been coming to Olympia for over twenty-five years. I have often wondered why the Deschutes River was impounded at "Capitol Lake." In the past few years, I have noticed that the impoundment has been altered significantly. There appears to be more fill around the lake.

I support returning the Deschutes River estuary to its natural condition to the greatest extent possible. As we face a crisis in salmonid production, it would be a sign of good faith for the state government and the City of Olympia to take a significant step toward restoring an estuary in the shadow of the State Capitol.

Thank you for considering my opinion.

Sincerely,

Toby Thaler
P.O. Box 1188
Seattle, WA 98111-1188
206 223-4088

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From: <Jetheiss@aol.com>
To: R-PLANNING.TRPC(morriss)
Date: 11/15/98 8:17pm
Subject: Capitol Lake Restoration

We received the mailed information on Estuary Options 5 and 6, and as longtime residents of Olympia we would like to comment. We favor neither of these options, Though often we support ecological imperatives, we believe that the recreational and esthetic benefits of leaving lower Capitol Lake outweigh returning the area to salt water wetlands. Particularly with current efforts underway to make the lake a centerpiece for Olympia and an extension of the Budd Bay waterfront an effort to release a good portion of the area to unattractive salt water wetland seems ill timed. The upper and lower lakes have attracted hundreds of walkers, joggers, and cyclists and have become the settings for festivals and picnics over the years. This area is in the middle of town and quite urbanized. The major species for which it provides a habitat is human. We hope it remains so. Jim and Barbara Theiss

1115 5th Ave SW
Olympia WA 98502

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From: "melodee" <mizle@email.msn.com>
To: R-PLANNING.TRPC(morriss)
Date: 11/20/98 7:51pm
Subject: Re: Capitol Lake Comments

-----Original Message-----
From: melodee <mizle@email.msn.com>
To: morriss@co.thurston.wa.us <morriss@co.thurston.wa.us>
Date: Friday, November 20, 1998 7:13 PM
Subject: Capitol Lake Comments

Dear Mr. Morrison:

I appreciate having this opportunity to state my opinions regarding the options offered in the Adaptive Management Plan for Capitol Lake. I was born and raised here in Olympia and have many fond memories of times spent around Capitol Lake, but much has changed over the years, the quality of the water in the lake has deteriorated to a point that swimming has not been safe for a number of years. I also would suspect that given the problems we now face in the environment, if we were making the decision today about whether to sacrifice a river estuary for the sake of gaining a reflecting pond there would be much debate, and I would hope that we would see the value in preserving a priceless ecosystem. I think that we need to start to consider much more than ourselves when we make these decisions-financial gain, in terms of attracting people to the downtown area, and aesthetics will mean little if we continue to alter natural systems to the point that they can no longer function.I could see the estuary in, years to come, being used as a superb educational tool and, contrary to the views expressed by many at the Public Hearing, the area could retain recreational value, albeit slightly altered than at present, in forms similar to those of the Nisqually Wildlife Refuge. Let's take this opportunity to allow the area to revert back to a tidal estuary.

Thank you for your time.

Keith P. Vandeman
3821 Hoffman Ct. SE
Olympia, WA 98501
Ph. 923-1794

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From: <Fawinoly@aol.com>
To: R-PLANNING.TRPC(morriss)
Date: 11/20/98 4:00pm
Subject: hurrah for capitol lake!

Dear Mr. Morrison:

I am writing to add my name to the list of those who wish to see Capitol Lake dredged as needed and maintained as the lovely addition to our city that it is.

Thanks.

Sincerely,
Frances A. Williamson
P.O. Box 11429
Olympia 98508
tel./fax 754-6500
fawinoly@aol.com

November 1998

Dear Steven Morrison:

Please make esturine restoration a reality by encouraging the Capitol Lake Adaptive Management Plan Steering Committee to adopt its proposed Estuary Alternative or the Combined Lake/Estuary Alternative.

These alternatives would restore critical esturine habitat that was lost in the 1951 damning of the Deschutes River.

We have lost too much of our original salt water habitat in Puget Sound. Now is the time to restore this ecosytem.

Sincerely,
Connie Wood

PUBLIC HEARING

Capitol Lake Adaptive Management Plan
Public Hearing
Thursday, November 18, 1998
GA Auditorium, GA Bldg., First Floor
Olympia, WA

1. Welcome and Introductions

The meeting was called to order at 7:04 P.M. by Chair Grant Fredricks. Committee members and staff were introduced.

a. Attendance

Committee: Grant Fredricks, Department of General Administration
Richard Blinn, Thurston County
Howard Thronson, Department of Natural Resources
Jeff Dickison, Squaxin Island Tribe
Andrea Fontenot, Port of Olympia
Sara LaBorde, Department of Fish & Wildlife
Sue Mauermann, Department of Ecology
Margaret McPhee, City of Olympia
Chris Parsons, City of Tumwater

Staff: Steven Morrison, TRPC
Corinne Tobeck, TRPC
Andy Stepelton, GA
Gary Larson, GA

Guests: Dale Anderson, Entranco

2. History of the Adaptive Management Plan

Steven Morrison presented a brief overview of the history of the Adaptive Management Plan and presented a slide pictorial tour of Olympia, the Capitol Lake site and the southern end of Tumwater, near the Old Brewery. Mr. Morrison shared slides of the Capitol Campus and lake area as it appeared in the 1930's to current status. The slide show depicted radical changes over a period of 60 years with construction from Tumwater to the current Capitol Lake site. He noted that water quality in Capitol Lake has been an issue for the past 20 years. He shared information about the extensive fish program that is facilitated in Tumwater at the Falls Park and noted that Percival Creek and Deschutes River are known to add sedimentation into Capitol Lake. He described the sedimentation issue as a continuing problem that needs to be addressed.

3. Draft Environmental Impact Statement

Dale Anderson, Entranco, said the purpose of the EIS is to comply with state law. The non-project EIS discloses to the public issues relating to the future management of Capitol Lake. The purpose of the EIS is to clearly communicate the alternatives, management of the resource, evaluate impacts of the environment, and present mitigation impacts. Mr. Anderson encouraged the public to read the entire Draft EIS document.

4. Public Hearing

Chair Fredricks shared the public hearing protocol and limited public testimony to three minutes. Mr. Fredricks asked that questions be clearly stated so as to allow staff to properly respond in a concise manner. Public comment will be accepted until 5:00 P.M., Monday, November 23. The Steering Committee will begin their discussions on the preferred alternative at their December 3 meeting, taking into consideration all public input. The Committee's challenge is to find a balance between all the competing views, ultimately reaching a fair and just decision on what is best for the community.

The public hearing was declared open at 7:34 P.M.

Leonard Soenke, 3127 Moore Street S.E., Olympia 98501 Mr. Soenke expressed concern regarding the drainage of Capitol Lake. He suggested that drainage would result in a lot of swampy area filled with mosquitos. He said to lose sight of this beautiful lake and have a swamp is sad. Mr. Soenke supports the *Lake Alternative*.

Grace Soenke, 3127 Moore Street S.E., Olympia 98501 Mrs. Soenke expressed her support for the *Lake Alternative* and protested doing away with Capitol Lake to develop wetlands. She said she has watched the development of the lake over the years and feels it to be a very beautiful part of our city. Ms. Soenke said she would like to see the lake remain from the railroad crossing or preferably from the freeway crossing.

Theodore Schultz, 1610 Evergreen Park Lane S.W., Olympia 98502 Mr. Schultz is speaking as a resident of Olympia and as the representative of the Evergreen Park Home Owners Association. He asked that the letter submitted to the Committee by Association President Jerry Harper be made a part of the record. He also noted that Mr. and Mrs. Rosencramps have submitted a letter for the record, as well. Mr. Schultz stated that the Association strongly supports the *Lake Alternative* as it is presented in the DEIS. He said they believe that option is the best option because it will maintain the beautiful setting for the Washington State Capitol that Capitol Lake now provides, and for which it was intended. The lake, he said, will also continue the many recreational opportunities afforded

by the Deschutes Parkway (i.e., walking, jogging, bicycling, etc.). The Lake Alternative will also maintain the principle element of the Heritage Park Plan which is now being implemented and currently under construction. Finally, the Lake Alternative it will permit the continuation of the Chinook Salmon rearing facility in Percival Cove. Recognizing the higher cost that is involved, Mr. Schultz said it appears that no consideration has been given the cost of increased illumination and police protection activities referenced in the Plan or the cost of replacing the salmon rearing facility. These two issues, he said, will be present in all of the alternatives except the Lake Alternative. In closing, Mr. Schultz urged the adoption of the Lake Alternative as the preferred alternative.

Jim Knudsen, 603 Plymouth S.W., Olympia 98502 Speaking as President of the Millennium Caroling Association, Mr. Knudsen said the Association is looking at seven sites in the north campus area. A look at the capitol setting and the capitol of our state, shows we have a unique treasure as it relates to the aesthetics. Mr. Knudsen expressed his appreciation to the Committee for looking at the long-term issue. He said he likes a time frame that looks at many generations and asked if the Committee has considered the impacts of the rise in sea level? Mr. Knudsen also asked the Committee to look at the reversibility question. He questioned whether or not any of the suggested alternatives block implementation of other alternatives, should we experience a change of mind? In closing, Mr. Knudsen asked the Committee to explain the impacts of adaptive management and asked how the Committee plans to move forward.

Mike Bahn, 6519 Tralee Court N.W., Olympia 98502 Mr. Bahn said he is encouraged that the option selected will be the best value for money and effort spent as opposed to least expensive. He said his first choice is the *Lake Alternative*. Mr. Bahn expressed interest in the recreational opportunities afforded by the lake and said the lake would provide a variety of opportunities if kept open (i.e., kyaking, boating, etc.). He told the Committee that the geese problem is easily resolved by changing the shoreline structure to preclude the geese from damaging it any further. He also suggested enhancing water flow. The Committee would need to look at enhancing the facilities along to the lake to allow people access to the water (i.e., dock area). This, he said, would result in an enhancement to the Lake Alternative. Mr. Bahn described his second choice as the *Combined Estuary/Lake Alternative*. Mr. Bahn further suggested that it would not be good to have the estuary run up and into Heritage Park. He noted, however, that the estuary will provide excellent educational and research opportunities.

David Schaffert, P. O. Box 1427, Olympia 98507 Representing the Chamber of Commerce, Mr. Schaffert thanked Entranco for producing a readable document. He informed the Committee that the dock in the slide presentation was built by the Chamber and said the Chamber supports the *Lake Alternative* as a means of protecting Heritage Park, providing the most public opportunities, encouraging salmon rearing capabilities, and protecting downtown businesses from flooding issues. Mr. Schaffert said possible liability issues for flooding do not appear to be addressed by the EIS and suggested the Committee may want to consider that issue for other alternatives.

C.E. Link, 1604 Evergreen Park Lane S.W., Olympia 98503 Mr. Link described Capitol Lake as a source of pride for many living in Olympia, the state of Washington, and is adored by many living all over the world. Mr. Link said he, along with a countless number of other people, have enjoyed watching the changes to the lake that were initiated by the Legislature. Some of those changes include: ridding the area of the mud flats and seeing the benefits to the public who enjoy a variety of activities such as fishing, boating, bird watching, etc. To revert back to a mud flat or estuary, in whole, or in part, would be a tragedy, tapestry, and an unwise use of resources. Mr. Link said Heritage Park represents one step forward, but to let Capitol Lake die would be two steps backward. Mr. Link supports the *Lake Alternative*.

Scott Waeschle, 4811 Water Street, Olympia, WA 98501 Mr. Waeschle told the Committee that he is one of the few people who live on Capitol Lake. He said he canoes and uses the lake as a recreation facility at least once each week and that he invites a lot of his neighbors to come and enjoy the use of the facility and lake as well. In addition to his canoeing, kyaking and rowing adventures, Mr. Waeschle said he would like to see improved water quality on Capitol Lake that will allow swimming, once again. Mr. Waeschle voice his support for the *Lake Alternative*, or at least maintain the present situation. He said he supports the Lake Alternative and the viewpoints of many who have already spoken. In closing, Mr. Waeschle said his wife is a rower and that she would like to see that recreational activity continue, possibly including a rowing facility at Marathon Park.

Martin D. Meyer, 219 17th Avenue S.W., Olympia 98501, Representing Trina Worthington and Himself. For Mrs. Worthington -- It was the beauty of Capitol Lake and the City of Olympia, as well as surroundings around lake that attracted her to the site on which she built her home. Ms. Worthington paid $16,000 in real property taxes in 1998. Ms. Worthington is concerned about the impact on her home should any alternative other than the Lake Alternative be selected. Ms. Worthington to see the continuation of the *Lake Alternative*.

Mr. Meyer, speaking on his own behalf, said he was recently struck by the beauty of the lake, the sunset, watching the leaves turning color, etc. Mr. Meyer said he grew up on the lake, played in the woods along the shores of the lake and he now enjoys taking his children out to the lake to row over to Tumwater Historical Park where they enjoy playing on the playground equipment. These pleasures would not be possible without the lake. In closing, Mr. Meyer urged the Committee to adopt the *Lake Alternative* as the preferred alternative.

Paul Seabert, 4022 Rechet Court S.E., Olympia 98501 Speaking as President of the Olympia Downtown Association, Mr. Seabert recommended the *Lake Alternative* as the preferred alternative. He stressed the importance of tying the capitol to the waterfront and the city and encouraged the Committee to maintain the lake so it can be used as a park and complement the city.

Kathy Overhauser, 10640 Yelm Highway S.E., Olympia 98513 Ms. Overhauser presented the Committee an analogy from the movie "Out of Africa" whereby she said the Deschutes River needs to go home to Budd Inlet. Ms. Overhauser said she does not feel the concern for mosquitos is appropriate here in Olympia. She believes the manmade lake was an expensive mistake and expressed her preference for the *Estuary Alternative* and the replanting of native species. This, she said, is the environmentally correct choice and we can call our festival the "Riverfair."

Maurice A. Click, 1910 Evergreen Park Drive S.W., Olympia 98502 As Chairman of the Board of the Capitol Lake Towers, a 45 unit condominium on Evergreen Park Drive, Mr. Click said the Board id deeply concerned about the alternatives that would destroy Capitol Lake. He said from the condominiums residents enjoy a beautiful view of Capitol Lake, the state capitol, and sometimes Mt. Rainier, Mt. Adams, Mt. St. Helens and the Black Hills. He said allowing Capitol Lake to dry up would be inconsistent with the development of Heritage Park. In closing, Mr. Click asked the Committee not to destroy the beautiful lake and park. The Board supports the *Lake Alternative*.

Jeff Dickison, Squaxin Island Tribe Mr. Dickison commented to issues raised in the EIS that need more clarification, rather than to a specific alternative:

1. Flooding — the contention represented in the DEIS is that the lake/dam acts as a flood control device. The Tribe does not believe this to be true, nor is it an accurate depiction of the nature of the situation. The Tribe contends that the dam creates the flooding potential. Tidal height of the bay, he said, never gets to flood height of the river; so, if there were no dam and the river were allowed to flow freely into the bay, it would never be high enough to flood downtown Olympia (notwithstanding future sea level rising).

2. Reference was made in the DEIS to capture of adult salmon at the fish ladder at outlet of the north basin for spawning activity. That facility is not used for that purpose. All the spawning occurs at Tumwater Park. The facility's use was described inaccurately. The Tribe's principle interest is relative to fish and fish rearing — sustaining and artificial runs of salmon need to be maintained. Management of the lake, in the past, have resulted in conditions and environments not in the best interest of the fish. He said it is clear that some of the alternatives would pose dramatic changes to the management of enhanced Chinook production in the lake. He said it is clear some alternatives that some other mitigation strategy would have to be proposed (i.e., construction of new facilities). One or more activities will have to occur to maintain Chinook production in or around the lake.

3. Regarding fish references made in the DEIS. Mr. Dickison said it is bothersome to him and the Tribe that there are a number of references made to fish in the system

with parentheticals following that indicate that the Tribal biologist may have a differing opinion. He said this reference attempts to subordinate the Tribe's management responsibility which is equal to the state's. The Tribe and Mr. Dickison, personally, is affronted by that representation. He said he believes more work is needed to accurately reflect the management regime.

Mr. Dickison, speaking personally, thanked everyone for coming to this public hearing. He said he has been working for the Tribe for over 12 years evaluating EIS's. Tonight's turnout is the best he has ever seen at an EIS public hearing.

Lanny Carpenter, 4210 Shincke Road, Olympia 98506 Mr. Carpenter expressed his support for the *Estuary Alternative*. He said an artificial freshwater empowerment is an expensive image to maintain, both in terms of dollars and environment. Mr. Carpenter said the Deschutes River deserves an estuary. He described the estuary at Kennedy Creek as very dynamic and interesting place to visit, much more than looking at a body of static water that is unfit for human contact. He said the tide comes in and goes out twice a day. When in, you have your reflecting pond and a compromise.

Chris Hawkins, 115 23rd Avenue S.E., Olympia 98501 Mr. Hawkins said he thinks this area needs to be managed in a way that is most cost effective with the lowest environmental impact. He also stressed the need to look at the habitat value being provided by this area. In looking at those options, Mr. Hawkins said he feels the *Estuary Alternatives* represent the preferred alternative. The estuary option provides optimal habitat for salmon, migratory birds and wildlife. Estuaries, he said, generate the highest bio-mass of any other system in the world. They also provide a number of other advantages that we often take for granted, including flood control. Recognizing the complexity of this issue, Mr. Hawkins said he hopes those charged with the management of Capitol Lake will continue to take an adaptive approach. He said he is convinced this is the only way to manage this valuable resource. We are losing and have lost a great deal of our estuary and habitat throughout Puget Sound. This, he said, is critical to the salmon species. In closing, Mr. Hawkins said he appreciates the thoroughness of DEIS and said he doesn't believe any of the options are necessarily perfect, nor does he envy the Committee with the choices before them.

Lucile Rohrbeck, 1910 Evergreen Park Drive S.W., Olympia 98502. Ms. Rohrbeck thanked the Committee for offering the public the opportunity to express their thoughts on this matter. She said prior to the development of Capitol Lake she felt the area was really terrible. Ms. Rohrbeck said she wants to prevent the destruction of our beautiful Capitol Lake. She said it would be terrible to destroy the Capitol Lake setting. In the early days this was the most horrible and smelly area with tideflats and mudflats. The odor was very offensive. People did not want to build houses in the area or walk in the area due to the smell. It would be criminal to let the lake go back to that again. Ms. Rohrbeck stressed the need to get going with the restoration and bring the site back to the beauty it

was. The best thing to do to improve the area would be to develop a swimming facility, even if a pool needs to be installed. Also, promote other recreational activities, boating, rowing, fishing, etc. It is ridiculous to think that any of the other alternatives wouldn't be just as costly. Property values will go down without lake. Ms. Rohrbeck supports the *Lake Alternative*.

Bob Jacobs, Mayor, City of Olympia Mr. Jacobs spoke on behalf of the City Council and submitted written testimony for the record. He said the Council commends the State Department of General Administration for convening the special study committee to review options to better manage Capitol Lake. The lake is an important community focal point worthy of the attention the Capitol Lake Management Steering Committee members have paid to its care since January. The Council has reviewed the Committee's work progress to-date and have reviewed the DEIS. As a result of those reviews, the Council believes the *Lake Alternative* is the best choice for lake management. The Council finds no data in the DEIS to refute the conclusion that other options would create severe and environmental consequences for the community today and into the future. In addition to flooding and health concerns, the Council is concerned that if non-lake options are considered there will be a tremendous loss of the lake's beauty. Aesthetic impacts will be most visible and felt most strongly in Olympia's downtown, in Heritage Park, and in Olympia's South Capitol Neighborhood.

Mr. Jacobs said the Capitol Campus and Olympia's downtown is the single integrated area that culminates at the lake. He said Capitol lake plays a key role in linking state government with the community in which it is located. Furthermore, its contextual fabric is urban, not rural. The lake is physically connected to the downtown and the lake provides a visual backdrop to the downtown area. A park is being developed to honor our Statehood along the lake's shoreline and the community's most important event, Lakefair, is centered around the lake. Mr. Jacobs said that as many American communities are attempting to bring water features to their downtowns to attract more economic development and create a greater sense of place and community, we should not consider returning our lake to a marsh environment.

Non-lake wetland or estuary options at this point would, in the Council's opinion, be completely contrary to the viable image the community is attempting to create for the downtown area and its associated areas such as heritage Park and the South Capitol Neighborhood.

Specific impacts the Council felt could not be mitigated include:

- Park, trail and recreational impacts
- Health implications
- Downtown Olympia flooding impacts, especially flood liability and increased erosion of 5th Avenue
- Hydraulic and engineering impacts to the train trestle and the 4th/5th Avenue bridges

- The water quality impacts from the lake, as they may relate to the potential increased LOTT discharge into Budd Inlet.

The Council, he said, reaffirms its commitment to participating as an active member on the steering committee and it believes that through that process the management tools can be found to best preserve the future deserved by all for Capitol Lake.

As a clarification point, Mr. Jacobs said he is speaking to the middle and north basins and leaving the south basin to Tumwater to comment about. He said he believes the Council would not want the middle basin to remain as shallow as it is today.

Question: Referring to downtown Olympia flooding impacts, Jeff Dickison asked for data upon which the Council's comments were based and how those impacts are affected by lake management.

Response: The Council's comments refer to data in the DEIS. The Council has no additional information.

Question: Referring to health implications of additional insects and other nocturnal animals (i.e., bats and other small crawling creatures), Mr. Dickison asked if Mr. Jacobs could be more specific as to the health implications?

Response: Can get more information as it relates to health implications.

Question: Chris Parsons called attention to the statement that the Council finds no data in DEIS to refute the conclusion that other options would create severe environmental consequences for the community, today and in the future . . . what conclusions are you relating to that the other options would create. This section is not clear.

Response: The other options create severe environmental impacts to the downtown and the Lake Alternative does not.

Grant Fredricks said follow up to these issues can take place at the Committee level.

Dave Sparkman Mr. Sparkman said he strongly favors the *Estuary or as a compromise, the Estuary/Lake Combination Alternative with damming.* He also expressed his surprise at the number of people who are offended by the smell of mud flats.

George Darkenwald, Olympia Mr. Darkenwald said he grew up in downtown Olympia and has vivid memories of mud flats and has very fond memories of freshwater lake after the dam was built. As a private citizen, Mr. Darkenwald said he prefers the *Lake Alternative*.

Mr. Darkenwald said his primary purpose is to speak on behalf of the North Capitol Campus Heritage Park Development Association. He noted that a letter written by Association President Alan Miller was hand delivered to Mr. Morrison for inclusion with the written testimony. The organization's desire, he said, is to maintain the Wilder and White 1911 vision for the capitol campus, a vision which included the creation of the reflective lake in 1950. He said the state, the city and private donors, as well as grass root citizen groups have invested numerous hours and $12 million dollars to bring this vision to completion. The Lake Alternative is the only alternative which is compatible with the Wilder and White 1911 vision. Therefore, the Heritage Park Association urges the Committee to adopt the *Lake Alternative* and to maintain Capitol Lake as a freshwater lake.

Calvin R. Lockwood, 515 Floravista Avenue N.E., Olympia 98506 A 70-year resident of Olympia, Mr. Lockwood reflected back to 1927 at a time when his family's livelihood was made from raising geese. He said if you want to revert this area back to a swamp land, you will have a major goose problem. The *Lake Alternative* is the better alternative. He shared his experiences draining Manitoba Lake and adjoining swamps and said the draining problem on Columbia Street is the result of a man-made problem, whereby the draining flood plain is higher than the tidal basin. He said he was in contact with the largest flyway of geese while in Manitoba (i.e., 1000's of miles of geese breeding grounds). He said if the lake is allowed to return to swam land, the geese problem will increase immensely. He suggested installing a triple catching basin in the south basin as suggested by Mr. C. K. Glades, a state Architectural Engineer, a number of years ago. The installation of such a basin, he said, would hold back the dredging problems.

Bob Jacobs, 720 Governor Stevens Avenue S.E., Olympia 98501 As a local resident and user of Capitol Lake, Mr. Jacobs said he uses the lake in two ways: walk around the lake and swim in the Annual Polar Bear Swim on January 1. Mr. Jacobs congratulated the Committee on doing a terrific job with the analysis. He said the long-term view is very positive as it addresses the needs in the long term. He urged the Committee to "keep it up and follow through". Feels the lake has largely been neglected for the 48 years it has been there, due mainly to the lack of money. He said he was not aware that the middle basin was gone until he tried to canoe that area a few years ago. He said ultimately the lake will need to be dredged to keep the waterways open. As a member of the People for Puget Sound (PPS), Mr. Jacobs said he had to really look at his reasoning for wanting to retain the lake environment, especially when the PPS is urging the discontinuance of the lake. Mr. Jacobs said he believes the fish runs are not affected by the Lake Alternative and that he supports the maintenance of the *Lake Alternative*.

Question: Jeff Dickison asked Mr. Jacobs is he was aware that the current run size of Coho Salmon in the Deschutes River is less than 10 percent of the historical average?

Response: Mr. Jacobs said he was not aware of any long term trend that makes him concerned; however he would be pleased to review data that supports that statement.

Ericka Guttman, 433 Milroy Street N.W., Olympia 98502 Ms. Guttman expressed her support of the *Estuary Alternative*. She shared the following key values of estuaries:

- Among the most productive eco-systems on the planet in terms of bio-mass, providing a lot of recreational activities and habitat for wildlife
- Ease the transition for salmon from salt to freshwater and back again
- Perform additional functions such as stormwater storage and filtering of contaminates

Ms. Guttman said less preferred from her point of view would be the Lake/Estuary Combination Alternative due to the cost factor. She described herself as a regular user of the lake, she runs, walks, and bikes around the lake. She said returning the lake to an estuary would enhance those uses as well as increase wildlife.

Marilyn Showalter, 2601 Capitol Way S., Olympia 98501 Ms. Showalter said her house overlooks the lake. She said she aesthetically enjoys her view of the lake, but added that she would even enjoy looking out at the aesthetics of an estuary that is alive with birds, fish, running river, etc. The lake, although pretty, is sterile with not much happening in it. She said she has learned a lot about the importance of estuaries over the past 50 years and stressed the need for "EMPY" -- everyone must pitch in. Ms. Showalter said she hopes the Committee takes a long view of fostering sustainability of people and our natural resources. In closing, Ms. Showalter said the *Estuary or Lake/Estuary Alternatives* are the best.

Sheila Swalling, 2501 Columbia N.W., Olympia 98501 Ms. Swalling stated that she prefers the adoption of the *Lake Alternative*. Ms. Swalling said she enjoy a view of the lake and has a strong connection to the lake. As a member of the community Ms. Swalling used to walk around the lake four times a week. She said the lake was developed for aesthetic reasons and that she does not feel the other alternatives are compatible with downtown business and land planning.

Bruce Wishart, 1063 Capitol Way #206, Olympia 98501 Mr. Wishart said he is representing 500 People for Puget Sound members in the Olympia area. Written comment will be submitted prior to the deadline. The PPS supports the *Estuary and Estuary/Lake Alternatives*. He said a serious toll has been taken on the eco-system with loss of over 90% of the near-shore physical habitats in the urban bays throughout the sound. Puget Sound estuaries were the most productive eco-systems in the world when they were functioning properly. The estuarian options represent one of the most significant opportunities to reverse the trend. The sediment is trapped because it's not allowed to flow into Budd Inlet. He said more than an environmental issue, this is a fiscal and social problem. The PPS would like the Committee to consider that there are a lot of people concerned about loss of recreational and aesthetic opportunities; however, a lot of people have also expressed support for the Estuary Alternative that will also enhance those opportunities.

Collum Liska, 401 17th Avenue S.W., Olympia 98501 Mr. Liska said he originally thought of the Lake Alternative as the preferred option. However, after reviewing the DEIS, he said he has to agree we haven't done a very good job creating a lake where a natural flow once existed to the sound. Taking into account both the idea of the vision and the natural reality, he recommends supporting the *Lake/Estuary Combination*. He said there are a lot of estuaries in Georgia and South Carolina where people live and enjoy and benefits from the estuaries. Mr. Liska said he feels Olympia could benefit from the Lake/Estuary Combination Alternative. He said the water quality of the lake must be dealt with if we maintain Capitol Lake in the long term and stressed that he feels it is outrageous that the quality issue has not been tended to over the past 20 years with the rising of fecal coliform count.

Question: Chris Parsons asked about the swimming issue and whether or not he felt the Lake/Estuary Combination Alternative could serve that function.

Response. Mr. Liska stressed the need for a separate water source for swimming, not the Deschutes River

Carol Jolly, 4007 Green Cove N.W., Olympia 98502 Carol Jolly described the DEIS as a high quality document and complimented the Committee and Consultant for the clear explanations that are provided in that document. She also expressed sympathy for the difficulty of options. Looking at the long-term (important element as we look at past and future of Capitol Lake), Ms. Jolly said we have learned a lot about the cost we pay at damaging natural systems. People benefits have been spoken to as provided by the lake. It is now time to recognize obligations to other parts of the eco-system and the people. Ms. Jolly encouraged the Committee's support of the *Estuary/Lake Combination Alternative* which she said will take advantage of Heritage Park and allow the people to enjoy the benefits of a natural estuary.

Steve Rodrigues, 907 Jefferson Street, Olympia 98501 Steve Rodrigues described the creators, Mr. Wilder and Mr. White as "visionaries" and said we are here today looking at history. We control the Mother Nature, but we also work with her. Mr. Wilder and Mr. White accomplished a great deal and they should be blessed because the city of Olympia has been. Mr. Rodrigues said he has built himself out of a job and is still alive to speak on behalf of Mr. Wilder and Mr. White. We have a good quality of life because of those two gentlemen. We have a continual need for a better quality of life and to be able to work with it on a balanced nature. The port and the economics of the community have also been enhanced, as has the future of many children. Speaking in terms of history and what can be accomplished in terms of the whole, Mr. Rodrigues said he favors the *Lake Alternative*. There are ways to control silt and sedimentation and there are ways that are less expensive than others; however, it takes a great deal of effort to think of the right way to solve them. With that, Mr. Rodrigues thanked Mr. Wilder and Mr. White.

Julie Clougherty, P. O. Box 1631, Olympia 98507 Julie Clougherty urged the Committee to look at the historical perspective for last 50 years and urged them to think of more than the human perspective (i.e., the scientific perspective, both physical and scientific). She stated that her preference is for the *Estuary Alternative*.

Betty Stevens Betty Stevens asked the Committee to look back 100 years when Washington State was a new state with an abundance of inlets and natural resources. She described this area as an incredible area. She said Wilder and White had a wonderful vision at that time to design this great urban area for the capitol of Washington. Now, the vision needs to be updated to reflect where we are 1998 — a lot has happened over past 100 years. Ms. Stevens said she works to protect the natural state every day. Natural resources are dwindling and diminishing and are very limited today. She encouraged everyone to think about the opportunities and urged everyone to look to the future and restore lost opportunities. Ms. Stevens said she prefers the Estuary Alternative.

Janel Moore, Lacey As a newcomer to Olympia, Ms. Moore said she was struck by the beauty of Capitol Lake, which made her move to this area very enthusiastic. Ms. Moore said she uses the lake frequently for jogging activities and feels it is a great enhancement to community. She said she thinks the lake increases the livability and standard of living in this community which quantifies the value of Capitol Lake in terms that are more important than dollars and cents. The Heritage Park development, the plans for the American Legion Hall, the Yardbirds Shopping Center, etc., combine to make Olympia, which she described as "jewel in the rough", more viable for business and leisure activities. Regarding the dredging issue, Ms. Moore asked if that would be shifted to Budd Inlet if we chose to go with an Estuary Alternative? She also asked if there would be a higher impact to water craft in that area? In closing, Ms. Moore stressed the value of Capitol Lake to the citizens of Olympia and the State of Washington.

Ann Storey, 2325 Schirm Loop N.W., Olympia 98502 Ms. Storey described herself as a user of the lake and said she loves Puget Sound and spends a lot of time walking the beaches, kyaking, etc. Ms. Storey urged the Committee to adopt the *Estuary Alternative* and stressed two aesthetic concerns: 1) Marilyn Frasca's "Meditations on the Mud Flats of the Puget Sound" — they are exceptionally beautiful and show the artistic value of tide and mud flats in Puget Sound; 2) the great naturalist, Alexander vonHumbolt talked about aesthetic concerns as they relate to ecological diversity. Ms. Storey said it is interesting that there is no conflict between the beauty of nature restored as best as it can be to its original form. She stressed the need to reverse the damage and restore Puget Sound.

Stanley Stahl, 120 State Avenue N.E. #232, Olympia 98501 Stanley Stahl said he felt we were short sighted about life in terms of the eco-systems. Referencing DNR's book showing 27 years of degradation to the state's eco-system, Mr. Stahl said the degradation is horrendous. Mr. Stahl said

he is very active in McAllister Springs and Woodland Creek areas. He said the general impervious surface situation can and should be reversed to revive habitat survival.

David Stevens Mr. Stevens said Washington is the Evergreen State due to the natural heritage and quality of life found in Washington State. As we look up to the capitol dome we think of cultural heritage. To have a functioning estuary integrated with the capitol dome would be the best of what Washington State could be. Mr. Stevens supports the *Estuary Alternative*.

Maurice Fitzgerald, 1910 Evergreen Park Drive #502, Olympia 98502 Mr. Fitzgerald commend the Committee for an excellent job on the DEIS report. He said he was born in Washington State and spent 32 years in the military, living in 19 states. He believes the state of Washington has one of the most environmentally sound and beautiful state capitols in the United States. He said he is proud of that fact and thinks we should *maintain current status* and continue with plans for Heritage Park.

Mary Lux, Olympia Mary Lux thanked the Committee for listening to the people. She reminded the Committee that people have thought about this project for many years. The architectural designers and legislators from all over state of Washington who approved the design and planning of Capitol Lake. This, she said, was not done by a small group of Olympia politicians, but by state wide decision. Heritage Park is designed to complete the landscape plan of the state capitol. She noted that two people from the Governor's Office have testified, as individuals, against the Lake Alternative. Ms. Lux said these reports will go into the political arena where the people of the state will have an opportunity through their legislatures to be involved with the funding. Ms. Lux expressed her support for the Olympia City Council in favor of the *Lake Alternative*. If impossible, budget-wise, Ms. Lux said she *could live with the Lake Alternative with Trap*.

There being no further testimony, Chair Grant Fredricks closed the public hearing and said the final decision will be made by Mary Tadano Long with recommendation from the Capitol Lake Adaptive Management Committee. Mr. Fredricks reminded the public that the comment deadline on the DEIS is Monday, November 23 at 5:00 P.M.

6. Next Meeting

The next meeting of the Capitol Lake Advisory Committee will Thursday, December 3 at 8:00 A.M., followed by a December 17 meeting also beginning at 8:00 A.M.

7. Adjournment

The meeting was adjourned at 9:25 P.M.

ct

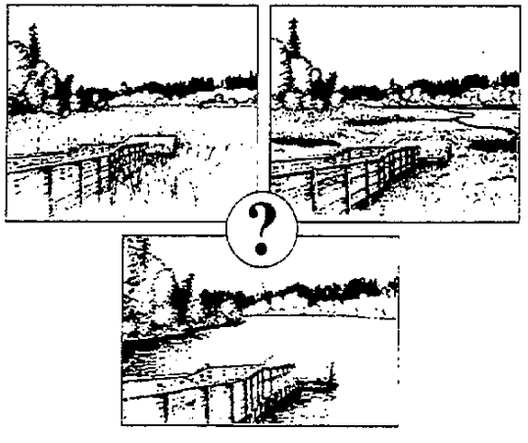
Chapter 5. Responses to Public Comments

This Chapter contains responses to all the comment letters, e-mail, postcards and Public Hearing testimony received on the Draft Environmental Impact Statement.

Responses were grouped into one of the following seven categories.

- Letters from the Steering Committee,
- Letters from other State and Local Governments,
- Letters and E-mails from Community Groups and Associations,
- Letters from Interested Parties,
- E-mail from Interested Parties,
- Postcards from Interested Parties, and (NOTE: Only one postcard has been copied)
- Speakers at the November 18, 1999 Public Hearing.

Refer to the numbering (#1 - 158) and lettering (A - Z) of the comments. The responses are in the same order. Use the number on the first page of the comment (#1 - 158) to navigate between the responses (in this Chapter) and the comment letters (in the previous Chapter).



RESPONSES TO PUBLIC COMMENTS

LETTERS FROM STEERING COMMITTEE MEMBERS

1. City of Olympia dated Nov. 18, 1998

A. The Capitol Lake Adaptive Management Plan (CLAMP) Steering Committee recognizes that Capitol Lake is a community-wide feature which enhances both local and state owned properties.

B. Thank you for your comment. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time. They have requested that additional information be made available before such a decision is made.

C. The CLAMP Steering Committee recognizes the benefit of park-like amenities surrounding Capitol Lake since these are located on State owned and maintained lands.

D. The Washington State Department of General Administration is unaware of any public health threats which are caused by insects, nocturnal animals in either a fresh water or salt water environment.

E. The CLAMP Steering Committee has requested that additional reports be prepared in the next two years that should address this concern. Reports will be prepared to address the issues of flooding. It is also our understanding that the City of Olympia applied for a Washington State Department of Ecology Flood Control Assistance Account Project (FCAAP) grant to prepare a new flood map for Capitol Lake and its surroundings.

F. The CLAMP Steering Committee also requested a report on the hydraulics of the lake be prepared, which would evaluate the forces at various points such as the Capitol Lake dam, the BNSF railroad trestle, Percival Creek bridge, I-5 crossing and Deschutes Parkway.

G. Additional information has been requested regarding water quality by the Washington State Department of Ecology. In a letter dated December 16, 1998, Ecology requested that a model run of the Budd Inlet Study Data be prepared for any of the alternatives. This would aid Ecology in evaluating the influence of any potential change upon Budd Inlet and the LOTT wastewater treatment plant discharge. This information will be shared with the CLAMP Steering Committee.

H. Additional information will be provided regarding the options available for sediment removal. Standards and potential permit requirements will be evaluated as new sediment samples are taken and analyzed. The CLAMP Steering Committee is interested in completing a Sediment Management Plan for the lake in the next two years which fits into other management actions.

2. City of Tumwater dated Nov. 23, 1998

A. The CLAMP Steering Committee is also concerned about issues of flooding adjacent to the lake. As a result, they have requested that additional reports be prepared in the next two years that should address this concern. One reports will be to prepare a new flood map for Capitol Lake and its surroundings. The second report would be to address the hydraulic forces around the lake basin. Sedimentation into the basin will continue to be an issue, regardless of which alternative is eventually selected. The CLAMP Steering Committee is interested in completing a Sediment Management Plan for the lake in the next two years which fits into other management actions.

B. The text will be edited to note the limitations on the cost estimates which you point out.

C. The Draft EIS attempted to address impacts to all surrounding land uses. Refer to the response to "A" above, regarding potential flooding.

D. The authors of the Draft EIS had access to the resources noted. Since the cultural and archeological resources were located along the edge of the old Puget Sound shoreline (before extensive filling) the authors believed that a decision on whether the basin filled with fresh or salt water would have little impact.

E. The Draft EIS contains a view of Viewpoint #5 at the Tumwater Historical Park on page 4-107 and a verbal description of the basin-wide impacts of estuary and lake-estuary alternatives on pages 4-106, 4-110 and 4-115. Viewpoint #5 is closest in elevation to Tumwater Falls and the Draft EIS authors believed that there would be the least change of character at this Viewpoint. Vegetation established above the high water mark would not be affected by a possible change to a salt water habitat. However, it is likely that up to half of the riparian habitat established on the gravel bars could be diminished if these alternatives were selected. Finally, the open water areas would change over time to resemble the salt water character at Viewpoint #3 or #4.

F. The Preliminary Assessment of Sea level Rise in Olympia, Washington: Technical and Policy Implications (1993) indicates that shorelines of the south sound could be affected by a rising sea level of varying estimates. Many uses along the lake would be affected by increased sea level elevations of this magnitude, since the Capitol Lake dam would not provide protection for tides above 18.40 feet MLLW or 10.67 feet MSL.

G. The CLAMP Steering Committee is also concerned about the hydraulics of the lake. It has requested that a report be prepared in the next two years which would evaluate the hydraulic forces at various points such as the Capitol Lake dam, the BNSF railroad trestle, Percival Creek bridge, I-5 crossing and Deschutes Parkway.

H. The General Administration capital budget for 1999-2001 biennium contains money for the design and construction of a modification to the Capitol Lake dam to allow year round fish passage.

I. The Washington State Department of Fish and Wildlife indicates that the operating costs of the Deschutes River Hatchery program averages about $80-90,000 per year. This is due in part to the assistance of the volunteer support of the Olympia Salmon Club. As a result, while the program is operating at about 30-40% of its historic high, the cost per fish at this facility is reported to be one of the lowest in Puget Sound.

J. The preliminary Washington State Department of General Administration capital budget for 1999-2001 biennium contains $254,000 for the design and construction of a fish ladder modification to the Capitol Lake dam.

K. Thank you for this comment. Such a discussion will be provided in the Capitol Lake Adaptive Management Plan rather than the Final EIS.

L. A note will be added to these figures referring the reader to the full size maps.

3. Port of Olympia dated Nov. 23, 1998

A. The CLAMP Steering Committee concurs that sediment release from the lake would likely settle in southern Budd Inlet and the turning basin. Sedimentation within the basin will continue to be an issue, regardless of which alternative is eventually selected. The Steering Committee is interested in completing a Sediment Management Plan for the lake within the next two years which fits into other management actions .

B. Estimates of the amount of sediments for each alternative would be interesting, but a computer model would be a costly report for the five alternatives which may not be selected. Instead, the CLAMP Steering Committee is interested in holistically addressing sedimentation within the basin. In such an approach the Steering Committee may choose to address dredging within the lake basin regardless of which "Preferred Alternative" is selected.

C. The CLAMP Steering Committee is aware that dredging in Budd Inlet has environmental cost and impacts not unlike those associated with Capitol Lake.

4. Squaxin Island Tribe Public Hearing Comments of Nov. 18, 1998

A. The CLAMP Steering Committee agrees that additional information on flooding is needed before a "Preferred Alternative" is selected. The grant application to prepare a new flood map for Capitol Lake and its surroundings would help address this issue.

B. Revisions to the Fisheries text have been included in the following Chapter and should address these issues.

C. Refer to the response to "B" above.

5. Thurston County dated Nov. 25, 1998

A. The CLAMP Steering Committee agrees that additional information on flooding is needed before a "Preferred Alternative" is selected. The grant to prepare a new flood map for Capitol Lake and its surroundings will help address this issue.

B. The CLAMP Steering Committee recognizes that human development around the lake was constructed on the basis of a fresh water environment. Many factors will be addressed by the CLAMP Steering Committee before a "Preferred Alternative" is selected. This is just one of the major issues which the CLAMP will need to address and balance in concert with other issues.

C. Sedimentation into the basin will continue to be an issue, regardless of which alternative is eventually selected. The CLAMP Steering Committee is interested in completing a Sediment Management Plan for the lake in the next two years which fits into other management actions.

D. The CLAMP Steering Committee recognizes that Capitol Lake functions more like a meandering river than a lake. Where possible the term "lake basin" is used to describe the geography now referred to as Capitol Lake.

E. The Draft EIS did not include a complete evaluation of the costs associated with removing the Capitol Lake dam along 5th Avenue. Although a desirable piece of information, this programmatic EIS will address these cost estimates should the CLAMP Steering Committee find that the flooding, hydraulics and sedimentation reports all warrant this as a second level of report preparation.

F. The CLAMP Steering Committee is also concerned about the hydraulics of the lake. It has requested that a report be prepared in the next two years which would evaluate the hydraulic forces at various points such as the Capitol Lake dam, the BNSF railroad trestle, Percival Creek bridge, I-5 crossing and Deschutes Parkway.

6. WA State Department of Ecology dated Nov. 23, 1998

A. The CLAMP Steering Committee has requested a report on the hydraulics of the lake before it selects a "Preferred Alternative". This report would evaluate the forces at various points such as the Capitol Lake dam, the BNSF railroad trestle, Percival Creek bridge, I-5 crossing and Deschutes Parkway.

B. Appendix B of the Draft EIS includes a detailed evaluation of costs. Page B.2 indicates that the cost of Gravity Dewatering for dredged sediments is between the costs for Marine Disposal and Mechanical Dewatering. Therefore, it is included in the range of costs contained on Figures 1-1 and 1-2.

C. Thank you for your comment.

D. We concur that Capitol Lake will remain as a "Shoreline of the State" regardless of which alternative is eventually selected.

E. The CLAMP Steering Committee realizes that a great deal of filling has occurred within this basin and is also concerned with the "quality" of any future aquatic environment. This is why additional reports will be prepared within the next two years which deal with sedimentation, lake hydraulics and flooding. It is likely that the Steering Committee will not make a selection of a "Preferred Alternative" until these reports are available.

F. The Heritage Park wetland mitigation site at the old interpretative site has been designed so that newly created wetlands would be at the same elevation as the lake. Two large culverts will breach the dike to provide a hydrologic link with the middle basin and circulation of water within these new wetland areas.

G. The terms described are those used by the United State Geological Survey (USGS) and the Federal Emergency Management Agency (FEMA). They describe an event which has a 1-in-one-hundred chance of occurring in any year.

H. This issue is not mentioned in the Washington State Department of Fish and Wildlife letter. Low dissolved oxygen in the lake is just one of the water quality parameters where the lake fails to meet the state standards, requiring placement on Ecology's 303 (d) list of impaired water bodies.

I. Capitol Lake may be called a "lake", but previous studies have shown that it hydrologically functions like a reservoir. Refer to page 4-14 in the Draft EIS. Therefore, the Draft EIS authors chose to utilize the more stringent requirement of Class "A" waters.

J. For purposes of the Draft EIS, "excessive aquatic plant growth" is most likely associated with any visible aquatic plant growth, which of course would be a normal part of a natural lacustrine system. Since the lake has been managed for a long time to eliminate this from the lake, the Steering Committee will be looking at all the various water quality parameters and trying to balance them with other beneficial uses of fisheries and shoreline recreation.

K. Attempts to control noxious weeds within the lake basin will be continued and will likely be incorporated into the Sediment Management Plan, which will be prepared over the next two years.

7. WA State Department of Fish and Wildlife dated Nov. 23, 1998

A. Thank you for your comment. The CLAMP Steering Committee has chosen not to select a "Preferred Alternative" at this time. They have request that additional information be made available before such a decision is made.

B. It is the desire of the Steering Committee to maintain the current production levels as a minimum condition.

C. Revisions to the Fisheries text have been included in the following Chapter and should address these issues.

D. The General Administration capital budget for 1999-2001 biennium contains money for the design and construction of a modification to the Capitol Lake dam to allow year-round fish passage.

E. The presence of the Capitol Lake dam has allowed past practices, which have lowered the lake during summer months. Recent water quality data from LOTT's Budd Inlet Scientific Study (1998) has documented the water quality impacts of this practice. It is likely that the CLAMP Steering Committee will establish a protocol for any future drawdowns, which also addresses other management concerns such as the impacts to Budd Inlet and fisheries resources.

F. See "E" above

G. These specific word changes have been made to the Fisheries text in the following Chapter.

8. WA State Department of General Administration dated Nov. 23, 1998

A. Thank you for your comment.

B. Thank you for your comment.

C. The CLAMP Steering Committee agrees that additional information on flooding is needed before a "Preferred Alternative" is selected. The grant application to prepare a new flood map for Capitol Lake and its surroundings would help address this issue.

D. The CLAMP Steering Committee also requested a report on the hydraulics of the lake be prepared which would evaluate the forces at various points such as the Capitol Lake dam, the BNSF railroad trestle, Percival Creek bridge, I-5 crossing and Deschutes Parkway.

E. Thank you for your comment.

F. Thank you for your comment.

G. The CLAMP Steering Committee agrees that additional information is needed before a "Preferred Alternative" is selected. Grounds maintenance is an operational cost which will need to be incorporated into the decision-making process of the Steering Committee with any change to current conditions.

H. Estimated costs and impacts are generalized at this programmatic phase and will be refined over time. It is likely that a large portion of the CLAMP Steering Committee discussions will be over how to do the management desired within the limitations of tight budgets. Any Steering Committee decisions about cost sharing will be by consensus, as are all other CLAMP agreements.

9. WA State Department of Natural Resources dated Nov. 23, 1998

A. Past funding by the State Legislature has not kept up with the rate of siltation by the Deschutes River. The Capitol Lake Adaptive Management Plan is the first opportunity for resource agencies, local governments and tribes to make a collective recommendation on behalf of Capitol Lake.

B. This concept is very similar to the basis of the Capitol Lake Adaptive Management Plan.

C. The CLAMP Steering Committee recognizes that fisheries resources will be a key component to future uses in and adjacent to Capitol Lake and will need to be addressed before a "Preferred Alternative" is selected.

D. It should be noted that the Chinook population within the lake basin is a hatchery stock and its population probably exceeds by many times any natural run that may have occurred within Percival Creek. There never was a natural run on the Deschutes River due to Tumwater Falls. Because of these conditions, the Steering Committee will tailor an approach which is unique to this water body, in a similar salmon stock (run-by-run) approach that has been suggested by the National Marine Fisheries Services (NMFS).

E. Subsequent to the Draft EIS the CLAMP Steering Committee was made aware of the historic loss of estuarine wetlands. The Steering Committee realizes that a great deal of filling has

occurred within this basin and is also concerned with the "quality" of any future aquatic environment. This is why additional reports will be prepared within the next two years which deal with sedimentation, lake hydraulics and flooding. It is likely that the Steering Committee will not make a selection of a "Preferred Alternative" until these reports are available.

F. The Washington State Department of General Administration capitol budget for the 1999-2001 biennium, contains money for the design and construction of a modification to the Capitol Lake dam to allow year-round fish passage.

G. As a programmatic EIS, the document does not need to address all issues at the same level of detail. Refer to WAC 197-11-060 (5) Phase Review and the discussion on page 1-4 in the Draft EIS. Should the CLAMP Steering Committee need to address this at a subsequent stage of the Plan, then this could be accomplished at that time.

H. Providing accurate cost estimates of impacts and alternatives has been one of the more difficult and controversial portions of this Draft EIS. Since the CLAMP Steering Committee is concerned with the "quality" of any future aquatic environment within the lake basin, the cost effectiveness of any management action will be an important part of the CLAMP decision-making process.

I. If a major change in the character of Capitol Lake is made from its current setting, it may be appropriate for another department of the state, such as Natural Resources, to manage this area. Such a decision would likely be a part of the Capitol Lake Adaptive Management Plan.

J. Thank you for your comment.

K. Thank you for your comment. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time. They have request that additional information be made available before such a decision is made.

L. Thank you for your comment. This concept is the basis of the Capitol Lake Adaptive Management Plan.

M. Sedimentation within the basin will continue to be an issue, regardless of which alternative is eventually selected. The CLAMP Steering Committee is interested in completing a Sediment Management Plan for the lake within the next two years which fits into other management actions. The Steering Committee will likely discuss the issue of who pays for sediment removal.

N. The CLAMP Steering Committee is interested in holistically addressing sedimentation within the basin. In such an approach the Steering Committee may choose to address dredging within the lake basin regardless of which "Preferred Alternative" is selected. It also realizes that additional sediment samples will be needed before any decisions are made regarding the feasibility of deep water disposal.

O. It is likely that the CLAMP Steering Committee will address this issue when it develops the Sediment Management Plan for the lake basin.

P. Please refer to the discussion on page 4-17 regarding the siphon which was constructed after this fish kill. The siphon works by the introduction of salt water from the Budd Inlet side of the dam into the crater. In doing so, the fresh water is displaced and the area where hydrogen sulfide would concentrate is minimized. There have been no reported fish kills since the installation of the siphon.

LETTERS FROM OTHER STATE AND LOCAL GOVERNMENTS

10. WA State Department of Community, Trade and Economic Development dated Nov. 10, 1998

- The CLAMP Steering Committee recognizes that the aesthetics of the north basin will be a key component regarding future uses in Capitol Lake. This will need to be addressed before a "Preferred Alternative" is selected.

11. Thurston County Conservation District dated Nov. 18, 1999

A. The CLAMP Steering Committee appreciates the role that the Conservation District is playing for watershed planning. The information that is being developed will be valuable to this process and will be incorporated into the adaptive management plan at an appropriate stage.

B. Thank you for your comment. The CLAMP Steering Committee recognizes that fisheries resources will be a key component to future uses in and adjacent to Capitol Lake and will need to be addressed before a "Preferred Alternative" is selected.

C. The preliminary Washington State Department of General Administration capital budget for the 1999-2001 biennium contains money for the design and construction of a modification to the Capitol Lake dam to allow year-round fish passage.

LETTERS AND E-MAIL FROM COMMUNITY GROUPS AND ASSOCIATIONS

12. Black Hills Audubon Society dated Nov. 23, 1998

A. Thank you for your comment. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

B. The CLAMP Steering Committee recognizes that Canada goose management will need to a component to future uses in and adjacent to Capitol Lake and will need to be addressed before a "Preferred Alternative" is selected.

C. Providing accurate cost estimates of impacts and alternative has been one of the more difficult and controversial portions of this Draft EIS. As a programmatic EIS, the document does not need to address all issues at the same level of detail. Very detailed cost estimates were available from the Draft EIS on lake dredging prepared in 1993-1995. Since the CLAMP Steering Committee is concerned that all cost information be equally valid, it is likely that cost effectiveness of any management action will be an important part of the CLAMP decision-making process.

D. The CLAMP Steering Committee is also concerned about the hydraulics of the lake. It has requested that a report be prepared in the next two years which would evaluate the hydraulic forces at various points such as the Capitol Lake dam, the BNSF railroad trestle, Percival Creek bridge, I-5 crossing and Deschutes Parkway. The Steering Committee has also requested another report be prepared on flooding. It is hoped that these reports will provide clearer answers for questions like this.

E. The CLAMP Steering Committee is concerned about Canada goose management. Since the selection of a "Preferred Alternative" may not be accomplished for several years, the management techniques used will have to deal with an over abundance of geese rather than the type of water in the lake basin.

F. An "integrated aquatic vegetation management plan" as described in the Draft EIS would be a plan which describes how, where and when herbicides might be applied in the lake to control algae or aquatic plants. Drawing down the lake and back-filling the basin with salt

water has been used since the 1970's and has accomplished the role. Salt water is toxic to fresh water plants, but no such plan was prepared. It is likely that the CLAMP Steering Committee may develop new protocols for lake drawdowns. At this time many parties have serious questions about continuing the practice of salt water backfilling if in-lake fisheries habitat is to be improved. But this too will an issue which will be addressed by the Steering Committee in the adaptive management plan.

G. The CLAMP Steering Committee agrees that additional information on flooding is needed before a "Preferred Alternative" is selected. The grant application to prepare a new flood map for Capitol Lake and its surroundings would help address this issue.

13. Capitol Lake Towers dated Nov. 18, 1998

– Thank you for your comment and the beautiful pictures of the lake.

14. Evergreen Park Association dated Nov. 9, 1998

A. Thank you for your comment. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time. They have request that additional information be made available before such a decision is made.

B. Please refer to the Washington State Department of Fish and Wildlife letter (#7) which indicates that the cost for a fingerling and yearling facility would be about $1 million each if Capitol Lake was not available.

C. The CLAMP Steering Committee is interested in holistically addressing sedimentation within the basin. In such an approach the Steering Committee may choose to address dredging within the lake basin regardless of which "Preferred Alternative" is selected.

15. Millennium Carillon Association dated Nov. 20, 1998

A. Thank you for your comment. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time. They have requested that additional information be made available before such a decision is made.

B. The CLAMP Steering Committee concurs that sedimentation within the basin will continue to be an issue, regardless of which alternative is eventually selected. The Steering Committee is interested in completing a Sediment Management Plan for the lake within the next two years which fits into other management actions .

C. The Preliminary Assessment of Sea-level Rise in Olympia, Washington: Technical and Policy Implications (1993) indicates that shorelines of the South Sound could be affected by a rising sea level of varying estimates. Many uses along the lake would be affected by increased sea level elevations of this magnitude, since the Capitol Lake dam would not provide protection for tides above 18.40 feet MLLW or 10.67 feet MSL.

16. North Capitol Campus Heritage Park Development Association dated Nov. 17, 1998

– Thank you for your comment. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time. They have requested that additional information be made available before such a decision is made.

17. Olympia/Thurston County Chamber of Commerce dated Nov. 17, 1998

– Thank you for your comment. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time. They have requested that additional information be made available before such a decision is made.

18. People for Puget Sound dated Nov. 23, 1998

A. Please note that the Draft EIS for Capitol Lake did not intend to address the issue of "Should Budd Inlet be dammed and create a fresh water lake." That was resolved in 1947 with the action by the Washington State Legislature in RCW 79.24.160.

B. Please note that the scope of the Draft EIS was not to evaluate the overall estuarine conditions of Puget Sound over which the nine Capitol Lake Adaptive Management Plan Steering Committee members have no direct authority.

C. Thank you for your comment. Please note that pursuant to WAC 197-11-060 (5) Phase Review, a programmatic EIS does not need to address all issues at the same level of detail. Please refer to the discussion on page 1-4 in the Draft EIS.

D. The authors of the Draft EIS believe the characterization regarding fisheries to be accurate. A common assumption was often overlooked when discussing the Estuarine and the Estuary/Lake options. Pages 3-11 to 3-17 indicate that the Capitol Lake dam would remain in place with the gates open or removed. So the questions the CLAMP EIS was seeking to address were: "What sort of an estuary or what quality of an estuary could be created by leaving the existing infrastructure largely intact?" The CLAMP Steering Committee was concerned about the hydraulic forces caused by tidal flows at various points around the lake including the Capitol Lake dam, the BNSF railroad trestle, Percival Creek bridge, I-5 crossing and Deschutes Parkway. This is why they requested that a report be prepared in the next two years which would evaluate these conditions.

E. Thank you for your comment. It was not the intent of the Draft EIS to imply that a fresh water habitat is inherently superior to an estuarine environment. The EIS did not attempt to place values on the various fish species, but was required by the SEPA guidelines to undertake a comprehensive evaluation. Please note that the presence of Chinook salmon is noted as a factor but not the entire emphasis of this section. Therefore, the authors of the Draft EIS believe the description to be accurate (with the addition of corrections noted in this Final EIS), comprehensive and objective.

F. Thank you for your comment. Please note some new water quality data has become available during the production of the Draft EIS which could not be effectively incorporated into the document. One such report is the Budd Inlet Scientific Study, (1998) prepared for the LOTT partnership. The Washington State Department of Ecology, in a letter dated December 16, 1998, requested that additional water quality model runs be performed to identify the possible water quality conditions which might result in lower Budd Inlet. This request has been reviewed by the CLAMP Steering Committee and has been identified as an additional report which will be needed before the selection of a "Preferred Alternative" is made.

G. The CLAMP Steering Committee concurs that sedimentation and flooding are issues which will need to be addressed regardless of which alternative is selected.

H. The CLAMP Steering Committee agrees that additional information on flooding is needed before a "Preferred Alternative" is selected. The grant to prepare a new flood map for Capitol Lake and its surroundings will help address this issue.

I. Sedimentation into the basin will continue to be an issue, regardless of which alternative is eventually selected. The CLAMP Steering Committee is interested in completing a Sediment Management Plan for the lake in the next two years which fits into other management actions. Providing accurate cost estimates of impacts and alternative has been one of the more difficult and controversial portions of this Draft EIS. Since the CLAMP Steering Committee is concerned that all cost information be equally valid, it is likely that cost effectiveness of any management action will be an important part of the CLAMP decision making process.

J. Thank you for your comment.
K. Refer to comment "E" above and the comment letter (#7) from the Washington State Department of Fish and Wildlife dated November 23, 1998.
L. Thank you for your comment.
M. Thank you for your comment.
N. Thank you for your comment. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

19. Puget Sound Gillnetters Association dated Nov. 23, 1998

– Thank you for your comment. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

20. Sasquatch Group Sierra Club dated Nov. 21, 1998

A. Thank you for your comment. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.
B. The Washington State Department of Ecology, in a letter dated December 16, 1998, requested that additional water quality model runs be performed to identify the possible water quality conditions which might result in lower Budd Inlet. This request has been reviewed by the CLAMP Steering Committee and has been identified as an additional report which will be needed before the selection of a "Preferred Alternative" is made.
C. The CLAMP Steering Committee concurs that the control of noxious weeds within the basin will continue to be an issue, regardless of which alternative is eventually selected. The Steering Committee is interested in completing a Sediment Management Plan for the lake within the next two years which fits into other management actions.
D. Thank you for your comment. Please note that the Fisheries section of the Draft EIS text has been revised and is included in the following chapter. This revised text more accurately depicts the current fisheries conditions.

LETTERS FROM INTERESTED PARTIES

21. Tom Badger and Wendy Gersted dated Nov. 22, 1998

A. Thank you for your comment.
B. Thank you for your comment. Please note that pursuant to WAC 197-11-060 (5) Phase Review, a programmatic EIS does not need to address all issues at the same level of detail. Please refer to the discussion on page 1-4 in the Draft EIS.
C. Providing accurate cost estimates of impacts and alternatives has been one of the more difficult and controversial portions of this Draft EIS. Since the CLAMP Steering Committee is concerned that all cost information be equally valid, it is likely that cost effectiveness of any management action will be an important part of the CLAMP decision-making process.
D. Thank you for your comment. Although the rate of sedimentation into the lake has been reduced in recent years, there are no current estimates of how long it will take for the current bed load to be deposited into Capitol Lake (Collins, 1994).

22. Ginny Broadhurst receive Nov. 23, 1998

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

23. Tim Burke dated Nov. 12, 1998

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

24. Martin D. Casey dated Nov. 23, 1998

A. The CLAMP Steering Committee concurs that sedimentation within the basin will continue to be an issue, regardless of which alternative is eventually selected. The Steering Committee is interested in completing a Sediment Management Plan for the lake within the next two years which fits into other management actions .

B. The CLAMP Steering Committee agrees that additional information on flooding is needed before a "Preferred Alternative" is selected. The grant to prepare a new flood map for Capitol Lake and its surroundings will help address this issue.

C. Thank you for your comment.

25. Julie S. Clougherty dated Nov. 23, 1998

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

26. John L. Dean received Nov. 19, 1998

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

27. Shelley Ferer dated Nov. 10, 1998

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

28. Nancy G. B. First dated Nov. 20, 1998

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

29. R. Funkhouser dated Nov. 19, 1998

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

30. George Ging and Joanne Stellini dated Nov. 23, 1998

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

31. Alan E. Goldberg received Nov. 4, 1998

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

32. **Marjoree Halgren dated Dec. 6, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

33. **Peter N. Halgren dated December 8, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

34. **Margaret R. Hellberg dated Nov. 20, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

35. **Winona Henderson dated Nov. 16, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

36. **James C. and Sharon G. Horacek dated Nov. 11, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

37. **Bob and Bonnie Jacobs dated Nov. 23, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time. Calculations of available public shoreline access within Thurston County show that 66.5 percent of the Capitol Lake shoreline is owned by the public. This converts to approximately 14,880 feet and is substantially more publicly owned than any other fresh water body in the county.

38. **Mark Johnson dated Nov. 22, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time. The CLAMP Steering Committee was concerned about the hydraulic forces caused by tidal flows at various points around the lake including the Capitol Lake dam, the BNSF railroad trestle, Percival Creek bridge, I-5 crossing and Deschutes Parkway. This is why they requested that a report be prepared in the next two years which would evaluate these conditions.

39. **Randal Johnson dated Nov. 19, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

40. **Karen Kargianis dated Nov. 23, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

41. **Mr. & Mrs. Ross G. Kincaid dated Nov. 10, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

42. **Lisa L. Lageschulte et. al. (petition) dated Nov. 20, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

43. **Charlie E. Link received Nov. 19, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

44. **Parker MacCready dated Nov. 8, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

45. **Jan McKenzie dated Nov. 20, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

46. **Mark Maurer dated Nov. 17, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

47. **Martin D. Meyer dated Nov. 23, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

48. **Mrs. P. Monroe dated Dec. 9, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

49. **Bob Morse dated Nov. 2, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

50. **Willow Oling dated Nov. 21, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

51. **Greg and Tammy Pelletier dated Nov. 22, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

52. **Betsy Perkins received Nov. 23, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

53. **Eika Petermann dated Nov. 22, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

54. **Ken Peterson dated Nov. 20, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

55. **Cynthia R. Pratt dated Nov. 22, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

56. **Lucile Rohrbeck dated Dec. 5, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

57. **Alex Rosendrantz dated Nov. 5, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

58. **Rochelle Rothaus dated Nov. 22, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

59. **Carla Rutz dated Nov 20, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

60. **Jim Schafer dated Nov 20, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

61. **Ellen S. Silverman dated Nov. 24, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

62. **Rickard C. Smith dated Nov. 22, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

63. **Dave Sparkman received Nov. 23, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

64. **Wendy Sternshein dated Nov. 20, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

65. **M. D. and Cara J. Stinson dated Nov. 23, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

66. Karen Strand received Nov. 5, 1998

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

67. Jeff Swotek dated Nov. 23, 1998

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

68. Curtis D. Tanner dated Nov. 23, 1998

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

69. Barbara Thomas dated Nov. 23, 1998

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

70. E. Sue Victory and Carl K. Holman dated Nov. 20, 1998

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

71. Lauri Vigue dated Nov. 22, 1998

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

72. James M. Weidner dated Nov. 2, 1998

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

E-MAIL FROM INTERESTED PARTIES

73. John Anderson and Marty Chaney dated Nov. 22, 1998

A. Providing accurate cost estimates of impacts and alternatives has been one of the more difficult and controversial portions of this Draft EIS. Since the CLAMP Steering Committee is concerned that all cost information be equally valid, it is likely that cost effectiveness of any management action will be an important part of the CLAMP decision-making process.

B. Sedimentation into the basin will continue to be an issue, regardless of which alternative is eventually selected. The CLAMP Steering Committee is interested in completing a Sediment Management Plan for the lake in the next two years which fits into other management actions.

C. The CLAMP Steering Committee is concerned about Canada goose management. Since the selection of a "Preferred Alternative" may not be accomplished for several years, the management techniques which will be used will have to deal with an over-abundance of geese rather than the type of water in the lake basin.

D. Thank you for your comment.

E. Thank you for your comment.

F. The CLAMP Steering Committee agrees that additional information on flooding is needed before a "Preferred Alternative" is selected. The grant to prepare a new flood map for Capitol Lake and its surroundings will help address this issue.

G. Thank you for your comments.

H. Thank you for your comment. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

4. Lanny Carpenter dated Nov. 23, 1998

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

75. Thad Curtz dated Nov. 26, 1998

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

76. Dudley Deenie dated Nov 22, 1998

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

77. Sue Minakan and Donna Ewing dated Nov. 17, 1998

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

78. Kirk Hanson dated Nov. 21, 1998

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

79. Diane Kurzyna dated Nov. 8, 1998

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

80. Steven Langer dated Nov. 17, 1998

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

81. Joanne Lee dated Nov. 17, 1998

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

82. Hans Littoy Jr. dated Nov 22, 1998

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

83. Shelby Majors dated Nov. 14, 1998

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

84. **Noelle Nordstrom dated Nov 16, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

85. **Richard Pelto dated Nov. 24, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

86. **Paul Pickett dated Nov. 19, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

87. **Elise M. Robinson dated Nov. 9, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

88. **Rita R. Robison dated Nov. 22, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

89. **Shelley Kirk Rudeen dated Nov. 18, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

90. **Bette Shultz dated Nov. 18, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

91. **Jean R. Shaffer dated Nov. 19, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

92. **Toby Thaler dated Nov. 19, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

93. **Jim and Barbara Theiss dated Nov. 15, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

94. **Keith P. Vandeman dated Nov. 20, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

95. **Frances A. Williamson dated Nov. 20, 1998**
- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

POSTCARDS FROM INTERESTED PARTIES

96. **Dave Bristow received Nov. 19, 1998**
   - Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

97. **G. Brownstein received Nov. 20, 1998**
   - Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

98. **Rosa Clawson received Nov. 19, 1998**
   - Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

99. **Josh Courtean received Nov. 20, 1998**
   - Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

100. **Jason Danielson received Nov. 23, 1998**
   - Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

101. **M. Fenyuesi received Nov. 23, 1998**
   - Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

102. **Nate Hayward received November 30, 1998**
   - Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

103. **S. Humphery received Nov. 23, 1998**
   - Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

104. **Christine Johnson received December 1, 1998**
   - Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

105. **Katie Knight received December 2, 1998**
   - Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

106. **Karen Kovich received Nov. 20, 1998**
   - Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

107. **Shannon McFall Nov. 24, 1998**
   - Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

108. Kara Marcoux received Nov. 20, 1998

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

109. A. Mazar received Nov. 19, 1998

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

110. Rachel Mitkani received Nov. 20, 1998

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

111. Heather Marie Marrow received November 30, 1998

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

112. Chad Odwaeny received Nov. 19,1 998

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

113. Kate Patterson received Nov. 23, 1998

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

114. Kathy Peters received December 1, 1998

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

115. Melvin D. Stanley received November 30, 1998

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

116. Peter H. Syben received Nov. 24, 1998

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

117. Gale Thompson received Nov. 23, 1998

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

118. R. Viets received Nov. 20, 1998

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

119. Lia Wallon received Nov. 19, 1998

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

120. Roger Weaver received Nov. 19, 1998

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

121. Ai Yuasa received Nov. 20, 1998

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

122. Connie Wood received Dec. 9, 1998

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

SPEAKERS AT THE NOVEMBER 18, 1998 PUBLIC HEARING

A copy of the minutes from this Public Hearing are included with the written comments. All of the issues raised at the Public Hearing are addressed in the preceding responses to the written comments which were often submitted by the same person or party.

AUTHOR'S NOTE: *The CLAMP Steering Committee staff would like to compliment all who testified and for making this Public Hearing the most productive, courteous and memorable in a 25 year career of public service.*

123. Leonard Soenke

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

124. Grace Soenke

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

125. Theodore Schultz

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

126. Jim Knudsen

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

127. Mike Bahn

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

128. David Shaffert (see letter #17)

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

129. C.E. Link

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

130. Scott Waeschle

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

131. Martin D. Meyer

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

132. Paul Seabert

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

133. Kathy Overhauser

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

134. Maurice A. Click

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

135. Jeff Dickison (see letter #4)

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

136. Lanny Carpenter

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

137. Chris Hawkins

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

138. Lucile Rohrbeck

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

139. Bob Jacobs (see letter #1)

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

140. Dave Sparkman

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

41. George Darkenwald

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

42. Calvin R. Lockwood

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

143. Bob Jacobs

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

144. Ericka Guttman

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

145. Marilyn Showalter

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

146. Sheila Swalling

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

147. Bruce Wishart

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

148. Collum Liska

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

149. Carol Jolly

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

150. Steve Rodruques

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

151. Julie Clougherty

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

152. Betty Stevens

– Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

153. Janel Moore

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

154. Anne Storey

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

155. Stanley Stahl

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

156. David Stevens

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

157. Maurice Fitzgerald

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

158. Mary Lux

- Thank you for your comments. The CLAMP Steering Committee has chosen to not select a "Preferred Alternative" at this time.

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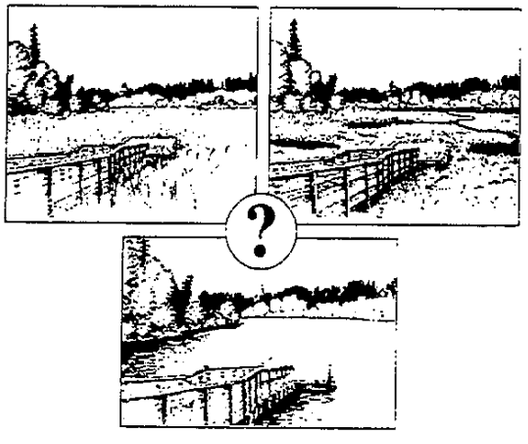
Chapter 6. Errata

Some of the comments to the Draft Environmental Impact Statement indicated that technical corrections were needed to the Fisheries Section, pages 4-38 to 4-42 and other parts of the Draft EIS. Instead of reprinting this entire section, the changes are listed below.

Where changes were required in other parts of the Draft EIS bill format was used. In this format, deletions are noted by strikeouts, and additions are shown by underlining.



ERRATA

The FISHERIES discussion in the Draft EIS found on pages 4-38 to 4-42 has been amended to read as follows. Table 4-5 of the Draft EIS was not changed:

Numerous fish species inhabit Capitol Lake and the Deschutes River. Table 4-5 provides a list of fish species observed since 1975. Fish use of these waters includes habitat for rearing and reproduction, a migration corridor both upstream and downstream to Budd Inlet, and the collection and rearing facilities in Capitol Lake itself and at the Washington State Department of Fish and Wildlife (WDFW) facility adjacent to Tumwater Falls. Other fisheries related facilities include a fish ladder at the tide gate that allows upstream and downstream migration by anadromous salmonids into and out of Capitol Lake. Another fish ladder is located at Tumwater Falls which allows upstream migration of adult salmonids into the Deschutes River watershed. A fish trap is used at the Tumwater Falls Collection Facility to gather adult chinook and steelhead trout to provide an egg supply for the production program. A recreational fishery also is associated with many of the fish populations both in Capitol Lake and the upper Deschutes River. The following discussion provides an overview of the status of fish populations and their habitat for the species of greatest interest in Capitol Lake.

The Pacific salmon inhabiting Capitol Lake and the Deschutes River include chinook salmon *(Oncorhynchus tshawytscha)*, coho salmon *(O. kisutch)*, chum salmon *(O. keta)*, and, in very small numbers, sockeye salmon *(O. nerka)* and pink salmon *(O. gorbuscha)* (K. Keown, personal communication). Resident and anadromous trout include coastal cutthroat trout (O. clarki clarki) and resident rainbow and anadromous steelhead trout *(O. mykiss)*. In the past coho, cutthroat and steelhead from other hatchery facilities were planted into the upper Deschutes Watershed but this practice has been discontinued (K. Kloempken, personal communication). In 1997 only chinook salmon, winter-run steelhead, and legal-sized rainbow trout are cultured at the Tumwater Falls facilities and/or planted in the lake (K. Keown, personal communication).

Chinook Salmon

Because Tumwater Falls presented a barrier to anadromous migration near the upstream end of present-day Capitol Lake, it is believed that no historic chinook runs existed in the Deschutes River nor Percival Creek, which is probably neither large enough nor cool enough to support an historic chinook run (C. Smith, personal communication). With the initiation of chinook juvenile plantings in the 1950s and construction of the fish ladder in 1954, upstream migration around Tumwater Falls became possible for returning adults.

Since there was no native chinook stock, transfers were made from at least 16 different hatcheries which span in geography from the Skagit River in north Puget Sound, to Hood Canal and the Columbia River. Most of the initial stock came from the Soos Creek hatchery in the Green River watershed. In 1962 a fish trap was constructed to capture returning adults for the production program, but some chinook adults were allowed to pass upstream into the watershed. There has been no concerted effort to establish a naturally spawning population above the falls (J. Dickison, personal communication).

Over the years the chinook hatchery stock has been supported through a combination of: incubation of eggs in Percival Creek, and spring and fall release of fish less than one year old and yearlings (fish over one year old) into Capitol Lake (see Appendix E). The Deschutes/Percival Cove chinook culture program is one of the most successful in the Puget Sound and is an important contributor of chinook to the state non-Native American and Native American commercial and sports fisheries (J. Fraser, personal communication). Chinook spawning survey numbers for the Deschutes River and Percival Creek are also provided in Appendix E.

Estuaries provide an important nursery habitat and many, if not most, juvenile fry in natural populations will rear in downstream estuaries and in a wide range of salinities. Stream-type chinook juveniles (which rear in freshwater for up to a year) use low velocity waters along stream margins and behind instream structures, but will tend to move to higher velocity waters before either coho or steelhead juveniles. This behavior appears to provide habitat segregation between these potentially competing species in waters they cohabit. Freshwater rearing chinook are not known to prefer lake rearing during their freshwater residence, although net pen rearing and feeding has proven to be highly successful in producing returning adults for fisheries (C. Smith, personal communication).

Coho Salmon

It is unlikely that coho salmon existed in the upper Deschutes River above Tumwater Falls, however it is possible that a historic coho run existed in Percival Creek below the falls near the SR-101 bridge. Unlike chinook salmon, coho are passed through the Deschutes River fish trap and allowed to reproduce naturally within the watershed. A naturally spawning population also inhabits the headwaters of Percival Creek (J. Dickison, personal communication; K. Kloempken, personal communication; & Appendix E). It is reported that a small plant of coho occurred within the Deschutes watershed in 1986 and 1990, but was discontinued as it is part of the south Puget Sound natural coho spawning study (J. Fraser, personal communication).

Coho juveniles have a year of freshwater residence where they typically inhabit their natal streams. However, coho do rear in lakes for this first year of residence, and their growth and survival can be equally good or better than stream rearing (Johnston et al. 1987).

Chum Salmon

Chum salmon also historically spawned in Percival Creek and continue to do so. Chum salmon do not readily ascend the fish ladder above Tumwater Falls so the development of a self sustaining population in the upper watershed has been limited (Williams et al. 1975 & J. Fraser, personal communication).

Corrections have also been made to the following FISHERIES discussion in the Draft EIS:

- *Pg 2-4: Paragraph 4 - Remove and add the following:*
  Each year, two million chinook salmon fry (juveniles less than one year of age) are planted in ~~Capitol Lake~~/ Percival Cove in March and April. The fry are fed by the Washington State Department of Fish and Wildlife (WDFW) from the time of planting ~~mid-April~~ to late May or early June (J. Fraser, personal communication).

- *Pg 2-5: Paragraph 1 - Add the following as the last sentence.*
  The yearling chinook salmon are typically planted in mid-November and reared until the following spring.

- *Page 4-18: Paragraph 1 - Remove the following:*
  ~~Therefore, there is a potential for fish kills in the like at this time of year.~~

  Replace with the following:
  Although reduced dissolved oxygen (DO) levels in the south basin are a concern to WDFW, it is unlikely that large numbers of adult chinook salmon in an open lake environment would measurably further reduce DO levels (J. Fraser, personal communication).

- *Pg 4-54: Paragraph 4 - Remove the following:*
  ~~WDFW would not release chinook fry directly into the estuary~~.

- *Pg 4-54: Paragraph 5 - Remove the entire Paragraph*

  Replace with the following:
  Under this alternative, the returning salmon would bypass the fish ladder at the Capitol Lake dam. The chinook rearing program would be similar to the current level of effort, which captures adult chinook salmon at the Tumwater Falls fish trap.

20:sp

DRAFT EIS REFERENCES

Documents

Adolfson Associates, Inc.

1994 Capitol Lake - North Lake Disposal Site and Middle Basin Dewatering Facility Wetlands Study. Olympia, Washington.

Aura Nova Consultants, Brown and Caldwell, Inc., Evans-Hamilton, Inc., J.E. Edinger and Associates, Washington State Department of Ecology, Dr. Alan Devol, University of Washington Department of Oceanography

1998 Budd Inlet Scientific Study Final Report. Prepared for The Lacey, Olympia, Tumwater, Thurston County Partnership (LOTT).

Berg, M.E., D.R. Tripp and E.S. Rosenberg

1980 Plant Associations and Primary Productivity of the Nisqually Salt Marsh on Southern Puget Sound, Washington. Northwest Science 54:222-236.

Boule, M.E.

1981 Tidal Wetlands of the Puget Sound Region, Washington. Wetlands 1:47-60.

Bouvee, K.

1978 Probability of Use Curves for the Family Salmonidae. Instream Flow Information Paper No. 4.

Bradfield, G.E. and G.L. Porter

1982 Vegetation Structure and Diversity Components of a Frasier Estuary Tidal Marsh. Canadian Journal of Botany 60:440-451.

Brown and Caldwell

1984 Operations and Maintenance Manual for Capitol Lake Dredge Spoils Treatment Site.

Capitol Lake Restoration Committee

1989 Capitol Lake Action Plan.

CH2M Hill

1978 Water Quality in Capitol Lake, Olympia, Washington. Prepared for the Washington State Departments of Ecology and General Administration.

1977 Capitol Lake Restoration and Recreation Plan. Final Environmental Impact Statement and Supporting Documents. Prepared for the Washington State Department of General Administration.

1976a Capitol Lake Restoration. Design Engineering Report. Prepared for the Washington State Department of General Administration.

1976b Capitol Lake Restoration. Draft Environmental Impact Statement. Prepared for the Washington State Department of General Administration.

Collins, B.

1994 A Study of Rates and Factors Influencing Channel Erosion Along the Deschutes River, Washington, with Application to Watershed Management Planning. Prepared for the Squaxin Island Tribe, Natural Resources Department. Prepared in cooperation with the Thurston Conservation District.

Corps see U.S. Army Corps of Engineers

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe

1979 Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service, Washington, D.C. FWS/OBS-79/31. 103 pages.

Davis, S., S. Berg, and J. Michaud

1993 Budd Inlet/Deschutes River Watershed Characterization. Part II - Water Quality Study. Thurston County Public Health and Social Services Department.

Dethier, M.N.

1990 A Marine and Estuarine Habitat Classification System for Washington State. Washington Natural Heritage Program, Department of Natural Resources. Olympia, Washington. 56 pages.

DGA see Washington State Department of General Administration

Ebasco

1992 Final Report, Element B, Purple Loosestrife: Distribution, Biology, and Ecology. Submitted to the Washington State Department of Ecology.

1986 Specifications for Capitol Lake Maintenance Dredging. 85-140D. Prepared for the Washington State Department of General Administration.

Ecology see Washington State Department of Ecology

Eld Inlet Watershed Management Committee

1989 Eld Inlet Watershed Action Plan. Thurston County, Washington.

Entranco, Inc.

1997 Capitol Lake Drawdown Monitoring Results. Capitol Lake Adaptive Management Plan. Prepared for the Washington State Department of General Administration. November 1997.

1996 Draft Supplemental Environmental Impact Statement, Capitol Lake Restoration and Recreation Plan, and Revised Maintenance Sediment Removal Plan. Prepared for the Washington State Department of General Administration.

1995 Draft Report: Research and Demonstration Project - Pilot Sediment Removal and Mechanical Dewatering Project. Prepared for the Washington State Department of General Administration.

1994 Draft Capitol Lake Sediment Characterization Report. Prepared for the Washington State Department of General Administration.

1990a Capitol Lake Wetland Development Feasibility Analysis. Prepared for the Washington State Department of General Administration.

1990b Erosion/Nonpoint Source Pollution Control Plan - Deschutes River/Capitol Lake System. Prepared for the Washington State Department of General Administration.

1984 Capitol Lake Restoration Analysis. Prepared for the Washington State Department of General Administration.

Entranco, Inc., Adolfson and Associates, Inc., Hartman Associates, Inc., and Hong West & Associates

1996 Capitol Lake Restoration and Recreation Plan Revised Maintenance Sediment Removal Plan. Prepared for the Washington State Department of General Administration.

EPA see U.S. Environmental Protection Agency

Federal Emergency Management Agency (FEMA)

1982 Floodway and Flood Boundary Map of Olympia, Washington. Community Panel 530191-0004. Flood Insurance Rate Maps. Federal Emergency Management Agency.

Forsman, Leonard A., Dennis E. Lewarch, and Lynn L. Larson

1997 LOTT Capitol Lake Pump Station Upgrade. Thurston County. Cultural Resource Overview.

Frenkel, R.E., H.P. Eilers, and C.A. Jefferson

1981 Oregon Coastal Salt Marsh Upper Limits and Tidal Datums. Estuaries 4:198-205.

Groot C. and L. Margolis

1991 Pacific Salmon Life Histories. UBC Press. Vancouver, British Columbia.

Healey, M.C.

1982 Juvenile Pacific Salmon in Estuaries: The Life Support System. In V.S. Kennedy [ed.], Estuarine Comparisons. Academic Press. New York, New York. p. 315-341.

Henderson Inlet Watershed Management Committee

1989 Henderson Inlet Watershed Action Plan. Thurston County, Washington.

Hong West & Associates, Inc.

1994 Geotechnical Engineering Services, Capitol Lake Sediment Control Project. Olympia, Washington. HWA Project No. 92055-2.

Hutchinson, I.

1989 Salinity Tolerance of Plants of Estuarine Wetlands and Associated Uplands. Prepared for Washington State Shorelands and Coastal Zone Management Program: Wetlands Section. Olympia, Washington. 63 pages.

1982 Vegetation-Environment Relations in a Brackish Marsh, Lulu Island, Richmond, British Columbia. Canadian Journal of Botany. 60:452-462.

Johnston, N.T., J.R. Irvine, and C.J. Perrin

1987 Coho Salmon (*Onchorhynchus kisutch*) Utilization of Tributary Lakes and Streams in the Keogh River Drainage, British Columbia. Canada Management Report, Fish Aquatic Science. No. 1973.

Jones and Jones

1986 State Capitol Heritage Park. Prepared for the City of Olympia Planning Department.

Jongejan, Gerrard McNeal

1984 Capitol Lake Middle Basin Rehabilitation Phase Two. Sheet No. 4 - Demolition and Grading Plan.

JWMSA (Jerome W. Morrissette and Associates, Inc.)

1997 Deschutes Parkway Improvements Study. Olympia, Washington.

Kunze, L.M.

1984 Puget Sound Coastal Wetlands: A Summary Report of Biologically Significant Sites. Washington Natural Heritage Program, Department of Natural Resources. Olympia, Washington. 154 pages.

Miller, J.A. and C.A. Simenstad

1997 A Comparative Assessment of a Natural and Created Estuarine Slough as Rearing Habitat for Juvenile Chinook and Coho Salmon. Estuaries 20(4).

Moore, B.C., W.H. Funk, and E. Anderson

1994 Water Quality, Fishery, and Biologic Characteristics in a Shallow, Eutrophic Lake with Dense Macrophyte Populations. Lake and Reservoir Management. 8(2): 175-188.

Nelson, L.S. and K.D. Getsinger

1994 Battling purple loosestrife brings some success. The Wetlands Research Bulletin. Volume 4, Number 1. U.S. Army Corps of Engineers, Waterways Experiment Station.

Nixon, S.W.

1981 Between Coastal Marshes and Coastal Waters: A Review of Twenty Years of Speculation and Research on the Role of Salt Marshes in Estuarine Productivity and Water Chemistry. In P. Hamilton and K.B. MacDonald [ed.], Estuarine and Wetland Processes with Emphasis on Modeling. Plenum Press, New York, New York. p. 437-525.

Olson, et al.

1998 Managing Macrophytes to Improve Fish Growth: A Multi-Lake Experiment. Fish. Management. 23(2):6-12.

Olympia, City of

1994a Comprehensive Plan for Olympia and the Olympia Growth Area. Prepared by the Olympia Community Planning and Development Department and Advance Planning and Historic Preservation.

1994b City of Olympia Wildlife Habitat Study, Final Recommendations. February 1994.

1992 City of Olympia Interim Critical Areas. Chapter 14.10. Prepared by the Olympia Planning Department: Olympia Community Planning and Development Department and Advance Planning and Historic Preservation.

Orsborn, J.F., J.E. Ongerth, G.C. Bailey, S.K. Bhagat, W.H. Funk, C.C. Lomax, and W.C. Mih

1975 Hydraulic and Water Quality Research Studies and Analysis of Capitol Lake Sediment and Restoration Problems, Olympia, Washington. Prepared for the Washington State Department of General Administration.

Pachernegg, S. and E.P. Poeter

1987 Groundwater Flow and Solute Transport Modeling of the Lakes Area - Thurston County, Washington. Prepared for Entranco by the Geological, Geotechnical, and Transportation Engineering Section, Washington State University.

Pacific Groundwater Group

1992 Groundwater Quality Evaluation - Hawks Prairie Landfill Vicinity. Prepared for Thurston County Department of Public Works.

Portico Group, The

1997 Heritage Park, Arc of Statehood Phase, Construction Documents. Permit Plan Set. Prepared for the Washington State Department of General Administration. December 1997.

Portico Group, The, and the SWA Group

1994 Heritage Parks Final Predesign Study. August 1994.

1992a Heritage Park - Draft Predesign Study - Executive Summary. Prepared for the Washington State Department of General Administration.

1992b Heritage Park - The Capitol Green - A Celebration of Washington's Heritage. Draft Predesign Study - Executive Summary. Prepared for the Washington State Department of General Administration.

PTI Environmental Services

1989 Draft Report. Puget Sound Dredged Disposal Analysis. Baseline Survey of Phase II Disposal Sites. Prepared for the Washington State Department of Ecology.

Richard Carothers Associates

1981 Capitol Lake Middle Basin Recreation Site. Prepared for the Washington State Department of General Administration.

Shipman, H.

1990 Vertical Land Movement in Coastal Washington. Washington Geologic Newsletter 18:26-33.

Shreffler, D.K., C.A. Simenstad, and R.M. Thom

1991 Foraging by Juvenile Salmon in a Restored Estuarine Wetland. Estuaries 15(2):204-213.

1990 Temporary Residence by Juvenile Salmon in a Restored Estuarine Wetland. Can. J. Fish. Aquat. Sci. 47:2079-2084.

Shreffler, D.K. and R.M. Thom

1993 Restoration of Urban Estuaries: New Approaches for Site Location and Design. Prepared for Washington State Department of Natural Resources, Olympia, Washington by Battelle/Marine Sciences Laboratory, Sequim, Washington.

Simenstad, C.A., K.L. Fresh, and E.O. Salo

1982 The Role of Puget Sound and Washington Coastal Estuaries in the Life History of Pacific Salmon: An Unappreciated Function. In V.S. Kennedy [ed.], Estuarine Comparisons. Academic Press, New York, New York. p. 343-364.

Simenstad, C.A. and E.O. Salo

1980 Foraging Success as a Determinant of Estuarine and Nearshore Carrying Capacity of Juvenile Chum Salmon (*Oncorhynchus keta*) in Hood Canal, Washington. p. 21-37. In B.R. Metleff and R.A. Neve [ed.], Proceedings of the North Pacific Aquaculture Symposium, Alaska Sea Grant Report 82-2. University of Alaska, Fairbanks, Alaska. p. 379.

Thom, R.M.

1992 Accretion Rates of Low Intertidal Salt Marshes in the Pacific Northwest. Wetlands 12:147-156.

1987 The Biological Importance of Pacific Northwest Estuaries. Northwest Environmental Journal 3:1.

1984 Primary Productivity in Grays Harbor Estuary. Bulletin of the Southern California Academy of Sciences. 83:99-105.

Thom, R.M. and A.B. Borde

1997 Restoration of Puget Sound Habitats. In J. White and K. Banfield [ed.], Proceedings from Our Living Estuary: The Puget Sound Habitat Conference. People for Puget Sound. Seattle, Washington. p. 30-33.

Thurston Conservation District (formerly Thurston County Conservation District)

1994 Upper Deschutes River Sediment Reduction Project. 1993-1994.

1984 Stream Corridor Management Plan for the Deschutes River, Washington.

Thurston County

1994 Thurston County Critical Areas Ordinance.

1994 Thurston County Zoning Ordinance.

1993 Pest and Vegetation Management Policy.

1991 Drainage Design and Erosion Control Manual for Thurston Region, Washington.

Thurston County Advance Planning and Historic Preservation

1995a Budd Inlet - Deschutes River Watershed Action Plan.

1995b Thurston County Comprehensive Plan.

Thurston County Advance Planning and Historic Preservation and Thurston Geodata Center

1995 Official Zoning Map - Thurston County, Washington.

Thurston County Health Department

1992 Northern Thurston County Groundwater Management Plan.

Thurston County Parks and Recreation Department

1995 Integrated Pest Management Plan.

1994 Draft Chehalis Western Trail - Master Design and Development Plan.

Thurston County Public Health and Social Services Department

1995 The Direct and Cumulative Effects of Gravel Mining on Ground Water Within Thurston County, Washington.

Thurston County Public Health and Social Services Department, Environmental Health Division

1997 Thurston County Water Resources Monitoring Report, 1995-1996 Water Year. Olympia, Washington.

1991 High Risk Waste Evaluation Guidelines, Olympia, Washington.

Thurston County Water and Waste Management Department

1995 Aquatic Plant Survey of Selected Lakes in Thurston County.

1993 Thurston County Solid Waste Management Plan. Solid Waste Division.

Thurston Regional Planning Council

1990 Shoreline Master Program for the Thurston Region.

1988 Capitol Lake Restoration Committee Report and Proposed Action Plan.

Trotter, P.

1989 Coastal Cutthroat Trout: A Life History Compendium. Trans. Am. Fish. Soc. 118: 463-473.

Tumwater, City of

1994 Tumwater Land Use Plan. An Element of the Tumwater Comprehensive Plan.

1993 Deschutes Riparian Habitat Rehabilitation Plan.

1991 Wetlands Protection Ordinance No. 1278.

1991 City of Tumwater Conservation Plan.

U.S. Army Corps of Engineers

No date Wetland Plants of the Pacific Northwest. Seattle District, U.S. Army Corps of Engineers.

U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, Washington State Department of Natural Resources, and Washington State Department of Ecology

1989 Puget Sound Dredged Disposal Analysis (PSDDA). Management Plan Report (MPR) for Unconfined, Open-Water Disposal of Dredged Material, Phase II (North and South Puget Sound).

U.S. Department of Agriculture, Puget Sound Cooperative River Basin Planning Team

1990 Deschutes River/Budd Inlet Watersheds - Thurston County, Washington.

U.S. Department of Agriculture, Soil Conservation Service (USDA SCS)

1990 Soil Survey of Thurston County, Washington.

U.S. Environmental Protection Agency (EPA)

1971 Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances. NTID300.1.

U.S. Fish and Wildlife Service

1979 Classification of Wetlands and Deepwater Habitats of the United States.

U.S. Geological Survey

1994a Hydrology and Quality of Ground Water in Northern Thurston County, Washington. Water Resources Investigations Report 92-4109. Prepared in cooperation with Thurston County Department of Health.

1994b Water Resources Data - Washington - Water Year 1993. U.S. Geological Survey Water-Data Report WA-93-1.

1982 Water Resources Data for Washington. Volume 1. Western Washington. U.S. Geological Survey Water-Data Report WA-80-1.

Walker and Byrne

1970 Hydrographic Survey of Capitol Lake, Olympia, Washington. Prepared for the General Services Administration of Washington.

Washington Administrative Code (WAC)

1992 Water Quality Standards for Surface Waters of Washington State. WAC 173-201A.

Washington State Department of Ecology (Ecology)

1992 Stormwater Management Manual for the Puget Sound Basin.

1976 Reconnaissance Data on Lakes in Washington. Clark, Cowlitz, Grays Harbor, Lewis, Pacific, Skamania, and Thurston Counties. Water-Supply Bulletin 43, Volume 4. Prepared in cooperation with U.S. Geological Survey.

Washington State Department of Fish and Wildlife (WDFW)

1996 Priority Habitats and Species List, Habitat Program. January 1996.

1995a Priority Habitats and Species List.

1995b Wildlife Survey Data.

1991 Management Recommendations for Washington's Priority Habitats and Species.

Washington State Department of General Administration (DGA)

1997 Final Environmental Impact Statement for Heritage Park.

1986 SEPA Environmental Checklist for Capitol Lake Dam Repair and Dredging.

1978 Specifications for Capitol Lake Restoration, Olympia, Washington. Project No. 73-565.

WIDCO

1982 Permit Application Package - Mining and Reclamation Plan - Centralia Mine, Centralia, Washington.

Williams, R.W., R.M. Laramie, and J.J. Ames

1975 A Catalog of Washington Streams and Salmon Utilization. Washington State Department of Fish and Wildlife. Olympia, Washington.

Wydoski, R.S. and R.R. Whitney

1979 Inland Fishes of Washington. University of Washington Press. Seattle, Washington.

Personal Communications

Benson, Ted. Washington State Department of Natural Resources. Telephone conversation with David Morency of Entranco, September 1995.

Caldwell, Jean. Caldwell & Associates Environmental Consulting. Letter to Emmett Dolby of the City of Olympia Public Works Department dated August 14, 1998.

Carlson, Chris. City of Tumwater. Letter to Washington State Department of General Administration, dated November 9, 1995.

Case, Nancy. Hartman Associates, Inc. Telephone conversation with David Morency of Entranco, August 1995.

Dickison, Jeff. Squaxin Island Tribe Biologist. Meeting with Daie Anderson of Entranco, August 1998.

Dolstad, Diane K. Washington State Department of Agriculture. Letter dated January 22, 1996 to Nick Cockrell, Washington State Department of General Administration.

Fraser, Jim. Habitat Biologist, Washington State Department of Fish and Wildlife. Telephone conversation with Bill Taylor of Taylor Associates, February 19, 1998. Letter dated May 6, 1998 to the Washington State Department of Administration.

Genrich, Marty. Washington State Department of Fish and Wildlife. Telephone conversation with David Morency of Entranco, January 1996.

Giles, Suzanne. Scientist, Evans-Hamilton Consultants. Telephone conversation and e-mail messages with Liam Antrim of Battelle Marine Sciences, February 1998.

Gloman, Nancy J. United States Fish and Wildlife Service. Letter to Jonathan Olds of Entranco, February 23, 1998.

Griffith, Gregory. Washington State Office of Archaeology and Historic Preservation. Letter dated September 20, 1995.

Guggenmof, Lori. Washington State Department of Fish and Wildlife. Letter to Jonathan Olds of Entranco, February 25, 1998.

Hallick, Molly. Fisheries Biologist, Native Non-game Fishes Office, Washington State Department of Fish and Wildlife. Telephone conversation with Bill Taylor of Taylor Associates, March 9, 1998.

Ikerd, Cliff. Telephone conversation with David Morency of Entranco, September 16, 1998.

Jackson, Steve. District Fisheries Biologist, Washington State Department of Fish and Wildlife. Telephone conversation with Bill Taylor of Taylor Associates, March 3, 1998.

Johnson, Rick. Thurston County Noxious Weed Control Agency. Telephone conversation with Nick Cockrell of the Washington State Department of General Administration, January 1996.

Keown, Keith. South Sound Complex Manager, Washington State Department of Fish and Wildlife. Conversation at Agency Comment Meeting, October 25, 1995. Telephone conversation with David Morency of Entranco, January 1996. Interdepartmental memo to Mike Kuttel, providing a summary of the South Sound Hatchery Complex program, 1997. Telephone conversation with Bill Taylor of Taylor Associates, February 23, 1998.

Kloempken, K. Data Technician, Washington State Department of Fish and Wildlife. Telephone conversation with Bill Taylor of Taylor Associates, March 11, 1998.

Lantz, Lisa. Washington State Noxious Weed Control Board. Telephone conversation with David Morency of Entranco, July 1995.

Leslie, Mike. Muckleshoot Indian Tribe. Telephone conversation with Bill Taylor of Taylor Associates, November 24, 1997.

Meyer, Dennis. Landscape Architect, The Portico Group. Telephone conversation with Joy Michaud of Envirovision, March 6, 1998.

Michaels, Jim. U.S. Fish and Wildlife Service, Olympia. Telephone conversation with David Morency of Entranco, January 1996.

Shirato, Greg. Wildlife Biologist, Washington State Department of Fish and Wildlife. Telephone conversation with Liam Antrim of Battelle Marine Sciences, February 23, 1998.

Smith, Carol. Chinook Stock Fisheries Manager, Washington State Department of Fish and Wildlife. Telephone conversation with Bill Taylor of Taylor Associates, March 9, 1998.

Turner, Marilyn. Thurston Regional Planning Council. Telephone conversation with David Morency of Entranco, March 1994.

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