Preserving Capitol Lake

Financial Projections

CLIPA PLAN for Capitol Lake and the Deschutes Watershed

"Save the Lake – Preserve the Past, Improve the Future."

March 2011

Capitol Lake Improvement and Protection Association
120 State Ave NE #1006 Olympia, Washington 98501-8212
www.savecapitollake.org
Friends@savecapitollake.org

CLIPA

Capitol Lake Improvement and Protection Association

"Save the Lake – Preserve the Past, Improve the Future."

CLIPA PLAN for Capitol Lake and the Deschutes Watershed

The Capitol Lake Improvement and Protection Association (CLIPA) was formed early in 2010 to provide a community led study and program that is designed to protect and improve Capitol Lake as envisioned by the community. This plan includes the management of the Deschutes Watershed, including Capitol Lake and the lower Budd Inlet.

This SUMMARY-CLIPA PLAN identifies more of the specifics of the CLIPA PLAN using both the technical studies funded by the State under the general guidance of the Capitol Lake Adaptive Management Program (CLAMP) and the collective expertise of the CLIPA Science and Policy Panel. This Panel includes about 20 professional engineers, scientists, economists, fisheries experts, researchers, and public policy leaders, each a recognized expert in their own right.

The Panel, together and individually, have examined over 140 Studies and working documents to guide the development of this Summary CLIPA PLAN. The first draft of the CLIPA PLAN was included in the White Paper first made available in July 2010. The White Paper was distributed to all of the key State Agencies, to the General Administration, the Legislators, the Capitol Committee, and to the general public via the web site, www.savecapitollake.org . Subsequent to the release of the CLIPA White Paper, CLIPA has continued to undertake specific research and to evaluate the findings that CLAMP used to arrive at their recommendations related to the potential of reversing the last 50 years of Lake management to recreate a tidal mudflat (form of estuary) that would result if the Fifth Avenue Dam were to be removed.

CLIPA believes that the CLAMP findings are in error, that their cost estimates for a Managed Lake are misleading, and that a much more environmentally acceptable solution is available to manage the dredging and retain Capitol Lake as a significant part of the Capitol Campus and the Greater Olympia Community. CLIPA believes that this can all be done for about 1/3 the cost that the estuary proponents project for the estuary. CLIPA also has found that the CLIPA PLAN can be phased in to accommodate the challenges of the current economic conditions and to provide a "green solution" to the disposal of most of the sediments from Capitol Lake. All of this can be done by starting small, and working to improve the entire Deschutes Watershed for sediment management, water quality, and fisheries enhancement.

THE CLIPA PLAN FOR CAPITOL LAKE, DESCHUTES WATERSHED AND ALL OF THE COMMUNITY INTERESTS.

CLIPA has used the CLAMP guided studies for all of its initial planning strategies and used the best ideas from CLAMP and made them better. This starts with the maintenance dredging from

the North Basin of Capitol Lake and disposing of the sediment on the west shores of the Mid Basin of Capitol Lake (just like the CLAMP Estuary option). This maintenance dredging is recommended during the next two years if possible, to stop the sediment carryover from the "full lake trap" into the marine waters where it is being contaminated by marine water containing dioxin. By stopping the sediment carryover from the "lake full of sediment" the CLIPA PLAN will reduce the State's liability associated with delayed Lake maintenance. The CLIPA PLAN also anticipate an initial marine water dredging project to "compensate" for the damages being caused by the sediment carryover. Thereafter the marine water dredging requirements will be reduced by the management of the sediment trap in Capitol Lake and as a result the CLIPA PLAN anticipates that the marine water beneficiaries will become partners in the Capitol Lake maintenance plan.

Under the CLIPA PLAN, subsequent Lake maintenance dredging can follow the least cost approach by one of several options; 1) Additional west shore disposal in the Mid Basin similar to that proposed by CLAMP, 2) Shore side dewatering to the west with use of the sediments for landscaping and land disposal in a "recycle/reuse mode"; or alternatively 3) Deep water disposal The option selected will come after environmental permitting and pre design is completed for the long term management strategy.

The CLIPA PLAN provides for a two, ten, and fifty year program. The fifty year cost estimate is about $48 million in contrast to the CLAMP Estuary Option which would cost at least $150 million and which has about $100 million in initial infrastructure cost just to get started.

A key element of the CLIPA PLAN is that it would be a public-private partnership with a shared representative Management Board. This new Board would guide the financing and the implementation plans with involvement by the local governments and stakeholders with the most to gain or to loose from the decisions related to the future of Capitol Lake, the waterfront, and the Deschutes Watershed.

The CLIPA Board is proceeding with the studies, the community meetings, and the promotion of community leadership to form the new Management Board. They are seeking a State, tribal, local, and private partnership to take the CLIPA PLAN from concept to a plan of action that begins in the summer of 2011.

The following documents outline in more detail some of the specifics and key findings incorporated in the CLIPA PLAN for Capitol Lake.

1) CLIPA's Financial Projections for How to Manage Capitol Lake for Future Generations
2) Strengths of CLIPA's Watershed and Dredging Plan
3) Comparison of Lake vs Estuary Costs from CLAMP/State documents
4) Letter from Wayne Daley on Fisheries
5) CLIPA Dredging Plan Schematic
6) Management Board Proposal (SB 5265 Authorizing multi-jurisdiction flood control zones)

More information on the CLIPA PLAN is at www.savecapitollake.org.

CLIPA

Capitol Lake Improvement and Protection Association

"Save the Lake – Preserve the Past, Improve the Future."

CLIPA's Financial Projections for How to Manage Capitol Lake for Future Generations

Financial Projections – First Biennium

2011-2013 Biennium ($4.5 million)

Based upon a preliminary estimate to be verified in the predesign study, the first biennium's activities would cost approximately $4.5 million. A capital budget appropriation at this level will finance the predesign, sediment testing for disposal, design, permitting, project administration, and initial interim maintenance dredging of the North basin[1] of Capitol Lake. It is anticipated that this activity will establish the long-term maintenance dredging program and permits. It will also provide the necessary time to bring partners together to develop a Deschutes Watershed plan.

Predesign Elements

Predesign will focus on efforts to maintain the existing lake and the proper disposal of dredged lake sediment. We recommend a new dimension to this effort, in which the predesign study will include performance objectives and strategies to achieve long-term maintenance of Capitol Lake. The identification and quantification of scientifically-based, measurable objectives will then establish and be used as a baseline for future monitoring and public reporting by General Administration (GA) to the Legislature on a five-year cycle, timed to coincide with the expected needs for ongoing maintenance dredging.

For example, elements of the predesign study might include:

- ***Sediment removal options (for the planned maintenance dredging and future dredging options)***
  For example, by explicitly identifying the lake as a sediment management "trap," and managed as such, the lake could be completely drained and dredged; it could be dredged using on-land operations; or, it could be dredged through piping out to lower Budd Inlet, and loaded onto a barge.
- ***Sediment disposal options – sites, transport methods, etc.***
  For example, in any of the options above, the dredging spoils could be moved onto trucks, trains, or barges. The State has the added option of using adjacent upland acreage as a dewatering and storage area. The State would then have time (up until the next dredge, potentially up to 5 years) to market the dredging spoils as fill, potentially

[1] We capitalize each basin (North, Middle or "Mid," and South) to draw attention to each individual basin.

reducing or even eliminating the sediment disposal costs. While this might take time for the first dredge due to the contamination of purple loosestrife, future dredges would offer clean fill for landscaping and such. On-site sediment disposal options include using areas such as Percival Cove or adding to the existing wetlands in the southwest corner of the Middle basin which was created by prior dredging spoils.

- ***Flooding/hydrology studies***
  By explicitly identifying the lake as a vehicle for flood management, such studies might identify optimal contours of the lake, and the extent to which the three lake basins serve in conjunction with other measures to best manage for flood control.
- ***Schedule and schedule constraints (e.g., in-water work scheduled to protect aquatic resources)***
- ***Cost factors***
- ***Water quality and overall lake management, including invasive species***
  The lake has not been well managed to anticipate and plan for its overall management as a body of water, nor has an overall watershed-wide plan been developed to utilize the lake features to improve upon overall quality and benefits to the ecosystem and to the community and visitors to the area.
- ***Habitat restoration***
  Similarly, an overall watershed management approach should incorporate how the particular features of the lake basins and surrounds might be managed for habitat restoration. The predesign study could identify unique habitat provided by the lake and lake environment that might be enhanced, consistent with its location in an urban area connecting the upper Deschutes and lower Budd Inlet.
- ***Recreation and education/interpretation opportunities***
  Increased opportunities to provide for recreation, as well as informal education and interpretation of the area should be identified. Signage providing historic "stories," nature interpretation, and connecting the area with the Capitol Campus, along with trail walks, structured "naturescapes," and other components could further enhance the use and enjoyment of the entire area, linking it more explicitly to the Capitol Campus, Deschutes Watershed, and Budd Inlet.
- ***Coordination of in-water work activities in lower Budd Inlet (e.g., City of Olympia Boardwalk and Percival Landing, west side development, etc.)***
  Predesign should identify various activities planned by national, state, and local entities in and around the area to align with and support each other's work, in scope, timing, and coordination.
- ***Opportunities for partnerships***
  This is discussed in greater detail in CLIPA's White Paper document.
- ***Funding strategy – e.g., Federal grants, Public/private partnerships, etc.***
  For example, the proposed dredge of the lower Budd Inlet should coincide with dredges throughout that basin, with cost sharing among all beneficiaries, including the marinas, yacht club, Port of Olympia, City of Olympia, etc.

Planning and Coordination

Our recommendation is that any planning includes what we deem a necessary step of setting up a Capitol Lake/Deschutes Watershed "coordinating board" of public and private partners. Such a board is intended to provide intentional coordination and collaboration in the management of the Deschutes Watershed, and Capitol Lake's role in water quality and sediment management

consistent with maintaining a healthy "lake environment." The coordinating board of public and private partners would oversee and guide the implementation of the plan for long-term sustainability and accountability.

A Water Quality and Sediment Management Plan for Capitol Lake should be a priority. It would identify improvements to and ongoing efforts needed for the long-term management of the Deschutes Watershed under the leadership of the County and the State, along with riparian and stormwater management by the cities and the Department of Transportation. The new "coordinating board" would provide routine reporting to the public on progress towards a healthy Deschutes Watershed and Capitol Lake program.

Maintenance Dredge Considerations

The intent is to obtain Corps of Engineers and State permits to authorize the interim maintenance dredge of about 100,000 cubic yards (cy) of sediment with a list of sites for disposal to be considered and selected in the predesign work. Ongoing routine and scheduled maintenance dredging would be included in the permit process. A preliminary draft plan was used to develop the attached draft budget for presentation to General Administration and to the Legislature as part of our proposed recommendations. The initial plan anticipates that the North basin of Capitol Lake would be dredged to an average depth of 13 to 15 feet (taking into account sloping bank contouring) and then be maintained at a depth that is consistent with the water quality and sediment management objectives for the lake, along with any other needs further identified during predesign (or future study and reporting).

Long-Term Strategy and Infrastructure

We recommend, and have included in our cost considerations, the incorporation of various strategies that will provide flexibility in the ongoing maintenance of Capitol Lake. Such strategies might include infrastructure needed for future dredges or "leave-behind" transition structures, such as a piping infrastructure at the dam (shown in CLIPA's Maintenance Plan document) for piping dredges to lower Budd Inlet for barging, as possible options.

Financial Projections – Remaining 10-Year Plan

2013-2015 Biennium ($2.4 million)

The first year of the second biennium would include maintenance dredging of approximately 110,000 cy of sediment in the marine water area between the dam and the Port Turning Basin. (This volume is slightly larger than the initial calculation from our Lake Maintenance Plan document due to approximation rounding.) This would be a joint operation with approximate dredging volumes in each area to be: 10,000 cy City of Olympia; 30,000 cy marinas and Olympia Yacht Club; 70,000 cy General Administration/lake carryover on the western side of lower Budd Inlet due to delayed maintenance dredging. If completed subsequent to the initial Capitol Lake interim maintenance dredge, the cost for the State portion is estimated to be about $1.4 million for the 70,000 cy. Further analysis may determine that combining this dredging activity with the Capitol Lake North basin maintenance dredge in the second year of the first biennium would create economies of scale and thus cost savings. This might be an option for the

Legislature to consider. If delayed much beyond this second biennium, the cost will continue to rise. The remaining costs of the approximately 40,000 cy of sediment beyond the western side of lower Budd Inlet would be paid for through cost sharing of the various public and private groups.

In addition to the estimated $1.4 million for the Budd Inlet dredging, the State request includes $1 million in funds for environmental enhancements and the water quality/sediment management plan implementation which would occur in the 2013-2015 biennium, as well as administrative costs for the coordinating board. Environmental, riparian, park, and trail enhancements would be subject to the location of lake sediment disposal. We recommend some of these funds be made available to the County on a matching grant basis for Deschutes Watershed enhancements specifically targeted toward up-river sediment management, water quality enhancements, and other riparian, wetland, recreation and education enhancements. The State could seek out matching federal funds for these purposes.

2015-2017 Biennium ($200,000)

No new work is anticipated for this biennium. Any unspent funds from the prior biennium, especially from the $1 million enhancement appropriation, may result in a reappropriation to continue and complete the environmental enhancements. $200,000 is requested in this biennium to support ongoing water quality and sediment management monitoring and administrative costs for the coordinating board. Predesign studies in the 2011-2013 biennium could expedite maintenance dredging in the Middle basin of Capitol Lake, or identify other sediment disposal strategies, including recycling of lake sediments for landscaping objectives. Funds might be needed for GA's efforts in these areas.

2017-2019 Biennium ($2.4 million)

Funding is requested for water quality and sediment management, and maintenance dredging of the North basin. It is estimated that on average 35,000 cy of new sediment settles into Capitol Lake from the Deschutes Watershed annually. We anticipate a 5-year routine maintenance dredging program to address this, requiring another 100,000 cy of sediment removal. Cost estimates of $2.0 million are based on the dredging, pre-planning and permitting that occurred in 2011-2013.

However, it should be noted that any new sediment management techniques utilized upstream in the Deschutes Watershed beginning with the 2013-2015 biennium's activities stemming from the $1 million request could reduce, perhaps significantly, sediment accumulations into Capitol Lake and either reduce the dredged material volume estimate and associated costs or extend the time period for needed maintenance dredging.

Another $400,000 is requested for continuous improvements to the Deschutes Watershed/Capitol Lake environment, targeting water quality sampling and sediment management along with other needed improvements and enhancements, as well as administrative costs for the coordinating board.

2019-2021 Biennium ($10-14 million)

Maintenance dredging of Capitol Lake's Middle ("Mid") basin is recommended for the 2019-2021 biennium, removing an estimated 500,000 to 700,000 cy at $20/cy. The estimate anticipates the Mid basin would be dredged to a depth of 6 feet. This is an option, and one that we strongly recommend. Another option would be the conversion of the southern end of the Mid basin to a freshwater wetland and park area, with trails, interpretive areas, and enhanced habitat. The decision on this will be based on the 2011-2013 Water Quality management studies, the predesign studies, and long-term sediment disposal plan and permitting program.

Note: The first dredge of the Capitol Lake North basin is estimated at $25/cy, due to all of the "unknowns," while subsequent dredges in the North basin and Middle basin are estimated at $20/cy.

10-Year Dredge Cost Estimates

	2011-13	2013-15	2015-17	2017-19	2019-21	**Total**
Dredge North basin	4.5					4.5
Dredge Inlet/boat basin		1.4				1.4
Environmental Enhancements		1.0	0.2	0.4		1.6
Maintenance Dredge North basin				2.0		2.0
Dredge Mid basin					10-14	14.0
Total (in millions $)	4.5	2.4	0.2	2.4	14.0	**23.5**

Financial Projections – Remaining 50-Year Plan

2021-2063

Capitol Lake will be managed for water quality, sediment management, habitat, and various multi-purpose uses by the community. The maintenance dredging program anticipates a five-year maintenance dredge of the "sediment trap" in Capitol Lake (North basin) of about 100,000 cy or $2.0 million every five years, with long-term permitting planned in 2011-2013. An additional $200,000 is included every five years for water quality and sediment management research, sampling, monitoring and reporting through the coordinating board. The plan also considers a ten-year cycle for the marine water maintenance dredging between the dam and the Port Turning Basin of about 50,000 cy or $1.0 million. The plan does not include maintenance dredging for the Mid basin, as that will need to be determined based on the timing of the first dredge, upstream sediment management, and other considerations. The plan also does not include costs of dredging the South basin. We advocate for that work, believing it might best be done in the second decade. However, there is much to consider in these cost estimates, beyond the information we presently have available. We recommend the predesign study consider these activities and their costs as potential options in the out-going years after the first decade.

Subject to the water quality management objectives and the ability to manage sediment upstream, the amount of sediment removal should continue to be reduced, reducing overall costs and extending the timing of dredges. The cost estimate of $20/cy is used with the premise that the long-term maintenance and permitting issues would be addressed in 2011-2013. The total

cost of this 40-year span (years 11 – 50) would be about $18.0 million for the lake, $1.8 million for environmental monitoring and enhancement, and $4.0 million for the marina/small boating area of lower Budd Inlet.

Summary

The 50-year cost of this program is anticipated to range from about $43.3 to $47.3 million using the above assumptions and estimates. The assumptions include the accepted State approach for some contingency budgeted. A more rigorous long-term budget will be verified after the predesign studies and permitting program, which provides for routine maintenance dredging, are outlined and negotiated.

As part of the coordinating board's work in the first few years, a cost sharing approach should be identified and implemented to ensure that the entire lower Budd Inlet boat basin dredging occurs simultaneously, and thereafter the maintenance dredges reflect a cost sharing in an equitable manner by the State, City, Port, marinas, and Yacht Club. For example, the marinas and Yacht Club pay the State for lease costs (funds are deposited in the Aquatic Lands Enhancement Account), and these funds could be appropriated by the State to partially fund some of the coordinating board's ongoing activities.

50-Year Dredge Cost Estimates

(Years 11-50 shown here; bienniums with $0 cost not shown; totals include the first decade, above)

	2021-23	2023-25	2027-29	2031-33	2033-35	2037-39	2041-43
Dredge North basin							
Dredge Inlet/boat basin							
Environmental Enhancements	0.2		0.2	0.2		0.2	0.2
Maintenance Dredge North basin	2.0		2.0	2.0		2.0	2.0
Dredge Mid basin							
Maintenance Dredge Inlet/boat basin		1.0			1.0		
Total (in millions)	2.2	1.0	2.2	2.2	1.0	2.2	2.2

	2043-45	2047-49	2051-53	2053-55	2057-59	2061-63	**Total**
Dredge North basin							4.5
Dredge Inlet/boat basin							1.4
Environmental Enhancements		0.2	0.2		0.2	0.2	3.4
Maintenance Dredge North basin		2.0	2.0		2.0	2.0	20.0
Dredge Mid basin							14.0
Maintenance Dredge Inlet/boat basin	1.0			1.0			4.0
Total (in millions)	1.0	2.2	2.2	1.0	2.2	2.2	47.3

Capitol Lake Project Cost Summary

STATE OF WASHINGTON AGENCY/INSTITUTION PROJECT COST SUMMARY		
Agency	Department of General Administration	
Project Name	Capitol Lake Maintenance - Phase I	
Project Number		

Contact Information	
Analysis Date	4/1/2010
Analysis By	CLIPA
Contact Phone Number	866-0251

Statistics	Primary	Secondary	Total
Gross Square Feet	0	0	0
Net Square Feet	0	0	0
Efficiency	0%	0%	0%
Escalated MACC Cost per Sq.Ft.	0	0	0
Building Type			
Is project a remodel?			
A/E Fee Class			
A/E Fee Percentage			

Schedule	Start Date	End Date
Predesign (mm-yyyy)	Jul-2011	Jan-2012
Design (mm-yyyy)	Jan-2012	Jun-2012
Construction (mm-yyyy)	Aug-2011	Dec-2011
Construction Duration (months)	4	

Cost Summary	
Project Phase	**Escalated Cost**
Project Total	$4,473,000
Consultant Services	$775,000
Pre-Schematic Design Services	$212,000
A/E Basic Design Services	$158,000
A/E Extra Services/Reimbursables	$264,000
Other Services	$71,000
Design Services Contingency	$70,000

Construction	$3,677,000
MACC - Primary	$2,932,000
MACC - Secondary	$0
GC/CM Risk Contingency	$0
GC/CM or Design Build	$0
Contingencies	$443,000
Sales Tax	$302,000
Other	$21,000
Acquisition	$0
Equipment	$0
Equipment Tax	$0
Artwork	$0
Agency Project Administration	$0
Other	$21,000

Other Details	
Number of C100s Included in Summary	1
Alternative Public Works Project	
State Construction Inflation Rate	
Base Month	
Project Administration by	
Project Admin Impact to GA that is NOT included in Project Total	

Capitol Lake Project Cost Estimate Detail

STATE OF WASHINGTON

AGENCY/INSTITUTION PROJECT COST ESTIMATE

FORM **CTC Cost Est.**

Version 2.62 August 1, 2007

AGENCY:	Department of General Administration	**Analysis Date:**	4/1/2010
PROJECT NAME:	Capitol Lake Maintenance - Phase I	**Analysis By:**	CLIPA
PROJECT NUMBER:		**Contact Phone #:**	360-866-0251
LOCATION:			

STATISTICS:	Primary	Secondary
Gross Square Feet		
Net Square Feet		
Efficiency	0%	0%
Estimated Cost per S.F.	0	0
Building Type:	Other Schedule C Projects	
Is project a remodel?	No	No
A/E Fee Class	C	
A/E Fee Percentage:	7.78%	0.00%

Project Schedule	Start Date	End Date
1. Predesign (mm-yyyy):	Jul-2011	Jan-2012
2. Design (mm-yyyy):	Jan-2012	Jun-2012
3. Construction (mm-yyyy):	Aug-2011	Dec-2011
5. Construction Duration (in Months):	5	
State Construction Inflation Rate:	3.50%	
Base Month:	Apr-2010	

Contingency Rate:	10.00%
Management Reserve:	5.00%
Tax Rate:	8.90%
Art Requirement Applies:	No
Project Admin by GA:	Yes
Higher Ed. Institution:	No
Alternative Public Works Project:	No

Project Cost Summary	
Primary MACC (escalated):	$2,932,000
Secondary MACC (escalated):	$0
Current Project Total:	$4,261,188
Escalated Project Total:	$4,473,000

Includes Formula Overrides:	No

	ITEM	BASE MONTH AMOUNT	STANDARD FORMULA	ESCALATION FACTOR	ESCALATED COST
A.	**ACQUISITION COSTS**				
1	Purchase/Lease Cost				
2	Appraisal and Closing Costs				
3	Right-of-Way Costs				
4	Offsite Mitigation				
5					
Total: Acquisition Costs		**$0**		1.0000	**$0**
B.	**CONSULTANT SERVICES**				

1		**Pre-Schematic Design Services**					
	a.	Programming/Site Analysis					
	b.	Environmental Analysis					
	c.	Predesign Study		$200,000			
		SubTotal: Pre-Schematic Design Services		**$200,000**		1.0622	**$212,000**
2		**Construction Documents**					
	a.	A/E Basic Design Services - Up to Bidding (69%)		$150,299	$150,299		
	b.	A/E Basic Design Services - Secondary (69%)		$0	$0		
		SubTotal: Construction Documents		**$150,299**		1.0545	**$158,000**
3		**Extra Services**					
	a.	Civil Design (Above Basic Services)		$100,000			
	b.	Geotechnical Investigation		$20,000			
	c.	Commissioning					
	d.	Site Survey		$20,000			
	e.	Testing		$20,000			
	f.	Energy Conservation Report					
	g.	Voice/Data Consultant					
	h.	VE Participation & Implementation					
	i.	Constructability Review Participation					
	j.	Environmental Mitigation Services (EIS)		$20,000			
	k.	Landscape Consultant		$50,000			
	l.	Biology Consultant		$20,000			
		SubTotal: Extra Services		**$250,000**		1.0545	**$264,000**
4		**Other Services**					
	a.	Bid/Construction/Closeout - 31% of basic services		$67,526	$67,526		
	b.	Bid/Construction/Closeout - Secondary		$0	$0		
	c.	HVAC Balancing					
	d.	Commissioning and Training					
		SubTotal: Other Services		**$67,526**		1.0544	**$71,000**
5		**Design Services Contingency**	10.00%	$66,783	$66,783		
	a.						
		SubTotal: Design Services Contingency		**$66,783**		1.0544	**$70,000**
Total: Consultant Services				**$734,608**			**$775,000**
C.		**CONSTRUCTION CONTRACTS**					
1		**Site Work**					
	a.	G10 - Site Preparation					
	b.	G20 - Site Improvements					
	c.	G30 - Site Mechanical Utilities					
	d.	G40 - Site Electrical Utilities					
	e.	G60 - Other Site Construction					
	f.	Mobilization & Demobilization		$200,000			
	g.	Dredging		$2,500,000			
		SubTotal: Site Work		**$2,700,000**		1.0470	**$2,827,000**
2		**Related Project Costs**					
	a.	Off site improvements					
	b.	City Utilities Relocation					

	c.	Parking Mitigation			
	d.	Stormwater Retention/Detention			
	e.	Wetland Mitigation	$100,000		
		SubTotal: Related Project Costs	**$100,000**	1.0470	**$105,000**
3A		**Facility Construction - Primary**			
	a.	A10 - Foundations			
	b.	A20 - Basement Construction			
	c.	B10 - Superstructure			
	d.	B20 - Exterior Closure			
	e.	B30 - Roofing			
	f.	C10 - Interior Construction			
	g.	C20 - Stairs			
	h.	C30 - Interior Finishes			
	i.	D10 - Conveying			
	j.	D20 - Plumbing Systems			
	k.	D30 - HVAC Systems			
	l.	D40 - Fire Protection Systems			
	m.	D50 - Electrical Systems			
	n..	F10 - Special Construction			
	o..	F20 - Selective Demolition			
	p.	General Conditions			
		SubTotal: Facility Construction - Primary	**$0**	1.0544	**$0**
		Maximum Allowable Construction Cost (MACC) - Primary	**$2,800,000**		**$2,932,000**
3B		**Facility Construction -Secondary (By Building System)**			
	a.	A10 - Foundations			
	b.	A20 - Basement Construction			
	c.	B10 - Superstructure			
	d.	B20 - Exterior Closure			
	e.	B30 - Roofing			
	f.	C10 - Interior Construction			
	g.	C20 - Stairs			
	h.	C30 - Interior Finishes			
	i.	D10 - Conveying			
	j.	D20 - Plumbing Systems			
	k.	D30 - HVAC Systems			
	l.	D40 - Fire Protection Systems			
	m.	D50 - Electrical Systems			
	n..	F10 - Special Construction			
	o..	F20 - Selective Demolition			
	p.	General Conditions			
		SubTotal: Facility Construction -Secondary (By Building System)	**$0**	1.0544	**$0**
		Maximum Allowable Construction Cost (MACC) - Secondary	**$0**		**$0**
4		**GC/CM Risk Contingency**			
		SubTotal: GC/CM Risk Contingency	**$0**	1.0544	**$0**
4		**GC/CM Risk Contingency - NOT APPLICABLE**			

5		**GC/CM or Design Build Costs**					
	a.	Preconstruction Services					
	b.	Fee					
	c.	Bid General Conditions					
		SubTotal: GC/CM or Design Build Costs		**$0**		1.0544	**$0**
5		**GC/CM or Design Build Costs - NOT APPLICABLE**					
6		**Construction Contingencies**					
	a.	Management Reserve	5.00%	$140,000	$140,000		
	b.	Allowance for Change Orders	10.00%	$280,000	$280,000		
	c.						
		SubTotal: Construction Contingencies		**$420,000**		1.0544	**$443,000**
7		**Sales Tax**	8.90%	$286,580	$286,580		
	a.						
		SubTotal: Sales Tax		**$286,580**		1.0544	**$302,000**
Total: Construction Contracts				**$3,506,580**			**$3,677,000**
D.		**EQUIPMENT**					
1		E10 - Equipment					
2		E20 - Furnishings					
3		F10 - Special Construction					
4							
		SubTotal: Equipment		**$0**		1.0544	**$0**
99		**Sales Tax**	8.90%	$0	$0		
100							
		SubTotal: Sales Tax		**$0**		1.0544	**$0**
Total: Equipment				**$0**			**$0**
E.		**ARTWORK**					
1		Project Artwork		N/A	N/A		
2		Higher Education Artwork		N/A	N/A		
Total: Artwork				**$0**		1.0000	**$0**
F.		**OTHER COSTS**					
1		Mitigation Costs					
2		Hazardous Material Remediation\Removal					
3		Permits		$20,000			
Total: Other Costs				**$20,000**		1.0470	**$21,000**

G.	**PROJECT MANAGEMENT**				
1	Agency Project Management	$0	$0		
2					
Total: Project Management		**$0**		1.0000	**$0**
GRAND TOTAL		**$4,261,188**			**$4,473,000**

NOTES
Assumes 100,000 CY of material from North Basin to be dredged, with the marketing of the dredge spoils to other vendors or for use within the Capitol Lake/Deschutes watershed area.

CLIPA

Capitol Lake Improvement and Protection Association

"Save the Lake – Preserve the Past, Improve the Future."

Strengths of CLIPA's Watershed and Dredging Plan

CLIPA's PLAN:

1. Addresses the number one cause of pollution in Puget Sound. Toxic runoff.

2. Addresses septic tank leakage, advocating for the highly successful Woodland Creek/Woodard Bay type approach.

3. Avoids the very real economic risks to Olympia's working waterfront associated with allowing sediment to pulse freely into Budd inlet.

4. Avoids serious risk of degradation to downtown Olympia and to the desirability of urban living here.

5. Is consistent with the wishes of a great majority of the public-at-large.

6. Employs the most cost efficient method of sediment removal as it uses the northern basin as a sediment trap. (CLIPA's dredging plan is approximately 1/3 the cost of dredging under CLAMP's managed lake alternative.)

7. Adheres to the architectural principles of capitol campus designers Wilder and White and the historic City Beautiful Movement concepts.

8. Addresses head-on the greatest impediment to Deschutes watershed clean-up with a thoughtfully constructed, more representative coordinating board under a multijurisdictional framework.

9. Drastically reduces initial and long term costs associated with this issue. Adequately dredging Budd inlet long term is unsustainable.

10. Avoids a "mud bay" visual effect and hydrogen sulfide odor in Washington's capitol city.

11. Improves fish habitat for the vast majority of Deschutes watershed acreage.

CLIPA

Capitol Lake Improvement and Protection Association

"Save the Lake – Preserve the Past, Improve the Future."

Capitol Lake / Estuary Cost Comparison

To help interpret the attached two pages, following are some guidance notes.

1) The "Plan" reference is info from CLAMP or CLIPA. The Remarks reference the source of the information from public reports. We took the "low estimate" from the CLAMP studies. There is also available mid and high range cost estimates that vary wildly.

2) Note on --CAPITOL LAKE/ESTUARY COST COMPARISON the following---CLAMP projects that the Lake option will require removal and exporting of 875,000 cy of material at $23.25/cy. CLIPA's proposal is to initially remove 100,000 cy and then we estimated removing from the sediment trap the reoccurring sediment (35,000cy per year) on a three year cycle. CLIPA's estimate for the dredging for 50 years is $43,465,000.

This compares to the CLAMP low estimate for the Estuary of $114,500,000 (which provides for no exporting of sediment/relocates it in the lake.) We are unsure of how this estimate deals with the 35,000cy of sediment that will annually be deposited in the marine waters in the marina and Port area that will now become contaminated with dioxin. We are still researching this.

This comparison shows the CLIPA program as costing $71,035,000 less than the lowest reported Estuary cost by CLAMP. This is in contrast to the CLAMP Reports that show the Lake option costing $71,035,000 more than the Estuary (due entirely to the costing of sediment management and removal vs the CLAMP Estuary proposal of placing the initial dredge on the shores of the Lake and allowing the annual new sediment to deposit in the marina areas of lower Budd Inlet)

3)Note on --ECONOMIC DATA AND COST;COMMUNITY ECONOMIC VALUES. This is a different CLAMP Report that presents CLAMP costs for the Lake option at $191,600,000 and the Estuary option at $114,500,000. For some reason this report uses a cy cost of $84.91/cy for the lake option initially, then $64.74/cy for maintenance dredging. This is in contrast to the cy cost for the Estuary option of $39.85/cy initially and $33.17/cy for maintenance and reduces the maintenance quantity by 550,000cy, Recall that under the Estuary option, the maintenance dredging will be from the marina area with dioxin and boating traffic issues to deal with---but their unit cost comparison to the is presented as almost 100% less costly.

The CLIPA cost estimate, even using the CLAMP dredge unit cost data and the CLAMP maintenance quantity for the Lake is $64,526,438. This simple analysis using the CLAMP data shows the Lake Cost as $49,973,562 less costly than the Estuary.

Other findings that we will be reporting on will show that in addition to the major cost savings associated with the Lake Option, the option will have environmental benefits that meet or exceed

the best of the estuary option, it will provide better flood and seawater rise benefits, it retains the reflecting pool objectives and it provides all of the benefits that the lake offers to the community.

All but this last paragraph is documented from the CLAMP reports.

This is what should be referencing rather than the press releases from CLAMP that are misleading at best.

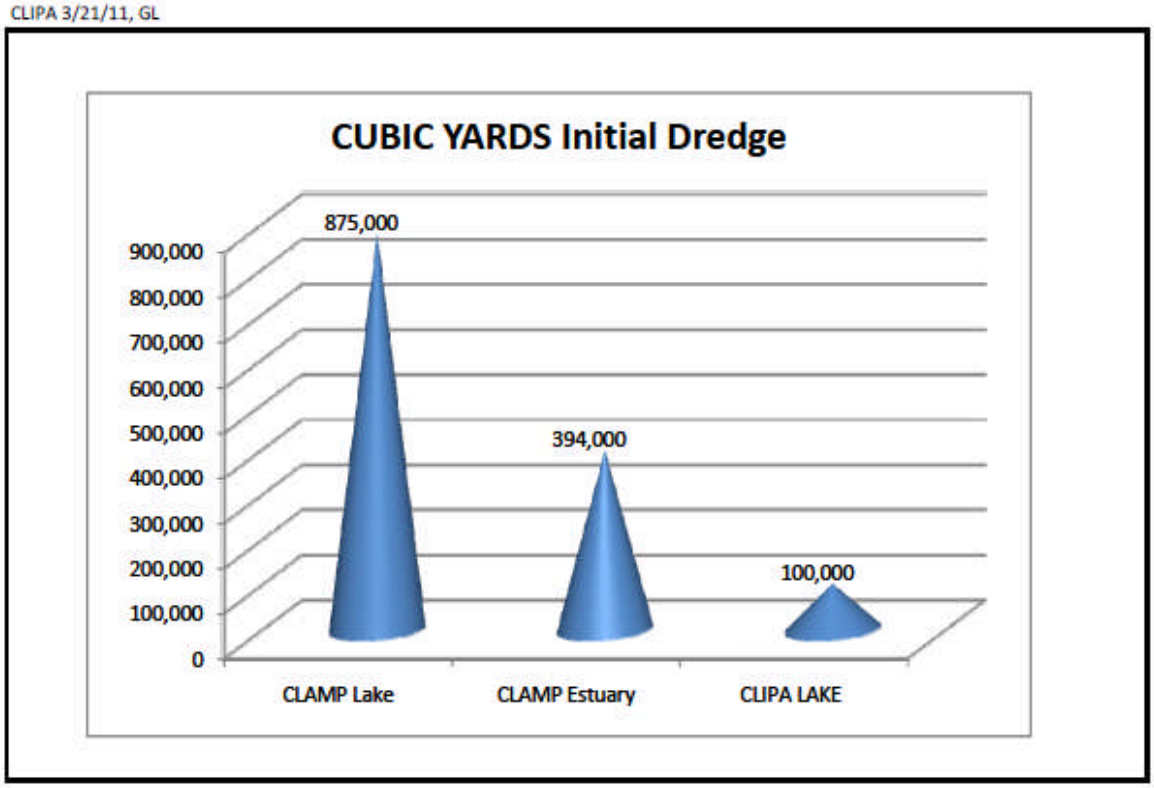
CAPITOL LAKE/ESTURAY COST COMPARISON *(Low)*

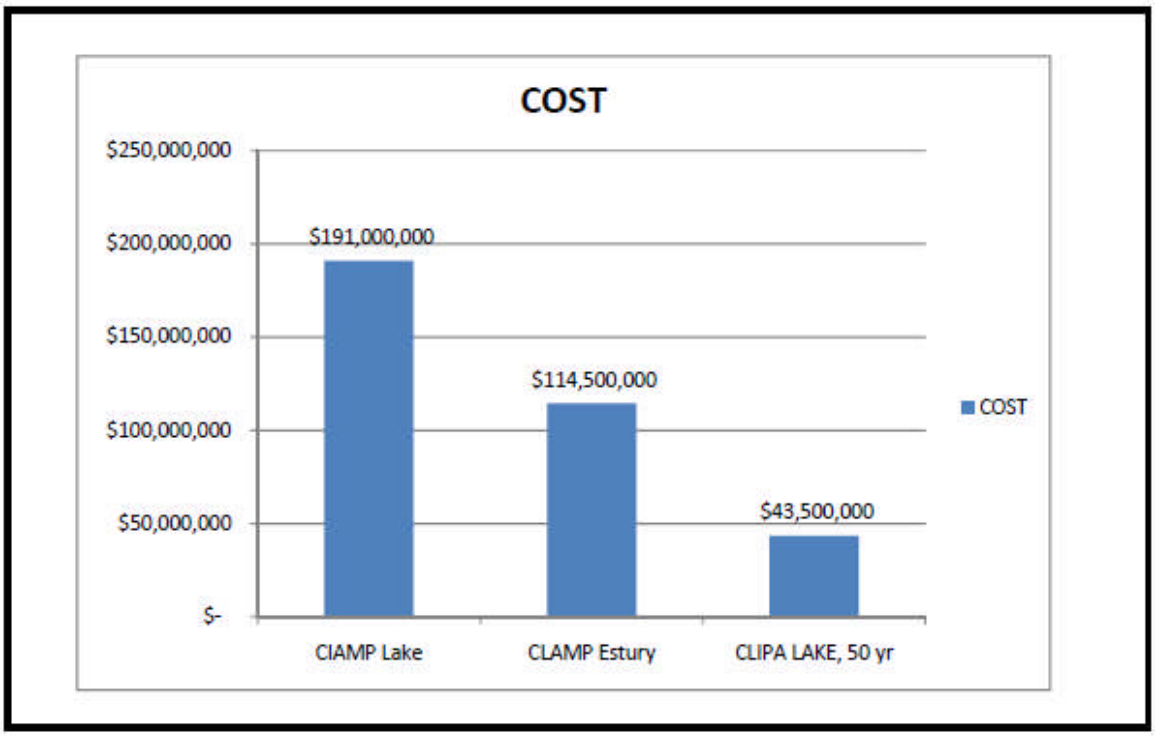
Gary Larson, 3/9/11

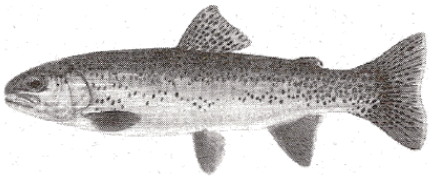
Item	PLAN	DESCRIPTION	CY CLAMP	CY CLIPA	$/CY	$ CLAMP	$CLIPA	REMARKS
1	CLAMP, Lake	N. Basin	158,000	100,000				M/N Addm 3/09, pg31, CLIPA Tab 2
2	CLAMP, Lake	M. Basin	717,000					Place along Deschutes Prkwy. $23/CY
3	Total		875,000	100,000	$ 23.25		$ 2,325,000	
4		Diking/Pipeline					$ 1,615,000	M/N Addm 3/09, pg 31, CLIPA Tab 2
5							$ 3,940,000	S/T
6		Maintenance Dredge		100,000	$ 23.25		$ 39,525,000	3 year cycle = 17 times in 50 years, upland
7							**$ 43,465,000**	**Total** *(CLIPA 7/10 Report= $47.3m)*
8						**$ CLAMP**	**$CLIPA**	
9	CLAMP, Estr	Remove- N. Basin	42,000					
10	CLAMP, Estr	Remove- M. Basin	352,000					CLIPA Tab 2
11		Total	394,000					M/N Addm 3/09, pg21
12								
13	CLAMP, Estr	Place- N. Basin Dschts	182,000					M/N Addm 3/09, pg21
14	CLAMP, Estr	Place- M. Basin Dschts	212,000					M/N Addm 3/09, pg31
15		Total	394,000		$ 23.25	$ 9,160,500		NO EXPORTING
16		Diking/Pipeline				$ 1,615,000		M/N Alt. Anal, 8/08, pg 47, Tab 5
17					S/T	$ 10,775,500		
18		Infrastucture Cost				$ 103,724,500		
19					**Total**	**$ 114,500,000**		
20							**$ 71,035,000**	**CLIPA Plan saving from Esturary Scenerio**
21								
22	SUMMARY							
23								CLIPA Tab 1
24	CLAMP, Estr	Total all infrastructure & Dredging				$ 114,500,000		GA Community Econ. Value, May 2009. pg 2
25	CLAMP, Lake	Total W/875kCY & Maint.				$ 191,600,000		GA Community Econ. Value, May 2009. pg 3
					Total	$ (77,100,000)		
26								
27	CLAMP, Estr	Total all infrastructure & Dredging				$ 114,500,000		GA Community Econ. Value, May 2009, pg 3
28	**CLIPA, Lake**	183kCY initial & 17 maint. (above)				$ 43,465,000		From line 7 above
29					Total	$ 71,035,000		
30							*Note:*	*M/N Addm 3/09, pg13, $40/cy nearshore salt*

Economic Data & Cost; Community Economic Values for Basin, May 2009, pg 3 (CLIPA tab1)								
Item	PLAN	DESCRIPTION	CY CLAMP	CY CLIPA	$/CY	$ CLAMP	$CLIPA	REMARKS
1	Managed Lake Scenerio (as reported)							
2	CLAMP	Dam Major Maint.				$ 2,000,000		
3	CLAMP	Flood Mitigation				$ 2,000,000		
4	CLAMP	Initial Dredge	875000		$ 84.91	$ 74,300,000		
5	CLAMP	50 yr Maint Dredge	1750000		$ 64.74	$ 113,300,000		
6					**Total**	**$ 191,600,000**		
7								(Item 1 - 13 as presented in CLAMP Report)
8	Esturay Scenerio (as reported)							
9	CLAMP	Flood Mitigation				$ 2,000,000		
10	CLAMP	Construction				$ 57,000,000		
11	CLAMP	Initial Dredge	394000		$ 39.85	$ 15,700,000		
12	CLAMP	50 yr dredging	1200000		$ 33.17	$ 39,800,000		
13					**Total**	**$ 114,500,000**		
14								
15	Managed Lake Scenerio = CLIPA Plan Est.							
16	CLIPA	Dam Minor Maint. Only				$ 500,000		Dam Cond. Asses./Exptcy 10/31/11; pg 19
17	CLIPA	Flood Mitigation				$ 2,000,000		(Tab 8)
18	CLIPA	Initial Dredge	100,000		$ 39.85	$ 3,984,772		Amnt ID to stack in Middle Basin= CLAMP
19	CLIPA	50 yr Main. Dredge	1750000		$ 33.17	$ 58,041,667		Amnt ID in maint. = CLAMP (35,000 CY/Yr)
20					**Total**	**$ 64,526,438**		
21							**$ 49,973,562**	**CLIPA Plan saving from Esturary Scenerio**

CLIPA 3/21/11, GL







Daley Design

1646 Jeannette Place Bainbridge Island, Washington 98110 206 / 842-2085

March 21, 2011

Jack Havens, Chair
Capitol Lake Improvements and Protection Association (CLIPA)
120 State Ave. NE #1006
Olympia, WA 98501

Subject: Deschutes Water Basin

Dear Mr. Havens

As a fisheries professional I have been asked to review the proposed changes to Capitol Lake presented by CLAMP an advisory board developed by the General Administration Department for the State of Washington. In addition I have reviewed the White Paper prepared by CLIPA.

In the years I have worked as a fisheries consultant I have had occasion to work in the Deschutes Watershed and I am familiar with the fisheries issues associated with the Deschutes River. The following is a quote from the State of Washington Catalog of Washington Streams. This is a 1975 document that is still referenced by fisheries professionals.

"The excellent present-day returns of Chinook and coho to this river system originated entirely from plants made above the falls. Present production is maintained at a high level through intensive stocking of Capitol Lake, a managed salmon rearing area existing as an integral part of the Deschutes River system.

Although no salmon hatcheries exist within the basin, eggs are obtained annually at the Deschutes River-Tumwater Falls fishway, with incubation at WDFW hatcheries."

The fact that this population of fish has been maintained with the returning fish to the watershed indicates that this is not a typical "donor stock" of hatchery fish. This is a viable population of salmon that have utilized a unique freshwater rearing area prior to immigrating to the saltwater. There will be a far greater return of fish to this system if the lake is dredged and rehabilitated with native vegetation on the shorelines around the entire perimeter of the lake.

However, a much more important issue is the critical need to have the entire watershed assessed and determine a management plan for the entire watershed. I have recently been the lead

fisheries biologist in the Watershed Management Plan for all of the watersheds of the west side of Hood Canal. This was done as a community effort with all of the city and county agencies working together with the Department of Ecology in the development of a long range plan to protect and enhance water quality and the fisheries resources of Hood Canal.

It is critical that this approach be taken with Capitol Lake. I do not believe that turning the lake into a mud flat will enhance or improve the existing salmon and trout populations of the watershed. The restricted flow of water into the area above 4th Street will not provide the typical flushing that would occur in an undisturbed estuary.

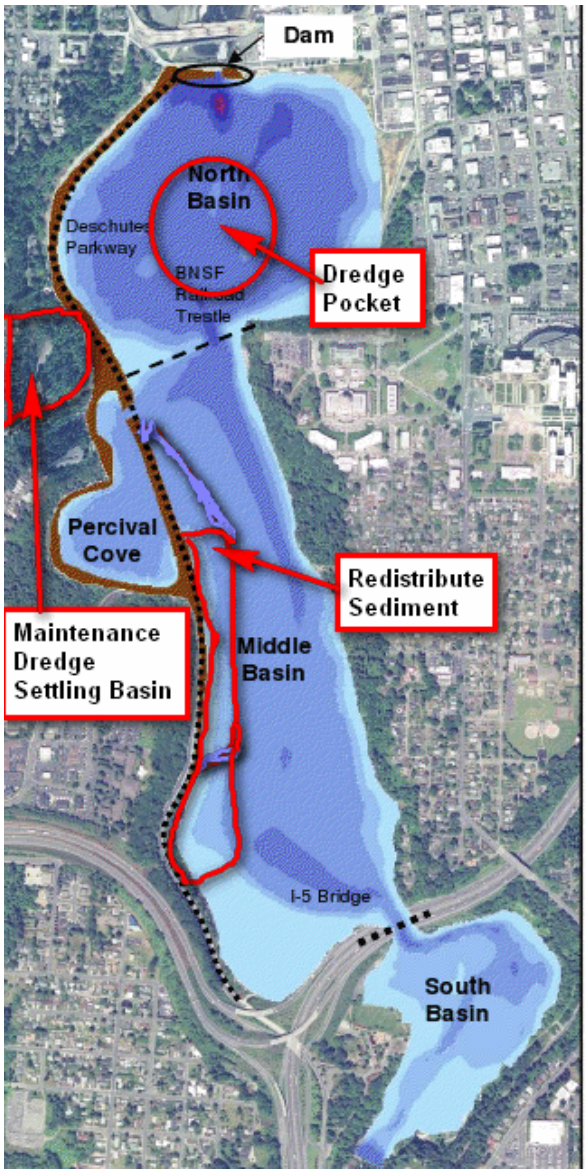
My observations are preliminary and will require additional research to verify the needs and impacts that are impacting the health of the entire watershed. I have also attached a resume.

Sincerely;

Wayne Daley
Sr. Fisheries Biologist

CLIPA DREDGING PLAN

The CLIPA Dredge Plan proposes maintaining the Lake by creating a dredge pocket of 100,000 Cubic Yards in the North Basin. This is predicted to catch the highest content of sediment drop-out as the river current slows at this point.



The Dredging would be accomplished with a small boat mounted Hydraulic Dredge launched from Marathon Park and use a "Tight-Line" to pump the sediments through.

The Initial Dredge and possibly the first Maintenance Dredge Sediments could be placed along the west shore of the Middle Basin. This location was previously identified in the CLAMP Studies to hold over 200,000 Cubic Yards. The predesign study should review the best location to ensure environmental and aesthetic goals are met.

Maintenance Dredge's should be planned for removal of 100,000 Cubic Yards every 3 years to collect the Tri-Annual sediment deposits.

The subsequent Maintenance Dredge Sediments could be placed in the Settling Basin on the GA Property West of Marathon Park bordered by the Rail Road. This Settling area was previously identified in the CLAMP Studies.

The Sediment when naturally drained would be removed from the Settling Basin and could be used for Fill, Landscaping soil, and Waste Site Cap material.

COST COMPARISON TO CLAMP SCENARIO'S