

Lake Ballinger/McAleer Creek Watershed Forum

City of Edmonds • City of Lake Forest Park • City of Mountlake Terrace

AGENDA

LAKE BALLINGER/McALEER CREEK WATERSHED FORUM

Tuesday, October 26, 2010

2:00PM – 3:30PM

Mountlake Terrace Interim City Council Chambers
6100 219th Street SW, Suite 220
Mountlake Terrace, WA

- I. Welcome and Introductions
 - a. Approval of Agenda
 - b. Approval of Minutes from June 22, 2010 Meeting

 - II. Interlocal Agreement (ILA) Update
 - a. Governmental/Member Participants
 - b. Forum Members
 - c. Fiscal Agent
 - d. Steering Committee
 - e. Technical Staff Committee

 - III. Lake Ballinger/McAleer Creek Watershed Forum CIP/Stormwater Activities Update
 - a. City of Edmonds
 - b. City of Lake Forest Park
 - c. City of Mountlake Terrace

 - IV. State and Federal Legislative Agenda Options

 - V. Public Comment: 3 minutes per speaker

 - VI. Adjournment
- Next Meeting: To be determined
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Jared Bond stated that he briefed the Lynnwood City Council on the new draft ILA on June 7. He explained that no one on the Council had time to devote to the Forum and they were not comfortable with his role as both staff and Forum representative. Mr. Bond announced that he anticipates Lynnwood will not continue their participation in the Forum. He added that a letter would be coming from the Mayor and Council President soon.

Snohomish County Councilmember Dave Gossett reported that the Snohomish County Attorneys are reviewing the new draft ILA. He added that it has not yet been scheduled for County Council.

Chair Jerry Smith commented that in light of some of the issues that have come up, it might be better to review the ILA annually rather than every five or six years. He added that this first ILA would continue for 18-months. Snohomish County Councilmember Gossett agreed that for operations one year at a time makes sense. He added that they should have a multiyear capital plan but each year would depend on annual approval of funding. Edmonds Councilmember Wilson asked Jared Bond if he would still be able to participate as an ex-officio member in the Forum as a staff member. Mr. Bond stated that he would continue at the staff level to assist his colleagues. He also suggested that he might best serve on a water quality subcommittee because it affects the entire watershed. Mr. Bond added that the City of Lynnwood would lend its support for grants if there were an opportunity and an additional signature was needed.

III. Presentation of the Ecology Lakes Project for Lake Ballinger by Maggie Bell-McKinnon
Department of Ecology Biologist Maggie Bell-McKinnon gave a presentation on the basic ecology of lakes and how they function. She explained how everything in the lake needed to be in balance and that the more diversity of life the healthier the eco-system. She also explained the types of human activities that could cause impacts to the eco-system of the lake including new construction, erosion, garden and lawn runoff, products that increase nutrients, adding game fish and storm water runoff.

IV. Public Comments

Al Rutledge expressed his concern that Lynnwood has given primary plan approval for construction of 25 new homes in the Halls Lake area. He added that this would send more water into Halls Lake, which would then run into Lake Ballinger. He added that he attended an Edmonds Planning Board meeting and suggested they run the water into sewers to keep costs down.

Ken Peirce handed out a copy of a statement from members of the Lake Ballinger Community Association that Edmonds Councilmember Wilson had requested. Mr. Peirce said that he was asked to have residents vote if they wanted to have the level of the lake lowered permanently year round. He said about twenty-five owners responded, twenty-five did not respond, eight of those are absentee property owners, and three are residents of Mountlake Terrace. Mr. Peirce stated that the LBCA respondents do not want the lake level lowered year round. He added that they would like the weir reconsidered but do not want the weir fixed.

Edmonds Councilmember Wilson thanked Mr. Peirce for providing the information. It was decided by the Forum that the statement should be attached to the minutes.

Edmonds Councilmember Wilson said that there were interesting questions and issues raised in the reply from the Lake Ballinger residents for the Forum. He added that he would like to know staff level thinking about some of these things and perhaps have them discussed at the next meeting. Jerry Shuster commented that reconfiguring the weir does warrant additional study. He added that the Staff Committee has not investigated specifically what would happen if the weir was changed. Mr. Shuster also recommended additional study of the culvert system between the weir and I-5. Edmonds Councilmember Wilson stated that the court allows for 60 cubic feet per second in outflow and it only gets to that level at flood stage. He added that if we can figure out a solution for the weir, we might be able to stay within adjudicated levels now and get some water out before a major flood occurs.

John Caulfield stated that Mountlake Terrace is working on several projects in anticipation of adoption of the new ILA. He stated that in the adopted strategic action plan and CIP, it includes evaluating modifications to the weir. Mr. Caulfield explained that Mountlake Terrace has been reviewing options in the plan including everything from doing nothing to completing a weir modification to reduce lake by 3.75 feet. He recommended that along with ideas mentioned at today's meeting, the Staff Committee would review the CIP and bring it back to Forum for further review, including consideration of the advantages and disadvantages to all stakeholders within the watershed. Mr. Caulfield added the Forum would have an opportunity to decide. He explained that no one knows what the answer is and no detailed analysis has been done. Mr. Caulfield added that Mountlake Terrace and Edmonds are taking the lead. He said that Mountlake Terrace has ordered a new weir gate. Mr. Caulfield explained that the city has been out of compliance since 1995 and does not want to be out of compliance. He added that Mountlake Terrace hopes to have the new weir gate completed and installed between July 1 and August 31. Mr. Caulfield said the culvert project is another item that must be dealt with, due to the significant problems it causes in Mountlake Terrace. He explained that the Mountlake Terrace City Council approved a contract to remove the culverts along with replacement of a sewer main and water main. Mr. Caulfield said all three projects are moving forward on parallel tracks and should be completed within the next twelve months.

Ken Peirce asked if there are any plans to fix the intake weir. Mike Shaw responded that they are aware of it but due to the constrained window by Fish and Wildlife, they have a very narrow timeframe in which to get the work completed. He added that it should be fixed this year. There was a discussion on issues with the weir gate working in concert with the hypolimnetic system. Ralph Svrjcek stated that there was a communication problem between DOE and the designer of the system.

IV. Adjournment

Chair Smith adjourned the meeting at 3:30 pm.

Next meeting is scheduled for Tuesday, July 27, 2010 at a location to be determined.

Statement of the Lake Ballinger Community Association
June 22, 2010

The LBCA has reviewed the Forum's Action Plan and Capital Improvement Project list, studied and asked water engineer consultants about the current weir and suggested alternatives, and hereby submit that:

- 1) The current outlet weir be completely replaced by one designed to allow **high flows at low lake "head" levels** thereby allowing more water out of the lake early in a storm to mitigate flooding. We believe that this can be done within the current adjudicated levels and maximum flow restrictions, thereby avoiding costly and prolonged litigation.
- 2) The Superior Court adjudicated levels and maximal flow restriction remain the same. If, after acceptable and creative water engineering designs for a completely new weir are studied and offered and fail to predict that lawn flooding can be minimized and house flooding can be minimized to an agreed upon frequency, we want engineering consultants to also then consider mechanisms for seasonal or early storm-predicted draw-downs to temporarily increase the lake's capacity.
- 3) If the first two requests are followed, then re-mapping of the flood zone by FEMA would be done only after the new weir engineering plan is in place.
- 4) Assuming that the engineering and re-mapping of the flood zone predicts a significant improvement in the lake's capacity, raising the five houses for "flood-proofing" may not be necessary.
- 5) We want Mountlake Terrace to repair the intake weir before removing the road and culverts of the 230th Street Project slated to be done this summer, because both structures reduce the rate at which water flows into the lake.
- 6) Improvement of Lake Ballinger's water quality needs to be pro-actively pursued by both the Forum and each municipality now, not just wait for Federal mandates, treating it as an afterthought. The water quality affects the Lake as a public recreational resource as advertised by Mountlake Terrace and countless children swim and fish here.
Particularly by:
 - a. Actively reducing the inflow of pollutants into the lake from storm water runoff
 - b. Stop considering the Lake as just a storm water detention pond
 - c. Increasing dissolved oxygen levels in the hypolimnion to reduce nutrient release from the sediments

Here I include the original statement as voted on and because it contains some of the reasons for our statement. Ken

Our original Statement that was voted on and confirmed by all of the 25 lake shore owners/ spouses who responded. There are about 25 to whom we gave notice via e-mail but received no response. There are also another 8 who are absentee landlords, only a few whose e-mails we have. (Jerry Schuster has the list of responses for this statement and will have an updated list as well. KP)

To the Lake Ballinger/McAleer Creek Watershed Forum

A) - **That the current old weir not be repaired** since its design is very seriously flawed and it is clear that it cannot even start to protect the lake from flooding because it only allows maximal flow at lake levels more than 1.7 feet above set levels, ie, close to flood stage. In fact, **repair of the current weir will be a contributing cause of future flooding** as it already has been.

- It is a serious engineering mistake.
- It cannot be lowered seasonally, if that becomes one of the solutions, it is already at the lowest level.
- It is a complete waste of taxpayer money.
- It will delay real progress.
- There are weir designs and other engineering devices that can better protect the lake from flooding without permanently lowering the lake or exceeding maximal allowable flow. We need a "high flow at low level" weir, probably with a secondary "high flow at low level" culvert with a maximal flow restriction but also an overflow allowance.
- We request that other possible engineering solutions be investigated.
- If \$25,000 of taxpayer money is burning a hole in Mountlake Terrace's pocket, spend it on aerating and reopening the effluent hypolimnetic pipe as DOE has suggested and agreed to.

B) - **That the current Superior Court adjudicated lake levels and maximal allowable flow not be changed.**

- Save taxpayer money by not pursuing unnecessary legal hassling.
- Permanently lowering the lake level is a knee-jerk hydrology response to a problem occurring "once every 100 years."
- Lowering the lake level permanently is environmentally, recreationally, esthetically, and for property values, a giant step backwards.
- If it becomes absolutely necessary to draw-down the lake level prior to rain episode or for the winter season, we hope that an agreement by all lake residents would suffice to still obey the current court order, possibly with a legal vote and an amendment.

C) - **Improvement of Lake Ballinger's water quality needs to be pro-actively pursued by both the Forum and each municipality now**, not just wait for Federal mandates, treating it as an afterthought. The water quality affects the Lake as a public recreational resource as advertised by Mountlake Terrace and countless children swim and fish here.

Particularly by:


- a. Actively reducing the inflow of pollutants into the lake from storm water runoff
- b. Stop considering the Lake as just a storm water detention pond
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Lake Ballinger/McAleer Creek Watershed Forum

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MEMORANDUM

TO: Lake Ballinger/McAleer Creek Watershed Forum

FROM: John J. Caulfield, City Manager, City of Mountlake Terrace 

DATE: October 26, 2010

SUBJECT: **Options for State and Federal Government Relations**

Overview

The Lake Ballinger/McAleer Creek Watershed Forum requested options at their June 22, 2010 meeting to pursue a state and federal legislative agenda, specifically options on how to obtain funding to implement the Forum's Strategic Action Plan that was adopted by the cities of Edmonds, Lake Forest Park, Lynnwood, Mountlake Terrace and Shoreline and Snohomish County in 2009.

Background

In 2008, the jurisdictions of the City of Edmonds, City of Lake Forest Park, City of Lynnwood, City of Mountlake Terrace, City of Shoreline, and Snohomish County signed an interlocal agreement creating the Forum. The Forum had regular monthly meetings that included the member jurisdictions as well as participation and involvement from the Department of Ecology, Department of Fish and Wildlife, the U.S. Army Corps of Engineers, federal and state legislators, and numerous citizen groups.

The Forum completed the development of the Strategic Action Plan (SAP) in July 2009. The SAP identifies a list of short- and long-term strategies related to flooding, water quality and habitat enhancement to include specific capital improvement projects. This regional approach includes: flood proofing of homes at the south end of Lake Ballinger; Lake Ballinger weir modification; FEMA floodplain boundary mapping at Lake Ballinger; culvert replacement and associated channel widening on McAleer Creek; infrastructure improvements to prevent Lyon Creek Flows from enter McAleer Creek in Lake Forest Park town center; flood proofing structures on lower McAleer Creek; and FEMA floodplain boundary mapping at Sheridan Beach.

The current Lake Ballinger/McAleer Creek Watershed Forum is an organization formed via an interlocal agreement currently spanning three cities, Edmonds, Lake Forest Park and Mountlake Terrace. The cities of Lynnwood and Shoreline, who had been a part of the original interlocal agreement, have decided at this time to not continue as members of the Forum. Snohomish County is currently reviewing the new interlocal agreement and expects to make a decision by the end of the year.

The Forum is now ready to move with implementation of the Strategic Action Plan (SAP).

State and Federal Government Relations

The Forum currently does not retain the services of a state or federal lobbyist to promote and advocate on behalf of its legislative issues – this is performed by member jurisdictions. However, the Forum has been successful in obtaining financial support from both our state and federal legislators.

For example, the member jurisdictions of the original Forum were able to successfully lobby the State Legislature to appropriate funds in 2008 totaling \$200,000 through the Department of Ecology to develop the recently adopted Strategic Action Plan. In addition, Forum members have worked with Congressman Inslee, who has requested \$1.2 million in 2010 Water Resources Development Act (WRDA) funds that would authorize the U.S. Army Corps of Engineers to collaborate with the Lake Ballinger/McAleer Creek Watershed Forum to implement the Forum's Strategic Action Plan.

This success is due primarily because of the positive relationships our respective jurisdictions have with our State and Federal Legislators who are sensitive and aware of the Forum's needs.

The key assets that a lobbyist brings to the Forum are access to and relationships with key State and Congressional elected officials and staff. Having a presence in Olympia, WA and Washington, D.C. significantly enhances the Forum's likelihood of securing state and federal appropriations. Specific assistance comes in the form of:

Funding Requests

- Work with the Forum to determine funding requests and prepare for future funding requests.
- Create collateral materials to accompany funding requests. This will include reviewing existing materials and adjusting them to coordinate with the state and federal funding environment, priorities and deadlines.
- Outline key messages for each of the funding requests and information.
- Coordinate formal submission of appropriation requests and information requirements and ensure compliance with all deadlines.

Lobbying Meetings

- Creating lobbying materials and leave behind packets.
- Schedule meetings in Olympia, WA with Forum members and state delegation.

- Schedule meetings in Washington, D.C. with Forum members and federal delegation.
- Prepare Forum team for lobbying meetings.
- Conduct follow up to meetings and respond to any outstanding questions and/or action items.

Budget and Appropriations Monitoring and Reporting

- Formal monitoring of the budget and appropriations process throughout the year with regular legislative updates.
- Additional meetings with state and congressional staff as appropriate to engage with the appropriations process.
- Engage Forum elected officials and staff as necessary to contact State Legislators and Members of Congress as appropriate in support of the funding requests.

Delegation Engagement

- Solicit support from state and federal delegation for each of the Forum's requests.
- Year-long direct engagement with targeted State Legislators and Members of Congress and their staff.
- Prioritize a visit to the Forum's member jurisdictions from district congressional staff to get a first hand look at the Forum's projects and in-depth discussion about the Forum's plans.

Projects

The Forum has identified the following projects as high priorities and are recommended for state and federal funding support.

- Lower McAleer Creek Phase 1/Priority A1 Project: Model McAleer Creek flood plain in Lake Forest Park and Shoreline to update FEMA flood plain mapping information (\$750,000 to \$1,000,000, 2009\$). Project lead agencies are cities of Lake Forest Park and Shoreline.
- Upper McAleer Creek/Lake Ballinger/Hall Creek Phase 1/Priority A1 Project: Model the Hall Creek and Lake Ballinger flood plain in Edmonds and Mountlake Terrace to update FEMA flood plain mapping information (\$750,000 to \$1,000,000, 2009\$). Project lead agencies are cities of Edmonds and Mountlake Terrace.

These two projects are ranked as high priority projects in the Lake Ballinger/McAleer Creek Watershed Forum CIP that was adopted by all six jurisdictions in 2009.

Options

1. **Option One (Core Program)** – This option would provide all the necessary counsel and support to the Forum to prepare and file its state and federal funding requests within all appropriate funding vehicles and monitor the progress of the funds

throughout the year. This option does not include in-person lobbying on behalf of the Forum in the district or in Olympia, WA and Washington, D.C. Proposal cost estimate: \$20,000 to \$25,000 plus expenses.

2. **Option Two (Core Program + District Engagement)** – This option would provide all the necessary counsel and support to the Forum to prepare and file its state and federal funding requests within all appropriate funding vehicles and monitor the progress of the funds throughout the year. This option includes a district engagement strategy (state & federal) to continue the Forum’s efforts to deepen its relationships with its state and federal delegation and key staff. This option does not include in-person lobbying on behalf of the Forum in Olympia, WA or Washington, D.C. Proposal cost estimate: \$30,000 to \$35,000 plus expenses.
3. **Option Three (Core Program + District Engagement + Olympia/DC Lobbying)** – This option would provide all the necessary counsel and support to the Forum to prepare and file its state and federal funding requests within all appropriate funding vehicles and monitor the progress of the funds throughout the year. This option includes a district engagement strategy to continue the Forum’s efforts to deepen its relationships with its state and federal delegation and key staff. This option also includes a minimum of two rounds of meetings with the state and congressional delegation offices in Olympia, WA and Washington, D.C. and a persistent lobbying strategy with the D.C.-based and local-based staff. Proposal cost estimate: \$40,000 to \$45,000 plus expenses.
4. **Option Four (Forum Jurisdictions -- joint approach)** – This option would provide for Forum members to jointly pursue a state and federal legislative agenda utilizing the resources of each jurisdiction. Proposal cost estimate: TBD (if resources are available) plus expenses.
5. **Option Five (Forum Jurisdictions -- current approach)** – As is current practice, this option provides for each Forum member to individually pursue a state and federal legislative agenda utilizing the resources of each jurisdiction (e.g., WRDA).

Next Steps

Step 1: Determine action(s) or project(s) for Forum to pursue state and/or federal funding based on Lake Ballinger/McAleeer Creek Watershed Forum CIP that was adopted by all six jurisdictions in 2009 and included as part of new interlocal agreement.

Recommendation (based on adopted Forum CIP)

- a) Lower McAleeer Creek Phase 1/Priority A1 Project (\$750,000 to \$1,000,000, 2009\$). Project lead agencies are cities of Lake Forest Park and Shoreline.
- b) Upper McAleeer Creek/Lake Ballinger/Hall Creek Phase 1/Priority A1 Project (\$750,000 to \$1,000,000, 2009\$). Project lead agencies are cities of Edmonds and Mountlake Terrace.

Step 2: Prioritize funding approach

- a) State appropriation request(s)

- b) Federal appropriation request(s)
- c) Joint state and federal appropriation request(s)

Step 3: Determine state and federal lobbying mechanism

- 1) Option One (Core Program)
- 2) Option Two (Core Program + District Engagement)
- 3) Option Three (Core Program + District Engagement + Olympia/DC Lobbying)
- 4) Option Four (Forum Jurisdictions -- joint approach)
- 5) Option Five (Forum Jurisdictions -- current approach)

Step 4: Obtain financial commitment and staff resource commitment from all participating member jurisdictions.

Step 5: Upon completion of Step 4, develop and issue Request for Proposal (RFP) seeking services of state and/or federal lobbyist.

If the Forum wishes to pursue funding opportunities in 2011 and utilize the services of a lobbyist, time is of the essence. Appropriations requests are typically due to our congressional delegation in January/February and state requests should be submitted now. In addition, cities and counties currently are preparing their budgets.

There is no guarantee that lobbying our state and federal delegations will prove to be effective this session, however it will set the stage for future requests as we establish a more binding relationship with our state and federal legislators by communicating to them our needs.

Lake Ballinger/McAleeer Creek Watershed Forum Capital Improvement Plan

Action or Project		Priority	Description	Lake Ballinger/Hall Creek		McAleeer Creek		Project Information			Service Criteria ¹			Goal	Issues	Projected Outcome
				Watershed Issue A	Watershed Issue B	Watershed Issue C	Watershed Issue D	Projected Planning Level Cost (2009 dollars)	Potential Funding Options ³	Project Lead Agency ⁴	1	2	other			
Lower McAleeer Creek																
Phase I	Forum Project Model the McAleeer Creek flood plain in Lake Forest Park and Shoreline to update FEMA flood plain mapping information	A1	Accurately model flow and determine flood plain elevations for McAleeer Creek from Lake Ballinger to Lake Washington - develop modeling and flood plain management guidelines to assist the Cities of Shoreline and Lake Forest Park with future development or redevelopment and to leverage FEMA funds for flood proofing program. This portion of the FEMA flood plain mapping project will assume flows from Lyon Creek have been redirected or minimized.			X		\$750,000 to \$1,000,000	Grant	Lake Forest Park, Shoreline			X	Revise existing flood plain maps to accurately reflect existing conditions and to develop modeling and flood plain management guidelines	Joint project in Shoreline and Lake Forest Park	Give accurate guidance to cities with development and redevelopment in the affected flood plain
	Private Project Develop and implement flood proofing program	A2	Leverage FEMA funds for flood proofing program			X		\$2,000,000 to \$3,000,000	Grant	Lake Forest Park			X	Develop flood proofing program to prevent structure flooding	Privately initiated flood proofing program with possible City assistance	Developing an effective flood proofing program
	Lyon Creek Bypass/Lyon Creek Channel Modifications	B	Forum to provide encouragement to Lake Forest Park to seek funds to eliminate the Lyon Creek overflow to McAleeer Creek during storm events			X		\$3,100,000	Lake Forest Park	Lake Forest Park	X	X		Minimize the impact of Lyon Creek on McAleeer Creek during storm events	No financial commitment on the part of upstream Forum jurisdictions	Reduce overflow from Lyon Creek during storm events to minimize flooding at Sheridan Beach
	McAleeer Creek Bypass Intake Retrofit	C	Retrofit McAleeer Creek Bypass Intake to optimize facility function			X		\$213,000	Grant	Lake Forest Park	X	X		Reduce the occurrence and severity of flooding in the Sheridan Beach Neighborhood of Lake Forest Park along McAleeer Creek	Project benefits residents in Lake Forest Park only.	Would remove 30 cfs from McAleeer Creek through the Sheridan Beach Neighborhood during the 100-yr event
Phase II	Upgrade/Replace Culverts on McAleeer Creek	D	Enhance and replace four culverts on McAleeer Creek in Lake Forest Park			X		\$1,000,000	Grant	Lake Forest Park	X	X		Reduce localized flooding in Lake Forest Park.	Project benefits residents in Lake Forest Park only.	Up to 10 residences in Lake Forest Park would be protected from localized flooding.
	McAleeer Creek Flood Berms	E	Install berms or other flood proofing along McAleeer Creek in Lake Forest Park			X		\$830,000	Grant	Lake Forest Park	X			Keep structures from flooding during 100 year events	Permitting, work on private property	Minimize flooding during 100 year events
	Basin Wide LID Retrofits	F	Retrofit existing city parcels and right of way with Low Impact Development BMP's	X	X	X	X	\$5,000,000 to \$10,000,000 over 20 years	Appropriations or grant	Lake Forest Park, Shoreline	X	X		Reduce flooding and improve water quality	Long term - 20 year plan	Eliminate 100 year flooding events, improve on fecal, temperature and chemical issues in McAleeer Creek
Upper McAleeer Creek/Lake Ballinger/Hall Creek																
Phase I	Forum Project Model the Hall Creek and Lake Ballinger flood plain in Edmonds and Mountlake Terrace to update FEMA flood plain mapping information	A1	Accurately model flow and determine flood plain elevations for Hall Creek and Lake Ballinger - develop modeling and flood plain management guidelines to determine the most advantageous elevation of Lake Ballinger weir	X				\$750,000 to \$1,000,000	Grant	Mountlake Terrace, Edmonds			X	Revise existing flood plain maps to accurately reflect existing conditions and to develop modeling and flood plain management guidelines	Joint project in Mountlake Terrace and Edmonds	Give accurate guidance to cities with development and redevelopment in the affected flood plain while managing the level of Lake Ballinger and developing a flood proofing program
	Private Project Develop and implement flood proofing program	A2	Leverage FEMA funds for flood proofing program	X				\$1,000,000 to \$2,000,000	Grant	Edmonds			X	Develop flood proofing program to prevent structure flooding	Privately initiated flood proofing program with possible City assistance	Developing an effective flood proofing program
	McAleeer Creek Weir															
	Action I	B ²	Install new weir gate	X	X			\$25,000	Mountlake Terrace	Mountlake Terrace	N/A	N/A	N/A	Restore weir to 1995 maintenance status	MLT maintenance issue	Meet existing maintenance requirements
	Action II	B1	Lower weir structure to first Nile culvert - 1.5 feet lower - install new weir foundation and dredge creek channel to lake	X				\$500,000	Grant	Mountlake Terrace, Edmonds	X			Keep lake level below 279.3	Would require readjudication of the Superior Court Order regarding lake level	Would reduce by 59% the length of time that the lake would be above 279.3
	Action II	B1	Lower weir structure to first Nile culvert - 1.5 feet lower - install new weir foundation and dredge creek channel to lake	X				\$500,000	Grant	Mountlake Terrace, Edmonds		X		Keep lake level below 277.4	Would require readjudication of the Superior Court Order regarding lake level	Would reduce by 74% the length of time the lake would be above 277.4
	Action III	B2	Lower weir structure by 3.75 feet - install new weir foundation and dredge creek channel to I-5	X				\$1,000,000	Grant	Mountlake Terrace, Edmonds	X			Keep lake level below 279.3	Would require readjudication of the Superior Court Order regarding lake level	Would reduce by 93% the length of time the lake would be above 279.3
Phase II	Hall Creek Detention	C	Install detention or infiltration system upstream of Lake Ballinger	X				\$12,000,000 not including land acquisition	Grant, appropriations, city CIP funds	Mountlake Terrace	X			Keep lake level below 279.3	Large site footprint of 2.7 acres - cost of land acquisition not included	Would reduce by 64% the length of time the lake would be above 279.3
	Basin Wide LID Retrofits	D	Retrofit existing city parcels and right of way with Low Impact Development BMP's	X	X	X	X	\$5,000,000 to \$10,000,000 over 20 years	Grant, appropriations, city CIP funds	Each city in upper basin	X	X		Reduce flooding and improve water quality	Long term - 20 year plan	Eliminate 100 year flooding events, meet Lake Ballinger TMDL limits and improve on fecal, temperature and chemical issues in McAleeer Creek
¹ Service levels are listed in Section 3 of the Strategic Action Plan, page 15 - 20 ² Weir gate replacement is contingent on decisions made about the ultimate level of the lake ³ Future governance agreement will incorporate and identify potential funding sources ⁴ A member agency representing the interests of the Lake Ballinger/McAleeer Creek Forum																