

Overview

Zumbro River Watershed Landscape Stewardship Plan



Including Dodge, Goodhue, Olmsted, Rice, Steele, and Wabasha counties



This overview offers a quick look at the Zumbro River Watershed Landscape Stewardship Plan.

The purpose of the plan is to provide a vision and framework that allows landowners, resource managers, local officials, and other stakeholders to work together to voluntarily implement landscape stewardship practices that sustain the region's water quality, natural areas, and biodiversity.



A vision for healthy waters, ecosystems, and human experiences in the Zumbro River watershed.

Healthy Lands, Healthy Waters

The Zumbro River Landscape Stewardship Plan focuses on protecting water quality by maintaining and enhancing the health of land in the watershed. It is based on the premise that the quality of a water body reflects the integrity of its watershed. Stewardship efforts that maintain forests, wetlands, and other natural communities will not only benefit



the biodiversity and ecological health of the region, but also weaken floods, improve infiltration, and remove nutrients from runoff as it makes its way to our streams. Implementing best management practices and expanding perennial cover in agricultural and residential areas will benefit both the natural habitat of the landscape and the water quality in the watershed. This plan proposes a vision, desired future conditions, and strategies that utilize a landscape approach to natural resource stewardship.





Who the plan is for

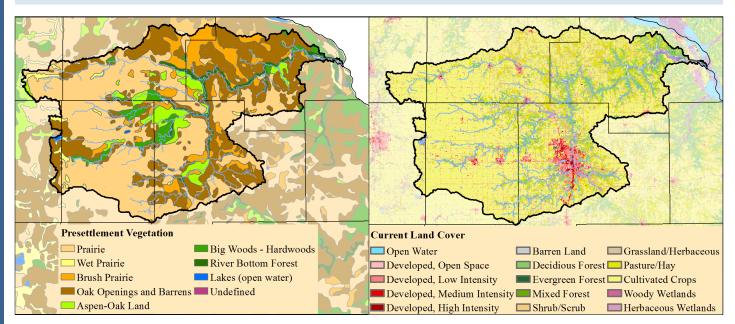
The landscape stewardship plan can be used in:

- Water and Natural Resource Planning
- Community Land Use Planning
- Conservation Project Prioritization and Funding
- Connecting with Policy and Decision Makers
- Guiding Private Land Stewardship
- Other Projects In and Around the Watershed



Landscape Context

The Zumbro River drains over 909,000 acres through a series of wetlands, underground karst features, and nearly 700 miles of streams and rivers. The watershed ranges from deep fertile glacial tills in the upper portion to steep "Driftless Area" bluffs in the lower reaches.



Historically this watershed had vast prairies, savannas, and oak forests, with stands of mesic hardwood forest in areas that were protected from fire. Today, only 23% remains as forest, wetland, or grassland and many of these areas have been degraded in some fashion. Despite these changes, the watershed retains relatively high water quality and areas of outstanding biodiversity significance that warrant special protection, maintenance, and restoration to sustain their function on the landscape. This plan highlights some of these areas and outlines strategies for their stewardship.



There are several public parks and wildlife management areas within the watershed which conserve native plant communities and protect water resources. These areas also offer opportunities for hiking, biking, canoeing, camping, hunting, and fishing. The vast majority of the watershed, however, is privately owned and stewardship of these lands will be key to maintaining regional biodiversity, water quality, and all of the outdoor recreational opportunities this region offers.

While there are many ways to divide a region into landscapes, using watersheds as the organizing feature emphasizes the link between natural resource management and water. It also parallels other state planning trends, such as the move to a *One Watershed, One Plan* system to replace local water plans. Planning natural community stewardship by watersheds increases the value of Landscape Stewardship Plans as resources for other water planning exercises.

Vision for the Zumbro River Watershed

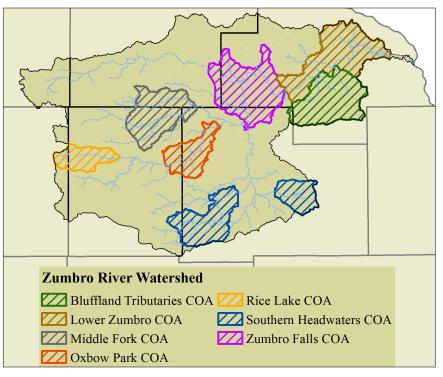
The Zumbro River Watershed Landscape Stewardship Plan supports the regional vision laid out by the Basin Alliance for the Lower Mississippi in Minnesota (BALMM) as the overarching landscape guidance for the watershed. The plan further focuses the BALMM guidance on the Zumbro River Watershed with a series of Desired Future Conditions (DFCs) and implementation strategies. Many of the plan's DFCs closely align with those of other regional plans and highlight the confluence of objectives between stakeholders in the watershed.

Desired Future Conditions

- High quality streams and healthy groundwater resources
- Stabilized and increasing populations of rare and threatened species
- Adequately buffered karst features including springs, fens, sinkholes, and the Decorah Edge
- Streams with rehabilitated banks and native floodplain vegetation
- Large habitat buffers and corridors around and between core biodiversity areas
- Fire is used as a management tool in appropriate ecosystems
- Consistent funding for cost share assistance associated with landowner activities such as invasive species control and native plant community restoration
- A more robust hardwood timber market supporting sustainable private timber management
- Improved landowner education
- Active comprehensive conservation planning on priority sites
- Regional land use plans recognize and protect rare features



The watershed contains over 125 miles of designated trout streams. Many of which support native brook trout.



Conservation Opportunity Areas

The plan identifies four Conservation Opportunity Areas (COAs) to help direct conservation efforts within the watershed in strategic and cost effective ways.

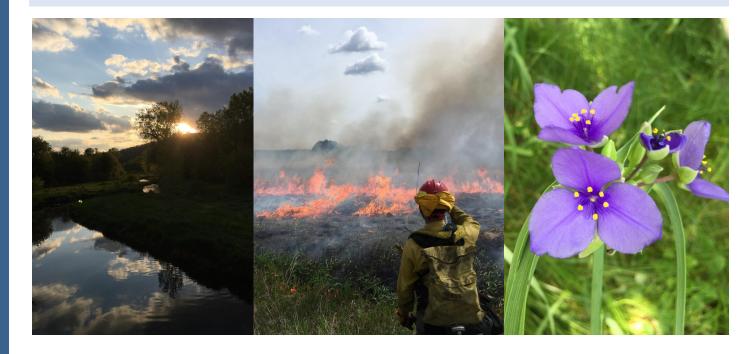
- <u>Bluffland Tributaries</u> (49,640 ac.): Contains a series of coldwater trout streams and forested bluffs that have outstanding biodiversity significance.
- <u>Lower Zumbro</u> (57,934 ac.): Includes forested bluffs, floodplain forests, and cold-water streams.
- <u>Middle Fork</u> (43,261 ac.): Almost entirely privately owned COA that contains a variety of biologically rich valleys.
- Oxbow Park (25,927 ac.): Contains an area of outstanding biodiversity significance along the South Branch of the Middle Fork.
- <u>Rice Lake (19,462 ac.)</u>: Rice Lake is one of the few natural lakes in the watershed and serves as an important biodiversity site in a largely agricultural landscape.
- Southern Headwaters (54,515 ac.): Consists of two units near Rochester that are important recharge areas for the City's drinking water and contain rare calcareous fens.
- <u>Zumbro Falls</u> (61,464 ac.): Topography in this area leads to a diversity of riparian areas and forested ecosystems that represent hotspots for biodiversity.

Achieving the Landscape Vision

The Zumbro River Watershed Landscape Stewardship Plan contains a series of strategies and an action plan for moving the landscape toward the overarching vision and desired future conditions. The strategies are organized into actions that focus on Public Land, Private Land, and Education/Outreach. Progress in all three of these categories will be needed for this voluntary plan to be successful.

Annual targets proposed in the Landscape Stewardship Plan include: 600 acres of prescribed fire, 70,000 tree seedlings sold to private landowners, 900 acres enrolled in programs that promote restoration and maintenance of native habitats, 15 new forest stewardship plans, two miles of streambank stabilization, and three outreach events. See the plan for a full list of implantation strategies and associated targets.

These targets are benchmarked off information on what is currently happening in the landscape, and what may be possible under realistic growth scenarios at five and ten year intervals. These general targets help set measureable goals for the landscape with the caveat that individuals and organizations will set their own targets that, when combined, will move the entire watershed toward the overall landscape targets.



More information on how you can contribute to achieving this vision for the Zumbro River Watershed can be found in the Landscape Stewardship Plan at:

https://mn.gov/frc/southeast-committee.html









The Minnesota Environment and Natural Resources Trust Fund and the U.S. Forest Service provided funding for this project. Developed by The Nature Conservancy and the Forest Stewards Guild with input and review from several local stakeholders.