

Water Quality Improvement Projects

also known as **Total Maximum Daily Loads (TMDLs)**

**What should I know?
What does it mean to me?**

We all live in a watershed...

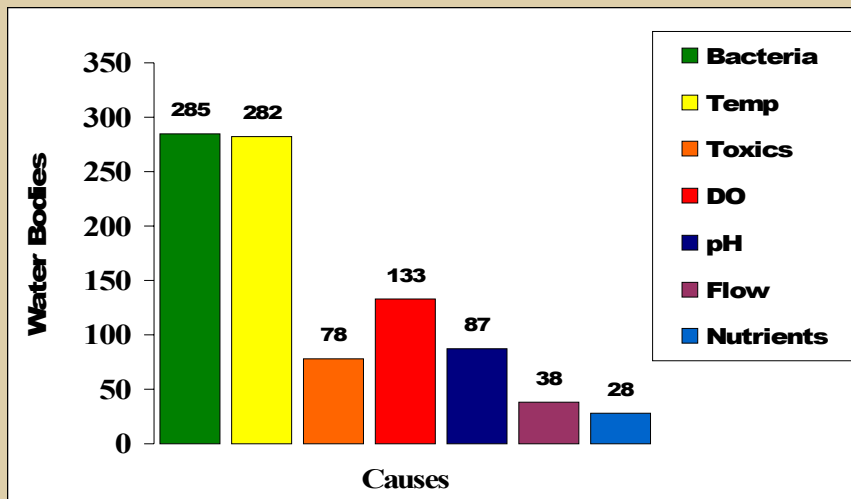


All land uses have an effect on our neighbors downstream.

The Department of Ecology works with local groups to develop water quality improvement projects for watersheds with known water quality problems.

What are the common water quality problems?

Water temperature and fecal coliform bacteria are the most common water quality impairments in Washington State. High water **temperatures** can harm fish spawning, growth, and adult migration. Although not necessarily agents of disease, **fecal coliform** bacteria indicate the presence of disease-carrying organisms.



*From 1998 list of impaired waters

Waters may be impaired for other reasons such as excess nutrients, low dissolved oxygen (DO) levels, presence of toxic substances, and pH levels that are too high or too low.

The ways we use water can be impacted by these water quality problems. The ways humans, animals, and aquatic life use water are called beneficial uses. Examples of beneficial uses include drinking, swimming and fishing, livestock watering, and aquatic habitat.

What are water quality improvement projects?

The terms water quality plan, water cleanup plan, and total maximum daily load (TMDL) are all used to describe the same thing - a process undertaken with local organizations and citizens to reduce water pollution.

These plans describe the type, amount, and sources of water pollution in a water body; how much the pollution needs to be reduced to meet water quality standards; and targets to control the pollution. They also include suggested activities to improve water quality.

Why are they developed?

The federal Clean Water Act of 1972 requires states to:

- Set water quality standards to protect beneficial uses;
- List waters not meeting those standards; and
- Develop water quality plans or TMDLs to correct the pollution.

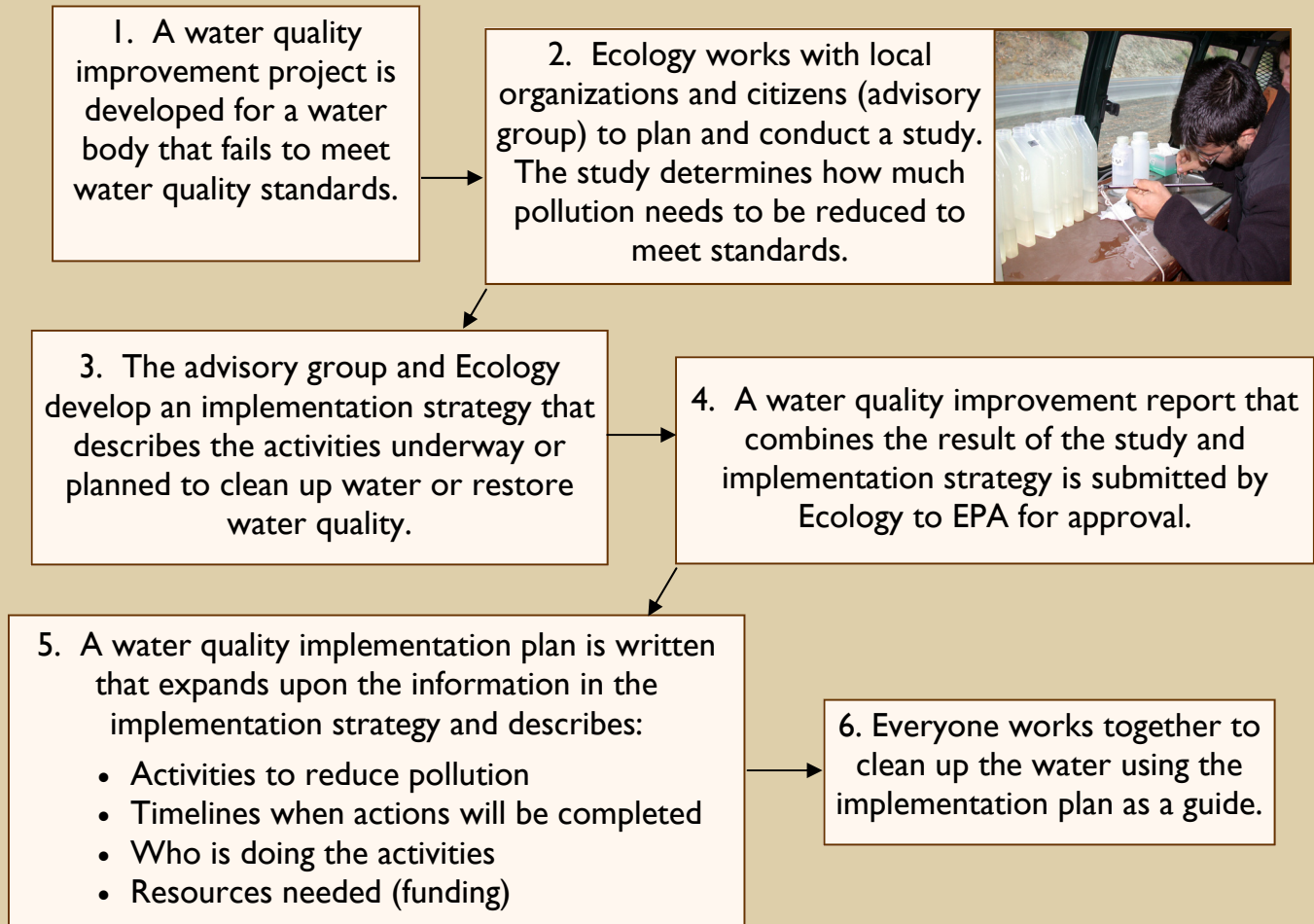
In the 1990s, various environmental groups sued individual states and the Environmental Protection Agency (EPA) for not making adequate progress on water quality plans.

In Washington State, the Department of Ecology, EPA, and the environmental advocacy groups came to an agreement on how Ecology would proceed with water quality plans to address impaired waters.



photo courtesy Spokane County Conservation District

What is the water quality planning process?



What does it mean to me?

- Nearby streams may likely be part of a study.
- You are invited to provide input to this process. Other citizens, agencies, and organizations may also be involved.
- You can help be part of the solution to restore water quality.
- Permits for wastewater treatment plants may need updated and ordinances may be adopted by local governments after EPA approval of the TMDL report.

Where do I find more information?

- Frequently Asked Questions about TMDLs
<http://www.ecy.wa.gov/biblio/0310068.html>
- Working Together to Achieve Clean Water: A Progress Report
<http://www.ecy.wa.gov/biblio/0310065.html>
- Washington State Department of Ecology TMDL website
<http://www.ecy.wa.gov/programs/wq/tmdl/index.html>
- Examples of implementation activities
<http://www.ecy.wa.gov/biblio/0410068.html>



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What should I know?
What does it mean to me?

Almost everything we do when we are at home, work, or play has the potential to cause water pollution.