

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

Thursday, September 26, 2013, 9:05 a.m. to 11:10 am

Attendees

Capitol Lake Improvement and Protection Association (CLIPA)

- Bob Holman

Citizens

- John DeMeyer
- David Milne
- Steven Morrison
- Janine Unsoeld

Deschutes Estuary Restoration Team (DERT)

- Dave Peeler

Ecology, WA State Dept. of

- Dustin Bilhimer
- Craig Graber
- Andrew Kolosseus
- Brett Raunig
- Charles Toal
- Lydia Wagner

Enterprise Services (DES), WA Dept. of

- Carrie Martin

LOTT Clean Water Alliance

- Karla Fowler

Olympia, City of

- Andy Haub
- Patricia Pyle

Olympia Yacht Club

- Jim Lengenfelder

Pacific Shellfish Institute

- Bobbi Hudson

Squaxin Island Tribe

- Scott Steltzner

Thurston County

- Rich Doenges
- Lawrence Sullivan

Thurston Public Utility District

- Chris Stearns

Transportation, WA State Dept. of

- Emily Miller

Tumwater, City of

- Dan Smith

General Updates

Grants and Loans: The application period for funding through the Combined Funding Process opens mid-October and closes December 4. This includes Centennial Clean Water Program, Federal Clean Water Act Section 319 Nonpoint Source Fund, and Washington State Water Pollution Control Revolving Fund. New this year is an online application process. More information about Ecology's Water Quality Grants and Loans Program is available at the following links.

- Water Quality Grants & Loans main page:
<http://www.ecy.wa.gov/programs/wq/funding/funding.html>
- Trainings & Workshops: <http://www.ecy.wa.gov/programs/wq/funding/Training/TrainMain.html>
 - Olympia's workshop is October 15, 2013 at the Red Lion Hotel, 2300 Evergreen Park Dr. SW, 9:00 a.m. – 3:00 p.m.
- To receive updates you can get on the listserv by going to <http://listserv.wa.gov/cgi-bin/wa?A0=ECY-WQ-GRANTS-LOANS>.

South Puget Sound Dissolved Oxygen (SPSDO) Study: Andrew provided a brief update on the study. The advisory group working on this study will review a draft in early-mid October. The work is similar to what this TMDL Advisory Group is addressing. The SPSDO study has a broader focus than just the Deschutes River watershed. If you want to participate in that advisory group, contact Andrew at 360-407-7543 or akol461@ecy.wa.gov. More information is available online.

- South Puget Sound Dissolved Oxygen Study:
http://www.ecy.wa.gov/puget_sound/dissolved_oxygen_study.html
- Puget Sound Dissolved Oxygen Model:
<http://www.ecy.wa.gov/programs/wq/PugetSound/DOModel.html>

Deschutes River/Budd Inlet Load Allocations (LA) and Wasteload Allocations (WLA) and Implementation Priority Maps

Dustin Bilhimer, Ecology, WQ/HQ

The following *draft* maps were presented during this meeting and are available online at *[insert website link when notes are finalized]*:

- Table 1: Map symbol legend for load allocation compliance areas
- FC targets (storm targets) and Stormwater Permit Areas
- Freshwater Beneficial Uses
- NPDES Permits with WLAs
- Construction SW Permits
- FC LAs (May-Sep)
- FC LAs (Oct-Apr)
- Effective Shade LAs – Shade Improvement Needed and Riparian Restoration Priority
- Current Nitrogen Model Profile NO₃ + NH₄ (ugN/L) and GW Average Unit Area Loading DIN (mg/d/m²)
- Fine Sediment LA Reaches and Current TSS Model Profile
- Urban Area Septic System Analysis and FC LAs (Summer)
- Land Uses Categories
- USDA NASS 2011 Cropland and 2006 Impervious Cover
- Construction SW Permits and Stormwater Permit Areas
- National Wetlands Inventory, Fish Distribution, Thurston CD Riparian Assessment
- Urban Area Septic System Analysis and FC LAs (Summer)
- TMDL Monitoring Locations, Construction SW Permits, WQ Interactions, and Stormwater Permit Areas
- Land Uses Categories
- National Wetlands Inventory and 2006 Impervious Cover
- Fish Distribution, Effective Shade LAs, Thurston CD Riparian Assessment

Acronyms used in the maps:

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| <ul style="list-style-type: none"> • BMP: Best management practice • CD: Conservation District • DIN: Dissolved inorganic nitrogen • DO: Dissolved oxygen • FC: Fecal coliform bacteria • GP: General permit • GW: Groundwater • IP: Individual permit • LA: Load allocations • mg/d/m²: Milligrams per day per square meter | <ul style="list-style-type: none"> • mgD/L (<i>Should be written as mg/d/L</i>): Milligrams per day per liter • MS4: Municipal separate storm sewer systems • NASS: National Agriculture Statistics Service • NH₄: Ammonium • NO₃: Nitrate • NPDES: National Pollutant Discharge Elimination System • OSS: On-site septic systems • RCW: Revised Code of Washington |
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- SW: Stormwater
- TM: Temperature
- TMDL: Total Maximum Daily Loads
- TSS: Total suspended solids
- UGA: Urban growth area
- ugN/L: Microgram of nitrogen per liter
- USDA: U.S. Department of Agriculture
- WLA: Wasteload allocations
- WQ: Water quality
- WQIR: Water Quality Improvement Report
- WSDOT: Washington State Department of Transportation

The following are key points, comments, or questions made during this presentation.

MS4s and Stormwater FC map: Looking at stormwater and permit areas, Lacey is only in a small area of Chambers Creek. The City of Olympia permit coverage designation comes from the last permit cycle. Thurston County staff stated their permit boundary area has expanded in both the north and south, including Boston Harbor and Black Lake. Ecology staff will check with Lisa Cox, Permit Manager, to confirm the permit boundaries. WLAs are still under development. Numeric limits will provide numeric targets and indications of where we need to see improvements. The dots on the maps represent targets only and not specific WLAs. BMPs may address many of these. Permit compliance is at the permit boundary. Sampling occurred without knowledge of the permit boundaries. LAs will look at percent reductions. Some of these may get addressed through identified implementation actions or BMPs.

There is concern that Ecology is determining the targets or allocations based on old data. Ecology will base these on information contained in the Technical Study, available online at <https://fortress.wa.gov/ecy/publications/summarypages/1203008.html>. Ecology does recognize new data and will track what is collected through the basin after the TMDL is approved. An example of this is an effectiveness monitoring pilot project already underway by Ecology's Environmental Assessment Program. More information is available online at <https://fortress.wa.gov/ecy/publications/publications/0903133.pdf>. We have flexibility to look at implementation actions based on new data.

Another issue raised was that of new businesses starting up in the watershed and their potential impacts. These can be addressed through the permitting or complaint processes of Ecology or local jurisdictions. If new industrial stormwater sites come in and there is an approved TMDL, the site will get factored into the permit. Any discharges would have to fit in with the existing loading capacity for the receiving waters. Some activities, such as a dog park, would generally come under local government permitting.

Helpful links:

- Department of Ecology's "How to Report Environmental Problems" home page: <http://www.ecy.wa.gov/reportaproblem.html>
- Thurston County Environmental Health "Report a Problem: form: http://www.co.thurston.wa.us/health_fpforms/ehadm/complaint.htm

Temp/DO Riparian Restoration priority: DO levels need to increase and this happen with more cooling of the water. Riparian shade improvement points are reflected on this slide and each point is 1 km. Red indicates more improvement is needed to cool the stream and improve DO levels. Using information from the technical study, Dustin plotted the daily minimum DO levels and looked at where the minimums were the lowest. This will help identify the worst areas needing the most riparian shade improvements. We can use this information to identify implementation actions which will achieve the most benefit. A concern was raised about the need to consider areas that are near degradation and have a high need for protection to prevent them from

worsening. Ecology responded by stating the model shows where we have to focus on for the shorter term to see improvements. We need to look at site-specific areas to identify the best implementation actions to address the problem. For example, stream bank stabilization or riparian vegetation.

Nitrate Ammonia Profile slide: Nitrogen loading in Capitol Lake and discharge to Budd Inlet is a concern. There is a direct correlation of dot size and pollution level. Our focus is to make sure the water flowing into Capitol Lake and Budd Inlet meet the water quality standards. The data reflects a mix of groundwater and stormwater data. The points represent the amount of nitrates concentrated in the groundwater. We can use the information in this map to identify priorities for restoration actions. As you go downstream in the Deschutes River system the levels of nitrogen increase.

Deschutes Fine Sediments: Reductions needed were identified by the Squaxin Island Tribe. Implementation will look at prevention of further erosion and increase channel complexity. Implementation actions developed with the intent to improve existing conditions and prevent future degradation. For issues related to the influx of new sediment into the system, we can address this through the adaptive management process.

Chambers Creek example: We discussed including maps/tables such as the ones presented today as an appendix in the Deschutes Multi-parameter WQIR. Examples of how these can benefit the WQIR include: identifying potential sources, assist MS4 permittees to identify high priority areas, impervious cover for permit coverage areas, and agriculture areas.

Bacteria: Some data in these maps may be incomplete but this gives us a good place to begin. There are already projects underway from permittees and we can capture them in the report. For example, pet waste stations area already provided on the Western Chehalis Trail. On-site septic systems (OSS) are one part of the process to address. Thurston County staff has previously stated the assumption is residences outside the UGA will be on septic. We'll also need to look at nutrient loads from golf courses. For example, we know the runoff from Indian Summer Golf Course ends up in Chambers Creek.

Ideas for future meeting agendas:

- SPSDO study and its implications to the Deschutes River Multi-parameter TMDL
- WSDOT permit/TMDL interface
- Phosphorus
- Department of Enterprise Services (DES) and potential implementation actions

Ecology asked the advisory group to comment on these maps and the draft implementation actions sent out by email prior to this meeting. Comments are due to Lydia Wagner by close of business on October 15.

Open Comments

Charles Toal: He asked for clarification on forest practices and sediment loading. He received a complaint about the Black Lake gravel pit and sediment going into the wetland. The landowner said it comes off forest land. The Road Maintenance and Abandonment Plan (RMAP) should address this issue.

Dave Peeler: Regarding nearshore land use, why didn't Ecology use 200 ft. for consistency with the Shoreline Management Act? Dustin responded that he chose 150 ft. because that has been used before. He can recalculate to 200 ft. Dave suggested there may be a relationship with the Growth Management Act and that Ecology should consider land use in this process.

Chris Stearns: He stated fencing off areas in the past is sometimes difficult because when high water events occur and the land floods it compromises the fences. The landowners don't want to put fences under water.

Next meeting

Date: Thursday, November 21, 2013*
Time: 9:00 a.m. – 12:00 noon
Place: Dept. of Natural Resources and Correctional Industries building
801 88th Ave. SE, Tumwater, WA

**Please note the October 24 meeting is cancelled.*