

**Lake Ballinger/McAleer Creek Forum  
Edmonds City Hall Brackett Room  
Meeting Minutes  
January 27, 2009**

**Members Present**

Janet Way (Shoreline), Noel Miller (Edmonds Public Works Director), D.J. Wilson (Edmonds City Council), Jerry Smith (Mountlake Terrace Mayor), Lisa Utter (Lynnwood City Council), John Caulfield (Mountlake Terrace City Manager), Mike Shaw (Mountlake Terrace Stormwater Program Mgr), Aaron Halverson (LFP Stormwater Technician), Jerry Shuster (Edmonds Stormwater Engineering Program Mgr), and Ed Sterner (LFP Councilmember).

**Others Present**

Joe Simmler (Otak), Jessica Collins (Otak), Chuck Ebel (Corp of Engineers), Curt Brees (Mountlake Terrace Public Works Director), Mark Phillips (LFP Streamkeeper), Neil Jensen (LFP City Engineer), Aaron Halverson, (LFP Engineering/Stormwater Technician ), Ken Pierce (Lake Ballinger Community Association), Jerry Thorsen (LBCA), Jim Halliday (LFP Streamkeeper), Diane Hettrich (Shoreline/King County/Echo Lake), Ralph Svrjcek (DOE), Jerry Thorsen (LBCA), Penny Mabie (Enviro-Issues), Tricia Shoblom (DOE), Bob White, Roy Gorud (Edmonds), Achim Reeb (LBCA), Chris Probst (Enviro-Drain), Doug Hennick (WDFW), Larry Kiriluk (Edmonds), Dave Page (LBCA), and Rob English (Edmonds City Engineer).

**I. Welcome and Introductions**

**a. Approval of Agenda**

D. J. Wilson, Edmonds City Councilmember, called the meeting of the Forum to order at 2:01 p.m. in the Bracket Room at Edmonds City Hall.

Handouts: Agenda, Lake Ballinger Hypolimnetic Injection and Discharge system, PowerPoint slides for Lake Ballinger and McAleer Creek Watershed Strategic Action Plan, and Table 1 Watershed Issues, Goals and Causes.

The agenda was approved (J.W., 2<sup>nd</sup> by J.C.)

**b. Approval of Minutes from December Forum Meeting**

Approval of the December minutes was postponed until the next meeting.

**II. Consultant Presentation of Study Results to Date**

Joe Simmler, Otak, provide a PowerPoint presentation regarding the Lake Ballinger and McAleer Creek Watershed Strategic Action Plan, advising no decisions had yet been made on any of the options or alternatives. He reviewed the project schedule and scope review, watershed issues related to lake flooding and water quality/habitat and downstream flooding and water

quality/habitat, study approach and methodology to the watershed study and described characteristics of the watershed and specifically Lake Ballinger.

He reviewed key findings of the surface water/groundwater studies: Lake Ballinger has been altered, downstream culvert conveyances are undersized in places, groundwater directly discharges into Lake Ballinger and lower McAleer Creek, water quality in lake and stream and been degraded and he concluded that the watershed has been substantially altered and cannot be restored to its pre-developed state without eliminating impervious surfaces and restoring native vegetation and soils.

He described how the Lake Ballinger Watershed water balance has been altered by increased surface water runoff. He described lake/upstream flooding during December 2007 and provided a damage estimate of \$15,000-\$25,000. He asked residents who experienced flooding to provide damage estimates. Several individuals in the audience commented on flooding as a result of the 1996 and 2007 floods. Chair Wilson suggested Mr. Simmler estimate direct damage as well as indirect damage anecdotally such as lost equity, loss income from the Lake Ballinger Golf Course, etc.

Mr. Simmler reviewed downstream flooding during December 2007 and provided damage estimate of \$16-17 million. He reviewed options for lake/upstream and downstream flooding service levels.

He described the solution identification process, explaining the Level I analysis included listing, evaluating and ranking possible actions. Projects that ranked the highest went through a Level II analysis to determine their ability to address the problem of flows and damages related to a 100 year event. The highest ranked projects went through a Level III analysis to select the highest ranked options. He described the range of options considered to address lake flooding, lake water quality/habitat, downstream flooding and downstream water quality/habitat and the criteria used to evaluate options based on their effectiveness, cost/benefit analysis and ability to implement/construct.

He identified the highest ranked short term, medium term and long term alternatives in the Level III analysis to address lake flooding, lake water quality/habitat, downstream flooding and downstream water quality/habitat. He identified the highest ranked alternatives:

Lake Flooding: flood-proof residential and structures, purchase flood-prone residential properties, and modify the weir to take advantage of the Lake's capacity to act as a large regional detention system

Downstream Flooding: Upgrade the culvert systems in McAleer and Lyons Creeks, flood-proof low lying commercial areas, purchase flood-prone residents if needed, and consider a high flow bypass system on Lyon Creek to discharge to Lake Washington.

Lake Water Quality/Habitat: NPDES Phase II Permit, continuing TMDL Lake Ballinger monitoring, water quality monitoring of Lake Ballinger and water quality/habitat enhancement plan for Lake Ballinger

Downstream Water Quality/Habitat: NPDES Phase II Permit, water quality monitoring for McAleer Creek and water quality/habitat enhancement plan for Lake Ballinger

The next steps are to gather input on the ranking/rating of alternatives; with that input they will develop the preferred alternatives. He highlighted several lake level facts and their significance. He briefly described the court order that established the maximum and minimum elevations of Lake Ballinger and the level the lake can exceed once every five years.

During and following his presentation, Mr. Simmler responded to questions regarding the size of the watershed, the timeframe for the increase in imperious area, the effectiveness of measures taken to date, primary source of water to Lake Ballinger, whether damage to Lyons Creek could be separated from damage to McAleer Creek, LID techniques, whether modifying the weir would require a change in the Superior Court ruling, possibility that modifying the weir to lower the lake level may eliminate need to buy out property, capacity of McAleer Creek to pass elevated flows, an option to construct a high flow bypass above Town Center and downsize the culvert capacity in Lyons Creek rather than upgrade all culverts, and how a bypass system could be constructed,

Chair Wilson concluded the hydrology study indicated if the weir is lowered, there is no flow difference in McAleer Creek and the volume detention in the Lake is increased and if Lyons Creek can be kept out of McAleer Creek, there may only be a need for limited investments in McAleer Creek.

### **III. Staff Presentation on Ecology Letter to Shutdown Lake Withdrawal System**

Mike Shaw explained in December 2008, DOE directed Mountlake Terrace to close the hypolimnetic discharge valve regulating the release of water from Lake Ballinger into McAleer Creek. The order stipulated the valve was to remain closed until a new plan of operation was approved. Copies of the letter were provided to Forum members and Lake Ballinger Community Association members.

He explained the hypolimnetic system was installed in Lake Ballinger as part of a Lake Ballinger restoration project undertaken by Mountlake Terrace in late 1970s. The purpose of the project was to address water quality in the Lake along with detention ponds on Hall Creek, a focus on individual site issues and general public education. The injection and discharge was designed to directly address the issue of excess phosphorous in the water column creating a negative impact on the water quality. He displayed a schematic of the current installation and explained the objectives of the withdraw and injection system.

He relayed the findings of volunteer water quality monitoring of phosphorous levels that found levels at or near the total maximum daily load (TMDL) set by DOE in 1993, DOE's assessment in 2006 of the effectiveness of phosphorous control effort set forth in the 1993 TMDL that confirmed phosphorous levels are exceeding the TMDL limit. In addition to lake monitoring, DOE took phosphorous and dissolved oxygen measurements in both Hall and McAleer Creeks, downstream of the weir in McAleer and upstream of the weir in Hall Creek; an increase in phosphorous was observed above the normal background level downstream in McAleer Creek in fall 2006 and was associated with reduced levels of dissolved oxygen. Recent DOE monitoring confirmed the results of the 2006 study; dissolved oxygen levels downstream of the discharge

pipe were found to be significantly below levels upstream and downstream of the weir in violation of the Washington State water quality standards.

This information resulted in the December 15 letter from DOE ordering the closure of the system. The directive requires the discharge pipe remain closed until a new plan of operation is approved by DOE. DOE has expressed willingness to work with Mountlake Terrace to establish an operating regime for the discharge pipe and weir that meets current water quality standards.

The process is anticipated to include the following changes: a new sliding rear gate will be installed to offer greater flexibility to spill water over the weir and allow for better mixing and flow from the discharge pipe. The rear gate will replace the fixed plates now used to control lake level. Flow from the discharge pipe during summer and fall months will be monitored to balance with flow over the weir. The goal will be to adjust the weir to balance flow through the outlet valve. This will allow for better mixing of creek water and discharge pipe. A new operations plan will be prepared and submitted to DOE prior to operation of the system. Mountlake Terrace has researched installation of a new sliding weir gate and has identified a contractor to perform the work. Should the level of the lake remain at its current low level, a new gate could be installed in the existing weir structure; if the lake is lowered beyond the current low limit and the bottom of the existing weir plates, a new footing and gate structure may need to be installed.

Questions/answers:

- Does the lake still stratify? Yes.
- What time of year was the oxygen level measured? DOE study November 2005 - November 2006 monthly readings. Low oxygen levels and high phosphorous levels found in September and October.
- Will DOE pay for some/all of the construction of the weir gate? No funding has been discussed. DOE observed a condition that was not meant to exist needed to have it stopped. This group could help by supporting DOE's funding request.
- What is DOE's opinion regarding the cause besides mechanical? DOE would like better control of pollutants entering Lake Ballinger. What are the solutions? Agree with the report's suggestion to let the Phase II program address problems and those actions may need to be accelerated
- A resident expressed frustration there is no assurance anything will be done after the study is completed and degradation of lake is enhanced by shutting off the hypolimnetic system. Turns Lake Ballinger into a detention pond.

Chair Wilson suggested the US Army Corp of Engineer make a presentation/update on their role at a future meeting.

#### **IV. Forum Subcommittee Report on Legislative Agenda**

Chair Council President Wilson invited each to identify their city's legislative priorities.

Shoreline: support infrastructure, stormwater, and habitat improvements, support AWCs priorities including federal stimulus packages that provide green jobs/economy. Nothing specific on their agenda regarding the Lake Ballinger Watershed.

Mountlake Terrace: State Representative Mark Ericks encouraged the Forum to submit a funding request to the State. Although funding is unlikely in the next 12 months, it is important to keep this in front of the State Legislative. Lake Ballinger Watershed is one of the key priorities in Mountlake Terrace's legislative agenda and is also on their federal legislative agenda. Mountlake Terrace does not have a specific funding request; they have identified \$200,000 for continued study and/or capital. The Puget Sound partnership plans to submit bills for stormwater funding related to clean up of Puget Sound; recommend monitoring that.

Chair Wilson offered to draft the paperwork for a \$200,000 request for Phase 2 implementation of the Strategic Action Plan and a \$1 million capital request to reconstruct the weir. Discussion followed regarding whether sufficient scientific analysis had been conducted to identify that as the Forum's capital request and a suggestion to indicate that other solutions were also being studied.

## **V. Budget Update from each City Representative and Each Forum Member**

Chair Wilson asked each city to identify funding in their budget for this project.

- Edmonds' 2009-2010 budget includes \$25,000 for the project in 2009 and \$47,500 in 2010
- Lake Forest Park did not include any funds in their budget for this project
- Mountlake Terrace allocated \$1 million for Lake Ballinger in 2008-2014, \$100,000/year for projects such as this, other water quality issues and matching funds for capital improvements. Mountlake Terrace has also allocated \$300,000 to replace the culvert at 230<sup>th</sup>/Halls Creek
- Lynnwood has not allocated any funds for this project
- Shoreline recently passed their stormwater program update

Forum Member Way relayed a suggestion that the Forum submit a letter to WIRA 8 describing the Forum's mission and objective because WIRA 8 is a major funding source for projects. She also relayed a suggestion to make a connection with the Puget Sound Partnership. She offered to write a letter to WIRA 8. She asked for input on the letter to the Legislature from each city.

## **VI. "Roadshow" for Councils in Early March with Key Findings**

This item was postponed to a future meeting.

## **VII. Adjourn**

The meeting was adjourned at 3:30 p.m.

Next Meeting: Tuesday, February 24, 2009  
Lake Forest Park City Hall  
17425 Ballinger Way NE  
Lake Ballinger Park, WA 98155

Discussion: Staff recommendation is to meet every 4 weeks for 3-4 meetings