

Wetland Protection in Region 10

But wetlands are only one element of the aquatic ecosystem. Streams, lakes, estuaries and even deep marine waters are also threatened in many ways. Region 10 of the Environmental Protection Agency (EPA) seeks to protect all of these aquatic systems throughout the states of Alaska, Idaho, Oregon and Washington. Frotecting wetlands and other aquatic habitats from the physical disturbance that occurs from such activities as filling, draining, damming, dredging and clearing is the responsibility of the EPA's Wetlands Section.

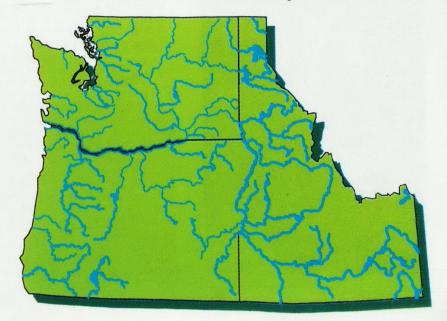
This brochure highlights some of the approaches EPA is pursuing to make protection of aquatic systems, particularly wetlands, effective, fair, and efficient. If you would like additional information about EPA's Wetlands Protection Program, please call the Wetlands Section at (206) 553-1226 or call the EPA Wetlands Hotline at 1-800-832-7828.

When it comes to the environment, there are few topics that spark as much controversy as wetlands. With about 75% of all wetlands in private ownership, many landowners are surprised and sometimes dismayed to find that the soggy piece of ground they own is subject to regulation by the federal government. Most wetlands, on private or public land, are considered waters of the United States and are subject to regulation under the federal Clean Water Act. This regulation includes the requirement to obtain authorization from the Army Corps of Engineers before filling, draining, or clearing a wetland.

Why does the Clean Water Act apply to wetlands? There are many reasons. In addition to supporting many species of wildlife, including migratory birds and 43% of all endangered species, wetlands play a vital role in soaking up heavy rains to help prevent flooding. They also help improve water quality by removing sediments, nutrients and some chemical contaminants as water filters through them. Such valuable functions make wetlands important to society as a whole.

Unfortunately, over half of all the wetlands in the lower 48 states have already been lost and estimates of current losses are as high as 300,000 acres per year. The goal of the Clean Water Act is to "maintain, preserve and restore the chemical, physical and biological integrity of our nation's waters." With respect to wetlands, that goal translates to seeking "no net loss" of wetlands in the short term and a **net gain** in the long term.

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Regulatory Actions

A key responsibility of the Wetlands Section is to ensure compliance with Section 404 of the Clean Water Act, which regulates the discharge of dredged and fill material into waters of the United States, including wetlands. In Region 10, EPA reviews between 800

and 1,200 permit applications each year.

When necessary, EPA takes enforcement action to rectify unpermitted fills or discharges of dredge material. The EPA shares enforcement responsibility with the U.S. Army Corps of Engineers and cooperates with local and state governments that have aquatic resource protection programs. This collaboration helps assure acceptable resolutions are reached in the most efficient manner. The goal of the EPA enforcement program is to reduce the number of violations in each state by 90 percent by the year 2000.

Restoration

Many wetlands have been degraded in the past, by diking, draining, polluting, or otherwise altering the area. There are abundant opportunities to restore these wetlands and restoration has become a national and regional priority for EPA. An aggressive restoration program is essential in order to meet EPA's long term goal of net gains in both

wetland acreage and wetland function.

Initial efforts have been focused on identifying wetland restoration opportunities in Region 10. Using this information, demonstration projects for various habitat types have been developed. Research is being conducted on restoration and assessment techniques and monitoring protocols have been developed. The Wetlands Section is helping to build coalitions for implementing large scale restoration projects and provides technical assistance to state and local governments, tribes, and individual citizens.

The Wetlands Section works with other programs in EPA to focus restoration efforts on entire watersheds, including restoration of degraded streams and riparian habitats. A watershed protection approach is essential to developing sound and sustainable aquatic

ecosystems.

Key Project: Skokomish Estuary Restoration



Wetland Conservation Planning

Because wetlands are important natural resources, it is generally preferable to address wetland conservation on a large scale such as a watershed, as opposed to case by case permitting. Such an approach allows decision makers to see how individual wetlands contribute both individually and collectively to the overall functioning of the watershed. Management decisions can then be made as part of the land use planning process to assure that the overall integrity of aquatic systems are maintained while providing predictability for wetland owners within the planning area. Permit decisions for activities that are consistent with an approved wetland conservation plan can then be made in a much more expedited fashion.

Region 10 currently provides funding and technical assistance for about twenty local wetland conservation plans. These plans are being developed in conjunction with statewide wetland conservation plans which, in addition to developing guidance for communities engaged in the local planning process, seek to develop more efficient ways of conducting case by case

permitting.



Ken Bierly (left), Oregon Wetlands Program Manager, meeting on site with city of Eugene staff and consultants to discuss wetland inventories and conservation planning. (Hugh G. Barton Photo)

Key Project:

The West Eugene Wetlands Management Plan, funded in part by the EPA Wetlands Section, is a comprehensive strategy for achieving no net loss within the planning area. The plan has identified all of the area's wetlands and assigned relative priorities to them. The plan identifies wetlands to be preserved, wetlands to be restored and certain very low value wetlands that could be developed.



The Skokomish Indian Tribe used an EPA grant to plan the restoration of an intertidal marsh located on their tribal lands. This project is part of a larger watershed restoration project.

Public Education

An informed citizenry is essential to realizing wetland protection goals. The more knowledgeable individuals are about the values and functions of wetlands, the more motivated and effective they will be at protecting wetlands on a local level. Because wetlands are privately owned, EPA strives to promote good stewardship among wetland property owners. The Wetlands Section has sponsored a number of projects, both directly and indirectly, to help achieve these goals. Outreach programs include production and dissemination of various types of wetland information including videos, brochures, guide books, and newsletters. The Wetlands Section is also involved in developing citizen networks, training citizen groups and local governments, and participating in conferences and forums. While there are federal and state regulations protecting wetland resources, these outreach efforts encourage local groups to take an increasing role in protecting the wetlands and aquatic resources in their own backyards.

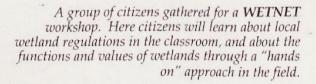


David Douglas High School students looking tired yet triumphant after a hard day's work removing trash from a wetland near their school in the Portland, Oregon area.

Key Projects:

The Urban Streams Council, with the help of EPA funding, has been working with schools and citizen groups in the Portland area to protect and restore urban watersheds.

WETNET is a group, funded in part by EPA, that works directly with the public through workshops, field trips, and educational presentations on wetland issues in the state of Washington.





Sediment Quality

Sediments are a critical part of any aquatic system since the bottoms of lakes, streams and marine waters support abundant plant and animal life that are often the basis of an intricate food web. The Sediment Management Unit (SMU) within the Wetlands Section has distinct projects and responsibilities that relate to many programs within the EPA. Their motto, similar to the National Wetland's "no net loss" challenge, is a goal of "no significant adverse effects." The unit reviews all dredging and ocean dumping permits and designates, monitors, and manages many sites for dredged material disposal. The SMU coordinates beneficial uses of dredged material for capping and other sediment projects in order to help control pollutants or enhance natural recovery. The SMU is involved in habitat creation, enhancement of aquatic resources, and restoration.

Key Project:

Jetty Island Habitat Creation

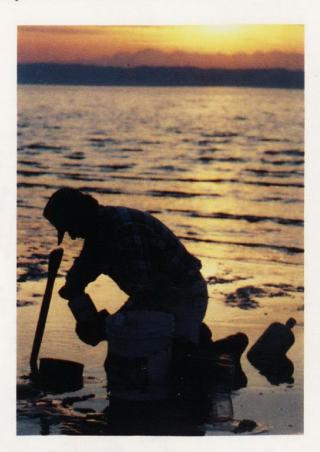
Sediment sampling being done on the Jetty Island habitat creation project

There is a tremendous need for more information on the evolving science of wetland ecology

Developing the Science

Wetlands have only recently been given the recognition they warrant as an important aquatic resource. For this reason the science of wetlands is relatively new and although much is known about wetland functions and values there is a tremendous need for more information. With many wetlands and other aquatic resources located on private land and in urbanized settings, it is critical to understand the effects of human activities on the health of these ecosystems. Many studies have been funded to expand this





knowledge and to generate a practical understanding of the best way to use, restore, and most importantly, protect wetlands and aquatic resources.

Key Project: Tundra Research in Alaska

Evaluation of restoration techniques at an abandoned oil drill pad in Alaska. Transplants of tundra are placed in greenhouses and the growth and survival is compared with less protected transplants.



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