Getting to Clean Water

Clean water is vital for our quality of life – for both economic development and a healthy environment. Unfortunately, some waters are so polluted they need extra help. One of the primary tasks of the Washington Department of Ecology (Ecology) Water Quality Program is to identify and improve the quality of Washington's polluted streams, rivers, lakes, and marine waters.

Ecology uses a system of rules and policy, developed in compliance with federal and state law, to help guide improvements to water quality. Washington's citizens help with this by:

- Observing and measuring conditions in local streams.
- Participating on local groups that develop and implement water quality improvement plans, also known as total maximum daily loads, or TMDLs. TMDLs identify how much pollution needs to be reduced or eliminated to achieve clean water.
- Changing daily activities to produce less water pollution.

Water Quality Standards

The federal Clean Water Act proclaims a national goal that water should be "fishable and swimmable." To achieve this goal and meet legal requirements, Washington State has established water quality standards to protect the beneficial uses of our bays, inland seas, lakes, rivers, and streams. These beneficial uses include drinking water, recreation, and habitat for fish and other aquatic life.

The water quality standards address toxic chemicals, such as arsenic, and other pollutants, such as harmful bacteria. They also set limits on other conditions, such as the water temperature. Water that is too warm harms fish and other aquatic life.

Federal regulations require that states hold public meetings at least once every three years to review applicable surface water quality standards and, as appropriate, adopt new or modified standards. This process is called a "triennial review." In 2010, Ecology conducted this process. It held a series of public meetings and received written comments about how the water quality standards could be improved.

Ecology plans to post comments it received from its triennial review in early 2011. Ecology will then summarize and prioritize water quality standard activities (guidance development, education, rule changes, etc.) and announce

upcoming actions by summer 2011. Of particular interest is the fish consumption rate numbers used to determine toxics criteria limits for protecting human health. Fish consumption rates set many years ago by the U.S. Environmental Protection Agency (EPA) are outdated and do not reflect how much fish people eat, especially for tribal members and others who subsist on locally caught fish and shellfish. Ecology will engage tribes, EPA, and the public to explore whether new fish consumption rate numbers are needed in Washington, and if so, what assumptions should be used to establish those new limits.

To learn more about the water quality standards, visit our website at www.ecy.wa.gov/programs/wq/swqs.

Water Quality Assessment

The Clean Water Act established a process to identify and clean up polluted waters. Every two years, states are required to prepare a list of water bodies that do not meet water quality standards. This list is called the 303(d) list because the process is described in Section 303(d) of the Clean Water Act. All water bodies identified on the list must attain water quality standards within a reasonable period, either through a water quality improvement plan (also known as a total maximum daily load or TMDL) or other pollution control mechanisms.

To develop Washington's list of polluted waters, Ecology compiles its own water quality data and invites others to submit water quality data they have collected. Data that is acceptable must be collected and assessed using appropriate scientific methods that Ecology describes in its listing policy. Based on this data, Ecology updates its list and allows the public to review and comment on the list.

Ecology submits the results of the assessment to the EPA as an "integrated report" to satisfy federal Clean Water Act requirements. The list helps us use state resources more efficiently by focusing our limited time on water bodies that need the most work. The list of water bodies in the assessment reflects water quality problems in Washington, as recognized by local government, community, and citizens, demonstrating citizen interest and commitment to clean water.

As local watersheds implement their water quality improvement plans (TMDLs), Ecology removes water bodies from the polluted waters (303d) list. EPA approved Washington's latest list of polluted waters in January 2009. All water bodies identified on the list must attain water quality standards within a reasonable period, through either a water quality improvement plan (TMDL) or other pollution control mechanisms.

Some changes are scheduled over the next year. One is the changeover to match the latest mapping tools and capabilities available in electronic media. A re-sorting of data from freshwater listings is underway. This re-sort will be made available in 2011 to help the public understand how freshwater data will be sorted in the next assessment due to EPA in 2012.

Ecology is changing the schedule for conducting the water quality assessment and 303(d) listing process. Rather than assessing all waters every two years, Ecology is moving to assessments of

marine waters and freshwaters in alternating two-year cycles. The first split list will be an assessment of marine water data received prior to October 2009. This assessment will be submitted as the next candidate 303(d) list for marine waters to the EPA in 2011. The next freshwater candidate list is scheduled for 2012. To learn more about the water quality assessment, visit our website at www.ecy.wa.gov/programs/wq/303d/index.html.

Water Quality Improvement Plans (TMDLs)

Total maximum daily loads (TMDLs or water quality improvement plans) describe the type, amount, and sources of water pollution in a particular water body. The plans also analyze how much the pollution needs to be reduced to achieve clean water, and provide strategies to control pollution.

Ecology regulates point sources (pollution that generally comes out of a pipe or an activity that has a wastewater or stormwater permit) by placing limits on water discharges. For pollution from nonpoint sources (pollution that comes from many smaller, diffuse sources), Ecology works with other agencies, local governments, landowners, and citizens to identify and implement specific pollution controls or "best management practices."

As a result of a 1998 legal settlement, Ecology has a deadline of 2013 to develop and implement plans to address about 1,566 polluted water bodies throughout the state that were listed on the 1996 303(d) list. The settlement agreement established a schedule for completing the required water quality improvement plans by 2013. The schedule includes interim targets at five-year intervals.

Ecology achieved the first five-year target of 249 plans required by June 30, 2003, but it did not meet the 2008 schedule, and will not be able to meet the 2013 schedule. As a result, Ecology talked with both EPA and litigants about the best method and schedule for completing the remaining TMDLs. Many factors prevented Ecology from meeting the original schedule and will complicate our ability to meet any new schedule. Some of the challenges are:

- TMDLs have become more complicated and controversial as we implement stricter pollution limits to protect human health and threatened and endangered species.
- Information is not yet available that shows existing forest practices regulations are successfully mitigating the effects of forestry on water quality. The state expected that this information would address listings and count for 400 TMDLs. This has not happened.
- We delayed many difficult TMDL issues, such as toxics, waiting for new and simpler pollution control strategies, which are not yet in play.

In addition, every time Ecology issues a new list of polluted waters, we find more water bodies that need TMDLs.

In any given year, Ecology typically is working on approximately 100 TMDLs at various stages of development. We have improved water quality because of TMDLs, and by implementing practices we know how to protect water quality without a TMDL. In Eastern Washington, we

were able to count 84 TMDL "equivalents" because of the livestock management activities that local farmers are implementing. In Kitsap County, we were able to count 34 TMDL "equivalents" because of Kitsap County's Pollution Identification and Correction Program.

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For more information about what you can do to protect clean water, visit Ecology's clean water education website
"Washington Waters – Ours to Protect" http://www.ecy.wa.gov/washington_waters/

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