

# Deschutes River, Capitol Lake, and Budd Inlet TMDL Advisory Group Meeting

Thursday, May 20, 2010 -- 9:00 a.m. to 11:50 a.m.  
Tumwater Fire Department, 311 Israel Rd. SW

## Attendees

---

### **Agriculture, WA State Dept. of**

- Ann Wick

### **Capitol Lake Improvement and Protection Association (CLIPA)**

- Jack Havens

### **Ecology, WA State Dept. of**

- Betsy Dickes
- Chuck Hoffman
- Mindy Roberts
- Lydia Wagner

### **Fish & Wildlife, WA State Dept. of**

- Hal Michael

### **General Administration, WA State Dept. of**

- Nathaniel Jones

### **LOTT Alliance**

- Karla Fowler
- Laurie Pierce

### **Olympia, City of**

- Laura Keehan

### **Olympia Yacht Club**

- John DeMeyer
- Jim Lengenfelder

### **Squaxin Island Tribe**

- John Konovsky

### **Thurston County Public Health**

- Art Starry

### **Thurston Public Utilities District**

- Chris Stearns

### **U.S. Environmental Protection Agency**

- Dave Ragsdale

### **WSU Thurston Extension**

- Bob Simmons

### **Weyerhaeuser Company**

- Steve Barnowe-Meyer

**TMDL Process Review:** Lydia Wagner, Department of Ecology, Water Quality Program, provided a brief refresher about this phase of the TMDL process. There is a difference between the Water Quality Improvement Report (WQIR), Implementation Strategy, and the Water Quality Implementation Plan (WQIP), but they are all closely related. The WQIR generally consists of a technical report and implementation strategy. The implementation strategy identifies needed activities and potential responsible parties. For the Deschutes water cleanup plan, Ecology intends to submit the Technical Report and WQIR as separate documents. The WQIR is submitted to the Environmental Protection Agency (EPA) for approval. After it is submitted, work begins on the WQIP that goes into detail such as what activities are needed; where they are needed; when will they occur; who is responsible, and more.

**Upper Watershed Summary:** We continued the discussion started at the April meeting regarding the implementation activities already happening or anticipated in the upper watershed. We added the following to the list.

Entity	Activity	Notes
Washington State University and Department of Natural Resources	Forest Stewardship Program	G&P
South Puget Sound Salmon Enhancement Group (SPSSEG)	Habitat and riparian restoration outreach	G

G: On the ground  
P: Policy

(The presentation covering the TMDL Process Review, Upper Watershed Summary, and Middle Watershed discussion is available online at [http://www.ecy.wa.gov/programs/wq/tmdl/deschutes/advgrp.html/052010DeschutesAdvMtg\\_Middle\\_Watershed.pdf](http://www.ecy.wa.gov/programs/wq/tmdl/deschutes/advgrp.html/052010DeschutesAdvMtg_Middle_Watershed.pdf).)

**EPA Grants:** John Konovsky, Squaxin Island Tribe, provided us with an update on EPA grants. He stated EPA has dedicated \$2 million dollars to work in the Deschutes Watershed. There are already a couple projects underway. There is one more grant round to allocate the remaining funds. The previous two rounds put more emphasis on “innovative ideas”. EPA is looking for new and novel approaches in grant proposals. The Thurston Conservation District (TCD), sponsor of the grant, and the Squaxin Island Tribe (SIT), will participate in a debriefing with EPA in June. They will look at the strengths and weaknesses of previous grant proposals. This will enable the TCD and SIT to refocus their efforts and concentrate on the identified strengths as they prepare for the next grant opportunity. Dave Ragsdale, EPA, stated that we are at a “high water mark” for available funds. If anyone has ideas for good projects, they are encouraged to move quickly and apply for some of those funds.

**Technical Findings in the Middle Deschutes River Watershed:**

---

Mindy Roberts, Department of Ecology, Environmental Assessment Program, presented information from the draft Technical Study specific for this section of the watershed. The water quality parameters of concern for this area are bacteria, temperature, dissolved oxygen, pH, and fine sediments.

**Bacteria:** There is good news for winter bacteria levels. They are meeting standards where testing has occurred. There are still areas of concern for summer bacteria levels and they are Reichel Creek, Spurgeon Creek, Chambers Creek, and the Deschutes River. Bacteria is harder to find in some areas. We essentially know what needs to be done to address the problem: Constant vigilance and prevent or limit new contributions.

Dave Ragsdale, EPA, stated the Nooksack TMDL strategy was quite effective and recommended we look at their cleanup plan. More information is available on Ecology's website at <http://www.ecy.wa.gov/programs/wq/tmdl/NooksackTMDL.html>.

**Temperature:** Groundwater is colder than surface water. There is some groundwater exchange between the Deschutes and Nisqually Rivers. What can we achieve? We can cool the water by 5° C. During peak summer months the river temperature could be in the lethal range for fish. In certain areas we know we cannot meet the water quality standards due to natural sources. Mindy reminded us the water quality standards change at Offut Lake.

Slide #9 shows current and mature shade levels. We need to think about comprehensive fixes throughout the entire watershed system. Sediments and water move through the system, allowing the buildup of gravel beds. Part of the problem with this scenario is that new riparian growth may not have the opportunity to firmly root and grow to maturity to provide the optimum shade.

**Dissolved Oxygen:** The area from Deschutes Falls to Offut Lake is violating water quality standards. Colder water holds more oxygen and temperature has a strong influence on the amount of dissolved oxygen in the water.

**Nutrients:** They have a bigger role and are more of an issue in the lower watershed. Tributaries are not a big source of nutrients. The biggest source comes in from groundwater originating upstream in the headwaters.

**Fine Sediments:** Sources come from upper watershed. Some are mobilized throughout the system and can take many years, decades most likely, to move through the system. Controlling sediments is key in the upper watershed. There are probably not any new sources in the middle watershed. A key strategy for this parameter is to control contributions from human sources.

We talked about the logjam from 2001-2002. This was a point of contention in the community. Contrary to common thought at the time, the situation was a symptom of too *little* wood in the system. Again, we need to consider a comprehensive approach. When logjams occur, sediments gather around them which helps to cool the water. This can also create good spawning areas. The water system will sort out the various sizes of sediments which create a variety of benefits and results. We need mature riparian vegetation to address the issue. Another recommendation is to have more frequent and large pieces of wood throughout the system.

Mindy was asked, "*What sediment management practices are recommended?*" She stated it is best to check with the Natural Resources Conservation Service (NRCS), the Washington State Department of Transportation (WSDOT), and local road departments for that information.

Useful website links:

- **Thurston County Photos of the Deschutes River/Waldrick Rd. 2001-2002 Logjam:** <http://www.co.thurston.wa.us/em/LogJam/photos.htm>

- **Thurston County Deschutes River Mile 13 Channel Migration Photos:**  
<http://www.co.thurston.wa.us/em/LogJam/histphotos.htm>
- **NRCS Watershed Program:** <http://www.nrcs.usda.gov/programs/watershed/>
- **WSDOT Erosion Control Program:**  
<http://www.wsdot.wa.gov/Environment/WaterQuality/ErosionControl.htm>
- **Thurston County Public Works Department:**  
<http://www.co.thurston.wa.us/roads>

(Mindy's presentation is available online at [http://www.ecy.wa.gov/programs/wq/tmdl/deschutes/advgrp.html/052010DeschutesAdvMtg\\_TechFindings-Middle.pdf](http://www.ecy.wa.gov/programs/wq/tmdl/deschutes/advgrp.html/052010DeschutesAdvMtg_TechFindings-Middle.pdf).)

## **Middle Watershed Discussion**

---

Mindy provided the following recommendations for the middle watershed:

- Continue to identify and reduce bacterial pollution
- Restore riparian shade
- Manage sediments
- Control nutrients
- Plan and act comprehensively throughout the watershed

The group discussed the following issues or concerns:

**Dairy operations:** *How many do we have in the watershed?* The WSDA reports there are two current licensed operations.

**Gravel mine operations:** Concern expressed that Ecology has overlooked this issue. The specific concern is about gravel washing contributing to significant removal of dissolved oxygen.

- Information about Ecology's Sand and Gravel General Permit is available online at <http://www.ecy.wa.gov/programs/wq/sand/index.html>.
- Follow-up: Lydia has invited a Sand and Gravel General Permit Manager to come and speak to the group.

**Sod growers and tree farms:** *How many are there in the area? How do their operations affect water quality? How does it change fish habitat?*

- Information is available about **Licenses, Permits, and Certifications** from the WSDA on their website at <http://agr.wa.gov/Portals/LicPermCert/>.

**Chemical use:** *Why isn't this being addressed in the TMDL?* Ann Wick, WSDA, responded to this question. This issue is regulated through the WSDA. She stated the WSDA has several regulations on chemical use. In heavily forested areas there is not

much pesticide use but there is more usage on Christmas tree farms. They conduct “use inspections” and complaint response but there is no state requirement to submit “use records”. The WSDA has the authority to request these records regarding pesticide use. They also conduct representative monitoring for 57 pesticides.

The following are useful website links from the Washington State Department of Agriculture (WSDA):

- **Surface Water Monitoring Program for Pesticides in Salmonid-Bearing Streams:** <http://agr.wa.gov/PestFert/natresources/SWM/default.aspx>.
- **Compliance Activities:** <http://agr.wa.gov/PestFert/Pesticides/ComplianceActivities.aspx>.
- **Pesticide Management Division:** <http://agr.wa.gov/PestFert/>

**Agriculture:** This is not a big issue in this watershed.

**Groundwater:** *What, if anything, can we address?*

**Nutrients:** *What has Thurston County done to address nutrients into lakes and groundwater? What about high density areas and septic systems? Are nutrient concentrations high?*

The following are useful website links from Thurston County government:

- **Septic Systems (Onsite Sewage Systems)** from Public Health and Social Services: <http://www.co.thurston.wa.us/health/ehoss/index.html>
- **Monitoring Data (Precipitation, Groundwater & Streamflow/Temperature)** from Water and Waste Management: <http://www.co.thurston.wa.us/monitoring/>.

**Education and Outreach:** *How do we reach landowners? What is the best way to communicate to them about how their actions can cause or improve environmental problems? Are there incentives available?* Increase public awareness of the problems and possible solutions. Generate interest now instead of waiting until Ecology has completed the water cleanup plan.

**Implementation:** We need to take advantage of current Puget Sound Restoration money that is available. Get the word out about implementation work that is happening now. Apply for funds to pay for activity still needed to improve conditions. Consider innovative ideas. Look at landowner incentives that were successful for cleanup of Chesapeake Bay. They addressed economic hurdles through a lottery system. (More information about cleanup efforts in Chesapeake Bay, are available on the Natural Resources Conservation Service (NRCS) website at [http://www.nrcs.usda.gov/news/releases/2010/chesapeake\\_bay\\_cleanup\\_5.13.10.html](http://www.nrcs.usda.gov/news/releases/2010/chesapeake_bay_cleanup_5.13.10.html).)

**Water Quality Standards (WQS):** We had some discussion centered around the surface water quality standards (WQS) and the ability to actually meet them in some parts of the watershed. For example, Ecology’s modeling results in the draft technical

study indicates the WQS can't be met in the upper watershed even with restored habitat. Questions asked included:

- Should our focus be on the WQS?
- Should we concentrate on what is the best we can do for a particular area or parameter?
- Can Ecology change the WQS to reflect what is actually achievable or what is a background condition?

This is a much bigger discussion and this group is not the appropriate forum for it. For those interested in how the WQS are established, more information is available on Ecology's website at <http://www.ecy.wa.gov/programs/wq/swqs/index.html>.

### Open Comment

---

**Chris Stearns, Thurston PUD:** He brought up concerns regarding water conservation. The goal is for people to use water more efficiently. Nutrients, temperature, and volume can benefit from conservation in the Deschutes basin. Exempt wells is a region-wide issue which contributes to water in the upper watershed. Nobody is addressing the number of exempt wells, particularly in the upper Deschutes and Nisqually watersheds. He expressed concern about water volume taken, even for properties with exempt wells. *(Note: Mindy Roberts stated base flows have declined 30% in the Deschutes watershed. This may be an effect of climate change.)*

Follow-up: Lydia has contacted staff from Ecology's Water Resources Program and is arranging for someone to come and talk to the advisory group about the groundwater permit exemption.

**Jim Lengenfelder, Olympia Yacht Club:** The past WRIA 13 Watershed Planning Unit brought up issues about "six packs" and water quality. Many of the same issues raised in the WRIA 13 planning process are also raised in this one.

Follow-up: The lead for this planning effort was Thurston County. The group disbanded after being unable to reach consensus in adopting the plan. More information about the process is available from Thurston County Development Services, Watershed Planning, at <http://www.co.thurston.wa.us/permitting/watershed-planning/index.htm>.

### Next meeting

---

It is on Thursday, July 15, from 9:00 a.m. – 12 noon, at the Tumwater Fire Department, 311 Israel Rd. SW.

Draft agenda items:

- Implementation Effectiveness Monitoring Pilot Project
- Ecology's Sand and Gravel General Permit
- Groundwater Permit Exemption (addressing exempt wells)

Other ideas:

- *What has Thurston County done to address nutrients into lakes and groundwater?* Perhaps have Nadine Romero come and talk about a case study she is working on.
- Education and Outreach activities from the Thurston Conservation District and WSU Extension Office.