

# Mississippi River – Brainerd

## One Watershed One Plan

### Technical Advisory Committee Meeting Report

August 23, 2022

## Attendees

**In Person:** Bethany Chaplin (Crow Wing SWCD), Shannon Wettstein (Morrison SWCD), Mitch Brinks (TSA 8), Chris Pence (BWSR), Jeff Hrubes (BWSR), Chad Anderson (MDH), Tim Terrill (MHB), Tad Erickson (Region 5).

**Online:** Bonnie Finnerty (MPCA), Todd Holman (TNC), Chad Weiss (MLB), Perry Bunting (MLB), Moriya Rufer (Houston Engineering), Lance Chisholm (Morrison SWCD), Nicole Erikson (Crow Wing County), Adam Ossefoort (Todd County), Jeff Weiss (DNR).

## Meeting Purpose

The purpose of this Technical Advisory Committee (TAC) meeting was to review draft issue statement prioritization by management zone.

## Timeline

This graphic is a simplified version of the overall timeline. This timeline is a general guide, and the process can be adapted to fit as we go.

### We are here:



## Resource Prioritization

Moriya Rufer presented an introduction to Resource Prioritization, which will be the next step in the planning process. This is the process to narrow down which lakes, streams, and groundwater areas to focus implementation in the next 10 years to make measurable progress. Data/criteria are used to narrow down which resources have the highest quality and the highest risk. The Steering Committee will begin working on this in September and bring it to the September TAC meeting for further work.

Common definitions for management focus in northern Minnesota protection watersheds:

<b>VIGILANCE</b>	Has already achieved the 75% protection goal. Management Actions include opportunity-based projects and maintaining protected lands.
<b>PROTECT</b>	Natural resources are generally in good condition, risks to natural resources are low, and the management focus is to maintain and increase protection levels with strategies such as private forest stewardship and conservation easements.
<b>ENHANCE/ PROTECT</b>	Some lakes have degrading trends and some natural resources need enhancement, and there are potential risk factors that could negatively impact the surface water and ground water systems of the watershed. Projects include enhancement such as pasture management, stormwater management, shoreline buffers and conservation easements in ecologically sensitive areas in addition to protection strategies as stated in the Protect focus above.
<b>RESTORE</b>	Resource is impaired.

## Visioning

At the Citizen Advisory Committee meeting in July, participants brainstormed words and phrases that could be used to craft a vision statement. These results were shared with the TAC and then the TAC brainstormed additional words and phrases to use for the watershed vision.

### CAC brainstorm results:

- The next generations will inherit an improved and sustainable watershed
- Protection of water and land resources for future generations
- The Mississippi Watershed is for generations to come
- Healthy lakes, healthy drinking water, healthy forests
- The beginning of the Big Easy; Stewardship for America's water
- Minnesota's contribution to better water to the heartland

## TAC brainstorm results:

- Mix of everything/diverse – lakes, rivers, urban, forests...
- Well known, Brainerd Lakes Area (Minnesota's Favorite Place)
- Sustainable, resiliency in the face of future changes (climate, development, land use changes)
- Future generations
- Cultural significance of Mississippi River Corridor past to future.
- Globally significant river
- The healthy part of the Mississippi River
- Bridge of forest to prairie
- Diversity
- Backbone
- Recreation
- Gateway
- Protection region to cities – source water region
- Camp Ripley
- Economic generator – farm and natural
- Economically viable working lands
- Resilience
- Work and play
- Bridges forest to prairie
- Doorway to “Up North”
- Multiple regional centers (Brainerd, Little Falls, Aitkin)
- Maintain balance of “Up North” feel
- Sustainability and balance
- Evolution of transportation: Rivers, Rail, Roads

This information will be used to craft a draft Vision Statement for review at the next TAC meeting.

## Logo

The draft logo was presented to the group. From designer, Dain Erickson:

*The "M" from Mississippi and the "W" from watershed and stack one over the other with water separating them to create a mirror reflection effect. The water/wave graphic between the letters represents the river itself. The green land and tree shapes in the M show the land uses.*

*The colors are supposed to be Mississippi mud red, sky blue, and deepwater blue*

There was general consensus in the group to adopt this logo and have the Policy Committee approve it.



## Break

***A short break was held to allow the Policy Committee to enter the room for the remainder of the meeting. The meeting reconvened at 2:05 PM.***

## Issue Prioritization

The Policy Committee joined the TAC for the discussion on issue prioritization. The prioritized issues from the July TAC meeting were presented along with the management zone prioritization. A few changes were discussed:

1. Soil health rankings should be higher
2. Need to incorporate terrestrial invasives into one of the issue statements
3. Need to incorporate pollinators into one of the issue statements
4. The forest issue statement could be revised to encompass all uplands and incorporate #2 and #3 above.

Emerging issues are issues that the plan will include but will not have goals for making progress. They include:

1. Pipelines
2. Climate variability
3. Contaminants of emerging concern
4. Energy sources (dams, hydropower)

These changes will be incorporated by the Steering Committee and brought to the next Advisory Committee meeting. A current copy of the issue statements with the notes included is attached at the end of this report.

## Land and Water Resource Narrative

The Land and Water Resource Narrative is Section 2 of the plan and is meant to be a narrative of the past, present, and future of the watershed in laymen's terms. It will be emailed to the TAC for review in September and comments are due to Moriya Rufer [mrufer@houstoneng.com](mailto:mrufer@houstoneng.com) by September 16.

## Next Steps

All meetings are held at the Crow Wing County Land Services building.

- **TAC – September 27, 1:00-3:30-pm**
  - Resource Prioritization
  - Goals
- **TAC – October 25, 1:00-3:30-pm**
  - Resource Prioritization
  - Goals
- **TAC & PC November 22, 1:00-4:00-pm**
  - Resource Prioritization
  - Goals

# Mississippi River – Brainerd 1W1P

## Issue Development

Over the past two months, the Mississippi River – Brainerd Watershed Planning Group has been working on gathering issues for the watershed. Issues have been gathered from numerous sources including existing county water plans, the Watershed Restoration and Protection Strategy (WRAPS), 60 Day Letters from state agencies and organizations, an online public survey, a public kick-off event, a Citizen Advisory Committee meeting, and an Advisory Committee meeting (Figure 1). These issues have been synthesized into the following draft issue statements on the next few pages.

At an Advisory Committee meeting on July 27, 2022, participants prioritized the issues by Management Zone using maps and data. The watershed is split into three Management Zones: Northern Forests, Central Mixed, and Southern Prairie (Figure 2).

These issues and their ranking will be reviewed and discussed again at the next Advisory Committee meeting on August 23. Then they will be presented to the Policy Committee for approval.



Figure 1. Process for gathering issue statements.

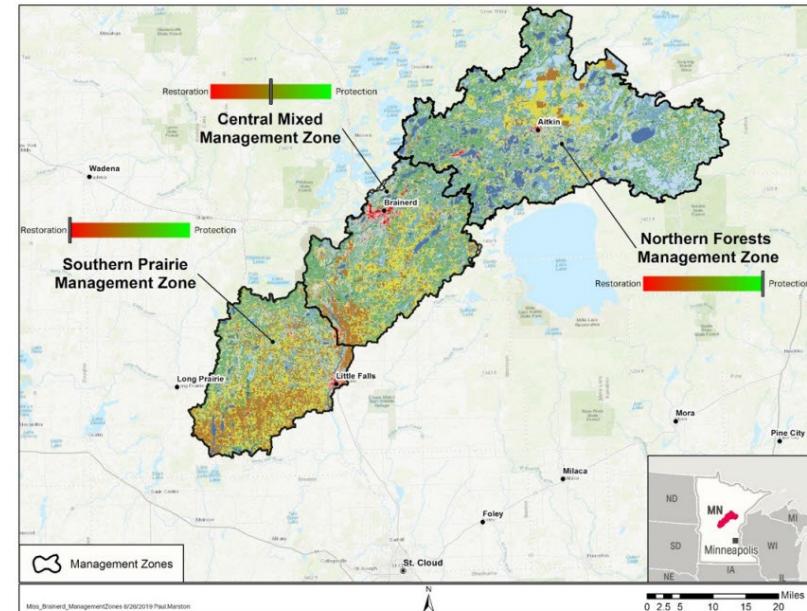
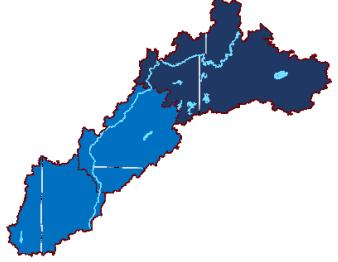
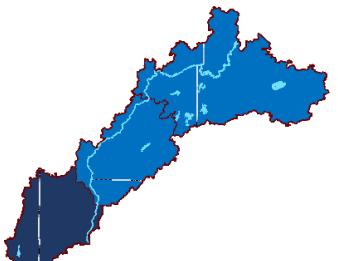


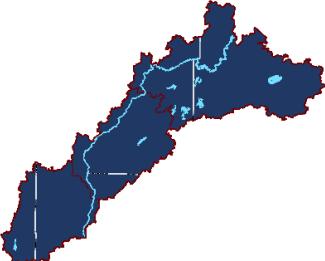
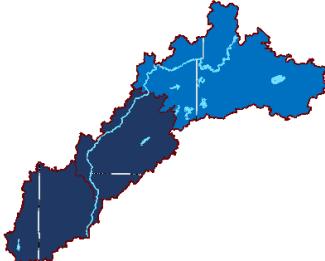
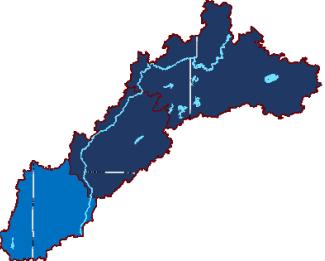
Figure 2. Management Zones in the MRB Watershed.

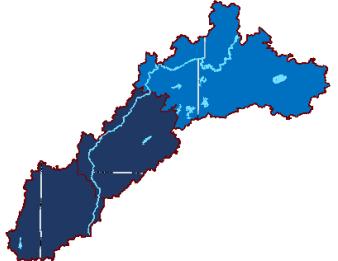
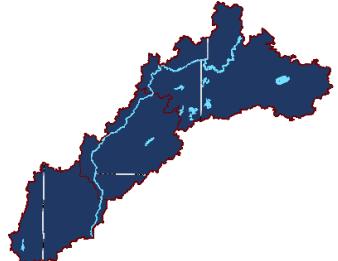
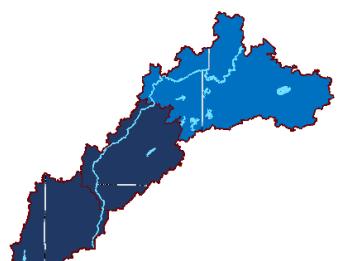
## Priority Issues

Priority issues that will be the focus of implementation efforts in the 10-year plan are listed in the table below. The main theme of the issue statement is shown in **bold** text. A high ranking in a management zone indicates where this issue is most prevalent.

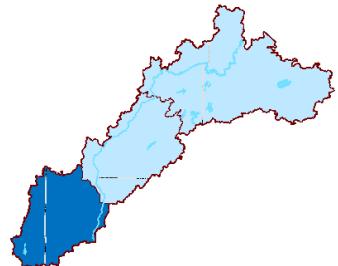
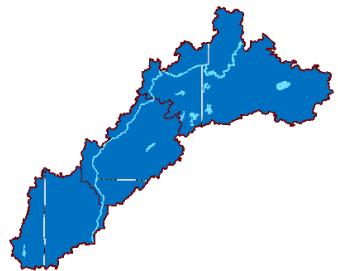
Management Zone Prioritization:  High  Medium  As Opportunities Arise

Resource Concern	Issues Statement	Management Zone Prioritization	Notes
<i>Resource impacted by the issue</i>	<i>BWSR requires a “brief issue statement that describes the relevance of the issue for the planning area”. Below are draft issue statements with their main themes in <b>bold</b>.</i>	<i>On 7/27/2022 the Advisory Committee prioritized the issues by Management Zone.</i>	<i>This column lists notes about what is covered by this issue statement.</i>
<b>Surface water:</b> Lakes, Streams, Wetlands, Mississippi River	<b>Altered hydrology</b> (channelized streams and ditch systems) increases peak flows and erosion and has led to biologically impaired streams.		Dams, culverts, Aitkin Diversion Channel, Brainerd Dam, Ditches, Need to reconnect streams to the floodplain, and identify areas to reduce runoff/peak flows to improve habitat and nutrient attenuation. Schwanke Creek in the south. Consider moving southern zone to high
<b>Surface water:</b> Lakes, Streams, Wetlands, Mississippi River	<b>Bacteria</b> can cause aquatic recreation and aquatic life impairments.		Bacteria impairments, cattle exclusions. Feedlots in the south, pasture management in central and north. Septic systems.

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<b>Surface water: Lakes, Streams</b>	<b>Nutrients</b> from lakeshore development, internal loading, and land use changes contributes to algal growth, and recreational and biological impairments.		TP lake impairments, internal loading, declining lake trends, wastewater discharge, septic systems, nutrient application. Identify tributaries/streams contributing nutrients.
<b>Surface water: Lakes, Streams, Wetlands, Mississippi River</b>	<b>Stormwater runoff</b> contributes sediment, nutrients, and pollutants to water bodies.		MRBW has 3 MS4s, Little Buffalo Creek is a priority stream impacted by high flow from stormwater, chloride is included in this issue statement. High = Brainerd/Baxter, Little Falls.
<b>Surface water: Lakes, Streams, Mississippi River</b>	<b>Sufficient protection</b> is needed for outstanding resources and sensitive species to maintain water and habitat quality.		Landscape Stewardship Plan, wild rice, cisco, Nokasippi River, outstanding biological significance, priority shallow lakes. Wild rice is a high priority for the Mille Lacs Band. Mining issues, trout creeks, trout lake in Morrison Co.

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<b>Groundwater: Quality</b>	<b>Groundwater quality</b> is vulnerable to contamination.		Nitrates, Surficial Sand Aquifer, protect DWSMA, high water table, arsenic, chloride, wellhead protection, pipelines, manure stockpiles, land application.
<b>Habitat: Riparian, Aquatic</b>	<b>Riparian and in-lake alteration</b> from development impacts water quality, lake health, and fish communities.		Development pressure, shoreline ordinances, impervious surface, clearing shoreline and in-lake vegetation. No wake zones. Identify where there are lake associations. Explain in-lake alteration in the text.
<b>Habitat: Uplands</b>	<b>Forest fragmentation</b> due to urban and agricultural land use changes impacts water quality, infiltration, and habitat.		50% of the watershed is forested, specifically protect the Mississippi River Corridor, conversion of forest to ag land, forest management, Landscape Stewardship Plan priorities Private forest management, Reforestation. <b>Incorporate forest health &amp; terrestrial invasives.</b>

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<b>Surface water:</b> Streams, Mississippi River	<b>Eroding streambanks</b> contribute to turbidity impairments and reduced habitat quality.		Mississippi River TMDL, Aitkin Diversion Channel, Riparian Buffers, stream channel. Focus on smaller streams: Little Buffalo Creek, Fletcher Creek.
<b>Surface water:</b> Wetlands	<b>Wetland restoration and protection</b> is necessary to store water, provide habitat, and improve downstream water quality.		Longitudinal connectivity, wetland restoration
<b>Surface water:</b> Lakes, Streams, Wetlands, Mississippi River	<b>Soil health</b> is important for agricultural productivity, water quality, and climate change resilience.		Cover crops, no till, soil organic matter, rotational grazing. Stream flow augmentation/holding water on the landscape. Irrigation water management. <b>Policy Committee recommends elevating soil health to higher priority; North = medium, Central and South = high</b>

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Groundwater: Quantity	<b>Groundwater sustainability</b> is vulnerable to overuse and loss of recharge.		Irrigation, groundwater use.
Habitat: Aquatic	<b>Aquatic invasive species</b> decrease biodiversity and impact recreation.		Note: the AIS program already has its own plan and dedicated funding, so even if it is a priority in the watershed, it may not be a priority in this plan. Include terrestrial invasives.

## Emerging Issues

Emerging issues are concerns in the watershed that lack detailed information but may affect the resources in the Watershed in the future.

- Contaminants of emerging concern (PFOAs, pharmaceuticals, estrogenic compounds, microplastics, etc)
- Climate Variability
- Energy (alternative sources), Miss. River has dams for power and reservoirs
- Pipelines