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

Thursday, December 13, 2012, 9:10 a.m. to 12 noon
LOTT Clean Water Alliance, 500 Adams St. NE, Olympia

Attendees

Black Hills Audubon Society
- Sue Danver

Capitol Lake Improvement and Protection Association (CLIPA)
- Jack Havens
- Bob Holman
- Bob Wubbena

Citizen
- John DeMeyer

Deschutes Estuary Restoration Team (DERT)
- Sue Patnude

Ecology, WA State Dept. of
- Alex Callender
- Kim McKee
- Lydia Wagner

Enterprise Services (DES), WA Dept. of
- Carrie Martin

LOTT Clean Water Alliance
- Ben McConkey
- Laurie Pierce

Olympia, City of
- Patricia Pyle

Squaxin Island Tribe
- John Konovsky

Thurston County Environmental Health
- Sue Davis
- Barb Wood

Thurston Public Utility District
- Chris Stearns

Transportation, WA State Dept. of
- Jeff Williams

Tumwater, City of
- Dan Smith

General Updates

- November meeting notes are not finalized yet. Email notification will go out when they are posted online.
- Revised Timeline: Ecology will update the draft timeline and provide it at the January meeting.
- 2013 Meeting Dates: Ecology reserved the Tumwater Fire Department training room for all of 2013 and provided the meeting dates in December. The list is available online at http://www.ecy.wa.gov/programs/wq/tmdl/deschutes/advisorycomm/111512DeschutesAdvGrp2013MtgDates.pdf.

Load and Wasteload Allocations

Kim McKee and Lydia Wagner, Ecology, Water Quality Program

As a follow-up to last month's meeting, changes to the technical information will be included in the TMDL submittal as an addendum document.

Today's discussion will concentrate on how to get the waters back into compliance with the water quality standards (WQS). Ecology is looking for input by the advisory group. Ecology has the obligation to submit the Water Quality Improvement Report (WQIR) and we are using this public process to help develop the details. We recognize not everyone will get what they want or be satisfied with the outcome. We need to think ahead about how our work will impact the water quality in the future.
The Water Quality Improvement Report (WQIR) addresses:

- Five parameters: Fecal Coliform Bacteria, Temperature, Fine Sediment, pH, and Dissolved Oxygen
- Fresh waters
- Marine waters

For this meeting we are focusing on fresh waters. Ecology staff are still having internal discussions about the marine waters.

The Implementation Strategy is a component of the WQIR and will identify *who* (jurisdiction) needs to do *what* (implementation action). The companion document, Water Quality Implementation Plan (WQIP), will provide more details.

Allocations are needed in order for the polluted waterbodies to meet Water Quality Standards (WQS). They are a required element of the WQIR which Ecology submits to the Environmental Protection Agency (EPA). The allocations identified will help jurisdictions (for example, Thurston County, City of Olympia, or City of Tumwater), determine the actions needed to achieve our goal of meeting WQS.

Each slide shown today represents something specific. This could include reductions needed, location of where the reductions are needed, what activities are needed, and the jurisdiction (or organization) most likely responsible or who would play a key role for those implementing those actions. A good way to think of allocations is to visualize a pie and each allocation represents a slice of that pie. Factors used to determine allocations include, but are not limited to, scientific assessments, modeling results, advisory group discussions, and personal knowledge.

We will look at each parameter identified in this TMDL effort (fecal coliform bacteria, temperature, fine sediments, pH, and dissolved oxygen) and discuss the designated location, appropriate jurisdiction(s), and identify potential sources. The information from this last column will help us later in identifying reductions needed.

The tables included in the slides were copied from the Technical Report and the appropriate pages are noted on the slides.

It is important to know that unless specified, the default allocation is "zero". This is a challenge with permittees when looking at zero versus an amount that comes from actual data.

Reminder: The total maximum daily load (TMDL) for each parameter = sum of the wasteload allocations + load allocations + reserve + margin of safety.

Deschutes TMDL Advisory Group (DAG) comments and Ecology (ECY) responses or Questions (Q) and Answers (A)

Q: *Where do all known, available, and reasonable methods of treatment (AKART) come into effect?*

A: The permit process should look at the appropriate technology to apply.

Q: *Does Ecology recognize economics as a factor in determining the allocations?*

A: It does not play a role in the analysis other than the test we have to apply back to see if the activity can be done. Considering the monetary impact is not part of our process. We can get comments on this impact through the public review and comment process. Sometimes these aren't easy decisions to make and we're trying to be as reasonable as we can.

DAG: It is important that we also factor in the economic factors of environmental health. It is bigger than just the financial cost.

DAG: The largest impact in Olympia is government (state/city/county) who is not part of the tax base. The local residents and property owners pay the for stormwater utilities.

ECY: Our task is to consider what is needed to meet WQS. As part of this effort we look at anthropogenic activities. Some can be controlled through management activities, some pollution contribution can occur naturally and we cannot control it. We need to look beyond the economics and see what makes the best sense for the environment. The economics will come into play later through implementation.

Q: *What exactly do you mean when you refer to location?*

A: If there is a permit then the compliance point (discharge site) is the location. When we refine the location site it can help the permit staff to use the information in the new or revised permits.

Q: *How is Ecology composing the technical analysis in this process?*

A: We are taking a half step backwards to consider and identify reasonable reductions for the affected parties.

DAG: The tables included in the Technical Report are based on data taken 10 years ago. Ecology has not continued to sample on all of them but Thurston County has more current data on some of the smaller ones. The County found some issues and work has already been done to fix the problems. The numbers contained in the Technical Report tables do not reflect implementation actions already completed. The county's data is available for review.

Q: *What is the process for Ecology to look at and consider the county's data when determining the allocations?* Someone suggested having this data presented to the DAG.

ECY: We will acknowledge the actions that were taken based on the more current data which worked towards bringing water back into compliance with the WQS. We can provide an overview of the actions in the WQIR. More detailed information about the specific implementation actions will go into the Water Quality Implementation Plan (WQIP).

Q: *For this exercise, is Ecology looking for a list of all potential actions or the ones that will be the most productive and effective?*

ECY: The latter. We want to start developing a list of implementation actions for the Implementation Strategy. We need to consider the percent (%) reductions that are needed, and identify actions that will achieve this goal. Then we need to encourage local government or other stakeholder groups to help with those actions. For example, if we are looking at livestock practices, the CD may be in the best position to help property owners implement appropriate best management practices (BMPs).

Q: *Will the Water Quality Implementation Plan (WQIP) identify specific compliance points?*

A: Using the 303(d) list to identify which waterbodies are not meeting the WQS, the WQIP will list actions needed to address these listings. The WQIP will provide more details than what are included in the Implementation Strategy. We can use all of this information to prioritize the implementation actions. We will later follow up with effectiveness monitoring to determine if those actions worked and the waterbodies are meeting the WQS. If they still do not, we will develop an adaptive management strategy to try something different. This could involve additional monitoring to identify the problem. The "compliance point" is generally referred to a specific outfall identified in a permit. So compliance may be at a discrete location such as a particular outfall or it could be for a reach of the waterbody.

DAG:

- There was concern expressed about the connection between the WQIR and stormwater permits. As a result of previous TMDLs, certain permit requirements were added without a direct connection to the TMDL. For example, a stormwater permit could require continued inspections of on-site septic systems for proper operation and maintenance. If the appropriate jurisdiction has already completed this task and resolved any issues, there is no reason to include the condition in the WQIR or WQIP as an action item.
- Another concern is related to enforcement and who is responsible.

ECY: Both WQIRs and permits have particular enforcement responsibilities and actions. We can ask Lisa Cox, Ecology, to address the permit issue and how permittees can have influence over what does or does not get incorporated into the Municipal Stormwater Permit.

Slide #8 – Fecal Coliform Bacteria, Summer, Deschutes River

Station #13-DES-20.5 (Hwy 507): Immediately upstream of this site is the Turner Road community, all with on-site septic systems (OSS). This could be a potential outreach opportunity for technical assistance from the Thurston Conservation District. *Is this an area that Thurston County could do some investigation into the OSS?*

DAG:

- This isn't the best area to conduct sanitary surveys. The stormwater probably perks into the ground.
- This area is outwash so unless the OSS was straight-piped into the system, bacteria is not the problem.
- Agricultural activities are more likely the source.
- There are unusual concentrations of OSS throughout this area.
- Page 213 of the Technical Report already acknowledges livestock as a key concern.
- As we are identifying possible sources and actions, we need to prioritize them. If, after implementing the primary action and the waterbody still exceed the WQS, then either go back and do source identification or implement the second action. This is all part of the adaptive management process.
- We are looking at a range of options and can prioritize them in the Water Quality Implementation Plan (WQIP).

Station #13-DES-28.6: This site is at the mouth of Reichel Creek, in the main stem. Possible sources are wildlife and recreation.

Slide #9 – Fecal Coliform Bacteria, Summer, Tributaries to the Deschutes River

Station #13-CHA-00.1: A 35% reduction is needed for Chambers Creek. This station is low in the watershed, coming in around 58th Avenue. Chambers Lake flows south and across Chambers prairie. It is dry part of the year around Rich Road. The spring feeds it year round at the river level.

Possible sources:

- Stormwater
- On-site septic systems
- Cross-connections between sanitary sewers and stormwater systems
- Canadian Geese population in the summer
- Chehalis Western Trail: pet waste and general recreational use

Possible implementation actions:

- Identify cross-connections
- Fix cross-connections

Remember: There may be natural conditions, such as the geese population, that we are unable to control.

Responsible party:

- The appropriate service jurisdiction, for example the cities of Lacey, Olympia, or Tumwater, or a private collection system.
- Dog walkers (picking up and properly disposing of pet waste)

13-REI-00.9 (Reichel Creek): Agriculture is a big source.

13-SPU-00.0 (Spurgeon Creek): Agriculture is a big source. Other sources include rural roads, wetland complex system, and houses with on-site septic systems far away from creeks.

Slide #10 – Fecal Coliform Bacteria, Summer, Capitol Lake and Percival Creek Watershed

DAG:

- We need to know the specific location of these stations.
- There are homeless camps in some of these areas. This is a constant problem. It is like a city with semi-permanent structures, and has been a problem for 10 years.

Possible implementation actions:

- Check infrastructure integrity
- Identify and fix leaks in manhole covers

Ecology will acknowledge work already done or in process by the affected partner organizations.

Station #13-PER-00.1 (Percival Creek): This site is near the mouth of Percival Creek.

Station #13-PER-01.0 (Percival Creek): This site is near the confluence of Black Lake Ditch.

Slide 11 – Fecal Coliform Bacteria, Summer, Budd Inlet Tributaries

Station #13-ADA-Unk (Adams Creek): There used to be livestock operations in this area. The County addressed them and the operation has since closed down. This branch flows into Adams Creek.

DAG: There is still an active livestock operation in the area and cattle near the water are a problem. Cattle are running on the waterfront and are using a county exemption. Perhaps Ecology could have a Nonpoint Source Inspector check it out or the TCD could do some outreach to the owner.

Station #13-ELL-00.0 (Ellis Creek): This area is urban and rural. Issues include stormwater and on-site septic systems (the soils are really bad in this drainage). There are not a lot of properties in this area already hooked up to the sewer system. The mouth of the creek is in Priest Point Park and the headwaters are in the city.

Station #13-IND-00.2 (Indian Creek): Possible sources include the homeless camp, highway runoff, cross-connections, and stormwater. DAG: Thurston County has done some dye testing in this area and has not located any problems.

Stations #13-MOX-00.0 and 13-MOX-00.6 (Moxlie Creek): Possible sources include infrastructure and the ongoing problem of illicit connections to the sewer.

Slide #13 – Fecal Coliform Bacteria, Winter, Capitol Lake and Percival Creek Watershed

Station #13-CAP-00.4 (Capitol Lake): This station is between the north and middle basin. Pollutants can come in from both Percival Creek and the Deschutes River. Possible sources include stormwater and infrastructure. Implementation action: identify and fix infrastructure problems.

Station #13-PER-01.0 (Percival Creek): Same suggestions as previously discussed for the summer season. Possible sources include stormwater and wildlife (ducks).

Slide #14 – Fecal Coliform Bacteria, Winter, Budd Inlet Tributaries

Q: *What is different in winter from summer?*

A: The data indicates there are more tributaries not meeting water quality standards in the summer. A likely cause is stormwater.

DAG:

- Same sources as #13-PER-01.0: stormwater, on-site septic systems, and infrastructure integrity.
- There are no public facilities in this area.
- There is a mobile home park downstream of 54th that could contribute some pet waste.

The PowerPoint slide presentation is available online at *[insert website link]*.

Brainstorming Exercise

Location/Station #	Jurisdiction	Potential Sources
Fecal Coliform Bacteria (Summer)		
Deschutes River		
13-DES-20.5	Primary: Thurston Conservation District; Secondary: Thurston County Health Dept.	Agriculture, access, on-site septic systems
13-DES-28.6	Weyerhaeuser	Wildlife
Deschutes River Tributaries		
13-CHA-00.1 (Chambers Creek)	Olympia, Tumwater, or Lacey; TCHD;	Identify cross-connections; on-site septic systems, geese, stormwater, dogs
13-REI-00.9 (Reichel Creek)		Agriculture
13-SPU-00.0 (Spurgeon Creek)		Agriculture
13-PER-01.0 (Percival Creek)		Infrastructure; identify cross-connections; stormwater; homeless; on-site septic systems
Budd Inlet Tributaries		
13-ADA-UNK (Adams Creek)		Livestock
13-ELL-00.0 (Ellis Creek)		Urban/Rural; stormwater; on-site septic systems; livestock
13-IND-00.2 (Indian Creek)		Cross-connections; homeless; highway
13-MOX-00.0 and 13-MOX-00.6 (Moxlie Creek)		Stormwater; cross-connections
Fecal Coliform Bacteria (Winter)		
Capitol Lake		
13-CAP-00.4 (Capitol Lake)		Waterfowl; stormwater; infrastructure
Percival Creek Watershed		
13-PER-01.0 (Percival Creek)		Stormwater
Budd Inlet Tributaries		
13-BUT-00.1 (Butler Creek)		Geese; golf course; community on-site septic systems

Open Comments: None

Next meeting

Date: Thursday, January 24, 2013
Time: 9:00 a.m. – 12:00 noon
Place: Tumwater Fire Dept., 311 Israel Rd. SW, Tumwater
Draft agenda: Conclude discussion about allocations for fecal coliform bacteria. Begin discussions for temperature and fine sediments.