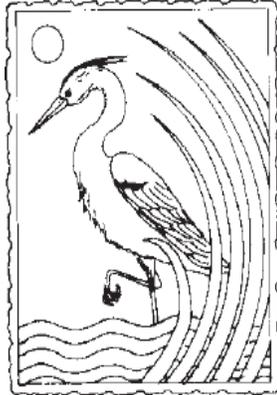


Homeowners' Guide to Wetlands & Buffers

Adapted from *At Home with Wetlands – A Landowner's Guide* (Publication #90-31)

Wetlands are important features of our landscape and bring economic benefits to communities. If a community had to build flood control or water treatment systems to replace functions provided by wetlands, the costs could far outweigh the cost of preserving the natural wetland systems.



Many people don't realize that healthy wetlands are among the most productive ecosystems on the planet, comparable to rainforests and coral reefs. Wetlands are part of a diverse and complex set of ecosystems that are vital to Washington's economy and an important part of our natural heritage.

General Protection

As a homeowner you play a big role in wetland protection and health.

Protecting a wetland doesn't necessarily require additional effort on your part. Often times it is what you don't do that is important. If your wetland is not already degraded, your most effective protection strategy may be as simple as guarding it from activities that will damage it. This means maintaining a buffer (protective zone) around the wetland and protecting the water and plants within the wetland.

Regulations

Wetlands are protected by local, state, and federal laws. There are certain uses and activities that are restricted in wetlands, such as filling and grading. Check with your county or city planning department to find out what those specific uses and activities are. You can also refer to the local

critical areas code to find out the allowable uses and activities within wetlands and associated buffers. If your property is on a shoreline you should refer to the local shoreline master program for allowed uses and modifications.

If there is a wetland mitigation site on your property, it is likely that there was a Department of Ecology Water Quality Certification or a U.S. Army Corps of Engineers Clean Water Action Section 404 Permit issued for the property. You should refer to the permits for specific conditions that apply to the wetland mitigation site.

If you have questions, visit the Department of Ecology's Wetland Contacts website to find the Wetland Specialist for your county:

<http://www.ecy.wa.gov/programs/sea/wetlands/contacts.htm>

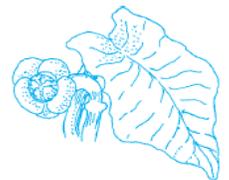
Septic Systems

Septic systems are a source of pollutants to wetlands. Be sure your septic system is operating properly. If you notice the area over your drainfield is particularly green or if you can smell sewage during rainy periods, then your system is not working properly. Seepage from your system may be polluting nearby areas, including your wetland. To avoid this problem, have your septic system pumped and inspected every three to five years.

Clearing and Mowing

Many homeowners mistakenly clear brush, mow grass, or both within the buffer area and sometimes directly in wetlands.

These activities adversely affect the soil structure, the type of plants that grow in the area, and the density and overall health of the vegetation. These changes in turn affect wetlands' filtering capacity, flood control capabilities, water recharge, and wildlife habitat.



Many wildlife species need a complete noise and visual barrier from civilization. Even clearing a small swath through the buffer to allow better visibility or access to the wetland creates

problems, especially if the wetland is located near homes or development. Imagine living near a busy street with only a thick hedge protecting you from the noise and disruption. Removing just a small portion of the hedge would increase the noise you hear and decrease your privacy.

Using Chemicals

Fertilizers and pesticides (plant and insect killers) represent a potential threat to your wetland. If they are used on adjacent or upstream lawns or farmland it is likely they will eventually enter local waterways and your wetland. These chemicals alter the ecological balance of wetlands and can indirectly create many problems for you. For example, certain pesticides will eliminate important bugs and insects that work in the wetland. You might not notice the loss of these “pests,” but perhaps an algae bloom will take over the pond because the insects and microscopic life that may normally have controlled the algae are no longer there. There may also be fewer songbirds because their food source (the insects) is gone.

Likewise, additional nutrients from fertilizers will cause extensive plant growth. These plants will eventually decay, and use up oxygen that is necessary for aquatic life. The result is likely to be a stagnant, smelly wetland.



There are safe alternatives to using fertilizers and pesticides. Contact your county WSU Extension Office or visit the Department of Ecology’s Yard Care website:

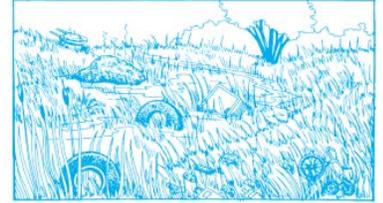
http://www.ecy.wa.gov/washington_waters/yard_care.html

If you do use fertilizers or pesticides, follow manufacturers’ directions carefully. Do not apply more than is recommended. Apply them only during periods of dry weather when you can be assured they will not wash away with the next rainfall. (Note: Dry weather in this context means a few days without rain. Most fertilizers should not be applied during periods of prolonged dry weather because they may harm vegetation under very dry conditions.)

To protect your wetland it is best to establish a chemical-free zone that surrounds your entire wetland and any streams, lakes, or other surface water. The chemical-free zone should include a densely vegetated buffer strip, 50-75 feet wide, to provide extra filtering capacity to keep these chemicals from the wetland.

Dumping and Filling

Since wetlands have traditionally been viewed as wasted land they are often used as garbage dumps. Plastic bottles, aluminum cans, snack and chip wrappers, and other refuse can be found in wetlands. This garbage should be removed from wetlands, and neighbors and other likely “dumpers” should be educated about wetland protection. A great way to educate people is to invite them to help remove the garbage as a neighborhood cleanup project.



Another common dumping practice is to throw lawn clippings, fill dirt, wood chips, and other yard waste into wetlands. This is often done with the intent of filling the wetland, perhaps to extend lawn or garden area. Any kind of filling results in a direct loss of the wetland’s capacity to control flooding in your area.

Additionally, dumping yard waste will cause changes in a wetland’s chemical balance. Although yard waste is composed of natural materials that will eventually decompose, they can damage a wetland in the process. As they decompose they release nutrients, cause oxygen depletion, and again result in a stinky, stagnant wetland.

The best thing to do with yard waste is to compost it. (Compost piles should be located at least 100 feet from your wetland or other surface water to ensure the nutrient-laden runoff water that drains the compost will not reach them.)

Pet Control

Unrestrained dogs and cats pose a threat to wetland wildlife. They can wreak havoc on wildlife populations by destroying nests or preying upon adults and their young. The best option for wildlife

protection is to exclude dogs and cats from the wetland entirely. Restricting dogs from the wetland during early spring and summer and requiring leashes throughout the year is a less limiting measure. This allows access to the wetland yet eliminates wildlife disruption.

Cats can be highly efficient predators and in some areas the sheer number of domestic and feral cats (domesticated cats that have gone wild) hurts wildlife, especially songbirds. You can place bells on the collars of your cats. You also can keep your cats indoors during early morning and dusk when wildlife is most active.
http://web4.audubon.org/bird/at_home/SafeCats.html

Recreation Overuse

Off road vehicles (ORVs) — dirt bikes, all-terrain vehicles, and mountain bikes — destroy soils, vegetation, and wildlife habitat within your wetland and its protective buffer strip. Motorboats disrupt wildlife and wetlands located along the shores of rivers, lakes, or estuaries. Boat wakes can cause severe shore erosion in heavy recreational use areas.

Passive recreational activities such as hiking, canoeing, and bird watching are compatible with wetland protection as long as wildlife and their habitat are not disturbed. Not disturbing them may require closing the wetland to all or certain uses during breeding or nesting seasons.

Urban Stormwater Runoff

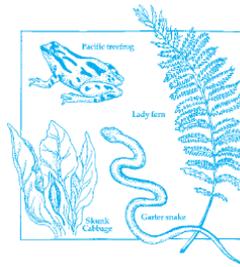
Stormwater supplies much of the water necessary to maintain wetlands, especially in urban areas. Chances are if you live near a lake, stream, or wetland the stormwater from your property drains directly into it. In fact, even if you don't live close to one of these and your stormwater enters concrete pipes and is "taken away," it likely goes only as far as the nearest body of water. Therefore, it is important to



take special care to keep your stormwater clean. A good rule of thumb is "don't throw anything down a storm drain you wouldn't want to swim in."

A common source of pollutants to stormwater is the area around the garage and driveway, where petroleum products and other chemicals are used for household and car maintenance projects. If you let these products drain onto the drive, they will eventually wash into local waterways. There are recommended methods for disposal of these products. For more information call 1-800-RECYCLE or visit: <http://1800recycle.wa.gov/>

The Importance of Buffers to Wetlands Protection



Buffers, the natural, undeveloped area surrounding a wetland, are a crucial part of the wetland system and must also be protected. Buffers provide the initial filtering of sediments and other pollutants from runoff water. Buffers also slow runoff water, reducing erosion and flood flows. In addition, they provide a protected pathway for wildlife species moving from the wetland to other upland habitat areas. They are vital to the livelihood of many species that rely on upland areas near wetlands to complete their life cycles. For example, frogs lay eggs in wetlands, live there as tadpoles, but as adults they move to the surrounding forest to live. Buffers provide a visual and noise barrier between the wetland and adjacent activities.

The recommended minimum buffer width for a healthy wetland ranges from 50 to 300 feet or more. The width requirement is based on the size of your wetland, the functions it provides, the health of existing vegetation, the wildlife you may want to protect, and adjacent land use. Your Conservation District, county Cooperative Extension office, local planning office, or the Department of Ecology can advise you on the minimum requirement for your particular wetland.

Gardening and Yard Care Tips for Every Season

Spring



- Put up birdhouses early (swallows will often return mid-to-late March). Make sure birdhouses are designed with small cavity openings to limit use to native species: http://wdfw.wa.gov/living/projects/basic_songbird.html
- Put out hummingbird feeder. Clean and change sugar solution regularly: <http://wdfw.wa.gov/living/hummingbirds/index.html#feeders>
- Put insect traps in fruit trees. Visit the Washington State University Extension website for more information: <http://extension.wsu.edu/gardening/plant/Pages/default.aspx>

Summer

- Cut grass high and let it lie: <http://www.spokane-county.wsu.edu/spokane/eastside/Fact%20Sheets/C059%20Grasscycling%2005.pdf>
- Water garden in early morning and only as necessary: <http://ext100.wsu.edu/pierce/wp-content/uploads/sites/9/2014/01/watering-a-vegetable-garden-RS008-2010v2.pdf>
- Mulch garden beds to conserve water: http://www.puyallup.wsu.edu/~Linda%20Chalker-Scott/Horticultural%20Myths_files/Myths/magazine%20pdfs/Woodchips.pdf

Fall

- Add compost to garden beds and mulch with fallen leaves: <http://ext100.wsu.edu/pierce/wp-content/uploads/sites/9/2014/01/composting-RS010-2010v2.pdf>
- Put up suet and seed feeders for the resident and over-wintering birds.
- Plant trees and shrubs in mid fall. This allows their roots to grow through the wet winter months and improves survival for the following dry summer: <http://puyallup.wsu.edu/~Linda%20Chalker-Scott/FactSheets/Planting%20fact%20sheet.pdf>
- Control aggressive non-native perennial weeds such as Himalayan blackberry and knotweed: <http://county.wsu.edu/county/agriculture/plants/weeds/weedinformation/HimalayanBlackberry.pdf> and http://www.nwcb.wa.gov/siteFiles/knotweed_brochure.pdf

Winter

- Clean out and sanitize bird houses.
- Prune trees and shrubs that need it: <http://treesaregood.com/treeowner/pruningyourtrees.aspx>
- Spray fruit trees with “dormant” oil: http://puyallup.wsu.edu/~Linda%20Chalker-Scott/Horticultural%20Myths_files/Myths/magazine%20pdfs/HortOils.pdf
- Work on a garden plan for next year: <http://wdfw.wa.gov/living/landscaping/index.html>



If you need this document in a format for the visually impaired, call the Shorelands and Environmental Assistance Program at 360-407-6600. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.