



# Focus on **Water Cleanup Plans**

Water Quality Program

## **Total Maximum Daily Loads (TMDLs)**

### **Why develop water cleanup plans?**

Clean water is vital for our quality of life - for both economic development and a healthy environment. Unfortunately, some water bodies are so badly polluted they need extra help. Total maximum daily loads (TMDLs or water cleanup plans) describe the type, amount, and sources of water pollution in a particular water body; analyze how much the pollution needs to be reduced to achieve clean water; and provide strategies to control pollution.

The federal Clean Water Act requires states to prepare a list of water bodies that do not meet standards for ensuring the water is healthy for such uses as fish and wildlife habitat, agricultural water supplies, and recreation in and on the water. All water bodies identified on the list must attain water quality standards within a reasonable period, either through a water cleanup plan or other pollution control mechanisms.

### **What is the schedule for Washington's cleanup plans?**

As a result of a 1998 legal settlement agreement, the Department of Ecology (Ecology) has been given a deadline of 2013 to develop and implement plans to clean up 1500 listings that apply to about 650 polluted water bodies throughout the state. Most listed water bodies are affected by more than one pollutant. Ecology is working with local governments, businesses, and citizens to develop solutions to improve water quality.

### **Who is responsible for implementation?**

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 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."

### **How is the cleanup of waters progressing?**

In 1998, the settlement agreement established a schedule for completing 1500 required water cleanup plans by 2013. The schedule includes interim targets at five-year intervals. We achieved the first five-year target of 249 cleanup plans required by June 30, 2003.

We have learned a lot from the cleanup plans we've already done, and we are now implementing some new strategies because of what we've learned. These include addressing all pollutants in a watershed at one time, standardizing procedures and reports, and capitalizing on partnerships. In addition, future cleanup plans will benefit from working with existing committees and with

entities that now have experience in the process. This experience should allow communities to move more quickly to take action to improve water quality. In any given year, Ecology is typically working on approximately 100 cleanup plans at various stages of development.

## Is water quality improving? – Examples of success

### Western Washington

State and local partners in the Nooksack River basin went into action with a water cleanup plan to reduce fecal coliform bacteria in 1998. Actions included working with dairy farms and small farms with horses or beef cattle, analyzing on-site septic systems, and monitoring to measure the effectiveness of the actions. Since 1998, fecal coliform bacteria have been reduced 63 percent in the Nooksack River and between 40 percent to 80 percent in all of its major tributaries. As a result of the work to date, shellfish beds in Portage Bay have experienced improved water quality that is expected to lead to meeting Department of Health shellfish sanitation standards. The Nooksack River and all of its major tributaries are on an improvement path that should lead to meeting water quality standards by June 2005.

### Eastern Washington

Ecology, in partnership with the Yakama Nation, has finished the first season of effectiveness monitoring of the Lower Yakima River mainstem. The Lower Yakima River was polluted with pesticides and sediments. Data indicate that the second half of the irrigation season (late June through October) is meeting the targets of the Lower Yakima River suspended sediment and DDT water cleanup plan. Water Quality improvement is the result of significant work by the Roza and Sunnyside irrigation districts and individual landowners to improve irrigation practices. This year's full season of monitoring should provide a more thorough assessment.

### Others

There are other areas where we are seeing better water quality as a result of TMDLs. Some examples include improved shellfish operations as a result of reduced bacteria counts in the Chehalis and Stillaguamish Rivers. Fish habitat improvements are resulting from implementation of the Simpson Timberlands temperature TMDL on the Olympic Peninsula. Local groups are hard at work maintaining the phosphorus levels in Lake Chelan. In addition, wastewater treatment plant upgrades, streamside plantings, pet waste control, fencing, and culvert fixes are happening all over the state. We are pleased with these actions and are working to expand local involvement and the number of water bodies seeing improvements statewide.



#### Before

Animals have access to the salmon stream.



#### After

Cleanup plan work included fencing the riparian area and restoring the stream banks with native vegetation.

## Where will we begin working this year?

Each year, Ecology evaluates the need for water cleanup plans in various parts of the state. Decisions on which plans are to be completed next are made with the help of local communities.

Regional Office	WRIA	Primary Location	Water Body(s) Name	Pollution Problems
CRO	37 – 38	Yakima County	Yakima urban area creeks in the Moxee and Wide Hollow Creek watershed	Fecal Coliform (bacteria)
CRO	38	Yakima County	Naches River and Tributaries	Temperature
ERO	34	Whitman County	NF Palouse River	Fecal Coliform
ERO	55	Spokane County	Little Spokane River	Dissolved Oxygen, pH; Fecal Coliform, Temperature
ERO	56	Spokane County	Hangman (Latah) Creek	Dissolved Oxygen, pH, Fecal Coliform, Suspended Sediment, Temperature
ERO	58 – 62	Stevens County	Colville National Forest water bodies	Temperature, Fecal Coliform
ERO	62	Pend Oreille	Pend Oreille River	Total Dissolved Gas, Temperature
NWRO	1	Whatcom Co	Whatcom Creek	Temperature
NWRO	5	Snohomish County	Old Stillaguamish Channel in Stillaguamish River watershed	Dissolved Oxygen, pH, Fecal Coliform
NWRO	8	King County	Lake Washington, Lake Sammamish, Lake Union, Cedar River, Sammamish River and numerous creeks	Fecal Coliform, Temperature, Dissolved Oxygen, pH, and others (see*** below)
NWRO	8	King County	Issaquah, and Tibbets Creeks, south end of Lake Sammamish	Fecal Coliform
NWRO	9	King County	Green & Duwamish Rivers; Big Soos, Crisp, Newaukam, Springbrook, and Mill Creeks	Fecal Coliform, Temperature, Dissolved Oxygen, pH, and others (see* below)
NWRO	9	King County	Longfellow and Des Moines Creeks	Fecal Coliform
SWRO	14	Mason County	Oakland Bay, Little Skookum/Totten	Fecal Coliform (see ** below)

**WRIAs – Water Resource Inventory Areas or watersheds**

**\* Potential TMDLs in partnership with King County DNR’s Green/Duwamish Water Quality Assessment (WQA) project.**

**\*\* Scope could be expanded to cover additional parameters such as dissolved oxygen if data assessment warrants.**

**\*\*\* Potential TMDLs in partnership with King County DNR’s Sammamish, Washington Ambient Monitoring Program (SWAMP).**

## **What is planned for next year? (Fiscal 2005)**

We are gathering initial information in the following counties to identify water bodies needing water cleanup plans for fiscal 2005:

- Western Washington: Island, King, Pierce, Snohomish
- Eastern Washington: Franklin, Lincoln, Okanogan

## **Future considerations**

Ecology is working with many local, state, and federal agencies to meet the water cleanup plan schedule and improve the health of Washington's waters. We are partnering with the EPA, U.S. Forest Service, U.S. Navy, King County Department of Natural Resources, and numerous local governments to clean up specific water bodies of special interest to those agencies. We are also exploring internal efficiencies and actively seeking additional partnerships with local governments and citizens to help complete water cleanup plans and attain better water quality statewide.

For more information, please contact:

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