



TMDLs in Olympia

Utility Advisory Committee

April 11, 2024



Clean Water Act Impaired Waters – 303(d)

- The federal [Clean Water Act](#) (CWA) requires that all states restore their water bodies to be “fishable and swimmable.” Section 303(d) of the CWA establishes a process to identify and clean up polluted water. Those waters WA Ecology determines to be impaired are placed on the “303(d) list” and are prioritized for future clean up.
- State Water Quality Standards are set by Washington State Department of Ecology to maintain designated uses: Aquatic life, Recreation, Drinking water supply, Miscellaneous.
- Categories of waters broken into 5 categories.
- Impaired Waters/303(d) list - Category 5 waters approved by EPA.



What is a TMDL

Total Maximum Daily Load – numerical value that represents the highest amount of a pollutant a surface water body can receive and still meet water quality standards.

A TMDL is a water clean up plan developed by the state and approved by EPA.

Developed with science (WQ data/monitoring, modeling and community/stakeholder input.)





What is the TMDL Process?

Washington State Department of Ecology Leads process:

- Loading capacity
- Load allocations
- Wasteload allocations
- Margin of safety
- Reserve capacity
- Seasonal variation
- Implementation Plan
- Monitoring plans
- Reasonable assurances
- Admin record
- Estimate of when water will meet WQ Standards





Deschutes River and Tributaries

- Process began in 2003 – WQ monitoring, modeling and stakeholder input.
- 2015 TMDL Plan submitted to EPA.
- 2018 EPA approved temperature portions of the TMDL.
- Disapproved bacteria, DO, fine sediment and pH.
- In August 2020, EPA finalized replacement TMDL elements for these parameters.



Deschutes River and Tributaries

Temperature approved June 2018.

Temperature – Deschutes River, Black Lake Ditch
and Percival Creek.





Budd Inlet

- Began process in 2016 (split off Deschutes and tributaries.)
- Approved by EPA December 2022.
- Dissolved oxygen impairment for aquatic life.
- Related items – nutrients and flushing/circulation.





Budd Inlet

Restoration of Capital Lake into an estuary by removing the 5th Avenue dam is the largest recommended clean-up action in the plan. The preferred alternative identified in the October 2022 EIS is removal of the dam and estuary restoration.





Budd Inlet

- External Sources of Nutrients - Nutrient General Permit, LOTT contribution minimal.
- Reduce N and C wasteloads 65-70% below 1997 loading (predates Municipal Stormwater Permits.)
- **Priority Areas** – prioritize sites within 100 feet of surface waters - for septic to sewer conversions, homeless encampment clean ups, cross connection identification.
- **Priority areas to address for Budd Inlet:** East Bay Drive, West Bay Drive and Deschutes Parkway, tributaries draining directly to Budd Inlet, with extra emphasis on Schneider Creek, Ellis Creek, Mission Creek, Moxlie Creek, Percival Creek, Black Lake, and Black Lake Ditch. Priority areas include all areas within 100 feet of surface waters.



Henderson Inlet

- Process began in 2002.
- Approved by EPA in January 2007.
- Multi Parameter –
 - Dissolved oxygen
 - Fecal coliform
 - pH and
 - Temperature
- Fecal coliform in Woodard Creek identified as a concern.





What Does Olympia Need to Do?

Budd Inlet – Dissolved Oxygen

- Report on nutrient reduction BMPs (March 2025)
- Analysis of nutrient loading from MS4 (Dec 2027)
- Develop and Implement BMPs (August 2028)
- Designate MS4 draining to Budd Inlet as high priority for IDDE.

*Municipal Stormwater Permit Appendix 2 (proposed for July 2024.)





What Does Olympia Need to Do?

Deschutes and Tributaries – Annual report on Temp reduction activities (Black Lake Ditch and Percival Creek.)

*Municipal Stormwater Permit Appendix 2 (proposed for July 2024.)





What Does Olympia Need to Do?

Henderson Inlet – Phosphorus control, FC monitoring , source tracing and enforcement at Taylor Wetland - coordinated with Lacey.

*Municipal Stormwater Permit Appendix 2 (proposed for July 2024.)





Resources

303(d) waters

<https://ecology.wa.gov/water-shorelines/water-quality/water-improvement/assessment-of-state-waters-303d>

TMDL Process

<https://ecology.wa.gov/water-shorelines/water-quality/water-improvement/total-maximum-daily-load-process>

Budd Inlet TMDL

<https://ecology.wa.gov/water-shorelines/water-quality/water-improvement/total-maximum-daily-load-process/directory-of-improvement-projects/deschutes-river-watershed-area-budd-inlet>

Deschutes and Tributaries TMDL

<https://ecology.wa.gov/water-shorelines/water-quality/water-improvement/total-maximum-daily-load-process/directory-of-improvement-projects/deschutes-river-and-tributaries>

Henderson Inlet

<https://ecology.wa.gov/water-shorelines/water-quality/water-improvement/total-maximum-daily-load-process/directory-of-improvement-projects/henderson-inlet-multi-parameter>

Proposed Municipal Stormwater Permit Appendix 2 (finalized in July 2024):

https://fortress.wa.gov/ecy/ezshare/wq/permits/MS4_2024_App2_CommentPeriod.pdf



Questions?

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