

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

Tuesday, December 14, 2010 -- 9:00 a.m. to 12:00 p.m.
Tumwater Fire Department, 311 Israel Rd. SW

Attendees

Agriculture, WA State Dept. of

- Ann Wick

Black Hills Audubon Society

- Sue Danver

Deschutes Watershed Ecosystem

- Hal Michael

Ecology, WA State Dept. of

- Alex Callender, SEA
- Betsy Dickes, WQ
- Chuck Hoffman, WQ
- Kim McKee, WQ
- Lydia Wagner, WQ

General Administration, WA Dept. of

- Nathaniel Jones

LOTT Clean Water Alliance

- Karla Fowler
- Laurie Pierce
- Paula Williamson

Olympia, City of

- Laura Keehan

Olympia, Port of

- Robert Zinkevich

Olympia Yacht Club

- Jim Lengenfelder

Thurston County Environmental Health

- Sue Davis

Thurston Public Utilities District

- Chris Stearns

Tumwater, City of

- Dan Smith

Updates

EPA Grant Application: Anyone interested in following the efforts of the Puget Sound Partnership (PSP) regarding the Environmental Protection Agency (EPA) grant applications, go to http://www.psp.wa.gov/EPA_funding_FY10. The PSP is working with lead agencies on all funding projects to assure monies are given to high priority items identified in the Puget Sound Action Agenda. Ecology is the lead agency for the following two grants:

- Watershed Protection and Restoration (Assisted by the Department of Commerce)
- Toxics and Nutrients Reduction and Control

2011 Meetings: All meetings are scheduled and complete information is online at <http://www.ecy.wa.gov/programs/wq/tmdl/deschutes/advisorycomm/DeschutesAdvGrp2011MtgDates.pdf>. The main agenda item for the January 27, 2011 meeting is an overview of the Lower Watershed.

General discussion

Technical Report: We had considerable discussion about the draft report. We need to use the report more to identify connections with the issues discussed in the advisory group meetings.

- A key question was “Why is the report still draft?” The response is simply a workload issue. Ecology staff from the Environmental Assessment Program (EAP) have had conflicting priorities. A joint decision made by the Water Quality and Environmental Assessment Programs which resulted in the delay. EAP staff will develop a Response to Comments to address comments received during the open comment period in 2008. Ecology needs to acknowledge and identify the gaps in the technical report in the final report to EPA.
- Look for thresholds for water quality nutrient levels. Identify areas already at the current threshold. We do not want to see additional contributions.
- Look at tables for where temperature and fecal coliform reductions are needed. For example, Reichel and Spurgeon Creeks. These two creeks near the riparian areas are probably agriculture problems. Reichel Creek has had cattle operations along the creek and Spurgeon Creek has horses and organic farms in the riparian area. Soils in the middle watershed are porous. Most of the on-site septic systems are not located along the creek. Septic systems probably are not major contributors of bacteria in the middle watershed because they are in outwash soils. They are contributing to the nitrate problem in the groundwater that contributes flow to the Deschutes River. Perhaps we should do a GIS exercise and look at the middle basin targeting land use.
- Page 117: There is a reference to a problem about cows on the banks and fecal material in the river on gravel bars between Old Camp Lane and the Lake Lawrence tributary. *Did Ecology conduct any follow-up inspections to check the site for fencing and waste management?*

Fish: We had a discussion surrounding fish and fish management. There are some net pens, a couple hatcheries, and small incubation facilities in the Deschutes watershed. There are fish farms in the Scatter Creek and Black River drainage. The WA Dept. of Fish & Wildlife (WDFW) has made changes in the fish management program for the Deschutes, particularly addressing resident cutthroat. The goal is to maximize population for catch & release. They want to emphasize those fish and they are not subject to changes to their environment. Different fish priority species is targeted from past. The Squaxin Island Tribe is concerned about coho, which are non-native to the watershed.

Agriculture:

- Inspection reports: An advisory group member asked for copies of inspection reports from both Ecology and the WA State Department of Agriculture (WSDA) addressing agricultural issues in the watershed. In particular, what were the problems, did inspections occur, and what resolutions occurred? *We need follow-up from both Ecology and the WSDA for this item.*
- Dairy Inspections: Are there adequate and frequent enough dairy inspections?
- Chemical usage: Ecology is not addressing the issue of chemical usage in this process. Does Ecology really know the location of “hot spots” and sources that are contributing to the water quality problems?

- New Sources: A concern was expressed about “new” sources. If they are permitted they have to meet the current water quality standards. But what happens to the unpermitted sources? Can the county permit them? Response: The county has Critical Areas Ordinances (CAOs) in place as well as a response process. They, like other governmental agencies, have limited resources.

Bacteria:

- Hot spots: Perhaps we can use inventories, drive-bys, or other methods to help identify the sources affecting these areas.
- Small stream pollution sources: Check the Thurston County Deschutes Watershed Characterization Study, available online at <http://www.co.thurston.wa.us/stormwater/chara/chara-deschutes.html>.
- Septic tanks: Since we’ve determined agriculture is less of a concern, we should consider looking at the increase in residences with septic tanks. Are they contributors? How can we affect positive change for this area to reduce or restrict further pollution? The technical report doesn’t address anticipated growth. We know there were past problems with nitrates and we don’t want to see a resurgence. The more we can identify potential problems, the better we can prepare for them. Most of the on-site septic systems are not located along creeks.
- Non-point sources: These do not show up on maps but contribute to the problem.
- Composting Facility: There were concerns expressed about a potential increase of nitrate and bacteria resulting from a commercial composting facility near Rainier.

Lake Lawrence: This lake discharges into the Deschutes River. Sawdust from mills is a nutrient source. To reduce the nutrient load is going to take dredging. There is 50-60 feet of accumulation on the bottom, which has created a false bottom. Removing all the “muck” is very difficult and test dredging was not able to get all the water out. Work done in the area determined on-site septic systems are not the pollutant source at this lake. Thurston County did an extensive lake restoration study in the early 1990s. They determined it was economically not feasible to remove the dirt from the lake because they cannot completely remove the water from the soil. Riparian restoration around lakes is difficult because of high development. Specifically addressing septic systems near lakes, county staff stated that most systems are pressurized. Regulations have come a long way and in the upland area there is a lot of outwash soils and problems in nitrates from septic systems going into the ground. There are existing high-density areas around many shorelines. The county regulations require these must be located more than 100 feet away from a lake boundary.

Future development: There were continued concerns expressed over future development in the watershed. There is at least one potential development with an approved permit but due to the current economic conditions, work has not begun. We should look at county zoning for previously identified water quality issues. We can also look at septic densities. The county can possibly manage these through zoning or health codes. *(Reminder: The TMDL has an antidegradation policy to prevent future impairments.)*

Draft Implementation Strategy: We began discussing what we already know about work currently underway in the watershed.

Education & Outreach: There are numerous efforts and organizations involved with providing information to county residents. Examples include:

- **South Sound GREEN (Global Rivers Environmental Education Network):** This is a watershed education program through the Thurston Conservation District. It involves students from Grade 4 through college. More information is available online at www.thurstoncd.com/?id=28.
- **South Puget Sound Salmon Enhancement Group (SPSSEG):** This is a non-profit, non-government agency working towards salmon recovery in King, Pierce, Kitsap, Thurston, and Mason Counties. Their efforts include restoring estuarine and near shore habitat, riparian restoration, and improving stream habitat. Examples of work include fixing culverts, providing stable structures for transporting fish, identifying and repairing blockages to fish passage. Community education and volunteer involvement are essential to their efforts. They look for partnerships and willing landowners. Unfortunately, the Deschutes River is a low priority because it is not a natural salmon run. More information is available online at <http://spsseg.org>.
- **Stream Team:** This is a program for citizens interested in protecting and enhancing water resources in Thurston County watersheds. It is coordinated through the Cities of Olympia, Lacey, and Tumwater, as well as Thurston County. Examples of work done by this group include planting native trees, stenciling storm drains, monitoring local streams, and removing litter. More information is available online at www.ci.tumwater.wa.us/waterstreamteam.htm.
- **Others:** What nature or environmental groups are working in the watershed? (*For example, Wild Fish Conservancy.*)

Technical Assistance:

- Technical assistance is very effective for the property owners who choose to participate. Environmental problems may result for those who choose not to. Since the Thurston Conservation District (TCD) is not a regulatory agency, how do we know where are the problems areas and who owns the properties?
- The TCD has put together a farm inventory that lists farms that need work.
- Perhaps Ecology can give the TCD directed funds to get targeted for areas that need help. Reminder that property owners are often motivated by money (for example cost-share programs) and resources provided. The TCD has money coming in from a Thurston County assessment source. They also have limited staff resources and divide their work and grants throughout the watershed.
- Consider a multi-prong approach to identify all applicable issues related to an identified property. Develop partnerships to coordinate a team approach to create a strategic plan for the property owners. Make it a well-organized effort to address all the issues, concerns, and proposed solutions.

Riparian Restoration: This is an obvious and main solution for both the upper and middle watersheds.

- Many of the streams identified for temperature reduction are the same tributaries with bacteria problems. (*For example: Lawrence Lake ditch and Reichel Creek.*) Some landowners may have to address multiple parameters such as both temperature and bacteria.
- There is a potential mitigation plan in the works through a partnership of the Cities of Lacey, Olympia, and Yelm. They may purchase property in the watershed and all agriculture activities would end. A major part of the mitigation plan includes riparian restoration. The partnering organizations submitted a draft plan to Ecology for approval.
- The draft Technical Report, page 152, identifies areas where we need shade. What is the next step? Do we know the names of the property owners? If not, how do we get that information?
- We need a **riparian management plan**. Using the recommendations in the draft Technical Report, we can identify specific areas needing shade, identify the appropriate plants to provide the best coverage and achieve the desired benefits, and identify possible organizations to coordinate the planting. Consider any associated wetlands in these areas since they can perform water cooling function as well. Functioning wetlands will slow down the water to provide more time for percolation and result in cooler water.
- **Incentives:** What kind of incentives will get the best participation from landowners? Cost-share? Free labor through volunteers? Resources such as free plants? Another suggestion was designing some kind of sign or press release to acknowledge the work and participation of watershed landowners. A positive role model could result in more participation
- Tree stock: Is it possible Weyerhaeuser is willing to furnish some trees?

Restoration:

- Perhaps individuals or organizations will step forward and express their willingness to buy property for restoration, provide the needed materials for a project, or donate time and labor to do the actual work.

Continued assessment: (*How do we identify problem areas and reach the landowners?*)

- We need to focus on identifying sources and landownership. Next is education, outreach, and technical assistance for the property owners.
- Ecology has some field data compiled around 2003-2004, that may give additional insight into problem areas. We can conduct internet research to see aerial photos of the current conditions to compare to the older photos. It is possible there are areas that have improved or worsened.

- Consider breaking the watershed down into smaller segments (sub-drainages) to identify additional sources of nutrients or bacteria and concentrate on mitigation efforts.
- We can determine potential sources (such as septic systems and nutrient loads) and locations through Geographic Information Systems (GIS) mapping. GIS layers for property ownership is a useful tool. It is available at websites from both Thurston County and Ecology. It is easiest to start with a narrow area and look at the GIS layer to identify the property owner.
 - Thurston GeoData Center: <http://www.geodata.org/>.
 - Dept. of Ecology, Geographic Information Systems (GIS) home page: <http://www.ecy.wa.gov/services/gis/>.

Enforcement: This is a key concern when working with cleanup plans. The implementation plan will identify the regulatory framework for enforcement. If landowners choose not to work towards improving the water quality, the appropriate regulatory entity is responsible for pursuing any enforcement actions.

Open Comment: None

Next meeting

Date: Thursday, January 27, 2011
Time: 9:00 a.m. – 12 noon
Place: Tumwater Fire Department, 311 Israel Rd. SW.
Agenda: Summary of middle watershed issues & Begin discussion on Lower Watershed