REGION 10 OWW TOPIC BRIEFING

TRIBAL CONSULTATION AND REVIEW UPDATE FOR DESCHUTES TOTAL MAXIMUM DAILY LOAD (TMDL), THURSTON & LEWIS COUNTIES, WASHINGTON

Meeting Purpose

Provide background information and update Dan on the following:

- Status of EPA TMDL Review;
- Squaxin Island Tribe TMDL Concerns; and
- Options for Moving Forward

Project Background

The Deschutes River, Percival Creek, and Budd Inlet Tributaries (Phase 1) TMDL study area (186 mi^2) is located in south Puget Sound and is situated within the boundaries of Thurston and Lewis Counties, Washington (**Figure 1**). The study area includes the major cities or towns of Olympia, Lacey, Tumwater, and Rainier. Significant data collection to support the Phase 1 TMDL began in 2003. Data analysis and modeling concluded in 2012. On December 17, 2015, Ecology submitted the final Phase 1 TMDL to EPA for approval. The submitted TMDL package includes a request that EPA approve allocations for 71 Water Quality Limited Segments (WQLSs) impaired by five pollutants (temperature, dissolved oxygen [DO], pH, fecal coliform, and fine sediment). EPA understands that Ecology is developing a TMDL for Budd Inlet and Capitol Lake as Phase 2 of the Deschutes TMDL. According to the timeline shared with EPA in March 2016, Ecology is tentatively planning to submit the Phase 2 TMDL for approval in June 2019.

The Squaxin Island Tribe (SIT) has maintained throughout the TMDL development and public notice process that critical aquatic improvement measures (see *Squaxin Island Tribe TMDL Concerns*) are missing from the TMDL. EPA met with SIT in 2015 to discuss these concerns. In addition to concerns

Ex. 5 - Deliberative Process

Phase 1 TMDL unfolded, NWEA filed a complaint in 2014 regarding Ecology's use of Natural Condition Criteria (NCC). Should NCC provisions be rescinded, parts of the Phase 1 TMDL may be invalidated because the TMDL considered or applied targets (temperature, DO, and pH) that were based on system potential (~modeled interpretation of highest quality condition attainable).

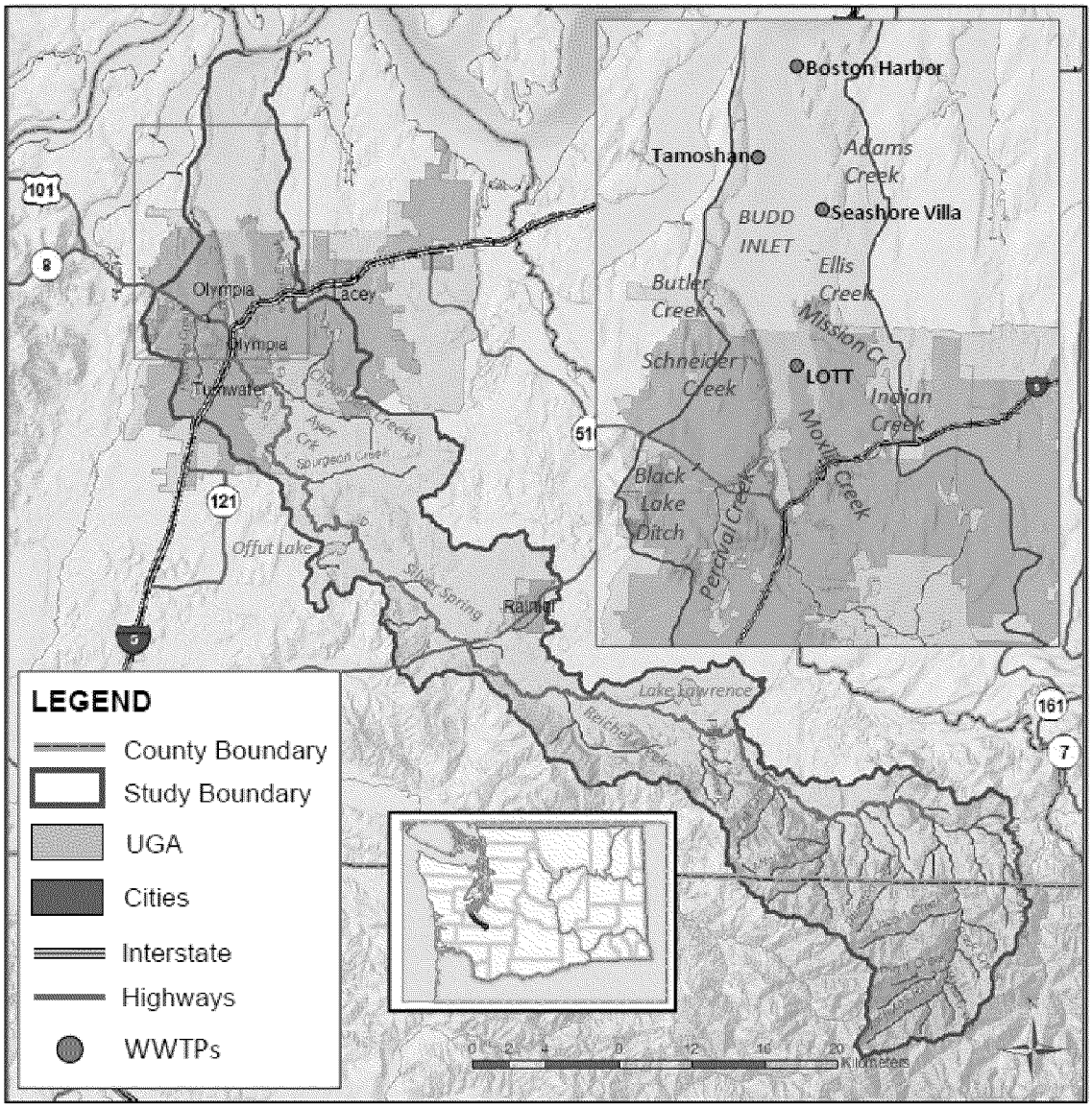

Figure 1. Study Area for Deschutes TMDLs (from Roberts et al., 2012, page 6).

Quick Summary

- ✓ Ecology is seeking approval for TMDLs that span 71 segments
- ✓ Category 5 impairments: water temperature, DO, pH, fecal coliform bacteria, and fine sediment
- ✓ Category 4C pollution: in-stream flows and large woody debris
- ✓ TMDL split into two phases given technical complexity and political ramifications related to Capitol Lake and Budd Inlet impairments. Complexities include Capitol Lake as a source of low DO to South Sound and nutrient reductions from stormwater sources to address Capitol Lake phosphorus impairment

- ✓ Surrogates are proposed for 4 of 5 pollutants
- ✓ The TMDL seeks to achieve temperature, DO, and pH water quality standards through increased stream shading (primarily)
- ✓ Ecology predicts that WQS for temperature, DO, and pH will be achieved by 2065.
- ✓ Permittees include: 5 municipal stormwater-MS4s, 7 sand & gravel, 9 industrial stormwater, and 25+ construction stormwater. The boundary of the Phase 1 TMDL does not include wastewater treatment point sources. Phase 2 of the TMDL will include the LOTT regional wastewater facility that serves south Puget Sound.

Ex. 5 - Deliberative Process

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Squaxin Island Tribe Concerns

SIT has maintained throughout the TMDL development and public notice process that the Phase 1 TMDL should address habitat (lack of woody debris, reduced stream flows). In addition, long implementation

Ex. 5 - Deliberative Process

" **River Flow**

- Decreasing flows of the Deschutes River
- River flow in the Ecology's Deschutes River temperature modeling

Ex. 5 - Deliberative Process

- Actions to be taken.

Riparian Shade

Ex. 5 - Deliberative Process

- Scale of the Deschutes River (flow, channel, and valley) relative to a 75 ft riparian buffer.
- Large woody debris as target allocations.
- Actions to be taken.

Addressing river flow is even more crucial, given that likelihood of full riparian shade restoration is low, and the timeframe is very long. "

Ex. 5 - Deliberative Process

Table 1. Critical Low Flows Calculated for the Deschutes River (from Roberts et al., 2012)

Years	Period	Rainier (12079000)		Years	E Street (12080010)	
		(cfs)	(cms)		(cfs)	(cms)
1949 – 2001	All data	24.0	0.68	1946 - 2002	64.1	1.8
1949 – 1969	Historical only	26.0	0.74	1945-1964	78.3	2.2
1991 – 2001	Recent only	21.4	0.61	1991-2001	56.3	1.6

In addition, SIT included the following in their public notice comments:

"The Clean Water Act does not allow Ecology to draw a bright line between its water quality and quantity programs. Rather, the Act requires "comprehensive solutions" to prevent, reduce and eliminate pollution in concert with programs for managing water; and (2) establishes the supreme goal of restoring and maintaining the chemical, physical, and biological integrity of the Nation's waters. Drawing a bright line is a prohibited "artificial distinction." PUD No. 1 v. Ecology, 511 U.S. 700, 719 (1994)."

To my knowledge, SIT has not explicitly requested that minimum in-stream flows be determined for the Deschutes River. However, such conversations are likely to arise or are already occurring.

Options for Moving Forward

Ex. 5 - Deliberative Process