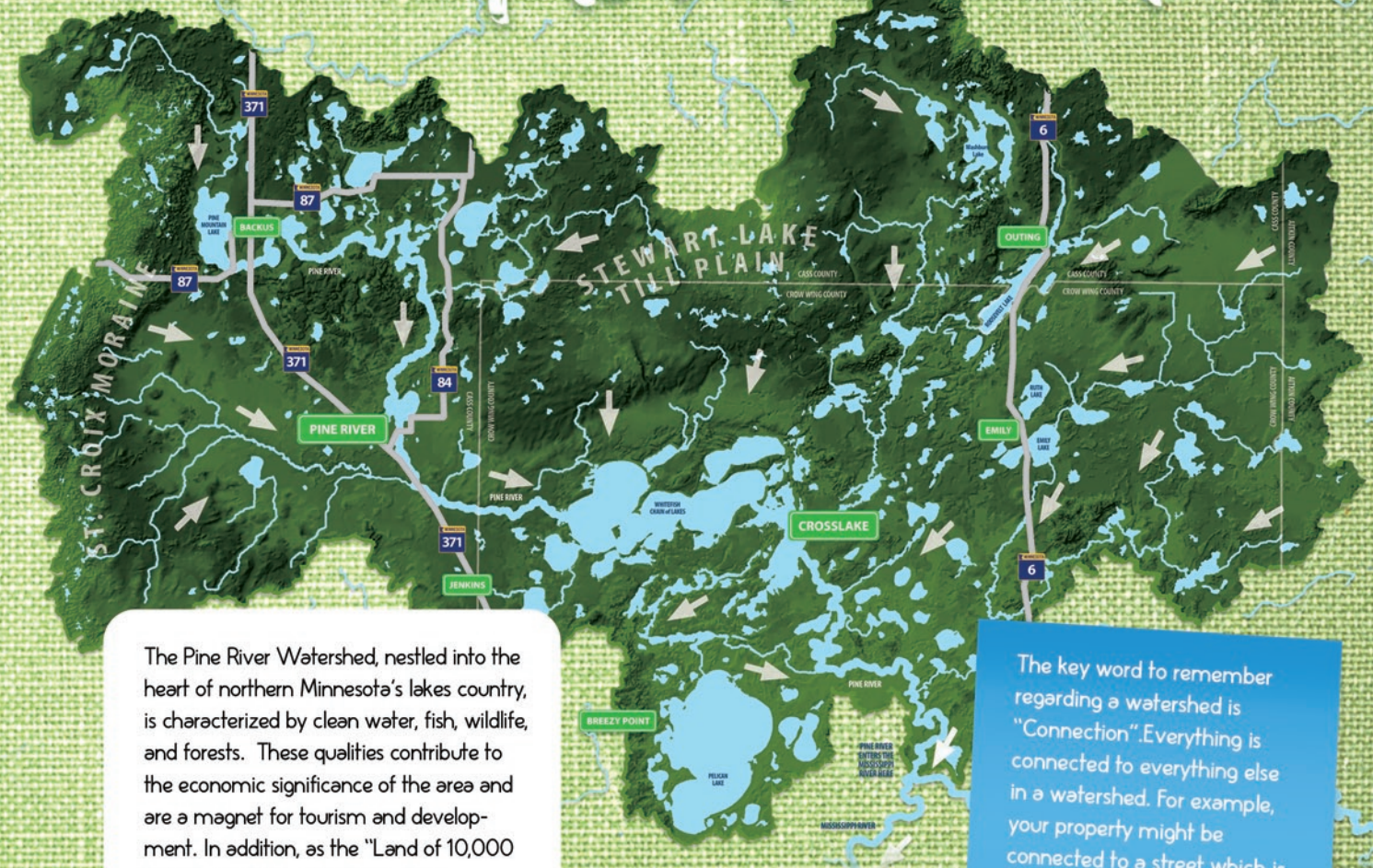




# PINE RIVER WATERSHED

Harmonizing people, water, forests, and the economy in a place to renew your spirit

## One Watershed One Plan



The Pine River Watershed, nestled into the heart of northern Minnesota's lakes country, is characterized by clean water, fish, wildlife, and forests. These qualities contribute to the economic significance of the area and are a magnet for tourism and development. In addition, as the "Land of 10,000 Lakes", residents often feel a deep connection to these natural resources because of the legacy of family cabins and family vacations. These assets and connection to the local area are illustrated in the watershed's vision statement, which was developed during this planning process.

White arrows on the map show the direction of water flow through the watershed.

The key word to remember regarding a watershed is "Connection". Everything is connected to everything else in a watershed. For example, your property might be connected to a street which is connected to a storm sewer, which is connected to a stream which is connected to a lake, etc... The water within a watershed is always moving.

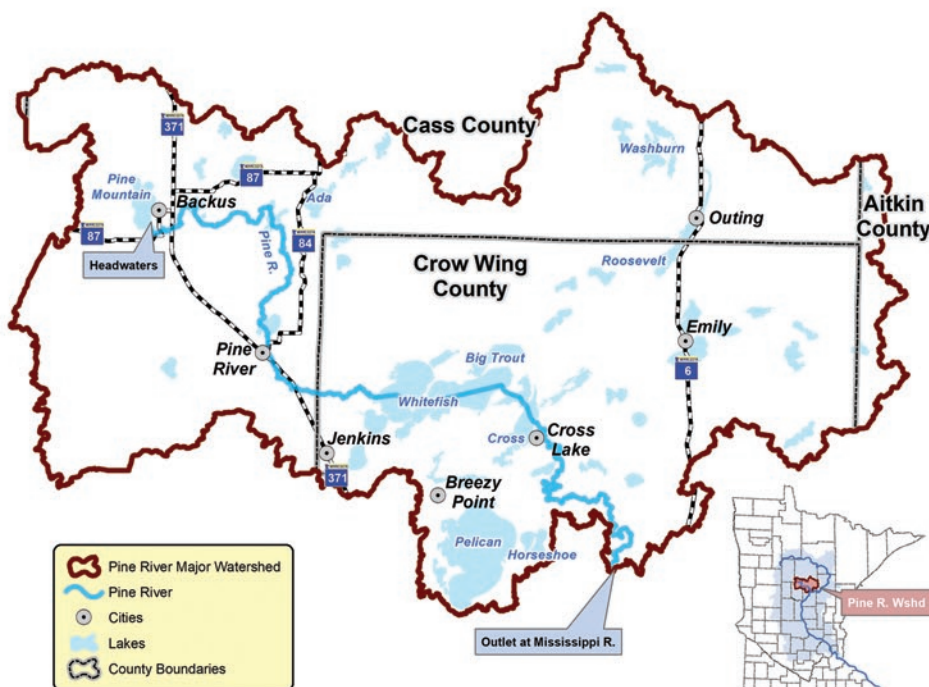


## Watershed highlights:

- Contains over 500 lakes
- Lakes, rivers and wetlands cover 34% of the surface of the watershed
- Supplies 15 million people with clean drinking water from St. Cloud, MN to Cairo, Illinois.
- The watershed covers 502,400 acres (785 square miles)
- Is part of four counties: Aitkin, Cass, Crow Wing and slight slice of Hubbard
- Primary towns include Backus, Pine River, Breezy Point and Crosslake

## What is One Watershed One Plan?

- Developed following the guidelines set by the Minnesota Board of Water and Soil Resources (BWSR)
- Aligns water planning along watershed boundaries, and enhances the existing county water plans
- Voluntary program and plan
- Uses existing authorities and funding mechanisms
- Based on current state information and data
- It is an Action Plan
- Progress is monitored and tracked for achieving measurable goals
- After adopted, BWSR implementation funding will be obtained through a non-competitive process rather than competitive process



What each of us does with our property will either have a positive or negative effect on the watershed. Thankfully, there are proven conservation methods to protect or improve water quality.



# Pine River One Watershed Plan

- Formed a Memorandum of Understanding between four entities: Cass County, Cass Soil and Water Conservation District, Crow Wing County, and Crow Wing Soil and Water Conservation District.
- Resulted in a resource-based plan that recognizes the roles of watershed partners to influence future watershed conditions and identifies specific activities that achieve common goals.

## Plan Highlights

- Process had great participation from the public through the Advisory Committee, who drafted the plan content
- Under budget and on schedule (*completed draft plan one year after the public kick-off*)
- This plan was the first to target phosphorus reduction for non-impaired lakes. This means lakes are initially protected from impairment as opposed to fixed after showing signs of impairment. (*It is less costly to protect than it is to repair!*) This analysis used data from the Watershed Restoration and Protection Strategies or "WRAPS".
- Includes a land protection goal that results in multiple benefits to lakes, streams, drinking water, habitat and forests. (*Protected land uses are defined as surface water, public land, private wetlands, conservation easements, and private forest management programs*)
- This plan was the first to have a Landscape Stewardship Plan incorporated into it for protection planning.

## Why does it matter?

Maintaining the cleanliness of our waters is more important than most people realize. The Pine River Watershed is dependent on a strong fishing industry, a healthy deer population for hunters, and beautiful lakes to uphold tourism numbers and property values. Whitefish land value alone is worth over \$2.7 billion! Our above-average water quality can, in a large part be credited to the rich forested lands within the watershed. Woodlands act as a giant sponge within the watershed, filtering and absorbing contaminants and retaining soil sediment, which in turn, keeps our water clean. Furthermore, our forested lands hold great ecological, aesthetic, and monetary value! To put it simply, our Minnesota way of life is dependent on the quality of our waters.





# Pine River Watershed - Plan Activities

## Enhance

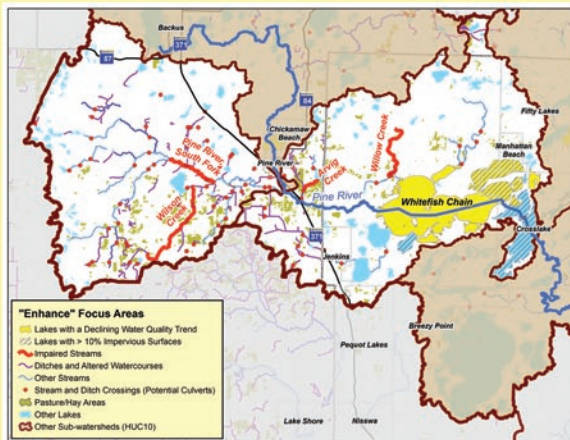
- Fix it -

**What:** Lakes with declining water quality trends, vulnerable groundwater, shoreland habitat, impaired streams, and problem culverts

**How: (Surfacewater)**

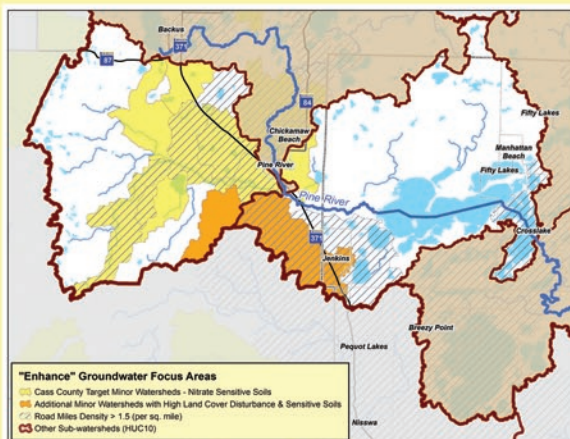
- Implement stormwater best management practices (*Shoreline Restoration, Rain Gardens, sediment treatment*)
- Pasture Management
- Culvert inventory, maintenance, & replacement

**Measure:** Pounds of Phosphorus Reduced  
(reduce the main nutrient that feeds plants and algae in lakes)



**How (Groundwater):**

- Fertilizer / Chloride Management



Surface  
water &  
habitat

Ground  
water

## Protect

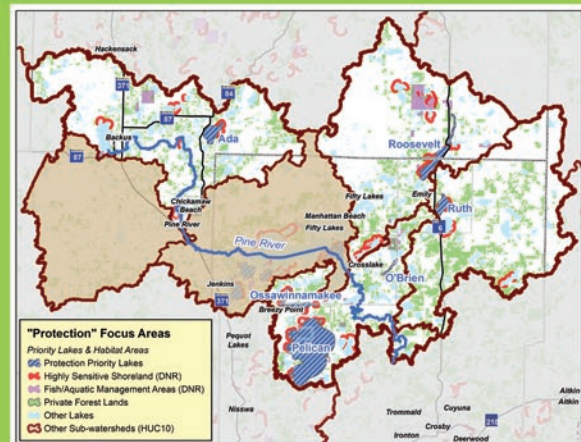
- Keep it -

**What:** Sensitive and Outstanding Lakes, Forests, Habitat, Groundwater, Wetlands, Source water to downstream cities & communities.

**How: (Surfacewater)**

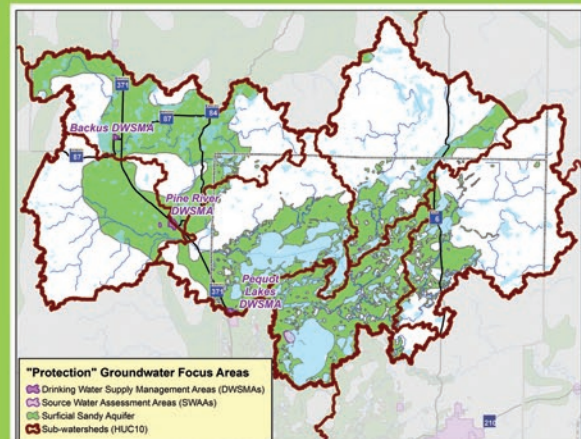
- Implement Private Forest Management to keep forested areas forested
- Protect undeveloped shore lands in sensitive habitat areas

**Measure:** Acres Protected  
(goal is 75% of the minor watershed protected)



**How: (Groundwater)**

- Well sealing and Septic System Maintenance above shallow sandy aquifer





# Four kinds of landowners

The goal of the Pine River 1 Watershed 1 Plan is to work with all types of landowners to protect the water and natural resources within the watershed



Woodland  
Land Owners



Agricultural  
Land Owners



Lakeshore  
Property Owners



Urban Land  
Owners

## How each landowner can help

### Information first

Your first step to aid in conservation is to gain the knowledge you need to be effective. There are a host of materials that provide best management practices backed by conservation success stories. Conservation professionals are ready and willing to assist you in forming a plan for your property. Ask questions, gather info, get organized, make a plan!

### Managing landscapes for conservation

Managing land for conservation begins with observing ordinances, and maintaining low impact development practices. Beyond your initial efforts, and depending on the type of land you own, a forest stewardship plan, or maybe a few ag best management practices like pasture management would be helpful. Many conservation practices can be implemented in tandem with your existing plans for your working lands.

### Protecting landscapes for conservation

Want to take it to the next level? Landowners can designate tracts of property under protection from development for the sake of conservation. Again... Many conservation practices and protection programs can be implemented in tandem with landowners existing plans for your working lands. Easements and Forest Management Incentive Payments can be applied to property with limited impact to the landowners working land plans. One of the major goals of conservation professionals is to keep large tracts of undeveloped lands in the hands of good land stewards.

### Fixing landscapes for conservation

Some lands are beyond simple management or protection projects. Some lands will benefit from some conservation "fix it" projects. Professionally guided erosion control, shoreline stabilization, feedlot fixes, septic system upgrades, or even strategically designed rain gardens can turn the tides on declining lakes. Conservation organizations like your local SWCD are prepared to assist with technical projects that require engineering or even financial assistance.



*Want to find out more?*

Find out more! To dig deeper into the plan details, visit: [www.crowwing.us/1476/Pine-River-1W1P](http://www.crowwing.us/1476/Pine-River-1W1P)

## *Plan Administration*

This plan will be implemented through a Memorandum of Understanding between Cass County, Cass SWCD, Crow Wing County, and Crow Wing SWCD.



Crow Wing County (218) 824-1010  
Crow Wing SWCD (218) 828-6197  
Cass County (218) 547-7241  
Cass County SWCD (218) 547-7399