



Focus on Lake-Friendly Landscaping

from Ecology's Water Quality and Shoreline and Environmental Assistance programs

Shoreline landscaping can have a big impact on lake swimming, boating, and fishing. Why? Because nutrients and toxins from stormwater run-off, pesticides, and fertilizers can lower water quality, trigger algae blooms, kill fish, and cause excess weed growth. "Lake-friendly landscaping" reduces the need for pesticides and fertilizers, helps filter harmful contaminants before they pollute your lake, and helps control erosion.

Helpful hints for landscaping

In the past, the most common shoreline landscape was a wide lawn with exotic ornamental plants leading to a bulkhead. We now know there are many problems with this type of landscape. The following provides some ideas for avoiding these problems:

Problem: Bulkheads

A bulkhead is not the best or only way to prevent erosion. Bulkheads create unnatural drop-offs that can be dangerous, especially to children and the elderly. They also destroy shoreline vegetation. New bulkheads are not likely to be approved under updated shoreline master programs.

Solution: Planting and maintaining natural vegetation instead of constructing a bulkhead will control soil erosion and run-off, provide a more gradual transition from yard to lake, help beautify your lake, and enhance wildlife habitat. Contact your conservation district or WSU extension office for help in designing a naturalized landscape.



Problem: Excess Nutrients

Wide use of lawn and garden fertilizers on shoreline property can cause nutrients to build up in the water. Rain and watering wash fertilizers out of your yard and garden and into the lake. Fertilizer buildup in the water results in rapid aquatic plant growth and algae blooms, which hamper swimming and boating activities and kill fish. Discarding lawn clippings and yard debris near the water will also cause excess nutrients to pollute the lake.

Solution: Leave some native vegetation along your shoreline, as required by most local shoreline master programs. If native vegetation is gone, replant it! Native plants usually require fewer pesticides and fertilizers and, once established, need less water than exotic ornamental varieties. A buffer of native plants can also act as a natural filter system, trapping nutrients from stormwater run-off before they enter the lake. Reduce the size of your lawn by landscaping with native species of trees, shrubs and ground cover. Dispose of lawn clippings and yard debris or start compost piles well away from the lake or nearby streams and wetlands. Do not use fertilizers near the shoreline as they can wash off into the water.

Problem: Excess Toxins

Pesticides commonly used around homes and gardens (such as Dursban and Orthene) and herbicides (such as Weed-and-Feed and Round-Up) can cause serious damage to fish, wildlife, and people when they get in the lake water. They may be blown directly into the lake when applied on a windy day or washed off plants and soil by rain or watering. Improper storage and disposal of these chemicals can also pollute the lake.

Solution: Always read labels carefully and avoid using pesticides and herbicides whenever possible, especially on windy days. Severely limit their use near the lakeshore. Avoid pesticide use when rain is forecast and avoid watering immediately following application as it will wash away. Use pesticides only when you actually see a pest. Dispose of unused pesticides and containers at the local hazardous waste disposal site.

Problem: Canada Geese

Lake-side lawns encourage nuisance populations of Canada geese and other waterfowl, who like to feed in short grassy areas. Bird feces on docks and lawns can contribute harmful nutrients and bacteria to the lake water, in addition to being unsightly, unsanitary, and unsafe.

Solution: Maintain a buffer of native vegetation along the lake shoreline. Many local shoreline master programs require a buffer of native vegetation along all shorelines. Consult your local planning department for specific requirements.

Lake-Friendly Landscape Plan

Shown here is a sample landscape plan that protects water quality and encourages native plants, fish and wildlife close to shore. Remember that encouraging shoreline habitat doesn't mean building a barrier of native vegetation between your home and the lake. A balanced approach to waterfront landscaping retains natural habitat and reduces pollution and erosion, while also meeting your household's needs.

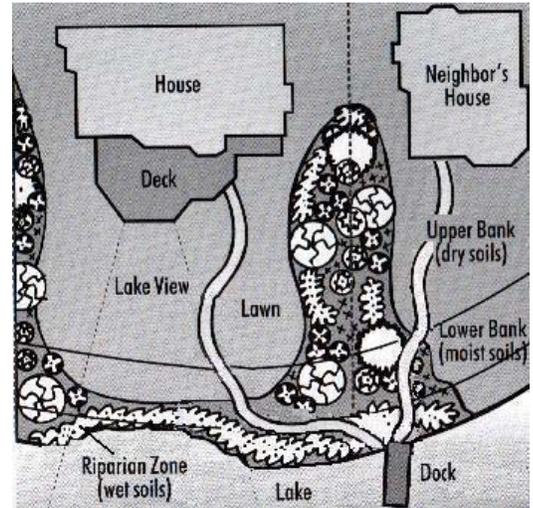
An Example:

In the example below, two neighbors have worked together to create native plant zones. The following are descriptions and recommended plants for each zone.

Riparian Zone - This zone extends about two feet up the bank from the edge of the lake. Fluctuating water levels and the wave action from boats and wind impact this zone. Plants here must tolerate wet soils for long periods and have deep root systems to minimize erosion. Low-growing plants are best, so the view from your home or deck is unobstructed. Examples of plant varieties suitable for this zone are: lady fern, sedges (many species) and blue flag iris.

Lower Bank - This two- to ten-foot zone is next to the riparian zone. The soil here tends to be moist but not wet. Your plan for this zone should include at least three shrubs (such as red osier dogwood, red elderberry, and evergreen huckleberry) and two ground cover varieties (such as lady fern, bunchberry, and sword fern).

Upper Bank - This zone extends from the end of the lower bank zone toward your home. The landscape here should include at least three shrubs (such as serviceberry, mock orange, and red flowering currant) and two ground-cover plants (such as salal, sword fern, and pig-a-back). Mixed throughout the upper and lower bank zones should be at least two varieties of shade trees and two types of shade and cover plants to create a multi-layered canopy. Some good choices for shade trees are: chokecherry, Oregon ash, and western hemlock. For shade and cover: vine maple, western crabapple, and hazelnut.



The best advice for what types of plants to use on your property can come from your local conservation district or WSU extension office. Give them a call!

If you need this information in an alternate format, please contact us at 360-407-6404. If you are a person with a speech or hearing impairment, call 711 or 800-833-6388 for TTY.