VI. Focus Group Comments

Focus Group Concept

The Department of General Administration held a focus group session on Saturday, June 20, 2009, which was attended by 14 citizens. The intent of this focus group was to explore the potential for creating innovative, consensual solutions that bridge the differing alternatives for the Capitol Lake Basin. A desired outcome for the session was to generate ideas that could provide some fresh insight into the overall discussions and deliberations on resolving the future status of the Capitol Lake Basin.

The overall approach to the focus group session utilized several facets of the Fisher and Ury model of interest-based negotiation. The session began with participants being asked to avoid emphasizing which alternative they preferred for Capitol Lake and instead focus on the reasons *why* they held that opinion. This activity allowed participants to discover which interests they shared, those that were simply different, or those that were in direct conflict with one another. The next step for focus group participants was to brainstorm options that sought to integrate participant interests within each alternative for Capitol Lake.

Focus Group Interests

When asked to identify their wants, hopes, fears, and concerns for each alternative, participants shared the following major opinion trends:

Status Quo:

- Fails to deal with any long-term issues, especially environmental
- Wetland conditions breed health concerns (West Nile virus)

Managed Lake:

- Covering the high cost of the improvement and the need for cost sharing
- Aesthetics and historic urban design
- Retaining current public civic activities, such as festivals
- Protecting freshwater species that currently use the lake

Dual Basin:

- Covering the high cost of the improvement and the need for cost sharing
- Impact of the alternative to the economic diversity, viability of the tax base
- Complexity of sediment management
- Alternative may not meet goals of aesthetics or being a “compromise” between managed lake and estuary

Estuary:

- Covering the high cost of the improvement and the need for cost sharing
- Impact of the alternative to the economic diversity, viability of the tax base
- Complexity of sediment management and impact to Port of Olympia and marinas
- Restores natural functions and improves water quality

All Alternatives:

- There is no thorough watershed analysis that included an approach for sediment management.

Focus Group Options

Options fulfill interests. To this end, participants were asked to brainstorm options for each alternative that not only met their interests, but the interests of others in the room. The highlights of those responses by alternatives that received support from the group were:

Status Quo:

- Mitigate loss of recreational activities and aesthetic qualities with improvements (fill and build park, build boardwalks, create freshwater access elsewhere)
- Take this alternative off the table

Managed Lake:

- Restore Budd Inlet fish use, nearshore, and shoreline habitat as mitigation for continuing the lake

Dual Basin:

- No real options offered

Estuary:

- Restore the estuary into a natural functioning system with all of the pieces working together
- Determine if there are compelling reasons to diverge from the Capitol Campus design
- Educate people about the benefit of natural systems over manmade systems
- Introduce new estuary-oriented festivals

All Alternatives:

- Establish an interjurisdictional body for water quality management and sediment management from the upper Deschutes River to Budd Inlet
- Develop a structure that oversees/administers/governs dredging and other costs
- Create an educational video of Lake and Budd Bay and how each alternative would affect them

Facilitator's Observations

The status quo and the dual basin alternatives were the least popular among the participants. They perceived the status quo alternative as accomplishing nothing and the dual basin alternative as being a poor compromise between the two main alternatives.

For those individuals that supported the estuary alternative, going forward with the managed lake alternative potentially would gain greater acceptance if there were a well thought-out and funded approach to environmental remediation for the Deschutes River and Budd Inlet. This would include water quality improvements in the freshwater and nearshore environments and shoreline improvements that would benefit fish and wildlife.

For those individuals that supported the managed lake alternative, the estuary alternative would be more palatable if there was clear commitment to an action plan for sediment management. Resolving the sediment management issue "equitably" is interpreted as sharing in dredging costs and commitment towards facilitating a fair permitting process when dredging becomes necessary. This would require an interjurisdictional approach involving private interests (marinas and environmental groups), special use districts (port), city, county, state, tribal, and federal agencies.

Both of these approaches may require a level of planning and funding equal to or perhaps greater than the proposed alternatives for Capitol Lake. It also is worthy to note that both approaches may prove to be a necessary eventuality regardless of the alternative selected.

IN ATTENDANCE:

Frank Anderson
Patricia Pyle, pylepat@yahoo.com
Paul Spivak, szj4@yahoo.com
Sue Patuude, convergence@wildblue.net
Jim Legenfelder, emilyrayjimlegenfelder@msn.com
Angela Ruiz, amruiz1@comcast.net
Maureen Morris, mlmorris4@comcast.net
Nancy Stevenson, nancycstevenson@comcast.net
Eve Fagergren, evefagergren@gmail.com
Gary Franklin, gary.franklin@comcast.net
Donna Nikerson, d.j.nick@comcast.net
Dan Grosboll, dgrosboll@pugetsound.org
Brenda Hood, bbinoly@comcast.net

Meeting facilitated by John Kliem and Debbie Holden. Presentation about the history and future of Capitol Lake by Nathaniel Jones, Department of General Administration and Steven Morrison, Thurston Regional Planning Council.

1. PURPOSE OF THE DAY / FOCUS

How we frame our community discussions makes a difference as to how well we solve community problems.

2. AGENDA

- How to we find consensus on Capitol Lake?
- Common Knowledge: A review of the Alternatives for Capitol Lake
- Identifying interests for each alternative
- Creating options that meet interests
- Wrap-up and what's next

3. DISCUSSION OF INTERESTS AND OPTIONS

POSITIONS:

- Where someone stands on an argument / issue
- Why focus on interests, not positions:
    - Focusing on Positions:
        - Less attention to meeting the concerns of people
        - Endangers relationships
        - Gets more complex with large groups
        - Becomes an argument that is inefficient
        - Giving in is no answer
            - Opportunities lost

INTERESTS:

- Interests are the hopes, fears, concerns & wants we hold; they define the problem for us
- Behind opposing positions lie compatible & conflicting interest
- We find our interests by asking "why" or "why not"
- Recognize that each "side" has multiple, prioritized interests
    - Wise solutions reconcile interests, not solutions
    - Wise solutions emphasize shared interests

OPTIONS:

- Options are ways to fulfill interests
    - How to come up with good options?
        - Don't assume a fixed pie and only one answer
        - Help the "other side" solve their problem
        - It's okay to brainstorm; to take risks
        - Emphasize solutions that allow for mutual gain
        - Create choices that make decisions easy

4. PRESENTATION

Presentation of the history and future of Capitol Lake by Nathaniel Jones and Steven Morrison with an in-depth discussion of the four alternatives and eight technical analysis topics:

Four Alternatives for Capitol Lake

1. Status Quo
2. Managed Lake
3. Dual Basin
4. Estuary

Eight Technical Analysis Topics

1. Sediment Management
2. Habitat

3. Water Quality
4. Infrastructure
5. Flooding
6. Costs
7. Public Recreation
8. Cultural & Spiritual Resources

5. BRAINSTORMING SESSION

INTERESTS

Identifying Interests for each Alternative

- Pair up into a team
- Share and discuss your interests for each alternative in team
- Each pair identifies three priority interests for each alternative
- Write interests on post-it notes and stick on appropriate "interest sheet"
- Team reports

Questions to Think About: Interests

- Why do I want what I want? Am I sure?
- Have I prioritized the issues that are important to me?
- Am I confused about "where they are coming from?"
- Have I failed to consider what I would want if I was in their shoes?

INTERESTS WALL NOTES

STATUS QUO	MANAGED LAKE	DUAL BASIN	ESTUARY
Not viable because addresses nothing (nothing-burger)	Who is going to pay and get all parties to agree to management implementation?	Increases # of entities / complexity of sediment management	Increases # of entities / complexity of sediment management
Doesn't appear to address any problems (but keeps building existing [problems]?)	Lake may maintain & increase safe, thriving walkable downtown	Impact to economic diversity, viability, contribution to tax base	Impact to economic diversity, viability, contribution to tax base
Does not deal with long-term issues	Boat Festivals (races, outdoor fair)	Restores natural functioning system / habitat	Restores natural functioning system / habitat
Mosquito / West Nile Virus threat	Reflecting pool for Capitol	Reflecting pool for Capitol	Huge change – civic memories
Cost	Cost sharing	Cost Sharing	Cost Sharing
Unhealthy water	Highest cost	Major tax-payer cost	Property values
Gradual delay of change	Current aesthetics maintained as a jewel of Olympia and for the State	May be weird aesthetic (gross sheet pilings in black & white photos – not an Oly postcard)	Useful to conduct unbiased survey of lake users to determine their potential use if estuary
Ignores environmental and water quality	Poor role model in connection to Puget Sound	May not substantially meet either goal	Potentially large adverse impact on economy
Loss of recreation and aesthetic value	Current wildlife (bats, purple marten) have adapted	Concerns about retaining working Port & Marinas	Concerns about retaining working Port & Marinas
Fear of unknown	Bats	Extra cost for no clear benefit	Water quality
Fear of increased flood risk	Weight given to historical design of Capitol Campus	Change: daily routine, visible landmarks in Olympia	Unconvinced that dam removal will make critical difference re: water quality & salmonids
Wastes effort put in so far	Retains civic rituals	Retains civic rituals	Sustainable
Lack of / need for watershed analysis including sediment mgmt & water quality	Lack of / need for watershed analysis including sediment mgmt & water quality	Lack of / need for watershed analysis including sediment mgmt & water quality	Lack of / need for watershed analysis including sediment mgmt & water quality
			Tidal rhythm

OPTIONS

Creating Options that Meet Interests

- Pair up into teams
- Share / discuss your options for each alternative in your team. Brainstorm new ones!
- Write 3 to 5 options on post-it notes & stick on appropriate "options sheet"
- Team reports

Questions to Think About: Options

- Does the situation look as though someone must win, the other must lose?
- Is it possible that our interests are compatible?
- Is there a chance where we both have things to gain?
- Have we brainstormed all the possibilities for each alternative?
- Have we reached a stalemate?

Options You Favor Most!

- Study our Interests & Options and think back on our conversations
- Choose your two most favored options
- Put a dot on each

OPTIONS WALL NOTES

STATUS QUO	MANAGED LAKE	DUAL BASIN	ESTUARY	ALL ALTERNATIVES
Mitigate loss of recreational & aesthetics: Nature trails elsewhere, public access to other lakes (Ward, etc.), boat launches	Public improvement district for sediment management Benefit / cost	Huge Change: civic memories and rituals -- Create visual of reflecting pond and recreational interactions with the waterbody	● Estuary oriented festivals: canoe / kayak guided trips, salmon festivals with Tribal involvement	Economic analysis of all groups affected
● Fill in lake except where river will exist. Farming, new buildable land, park?	● ● ● ● Restore Budd Inlet nearshore and shoreline habitat as mitigation for continued lake; restore pocket estuaries / fish passage at Budd Inlet		Create destination tourist attraction of dam removal (only dam at estuary mouth) study long term	Watershed analysis of impact from Falls to Upper Budd Inlet
● Take status quo and dual basin off the table	Detailed cost sharing plan that's equitable		If lake goes away, need to restore another nearby lake and protect & preserve for	More detailed study clarifying dredge disposal options

STATUS QUO	MANAGED LAKE	DUAL BASIN	ESTUARY	ALL ALTERNATIVES
			migratory birds and/or bats (restore nearby habitats for user-group wildlife)	
Mosquito control: bat protection, swallow habitat	Detailed picture of recreational use		● Campaign to educate about returning back to NATURAL system (natural tidal, health v. MANMADE)	● Cost sharing long-term plan including private, public, etc
● Create system of boardwalks as lake fills in			Huge Change: Civic memories & rituals -- Create visual of reflecting pond & recreational interaction with water body	● Permitting process (including local, state, tribes) for on-going open dredge permit approved to address changing conditions
			● ● Determine if there are compelling reasons (e.g., scientifically valid) to diverge from original (1937 -51) Capitol Campus design	● ● Interlocal agreement including tribes, multijurisdictional authority to manage water quality and sediment management and watershed health
			Recalculate cost of initial managed lake and include economic costs ($167/yd^3 v. $97/yd^3)	● Educational video of Lake and Budd Bay – changes under each option (dealing with urban legend)
			Conduct surveys to gather broader information on desires and preferences: visitors to lake, downtown users regarding civic rituals, broader community	● Develop mechanism / structure to deal with dredging & other costs
			Conduct economic impact study of replacing lake with estuary	

STATUS QUO	MANAGED LAKE	DUAL BASIN	ESTUARY	ALL ALTERNATIVES
			Conduct a public health risk assessment of potential health risks of managed lake vs. estuary	
			Divide up cost of sediment removal equitably among government & private	
			● ● Restore "Capitol Lake" back to the Deschutes Estuary. To make this natural functioning system work again with all pieces working together consider: 1. Cost-sharing district development to fund continued use of all on-going water uses: Port, Recreation, Fish & Wildlife, Business Interests; 2. Develop new estuary-based cultural events that use current events as models ● 3. Re-open family recreational areas: saltwater swim areas (like Twanoh St. Park, sailboat lessons, etc.) 4. Promote saltwater business interests – current marinas, etc. 5. Celebrate	

STATUS QUO	MANAGED LAKE	DUAL BASIN	ESTUARY	ALL ALTERNATIVES
			Deschutes Estuary as a Crown Jewel of the Puget Sound at the Capitol 6. Sustain the Pacific NW Marine Heritage	

VII. Community Position Papers

During the Alternative Analysis review process, General Administration received a number a number of position papers from various community interest groups. Also included in this category are op-ed statements to the local print media, and articles regarding the CLAMP process found in other local magazines.

A. Position Papers

June 29, 2009

Nathaniel Jones, Senior Facilities Manager
WA General Administration - Facilities Division
PO Box 41011
Olympia, WA 98504-1011

Dear Nathaniel:

The Black Hills Audubon Society has been involved in CLAMP as a public interest group since CLAMP's early days. We have continued to learn about the possibilities for and difficulties of restoring the Deschutes estuary through review of the detailed technical reports, attendance at steering committee deliberations, participation in the focus group sessions and various public dialogues within the CLAMP process. We have grown increasingly convinced that restoring the Deschutes River to an estuary is the best alternative choice.

Findings from the numerous and comprehensive CLAMP studies indicate that the estuary alternative represents a low long term cost alternative that would generate a high amount of public benefits in terms of wildlife, recreation, ecological services, and economic benefits to the local economy. The managed lake alternative, which is perhaps more popular with the general public, represents a 70 percent higher total implementation cost than the estuary alternative, with fewer overall public benefits (CLAMP 2007 net benefit analysis). Indeed, findings of a 1997 Ecological Economics study demonstrated that compared to all other biomes, estuaries generate the highest value of ecosystem goods and services per hectare. The estuary alternative simply makes sense at many levels.

However, should the estuary alternative be chosen, it is important that the sources of pollution currently in lower Budd Inlet, the Capitol Lake and Deschutes River be assessed and cleaned up first. Restoring the Deschutes estuary will return the force of the Deschutes as the second most important river system that influences South Sound's circulation. The restoration of the Deschutes estuary will transport not only sediment but also pollutants with the outgoing tide and transport the lower Budd Inlet pollutants back up the sub estuary with the incoming tide. In sum, we will see a mixing of the pollutants between the Deschutes and lower Budd Inlet. We will also see some kind of mixing of these pollutants up Budd Inlet and throughout other areas of South Sound. The Hydrodynamics and Sediment Transport Modeling report (2006) did not model past the mouth of Budd Inlet but did indicate that the sediment (and likely, any pollutants) would go beyond Budd Inlet. Given the economic importance of a healthy South Sound for fish, shellfish, birds and other ecosystem benefits, it is important that the probable sources of pollutants in both the Deschutes and lower Budd Inlet be identified and controlled first before restoration takes place. Only then will the Deschutes estuary restoration be highly beneficial for South Sound.

Sediment has been seen largely as a cost in the various CLAMP analyses. However, good, clean sediment is a benefit to an estuarine ecosystem. It increases beach formation and is an important component of the Puget Sound basin's gravelly nearshore areas that are prime salmon habitat. Return of the Deschutes River sediment to Southern Puget Sound would not only increase salmon habitat but would benefit homeowners by building up their beaches and lessening the impacts from storm damage. At the same time, too much sediment results in turbidity problems. Improved land use management within the

Deschutes River basin and lower Budd Inlet would help prevent further increases in sediment levels while helping to resolve the current ground water problems. Comprehensive management of sub estuaries in Puget Sound will be part of the larger solution for restoring the health of Puget Sound by 2020, the goal of the Puget Sound Partnership. Restoring the Deschutes Estuary, with a comprehensive management approach, will be a contribution to this larger goal.

Adaptive management looks for solutions that incorporate new information and the collaborative thinking of a multi-sector group of stakeholders. Possible solutions that allow ecosystem function while mitigating the impacts and satisfying a variety of interests (for example, relocating the marinas to areas nearby where dredging would either not be needed or be needed less frequently, among other innovative approaches) could be a part of the next round of discussion as we move forward in the decision making process.

I thank you and other key individuals, including Steven Morrison, Curtis Tanner, and Margen Carlson, that have made the CLAMP process work so well over the years.

Sincerely,

Donna J. Nickerson

Donna J. Nickerson
Chair, Conservation Committee

cc: BHAS President and Conservation Committee Members

Nathaniel

Olympia Yacht Club

201 Simmons Street NW
Olympia, WA 98501

May 19, 2009

The Honorable Linda Villegas Bremer
Washington State Department of General Administration
P.O. Box 41000
Olympia, Washington 98504-1000

Dear Director Villegas Bremer:

As you know, the Washington State Department of General Administration as one of the seven governmental entities represented on the Capital Lake Adaptive Management Plan (CLAMP) Steering Committee, will soon be making its recommendation regarding the four alternatives presented in the CLAMP study.

The pending decision will directly affect the Olympia Yacht Club (OYC) as a water-dependent organization, and its membership of local citizens. Attached is a position paper outlining the OYC concerns, along with reasons why we support maintaining Capitol Lake through the Managed Lake Alternative. Converting Capitol Lake to an estuary by removing the 5th Avenue dam would have huge implications to the entire watershed, our local economies, iconic heritage as a capital city, and way of life.

We strongly urge you to support maintaining Capitol Lake by recommending the CLAMP Managed Lake Alternative to the Department of General Administration.

Also, needed maintenance dredging of the Lake has been held in abeyance for the past 12 years pending the outcome of this study. We urge you to recommend GA initiate a much needed maintenance dredge within the immediate future.

Let's work together with a real commitment to the future management efforts that are going to be necessary to protect the Deschutes watershed and the water issues of the river and lower Budd Inlet.

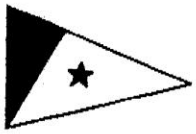
Sincerely,

Mike Contris, Chair
Board of Trustees
Olympia Yacht Club

Attachment

COPY

RECEIVED
MAY 21 2009
GENERAL ADMINISTRATION
OFFICE OF THE DIRECTOR



Olympia Yacht Club
Position Paper on Capitol Lake
Adopted May 13, 2009

Position

The Olympia Yacht Club (OYC) strongly supports maintaining Capitol Lake through the Managed Lake Alternative.

After lengthy review and involvement, the OYC has concluded that only with the Managed Lake Alternative as presented in the Capitol Lake Adaptive Management Plan (CLAMP) do we retain Olympia's character, our city waterfront and safe harbor, and an operating port facility. If either of the Estuary Alternatives were selected and put in place, the Olympia community would lose not only Capitol Lake, but would very likely lose Percival Landing, the marinas and other water-dependent activities, and the Port of Olympia's waterfront facility. The public also would lose a significant part of our waterfront culture, our quality of life, and the attractions that are unique and special to Olympia.

OYC Involvement

OYC is a water-dependent, community-based organization that has existed in the same general location since-1904. The marina and facilities are located downtown, on the city waterfront between Percival Landing and the Deschutes waterway. Our organization of approximately 500 members from around the region will be significantly affected by the pending decision.

OYC's position on this issue goes well beyond the impact to our facility. We are a diverse organization made up of many generations of local residents who have been part of the history, culture and development of this region. We are your teachers and small business owners, mariners and electricians, public servants and entrepreneurs. And yes, some of us are ecologists, engineers, lawyers, judges, community activists, historians and natural resource scientists. Some of us were here when the original decision that resulted in the formation of Capitol Lake was made, a thoughtful process that has produced a site of great cultural and social significance. We bring both the expertise and the hindsight to know that creating Capitol Lake was the right decision.

Drawbacks of the Estuary Alternatives

OYC does not believe it is feasible to proceed with either estuary alternatives AND maintain a viable working waterfront and our community's valued water related activities. Issues of concern that OYC wishes to have on the record include:

1. Sedimentation

How the sediment has been and will be managed in the future is a central issue in the current Lake versus Estuary debate.

The Deschutes River system produces and delivers to lower Budd Inlet approximately 35,000 cubic yards of sediment per year (some years less and some years more – for example, significantly more in 2008 and 2009). This natural phenomenon occurs year after year as it has since time immemorial.

Nautical charts from the mid 19th century show that all of lower Budd Inlet was an extensive mud flat at low water. Early settlers of Olympia and Thurston County had to construct ***a pier nearly a mile long across these mud flats*** to gain access to water depths suitable for navigation.

During the late 19th century, the first of several major dredge operations occurred, funded primarily by the federal government. The dredge spoils were used to fill in the tidelands to create large areas for development of downtown Olympia and the Port area. Dredging also ensured adequate water depth for navigation purposes.

In 1951, the state of Washington created Capitol Lake by constructing the current 5th Avenue dam. The dam reduced the need for major dredging of lower Budd Inlet to maintain water depths needed for navigation, and as a result the city waterfront began evolving into its present form.

Today, as a result of Capitol Lake's existence, we have a bustling working waterfront extending from the Port to Percival Landing. The multiple marinas and the city's Percival Landing provide ideal sheltered moorage for approximately 450 recreational boats, including those permanently moored here by local residents, and visitors from around Puget Sound.

This setting, with its fine restaurants and shops along the Percival Boardwalk, attracts thousands of residents and visitors each year by land and by sea. Percival Landing is a major recreational draw and is the hub for major community events such as the Wooden Boat Festival, Harbor Days and Lakefair.

Are we prepared to allow Budd Inlet to revert back to a mud flat similar to what Olympia's original settlers were faced with? Are we prepared to lose our water access and safe harbor?

2. Unsustainable dredging

All of the amenities described above are at risk with the two proposed Estuary Alternatives. Approximately 900,000 cubic yards of sediment has accumulated in Capitol Lake since 1951. Despite the Estuary options' planned pre-dredge, about half of this accumulated sediment would be flushed into the Percival Landing-City waterfront area if the Capitol Lake dam were removed. Maintaining current water depths along the city waterfront and Percival Landing/Port area would require ***dredging every three to five years***. Under the proposed Estuary Alternatives, the responsibility to conduct the necessary dredging to maintain current water depth would be shifted from the state of Washington to the four waterfront marinas, the City of Olympia (Percival Landing), and the Port. This is both impractical and economically unfeasible. The Olympia Yacht Club's estimated cost for its share of the first dredge cycle is approximately ***$4 million - $6 million***. It is very likely that the other City waterfront operators would be faced with similar costs.

3. Lack of disposal sites

Contamination issues with both the Budd Inlet and Capitol Lake sediments preclude the use of currently designated open water disposal sites. The only disposal sites available presently are upland hazardous waste or upland reclamation sites, which require transportation by truck or rail. There is no rail access to the City waterfront or Percival Landing area. Sediment dewatering and transferring the material onto railcar or truck requires considerable space for the safe operation and maneuvering of heavy equipment. ***This would require limiting or restricting public access to the City waterfront for up to six months during dredging operations***. It is difficult to picture how this could occur.

4. Permitting uncertainties

At least 15 governmental and tribal agencies are currently involved in the permit approval process. Permit approval time is highly uncertain. Currently, it is not unusual for the process associated with federal, state and local ***permitting to take several years***. Dredging permits stipulate that in-water operation is restricted to certain months of the year or "fishery windows." This "window" varies by fish species and location. If a dredge operation cannot be completed within a window, in-water operation has to cease and be held in abeyance, usually several months, until the next window.

5. Planning uncertainties

Coordination and cooperation between City, Port and the four private marinas is uncertain. Each operates independently under different authorities, funding scenarios and schedules. Further complicating the situation is the uncertainty of the actual sedimentation rate, which is uneven over the short term. The CLAMP study indicated that ***80-85% of the sediment moves downstream in major storm events occurring over only 8% of the time***. Two consecutive years of major storm events such as we experienced in 2008 and 2009 can create major planning, finance, and operational obstacles.

OYC has used the collective expertise of our members to extensively study this issue. It was a sober realization that it is unlikely that the Olympia Yacht Club could continue to exist under the conditions described above. What about the other City Waterfront venues and operators?

6. Major study limitations

The consequences to lower Puget Sound are significant enough to cause any prudent person to pause and consider whether the CLAMP study is sufficient for a decision to be made. We have found several areas of concern with respect to the current study:

- It is too limited in scope in that it does not take into account the watershed as a whole, known as a watershed analysis unit (WAU). We find this remarkable considering the range and significance of activities that will be affected. The study focuses almost entirely on Capitol Lake, while the implementation of the estuary alternatives has regional implications;
- The CLAMP study oversimplifies that an estuary alternative would significantly improve water quality in lower Budd Inlet. This claim is without sufficient evidence given the complex watershed hydrological cycle;
- The study does not adequately address critical issues such as sediment management and other points raised above; and
- There is an overall lack of attention and analysis of the economic, social, and environment impacts of the estuary alternatives to the entire WAU.

The question must be asked, what are the long-term consequences of the Estuary Alternatives? What is it, exactly, about the current situation that brings us a great quality of life, accolades as one of the most beautiful and thriving capital cities, and financial stability, are we trying to "fix" with undoing all that has brought this about? With such limitations identified above, it can only be concluded that a decision to change the current landscape is premature.

Benefits of Maintaining Capitol Lake as a Managed Lake

1. Sediment control

The lake has proven to be an effective sediment trap. It has the capacity to handle the large surges of sediment associated with major flood events. In the past 58 years there have been only two partial dredges in portions of the lake – and there is still sediment storage capacity remaining.

2. Planned dredging

Dredging Capitol Lake can be completed in a planned, predictable, and orderly manner. Whether the permitting process takes one or five years is not critical. The permitting acquisition process is centered in one governmental agency. The dredging cycle is 9-10 years instead of 3-5 years.

3. Disposal sites

Capitol Lake already has good rail access available, making affordable access to upland disposal sites for dredge spoils a significant benefit of the Managed Lake alternative. The area around the lake is relatively undeveloped (as compared to the City waterfront), providing ample room for the assembly and safe operation of heavy equipment. There would be minimal impact to public access.

4. Environmental risk-abatement

Dredging Capitol Lake on a 9-10 year cycle versus dredging lower Budd Inlet on a 3-5 year cycle provides less exposure to an environmental mishap through oil spill or in-water accident.

5. Recreational value

Capitol Lake and lower Budd Inlet provide year round unique recreational and aesthetic values to residents of our community and tourists alike. The lake, with its tranquil water, has been a safe and ideal venue for small craft boating and boating events such as the recent dragon boat races.

6. An iconic heritage

The current landscape with the capitol dome and the reflecting pond has intrinsic value that is just priceless. It has come to represent not only our capital city but the state of Washington. The Managed Lake alternative would actually enhance these important values and uses.

Conclusion

The facts, historical evidence, and experience support the managed lake as the best alternative. What is at risk is a viable working waterfront within the currently designated harbor area. We do not find evidence that returning Olympia's waterfront to extensive tidal mud-flats will provide a draw for our citizens, businesses and visitors as represented in the idealized artistic renderings. Given the risks and unpredictability of the estuary scenarios, we do not believe a decision in favor of either of the Estuary Alternatives is possible without addressing the issues we have raised and without the benefit of a complete watershed analysis. We look forward to a response to the concerns raised in this position paper.

We ask that you make your determinations based on facts and evidence, and in the best interest of the public good, which we believe to be in support of maintaining Capitol Lake.

For more information, please contact: Jim Lengenfelder, olympiayachtclub@comcast.net, 360-943-6199.

CAPITOL LAKE AND DESCHUTES WATERSHEAD

FRIENDS OF WORKING WATERFRONT
POSITION PAPER

May 15, 2009

The FRIENDS of the OLYMPIA WORKING WATERFRONT (FOWW) believes that the studies completed to date by Capitol Lake Adoptive Management Plan (CLAMP) Steering Committee have significant missing elements and do not accurately define the impacts of the freshwater estuary options.

To assist with this discussion FOWW has presented what we believe are the missing elements of the CLAMP Studies and recommend a specific Plan of Action for consideration by the responsible State, County and local elected officials.

This POSITION PAPER, after the Executive Summary, is organized as follows:

SECTION I. THE COMMUNITY ISSUE

SECTION II. THE MISSING ELEMENTS

SCETION III RECOMMEND PLAN OF ACTION

SECTION IV. SUMMARY STATEMENT

EXCUTIVE SUMMARY

The CLAMP process is narrowly focused on just Capitol Lake. It must be studied in context of the full Deschutes Watershed. Economic impacts are simply ignored and the 70 years of planning and investment of the current Capitol Lake and Olympia Percival Landing infrastructure is minimized. Sediment management which is a critical element is sent down stream without a management plan while increasing frequency of dredge requirements and into an unknown status of dioxin control. Roles and responsibilities of planners, regulators, and responsible parties become more obscure.

At this time it is necessary for the State and local governmental authorities to establish an Inter-local Agreement to create an Interim Sediment Management Plan which includes an interim dredge of Capitol Lake while the Deschutes Watershed Plan establishes a water quality and sediment control program for the long term management of the Watershed..

FOWW POSITION PAPER

SECTION I. THE COMMUNITY ISSUE

The Friends of Olympia's Working Waterfront.(FOWW) are---People who want to use the Boardwalk with their families to view the boats of the past and the present, people who have relied on the sequential decisions of government agencies to create a managed marine water front transition program for people and the environment, people who have invested in building an active downtown, people who understand that there is a balance of accommodating people's needs with the environment while respecting the community decision process.

After review of the work by CLAMP to date, the FOWW find the Capitol Lake Adaptive Management Plan Steering Committee (CLAMP) report as being too narrowly focused and written to achieve a single interest objective---namely it attempts to recreate an urban estuary without consideration of the other elements of a healthy watershed.

Further the original visions of its design by Wilder & White and the 70 years of planning and investment of the current Capitol Lake and Olympia Percival Landing infrastructure is minimized. This includes everything from building Heritage Park, cleaning up what was called "Old Hollywood" to dealing with storm water run off.

The CLAMP Cultural and Spiritual Values Report is interesting. However the "Effects" of Management Alternatives" table of impact categorizes positive and negative impacts with the same symbol. The analysis also neglects to point out the majority of citizen respondents indicate a high degree of civic pride tied to many aspects of the Capitol Lake and the Olympia Waterfront as it is currently planned.

SECTION II. THE MISSING ELEMENTS

For an informed decision on the future of the "fresh and marine urban waterfront," these four elements must be included and understood within the context and interest of all Key Stakeholders. This means that the study must include

(a) WATERSHED PLAN. A comprehensive analysis of how the use and management of the entire Deschutes Watershed actually functions, where the sediment loads are coming from, what is to be done about sediment management for the entire watershed and marine estuary, and whether the participant agencies

on CLAMP are in fact meeting their upper watershed responsibilities to reduce the sediment problems.. This means the report should define how watershed activities upstream impacts downstream uses. The fresh and marine waterfront should be the baseline against which all actions should be measured (this is current State Law and a Watershed Plan is required). At the April CLAMP meeting, the Department of Ecology representative said the water quality portion of a Watershed Plan was just being initiated. The results of this study must be integrated with the Sediment Management Plan.

(b) PROJECT DESCRIPTION WITH IN THE WATERSHED PLAN. The CLAMP project needs an expanded description of the proposed action and how it will be funded, the impacts mitigated, and who/how the project and its impacts will be paid for. A simple agency answer of "not part of this study" suggests the project report should be rejected as being incomplete. At the April CLAMP meeting the Chair said that it was never CLAMP's intent to "transfer the Capital Lake sediment problem to the downstream (marine estuary) users." However with a schedule to "develop a recommendation on the Capital Lake option" without a more complete analysis of how the marine inlet would be dredged, and how the dioxin recontamination of the transferred Capital Lake sediment would be disposed , suggests that CLAMP has an incomplete data base on which to make a valid recommendation.

(c) A PLAN WITHIN A PLAN. If the proposed CLAMP project is only a project within a plan (i.e. a Capital Lake Estuary without the plan for the marine Inlet Estuary), then the decisions of proceeding are not with the CLAMP Steering Committee. In this case, the decision agencies will need to prepare a larger study that properly places the CLAMP proposal as a "plan within a plan" yet to be completed. The decision must rest with those agencies and citizens who will be required to fund and implement the plan that is adopted.

(d) ENVIRONMENTAL IMPACTS. The Plan's Environmental Impact Statement (EIS) must address the direct impacts plus the secondary impacts—in this case all of the shifted impacts to Capital Lake and the downstream users of the marine water front, as well as the changes that will be required to the City of Olympia's Shoreline Management Plan, the Urban Waterfront Plan, and the challenges of redirected recreational boating and waterfront celebrations that have direct links to the "working waterfront". Since the CLAMP draft report is curiously silent on this major impact, it suggests that the CLAMP work is woefully inadequate to serve as a basis for the required EIS for any work of this nature. The presumed value of an added urban estuary for Capital Lake has not addressed the positive and negative impact to the marine inlet part of the estuary and all of the other issues. A much more rigorous analysis should be expected from the Depts. of Fish and Wildlife, Ecology, Natural Resources and the Tribes consistent with what they would require of a private development.

(e) ECONOMIC IMPACTS. These impacts must include the direct cost of construction of the project, the impacts on the downstream users/governments, the lost opportunities that have been planned and developed on the Olympia waterfront since the early 1980,s; the shifted cost to down stream users, the increase in annualized operating costs to activities that will be negatively impacted, the cost of engineering, permitting and disposal of the dredge materials and loss of DNR and City tax/lease income due to the lost retail opportunities with the probable closure of the four private marinas (due to loss of market place competition/higher cost of operation). None of these impacts have been included in the CLAMP cost of alternative comparisons and therefore a valid cost of alternatives can not be provided at this time to assist General Administration, the Legislature or other government agencies in making an informed decision. An example of a major missing cost is all of the mobilization cost associated with dredging on the waterfront. The Port of Olympia's recent project resulted in a dredging cost of about $244/cy when you factor in the contractor's mobilization cost --not including environmental permitting and direct staff cost to the Port.

(f) WATERFRONT PLAN. The project must fit within the past 30 years of fresh and marine waterfront planning and investments and linked into the long term future plans if CLAMP is going to use a 50 year cost impact analysis. The Legislature is considering funding a park on the Isthmus, the City is seeking ways to rebuild Percival Landing and to increase the housing density in the downtown area to be responsive to the State Growth Management Act, and the agencies continue to impose new constraints on water quality management objectives in lower Budd Inlet. Each of these plans must be considered in the economic and environmental impact analysis and the decision schedule of the CLAMP plan vs. the City's Water Front Plan.

(g) SEDIMENT DISPOSAL PLAN---IN BUDD INLET AND LOWER PUGET SOUND. Unless the CLAMP agencies are prepared to define where and under what conditions that either or both Capital Lake and the marine waterfront waterways can be dredged and disposed of in lower Budd Inlet (with written and probable conditions to price the disposal option), the recent Port of Olympia dredging experience under the permitting requirements of the CLAMP regulatory agencies, should be considered the criteria to prepare the dredging cost for the next 50 years. See attached bid documents that do not include Port Staff cost or the cost of managing the logistics for six marina owners in the impacted areas. This means that the environmental testing, engineering, regulatory agency review, seasonal timing, logistics within a fully occupied marinas, mobilization and the presence of large dredging equipment on a 3 to 5 year cycle in the boating channel are costs in addition to the units quoted by the Port.

Another challenge is the cost of dredging newly released sediment into the marine waterfront where dioxin at natural background occurs at a level that may exceed regulatory standards(from urban run off) and will recontaminate the thr newly

released sediment prior to disposal. This is one of the key problems that the CLAMP analysis is not addressing.

Unless or more realistic approach is taken by the regulatory agencies, the cost of future marine dredgeing will exceed the Port's recent experience due to the distributed nature of the sediment and the City of Olympia's challenge of financing the dredging in and around Percival Boardwalk. The projected cost of dredging the equivalent material from Capital Lake must be compared with dredging a widely distributed area around about 500 moored boats (Olympia Yacht Club, Martin Marina, One Tree Island Marina, Fiddlehead Marina, Percival Landing/Visitor Marina, and Port Plaza/Visitor Marina.).

Frequency must also be considered. A multi year of accumulation of sediment in Capital Lake in the two to four feet level can be accommodated with limited restrictions on current use. In the marine inlet and marina area, a foot of new sediment can begin to restrict use of shallower marina and channel areas and two feet may begin to restrict use of major areas. The CLAMP Dredge study suggests that 80% of the sediment load is transported to the waterfront over 10% of the major runoff/flood periods. This means that in the more susceptible areas of the marina waterfront, annual dredging may be required if the Capital Lake sediment trap is removed.

The Sediment Management Plan should include the potential of reducing the sediment load coming from the upper watershed, the CLAMP management options for Capital Lake, the yet to be developed plans for the marine inlet and then realistic quantities of sediment that will be dispersed and recontaminated in the inlet. The Sediment Plan should establish a framework that addresses all of the sediment management assumptions so that alternative strategies can be validated and tracked. The records since the mid 1980's are generally available now to test some of the assumptions and model outputs used by CLAMP. The actual cost of the logistics, permitting, testing, mobilization and disposal is available from the 2008 Port dredging project.

As another example, all of the marinas, including the City's Percival Landing and the Port Plaza Marina Docks, were dredged in the 1980's. Fiddlehead Marina was dredged with upland disposal of their North Basin due to storm water (and old city primary waste disposal at that site). The area was clean in the mid 1980'sand dredged to a depth of -7 to -12 feet below sea level. Twenty five years later, with the exception of some near shore sloughing problems, the marina depth remains mostly the same. One change is that the Port's testing has found elevated dioxin in the vicinity of Fiddlehead. This suggests that the City's storm water outfall at the marina is the source of recontamination. It is likely that all of the sediment from Capital Lake that ends up in the area of Fiddlehead Marina most likely will be recontaminated by dioxin from the City's storm water run off.

The Yacht Club's experience is not as optimistic in that the carry over sediment has settled in the Yacht Club area to represent what the rest of the marinas would experience if the dam was removed and the unimpeded flood waters deposited their sediment throughout the lower inlet. The use of different CLAMP assumptions in their model on the density of the sediment is a key issue here. The higher density assumptions, if true, would settle out closer to the dam site. The lower density sediment would carry further into the inlet and into more of the marinas. They both may be correct, depending on the magnitude of the floods and the status of the tide at the time of the peak sediment load.

(h) CHANGING STATE SHORELINE PLANS. The recorded Shoreline Management Act decisions, the Urban Waterfront decisions and investments, the uncertain plans for the Isthmus, the City's plans for the Boardwalk, the City's plans for other parks along the waterfront, CLAMP project's proposed placement of dredging material for "shoreline enhancement" without defining both where and how that might change the current Urban Waterfront Plans creates another challenge for the City of Olympia and how they might address the marine inlet estuary and sediment impacts. At a minimum, the City of Olympia would need to assume the lead role in the dredging and sediment disposal plan for the marine water front. The marinas are small private or not for profit businesses that do not have the on staff resources or the financial capacity to manage such a large project. The City should identify the true costs of maintaining the Percival Boardwalk investment in the face of a 3-5 year marine dredge cycle.

The City should request that Ecology, Fish and Wildlife, the Tribes and the Corps of Engineers outline the probable conditions of the routine (every 3 to 5 years) dredging permit requirements along with specific criteria related to shoreline enhancement from Capital Lake sediment and the marine water sediments with potential dioxin in it. This information is needed before the City should consider supporting a Capital Lake Estuary option. If this isn't available from the regulatory agencies prior to a decision and an Estuary option is recommended, the City will become the default lead agency in addressing all of the above mentioned impacts that have not yet been addressed.

(I) CONFUSED ROLES AND RESPONSIBILITIES---
WHO PAYS FOR WHAT NOW AND IN THE FUTURE---
RESOURCE PLANNERS VS REGULATORS

.

For the CLAMP Studies to be valid they must provide answers to the above, including the cost and how the costs will be paid for and by whom, otherwise the report is incomplete and simply ---one option without answers to the truly difficult issues.

FOWW does not believe that the reports to date address the policy, management, and funding and impact issues for the impacted four zones of the Deschutes

Watershed within which this project is located. The plan is not presented in a manner or in a way that the responsible parties----General Administration, Thurston County, Cities of Olympia and Tumwater and the Port of Olympia---can reasonably assess the draft proposals.

It is unclear in how the tribe's involvement should be considered. Is the Tribe a resource planning participant with no implementing and financing role or are they an implementing participant that will provide financial and long term permitting agreements? The latter would allow the proposed actions to occur without new and additional conditions that are not addressed by the plan. Or may their participation actually prevent the suggested plan from being implemented?

The State Agencies that are members of CLAMP must clarify and separate their role as resource management agencies and as regulatory agencies. The proposed Plan—as a proposed resource management plan within the Deschutes Watershed Plan should be approved per State Law---and the permitting of dredging and disposal of dredge materials for the next 50 year management program should be defined and tacitly approved since their costs analysis is presenting it as an acceptable or approved plan. The CLAMP proposal must include the participating regulatory agency commitments on permits and conditions of dredging and disposal permits----at least their written and documented best estimates---otherwise the assumptions by CLAMP Steering Committee on the cost and future strategies are just a 'best guess by current staff" with no future assurances. If these agencies will not confirm their agencies permit expectation and put this in writing, then the "worst case analysis must be presented in the cost analysis---because it most likely will occur as the Port found out on their recent dredging project.

If the CLAMP participants can not agree on and obtain approval of a State approved Watershed Plan, they should at least present the technical and management proposals using the State Guidelines for Watershed Management for all four management zones---the upper watershed/Forrest Management, the rural agricultural zone, the urban zone with freshwater, and the urban zone in the marine waterfront.. This plan would help identify the sources of the sediment and contaminants that are creating the challenges within the CLAMP planof action.

The four management zones that apply in this case includes the Forest Zone and how the County and the State manage the forest practices and control sediment load run off into the Deschutes River; the rural agricultural zone which is controlled primarily by the County through land use management, zoning and other regulations to control sediment and contaminant runoff.

It is these two zones that contribute the majority of the sediment that must be dredged from Capital Lake at the present time.

The third zone is the urban area of the County and the Cities of Tumwater and Olympia that contributes storm water run off to the Deschutes River and uses this zone for parks and riparian zone management. The storm water runoff contributes contaminants from the streets and other urban contaminants that are trapped in Capital Lake along with the sediments from the upper two zones.

It is this third zone that CLAMP Steering Committee is seeking to modify by eliminating the sediment trap provided by the current Capital Lake design. By converting the Lake to an estuary, the sediment trap would be transferred from the General Administration responsibility to the City of Olympia and the Port of Olympia. GA's current dredging responsibility for the Lake is shifted in practice to the City and the Port in a much larger marine environment.

It is the fourth zone that creates the conflict between the State and Tribal positions on the CLAMP report. The CLAMP participants are making recommendations to remove the sediment trap of Capital Lake and to allow that same sediment to be dispersed throughout the lower Budd Inlet where they are projecting a need to dredge every three to five years to maintain the current recreational and marine use. These same state and tribal agencies required the Port of Olympia to undertake special dredging and disposal techniques due to their setting a dioxin standard that is lower than natural background, resulting in the Port's dredge and train hauling of material to Oregon and then placing a clean sand "cap" on the dredged area.

This approach was required of the Port in 2008 as a condition of dredging. This is the same general area that the four private marinas are located and the City of Olympia and Port of Olympia recreational docks associated with Percival Boardwalk. The Port had easy access to rail on the Port docks. The four marinas and the City do not have access to rail and therefore, the cost of dredging every three to five years will be more expensive than the recent cost to the Port.

The cost doesn't address the sampling, engineering, permitting and logistics of working around the currently fully occupied marinas. This cost is not included in the most recent CLAMP draft plans, nor is there any indication that the agencies and tribe that are CLAMP participants will facilitate the permitting disposal of the increased sediments that they are suggesting that should be transferred from Capital Lake to the marine location.

All of this is further complicated by the fact the four marinas and the City of Olympia dredged the marine water front in the mid 1980's, thereby cleaning up their part of the waterfront from the old industrial pollutants and leaving a clean environment in their marine area. Unfortunately, the new focus on urban runoff dioxins creates a new challenge.

After nearly 25 years, only the Olympia Yacht Club has experience any major sediment deposition since the 1980's dredging and that problem is isolated to the

dam release current flow area. The other marinas have only recently paid off their 20 year loans to pay for that dredging and their share of the construction of Percival Boardwalk. If dredging increases to every 3 to 5 years as the CLAMP study projects, the City or the State will need to assume the responsibility for the cost since the marinas would most likely be forced to close and therefore would not provide the revenue for the dredging for recreational boaters. The state would lose the revue generated from the under lying leases that DNR hold.

The CLAMP estuary proposal is to release the sediments to the marine waterfront where the urban storm water with urban living created dioxins will recontaminate the sediments creating a new challenge and cost to dispose of the dredged material

SECTION III. RECOMMENDED PLAN OF ACTION

The FOWW believes that a more prudent community decision and scientifically based approach would be to implement the following four steps:

(1) INTERLOCAL AGREEMENT (IA) -- 2009. The State, County, City(s) and Port Elected officials represented on CLA MP should join to form an implementation committee under an Inter local Agreement to immediately implement a joint effort to fund and implement near term actions to manage Capital Lake and the larger Sediment Management needs of the Deschutes Watershed., and

(2) INTERIM SEDIMENT MANAGEMENT (ISM) IN CAPITAL LAKE--- 2010 TO 2012. The IA should define the funding and need to support the use of the interim findings of the CLAMP studies to date, along with FOWW input, to implement an interim dredging program of Capital Lake. The plan should test the disposal of the dredge material in the lower Budd Inlet marine area that CLAMP has proposed as a potential enhancement project. This ISM plan will reduce the downstream transfer of upper watershed and Capital Lake sediment to the marine waterfront and confirm the cost and validity of the CLAMP proposals before adopting a long term plan. In the mean time an interim dredge should be completed by General Administration and

(3) COMPLETE DESCHUTES WATERSHED PLAN TO ESTABLISH WATER QUALITY AND SEDIMENT CONTROL PROGRAM.—2011. The County and the State agencies on CLAMP have already initiated steps to complete the water quality control elements of a Deschutes Watershed Plan. Sediment control is a key part of any water quality plan. The ISM would allow the local, State and tribal governments to complete the Watershed Management Plan and to test the effectiveness of the upper and rural land use management plans to reduce the sediment transport problem. It is the flood waters and sediment transport from the upper watershed that is the primary source of sediment in Capital Lake. All of the CLAMP members are part of the Watershed Planning process. The completed Watershed Management Plan should outline the technical findings, the plan of action in each of four zones in the watershed, the shared financing of the plan and to confirm if a freshwater/marine water estuary is the best solution to further all of

the environmental and community interests in the Capital Lake and Percival Landing area of downtown Olympia and the up lake areas of the Tumwater waterfront.

(4) 50 YEAR OPERATIONS PLAN.—2009 TO 2059. Using the interim sediment management plan in Capital Lake to address near term sediment problems, the completed and adopted Deschutes Watershed Plan should then address the technical, political, environmental, financial, and operational program for the long term solution that can be supported by the State, Tribal, County and Municipal governments. This long term plan should define the specific steps of the plan and permitting approach to sediment disposal and waterfront enhancement from an informed and tested approach.

FOWW believe that this approach should be initiated immediately and that more studies should be undertaken only if they advance this more holistic approach.

FOWW believes that the responsibility to plan and finance the Sediment Management Plan and Deschutes Watershed Plan is a shared responsibility of all of the CLAMP participants tied to their operational interests in the completed plan of action.

FOWW members are prepared to join with the governmental agencies to advance this important new step in managing the Deschutes River, Capital Lake and Budd Inlet waterfront for all of the environmental and community interests.

SECTION IV. SUMMARY STATEMENT

The FOWW members do not believe that the study completed to date by CLAMP and their consultants accurately defines the impacts of the four alternatives related to the Capital Lake Alternative Management Plans; that the schedule for preparing a recommendation for forwarding to the Director of the General Administration is premature; and that basic answers to each of the major points that are outlined above are necessary before a scientifically sound conclusion can be developed.

Further, we request that the Mayor and City Council of the City of Olympia, working with the Port of Olympia, City of Tumwater, Thurston County and the Washington Department of General Administration take a more holist view of sediment management before focusing on a partial solution that is not well defined within the context of the management of the Deschutes Watershed and the Urban Water front plans of the two cities.

RESPECTFULLY SUBMITTED
FRIENDS of OLYMPIA's WORKING WATRFRONT (as of May 15, 2009)

Bob Wubbena, PE, Fiddlehead Marina Inc
Roger Burgher, Martin Marina

Mike Contris, Olympia Yacht Club Board Chair
Robert Connolly, Skillings and Connolly
John DeMeyer, Citizen/Boater
Neil Falkenburg, West Bay Marina
Jewel Goddard, Marina Owner
Jim Lengenfelder, South Sound Sailing Society
Russ Meixner, Capital City Yacht Sales
Ron Rants, Rants Group
Russ Shurtz, Shurtz Marine
Justice Robert F. Utter, (Ret.)
Paul DeTray, P&P Investments
Carol Robinson, Inlet Marine Services
Chuck Eich/Carol Robinson, Nor-Pac Marine Surveyors

Other Names Will Be Added On Request.

B. Commentary from local print media

SPECIAL SECTION - CAPITOL LAKE AND

Restoring Our Estuary - Olympia's Tidal Beating Heart

By Gabrielle Byrne and Dan Grosboll

Olympia and South Sound are seizing an historic opportunity to become a model for healthy waters and a healthy world.

In 1951, a dam blocking the Deschutes River was constructed to create the Capitol Lake reservoir as part of the Capitol Campus. It's purpose is to reflect the Legislative Building – the capital's domed structure – and for the residents and visitors to the state's capital city to enjoy.

But when this choice was made, part of our history and heritage was lost, along with an ecological system that supported habitat, water quality, and our own health.

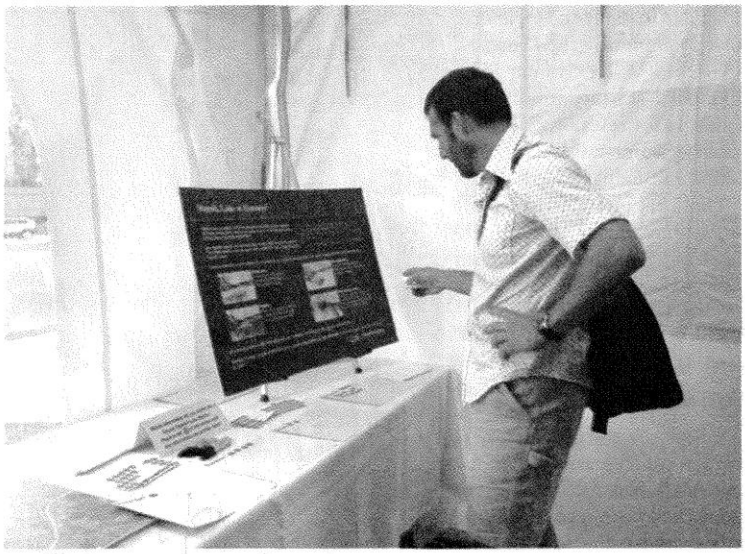
It's easy to understand why officials made the decision to dam the estuary at the time and why they now have chosen to restore the estuary.

In 1951, Olympia piped its raw sewage into the harbor, the area was seen as an unsightly mess, and there was little understanding of the unintended ecological and economic consequences of creating the impoundment.

Now we know that maintaining the lake is bad for water quality, harms more species and ecological communities than it helps, and will cost substantially more to maintain than an estuary.

Before the industrialization of the basin and port area, the Deschutes estuary supported a wide variety of uses, including human communities that lived along its shoreline and a healthy shellfish bed of native Olympia oysters.

Now that we know more about the danger Puget Sound is in – from stormwater runoff, low oxygen in the water, and the ever-growing human population – it's the right time to learn from the past, look to the future, and restore the Deschutes estuary.



Paul Horton examines the choices and weighs in on the lake vs. estuary issue. The public information event, sponsored by the Washington State Department of General Administration and the Capitol Lake Adaptive Management Plan (CLAMP) Steering Committee, was held in a large tent in Heritage Park in late June. *Photo by Janine Gates*

Over the past 150 years, we've lost more than 95 percent of the estuarine wetlands in lower Budd Inlet and more than 75 percent of the river estuarine marshes in Puget Sound. Over time, this affects our community's economy, our community health, and the sustainability of the world's oceans.

The recent decision by the Capitol Lake Adaptive Management Steering Committee (CLAMP) to support estuary restoration was courageous and correct. Maintaining the lake would require regular dredging to maintain open water and remove invasive Eurasian water milfoil. The lake is unlikely to meet water quality standards with dredging so that it could be used for swimming or water skiing.

The Capitol Lake reservoir is fundamentally ecologically unhealthy and unsustainable. Its shallow, warm, high-nutrient waters promote the runaway growth of algae and aquatic vegetation that decays and leads to low dissolved oxygen levels in lower Budd Inlet.

All the options before us – status quo lake, split the basin estuary, a managed lake, and a full estuary restoration – are expensive and would require substantial public investment. No cheap, easy, long-term solution is available, but the estuary option is the least expensive.

We'll have to find ways to pay for

continued on page 12

CONTINUING ARTICLES

Restoring estuary...

continued from page 8

any option we choose, but it's hard to see how federal or state officials can support funding a managed lake that will result in poor water quality and poor habitat conditions for most species.

The estuary option is more likely to bring in federal habitat restoration funding, because it improves water quality and habitat. Federal transportation funding to improve access to Olympia's west side and for traffic safety also could be part of this funding.

Restoring the lake to an estuary will allow much the same recreational opportunities, but cost millions less than maintaining the lake, even when infrastructure and costs for maintaining marina and port berths through dredging are included.

The marinas and the port may incur costs, and a cost-sharing agreement should be developed to ensure that we can maintain a healthy working waterfront.

It's not appropriate that the state of Washington, we the taxpayers, totally foot the bill for maintaining the lake or for restoration of the estuary.

Predictions of a downtown economic collapse and marinas going out of business by some pro-lake interests were correctly seen as being starkly at odds with the facts.

None of the scenarios developed in the CLAMP analysis would put marinas or downtown economics at risk, and the costs of dredging marinas have been included in the analysis. In addition, estuarine restoration will interest the federal government as an action integral to salmon recovery efforts in a time when jobs are scarce and helping the environment is in line with the Obama administration's new green economy.

The chances of getting federal dollars to maintain a reservoir to reflect the Legislative Building while habitat is being degraded and the water quality is close to zero. That means local and state taxpayers – and perhaps the marinas and port – would likely be alone in footing the bill for keeping the lake.

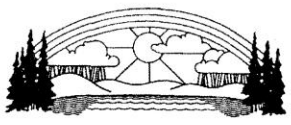
Let's be clear: The removal of the dam and restoration of the estuary isn't the only thing we need to do to recover healthy water in Budd Inlet. Many other conditions contribute to poor habitat quality and water quality, but removal of the dam is likely the most important single action that we can take to improve it. Locking in a managed lake that makes ecosystem recovery more difficult would have clearly been the wrong decision. A restored estuary will have immediate effects with increased tidal exchange in Budd Inlet and rapid colonization by vegetation and invertebrates important for salmon.

CLAMP, made up of representatives from local governments, the Squaxin Island Tribe, and state agencies, took a stand in favor of Puget Sound, water quality, and habitat. It deserves our heartfelt congratulations.

Now is the time to start working together to make sure that estuary restoration works for the community, works for the economy, and works for the environment. There will be difficult discussions and negotiations ahead: who pays and how much; how to minimize disruptions to local businesses, organizations and residents; and how to heal the divided community so that once again we are working together toward solutions.

Make your voice heard by going to www.ga.wa.gov/CapitolLake/ and clicking on "Feedback" or calling your local government representatives and Port commissioners.

Gabrielle Byrne and Dan Grosboll are members of People For Puget Sound.

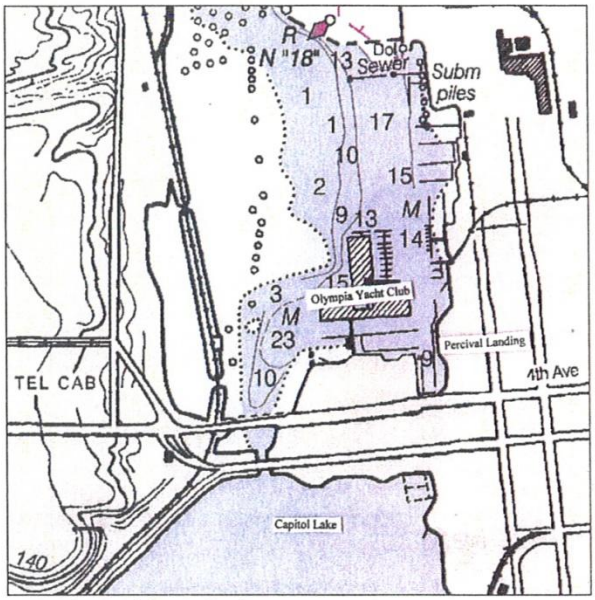


Waterfront Watch

By Chuck Gould

"Don't Breach Capitol Lake Dam!"

One of the better areas for cruising in the Pacific NW is in the South Sound. Boats traveling under sail or motoring at low speeds normally reach the South Sound in less than a day from central Puget Sound, making it a much closer destination than the San Juan Islands. Surprisingly under-utilized, the South Sound contains a network of fjords and islands liberally sprinkled with state parks, and enclosed by a landscape that is primarily rural and wooded. Few areas of open water somewhat dampen high wind waves on days when conditions are more unpleasant elsewhere.



Not to be used for navigation.

South of the Narrows, (or at least south of Tacoma), the only town of any size offering transient moorage is Olympia. It's a delightful stopover during a south sound cruise, with a three-season farmers' market, eclectic shops, a variety of interesting restaurants, an active arts scene, and other shore side diversions. Yet, much of the transient moorage in Olympia is in danger of being eliminated. A prospect under consideration by the Washington State Capitol Commission is concerned with breaching Capitol Lake Dam, a move that would also effectively destroy the Olympia Yacht Club and eliminate hundreds of additional private slips, as well as the transient moorage. Somebody with no sense of history has proposed breaching Capitol Lake Dam, and unfortunately, the Capitol Commission is seriously debating the idea.

Many boaters enjoy mooring at "Percival Landing", on the west side of the peninsular area projecting from the original Olympia shoreline out into Budd Inlet. Today, Percival Landing consists of a transient moorage float, perhaps 200 feet in length and usable by most vessels at all tides. The original Percival Landing consisted of a very, very long dock just under a mile in length. The mile-long dock was required to extend far enough into Budd Inlet to clear the mudflats and provide moorage that wasn't high and dry at low tides. Now, the peninsula that extends from Percival Landing out to Swantown Marina consists of fill that was dredged out of Budd Inlet to improve maritime access to Olympia.

The Deschutes River once emptied directly into Budd Inlet, and the historic mudflat was the direct product of thousands of tons of silt carried into the inlet during heavy rainstorms. Capitol Lake Dam interrupted the flow of the

Deschutes, and solved most of the silting problems. Frequent dredging is not currently required to maintain navigable depths at Olympia. If the dam is breached and the natural flow of the Deschutes is restored, then the natural result of such flow (a mile of mudflats), will certainly recur.

Proponents of breaching the Capitol Lake Dam reportedly include the Squaxin Indian Nation, as well as assorted "back-to-nature-at-all-costs" environmentalists. Breaching the dam would create a muddy swamp where pristine Capitol Lake now reflects the stately domes and columns of government buildings on the hill beyond. It's almost certain that birds, beavers, muskrats, and even regular rats would flourish in the brackish and aromatic ooze remaining. The wildflowers, rodents, and mosquitoes will propagate with wild abandon, while south sound boaters become an endangered species.

The Olympia Yacht Club is located just seaward of the Capitol Lake Dam. Experts have advised the club that if the dam were breached the club would need to begin an extensive and almost continuous dredging program to maintain navigable depths within its facility. Current estimates suggest a dredging cost of about $2-million every other year. It would be unlikely that Olympia Yacht Club members could endure the dues and moorage increases required to increase the club's maintenance budget by an average of $1-million each year.

It's certain that the private moorages north of the Percival Landing float would also be forced into extensive dredging programs. The private marina dredging costs would of course be likewise passed through to renters at the marinas, providing any boaters would be willing to pay a dramatically increased rate to moor in muddy water.

The Port of Olympia operates a log and container shipping facility that would likely be affected by a breach of the Capitol Lake Dam. A variety o student and other groups have protested the use of the Port of Olympia facilities for transporting armaments to and from nearby Fort Lewis. The commercial port facilities would undoubtedly be impaired as well. (I wonder if that could be an ulterior motive for some of those pressing for a breach of the dam?).

Washington State Capitol Commission, please don't breach the Capitol Lake Dam. If Olympia preferred to have a sticky, stinky, mile-long mudflat instead of a fine harbor, that's a decision that should have been made perhaps 100 years ago. It's too late to turn back the clock. It's too late to displace hundreds of millions of dollars worth of vessels and shore side improvements. It's too late to make a silly and radical environmental decision and hope that beavers, muskrats, rats, and mosquitoes will return to a restored swamp where beautiful Capitol Lake now protects Budd Inlet from silt up. ■

THE DESCHUTES ESTUARY

Unclamping the Deschutes

By Sue Patnude

Capitol Lake isn't a lake. It's a river disconnected from its estuary. It's a serious disruption to an ecosystem that hasn't been able to function normally for 58 years. And, for Capitol Lake, timing is everything.

Future generations could see this body of water return to a freshwater marsh and then eventually to land. Every year the "lake" fills up a little more as the Deschutes River dumps an estimated 35,000 cubic yards of sediment into the basin. The lake acts like a huge bathtub with the plug in.

Before the dam was built to form Capitol Lake in the early 1950s, the Deschutes Estuary was a ruin. Much of the estuary had already been filled to build downtown Olympia and its port. Raw sewage oozed into the tidal mud. Garbage was strewn about at low tide. "Undesirables" lived along its shores. The mud flats became symbolic as negative, unaesthetic, and stinking.

Some people still carry the memory of that picture and smell today. But a healthy body of water and its bed don't stink. The smell on some of the healthier Puget Sound beaches at low tide can be refreshing, salty, and clean. For some folks, however, the smell of Capitol Lake on a warm day isn't pleasant.

During the 1980s, when my son was about 8 years old, he went swimming in Capitol Lake on a daycare outing. The water was polluted. He contacted giardia and was very sick. The swimming area was posted unsafe to use due to public health risk shortly after that and closed to public use.

Giardia is the most common cause of waterborne illness, and causes severe diarrhea and stomach pain, according to the Centers for Disease Control. It's transmitted when someone comes in contact with human or animal feces. Capitol Lake was contaminated from sewage and stormwater runoff. It hasn't been used for public recreation for more than 28 years.

The Capitol Lake Adaptive Management Steering Committee (CLAMP), a group made up of local, tribal, and state government representatives, formed more than 10 years ago to develop a lake management plan.

On July 2, 2009, CLAMP voted to recommend letting the Deschutes River flow once again into Puget Sound. Of the four alternatives for management of sediment in the lake, restoring the estuary is environmentally and economically at the top. For more information, go to www.ga.wa.gov.

The next step is for the director of General Administration, Linda Villegas Bremer, to make a recommendation on how to manage Capitol Lake to the State Capitol Committee. The committee members are Lands Commissioner Peter Goldmark, Secretary of State Sam Reed, Lieutenant Governor Brad Owen, and Governor Gregoire's representative Marty Brown.

The final decision will fall to the Washington State Legislature, which could also provide funding for the restoration.

For many years the department, whose primary role in government is to take care of state-owned facilities, has managed Capitol Lake. This body of water has been maintained as a building manager would maintain a building.

However, in reality, it's never stopped being a river disconnected from its estuary. As the lake continued to fill with dirt, the budget for maintaining it as a facility ceased to exist. The department has done an admirable job, despite the no-win situation in which its staff has been placed.

In this current economic climate,

continued on page 15

CONTINUING ARTICLES

Unclamping...

continued from page 9

it will take more than state money to make estuary restoration a reality, yet it would make sense that, with the level of public and private resources being invested in Puget Sound, clean up of the Deschutes estuary would be a priority for funding.

The Legislature has a dammed-up Puget Sound estuary in its backyard, and they'll not be able to ignore or compromise this important project in either a political or a regulatory environment.

While we wait for the political wheels to start spinning, why not begin discussing how we'd make a change as significant as estuary restoration in downtown Olympia work for everyone? What strategies should be used to carry out full estuary restoration for the common good?

Estuary and lake supporters will need to come to the table prepared to develop strategies that work for all interests and for the public health. Recreation, economic development, property values, fish and wildlife habitat, and public health needs can complement each other as elements in a package that would evolve around a naturally functioning estuarine environment.

We see working examples of this in many places around Puget Sound: Twanoh State Park on Hood Canal and Golden Gardens Park in Seattle, for example. They offer huge beaches for people to relax, swim, and picnic. Even today, our marine waterfront is a substantial economic draw. It's where we hold our celebrations and festivals such as Harbor Days and the Wooden Boat Fair. It's the location of our Farmers' Market and our working port. This natural gem draws visitors from the global community. Though our particular future may look different than a traditional sandy beach, we will surely develop a deeper appreciation for the gifts that nature will bestow here in Olympia as time and careful stewardship together perform the magic of healing.

Sue Patnude, a co-founder of SPEECH, is the vice president of the Deschutes Estuary Restoration Team, a pro-estuary group. Patnude was a member of the Capitol Lake Adaptive Management Steering Committee from 2002 to 2008. You can contact her at convergence@wildblue.net.

Editor's Note: As always, we invited submissions for this issue. Two articles came in supporting the CLAMP estuary recommendation, but surprisingly none in favor of retaining the lake. We will continue to cover this subject as the planning process unfolds, and may feature alternate points of view in the coming months. Many thanks to our writers and other volunteers who make the *Green Pages* awesome month after month. And thanks for reading!

Joanne McCaughan, Managing Editor

President's message...

continued from page 2

The excessive number of wells being placed for new development also jeopardizes groundwater supplies.

Take into consideration that we don't have a comprehensive inventory of how much groundwater is available, how quickly it is recharged, and how long it is projected to last given current rates of use and development. We are also facing seawater intrusion into our aquifers, as both the aquifers are drawn down and the sea level rises. Although I am an optimist, it appears to me that the water picture for the South Sound is murky at best. We certainly have our work cut out for us.

Janine Gates is president of SPEECH and can be reached through her website at www.janinegatesphotography.com or her Olympia news blog at www.janineslittlehollywood.blogspot.com.

Contribute to Green Pages

What do you want to see covered? Send us your ideas or submissions by calling us at 360-528-9158 or e-mailing greenpagessubmissions @gmail.com.

Turning Capitol Lake into estuary will harm local economy

The Olympian Published June 16, 2009
Rich Taylor

The Olympian recently devoted almost 40 inches to whether we should destroy the dam that forms Capitol Lake and turn the lake into an estuary. That's a lot of detail you will not get on TV.

The issue I haven't seen detailed yet, however, is the devastating effect destroying the dam will have on the local economy.

Olympia elected officials are trying to create a rejuvenated downtown but so far things such as the isthmus rezone issue have merely created gridlock.

The dam might be a little simpler.

Whereas the condos MIGHT bring people downtown, Capitol Lake and Percival Landing ALREADY bring people downtown. To not build high-rise condos on the isthmus costs us POTENTIAL revenue, but to destroy the dam costs us ACTUAL revenue.

People might still jog around an estuary, but the businesses and events built around Percival Landing require deeper water. Destroying the dam will fill Percival Landing with Deschutes River sediment and make navigable water economically unfeasible.

That means the closure of five marinas with about 500 boats. Five hundred boats represent about 500 families or roughly 1,500 people who visit their boats probably two or three times a month from May to October. That's about 20,000 visitors in six months who would be forced to take their business elsewhere if Percival Landing turned into Mud Bay.

Add to that the thousands who visit Percival Landing for events such as the Wooden Boat Festival, tugboat races, Sand in the City, lighted ships parade, and tall ships. The 100-year-old tug, Sandman, logged more than 4,500 visitors by itself last year.

Those kinds of visitors enjoy the history of the waterfront, dream about boats, and remove the "drizzly November in my soul." An estuary removes that ambience.

The 500 moored boats pay an average of $245 per month for moorage and shore power, plus 12.8 percent tax. Together they pay about $137,500 per month or $1.6 million into Olympia's economy each year, $183,750 just in taxes.

The marinas themselves pay the state $300,000 for their leases. That money goes into the Aquatic Land Enhancement Account which funds things such as the Percival Landing renovation project.

That's a lot of stimulus money.

If we assume those 3,000 boaters and 1,500 visitors each month spend a mere $5 each while they are in town on groceries, beer, repair parts, or parking, there's another $135,000 in tax generating revenue in just the six boating months. If 1,600 of them eat one meal a month at Budd Bay,

Anthony's, the Oyster House or the Dockside Bistro (all waterfront based venues) at $50 for two, that's $40,000 per month; $240,000 in the six boating months. That's a lot of local salaries. Now factor in revenue from boat sales, boat maintenance professionals, Percival Landing event vendors, and the non-boating businesses enhanced by the waterfront ambience from Market Center to the Bayview.

Percival Landing's boat-friendly water attracts more than $2 million to Olympia each year.

And none of this includes money brought in by the Port of Olympia which seems to be turning a corner with ships regularly in port.

These are conservative figures.

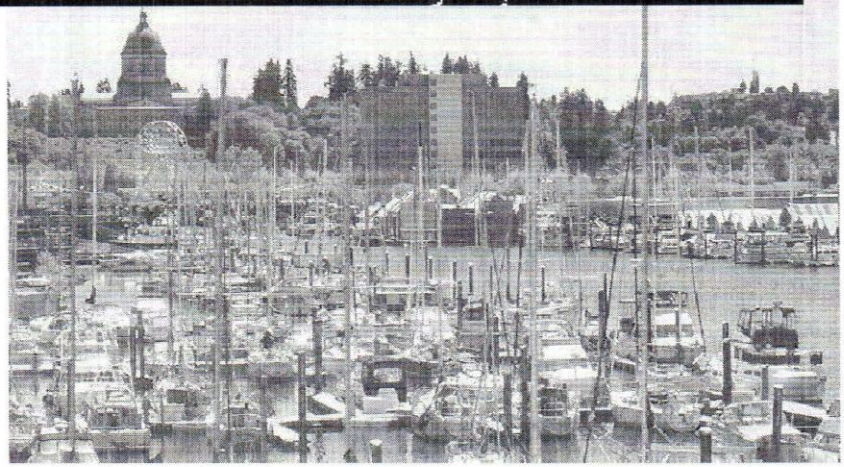
Bellingham built a 350-boat marina about four years ago and they estimate it brings in $10 million to the local economy. Olympia's marinas are half again bigger.

In Washington, D.C. $2 million to $10 million is chump change, but for us in the real world it is an important stimulus to our city's hopes for a rejuvenated future.

To keep Percival Landing a useful, fun, and profitable attraction we need to keep the dam and dredge the lake. It is an economic necessity.

Rick Taylor, a member of The Olympian's Board of Contributors, retired from the U.S. Army/Oregon Army National Guard after 27 years of service. After 14 years teaching high school language arts and social studies, he is retired, and can be reached at anchoredhere@gmail.com.

Battle Over the Olympia Waterfront



Public marinas of Percival Landing looking over to the Capital and Olympia Yacht Club on the right. Capitol Lake starts just behind the Ferris wheel and extends to the far right of the photo behind the building and up to the ridges in the background.

The Olympia waterfront is becoming a battleground over the future of the Capitol Lake dam and its impact on boating. Government action is expected this spring that many say could cripple boating at Olympia's Percival Landing.

Capitol Lake dam holds huge amounts of silt runoff from the Deschutes River that, if unleashed, many boaters say would make recreational boating physically impossible without economically unfeasible dredging. The dam forms Capitol Lake, a reflecting pool for the state capital and venue for Heritage Park's recreation and fairs. Just downstream Percival Landing is home to more than 450 pleasure craft in five marinas and the Olympia Yacht Club. It has 1.5 miles of boardwalk, plus two guest docks nuzzling into downtown Olympia's numerous waterfront restaurants, shops, and businesses. It hosts an annual wooden boat festival, tug boat races, and Sand in the City.

Proponents of removing the dam want to turn Capitol Lake into a tidal estuary as it was 60 years ago. They cite Budd Bay water quality and healthier environment for native wildlife as major benefits.

Opponents estimate a $20 million loss to the economy if the marinas fold and the waterfront businesses, with their jobs and tourist attracting views, cut back. They say Olympia's 25 year effort to improve the waterfront will be thrown away.

The state General Administration department manages Capitol Lake as part of the Capitol campus. The lake filled with sediment when, on conflicting advice from various ecological and technical departments, GA stopped back flushing the lake with salt water in 1984. The technique removed sediment and killed certain non native species of fish and weeds, but also hurt some native species. It also carried polluted sediment and noxious weeds into Budd Bay.

If the dam is removed government estimates from the Capitol Lake Adaptive Management Plan (CLAMP) say 37,000 cubic yards of sediment will have to be dredged from Percival Landing every three years costing about $3 million each cycle.

The Olympia Yacht Club estimates it would cost their members about $7,500 each assuming the public marinas chip in their fair share. They fear the cost could put them all out of business. OYC is leading the charge to save the dam.

The CLAMP report also notes that sediment flow would not be predictable. One bad upstream storm could suddenly dump enough sediment to effectively close the area for boating. Arranging for dredging could take months while boats lie trapped at their slips.

The ecological issues are complex. Some studies focus on oxygen content which an estuary could help. Others point out that pollutants would still flow through an estuary into the bay where, combined with sewer pipes already terminating there, the change would do little for aquatic life. Since most of the

pollution in the water is created upstream from Olympia-Tumwater, removing the dam will not in itself create significantly cleaner water. Naming more than 15 species from fish and birds to bats, the Department of Fish and Wildlife says that removing the dam will hurt almost as many species as it will help.

But the biggest issue is how much will it cost. Each side claims victory depending on how much work is included. Estimates range from $58 million to $360 million over a seven year period. Everyone agrees the lake must be dredged whether the dam comes out or not. That will cost about $35 million according to CLAMP.

Removing the dam would not be the last expense. With no dam, the tides would flow under two street bridges with increased ferocity requiring reinforcing or rebuilding them both.

The Port of Olympia, just downstream from Percival Landing, will also have to dredge more frequently to allow shipping in. If the dam stays, the lake will still have to be dredged every three years.

Cost estimates ignore the human element. Percival Landing is a popular growing city attraction. The marinas and OYC host several public events including the highly popular lighted boats parade, opening day parade, and OYC's special peoples cruise.

Percival Landing and Heritage Park with its interactive fountain draw thousands of visitors each year. A renewed downtown is growing from that nucleus with other new attractions such as the Farmer's Market, Swantown, and an antique and art store section.

Proponents of the estuary say that the impact will be minimal and cite a study that says the mud will only be exposed about 20 percent of the time. They think the waterfront will retain its charm. They say that Capitol Lake is already not good for swimming and turning it to an estuary for wildlife will be an attraction in itself.

The battle is moving from committees to the streets in meetings, brochures and letters. A CLAMP committee vote is expected this spring.

Either way it goes, boating in Olympia is in for a change.

— by Rick Taylor

Facts You Should Know . . .

Keeping the lake and the dam benefits our community

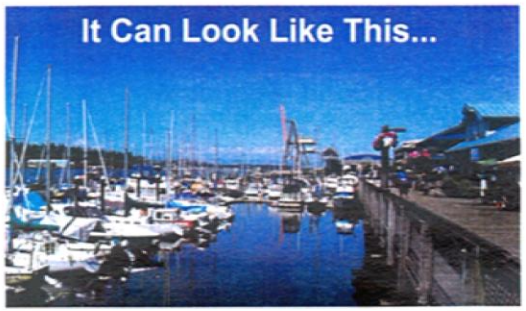
Capitol Lake was conceived in 1911 as a reflection pool. A dam was built in Budd Inlet to create the lake, which was originally an estuary. Now the lake is filling with sediment, requiring it to be dredged on a regular basis. There are really only two choices:

1. Remove the dam, which would allow the sediment to flow into Budd Bay and create an estuary in place of the existing lake.
2. Keep the dam and the lake, and continue to dredge the lake.

The best option is to keep the dam and the lake.

Capitol Lake has benefited business development and recreational activity in Olympia for over 50 years based on the inviting shoreline and view. The lake and city waterfront are a major attraction for business, housing, and recreation from Olympia to Tumwater.

Capitol Lake provides a place for activities such as picnics, jogging, playgrounds, and boating, from Percival Landing to Tumwater Heritage Park. The area supports five major civic events, hundreds more gatherings, and dozens of jobs and businesses.



Removing the dam hurts our waterfront

There are approximately 900,000 cubic yards of sediment in Capitol Lake today. That's enough dirt to fill 90,000 standard dump trucks.

If Capitol Lake Dam is removed, most of this sediment -- plus the annual Deschutes River sediment load of 35,000 cubic yards -- will be flushed into the Percival Landing and city waterfront. This is a total of more than 100,000 cubic yards of sediment that will be dumped into Olympia's waterfront every three years.

If we stop dredging the lake and allow this sediment to be dumped into our waterfront, it will:

- eliminate venues for the Wooden Boat Festival, Harbor Days, the Lighted Ships Parade, and impact other events such as Lakefair;
- destroy scenic waterfront for numerous restaurants and businesses;
- eliminate recreational boating moorage along the waterfront;
- return to stinky mud flats; and
- undo 25 years of work and money to build Percival Landing into a public attraction.

Economic and dredging data gleaned from Washington State Capitol Lake Adaptive Management Plan.

Removing the dam hurts our economy

Removing the dam to create an estuary would be expensive. The 5th Avenue bridge would have to be replaced. Deschutes Parkway and new 4th Avenue bridge would have to be reinforced to withstand the flow of the tides. These initial construction costs would range between $67 and $90 million.

In addition to these construction costs, dredging would still need to be done to keep the current water depth throughout the Percival Landing area and city waterfront.

This continued dredging would also be expensive: $48 to $112 million over the long term. The City of Olympia and five marinas located along the waterfront would be confronted with a three-year dredge cycle, with costs averaging $3 million per cycle. It is questionable whether the marinas could continue operating with these costs.

The estimated loss of 450 recreational boat moorages would deprive the local economy of more than $10 million per year. This is just a small part of the total social and economic impacts of removing the dam.

...Or Like This

What you can do

Write, E-mail, and visit

City Councils
Olympia 753-8569
councilmembers@ci.olympia.wa.us
Tumwater 754-4120
council@ci.tumwater.wa.us.

County Commissioners
786-5440
tcbocc@co.thurston.wa.us

Port of Olympia
528-8000
George Barner
georgeb@portolymoia.com
Bill McGregor
billm@portolympia.com
Paul Telford
pault@portolympia

State Capitol Committee
902-4111
Gov. Chris Gregoire
www.governor.wa.gov
Lt. Gov. Brad Owen
ltgov@leg.wa.gov
Sec. of St. Sam Reed
sam@secstate.wa.gov
Lands Comm. Peter Goldmark
cpl@dnr.wa.gov

Legislators
1-800-562-6000
fraser.karen@leg.wa.gov,
hunt.sam@leg.wa.gov,
williams.brendan@leg.wa.gov

The Olympian editor at
news@theolympian.com

Save the Lake

savecapitollake@gmail.com
201 N. Simmons St
Olympia, WA 98507

Help Us Save

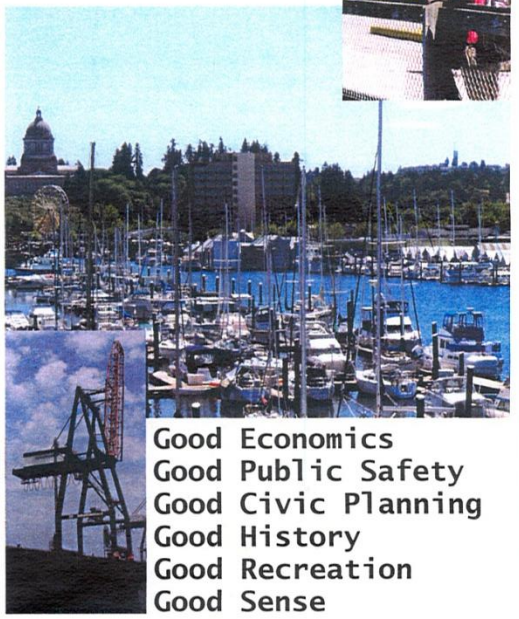
The Dam...

Capitol Lake...

Heritage Park...

Percival Landing...

The Port...

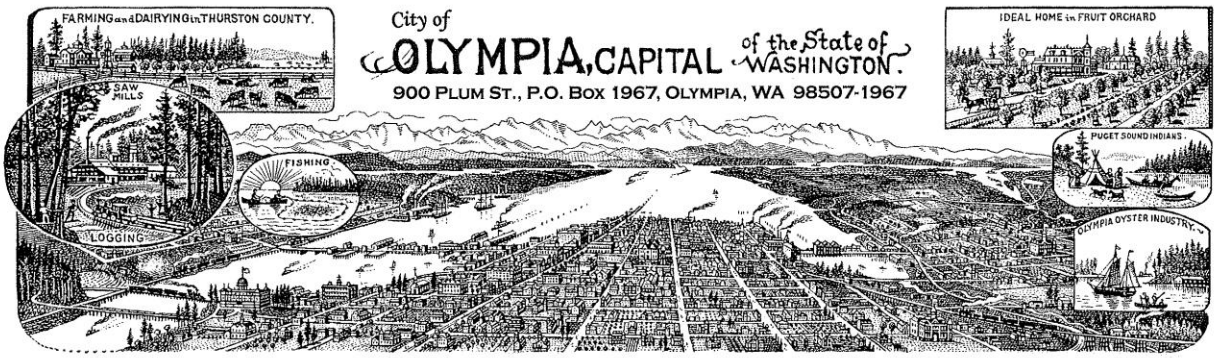


Good Economics
Good Public Safety
Good Civic Planning
Good History
Good Recreation
Good Sense

This page left intentionally blank.

VIII. Public Opinion Poll

The City of Olympia commissioned a public opinion poll related to the CLAMP Alternative Analysis. Although not a GA product, this is an example of public input which has been utilized by the CLAMP entities.



This letterhead is a replica of 1899 City of Olympia letterhead, which we are using in commemoration of the City's 150th Anniversary.

MEMORANDUM

TO: Joe Hyer, Councilmember, and CLAMP Steering Committee Member

FROM: Laura Keehan, Associate Planner-NPDES Coordinator LK
Public Works Water Resources

DATE: May 4, 2009

SUBJECT: Elway Survey Results

The purpose of this memorandum is to convey the information gathered from the City of Olympia Storm and Surface Water Utility's "Stormwater Runoff: Public Attitudes, Awareness and Behavior" survey just completed in April.

The above-referenced survey was funded by a grant from the Washington State Department of Ecology in order to develop baseline data to track progress on implementation of the City's Phase II NPDES Municipal Stormwater Permit.

Conducted by Elway Research the week of April 13, 2009, the survey randomly sampled 404 Olympia residential utility customers that reside within Olympia city limits. The survey respondents are demographically consistent with Olympia's demographics as a whole. The survey has a 5% margin of error at the 95% confidence interval. That is, had the same survey been conducted 100 times, the results would be within 5% of the results reported at least 95 times.

Of the 32 survey questions, three of the questions pertain to Capitol Lake and its future. These questions and their results are:

3. Would you say that health of Capitol Lake is…

Excellent.....**1**
Fairly Good.....**20**
Not Too Good.....**28**
Poor.....**44**
[NO OPINION.....**7**]

7. You may be aware that studies are underway about the future of Capitol Lake and Budd Inlet. How important are the following factors to you in determining the future of Capital Lake? What about [**READ A – C: ROTATE**]? Would you say that should be: extremely important, somewhat important, or not at all important when determining the future of Capitol Lake?

	EXT	SW	NOT	NO OPIN
1. Keeping the cost to the taxpayer as low as possible	**44**	**41**	**16**	**0**
2. Maintaining the look of the lake	**36**	**40**	**22**	**1**
3. Doing what is best for water quality, fish, and wildlife	**74**	**23**	**3**	**0**

8. Which of these do you think is the most important? **RE-READ IF NECESSARY.**

Doing what is best for water quality, fish and wildlife.....**70**
Keeping the cost to the taxpayer as low as possible **15**
Maintaining the look of the lake.....**11**
NONE.....**1**
[DON'T KNOW.....**2**]
[NO ANSWER.....**1**]

As indicated by the responses above, respondents were consistent in choosing "do what's best for water quality" as the most important factor when determining the future of the lake.

- 70% said water quality is the most important factor, and 74% said that it was extremely important;
- 15% said that "keeping the cost to the taxpayer as low as possible" was most important, and 44% "extremely important";
- 11% chose "maintaining the look of the lake" as most important, and 36% "extremely important".

This information should prove useful as the Council considers its recommendation to the CLAMP Steering Committee. Please feel free to contact me at (360) 753-8321 or via email at lkeehan@ci.olympia.wa.us if you have any questions about the survey or would like a copy of it in its entirety.

LK/hr
X:\Capitol Lake\LK050409 Hyer CLAMP Memorandum RE Elway Survey.docx

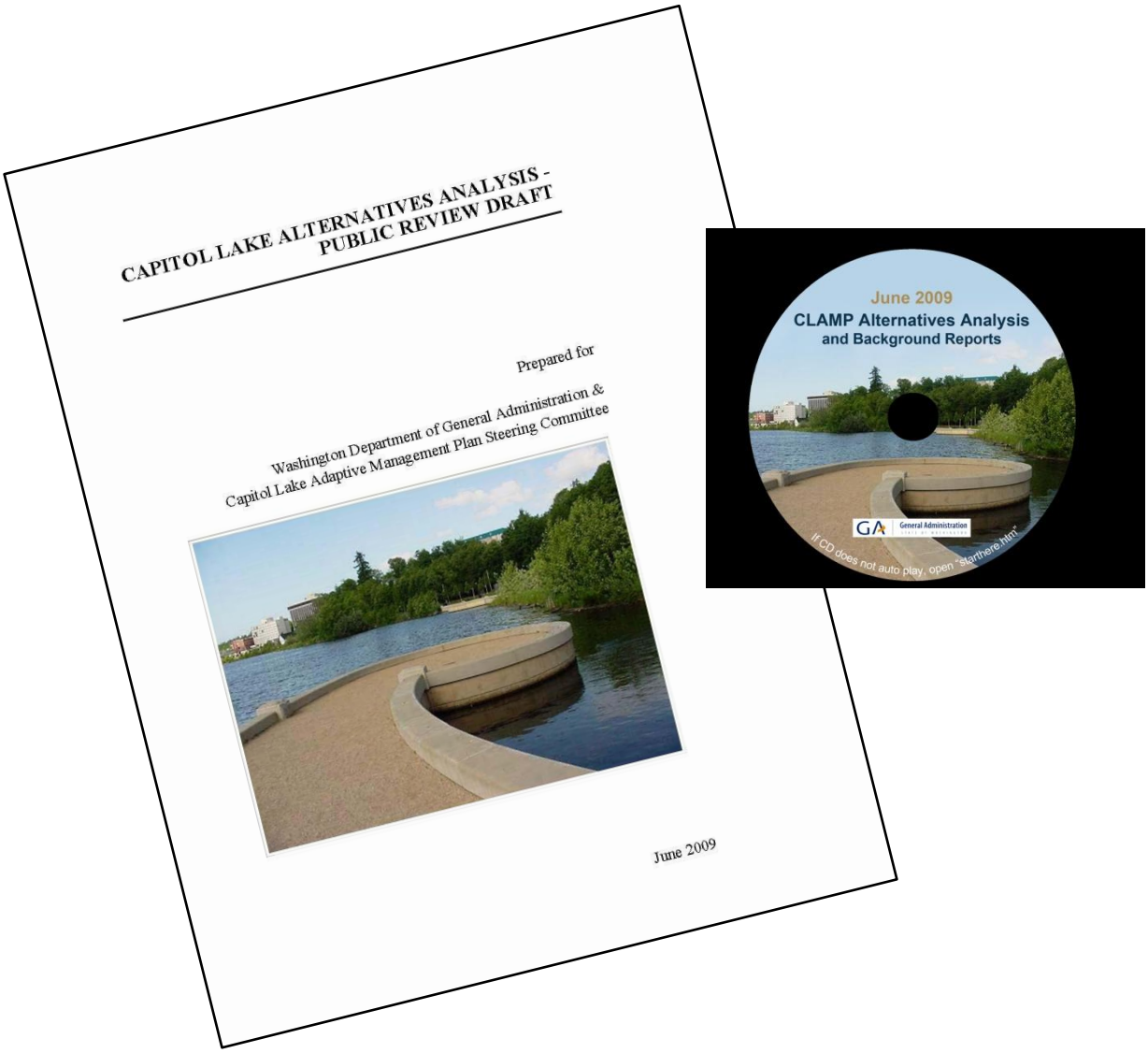
This page left intentionally blank.

IX. Comments on the Public Review Draft

The *CLAMP Alternative Analysis - Public Review Draft* was available to the public on June 16, 2009. Notice of its availability was provided through an email distribution of approximately 500 individuals who had attended previous CLAMP events or identified themselves as an interested party. Electronic copies of the report were distributed to the CLAMP entities and others who receive notification of the CLAMP Steering Committee meetings (approximately 65 people).

Paper copies of the report were available at the Public Workshop on June 24, 2009, along with copies on a CD Rom. The CD version also contained copies of all the CLAMP Technical Reports used in its preparation. Public comments were accepted on the Public Review Draft until July 6, 2009.

While there were numerous comments received from the Public Workshop and via email concerning the lake/estuary question, only one comment was submitted regarding the Public Review Draft. It was provided by the Olympia Yacht Club (OYC). Their eight page letter has been provided, followed by an item by item response to their identified issues.



Olympia Yacht Club
201 Simmons Street NW
Olympia, WA 98501

BCC: Heidi 7-8-(

July 5, 2009

Neil McClanahan, Chair
Capitol Lake Adoptive Management Plan Steering Committee
Washington Department of General Administration
General Administration Building
210 11th Avenue SW
Olympia Washington

Dear Chair McClanahan,

Thank you for the opportunity to provide input to the Washington State Dept. of General Administration and the Capitol Lake Adaptive Management Plan Steering Committee on the ***Capitol Lake Alternatives Analysis – Public Review Draft.***

Overall, the ***Public Review Draft*** reflects previous summaries. It does a good job of bringing together all the different research that has been done over the last decade. Of particular note is the document's organization into three major sections: Environment, Economy and People. This is a logical presentation and helps the casual reader put all the pieces together.

Unfortunately, this "summary" document continues the limitations of previous CLAMP documents.

Major study limitations

The consequences to lower Puget Sound are significant enough to cause any prudent person to pause and consider whether the CLAMP study is sufficient for a decision to be made. There are several areas of concern with respect to the current study:

- **It is too limited in scope. It does not take into account the watershed as a whole, known as a watershed analysis unit (WAU). We find this remarkable considering the range and significance of activities that will be affected. The study focuses almost entirely on Capitol Lake, while the implementation of the estuary alternatives has regional implications. The Alternatives Analysis oversimplifies the theory that an estuary alternative may noticeably improve water quality in lower Budd Inlet. This claim is without sufficient evidence given the complex watershed hydrological cycle; and more unfortunately, it has been used as certainty when in fact creating a mud-flat estuary may not improve water quality in lower Budd Inlet.**

1

- **The entire WAU has an overall lack of attention to and analysis of the economic, social, public health, and environment impacts of the estuary alternatives.**
- **Previous reports did state that the CLAMP Steering Committee made an informed decision not to address a cost benefit analysis. This is a key fact and should be addressed in the Alternative Analysis. The lack of this kind of regional commercial and business information is a major shortfall of all previous studies.**
- **The study does not adequately address critical issues such as sediment management and other points described in Issues 1 through 6 below.**

Issue 1: The Alternatives Analysis Report has no Sedimentation Management Plan, nor does the Analysis address Upstream Sediment Management.

Sending sediment downstream is not a sediment management plan. *How the sediment has been and will be managed in the future is a central issue in the current Lake versus mud-flat/ estuary debate.*

The Deschutes River system produces and delivers to lower Budd Inlet approximately 35,000 cubic yards of sediment per year (some years less and some years more – for example, significantly more in 2008 and 2009). This natural phenomenon occurs year after year as it has since time immemorial.

Nautical charts from the mid 19th century show that all of lower Budd Inlet was an extensive mud flat at low water. Early settlers of Olympia and Thurston County had to construct *a pier nearly a mile long across these mud flats* to gain access to water depths suitable for navigation.

During the late 19th century, the first of several major dredge operations occurred, funded primarily by the federal government. The dredge spoils were used to fill in the tidelands to create large areas for development of downtown Olympia and the Port area. Dredging also ensured adequate water depth for navigation purposes.

In 1951, the state of Washington created Capitol Lake by constructing the current 5th Avenue dam. The dam reduced the need for major dredging of lower Budd Inlet to maintain water depths needed for navigation, and as a result the city waterfront began evolving into its present form.

Today, as a result of Capitol Lake's existence, we have a bustling working waterfront extending from the Port to Percival Landing. The multiple marinas and the city's Percival Landing provide ideal sheltered moorage for approximately 450 recreational boats, including those permanently moored here by local residents, and visitors from around Puget Sound.

This setting, with its fine restaurants and shops along the Percival Boardwalk, attracts thousands of residents and visitors each year by land and by sea. Percival Landing is a

major recreational draw and is the hub for major community events such as the Wooden Boat Festival, Harbor Days and Lakefair. ***Without a viable sediment management program, this setting will not exist.***

Issue 2: The Alternatives Analysis Report proposes an unsustainable dredging plan for the estuary alternative.

All of the amenities described above are at risk with the two proposed Estuary Alternatives. Approximately 900,000 cubic yards of sediment has accumulated in Capitol Lake since 1951. Despite the Estuary options' planned pre-dredge, about half of this accumulated sediment would be flushed into the Percival Landing-City waterfront area if the Capitol Lake dam were removed. Maintaining current water depths along the city waterfront and Percival Landing/Port area would require *dredging every three to five years*. Under the proposed Estuary Alternatives, the responsibility to conduct the necessary dredging to maintain current water depth would be shifted from the state of Washington to the four waterfront marinas, the City of Olympia (Percival Landing), and the Port. This is both impractical and economically unfeasible. The Olympia Yacht Club's estimated cost for its share of the first dredge cycle is approximately *$4 million - $6 million*. It is very likely that the other City waterfront operators would be faced with similar costs.

Alternatively, if dredging does not occur, it is clear that lower Budd Inlet **WILL** fill in with sediment and turn into a large mud-flat.

Issue 3: The Alternatives Analysis Report lacks location of disposal sites.

Contamination issues with both the Budd Inlet and Capitol Lake sediments preclude the use of currently designated open water disposal sites. The only disposal sites available presently are upland hazardous waste or upland reclamation sites, which require transportation by truck or rail. There is no rail access to the city waterfront or Percival Landing area. Sediment dewatering and transferring the material onto railcar or truck requires considerable space for the safe operation and maneuvering of heavy equipment. *This would require limiting or restricting public access to the City waterfront for up to six months during dredging operations.* It is difficult to picture how this could occur.

Issue 4: The Alternatives Analysis Report ignores permitting uncertainties.

At least 15 governmental and tribal agencies are currently involved in the permit approval process. Permit approval time is highly uncertain. Currently, it is not unusual for the process associated with federal, state and local *permitting to take several years*. Dredging permits stipulate that in-water operation is restricted to certain months of the year or "fishery windows." These "windows" vary by fish species and location. If a dredge operation cannot be completed within a window, in-water operation has to cease and be held in abeyance, usually several months, until the next window.

Issue 5: The Alternatives Analysis creates many planning uncertainties.

Coordination and cooperation between the city, the Port, and the four private marinas is uncertain. Each operates independently under different authorities, funding scenarios and schedules. Further complicating the situation is the uncertainty of the actual sedimentation rate, which is uneven over the short term. The CLAMP study indicated that *80-85% of the sediment moves downstream in major storm events occurring over only 8% of the time*. Two consecutive years of major storm events such as we experienced in 2008 and 2009 can create major planning, finance, and operational obstacles. This unpredictability is not mentioned in the Alternatives Analysis Report.

Issue 6: Finally, through omission, the Alternatives Analysis Report suggests that there is no appreciable difference in community support for the lake versus estuary options. This is not true, which has more recently been confirmed by the Department of General Administration's public input process that favored the Managed Lake option by a three to one margin.

In addition to the above-stated major weakness of the Alternatives Analysis Report , there are several facts in the presentation of the material that should be included or modified in order to have the Alternative Analysis Report accurately reflect previous reports. They are:

Section 2.1 Sediment Management
The "*Impacts to Marinas and Yacht Club*" are actually impacts to the areas within which the marinas lie. It is also noted that there will be significant impact to the area in which City of Olympia Percival Landing sits, and this is not mentioned.

Merge the appropriate information from the "Dredging Impacts," "Impacts to the Port of Olympia," and "Impacts to Marinas and Yacht Club" paragraphs into one section titled "Dredging Impacts Associated with Alternatives." In this paragraph, provide detailed and accurate information on the current and future impacts to the Capitol Lake area and the lower Budd Inlet area (including the Port of Olympia and marina basins). The impacts should provide comparable information on the current and future impacts on the dredging cycles, dredging costs, disposal options for dredged spoils and other related information. Below is a modified table Table 2-1 that will help begin this work. To insure accurate information, please consult affected parties before finalizing this table.

Table 2-1. Comparison of alternatives in relation to sediment management issues.

	Status Quo	Managed Lake	Estuary	Dual-Basin Estuary
Dredging Needs				
-Initial	0 cy	875,000 cy	394,000 cy	394,000 cy
-Maintenance				
Capitol Lake area	0 cy	350,000 cy (every 10 years)	NA	NA
Lower Budd Inlet	15-20 yr cycle	15-20 yr cycle	123,500 cy every 5 years*	123,500 cy (every 5 years)*

	Status Quo	Managed Lake	Estuary	Dual-Basin Estuary
Disposal Options				
Initial				
- Capitol Lake area	NA	Upland Reclamation Site	Near shore	Near shore
Maintenance				
-Capitol Lake area	NA	Upland Reclamation Site	NA	NA
-Lower Budd Inlet	No change	No change	5-10% to landfill 90-95%to upland reclamation site	5-10% to landfill 90-95%to upland reclamation site

*This should reflect volume for 3-5 year cycle rather than the 5 year cycle

Modifications to Table 2-4 must be completed in consultation with the Port of Olympia and marina operators. A final Capitol Lake Alternatives Analysis Report without input from these affected parties will not present a complete and accurate comparison of impacts from alternatives being promoted.

The new assumption that 30% of the sediment does not have to be managed clearly needs to be addressed. It may not be deposited in the "lower" Budd Inlet, but it will end up in the navigable waters and the channel that is now necessary to dredge.

Information was presented to CLAMP on the management of Purple Loosestrife. This information is not included in the report. The fact that Purple Loosestrife is not as big a problem as was previously thought, has major implications to dredging costs. In earlier cost studies, the assumption that Purple Loosestrife would have to be managed affected cost assumptions.

Information in the Alternatives Analysis Report indicates a five-year dredge cycle. However, the Moffatt and Nichol study clearly indicates a three to five-year cycle, and that the cycle is unpredictable. Only in an Addendum report did the Moffatt and Nichol study mention a five-year cycle, and that was to make the cost categories of high/medium/high estimates match other study data. The five-year cycle is mentioned in several places in the Alternatives Analysis Report, and needs to be corrected.

The fact that sediment movement cannot be predicted is not in the Alternatives Analysis Report. Again, the Moffitt and Nichol study was clear on this point. The Alternatives Analysis Report omits this vital point. Unpredictability of the sediment movement makes a sediment/dredging plan in lower Budd Inlet critical. The Managed Lake option allows dredging to be done on a planned basis.

Section 2.2 Plants and Animals

Revise the "Plants and Animals" paragraph on page 73 to more accurately reflect the fact that CLAMP members cannot document any significant differences in impacts to the non-native salmon resources in the Deschutes watershed from either the lake alternative or the mud flat alternative. Even the Washington Department of Fish and Wildlife is

unable to make such a determination because, according to their report Implications of Capitol Lake Management of Fish and Wildlife dated 22 August 2008, the Department was "...generally limited by a lack of specific studies of Capitol Lake and estuaries similar to Budd Inlet, as well as by a poor understanding of species-habitat association that can readily be translated into population level responses to the type of habitat changes considered here." They cautioned readers, including CLAMP, to "...consider those limitations when interpreting information contained in this report." Consequently, the summary statement on page 74 needs to make it clear that the conversion of Capitol Lake to a mud flat will not noticeably improve the non-native salmon runs in the Deschutes River watershed or any other south Puget Sound watershed, and this should not be an expected outcome or goal for creating a mud flat in lower Budd Inlet.

Section 2.3 Water Quality
Revise the "Water Quality" paragraph on page 73 to make it clear that while there are varying water quality improvements associated with both the lake alternative and the mud flat alternative, there is no significant improvement associated with either alternative. The most significant improvements to the Deschutes River, Capitol Lake and Budd Inlet water quality is likely to come from measures taken upstream in the Deschutes River watershed. The Washington Department of Ecology is in the very early stages of understanding the water quality study findings as found in the Deschutes River, Capitol Lake and Budd Inlet Temperature, Fecal Coliform Bacteria, Dissolved Oxygen, pH, and Fine Sediment Total Maximum Daily Load report. For instance, page 21 of this report states that dissolved oxygen load reductions in the Deschutes watershed are needed under both the lake alternative and the mud flat alternative, and measures to accomplish this will "...be developed in the Water Quality Improvement Report." This paragraph should make it more clear that the real benefits to water quality in the Capitol Lake and Budd Inlet area will come from measures taken upstream, and the water quality improvements from the lake alternative or the mud flat alternative will be negligible in comparison.

The Alternative Analysis does not speak to the benefits of maintaining Capitol Lake as a Managed Lake. The following key elements <u>are not included</u> in the comparative analysis:

1. <u>Sediment control</u>
The lake has proven to be an effective sediment trap. It has the capacity to handle the large surges of sediment associated with major flood events. In the past 58 years there have been only two partial dredges in portions of the lake – and there is still sediment storage capacity remaining.

2. <u>Planned dredging</u>
Dredging Capitol Lake can be completed in a planned, predictable, and orderly manner. Whether the permitting process takes one or five years is not critical. The permitting acquisition process is centered in one governmental agency. The dredging cycle is 9-10 years instead of 3-5 years.

3. Disposal sites
Capitol Lake already has good rail access available, making affordable access to upland disposal sites for dredge spoils a significant benefit of the Managed Lake alternative. The area around the lake is relatively undeveloped (as compared to the City waterfront), providing ample room for the assembly and safe operation of heavy equipment. There would be minimal impact to public access.

4. Environmental risk-abatement
Dredging Capitol Lake on a 9-10 year cycle versus dredging lower Budd Inlet on a 3-5 year cycle provides less exposure to an environmental mishap through oil spill or in-water accident.

5. Recreational value
Capitol Lake and lower Budd Inlet provide year round unique recreational and aesthetic values to residents of our community and tourists alike. The lake, with its tranquil water, has been a safe and ideal venue for small craft boating and boating events such as the recent dragon boat races.

6. An iconic heritage
The current landscape with the capitol dome and the reflecting pond has intrinsic value that is just priceless. It has come to represent not only our capital city but the state of Washington. The Managed Lake alternative would actually enhance these important values and uses.

OYC Involvement
OYC is a water-dependent, community-based organization that has existed in the same general location since-1904. The marina and facilities are located downtown, on the city waterfront between Percival Landing and the Deschutes waterway. Our organization of approximately 500 members from around the region will be significantly affected by the pending decision.

OYC's position on the future of Capitol Lake goes well beyond the impact to our facility. We are a diverse organization made up of many generations of local residents who have been part of the history, culture and development of this region. We are your teachers and small business owners, mariners and electricians, public servants and entrepreneurs. And yes, some of us are ecologists, engineers, lawyers, judges, community activists, historians and natural resource scientists. Some of us were here when the original decision that resulted in the formation of Capitol Lake was made, a thoughtful process that has produced a site of great cultural and social significance. We bring both the expertise and the hindsight to know that creating Capitol Lake was the right decision.

After lengthy review and involvement, the OYC has concluded that only with the Managed Lake Alternative as presented in the Capitol Lake Adaptive Management Plan (CLAMP) do we retain Olympia's character, our city waterfront and safe harbor, and an operating port facility. If either of the Estuary Alternatives were selected and put in place, the Olympia community would lose not only Capitol Lake, but would very likely lose

Percival Landing, the marinas and other water-dependent activities, and the Port of Olympia's waterfront facility. The public also would lose a significant part of our waterfront culture, our quality of life, and the attractions that are unique and special to Olympia.

Conclusion
The facts, historical evidence, and experience support the Managed Lake as the best alternative.

What is at risk is a viable working waterfront within the currently designated harbor area. We do not find evidence that returning Olympia's waterfront to extensive tidal mud-flats will provide a draw for our citizens, businesses and visitors as represented in the idealized artistic renderings. Given the risks and unpredictability of the estuary scenarios, we do not believe a decision in favor of either of the Estuary Alternatives is possible without addressing the issues we have raised and without the benefit of a complete watershed analysis.

We look forward to a response to the concerns raised in our comments.

Sincerely,

James T. Lengenfelder

cc: Linda Villegas Bremer
Nathaniel Jones

Response to Olympia Yacht Club - July 5, 2009

1. ***Major study limitations: It is too limited in scope. It does not take into account the watershed as a whole, known as a watershed analysis unit (WAU).***

   Response: Watershed Analysis Units (WAUs) is a watershed unit usually pertaining to the dominant stream. They are discrete hydrologic units of 15 to 80 square miles in size. The requirements for WAU are in WAC 222-22-020 and are used for the evaluating local forest lands under the Washington State Forest Practices Act. While it is not an appropriate analysis tool for an urban setting, the *CLAMP Public Review Draft* has incorporated many of the same evaluation models, such as: sedimentation, water quality, and fish and wildlife habitat.

   The scope of the CLAMP Alternative Analysis is limited to only a portion of the entire Deschutes River-Budd Inlet watershed. Capitol Lake lies between the base of Tumwater Falls and the Capitol lake dam. The *CLAMP 10-Year Plan* (2002) - management objective #1, limits the scope of the CLAMP Steering Committee to "Adaptively manage the Capitol Lake basin". The Plan [pg 8] describes the Capitol Lake basin as being the north, middle, and south basins along with Percival Cove. The Capitol Lake basin contains the Washington State Capitol Campus and a large portion of publicly owned and managed aquatic lands and uplands.

   When the Deschutes Estuary Feasibility Study was initiated, CLAMP 10-Year Plan: management objective #2, there was a commitment to include that portion of lower Budd Inlet which lies within one mile of the Capitol Lake dam. That same commitment to address issues in lower Budd Inlet was carried though within the Public Review Draft.

   Additional analyses are underway which are focused on portions of the watershed above and below the Capitol Lake basin. These various activities are itemized in the Phase 1 report of the Budd Inlet Restoration Partnership (December 2008). There is substantial value in coordination between these efforts. In large measure, the CLAMP Alternatives Analysis report and the associated process has served to further such coordination.

2. ***Major study limitations: The entire WAU has an overall lack of attention to and analysis of the economic, social, public health, and environment impacts of the estuary alternatives.***

   Response: The *CLAMP Pubic Review Draft* does not contain all the information that was developed by the CLAMP initiative. Throughout the development of the Alternatives Analysis document and the supporting background reports it was recognized that the topics which could be addresses were limited by the available budget. The scale and scope of the analysis was an area of significance to the members of the Steering Committee which was regularly considered and revisited.

   The CLAMP Pubic Review Draft was intended to provide an "apples to apples" comparison of the four alternatives.

   > "The goal of this report is to summarize the key findings of these technical reports to facilitate selection of a long-term management strategy. It is not the purpose of this report to provide a technical review of the reports or to further analyze the information presented in them. The background reports themselves

were not prepared to address all issues facing this management decision, but to provide a framework for what is considered the most crucial of these issues. **Depending upon the alternative selected, a more comprehensive environmental review (e.g., an Environmental Impact Statement) will be prepared**." [pg 2 - Section 1.2 *Emphasis added*]

Regarding economic issues, refer to the detailed reply under #3 below.

Regarding social issues, these were address in the *Deschutes Estuary Feasibility Study: Net Benefits Analysis - Stakeholder Involvement* (2006), commonly referred to as the 'Focus Group Report', and the *Deschutes Estuary Feasibility Study: Net Social and Economic Benefit Analysis* (2007), commonly referred to as the NBA report, in the preceding quote.

Regarding public health issues, questions about mosquitoes and west Nile virus arose from a CLAMP Public Workshop in, June 20, 2007. Responses were provided at the meeting and later posted to the GA website. Beyond that, this has not been a key issue for the CLAMP Steering Committee.

Regarding environmental impacts, various background reports provide insight into the environmental issues facing the watershed, the lake, and Budd Inlet. Your review should include the *Deschutes River, Capitol Lake, and Budd Inlet Temperature, Fecal Coliform Bacteria, Dissolved Oxygen, pH, and Fine Sediment Total Maximum Daily Load* report of October 2008. You will find additional information in the *DEFS Restoration Study Biological Conditions Report (2007)* and its subsequent addendum *(2008),* the *Implications of Capitol Lake Management for Fish and Wildlife* (2008), the *DEFS – Independent Technical Review* (2007), and the *Deschutes Estuary Feasibility Study Final Report* (2008).

Finally, it is important that you understand that the Alternatives Analysis report and all of its background documents have been prepared to support a decision process leading to a long-range strategy for the lake basin. The depth and scope of the Alternatives Analysis has been gauged to inform the decision process. As noted in Section 1.2 of the report (and repeated above), a more comprehensive environmental review process which will dive more deeply into the economic, social, public health, and environment impacts is expected prior to implementation of any new alternative.

3. Major study limitations: Previous reports did state that the CLAMP Steering Committee made an informed decision not to address a cost benefit analysis.

Response: The Pubic Review Draft does not contain all the information that was developed by CLAMP. The CLAMP Steering Committee considered secondary economic factors in the preparation of the Public Review Draft.

The following discussion is from *Community Economic Values for the Capitol Lake Basin* (2009).

"3. Secondary Economic Impacts

The NBA [Net Benefit Analysis] report was not able to determine the possible affect on downtown Olympia business if the lake were restored to an estuary…

Staff representing General Administration, the Thurston Regional Planning Council, and the National Oceanic and Atmospheric Administration - Coastal Services Center explored various local data sets which might be used to populate a regional economic model. It was determined that available economic models required a large amount of localized data that was not available within the US census profile, provided in the county property tax records, or reasonably attainable through other methods."

Since the release of the NBA report two related studies were completed. These were *Implications of Capitol Lake Management for Fish and Wildlife* (September 2008) and *Heritage Park Program Development – Partner Agency Focus Group Report and Recommendations* (April 2008). These reports offer greater insight into the potential for the development of wildlife watching in the Capitol Lake basin under alternative scenarios. In sum, these studies found significant potential for local wildlife tourism and a greater quantity and diversity of wildlife under estuary alternatives. The NBA report was not able to determine the possible affect on attendance at community events if the lake were restored to an estuary.

A study could be undertaken to predict these behaviors. However, it is believed that the study's cost is greater than the benefit it would provide to the CLAMP decision making process.

There are limited financial resources available to address detailed questions of regional economic impact. Recent CLAMP technical reports have provided answers to some of the economic questions about the future of the Capitol Lake basin. Questions which will likely not be fully resolved relate to the secondary economic impact of a lake versus an estuary upon the local region. [pg 9-15]

4. ***Major study limitations: The study does not adequately address critical issues such as sediment management and other points described in Issues 1 through 6 below.***

Response: These will be addressed in detail below in items 5 through 10.

5. ***Issue 1: The Alternatives Analysis Report has no Sedimentation Management Plan, nor does the Analysis address Upstream Sediment Management.***

Response: The *CLAMP Pubic Review Draft* contains a significant discussion about Sediment Management. [pg 11-20] This summary was prepared from several technical reports which were used in the preparation of the *Pubic Review Draft.* The *CLAMP Pubic*

Review Draft described the various options which could be implemented. These background reports included the following:

- Moffat & Nichol. 2009. Capitol Lake Alternatives Analysis – Dredging and Disposal Addendum.
- Moffat & Nichol. 2008. Capitol Lake Alternative Analysis – Dredging and Disposal.
- Stevens, A., Gelfenbaum, G., Elias, E., and Jones, C. 2008. Capitol Lake Alternatives Analysis: Incorporation of Fine-Grained Sediment Erodability Measurements into Sediment.
- Moffat & Nichol. 2007. DEFS – Engineering Design and Cost Estimates.
- George, D., Gelfenbaum, G., Lesser, G., and Stevens, A. 2006. DEFS – Hydrodynamics and Sediment Transport Modeling.

Regarding upstream sediment management, the *CLAMP Pubic Review Draft* was informed by a recent report on sediment production. This report was authored by the Squaxin Island tribe and was to be used as a part of the Total Maximum Daily Loading (TMDL) process. It updated the results of an earlier Deschutes River sediment report, which is also listed below:

- Raines, Mary. 2007. Deschutes River Mainsteam Bank Erosion: 1991 to 2003.
- Collins, B. 1994. A study of rates and factors influencing channel erosion along the Deschutes River, Washington with application to watershed management planning.

6. ***Issue 2: The Alternatives Analysis Report proposes an unsustainable dredging plan for the estuary alternative.***

Response: The *CLAMP Pubic Review Draft* summarizes sediment management strategies which were contained in two CLAMP technical reports.

- Moffat & Nichol. 2008. Capitol Lake Alternative Analysis – Dredging and Disposal.
- Moffat & Nichol. 2009. Capitol Lake Alternatives Analysis – Dredging and Disposal Addendum.

These technical reports identify how sediment would be distributed in Budd Inlet under an Estuary Alternative. It does not identify who would pay for the dredging. A recommendation in the *Community Economic Values for the Capitol Lake Basin* (2009) report suggests that these costs should be shared among affected parties.

> "Recommended Action: It has been suggested that the CLAMP Steering Committee address possible distribution of costs and possible cost sharing

opportunities between effected parties. The scope and reach of the committee's recommendations regarding the future management of the lake will be determined as a part of the analysis process." [pg 11]

7. ***Issue 3: The Alternatives Analysis Report lacks location of disposal sites.***

Response: As noted previously, the *CLAMP Pubic Review Draft* contains summary information of sediment management discussion from other documents. The Moffat & Nichol 2009 report (see above) contains Section 2, Beneficial Reuse of Dredged Sediments. This discusses possible disposal sites within southern Budd Inlet. The Moffat & Nichol 2009 report also contains a map of potential disposal sites: Figure 3 Areas of Lower Budd Inlet with Restoration Potential. [pg 7]

If sediment disposal is not possible in Budd Inlet, the Moffat & Nichol 2009, report and its predecessor (Moffat & Nichol, 2008) contain a range of disposal options, which are based on a range of disposal assumptions.

8. ***Issue 4: The Alternatives Analysis Report ignores permitting uncertainties.***

Response: While Sediment Management is the longest section in the *CLAMP Pubic Review Draft,* it is not possible to include all the valuable discussion contained within the various background reports. The Moffat & Nichol 2008, report contains a discussion in Section 5.2, Permitting and Regulatory Process [pgs 27-29].

9. ***Issue 5: The Alternatives Analysis creates many planning uncertainties.***

Response: We concur that there is uncertainty within the planning environment. Inter-jurisdictional and public-private coordination bring unique challenges. The CLAMP process has provided a useful and constructive forum to reduce such uncertainty and better understand the interests of the affected parties. Variable hydrologic conditions are a natural part of a properly functioning watershed. The CLAMP analysis has been particularly successful because resources were applied to objective science and observation. As a result, we now have a far greater understanding of the parameters which bracket the behavior of the Deschutes watershed. Contrary to the assertion contained in Issue 5, the Alternatives Analysis process has addressed and resolved many planning uncertainties; it has not created uncertainty. Again, we concur that uncertainty still resides in various aspects of the planning environment; however, we are far more able to address the issues before us than before.

10. ***Issue 6: The Alternatives Analysis Report suggests that there is no appreciable difference in community support for the lake versus estuary options.***

Response: The *CLAMP Pubic Review Draft* was intended to provide an "apples to apples" comparison of the four alternatives. It is a summary of all the technical reports.

A separate CLAMP document is being prepared which will include all the public comments received regarding the future management of the Capitol Lake basin. It will include comments

from the public workshop, CLAMP focus group, emails, letters, position papers, and the Olympia Yacht Club letter.

11. Section 2.1 Sediment Management

Response: Thank you for the suggestion about merging the "Dredging Impacts," and "Impacts to the Port of Olympia," sections of the *CLAMP Pubic Review Draft* into a single discussion.

We concur that sediment management information be comparable for future dredging cycles, dredging costs, disposal options for dredged spoils and other related data.

Thank you for the suggestion to modify Table 2.4 (Table 2.1 in the OYC letter). We believe that it is appropriate to use the five year time period because it is the latest and best information we have (Moffat & Nichol, 2009).

We concur that it will be important to maintain contact with the Percival Landing marina operators and the Port of Olympia as the CLAMP process proceeds.

12. Assumption of 30% of the sediment does not need to be addressed

Response: Moffat & Nichol, 2009 reports, "…the absolute quantity of material to be dredged long-term is smaller for the estuary alternatives. The modeling by USGS (2006, 2008) shows that, in the long term, approximately 30 percent of material that enters lower Budd Inlet bypasses the marinas and Port facilities and moves north into Budd Inlet." [pg 38]

The report authors worked with the United State Geological Survey (authors of Stevens et al, 2008 George, et. al. 2006) to clarify this understanding. At this time, we have no reason to dispute this finding. Small particles of suspended sediment from the Deschutes River which move north, beyond the Port Peninsula, are likely to disperse broadly, over a very large area which includes portions of the Sound itself.

13. Management of Purple Loosestrife

Response: The WA Department of Agriculture has indicated that they have no permit review for the removal of sediments from Capitol Lake. However, like the Department of Agriculture and the Thurston County Noxious Weed Control Board, we are concerned with the potential that Purple Loosestrife seeds from Capitol Lake sediments will germinate once they are at a disposal location. While this risk can be lessened by the removal of all new plants, this does not alter the condition of the sediments. Sediment disposal planning has included the potential for loosestrife mitigation, should this become necessary.

14. Five-year vs Three to Five-year dredging cycle

Response: Thank you for the suggestion to use a 3 to 5 year dredging cycle. We believe that it is appropriate to use the five year time period, since this was used in the most recent dredge disposal report (Moffat & Nichol, 2009).

15. Sediment movement cannot be predicted

Response: We concur that there can be a high degree of variability in flow within naturally functioning watersheds. The first USGS sediment transport report (DEFS – Hydrodynamics and Sediment Transport Modeling, 2006) provides detail about of what factors were included in the model simulations. [Pgs 2-1 to 2-56] That report also describes the uncertainties of numerical modeling.

16. Section 2.2 Plants and Animals

Response: Thank you for the suggestion to edit the Plant and Animal discussion of the Summary Chapter. Comments were received regarding the Plant and Animal section of the *CLAMP Pubic Review Draft.* [pg 20-30] It seemed appropriate to clarify what the WDFW report contained in Plant and Animal section, rather than the summary, so this is what we have done.

17. Section 2.3 Water Quality

Response: Thank you for the suggestion to edit the Water Quality discussion of the Summary Chapter. The *CLAMP Pubic Review Draft* summarizes the main points of the TMDL report (Ecology. 2008) in section 2.3.1.1 Dissolved Oxygen. [Pgs 31 & 32]

We concur that downstream improvements to water quality could be realized over the long-term by reestablishing a forested riparian corridor. However, we are concerned that temperature improvements achieved in the uplands may not be sustained in the basin area. The discussion on page 31 indicates that the current lake "violates dissolved oxygen standards for 60 days or more during the summer (July 15 through September 15)". This violation cannot be perpetuated.

18. The Alternative Analysis does not speak to the benefits of maintaining Capitol Lake as a Managed Lake

Response: The *CLAMP Pubic Review Draft* was intended to provide an "apples to apples" comparison of the four alternatives.

> "The goal of this report is to summarize the key findings of these technical reports to facilitate selection of a long-term management strategy. It is not the purpose of this report to provide a technical review of the reports or to further analyze the information presented in them. The background reports themselves were not prepared to address all issues facing this management decision, but to provide a framework for what is considered the most crucial of these issues." [pg 2 - Section 1.2]

19. OYC Involvement

Response: Thank you for your organization's continued interest in the entire CLAMP process and your considerable investment of time and effort to understand the facts and implications associated with each alternative. Your commitment is greatly appreciated.

X. Print Media Commentary

The CLAMP process has been of interest to the local print media, *The Olympian*, since the committee was created in 1997. The following is a collection of 21 articles and four editorials which are associated to the CLAMP process. They span the time of September 2005 to August 2009 and these are in chronological order.

This collection provides an interesting "window in time" to questions posed by the CLAMP Alternative Analysis. The threshold established by *The Olympian* was summarized by the last part of their editorial of September 23, 2005, which reads as follows:

> *"The study must lead to a final decision. The elected and appointed officials in charge owe it to the public to make a decision: Lake or estuary?*
>
> *No more indecision. No more stalling. No more studies. Make a decision and move forward. "*

Decision must follow study

The Olympian Published September 23, 2005

The South Sound community is inching ever closer to a decision on the future of Capitol Lake. It's about time.

Crews are on the ground studying the lake as part of a $900,000 study to determine whether it's best to leave the 260-acre lake as a reflecting pool or remove the Fifth Avenue dam and allow the man-made lake to revert to an estuary. The first parts of the study should be complete next spring.

The ramifications are huge -- not just for aesthetics, the environment and salmon recovery, but for shipping in lower Puget Sound. The sediments washing down the Deschutes River have to go someplace, and if it isn't the lake, it will be Budd Inlet. And that has potential impacts for the Port of Olympia and the Army Corps of Engineers responsible for saltwater dredging. Then there's the question of whether the new, multimillion- dollar Fourth Avenue bridge can withstand unregulated tidal action if the dam is removed.

The central question, however, is this: Will the study -- finally -- lead to a decision?

The Capitol Lake Adaptive Management Committee, a group of local, state and tribal officials charged with managing the lake, has struggled for more than six years to answer one question: Lake or estuary?

Half of the committee members support continuation of the man-made lake; the other half believe the estuary is the best solution. That split reflects a similar divide in the community.

The decision to do an estuary study was put forth as a means to resolve the impasse. It might be that an estuary isn't possible, in which case state officials, as managers of the lake, need to begin dredging immediately. The lake hasn't been dredged since 1986 and continues to fill with sediment while local, state and tribal officials have been stuck in neutral.

Raising the $900,000 for the study proved to be a difficult challenge. But with a good portion of the money either in hand or promised, the study was ordered.

In announcing the decision to proceed, Rob Fukai, former director of the Department of General Administration, said: "Stewardship of the lake is a contentious and complex issue.

Reaching agreement isn't easy. But the committee and staff have demonstrated a great degree of patience, trust and respect, which I believe will ultimately lead to success." Let's hope so, because the committee has had little success to date.

But now the scientific work has begun. A final report is not due until mid-2008.

What happens after that?

Capitol Lake is a state resource. It's considered part of the Capitol Campus, and the state Department of General Administration has been the governing authority -- scheduling dredging work, etc.

The waters of the state belong to everyone, but the reality is that folks in Spokane or Walla Walla or Vancouver or Bellingham don't really care whether Capitol Lake stays the way it is or becomes an estuary. So it's incumbent upon residents of South Sound to speak for their colleagues across the state.

After a public education campaign, the public must be consulted. An advisory ballot is warranted.

The worst possible outcome is for the $900,000 estuary study to sit on a shelf someplace drawing dust. The study must lead to a final decision. The elected and appointed officials in charge owe it to the public to make a decision: Lake or estuary?

No more indecision. No more stalling. No more studies. Make a decision and move forward.

Questions linger over lake's future

The Olympian Published December 2, 2005
John Dodge

A public with an appetite for answers about how a Deschutes River estuary would behave in lieu of the existing Capitol Lake left the annual meeting of the lake managers Thursday night still hungry.

The $1.1 million study, which relies in large part on computer models, still is in the early stages, not ripe enough to explain what would happen to the river sediment the lake traps before it enters Budd Inlet.

Olympia physician Paul Allen probably asked the three biggest questions on the minds of the 45 or so people who braved the sleet and snow to attend the annual Capitol Lake meeting in Olympia:

• How much sediment would end up at the Olympia Yacht Club if the Fifth Avenue Dam is removed?

• What would be the rate of delivery of sediment to the Port of Olympia?

• Is downtown Olympia less prone to flooding without a Fifth Avenue dam?

"We don't have answers to your questions yet," said Curtis Tanner, a state Department of Fish and Wildlife biologist serving as project manager for the estuary feasibility study.

He said the sediment transport study by the U.S. Geological Survey should be done by May 2006, along with another study to determine what the estuary habitat would look like if the dam were removed and the 260-acre manmade lake ebbed and flowed with Budd Inlet tides each day.

This much is clear: The area that now is a lake will remain inundated with salty water much of the time, according to computer model simulations by the U.S. Geological Survey.

Those two studies will be followed by two more: One beginning in March 2006 that looks at the cost estimates of converting the lake to an estuary and another starting in July 2006 that weighs the social and economic pros and cons of altering the lake environment.

The entire study is due for completion in 2008.

"Our concern is the sediment," said Olympia Yacht Club board of trustee John DeMeyer.

The yacht club and its members' 230 boats are moored within a stone's throw of the Fifth

Avenue dam. They fear their moorages could be plugged with sediment, making it difficult to navigate lower Budd Inlet.

If dredging is required, would the sediment be free enough of pollutants to allow for open water disposal? DeMeyer asked. The sediment has not been tested for contaminants, Tanner said.
However, the last time the state Department of General

Administration dredged the lake in 1986, the sediment was clean enough to dispose of in marine waters, general administration senior planner Nathaniel Jones said.

Greg Falxa noted that Capitol Lake as it is provides valuable foraging habitat for thousands of maternal bats in the summer, habitat that might not support them if it's turned into an estuary.

Olympia resident Bob Vadas pointed out that cutthroat trout would benefit if the lake were converted to an estuary.

"I personally like the smell of mud flats," Vadas said.

At the meeting, the nine-member lake management committee consisting of state agency, local government and tribal representatives also reported on other lake activities, including 2006 construction plans for Heritage Park.

The $1.6 million park project along the shores of the lake in downtown Olympia will begin shortly after Lakefair next summer and last nine weeks. It includes bringing in topsoil, regarding nine acres of lawn, installing irrigation and drainage as well as seeding with turf grass. It will leave the grassy expanse off limits to the public until it matures the following spring.

However, the popular Arc of Statehood promenade along the north basin will remain open.

Capital Lake Q&A

Q: Who manages Capitol Lake?

A: At the direction of the state Legislature, the 260-acre lake was formed by the damming of the Deschutes River with construction of the Fifth Avenue Dam in 1951. Historically, the state Department of General Administration has managed the lake as part of the Capitol Campus.

In 1997, the Capitol Lake Adaptive Management Plan Steering Committee was formed to address long-term management of the lake within the context of the larger Deschutes River watershed. The committee conducts public meetings at 8 a.m. the first Thursday of every month in the General Administration headquarters office, 210 11th Ave. S.W., Olympia.

Q: Who is represented on the committee?

A: The nine-member committee includes representatives from the state departments of Ecology, Fish and Wildlife, General Administration and Natural Resources, the cities of Olympia and Tumwater, Thurston County, the Squaxin Island Tribe and the Port of Olympia.

Q: Why study the pros and cons of converting Capitol Lake back to Deschutes River estuary?

A: The Lake has several serious problems. It is filling with sediment, slowly turning into a freshwater marsh.

Lake water quality violates the state standards for fecal coliform, a human health hazard, and phosphorus, a nutrient that increases algae blooms. The lake also is polluted with stormwater runoff and infested with noxious weeds.

If feasible, an estuary might solve some of the problems associated with maintaining an artificial lake.

Q: Why don't the lake managers just dredge the lake to maintain it?

A: The estimated cost of annual dredging is pegged at $1 million to $1.5 million a year. Disposal of the dredge material also is a problem. The lake was last dredged in 1986. Since then, about 700,000 cubic yards of sediment have accumulated in the lake, reducing water levels by several feet.

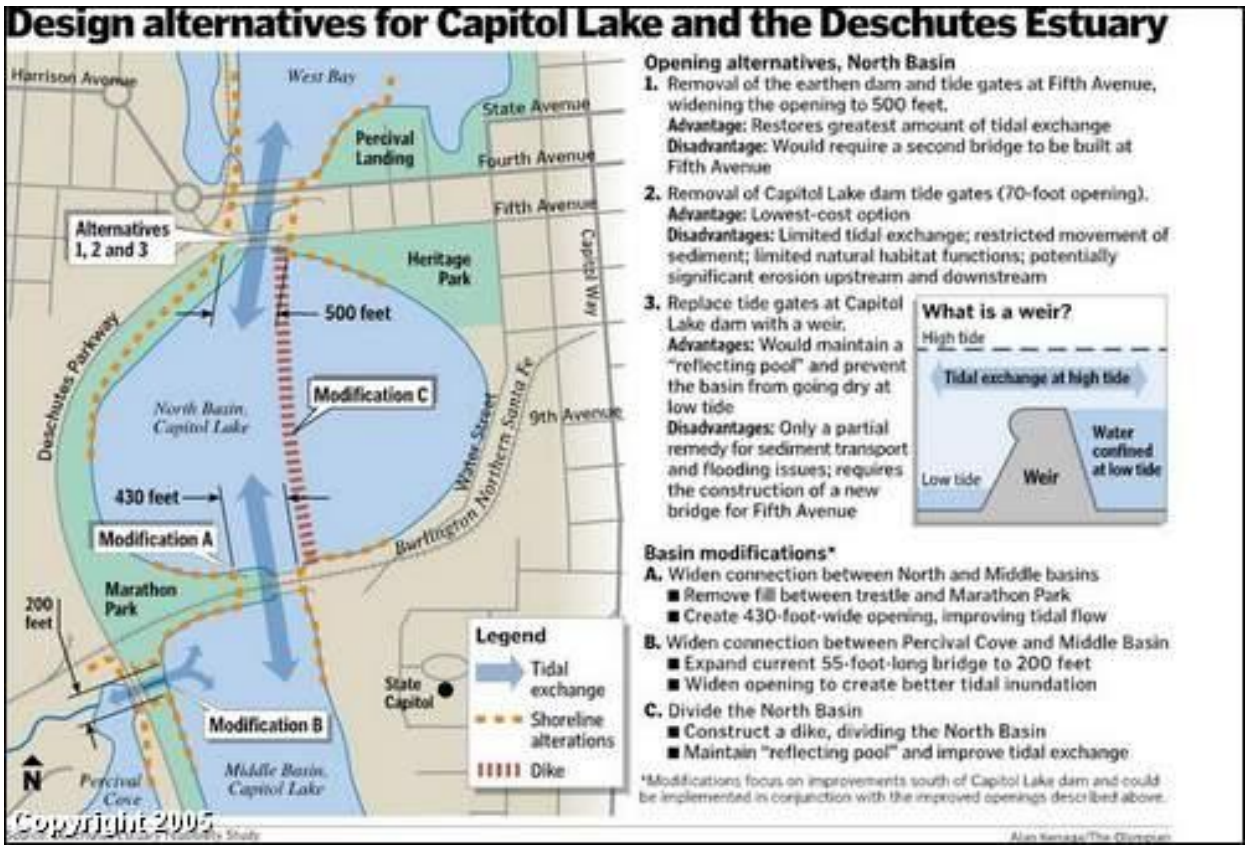
Q: What is an estuary?

A: An estuary is an area where saltwater mixes with freshwater. In this case, it would be the Deschutes River mixing with Budd Inlet. Estuaries are some of the most biologically productive areas on earth, home to many species of birds, fish and mammals.

Q: Would an estuary cause odor problems?

A: A restored Deschutes River estuary probably would smell much like other estuaries along Puget Sound, such as Mud Bay or the Nisqually Delta. Many longtime residents recall the foul odors of the Deschutes River mud flats prior to creation of the lake. The foul smell might have been due in large part to raw sewage and other untreated waste entering the estuary.

Wastewater generated in urban South Sound now is sent to the LOTT Alliance wastewater treatment plant in downtown Olympia for advanced treatment before it's discharged to Budd Inlet.



Tracking the money

The Capitol Lake managers have gathered $938,245 in cash and in-kind services so far for an estuary feasibility study, which is expected to cost $1.1 million.

Here's a breakdown of the contributions:

- Department of General Administration: $264,005
- Federal salmon recovery funds: $221,740
- Department of Fish and Wildlife: $222,000
- Department of Ecology: $99,000
- Squaxin Island Tribe: (EPA grant) $40,000
- Puget Sound Action Team: $30,000
- City of Olympia: $20,000.
- National Oceanic and Atmospheric Administration: $15,000
- Department of Natural Resources: $13,000
- Port of Olympia: $10,000
- Thurston County: $3,500

Source: State Department of General Administration

Cost of Estuary Study Rises

The Olympian Published February 1, 2006
John Dodge

The cost to complete the Capitol Lake estuary study has climbed, but partners in the project have committed enough money to finish the work, the state Capitol Committee learned Tuesday.

The latest estimate to finish a study of the pros and cons of converting the man-made lake back into a free-flowing Deschutes River estuary is pegged at $1.14 million, compared with $902,505 when the committee was last briefed on the study in July 2005.

The main spike in the budget is a more complete estimate of project management costs, which stand at $185,000 to finish the project in 2008, said Peter Antolin, deputy director of the state Department of General Administration.

The lake managers, who are from state agencies, local governments, the Port of Olympia and the Squaxin Island tribe, are confident they have all but secured the money to finish the study, Antolin said.

The balanced project budget assumes the state Department of Fish and Wildlife will contribute $200,000 to the project in its 2007-09 budget.

The state agency money is tied to implementing the Puget Sound cleanup and protection plan, including work to protect nearshore habitat.

“The Puget Sound water quality management plan is ongoing, which makes the money a pretty solid guarantee,” Antolin said.

The most critical voice on the Capitol Committee came from Marty Brown, director of the state Office of Financial Management.

Brown expressed frustration that state agencies continue to carry the bulk of the load to fund the project, even though it is supposed to be a cooperative effort between the state, local governments and the tribe.

Project Could Free Mass of Sediment

The Olympian Published November 6, 2006
John Dodge

1 Million Cubic Yards Have Settled in Capitol Lake

Olympia Harbor, home to the Port of Olympia and four private marinas, could receive a big slug of sediment trapped in Capitol Lake if the Fifth Avenue Dam is removed to recreate a Deschutes River estuary.

More than 1 million cubic yards of sediment carried down the river in the past 55 years since the river was dammed have accumulated in the artificial lake, reducing lake volume by about 60 percent, according to a just-released report by the U.S. Geological Survey.

With the dam gone, somewhere between 125,000 cubic yards and 280,000 cubic yards of sand, silt and mud would leave the 260-acre lake basin and enter Budd Inlet in the first three years, according to the USGS study.

The $195,000 USGS study is a key piece of the $1.1 million estuary feasibility project, which state, tribal and local government officials managing Capitol Lake began in 2003. It's slated for completion in 2008.

The study's goal is to weigh the pros and cons - economic, social and environmental - of replacing the lake with a free-flowing river, a topic of lively community debate.

After 10 years, sediment about 6-feet deep would accumulate in the port and marina area. Without programs to dredge and manage the sediment, recreational vessels could be left stranded in the mud, and the port's marine terminal and shipping channel - the site of a proposed dredging operation - could be partially filled with sediment.

"We're concerned about what's going to happen," said Jim Lengenfelder, commodore of the Olympia Yacht Club, which has 260 boats moored just north of the Fifth Avenue Dam. "Our moorage basin is already getting shallow, and some of the boats sit in mud at low tide."

The lake has served as an effective sediment trap for the port for decades, reducing the frequency with which port officials and the U.S. Army Corps of Engineers have had to dredge to maintain marine commerce.

"It would certainly speed up the port's need to dredge the shipping basin," Port Commissioner Bob Van Schoorl said of the estuary option.

It also would shift the responsibility for dredging from the state, which manages Capitol Lake, to the local tax base, with help from the Corps of Engineers, Van Schoorl said.

"We're going to have to pay for sediment management one way or the other," noted Olympia physician Paul Allen, a member of Friends of the Deschutes Estuary. "There's economic burden of keeping the lake a lake."

Previous estimates suggest it would cost about $1.2 million a year to dredge sediment entering the lake on an annual basis and $40 million to remove the accumulated sediment. But the numbers could vary, depending on whether the sediment is polluted or clean, which influences how it is disposed of.

An engineering study set for completion this winter is supposed to fine tune dredging costs and provide an idea of how much it would cost to remove the dam, Tanner said.

Sediment management has been a thorny issue for years. The lake has been partially dredged twice - 191,000 cubic yards in 1979 and 43,600 cubic yards in 1986 - because of the cost and environmental concerns about sediment disposal.

Restoring estuaries, including the Deschutes, is a key to recovering the health of Puget Sound, said Naki Stevens, program manager for People for Puget Sound.

"Puget Sound is on the brink," she said. "There's nothing better than an estuary for restoring biological productivity in Puget Sound."

Sediment Could Be Used

Options exist to reduce the initial flush of sediment into lower Budd Inlet, noted Curtis Tanner, a U.S. Fish and Wildlife Service biologist hired to manage the Deschutes estuary study.

For instance, some of the sediment in the lake basin could be dredged and repositioned along Deschutes Parkway to both protect the road from erosion from tidal forces and create a gently sloping shoreline that would support salt marsh and other estuary habitat for fish and wildlife, Tanner said.

"There may not be that big of a flush of sediment, if we use some of it to reshape the shoreline in the lake basin," said Nathaniel Jones, a senior planner with the state Department of General Administration, which has authority to manage the lake as part of the Capitol Campus.

Other findings in the study include:

- **The amount of** sediment entering Budd Inlet in the early years after dam removal could increase by about 30 percent if the east half of the lake's north basin were walled off to maintain a freshwater reflecting pond for the state Capitol.

- **Roughly 35,000** cubic yards of sediment enter the lake from the river each year. Before the dam was built, about half the sediment settled in the confines of the current lake boundary and half headed out to Budd Inlet.

- **The main river** channel, north basin and portions of the middle basin would be underwater about 80 percent of the time. Current lake elevations above 6 feet would be under water about 50 percent of the time.

- **The dam opening** would be sufficient for a full tidal exchange in the estuary, creating a range in salinity high in the north basin to low in the south basin south of Interstate 5. "If the opening was too small, the saltwater would pile up at the mouth of the river," Tanner said.

- **During extreme high** tides and rainstorms, portions of Tumwater Historical Park and the north end of Marathon Park could flood, but flooding problems with an estuary are less than they are with a lake.

Dioxin Adds To Questions

It's unclear to lake managers what effect the recent discovery of unacceptable levels of dioxin in lower Budd Inlet bottom sediments will have on management of the sediments trapped in the lake. The dioxin discovery has temporarily derailed a Port of Olympia plan to dredge its shipping berths and the Budd Inlet shipping channel maintained by the Corps of Engineers.

The lake sediments would need to be analyzed for toxic chemicals, including dioxin, before anything could happen to them, Tanner said. If they were clean, it's possible they could be used in some way to cap contaminated sediments in lower Budd Inlet as part of an overall toxics cleanup plan, Van Schoorl said.

But the lake sediments could be a problem if their release into lower Budd Inlet forces the port and corps to increase dredging in areas identified as contaminated with dioxin, Van Schoorl said.

Deschutes Workshop

A community workshop to review two major technical reports for the $1.1 million Deschutes Estuary Feasibility Study is set for 6:30 p.m. to 9 p.m. Wednesday [November 8, 2006] in the General Administration Building lobby at 210 11th Ave. S.W., Olympia.

Key findings on what would happen to Capitol Lake sediments if the Fifth Avenue Dam is removed and what a Deschutes River estuary would look like will be presented by authors of the reports.

CAPITOL LAKE - Life Without the Dam

The Olympian Published November 06, 2006
John Dodge

At low tide, an expanse of mud flats partially ringed by a narrow band of salt-tolerant plants and split by a braided, sandy river channel would await visitors to what is now Capitol Lake, if the Fifth Avenue Dam were removed.

The recreated Deschutes River Estuary, a place where the river would mingle with Budd Inlet tides, would most likely resemble the tide flats of Eld Inlet's Mud Bay with a river channel similar to Kennedy Creek as it flows into Totten Inlet.

The north end and middle of the estuary would be underwater much of the time, and the estuary would likely be host to an array of fish, waterfowl, clams, algae, worms, saltgrass and pickleweed typically found in places where rivers meet the sea.

That's the conclusion of a $105,000 study by Earth Design Consultants Inc., a Corvallis, Ore.-based firm whose assignment from Capitol Lake managers was to paint a physical and biological picture of what the estuary would look like if the dam holding back the river flows since 1951 were removed.

The image of mud flats means dramatically different things to different members of the community. Some envision them as a stinky, inferior alternative to the lake.

"In the plan to make Capitol Lake an estuary, the beautiful walkways, paths, seating areas will surround smelly mud flats," Olympia resident Joyce Dunn wrote in a recent letter to the editor. "You will need a nose plug to stroll along Deschutes Parkway."

For others, mud flats are a natural feature of South Sound, playing host to a variety of marine creatures at the bottom of a Puget Sound food chain torn ragged by habitat loss and pollution.

"Mud is good. Mud is beautiful," said Naki Stevens, program director for the conservation group People for Puget Sound.

"The smell of mud flats is in the nose of the beholder," offered Curtis Tanner, a U.S. Fish and Wildlife Service biologist assigned to manage the estuary study.

He said it's important to remember that some of the stink of the pre-dam Deschutes Estuary that longtime residents of Olympia remember is directly tied to release of raw sewage and industrial wastewater in lower Budd Inlet before the community had a wastewater treatment plant.

Tanner said the estuary would be short on vegetation and salt marsh because it is low-lying and lacks some of the gradual shoreline elevations that would create different tidal zones and plant communities.

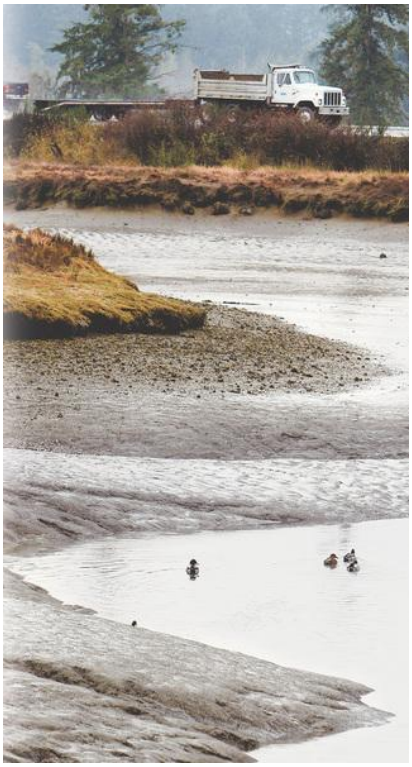
If some of the accumulated sediment in the lake - more than 1 million cubic yards since the river water was impounded - were used to reshape the shorelines, there would be more salt marsh, shrubs and trees, he said.

Earth Design Consultants sampled 90 sites in five estuaries within South Puget Sound, conducted a scientific literature review of estuaries and prepared a statistical model to come up with its picture of a Deschutes Estuary.

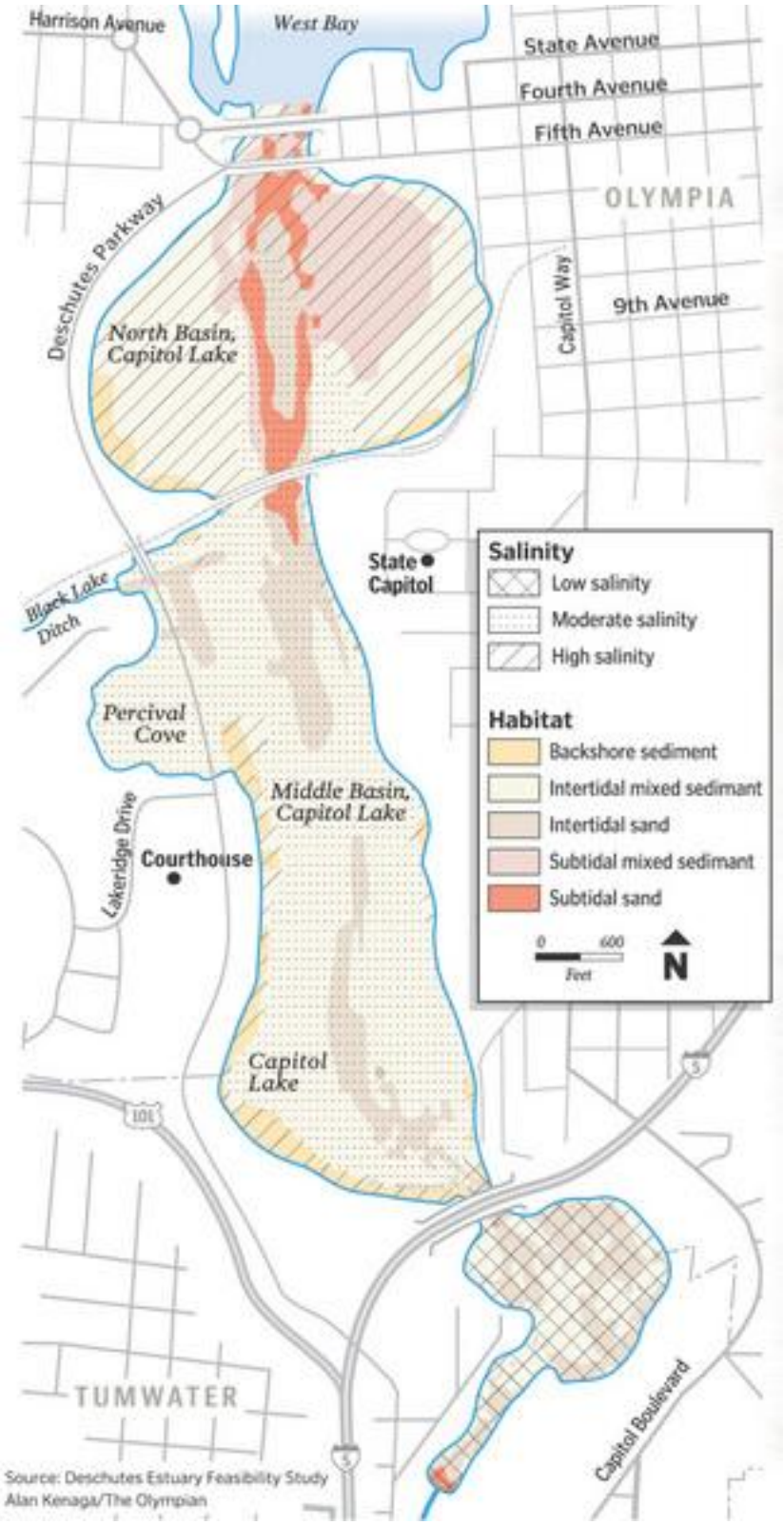
While there are no obvious physical barriers to recreating the Deschutes Estuary, the estuary's urban setting makes it vulnerable to urban stormwater, invasive species and other human disturbances, the consultants concluded.

The health of the estuary would depend in large part on adaptive management and community support to reduce the disturbances, the consultants said.

"Even under the best conditions, urban restoration may come to be enhanced or rehabilitated, but never truly restored," the study concludes. More information about the Deschutes Estuary Feasibility Study, including a report on potential sediment movement from Capitol Lake into Budd Inlet, is available at www.ga.wa.gov/CLAMP/EstuaryStudy.htm.



The Deschutes River Estuary would look like the Mud Bay mud flats (pictured above) at low tide.
Photo by Steve Herppich



A

A recreated Deschutes River Estuary would feature mostly mud flats at low tide with sandy river channels running through it and a thin perimeter of salt marsh plants in portions of the north and middle basins, according to scientists.

Source: Deschutes Estuary Feasibility Study Alan Kenaga/The Olympian

Capitol Lake Could Become a Successful Estuary, Studies Say

The Olympian Published November 9 2006
John Dodge

Capitol Lake resident Frank Anderson would just as soon be a Deschutes River Estuary resident. Anderson, whose Water Street home overlooks the lake, was among the 50 people who attended a community workshop about the lake Wednesday night.

They heard results of two reports that are part of a $1.1 million study to examine the feasibility of removing the Fifth Avenue Dam and letting the Deschutes River mingle with lower Budd Inlet as it did before the dam impounded the 260-acre lake in 1951.

"I've lived here in Olympia for a long time," Anderson said. "An estuary would be more interesting to look at than a lake."

One of the studies presented at the workshop concludes that a re-created estuary would be an expanse of mud flats with a sandy river channel with marshy vegetation along the edges, noted Ralph Garono, an aquatic biologist with Earth Design Consultants of Corvallis, Ore., the study's author.

But don't underestimate the value of mud, he said.

"These mud flats have a lot of potential to support the base of the food web, providing food for salmon," he said.

The estuary study is about halfway complete and won't be done until 2008. But the first two studies presented to the public and the lake managers in separate meetings Wednesday show that the lake could be turned back into an estuary, study project manager Curtis Tanner said.

The workshop was attended by folks who want the lake to remain a lake and others ready for a change. Others, including Olympia School District employee Barbara Carlson, remain undecided.

"Capitol Lake plays a dominant role in what Olympia is," she said. "On the other hand, a natural area sounds nice. Is there some middle ground?"

If the dam is removed, a mass of sediment stored in the lake would quickly shoot into Budd Inlet and head straight for the boating slips of lower Budd Inlet marinas and the Port of Olympia marine cargo shipping berths.

"As soon as you remove the dam, you're going to see some change," U.S. Geological Survey scientist Guy Gelfenbaum said in summarizing a $195,000 study of how 1 million cubic meters of sediment stored in the lake would respond to freedom to move out to sea with the river and the tides.

In the first three years, anywhere from 125,000 cubic meters to 280,000 cubic meters of sand, silt and mud would settle in the port and marina areas at a depth of more than 6 feet, the USGS study concluded.

Thanks to the presence of the dam, it took 30 years for 3 feet of sediment to accumulate in the port marine terminal area, noted Port Commissioner Bob Van Schoorl said.

Without some pre-dam-removal dredging in the lake, the sediment would virtually smother the Olympia Harbor marinas and Olympia's recreational boating slips at Percival Landing, Van Schoorl said.

Because South Puget Sound has the widest range of high and low tides in Puget Sound - about 5 feet *[actually 4 meters: 13 feet]* - most of the estuary would be covered in water at high tide and exposed at low tide.

The next two reports due in the months ahead will look at the engineering costs of creating an estuary or maintaining a lake and the social, economic and environmental costs and benefits of an estuary versus a lake.

Views on Capitol Lake

"An estuary is a lot more interesting than the lake."
- Frank Anderson, Olympia

"It doesn't seem like the lake is a very healthy system."
- Chris Clinton, Olympia

"Capitol Lake plays a dominant role in what Olympia is."
- Barbara Carlson, Olympia

The Capitol Lake debate

Question: What is the Deschutes Estuary Feasibility Study?

Answer: The $1.1 million study paid for by federal, state, tribal and local government money is designed to determine whether it is feasible to turn Capitol Lake - a dammed-up, 260-acre area of the lower Deschutes River since 1951 - back into an estuary.

Q: Who controls the lake?

A: Historically, the lake has been managed by the state Department of General Administration as part of the state Capitol Campus. But in 1997, a nine-member group was formed to set long-term management priorities for the lake. The lake management group includes the state departments of General Administration, Ecology, Natural Resources and Fish and Wildlife; Thurston County; the Squaxin Island tribe; Tumwater; Olympia; and Port of Olympia.

Q: Why not just keep Capitol Lake as it is?

A: The lake is in trouble. Sediment moving downriver is filling up the lake, which has only been partially dredged twice in the past 27 years. It's polluted with stormwater, home to invasive weeds and violates state water-quality standards for fecal coliform bacteria and phosphorus.

Q: What is an estuary?

A: An estuary is a place where freshwater mixes with saltwater - in this case, the meeting of the Deschutes River with Budd Inlet. Estuaries are some of the most biologically productive places on earth, providing a place for fish, birds, invertebrates and other wildlife to live, feed and reproduce. They also help store flood waters and river sediment and filter pollutants.

Q: Has the decision already been made to turn the lake back into an estuary?

A: No. The feasibility study is simply that. Any decision to go from a lake to estuary would require several layers of approval and include the lake managers, the four-member state Capitol Committee and, ultimately, the state Legislature, which controls the purse strings for everything from lake dredging to removal of the Fifth Avenue Dam.

Q: What's next?

A: The estuary study completion awaits two more critical reports, one dealing with the engineering costs associated with converting from a lake to an estuary, and another detailing the social, environmental and economic costs and benefits of a lake versus an estuary. The study is set for completion in 2008.

Water rushes into Puget Sound as the dam on 5th Ave releases water from Capitol Lake after the heavy rains over the past few days. The threat of Deschutes River flooding in downtown Olympia would be slightly reduced, if the Fifth Avenue Dam were removed and the lake was returned to an estuary, according to a study by the Federal Emergency Management Agency *[actually the Unites States Geological Survey– USGS)*. (Steven M. Herppich/The Olympian)

Keep Collecting Data on Lake

The Olympian Published November 15, 2006

Two years from now, local, state and tribal officials will have most of the scientific information they need to determine whether Capitol Lake should remain as a shallow reflecting pool or be transformed into an estuary. The scientific data should be weighed against economic, social and environmental considerations.

The recent conversion of a cow pasture into an estuary at the mouth of the Nisqually River has given ammunition to those pushing an estuary at the mouth of the Deschutes River. Estuary proponents say the addition of habitat for salmon and other wildlife at the Nisqually should be replicated at the Deschutes.

The difference, of course, is the fact that the Deschutes flows into a man-made lake that serves as a spectacular reflecting pool with the Capitol Dome in the distance. Creation of an estuary would require the removal of the Fifth Avenue dam and would result in the loss of the lake, which many people consider to be a jewel in Olympia's crown.

Capitol Lake is a state facility in the heart of Olympia governed primarily by the state Department of General Administration. Its governance also involves a nine-member advisory panel that includes local, port and state officials along with members of the Squaxin Island tribe. And because the Capitol Lake environment has implications for salmon and waterfowl, the departments of Fish and Wildlife, Natural Resources and Ecology also have a seat at the decision-making table too.

The governing officials have been evenly divided on the lake-versus-estuary question.

Those decision-makers were able to come up with about $1 million to provide them with scientific studies they can use to make their decision.

As part of the estuary study, the U.S. Geological Survey recently released a report on the effect of sediment washed down the Deschutes River.

The lake, which was created 55 years ago, has served as a giant sediment trap over the years. It has gradually filled up with sand, silt and mud, to the point where the lake volume has been reduced by about 60 percent. Only a portion of the 1.3 million cubic meters of sediment has been removed from the lake. The last dredging took place in 1986.

The Geological Survey concluded that if the dam is removed and the estuary is created, the southern tip of Budd Inlet would receive somewhere between 125,000 cubic meters and 280,000 cubic meters of sediment in the first three years.

After 10 years, sediment about 6 feet deep would accumulate in the port and marina area.

The question is whether that sediment will be dredged from the lake, end up in the lake or be flushed into lower Puget Sound through the estuary. That will have an effect on who pays the dredging bill, too.

The state pays for dredging of the lake, while local taxpayers through the Port of Olympia subsidy pay a portion of the dredging bill for lower Budd Inlet.

Those and other considerations will play into the final decision on the lake-versus-estuary question. The important thing at this point in the debate is to continue to collect data so officials can have a solid base of information to make that all-important decision - lake or estuary

Fish-rearing ends at Percival Cove

The Olympian Published Feb 2, 2007
John Dodge

The decades-long practice of rearing chinook salmon in Capitol Lake's Percival Cove is about to end.

The state Department of Ecology has ordered the state Department of Fish and Wildlife to pull the salmon pens from the cove amid concerns that the nutrients from fish food and fish waste contribute to water-quality problems in the lake.

Losing Percival Cove as a place to acclimate 100,000 yearly chinook and 500,000 younger chinook each winter and early spring before they are released into Puget Sound will reduce the fish available for recreational harvest in Puget Sound.

Caring for salmon

The cove will be used for salmon rearing this winter and spring, then the fish will be released in May, and the pens will be pulled this summer, Sue Patnude, regional director for Fish and Wildlife, said Thursday.

Fisheries then will hire a consultant to do an environmental review of the cove to map out a cleanup plan, she added.

"Our goal is to restore the cove to its historic condition," Patnude said.

The agency hopes to eventually recover the fish production lost at Percival Cove at its proposed Deschutes Watershed Center in Tumwater's Pioneer Park, said Rich Eltrich, Fisheries' hatchery complex manager for South Sound and Hood Canal.

But that multimillion-dollar complex will require continued state funding to complete it in five or six years.

Gov. Chris Gregoire's 2007-'09 state budget includes $2.345 million to start work on the new hatchery and $350,000 to start the Percival Cove cleanup.

History

As a fish-rearing site since the 1970s, Percival Cove has a troubled history.

Fish-eating birds used to take their toll when as many as 1 million free-swimming chinook were raised in the cove. The bird predation eased in the mid-1980s, when fisheries managers switched to net pens. But the fish also were vulnerable whenever the Deschutes River flooded because drawing down the lake to make room for floodwaters sometimes forced the release of fish into Budd Inlet prematurely. That last happened in winter of 2002.

In recent years, hatchery managers have placed fish in the cove February through April, rather than November through April, to reduce the risk of premature release, Eltrich said.

Meanwhile, Ecology has been pressuring Fish and Wildlife for years to stop rearing fish in the cove.

The reason: Fish food and fish wastes contain phosphorus, a nutrient that promotes algal growth that robs the lake of oxygen.

Capitol Lake is topic of yearly open house

The Olympian Published Feb 2, 2007
John Dodge

The Capitol Lake Adaptive Management Plan steering committee will hold its annual meeting and open house Saturday.

Among the topics to be discussed are the reopening of lawn areas at Heritage Park and what's being done about water quality in Capitol Lake.

The meeting will update people on the progress being made to complete the 14 objectives outlined in the 10-year lake-management plan that was approved in 2003.

The steering committee is a nine-member group of state, local and tribal government representatives who advise the Department of General Administration about Capitol Lake management. Capitol Lake was created in 1951 when the state built a dam where the Deschutes River flows into Puget Sound.

The open house will be from 9:30 to 10 a.m. The meeting will be from 10 to 11:30 a.m. Both are at the General Administration Building auditorium, 210 11th Ave. S.W., Olympia.

To see the meeting agenda and learn more about Capitol Lake, go to www.ga.wa.gov/CLAMP/index.html.

Price Tag for Capitol Lake Conversion is $76 Million

Several factors may cause project cost to fluctuate

The Olympian Published February 21, 2007
John Dodge

The cost to convert Capitol Lake into a free-flowing Deschutes River is estimated to be about $76 million, according to a report just released by the committee working on the Deschutes Estuary study.

The price tag could be as low as $66 million, if dredging costs come in lower than expected, or as high as $120 million, if the north basin of the lake is split in two to maintain a reflecting pool for the Capitol.

Big-ticket items under any of the scenarios include removing the Fifth Avenue Dam, which separates the lake from Budd Inlet; building a Fifth Avenue bridge; shoring up Deschutes Parkway; and dredging river sediments that have accumulated in the lake so they don't inundate lower Budd Inlet.

The engineering study by Seattle firm Moffatt & Nichol didn't uncover any flaws that would preclude an estuary. For instance, the Fourth Avenue bridge would need only minor buttressing to withstand the force of the tides.

"There are no fatal flaws, but the cost is higher than we would have liked," said Curtis Tanner, the estuary study project manager and a U.S. Fish and Wildlife Service fisheries biologist on loan to the state Department of Fish and Wildlife.

There is no comparable study of what it would cost to maintain Capitol Lake as a lake. Ten years ago, annual dredging costs were pegged at $1.2 million, plus millions of dollars to dredge accumulated sediments in the lake.

The lake, as a long-term option, also would face upgrades, or even replacement, of the Fifth Avenue dam, said Nathaniel Jones, a senior planner with the state Department of General Administration, the state agency charged with managing the lake.

"In order to compare apples to apples, we need to go back and look at the cost estimates for maintaining the lake," he said.

Lake dredging has been spotty and controversial in the past 30 years, leading to the estuary study. Do nothing and the lake will fill in and become a freshwater marsh in the next 50 to 100 years, previous studies suggest.

The estuary cost estimate did nothing to dissuade estuary supporters.

"The estuary would provide better water quality and fish and wildlife habitat," said Olympia physician Paul Allen, who helped organize the group Friends of the Deschutes Estuary. "That can't be measured in dollar terms."

But the lake has its fair share of constituents, including many longtime South Sound residents who find it more aesthetically pleasing than mud flats.

“I’ve always liked the lake,” said Coke Funkhouser, whose home overlooks it on Olympia’s west side. “Aesthetically, there’s nothing better than what’s there.”

John Dodge is a senior reporter and Sunday columnist for The Olympian. He can be reached at 360-754-5444 or jdodge@theolympian.com.

Olympia resident Bruce Leonard bikes down to the Capitol Lake Interpretive Park trails three times a week to do some bird watching and get some exercise. It may be necessary to raise some of the park's trails if Capitol Lake is converted to an estuary to accommodate tide levels. (Steven M. Herppich/The Olympian)

The muddy water of Capitol Lake stands in stark contrast to the near emerald green of Capitol Lake. (Steve Bloom/The Olympian)

Estimated costs for the Deschutes Estuary project

Here's a look at several options and the costs in 2006 dollars to convert Capitol Lake back to the Deschutes River estuary:

Alternative A: Remove Fifth Avenue Dam to create a 500-foot opening for the river to flow into Budd Inlet, build Fifth Avenue Bridge and bolster Deschutes Parkway with large rock and dredge materials: **$65.9 million to $87.2 million**

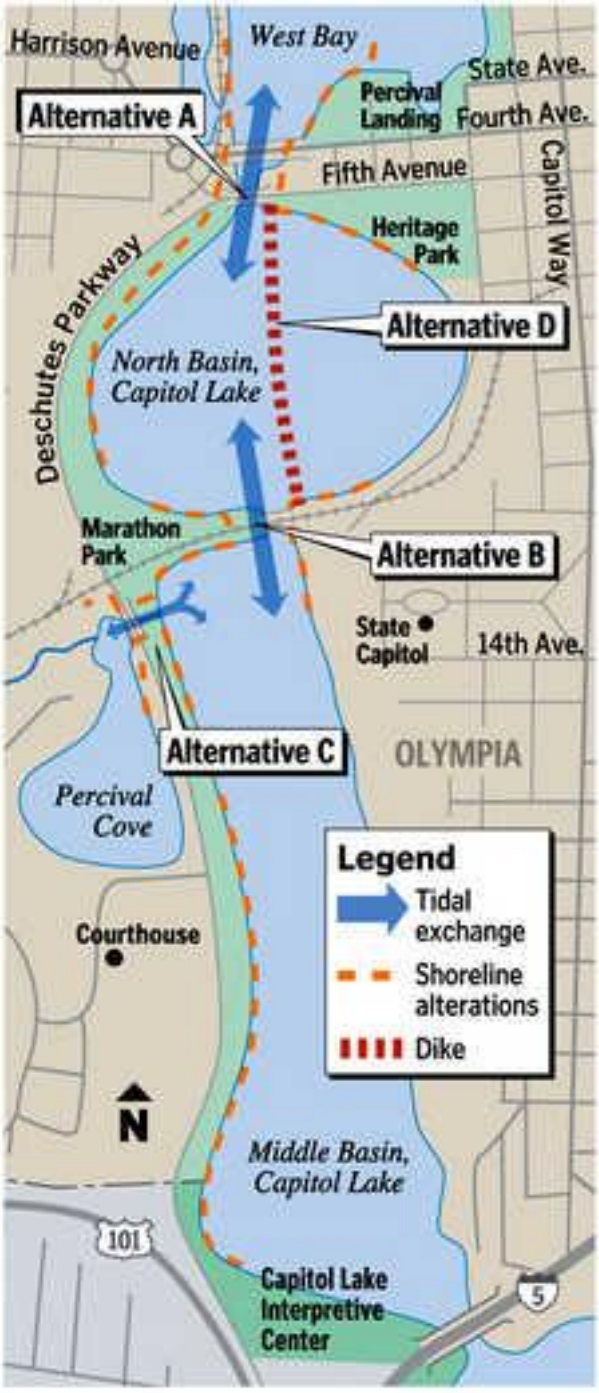
Alternative B: Same as above, except the Burlington Northern Santa Fe railroad bridge span between the north and middle lake basins would be widened to improve tidal circulation and reduce scouring the railroad crossing: **$79.6 million to $102.3 million**

Alternative C: A wider opening at Percival Cove — rejected because it doesn't change conditions in the cove.

Alternative D: Build a dividing wall in north basin to retain a reflecting pool of water for the state Capitol: **$93.8 million to $120 million**

Source: Engineering Design and Cost Estimates for Deschutes Estuary Feasibility Study by Moffat & Nichol

John Dodge and Alan Kenaga/The Olympian



Comparison Data Needed for Lake Plan

The Olympian Published February 28, 2007

The cost to convert Capitol Lake into an estuary is estimated at $76 million. That number grows to $95 million if decision makers wait until 2012 to act. And the projected costs climb as high as $120 million if the north basin of the lake is split in two to maintain a reflecting pool for the Capitol.

Having the dollar estimates is a good first step. But the committee studying the lake versus estuary options need something to compare that with. We now know how much money it will cost to convert the lake to an estuary, but decision makers and South Sound residents need to know how much it will cost to maintain Capitol Lake as a lake through regular dredging.

Both cost estimates are needed before a realistic comparison and decision can be reached.
The study on estuary costs is the third of four reports commissioned by the committee of state, local and tribal officials determining the future of Capitol Lake. Plagued by years of neglect, the lake is filling with silt washed down the Deschutes River. But committee members have been unable to agree on whether to dredge the lake and keep it as a reflecting pool for the domed Legislative Building or to let nature convert the lake into an estuary where freshwater from the river would blend with saltwater from southern Puget Sound.

The committee members plan to spend a total of $1.1 million to collect the scientific data to help them render a decision. The committee began its work in 2003 and is slated for completion next year.

The first two reports completed late last year concluded that:

• **More than 1 million** cubic meters of sediment carried down the Deschutes River has accumulated in the lake since it was created in 1951, reducing lake volume by about 60 percent.

• **Up to 28 percent of that sand,** silt and mud would flow from the 260-acre manmade lake into lower Budd Inlet in the first three years after removal of the Fifth Avenue Dam, unless the lake is dredged before dam removal.

• **A re-created estuary** where the river flows into Budd Inlet would be an expanse of mud flats with a sandy river channel featuring marshy vegetation along the shoreline edges.

The fourth and final report, set for completion this summer, will examine the social, economic and environmental pros and cons of turning the lake back into a free-flowing river.

The estimated estuary cost of $76 million is useful information, but there is no comparable study of what it would cost to maintain Capitol Lake. Ten years ago, annual dredging costs were pegged at $1.2 million, plus millions of dollars to dredge accumulated sediments in the lake.

Port officials estimate they will have to dredge every two or three years and that could add $10 million a year to costs. In addition, the West Bay Marinas could go out of business because owners would be strapped to pay for dredging costs. Those costs need to be factored into the final decision.

Dredging costs are essential if those studying the lake versus estuary options are to make legitimate comparisons and reach a rational conclusion. Without comparable data, there is nothing to measure the $76 million estimate against.

Study Highlights Controversy over Capitol Lake Estuary Plan

The Olympian Published June 5, 2007
John Dodge

A study to spell out social and economic pros and cons of making Capitol Lake into a Deschutes River estuary reaffirmed what many in the community already know: It's a hot-button topic that evokes strong feelings from both the lake and estuary camps.

The $50,000 study released Monday, the fourth and final consultant's report to go into the $1.1 million project, offers little in the way of new information, noted Neil McClanahan, chairman of the Capitol Lake Adaptive Management Plan steering committee and Tumwater city councilman.

But it does point out that water quality and fish and wildlife habitat would improve with an estuary, while boater recreation and Port of Olympia operations could suffer if the Fifth Avenue Dam is removed and sediment that has accumulated in the 56-year-old manmade lake is allowed to flow into lower Budd Inlet.

"The study queues up a community conversation we knew we'd have to have all along," said Curtis Tanner, project manager for the estuary study, which began in 2003.

The 2007 state Legislature appropriated $590,000 to complete the estuary study and figure out how much it would cost to maintain the lake, said McClanahan, who spearheaded the lobbying effort for more money to get the studies done.

The 24 members of The Olympian's Reader Network who responded to an unscientific poll Monday afternoon were 2-1 in favor of maintaining the lake — especially if it could be restored to swimming quality.

"Capitol Lake is a wonderful reflective pool that should be preserved. Ideally I would love to see it become inhabitable again by humans for swimming. I predict hundreds would use it for that," said Deb Moody, 52, Olympia.

Others, such as Buc Alboucq of Lacey supported returning it to an estuary.

"Take it out and return the river to an estuary. We as humans sometimes change natures creations, and it does not always age well. The benefits of having the river run natural far out-weighs and the estuary would be a very interesting place to observe nature," Alboucq wrote.

"The folks on the hill want it to remain a lake," McClanahan said after several interviews with key legislators and statewide elected officials who play a major role in the final decision.

Down on the docks of Martin Marina on lower Budd Inlet, with the state Capitol in view, boat owner Ron Fantz, 65, summed up his feelings.

"Sounds like they still need to do more work to compare the costs of a lake to an estuary," he said. "But I'm for opening things up and letting the river flow, if it will work."

Fantz, a retired longshoreman from Portland, said his support for an estuary would also depend on some dredging of the lake prior to dam removal to reduce sediment building up at the Olympia Yacht Club, three other private marinas and the Port of Olympia.

"I'd hate to see the deeper draft yachts stranded," he said.

McClanahan agreed.

"That lake has to be dredged, one way or another," McClanahan said.

John Dodge covers the environment and energy for The Olympian. He can be reached at 360-754-5444 or jdodge@theolympian.com.

****

Public meeting

A public meeting is set for 6:30 p.m., June 20 at Olympia City Hall to discuss a report that examines the social and economic pros and cons of converting Capitol Lake into a Deschutes River estuary.

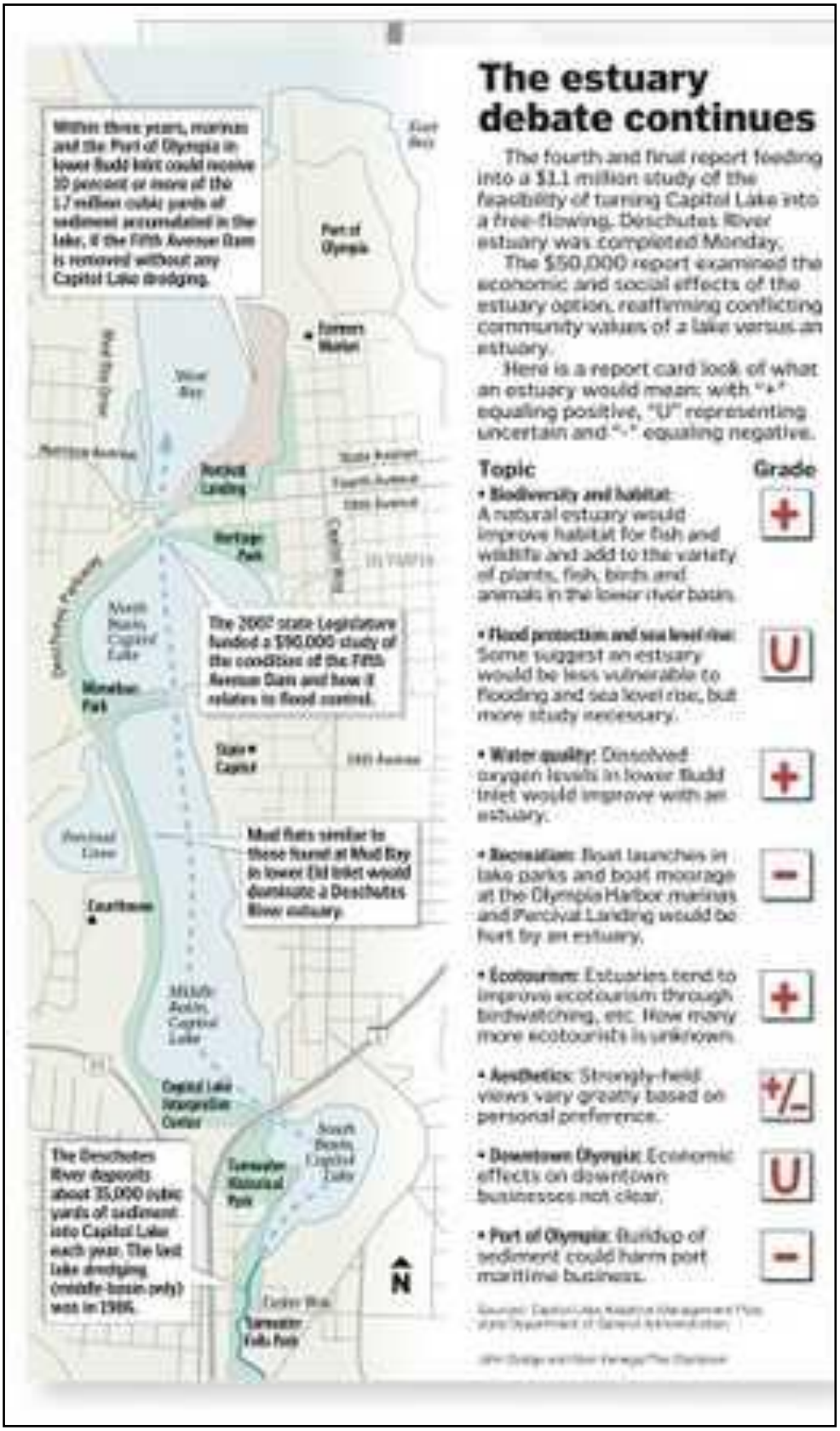
The report, and three others that preceded it in the $1.1 million estuary feasibility study, are available online.

Next on tap is a technical review of the four reports, along with a $300,000 study to be completed early next year on what it will require and cost to maintain Capitol Lake, in comparison to the roughly $76 million cost of an estuary.

The Capitol Lake Adaptive Management Plan (CLAMP) steering committee is scheduled to make a recommendation to the state Department of General Administration in June of 2009 on whether to keep the lake or convert it to an estuary.

CLAMP consists of nine representatives of Olympia, Tumwater, Thurston County, Squaxin Island Tribe, Port of Olympia and state departments of Ecology, Fish and Wildlife, General Administration and Natural Resources. The committee conducts public meetings the first Thursday of every month at 8 a.m. in Room 207 of the General Administration Building, 210 11th Ave., Olympia. The next meeting is June 7.

****



The estuary debate continues

The fourth and final report feeding into a $1.1 million study of the feasibility of turning Capitol Lake into a free-flowing, Deschutes River estuary was completed Monday.

The $50,000 report examined the economic and social effects of the estuary option, reaffirming conflicting community values of a lake versus an estuary.

Here is a report card look of what an estuary would mean; with "+" equaling positive, "U" representing uncertain and "-" equaling negative.

Topic	Grade
• Biodiversity and habitat: A natural estuary would improve habitat for fish and wildlife and add to the variety of plants, fish, birds and animals in the lower river basin.	+
• Flood protection and sea level rise: Some suggest an estuary would be less vulnerable to flooding and sea level rise, but more study necessary.	U
• Water quality: Dissolved oxygen levels in lower Budd Inlet would improve with an estuary.	+
• Recreation: Boat launches in lake parks and boat moorage at the Olympia Harbor marinas and Percival Landing would be hurt by an estuary.	-
• Ecotourism: Estuaries tend to improve ecotourism through birdwatching, etc. How many more ecotourists is unknown.	+
• Aesthetics: Strongly-held views vary greatly based on personal preference.	+/-
• Downtown Olympia: Economic effects on downtown businesses not clear.	U
• Port of Olympia: Buildup of sediment could harm port maritime business.	-

Recreational boater Ron Jantz said he could support turning Capitol Lake into the Deschutes River estuary, if sediment doesn't accumulate at lower Budd Inlet marinas.

Capitol Lake fan makes pitch

The Olympian Published June 12, 2007
John Dodge

OLYMPIA — Mudflats at the doorstep of the Capitol are a poor substitute for Capitol Lake, an Olympia Kiwanis Club guest speaker said Monday.

“It’s more beautiful and beneficial to have it as a lake,” said Olympia attorney Allen Miller, president of the North Capitol Campus Heritage Park Development Association.

Miller’s pro-lake presentation followed on the heels last week of a Kiwanis guest speech by Squaxin Island tribe policy analyst Jeff Dickison, who pointed out that removal of the Fifth Avenue Dam to allow the Deschutes River to flow freely into lower Budd Inlet would provide valuable habitat for salmon, improve water quality and eliminate problems with noxious weeds that grow in the lake.

Miller argued that a lake is more consistent with the architectural design of the Capitol Campus, which called for a reflecting pond for the Legislative Building.

And, he said, it would be less expensive to dredge every 10 years to 20 years in the lake, than it would to dredge more frequently in lower Budd Inlet to keep sediments that flow downstream from choking Port of Olympia maritime operations, three private marinas, the Olympia Yacht Club and Percival Landing.

The lake acts as a sediment trap, and it’s filling up fast. The port marine terminal area hasn’t been dredged for about 30 years, and the lake hasn’t been partially dredged for 20 years.

Since the lake is part of the Capitol Campus, dredging costs would be absorbed by state taxpayers while dredging lower Budd Inlet could end up a Thurston County taxpayer burden, noted Port Commissioner Bob Van Schoorl.

“I get a little nervous when I think about the tax relief Thurston County would be providing the other 38 counties,” said Kiwanis Club member and Thurston County commissioner candidate Jon Halvorson.

Kiwanis Club member Don Law summed up what might be one of the few things both the estuary and lake camps agree on.

“We’re doing to have to dredge either in the lake or in the port area,” he said.

Even though a decision on the lake versus estuary is more than two years away, the topic is of great community interest, noted Doug Sutherland, state lands commissioner and one of four statewide elected officials who will make a recommendation to the Legislature to keep the lake or create the estuary.

“Opinions are starting to harden,” Sutherland said of the community debate. “This is going to be a very controversial decision.”

The lake option seems to resonate more with the Kiwanis Club members, club member Derek Valley said. But the club won’t take a position either way.

Water Report Topic of Talk

The Olympian Published June 17, 2007
John Dodge

The fourth and final report feeding into a $1.1 million Deschutes River estuary-feasibility study will be the topic of a public meeting at 6:30 p.m. Wednesday at Olympia City Hall.

The $50,000 report by Cascade Economics LLC and Northern Economics Inc. looks at the social, economic and environmental values associated with Capitol Lake and a river estuary.

Authors of the report suggested that water quality and fish and wildlife habitat would improve with an estuary, and boater recreation and Port of Olympia operations could suffer.

However, a lake versus estuary comparison is difficult because a study of what it would cost to maintain the man-made lake won't be completed until early next year.

Nevertheless, Olympian readers had a lot of questions about this major decision, which still is more than two years away.

Here are 10 of their questions, along with answers provided by data collected from the feasibility study and state Department of General Administration senior planner Nathaniel Jones.

****

Question:

If the lake is not converted into an estuary, will it be cleaned up to again make it possible to swim there? Rick Bartholomew, Olympia

Answer:

There are no plans to try to restore swimming in Capitol Lake. Obstacles include untreated stormwater that enters the lake, poor water circulation along the Heritage Park shoreline and the threat of accidental fuel and chemical spills from nearby highways. "Unless these public health risks can be reduced, Heritage Park would not be a suitable place for a public swimming beach," according to a Thurston County Public Health & Social Services report in 2003.

Question:

Isn't tearing down the Fifth Avenue Dam and creating an estuary at cross purposes to the investments made in Heritage Park? Denis Curry, 72, Olympia

Answer:

"I think Heritage Park is a valuable asset regardless of the outcome of the estuary-feasibility study," Jones said. "Heritage Park is a central recreational area and a jewel, one way or the other."

Question:

Won't making it an estuary again also make it a saltwater mud flat with an accompanying, nasty stink? Ron Lawson, 68, Lacey

Answer:

A Deschutes River estuary would be similar to Mud Bay and have the same odors as other South Sound estuaries. It's important to note that the river estuary odors before the lake was created in 1951 were influenced by the presence of raw sewage entering Budd Inlet and the river estuary.

Question:

The Fifth Avenue Dam was built 56 years ago to protect the downtown Olympia area from flooding. What has changed that invalidates that reason? Jim Fogle, 70, Lacey

Answer:

The dam was not built to reduce flooding, Jones said. It was built to create a reflecting pond for the state Capitol and as part of the Deschutes Parkway to connect Olympia to Tumwater. An answer to the question of whether the lake or the estuary offers the most flood protection is part of a $300,000 lake study under way.

Question:

Isn't tearing down the Fifth Avenue Dam and creating an estuary at cross purposes to the investments made in Heritage Park? Denis Curry, 72, Olympia

Answer:

"I think Heritage Park is a valuable asset regardless of the outcome of the estuary-feasibility study," Jones said. "Heritage Park is a central recreational area and a jewel, one way or the other."

Question:

What is the projected cost and who would be responsible for bearing the expense?
Michael Foster, 54, Thurston County

Answer:

The cost of returning Capitol Lake to a Deschutes River estuary is estimated at about $76 million, plus an additional $1 million to $1.5 million annual cost to dredge lower Budd Inlet. It's expected that there would be federal and state funds to help pay for estuary restoration, but it isn't known who would pay. Some community leaders have expressed concern that the cost of dredging in lower Budd Inlet around the port, private marinas and Percival Landing would be the chief responsibility of county taxpayers.

Question:

If the lake was cleaned up and small, well-designed vendor carts offering boat rentals, food and arts and crafts were allowed to set up around it — and people were allowed to recreate in it — wouldn't that generate income to help offset the costs of maintaining the lake?
Deb Moody, 52, owner of *State of the Arts Gallery* in downtown Olympia

Answer:

"I think these are interesting ideas — there's a chance to do more with Heritage Park than we've done before," Jones said. "But the income generated would be a drop in the bucket compared to the cost of maintaining the lake."

Question:

Will the estuary reduce the pollutant levels, which are very high in the present Capitol Lake?
Tom Caristi, Tumwater

Answer:

Studies suggest that increased water circulation with daily tidal exchange would improve water quality, including dissolved oxygen levels in lower Budd Inlet. “One of the functions of estuaries is to filter water, so they generally improve water quality,” Jones said. “But to say pollution levels in Capitol Lake are very high is not accurate. Conditions throughout the Deschutes River watershed are not unlike other watersheds in the South Sound area.” For the record, Capitol Lake fails to meet state Department of Ecology water-quality standards for fecal coliform and phosphorus.

Workshop Leans Toward Preserving Capitol Lake

The Olympian Published June 21, 2007
Matt Batcheldor

More people seemed to be against turning Capitol Lake into an estuary than in favor of doing so during a question-and-answer session Wednesday at Olympia City Hall. About 30 people attended the community workshop to talk about the results of a state report about creating an estuary.

People wrote unsigned questions on note cards, and state officials and consultants answered the questions.

What the report said

Water quality and fish and wildlife habitat would improve with an estuary, but boater recreation and Port of Olympia operations would take a hit. But a lake-versus-estuary comparison is difficult to make because a study of the cost of maintaining the lake won't be completed until early next year.

Questions from the meeting

QUESTION: The report talks about the value of fish. What about the value of boaters? Why didn't you quantify that?

ANSWER: There was no area-specific boating data available to the people doing the study.

Q: Can you safely swim in an estuary?

A: The Department of Health recommends against it.

Q: Will creating an estuary create a habitat for mosquito breeding?

A: Mosquitoes are hatching in Capitol Lake. With an estuary, tides would help flush mosquitoes away and fish would eat their larvae.

History of the study

The $50,000 Deschutes Estuary Feasibility study, released June 4, is the fourth and final installment in a $1.1 million project to study turning Capitol Lake into an estuary.

What's next?

Next is a technical review of the four reports, along with a $300,000 study to be completed early next year about what it would require to maintain Capitol Lake, as well as what the cost would be compared with the roughly $76 million cost of an estuary.

The Capitol Lake Adaptive Management Plan steering committee is scheduled to make a recommendation to the state Department of General Administration in June 2009 on whether to keep the lake or convert it to an estuary.

CLAMP has nine representatives of Olympia, Tumwater, Thurston County, the Squaxin Island tribe, the Port of Olympia and the state departments of Ecology, Fish and Wildlife, General Administration and Natural Resources. The committee has public meetings at 8 a.m. the first Thursday of every month in Room 207 of the General Administration Building, 210 11th Ave., Olympia.

What it would take to make it an estuary?

The Fifth Street Dam would be removed, allowing Capitol Lake to revert to being an estuary, as it was before 1951. The Deschutes River would naturally mingle with lower Budd Inlet, converting the area to wetlands. The change would allow some of the area to revert to mud flats, which some people think are unsightly. Lower Budd Inlet would have to be dredged yearly to reduce sediment.

What it would take to leave it a lake?

Capitol Lake is due for a dredging. The most recent was completed more than 20 years ago. The Deschutes River has heaped more than 1 million cubic yards of sediment since the river was dammed, reducing lake volume by about 60 percent, according to a report by the U.S. Geological Survey. Further details about the lake won't be available until the state completes a study of keeping the lake, which it will do after the estuary study is finished.

Gary Nelson (center) of the Olympia Yacht Club listens to discussion about an estuary-feasibility report during a community meeting Wednesday at Olympia City Hall. (Toni L. Bailey/The Olympian)

The tide flats off Mud Bay Road. Researchers have said a Capitol Lake estuary would look much like the area.
(Steven M. Herppich/The Olympian)

Capitol Lake as it looks now.
(Steven M. Herppich/The Olympian)

Capitol Lake study funding not on budget

The Olympian
John Dodge

The $1.1 million study to determine the pros and cons of turning Capitol Lake back into a Deschutes River estuary suddenly is short on money.

Gov. Chris Gregoire's proposed budget does not include the $135,000 needed to mesh all the technical studies into a report for final review, the Capitol Lake management team of local, state and tribal officials learned Thursday.

The lake managers had banked on the state Department of Fish and Wildlife receiving the money from the Puget Sound Action Team, which is part of the governor's office.

"It hasn't emerged as a priority," project manager Curtis Tanner said.

The decision left lake managers puzzled about how to proceed to the end of the project, which is set for completion in 2008.

They have enough money to finish all the technical studies. Among those studies is one near completion to determine how much it would cost to take out the dam and reinforce bridges, roads and the trestle near the confluence of Budd Inlet and the river.

The state Legislature might be asked to reinsert the money in the 2007-09 budget, or lake managers could look for funds from federal agencies, local governments or private foundations.

"We're not interested in shutting the study down," Sue Patnude of Fish and Wildlife said. "We've come too far."

Artificial Wetlands Thrive as Result of Repairs after Damage in 2001

The Olympian Published May 01, 2008
John Dodge

The 2001 Nisqually Earthquake was a blessing in disguise when it comes to the artificial wetlands near the southwest corner of Capitol Lake.

Completed in 1999, the 17 acres of constructed wetlands were poorly engineered, lacked native plants and relied on deficient soils, said Perry Lund, a state Department of Ecology shoreline specialist who offered a noon-hour walking tour of the area near the Capitol Lake Interpretive Center on Wednesday.

"It was a really crummy job of building wetlands," Lund told the 20 people who took the short hike and received a cursory class in native plant identification.

The wetlands were built by a state Department of General Administration contractor as mitigation for lake filling and other shoreline changes required to complete Heritage Park at the north end of the lake.

Just three months after Lund issued a letter to General Administration, telling the state agency the wetlands project didn't meet permit requirements, the earthquake hit and tore apart the wetlands.

"The earthquake was the best thing that could have happened down here," Lund said. "It messed everything up and allowed the wetlands to be rebuilt in an ecologically sensitive manner."

Steep slopes and non-native plants were eliminated and shallow ponds and islands were created. In March 2003, more than 150 volunteers planted 6,000 native plants along the trail that separates the wetlands from the lake's middle basin.

"This place looks fantastic," Lund said, pointing out the Oregon grape, black cottonwood, wild roses, snowberry, vine maple and other native plants bursting with spring foliage.

Many on the tour were surprised to hear that the earthquake helped to right an environmental wrong. "What a gift Mother Nature is — like the earthquake," Diana Larsen-Mills said.

While the tour extended only about 100 yards out from the interpretive center, more than 20 bird and waterfowl species were seen or heard by Black Hills Audubon board member Whittier Johnson.

Species included a ring-necked duck, Caspian tern, ruby-crowned kinglet, brown creeper, orange-crowned warbler and yellow-rumped warbler. The tour coincided with Native Plant Appreciation Week, April 27-May 3.

Shoreline specialist Perry Lund shows off the branch of a native dogwood bush.

This twin-berry bush grows along the trail. In March 2003, volunteers planted 6,000 native plants at the site.

Plants and vegetation flourish along the Capitol Lake Interpretive Center trail. The 17 acres of constructed wetlands used to lack native plants

Bettie Snoey of Lacey talks with shoreline specialist Perry Lund about some of the native plants, including fireweed (foreground), growing along the trail during a walking tour Wednesday.

Phots by Steven M. Herppich/The Olympian

Capitol Lake's Estuary Potential

The Olympian Published July 04, 2008
John Dodge

Using Capitol Lake dredge spoils to reshape the shoreline along Deschutes Parkway will be the best way to reduce effects of sediment accumulating in lower Budd Inlet if the lake is turned back into a Deschutes River estuary, a federal study released Thursday suggests.

The $100,000 study by the United States Geological Survey is part of a lake-versus-estuary comparison by the Capitol Lake Adaptive Management Plan steering committee that's scheduled for completion in summer 2009.

Since the lake was formed behind the Fifth Avenue Dam in 1951, about 1.3 million cubic meters of gravel, sand and mud coursing down the Deschutes River has settled in the lake, according to a 2006 study by the USGS.

Managing that sediment is the biggest challenge to either keeping the lake or reverting to an estuary.

If it isn't dredged, the lake eventually will turn into a freshwater marsh. If the dam is removed without any dredging first, a slug of sediment will gush into lower Budd Inlet and build up in front of the Port of Olympia and lower east bay marinas.

The 2006 USGS study, based strictly on literature reviews and modeling, estimated anywhere from 125,000 cubic meters to 289,000 cubic meters of sediment in the lake would erode into lower Budd Inlet in the first three years after the dam removal, most of it on the east side of the bay where the port and marinas sit.

The USGS study released Thursday, based on analysis of core sediment samples and modeling, reinforced a wide range of volume but predicted it likely would be about 200,000 cubic meters, USGS scientist Guy Gelfenbaum said.

That number could be reduced to about 86,500 cubic meters if the lake is dredged for shoreline-reshaping work prior to dam removal, the study predicted.

The study makes a case for predredging the lake, said state Department of Ecology wetlands scientist Perry Lund.

Using the dredge spoils inside the river basin, instead of trying to dispose of them upland or in marine waters, would reduce the risk of spreading seeds of noxious weeds embedded in the sediments, Thurston Regional Planning Council senior planner Steve Morrison said.

The sediments would be useful along the shoreline for covering rip-rap rock that would need to be placed along the roadway to protect the road bed from the tidal flows associated with an estuary, added estuary project manager Curtis Tanner.

Studies: Estuary Good for Budget, Animals

The Olympian Published September 04, 2008
John Dodge

Supporters of a Deschutes River estuary gained some ammunition Thursday with the release of two studies that show an estuary outshines Capitol Lake on at least two fronts — dredging costs, and fish and wildlife habitat.

Dredging costs to restore Capitol Lake to 13 feet deep and maintain it for 50 years are some three times more expensive than restoring the estuary and dredging river sediments out of lower Budd Inlet.

In 2008 dollars, the range of likely dredging costs for the lake are $166 million to $274 million while managing sediment associated with a Deschutes River estuary, including dredging in lower Budd Inlet, could cost $58 million to $88 million, the $70,000 study by the Seattle-based engineering consultant Moffatt & Nichol says.

"This is a very significant report," said Olympia City Councilman Joe Hyer, a member of the Capitol Lake management steering committee that's been studying lake versus estuary options since 2003. "The estuary folks have a leg up on the cost comparison."

Despite the dredging cost difference, not everyone thinks changing Capitol Lake into an estuary is a good idea.

The formal position of the Thurston County Chamber of Commerce for 15 years has been to maintain the lake because of concerns an estuary could hinder economic development and recreational opportunities, chamber president David Schaffert said.

An estuary would allow sediment to flow freely into the lower inlet, gradually reducing the water depth without regular dredging, and could hinder boat traffic at the Port of Olympia, Olympia Yacht Club and other local marinas, Schaffert said.

"The costs involved would be almost prohibitive for the Olympia Yacht Club to deal with," club member John DeMeyer said. "The downtown waterfront is at risk with the estuary proposal."

An estuary would change the character of the area, as well, Schaffert said, adding the state Capitol would no longer reflect off a lake, and views would change dramatically from Heritage Park.

The estuary option is less costly because it involves less dredging and uses dredged sediments to recontour the former lake shorelines. Dredge disposal costs are the big-ticket item and vary greatly depending on whether river deposits are dumped in Puget Sound or hauled long distances to upland disposal sites.

With the latest study, the state Legislature has an idea how much it would need to spend to maintain the lake. Lack of dredging for 30 years because of cost and environmental concerns has allowed the lake to fill with sediment. No action will allow it to turn into a freshwater marsh.

Without some cost-sharing agreement between the Port, state and private marina owners, the estuary option would shift the cost burden of dredging from the state to Thurston County taxpayers — through

the port district — and boat owners who use the private marinas, Port Commissioner George Barner said.

The lake has served as a river sediment trap for more than 55 years, saving the Port of Olympia and four private marinas in the west bay of lower Budd Inlet millions of dollars in dredging costs.

"Who pays — that's going to be a huge debate," said Linda Bremer, director of General Administration, which manages the lake.

The cheaper Puget Sound disposal option will be limited by the presence of the noxious weed purple loosestrife in Capitol Lake. Despite measures to eradicate it, the plant's seeds can live in sediments for years, and survive in saltwater, infesting new shorelines.

The cost study released Thursday only deals with dredging costs. It does not include other costs associated with turning Capitol Lake into an estuary, such as taking out the Fifth Avenue dam and building a bridge to create an estuary, or eventually replacing the aging Fifth Avenue dam to maintain a lake.

Meanwhile, the estuary would improve the biological health of South Puget Sound, said Paul Allen, an Olympia physician and founding member of Friends of the Deschutes River Estuary.

He pointed to a $30,000 state Fish and Wildlife study also released Thursday that estimates estuary habitat loss — mostly in Puget Sound — at 77 percent, or more than 38,500 acres since pre-white settler days.

Generally, marine fish, including salmon and steelhead, shorebirds, raptors, heron and shellfish would benefit from an estuary, a place where fresh water from a river mixes with marine waters, pulsing with the high and low tides.

However, freshwater fish, northern river otter, little brown and Yuma bats, swallows and other insect-eating birds would fare better if Capitol Lake remains.

Ten of 16 species found in the area and on the state's priority habitat and species list would benefit from an estuary while four of 16 would favor a lake, said Tim Quinn, chief scientist in the Department of Fish and Wildlife habitat program.

"In the lake and estuary options, some species win and some species lose," he said.

The nine-member lake committee — consisting of representatives from Olympia, Tumwater, Thurston County, the Squaxin Island tribe, Port of Olympia and four state agencies — is slated to settle on a recommendation to General Administration next spring.

Dredging costs for Capitol Lake

The low, medium, high and worst case costs for initial and maintenance dredging vary, depending on where dredge disposal occurs. In general, the greater the haul distance, the greater the cost.

Low-cost

Estuary alternative	Lake alternative
$57.8 million	$166.1 million

Medium-cost

Estuary alternative	Lake alternative
$67.9 million	$210.7 million

High-cost

Estuary alternative	Lake alternative
$87.6 million	$273.9 million

Worst-case*

Estuary alternative	Lake alternative
$138.8 million	$361.0 million

Note: All totals include initial dredging costs plus maintenance cost for the 50-year project life.

*Does not include possible costs associated with disposal of contaminated sediment at a landfill.

Sources: CLAMP Steering Committee, state Department of General Administration

John Dodge and Alan Kenaga/The Olympian

Money, Politics Likely to Weigh Into Lake's Fate

The Olympian Published September 17, 2008

Lake or estuary?

This community and this state are inching ever closer to a final decision on whether picturesque Capitol Lake in the heart of Olympia will remain a reflecting pool or be transformed into a saltwater estuary benefitting birds and other wildlife.

There is no community consensus on the question and the reality is that eventually this pivotal decision will come down to politics and money.

The state and community have wrestled with this important question for years.

The simple truth is the state-owned lake that reflects a mirror image of the capitol dome, has been neglected for years. If nothing is done, silt washed downstream through the Deschutes River eventually will fill the lake transforming it into a freshwater marsh.

That's nature's solution.

But man feels the tug to intervene.

The options

After years of back-and-forth arguments between local, state and tribal representatives, the committee charged with coming up with a solution, found the money to pay scientists to study the lake and estuary options and come up with cost estimates.

Two recently released reports say the estuary option is better for wildlife and taxpayers.

Dredging costs to restore Capitol Lake to 13 feet deep and maintain it for 50 years are three times more expensive than restoring the estuary and dredging river sediments out of lower Budd Inlet.

In 2008 dollars, the range of likely dredging costs for the lake are $166 million to $274 million while managing sediment associated with a Deschutes River estuary, including dredging in lower Budd Inlet, could cost $58 million to $88 million.

"This is a very significant report," said Olympia City Councilman Joe Hyer, a member of the Capitol Lake management steering committee that's been studying lake versus estuary options since 2003. "The estuary folks have a leg up on the cost comparison."

Shifting costs

The estuary option would shift costs from the state to those who lease tidelands in lower Puget Sound, such as the Olympia Yacht Club, the Port of Olympia and marina owners.

"The costs involved would be almost prohibitive for the Olympia Yacht Club to deal with," club member John DeMeyer said. "The downtown waterfront is at risk with the estuary proposal."

The lake or estuary debate continues even as the scientific reports continue to be compiled. The study committee is expected to have its work completed next spring at which time a recommendation will be sent to the director of the Department of General Administration. The state's landlord agency, in turn, will take a recommendation to the Capitol Committee which includes representatives of the governor, secretary of state, lieutenant governor and lands commissioner. They will make a decision on how to proceed.

Ultimately, however, the state Legislature will decide a course of action. Lawmakers control the decision-making because they control the purse strings.

Once you add politics and money to the mix, it's anyone's guess whether the ultimate decision will be lake, estuary or something in between. Only a fool would bet on the final outcome at this juncture.

Dredging Capitol Lake More Expensive Than Estuary

The Olympian Published September 04, 2008
John Dodge

The dredging costs to restore and maintain Capitol Lake are some three times higher than the dredging costs to create and maintain a Deschutes River estuary, according to a study unveiled today at the Capitol Lake management committee meeting.

The lake option over 50 years could cost $166 million to $274 million while the estuary option is pegged at $58 million to $88 million.

The volume of dredged material is much greater with the lake option because it's had very little dredging in the past 30 years and would need about 875,000 cubic yards of sediment removed to restore it to a depth of 13 feet, according to the study by consulting engineers Moffatt & Nichol.

On the other hand, initial dredging for the estuary would be less than half that much material and would be used to reshape the river shoreline, avoiding costly dredge disposal fees.

The dredge cost comparison is one of the most important pieces of data to date that will feed into a recommendation by the lake committee next year on whether to keep Capitol Lake or return the impounded Deschutes River to a free-flowing condition.

Under the lake option, all dredging occurs inside the lake, which is managed by the state. Under the estuary option the maintenance dredging occurs in lower Budd Inlet, which could become a financial burden to the Port of Olympia and several private marinas in west bay.

Another report released by the state Department of Fish and Wildlife Thursday showed more fish and wildlife species benefiting from an estuary than would from maintaining a lake.

Dam to Last 50 Years with Work

The Olympian Published December 12, 2008
John Dodge

The Capitol Lake Dam built at Fifth Avenue in downtown Olympia 60 years ago is in fair condition and, with some serious maintenance, should last at least 50 more years, an engineering consultant told Capitol Lake managers Thursday.

But the state will need to spend a couple of million dollars in the not-too-distant future to combat corrosion of the concrete structure because of saltwater intrusion and replace the leaky seals on the dam gates, noted Susan Tonkin of Moffatt & Nichol, a Long Beach, Calif.-based maritime engineering firm.

"The question is: Is the dam going to survive another 50 years?" Tonkin said. "The simple answer is yes."

But the state Department of General Administration will need to invest in the structure in the next few years if the dam isn't removed to make way for a free-flowing Deschutes River, she said.

The nine-member lake-management committee has been studying the pros and cons of keeping the lake or reverting to an estuary for years. The group, which includes representatives of Olympia, Tumwater, Thurston County, the Squaxin Island tribe, the Port of Olympia and four state agencies, is on schedule to deliver a recommendation of lake or estuary to General Administration by June, agency planner Nathaniel Jones said.

The assessment of the dam's condition is one of many factors playing into the decision.

Lake managers also received a report on flood risks associated with a lake and an estuary.

During high tides when Deschutes River flows are low, the dam reduces the chances of flooding, said Joy Michaud of Herrera Environmental's Olympia office.

However, the dam can make flood problems worse when a string of high tides combine with a few days of high river flows caused by storm runoff.

"The dam can't drain enough water during high tides," she said.

Water levels during a 100-year flood event with an estuary are predicted to be about 6 inches higher than with a dam, Michaud predicted. And an estuary is slightly more susceptible to sea-level rise than a lake, she said.

She also said dredging the lake isn't critical for flood control, compared with opening the tide gates as soon as possible after each high tide recedes.

Tide turns for Capitol Lake, estuary

The Olympian Published July 03, 2009
John Dodge

A committee charged with helping to shape the future of Capitol Lake lined up Thursday squarely in favor of turning it back into the Deschutes River estuary after five years and $1.7 million worth of study and debate.

Six of the nine members of the Capitol Lake Adaptive Management Plan steering committee voiced support for removing the Fifth Avenue Dam and letting the 250-acre man-made lake revert to tideflats.

Two members, the Port of Olympia and Tumwater, were less enthusiastic but still open to the idea of an estuary and a third, the state Department of General Administration, didn't take a position because the committee recommendation will go to GA Director Linda Villegas Bremer in August for her review.

Support for the estuary option came from Thurston County, Olympia, the Squaxin Island tribe and the state departments of Natural Resources, Ecology, and Fish and Wildlife.

The three state agencies set the tone for the half-day retreat in Tumwater when they delivered a letter to the committee signed by all three agency directors.

"The opportunity here is to convert a failing, unhealthy lake into a major restoration project at the base of south Puget Sound," the letter concluded.

Five years ago, the CLAMP committee was evenly split on the fate of the lake, which was created as both an extension of the state Capitol Campus and a sediment holding pond in 1951. But two key things happened:

- A series of scientific studies showed that is cheaper to create an estuary and maintain it for 50 years – at a cost of $221 million – than it is a lake, which would cost more than $300 million. The estuary reduces some of the water-quality problems that plague the lake and lower Budd Inlet. The estuary also provides habitat for a greater variety of fish and wildlife.

- Key political players involved in the decision have changed over time, including county commissioners, Olympia City Council members and the state lands commissioner.

The estuary option is far from a done deal. It will need political and financial support from GA, the state Capitol Committee, the state Legislature and the federal government to move forward. Even if it's approved along the way, it could take years to accomplish.

"This marks an important milestone," Squaxin Island tribal representative Jeff Dickison said. "But there's still work to be done."

In addition, the lake has strong public support in the Olympia community, especially among residents who enjoy the aesthetics of the lake, those who don't like the smell of mudflats and boaters who moor their boats in lower Budd Inlet who will see an increased load of sediment from the river if the dam is removed.

“We really don’t know what will happen when you take the dam out,” said Jim Legenfelder, an Olympia Yacht Club member and estuary critic.

“Aesthetics is a tough issue,” conceded Ecology committee member Sally Toteff. However, she said, even an estuary would be covered with water about 70 percent of the time.

All of the CLAMP members agreed that the cost of dredging sediments that have been piling up in the lake and will continue to travel down the river should be a shared responsibility.

“We realize the port and marinas can’t fork out millions and millions of dollars to manage sediments,” DNR’s Todd Welker said.

Olympia City Council member Joe Hyer said the state agencies’ unified support for an estuary swayed him to return to his uncommitted council and recommend the city join the estuary camp.

“Five years ago I was in the lake camp,” he said. “But you can’t have water quality in a managed lake. That pushes us to an estuary option.”

The county commissioners voted 2-1 recently to support the estuary, with Commissioner Cathy Wolfe backing the lake, Commissioner Karen Valenzuela said.

The Tumwater City Council voted 4-3 in support of the lake. But council members might be willing to reconsider their position as long as their major concerns, including protection of the old Olympia brewhouse and Tumwater Historical Park and an equitable sharing of dredging costs, are addressed, said Neil McClanahan, CLAMP committee chairman and a Tumwater City Council member who supports the estuary option.

Time for decision on future of Capitol Lake

The Olympian Published July 10, 2009

Wow! The committee charged with determining the future of Capitol Lake has recommended the lake be converted to an estuary.

What a turnaround — a turnaround that will surely spark a lot more debate in the community and in the halls of the Washington Legislature. The lake vs. estuary debate is one that has consumed more than a decade and $1.7 million in tax dollars for consultant studies. South Sound residents are sharply divided on the issue, and that's not likely to change.

POSITIVE STEP

We see the emerging recommendation the Capitol Lake Adaptive Management Plan steering committee in favor of the estuary as a positive step, if for no other reason than it moves this controversial issue one pace closer to an ultimate resolution.

The debate has dragged on far too long. It's time to pick an option and proceed. What's interesting is how the scientific and financial studies over the last several years have turned votes. Olympia Councilman Joe Hyer is a good example.

As a member of the CLAMP committee, he was in the lake camp. What persuaded him to switch to the estuary option — with the backing of his City Council colleagues — was the fact that all three state agencies entangled in this controversy solidly support the estuary option.

Peter Goldmark, the new director of the state Department of Natural Resources, Fish and Wildlife Director Phil Anderson and Ecology Director Jay Manning, signed a letter to the CLAMP committee voicing solid support for converting the lake, which is a reflecting pool for the domed Capitol Building, into an estuary where the Deschutes River will meet southern Budd Inlet.

"The opportunity here is to convert a failing, unhealthy lake into a major restoration project at the base of south Puget Sound," the agency directors wrote in their letter to their CLAMP colleagues.

Olympia and the three state agencies were joined by representatives from Thurston County and the Squaxin Island tribe in their support of the estuary.

Two members, the Port of Olympia and Tumwater, were less enthusiastic but are open to the idea of an estuary, and a third, the state Department of General Administration, didn't take a position because the committee recommendation will go to GA Director Linda Villegas Bremer for her review.

It's important to note that some of those estuary votes are not always unanimous. Thurston County commissioners, for example, voted 2-1 in favor of the estuary with Commissioners Karen Valenzuela and Sandra Romero outvoting Cathy Wolfe, who supported the retention of Capitol Lake.

The vote on the Tumwater City Council was 4-3 in support of the lake option, primarily based on fears of what an estuary would do to the old Tumwater Brewery on the banks of the Deschutes River.

EVENLY DIVIDED

Five years ago the CLAMP committee was evenly divided on the debate — half in the lake camp, half supporting the estuary option.

While some residents complained about spending almost $2 million for scientific studies and financial reviews, those documents clearly swayed votes — as did CLAMP committee membership changes over the years.

The studies showed that it is cheaper to create an estuary and maintain it for 50 years — at a cost of $221 million — than it is a lake, which would cost more than $300 million. The estuary reduces some of the water-quality problems that plague the lake and lower Budd Inlet. The estuary also provides habitat for a greater variety of fish and wildlife. It also mirrors the efforts to create a larger estuary at the mouth of the Nisqually River in northern Thurston County. Efforts there have been applauded as positive steps toward increasing wildlife habitat and improving water quality in Puget Sound.

The same arguments can be made about removal of the Fifth Avenue dam and conversion of Capitol Lake into an estuary. But this deal is far from done.

Bremer, the director of General Administration, the state's landlord agency, will begin her review in August and make a recommendation to the state Capitol Committee, which has oversight over Capitol Campus issues. The lake, and Deschutes Parkway are considered part of the Capitol Campus.

The Capitol Committee, which includes Lands Commissioner Goldmark, Gov. Chris Gregoire, Lt. Gov. Brad Owen and Secretary of State Sam Reed, will make a recommendation to the Legislature. The federal government also will have a say.

Look for the lake vs. estuary debate to continue as South Sound residents continue to choose sides. That's OK. What's key is that this drawn-out issue be brought to resolution.

Committee aligns with estuary
CAPITOL LAKE: Group wants to restore tideflats

The Olympian Published August 07, 2009
Matt Batcheldor

OLYMPIA – The Capitol Lake Adaptive Management Plan Steering Committee agreed Thursday to formally recommend that Capitol Lake revert to an estuary, the culmination of more than five years of debate.

The committee will present the recommendation to state General Administration director Linda Bremer in a meeting on either Sept. 3 or a date yet to be scheduled. After that, the state Capitol Committee will consider the recommendation. Legislative and federal support also would be needed for the recommendation to be implemented.

Group members mostly came to their conclusions during a July retreat, but they finalized a written report Thursday. The committee includes members of state agencies and the Squaxin Island tribe, as well as representatives of the Port of Olympia Commission, Thurston County Commission and Olympia and Tumwater city councils.

“We are here for a very important meeting,” said Neil McClanahan, chairman of the committee and a Tumwater council member.

Five of the nine members of the committee have said they favor removing the Fifth Avenue Dam and letting the lake revert to tideflats. The lake was an estuary until 1951.

The Squaxin Island tribe and the state departments of Natural Resources, Ecology and Fish and Wildlife support creating an estuary. The Thurston County Commission also voted 2-1 in favor of an estuary.

The Olympia City Council is sitting on the fence for now, forwarding the state a list of issues and concerns about both the lake and the estuary options. The council’s representative, Joe Hyer, has voiced support for an estuary.
Tumwater and the Port of Olympia representatives have opposed the estuary option.

Port of Olympia representatives have concerns about cost sharing and sediment management. All three port commissioners wrote in a letter that the economic impacts have not been fully or accurately calculated. They say the estuary doesn’t significantly improve water quality and that they fear the state is “transferring its obligations for lake management to Thurston County residents.”

The port “cannot support moving forward with an estuary without a much higher degree of confidence that a selected alternative will benefit our communities as well as the environment,” they wrote.

The Tumwater City Council voted 4-3 to support the lake. But McClanahan said council members might reconsider if their major concerns are addressed – including protecting the old Olympia brewhouse and Tumwater Historical Park and equitablly sharing dredging costs. McClanahan supports the estuary option.

General Administration representatives have attended the meetings but are neutral on the issue.

The support for an estuary is a marked change from five years ago, when the committee was more evently split about the issue.

WHAT'S NEXT

After the committee forwards its recommendation to General Administration, the recommendation will be considered by the state Capitol Committee. Legislative and federal support would be needed for the recommendation to be implemented.

Supporters say an estuary would improve water quality and return the environment closer to its natural state. They also like the aesthetics of an estuary, which mostly would be full but revert to mudflats twice a day, during low tide.

Lake supporters enjoy the look of a lake and are concerned that mudflats would be unsightly and smelly. Boaters worry that sediment would pile up at their lower Budd Inlet marina and affect their moorage.

Lake proponents have a slight edge over estuary supporters in 118 public comments that General Administration has received, spokesman Steve Valandra said in an e-mail. Chief concerns are about the need to:

- Prevent flooding.
- Restore a natural setting and help wildlife.
- Maintain a viable park/lake setting for the public.

Some commenters also said the state should "make a firm decision and quit spending money on studies," Valandra said.

Also in question is what will happen with the Capitol Lake Adaptive Management Steering Committee. Its role and scope are unclear. McClanahan said he hopes for it to shift gears to study the greater cleanup of Budd Inlet. He said the group will meet at least quarterly; it had been meeting monthly.

"I ... do not want to see this momentum and this incredible resource go away," McClanahan said about the committee.