

# Landscaping Near the Water's Edge



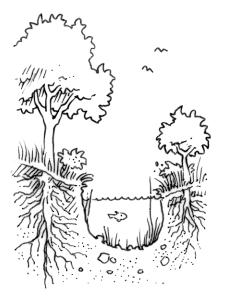
Guide No. 7

### Why be concerned?

A zone of trees and other plants growing at the water's edge help keep water pure, cool and clean. Vegetative buffers, or riparian areas, provide shade, filter pollutants, prevent erosion and reduce sedimentation.

In contrast, grassy buffers offer little protection to shorelines and stream banks. Their comparatively shallow roots are less effective at infiltrating runoff and preventing erosion - both major problems locally.





Lastly, riparian areas provide wonderful backyard habitat, and discourage nuisance geese. For more information, see the National Wildlife Federation and Wisconsin DNR web sites in the "Getting Help" section.

### Landscaping Near the Water's Edge

Landscaping designs next to waterways and stormwater ponds protect and enhance riparian vegetation to benefit homeowners, wildlife and water quality. When thinking about re-landscaping riparian areas, consider these factors:

- Planned use of the landscape
- Aesthetics
- Long-term maintenance.

*Use* - Typically, the backyard is the most actively used outdoor area at home. Often the total area available for different uses is relatively small, and wise use of space is a necessity.

**Aesthetics** - Views from the home and backyard are another factor to consider in landscape design. Many people value the views of an adjacent stream and want access to the water's edge. Views can be directed by sensitive placement of trees and shrubs in relationship to viewing points, such as windows, outdoor paths and patios.

**Maintenance** - Traditional grass lawns provide an ideal surface for many outdoor activities and permit open views, but they also require regular maintenance with correspondingly little benefit to the environment.

#### What's "Native"?

According to the Ann Arbor City Parks Natural Areas Preservation Program, 'native' refers to plant communities that were here before Europeans settled Michigan in the 1700's. Since then, thousands of plants have been introduced and have become naturalized in North America at an unprecedented rate and scale.

'Naturalized' refers to non-native, or alien species, that have been introduced over time. Once introduced, some non-natives are difficult to control because they have no natural enemies.

Approximately 30% of the 2,600 plant species growing in Michigan are non-natives that have become naturalized, largely over the last century.

### Adding Vegetation to the Banks of Water Bodies

Planting a variety of shrubs and wildflowers along the banks of streams and stormwater ponds can promote bird habitat and provide seasonal color and interest. Many varieties of wetland shrubs and wildflowers grow well in damp soil. Several native trees have also adapted to grow near water.

As an alternative to cattails, wetland plants such as softstem and hardstem bulrush, blue flag iris, woolgrass, water plantain, pickerel weed and arrowhead can be planted in stormwater pond areas. (If landscaping near a stormwater basin, please remember to leave room for maintenance vehicles. Contact the Washtenaw County Water Resources Commissioner's Office for information.)

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Nurseries that specialize in wetland plants are increasing in number. For more information, contact the MSU Extension Office for Washtenaw County or Wild Ones in the "Getting Help" section.

### Landscape Zones

A Landscape Zone plan can be drawn in a simple way to visualize how a residential property that borders a waterway can be designed by use, views and desired maintenance levels. The example below illustrates how a variety of uses and scenic views of the adjacent stream can be accommodated while maintaining or enhancing the riparian buffer zone.



*Trees:* green ash, swamp white oak, tuliptree, black walnut, sycamore, silver maple and red maple.

*Understory Trees and Large Shrubs:* alternate-leaf dogwood, redbud, serviceberry, nannyberry viburnum, American hazelnut and black chokeberry.

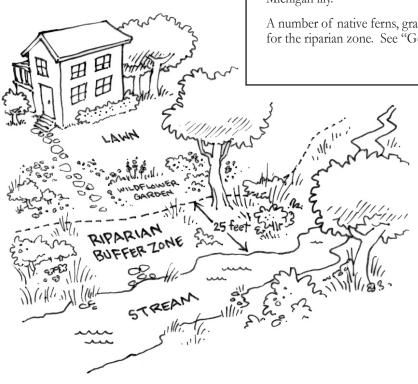
*Shrubs:* red-osier dogwood, silky dogwood, buttonbush, common elder and black raspberry.

*Wildflowers and Groundcovers for Shade:* blue cohosh, mayapple, wild ginger, bloodroot, jack-in-the-pulpit, trillium, wild geranium, woodland phlox, marsh marigold and Dutchman's breeches.

Wildflowers for Sunny Wet Areas: New England aster, joe-pye-weed, boneset, ironweed, cardinal flower, and swamp milkweed.

*Wildflowers for Sunny Dry Areas:* blazing-star, beebalm, black-eyed susan, yellow coneflower, stiff goldenrod, showy goldenrod, wild strawberry, turtlehead, and Michigan lily.

A number of native ferns, grasses, rushes and sedges should be also be considered for the riparian zone. See "Getting Help" for more information.



## Planting Tips for Riparian Buffers

- Retain existing or plant new native trees, shrubs, grasses and wildflowers along the water's edge.
- The width of the vegetated buffer zone is likely to be influenced by many factors; ideally, the zone should be at least 25 feet in width.
- Many communities have adopted ordinances and regulations requiring buffer zones of varying widths. Contact township or city officials for more information.
- Choose plants that are compatible with site conditions (soil type, pH, sun exposure, etc.)
- Avoid selecting non-native plants because they typically require more chemical use to sustain their health.

### **GETTING HELP**