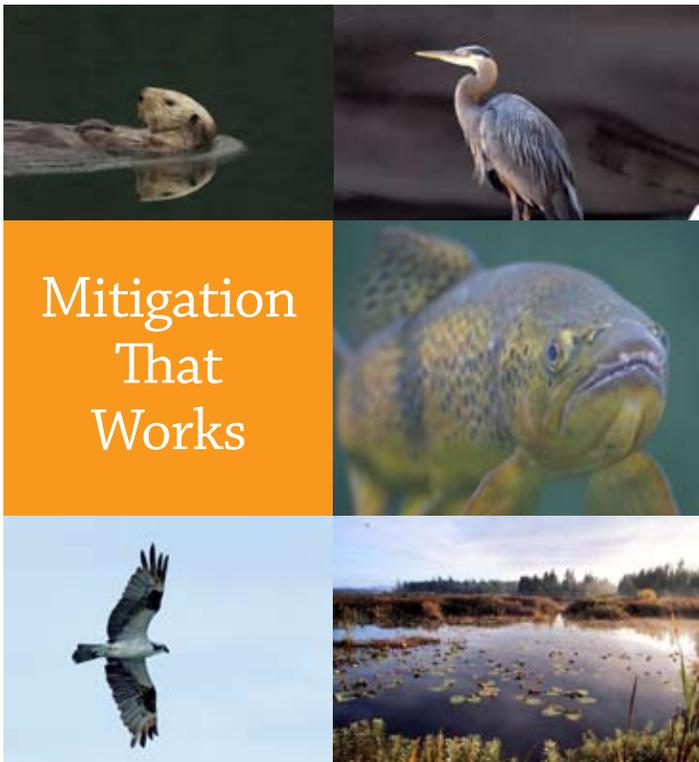


ISSUE UP CLOSE:



Sustaining our remaining wetlands for people, fish and wildlife



Habitat

Why it matters to people and the environment

Habitat is essential to life. People, fish and wildlife all need places to live – food, water, shelter and space. The capacity of any acre of landscape to sustain fish and wildlife is finite (this is called carrying capacity), so the loss of habitat translates into a loss of fish and wildlife.

Certain habitats are especially critical for fish and wildlife, and for sustaining vibrant communities and healthy economies. Among these are wetlands, estuaries, streamsides and shoreline areas. Wetlands, for example, provide many benefits to people and communities because they filter pollutants from the water, provide fish and wildlife habitat, store flood waters, recharge aquifers and maintain surface water flow during dry periods. In Washington, over half of our fish and wildlife depend on wetlands at some time in their lives. Coho salmon, great blue herons, eagles, osprey, a variety of ducks, hawks, song birds and frogs are but a few examples of the wildlife that depend on our wetland resources.

In the 1970s, Congress and the Washington State Legislature adopted clean water laws to protect the health of people, communities and the environment. Our clean water laws recognize the critical role of wetlands – marshes, bogs and similar places – and guide public agencies and private landowners as we work to preserve, protect, and restore them.



Mitigation

Minimizing damage and offsetting losses when damage is unavoidable

In 1780, the estimated area of wetlands in Washington state was over 1.25 million acres. In 1982, the last year for which we have reliable data, there remained approximately 938,000 acres of wetlands. This represents a 31 percent loss of our wetland resources, and the data is more than 20 years old. Since 1982, Washington's population has grown by two million people, adding the equivalent of ten new cities the size of Spokane or Tacoma, and inevitably impacting more of our wetland resources.

Wetlands are so important and so diminished that now, when land is converted for road building and commercial and residential expansion the law requires mitiga-

tion so that the wetlands continue to do their vital work for people, communities and the environment of Washington. State and national policies now require no net loss of wetlands.

The first and most important principle of wetland mitigation is to avoid damaging a wetland. Some projects, however, can't avoid this impact. A road-widening project that will reduce collisions and save lives is a good example of a project that may not be able to avoid degrading or destroying a wetland.

In a case like this, mitigation means finding ways to replace the function and value of the wetland being damaged, either by enhancing, restoring, or even creating a new wetland. This is called compensatory mitigation.

The problem with mitigation

The problem with wetland mitigation is that current mitigation practices just don't work: They don't work for permit applicants; they don't work for the agencies that issue the permits; and they certainly don't work for the environment. Here's why:

- On-site mitigation – replacing or rebuilding a wetland on the same site – is not always the best solution to replacing the function and value of a wetland, and yet on-site mitigation has been the established practice for many years.
- Most builders and developers are not in the business of building – let alone maintaining – wetlands, nor do they want to be in this business.
- Inefficiencies in permitting often cause costly construction or development project delays.

- Wetlands mitigation permits are issued on an individual, case-by-case basis, and local, state and federal agencies are confronted with multiple planning and permitting responsibilities.
- Several studies by local, state and federal agencies revealed poor compliance and success rates for mitigation projects. For example, Ecology found that only 46 percent of wetland mitigation projects were partially or fully successful.
- Many mitigation projects are never done at all. Federal, state and local environmental agencies' wetland mitigation staff struggle to just keep up with the new applications and have little or no time to monitor compliance.

The bottom line: *Our traditional mitigation approach isn't working.*

The good news

“Win-win solutions” are increasingly available in Washington

In response to these problems, the Washington Department of Ecology, the Army Corps of Engineers and the U.S. Environmental Protection Agency have issued new guidance that encourages flexible solutions to restore or replace wetlands. The new guidance provides predictability and consistency by aligning the federal and state environmental agencies’ requirements and expectations for how wetlands are managed in the face of construction projects.

Not only does the new joint guidance improve consistency between agencies, but it also saves applicants time and money by clearly outlining what information needs to be provided to the permitting agencies.

One solution uses a watershed-based approach that accounts for the needs of fish, wildlife and people within a particular watershed instead of being narrowly focused on one particular piece of real estate.

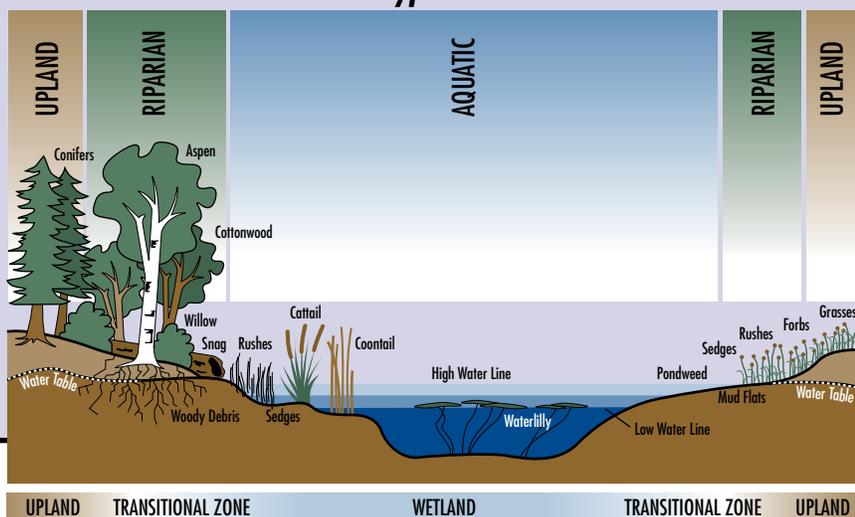
Identifying areas within a watershed that are critical to overall health allows land-use planners to prioritize areas that are best enhanced, preserved, or restored. Doing this can also tell us where mitigation will, and won’t produce the needed result. For example, an affected wetland that has historically provided flood storage, or nutrient filtering, should be replaced by a mitigation site that performs the same functions, within a watershed that can support and sustain those functions. Using a watershed-based approach allows this determination to be made and improves the overall effectiveness of the mitigation.

Using this flexible approach, builders and developers will have more options for offsetting the negative impacts of their projects. This approach gives greater emphasis to locating replacement wetlands where they will do the most good and where they will be the most sustainable over the long term, based on an analysis of watershed health.

While this watershed-based approach provides considerable flexibility to improve mitigation practices, environmental protection standards will not be compromised and mitigation costs will not increase for developers.

This flexible, watershed-based approach will create increasing opportunities for win-wins – positive results for people, and positive results for the environment. Landowners, developers, and road builders will gain more certainty and predictability regarding the location of, and cost for mitigation. Local governments will be able to adapt their local ordinances to be consistent with the new state and federal guidance and know that they are using the most current and best available wetland science. And Washington’s fish and wildlife – and the watersheds we all depend on – will be healthier.

A Typical Wetland



Watershed Characterization

Research shows that efforts to protect wetlands can be more successful if they incorporate scientific knowledge about how watersheds work. To help local communities and natural resource managers better protect wetlands and other aquatic ecosystems (lakes, rivers and estuaries), Ecology has developed a “watershed characterization” tool. This tool can help communities identify areas within a watershed that are important to the health of its wetlands, rivers and lakes.



Among other things, the watershed characterization tool allows us to identify and prioritize areas within specific watersheds where wetlands can still be successfully restored to help sustain the watershed’s fish and wildlife diversity, water filtration and capacity to absorb flood waters.

As of September 2006, Whatcom, Jefferson and King counties are using the watershed characterization tool to develop important, watershed-specific information to help guide local land-use planning.

This information also can be useful to local jurisdictions when a wetland will be unavoidably destroyed or degraded. Watershed characterization helps identify land well suited for wetland restoration within that same watershed – land where they can re-establish fish and wildlife habitat, water filtration and flood buffering capacity that may be lost to development.

For more information on Watershed Characterization, click on <http://www.ecy.wa.gov/biblio/0506027.html> on the Ecology Web site, or contact Stephen Stanley at 425-649-4210.

Wetland Banking

One of the more innovative strategies for Mitigation that Works

A wetland bank is a pre-existing wetland restoration project specially licensed by the state Department of Ecology, the U.S. Corps of Engineers and the appropriate local government agency. The banking initiative does not change environmental review standards that protect against

the loss of wetlands. Instead, it acknowledges that on-site mitigation is not always the best way to meet or exceed these environmental standards.



North Fork Newaukum Mitigation Bank: Site inspection to ensure the bank is meeting its performance standards.

Photo courtesy Washington State Department of Transportation

Wetlands banks as a mitigation tool are private transactions involving a willing buyer and a willing seller. Banks are most

likely to be private property, and the land remains part of the local tax base. Developers and road builders benefit because, rather

than construct their own mitigation projects to compensate for wetland losses, they have the option of purchasing acreage “credits” at a wetland bank in the same watershed. If given the option, many developers and road builders welcome the opportunity to meet their mitigation obligations by purchasing credits from a wetland bank instead of building and maintaining their own wetland.

Ecology’s wetland banking pilot program enables investors to create privately owned banks to serve particular watersheds. The banks typically will restore larger areas and in turn create better-integrated systems for habitat and water quality than is possible with smaller, scattered projects. The banks must provide ongoing maintenance and monitoring for 10 years or more to ensure their wetland restoration projects succeed. After that, a bank must permanently preserve its wetland site through a conservation easement.

Although wetland banking is not entirely new to Washington – some local governments and state agencies have established

wetland banks for their own projects – the state’s wetland bank initiative is improving



Wetland banks help us achieve “no net loss” of our valuable wetland resources.

on the concept, making changes based on lessons learned, and making wetland

banks available in more areas of the state.

Lake Stevens School District

A “win-win” case study

In 2006, the Lake Stevens School District’s new Mid-High School became Washington’s first development project to receive approval to purchase wetland credits under the state’s wetland banking initiative.

Impacted wetlands at the future site of Lake Stevens Mid-High School.



To accommodate rising enrollment, the Lake Stevens Mid-High

School will house 1,500 students in a 224,000 square foot building on 37 acres. The project will unavoidably cause the loss of about half an acre of on-site wetlands. Rather than have to engineer and maintain a small replacement wetland, the school district received approval

Lake Stevens Mid-High School: First development project approved to purchase credits under the new wetland banking initiative.

to purchase a six-tenths credit (approximately 1.2 acres of wetlands) at a 225-acre privately owned wetland bank project near

Monroe. There is a size difference in the wetlands lost on-site (.5 acres) and the acreage credit purchased through the



bank (1.2 acres). This is because in these two specific wetlands, the equivalent value and function of the original wetland can only be maintained (the goal of “no net loss”) by increasing the amount of wetland acreage restored offsite.

The role of environmental agencies in mitigation

The role of federal, state and local environmental agencies in mitigation is to evaluate and determine whether a proponent's mitigation plan would adequately replace the wetlands that will be damaged or destroyed by a proposed project. The environmental agencies don't select sites for mitigation, nor do they participate in negotiations for acquiring the mitigation site nor direct a proponent to a specific site.

Early Stage of Wetland Resoration:
Recently planted saplings taking root at the Snohomish Basin Mitigation Bank.



Wetland mitigation and farming

Wetlands mitigation and farming can be compatible uses of Washington's landscape. The Department of Ecology does not support forcing farmland out of production to provide land for mitigation projects.

Specific agreements with neighbors limit how a wetland bank can affect nearby farms. For example, water from a wetland bank cannot back up onto neighboring fields. In fact, a healthy wetland actually protects downstream landowners by buffering the effects of floods, filtering fecal coliforms and other pollutants from water, and reducing the need for cleanup after floods. Like farmland, a wetland mitigation bank is usually privately owned and remains part of the local tax base and contributes to the local economy.

This Snohomish Basin bank sold Lake Stevens School District banking credits to mitigate for the loss of wetlands.





Specific ways we are working with the agriculture community on wetlands

Draft policy statement for the Agricultural community

Ecology is working to ensure that wetland banks are compatible with maintaining viable and productive farmland. Members of the agriculture community have told us their concerns about the ability of wetland mitigation banks and agriculture to co-exist. They have expressed concerns about the potential of wetland banks to increase flooding, causing a loss of agricultural production due to high water tables, and affecting drainage in and near wetland banks.

Ecology agrees that proposed wetland banks and their effects on farmlands are important and need to be carefully considered during our early evaluation of the proposals. We consider agricultural concerns to be a key consideration in evaluating wetland banking proposals. We want to work with the agricultural community and the project proponents to ensure that bank proposals are consistent with maintaining viable and productive farmlands.

Ecology has determined that putting proposals out for review earlier than what is required by the Clean Water Act is one way of working with the community. Receiving public comments and suggestions at an ear-

lier stage allows the applicant and Ecology to include these important discussions into the project design and development. More importantly, good ideas can be included in the final design decisions.

During the review of bank proposals, Ecology works with local agencies to ensure that proposals comply with local land use regulations. The draft rule for wetland mitigation banking (Washington Administrative Code (WAC) 173-700) provides for local agencies to participate on the mitigation bank review team. This team convenes to review technical issues and negotiate with the sponsor on the terms and conditions of the bank agreement. The local jurisdiction(s) must approve the final banking agreement before Ecology will issue any permits or authorize any agreements. The intent of this process is to ensure that bank proposals are in accordance with Growth Management Act requirements and other local regulations.

Ecology is committed to taking concerns about wetland banking and potential impacts to agriculture into account when reviewing bank proposals and working with the local environmental review agency.

To provide comments, contact Gretchen Lux by phone at 360-407-6861 or by email at glux461@ecy.wa.gov.



Washington State Department
of Fish and Wildlife



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Wetlands and Climate Change

Now more than ever, it is critical that we do everything we can to protect our wetland resources. As the effects of global warming become more apparent, the value of – and the threat to – our wetlands increase.

Not only do wetlands and their surrounding areas do their part to absorb the carbon dioxide that is heating up the planet, but they also provide an efficient method of absorbing the additional water that will result from more frequent and powerful storms. The natural water storage capacity of wetlands will also help recharge aquifers and keep our streams from drying up during the summer drought periods.

Ecology will continue to work diligently with our partners to address these important and changing circumstances. With mitigation that works, we can better sustain our wetlands and all they do for people, communities and the environment of our state.

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