

Landscaping Near the Water's Edge

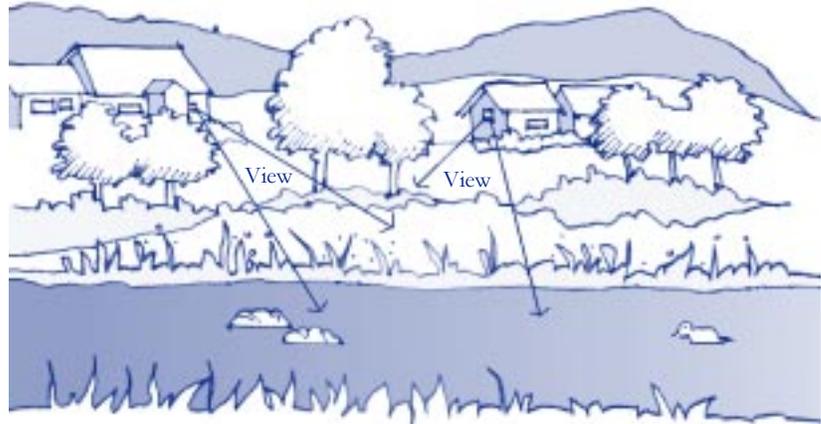
A guide to improving water quality in Redford



Why be concerned?

Lands adjacent to streams, rivers and inland lakes are called riparian areas. Riparian vegetation serves many functions, such as providing shade which helps cool stream water (a survival requirement of some fish species, like trout). Riparian vegetation also traps sediment and nutrients collected by rain water as it flows across pavement and other impervious surfaces before it reaches a waterway.

Residents who live next to a stream, river or lake, often replace most of the existing vegetation between their house and the edge of water with lawn grasses and a few ornamental trees. The shallow root systems of lawn grasses are ineffective in preventing streambank erosion, which is a major problem within local streams and rivers. Eroded soil can cover fish habitat and degrade water quality.



Typically, the most actively used outdoor areas are found in the “backyard.” The backyard landscape may need to accommodate a variety of uses such as active play, outdoor dining, gardening, sunbathing, resting, or work space for hobbies. Often the total area available for these different uses is relatively small, and wise use of space is a necessity.

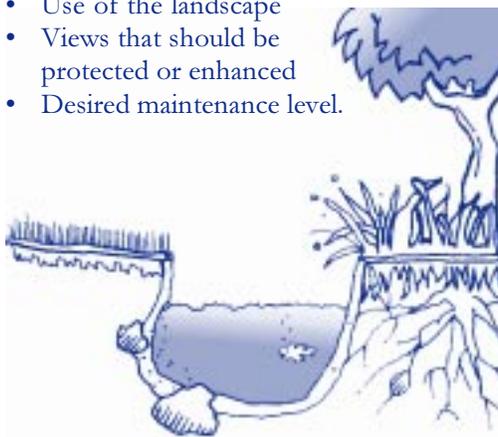
Views from the home and within the backyard are another factor to consider in landscape design. Many people value the views of an adjacent stream and want access to the water's edge to experience the sound and sight of moving water. Views can be directed by sensitive placement of trees and shrubs in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

Riparian landscape design considerations

Residential developments next to waterways can be designed to protect riparian vegetation and benefit homeowners, wildlife and water quality. Property adjacent to the Rouge River or its tributaries is in need of special attention.

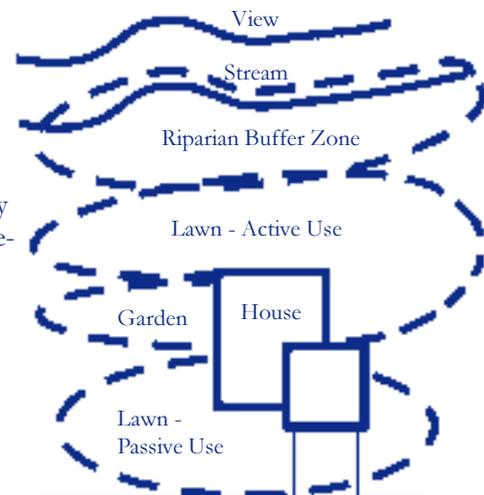
Factors to consider in any landscape design project include:

- Use of the landscape
- Views that should be protected or enhanced
- Desired maintenance level.



Landscape Zones

A Landscape Zone Plan can be drawn as a simple way to visualize how a residential property that borders a waterway can be organized by use, views and desired maintenance levels. The example shown on the back page illustrates how a variety of uses and scenic views of the adjacent stream can be accommodated while a riparian buffer zone is maintained or enhanced.



(Adapted from a graphic by David Merkey)

Sources and Funding

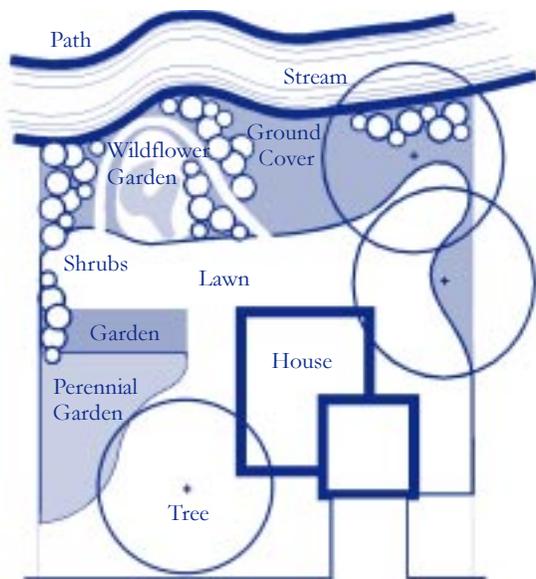
- Prepared by Canton Township Engineering Services and JJR Incorporated (Fall 1997).
- Guide preparation and distribution funded, in part, through a grant from the Rouge River National Wet Weather Demonstration Project (# X995743-02).

Riparian buffer zone

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; however, ideally, the zone should be at least 15 feet wide. Choose plants that are adapted to the site conditions (soil type, pH, sun exposure, etc.). Avoid exotic plants. They typically require more chemical use to sustain their health.

Planting plan

The sketch below illustrates how the sample Landscape Zone Plan could be implemented.



What does “native” mean?

When a plant is termed “native,” rather than “exotic,” it means it is adapted to an area, including the local climate and soils, and provides habitat and food for local wildlife. Planting native plants in your yard adds to the scenic quality that is unique to Lower Michigan.

Native Michigan plants to consider planting near water



Trees:

green ash, swamp white oak, honeylocust, black walnut, sycamore, silver maple and red maple.

Understory Trees and Large Shrubs:

alternate-leaf dogwood, redbud, serviceberry, nannyberry viburnum, highbush-cranberry and black chokeberry.

Shrubs:

red-osier dogwood, silky dogwood, buttonbush, common elder and compact highbush-cranberry.

Wildflowers and Groundcovers for Shade:

common violet, 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, bee balm, black-eyed susan, yellow coneflower, stiff goldenrod, showy goldenrod, wild strawberry, evening primrose, and coreopsis.

Many people think our native goldenrods are responsible for hay fever, but they're not. The real cause of the allergy is usually ragweed, which blooms at the same time.

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

Floodplains and wetlands

Floodplains and wetlands are often located within riparian areas. A floodplain is a flat area next to a stream or river that is subject to flooding after storms. Wetlands are areas of land that are covered with water at least part of the year and contain plants and animals that are adapted to these conditions. To learn more about floodplains, contact the Michigan Department of Environmental Quality.

Getting Help

Garden Hotline, Wayne County

313.833.3268

MSU Extension Office for Wayne County

313.833.3412

Michigan Department of Environmental Quality

800.662.9278