



## Building Better Buffers

## Forested Buffers

### What are Forested Buffers?

A forested buffer is an area adjacent to a stream, lake, river, ditch or wetland that contains a combination of trees, shrubs, and/or other perennial plants. Forested buffers are managed primarily to provide conservation benefits, but can also include trees and shrubs that produce a harvestable crop.

In a forested buffer, the area closest to the waterbody provides bank stability and shade to decrease water temperature. The area above the bank can be managed for fruit and nut bearing trees and shrubs, and can hold large trees for wildlife habitat and cover. The area farthest from the water can be planted with shrubs, grasses and forbs that may be harvested for fiber, nuts and berries, floral arrangements or seed production.

**ABOUT THE SERIES:** Building Better Buffers is a series of guides offering voluntary options to landowners who want to improve their existing buffers. They provide information about improving buffers for increased water quality, enhanced habitat, and forestry, plus ideas for buffer maintenance and alternative practice options.



### Planning for the Future

Trees and shrubs may be prohibited along some watercourses, such as drainage ditches. Check with your local soil and water conservation district (SWCD) before planting. Most SWCDs offer tree, shrub, and seed sales. Your local SWCD can also provide information on grants and cost-sharing opportunities.

### Buffer Law Requirements

- ◆ **Public Waters:** 50-ft average, 30-ft minimum width buffer
- ◆ **Public Ditches:** 16.5-width buffer
- ◆ **Alternative Practices:** Practices that provide water quality benefits comparable to full-width buffers may apply in some situations, along with reduced width buffers.
- ◆ **Buffers must consist of perennial vegetation, not row crops or noxious or invasive weeds**

### Benefits of Forested Buffers:

- ◆ Filter nutrients, pesticides, sediment and animal waste from agricultural runoff
- ◆ Moderate or reduce water temperatures within a waterbody
- ◆ Provide food, shelter, water and breeding sites for birds, mammals, amphibians, and reptiles
- ◆ Protect cropland and downstream communities from flood damage
- ◆ Generate income from farmland that is frequently flooded or has poor yields
- ◆ Create space for recreation
- ◆ Provide windbreaks
- ◆ Increase carbon storage
- ◆ Maintain channels and stabilize streambanks



## What to Plant in Forested Buffers

**Trees:** Conifers like Pine, Spruce and Cedar provide year-round shelter to birds and other wildlife. Deciduous trees like Maple, Willow, Basswood, Oak and Poplar species provide overhanging shade. Falling leaves feed many types of organisms.

**Shrubs:** Species such as Choke Cherry, Ninebark, Prairie Plum, Highbush Cranberry, Indigo Bush and Dogwood provide habitat for pollinators, songbirds, and other wildlife. Some species such as Elderberry, Chokeberry, Hazelnuts and Willows can also be grown as commercial crops.

**Grasses and Forbs:** Woody plants should be planted in combination with native vegetation or other perennial groundcover species to ensure effective stormwater filtering, prevent erosion, and suppress weeds.



Photo Credit: MPCA

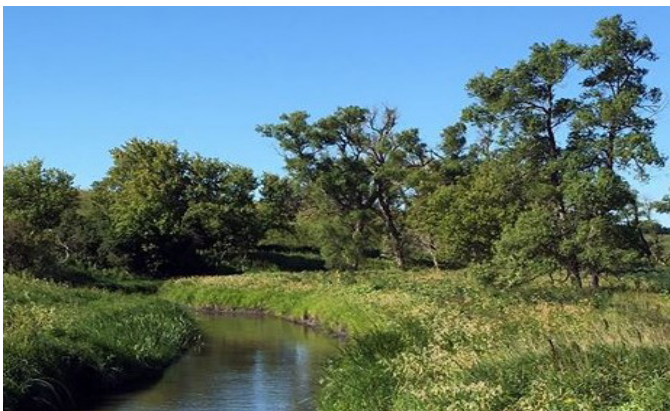


## Value for Landowners

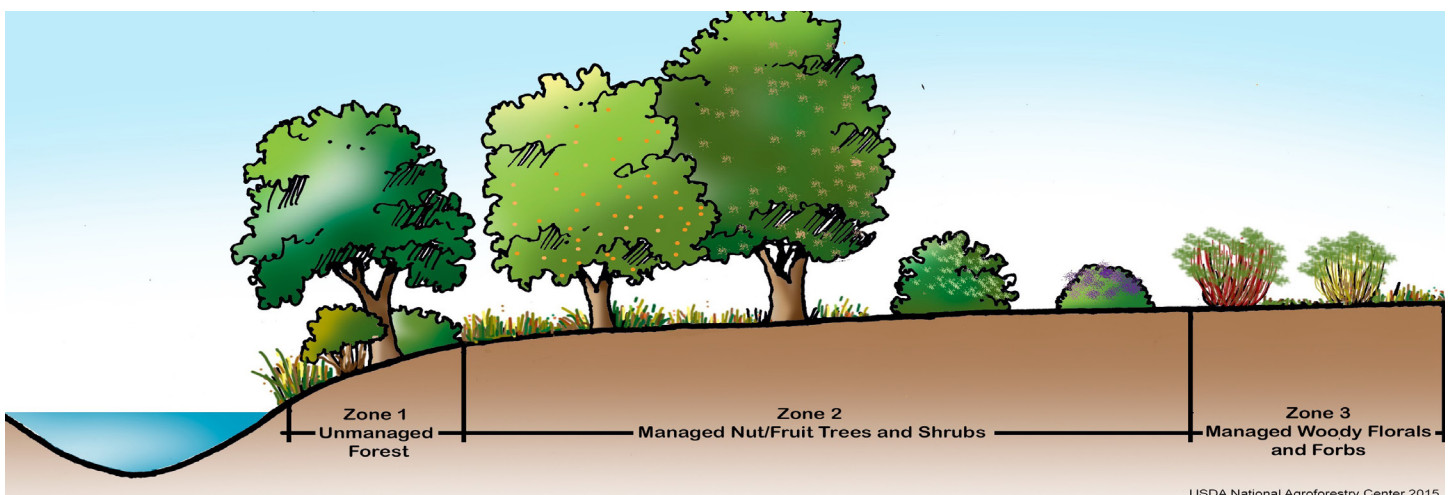
Trees, shrubs, forbs, and grasses within a buffer can achieve conservation goals such as improved water quality and reduced flood damage. They can also yield a variety of products including wood from high-value species such as Walnut, Oak, and Maple, plants used for medicinal and botanical purposes, food (berries, nuts and mushrooms), specialty woods, and woody florals.

Examples of income opportunities include:

- ◆ Fruit, nut, and seed production
- ◆ Woody florals/floral arrangements
- ◆ Wood/fiber harvesting
- ◆ Lease hunting



## Example of Forested Buffer Vegetation Zones



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