

**Minnesota Department of Natural Resources
Southern Region Headquarters
21371 State Highway 15
New Ulm MN 56073**

September 27, 2018

Watonwan County Land Management/SWCD
108 Eighth Street, Suite #2
St. James, MN 56081

BWSR – Jill Sackett-Eberhart
11 Civic Center Plaza, Suite #300
Mankato, M 56001

Dear Ms. Rudolph and Ms. Sackett-Eberhart,

Thank you for inviting the Minnesota Department of Natural Resources (DNR) to provide input as you and other local partners begin developing a Comprehensive Watershed Management Plan. I am writing on behalf of DNR Commissioner Tom Landwehr to express our support and share our priorities for the Watonwan Watershed.

We view these priorities as keys to protecting and improving the health of the watershed. A watershed scale plan can provide a system-based management approach. Sustaining the water resources are a must to maintain or enhance the quality of life for all who live, work, and enjoy the outdoors in the Watonwan Watershed.

Our goal is to supply scientific data and information to support your watershed plan. We are willing to bring information or provide presentations to stakeholders in order to get to know the watershed. In other watersheds partners have found value in our tools focusing on watershed health and Community-based Aquifer Management Partnership (CAMP) planning.

Our lead for this One Watershed One Plan (1W1P) project is Brooke Hacker, Regional Clean Water Legacy Specialist, based at the DNR office in Mankato. Please contact Brooke by phone at (507)389-8803 or via email at brooke.hacker@state.mn.us if you have questions or would like more information about the attached priorities.

Also feel free to contact me directly if needed. As the DNR's Regional Director, I am committed to ensuring that DNR staff in the region are organized to support 1W1P planning efforts and the resulting plans. We greatly value the opportunity to contribute to the process and hope the information we provide is helpful.

Sincerely,



Scott W. Roemhildt, DNR Regional Director, Southern Region

Ec: Robert Collett, DNR EWR South Region Manager
Jim Sehl, DNR EWR Assistant Regional Manager
Todd Kolander, DNR EWR South District Manager

Barbara Weisman, DNR Clean Water Coordinator
Cathi Fouchi, DNR Regional Planner
Brooke Hacker, DNR Clean Water Specialist

The priorities listed below are from each of the DNR’s divisions, in no specific order. We would appreciate if these issues are included in this Comprehensive Watershed Management Plan. As a natural resource team, we looked for opportunities that provide multiple benefits for the watershed. We are committed to be involved throughout this process and will bring more information as needed. Thank you for the opportunity to provide input.

Resource	Priority Resource Concerns & Opportunities
<p>Hydrologic Condition</p> <p>Adjust overall water volume and timing through water management and storage practices to improve the health and stability of the Watonwan watershed.</p>	<p>Concern: Many of the natural streams, rivers and lakes in the watershed are degraded. Changes in cropping, unmitigated drainage improvements, adding impervious surfaces and other landuse changes have changed the volumes of surface water in the watershed. More volume flows through our streams and rivers than has historically, including more flow in the fall and even winter.</p> <p>Drainage is essential for the economic prosperity of agriculture and those in the Watonwan Watershed. However, the cumulative impact of many has negatively impacted the stability of both natural streams and constructed channels. We see failing banks, increased erosion, and property damage, and needed investment in costly infrastructure projects. The net increase in water flow and volume across the watershed intensifies flooding, increases nutrient and sediment loads, and degrades aquatic habitat and species diversity. The watershed plan should identify targeted land use and water management strategies to reduce and mitigate these impacts.</p> <ul style="list-style-type: none"> • Opportunity: <u>Ditch and Drainage Management</u> - Ditch/drainage improvement should include mitigation (water storage), reducing impacts to downstream roads, bridges, and landowners. Fluctuating waters degrade public waters, and fish and other aquatic life. Focus on drainage repairs and spot clean out, or consider including mitigation on system wide excavations or improvements. • Opportunity: <u>Floodplain Access</u> – Many stream have downgraded due to the increase flows or have been deepened as part of drainage projects to the point flood flows are contained into the channel. Connecting rivers and streams to their floodplains – allowing them to flood – will slow the flow, dispersing sediment and nutrients. Perennial vegetation in the floodplain helps reduce erosion and filter sediment and nutrients. • Opportunity: <u>Proper Culvert Sizing</u> - Culverts should be properly sized and designated to function at various flow conditions while maintaining infrastructure and public safety. Improperly sized culverts impact sediment transport and stream stability. • Opportunity: <u>Natural Channel Restoration</u> - In areas where streambank or stream work is needed to protect infrastructure or private land natural channel restoration should be considered to achieve stream stability and limit downstream impacts. Natural channel design should be the first option and included in projects even when hard revetment (i.e. rock riprap) is preferred by

<p>Hydrologic Condition (Continued)</p>	<p>landowners. The healthy watershed approach generally favors natural stabilization techniques in order to stabilize banks, create floodplain benches and manage vegetation.</p>
<p>Water Quality – Reduce nutrient and sediment loading to improve the biology and health of the watershed.</p>	<p>Issue: Current water quality conditions for both lakes and streams point to a need for significant land use changes. Water Quality continues to decline in the watershed. Significant changes are needed, including landuse changes, to stabilize or improve deteriorating water quality trend.</p> <p>Work to address the water quality goals established in the Watershed Restoration and Protection Strategies (WRAPS) report and TMDL studies in ways that prevent future surface water quality impairments and groundwater contamination, improve fish habitat in lakes and streams, and promote the watershed's resilience to climate change, invasive species, and other stressors.</p> <ul style="list-style-type: none"> • Opportunity: <u>Targeted BMP implementation</u> - Prime agricultural ground should be protected for agriculture, but the watershed would benefit from targeted conservation BMPs. Healthy soils protected by cover crops and reduced tillage reduces nutrients, increases residue, and increases water storage within the soil profile and reduces runoff. In addition to targeted BMPs, promote watershed wide nutrient application rates as approved by MDA. • Opportunity: <u>Invasive Species</u> - Work to prevent, contain and/or control the spread of invasive species. Leverage local efforts with state programs to improve water quality and stop the spread of invasive plants and animals. <p>Issue: Lakes and rivers are under stress from climatic variability and land use changes. Certain lakes are high priorities for protection or restoration because they have outstanding water quality, support diverse fisheries and diverse and abundant native aquatic plant communities.</p> <ul style="list-style-type: none"> • Opportunity: Protection or restoration measures are needed to maintain or improve the high public recreational and resource value of the lakes that meet water quality guidelines for water recreation and fish consumption <ul style="list-style-type: none"> -<u>Fish Lake</u>– (Protection) This lake has a higher sensitivity to nutrient loading. Nutrient management and other BMPS are especially important in the watershed of this lake. -<u>St James Lake</u> – (Restoration) Due to the small lake to watershed area, this system would likely respond well to a variety of agricultural and urban water quality BMPs. With limited flushing, the timeline to see improvements will be much longer. It is best to protect the water quality early on. -<u>Kansas Lake</u> – (Restoration) Landuse zoning including Shoreline management would help assist the already established fishery from future degradation or development pressure.

<p>Water Quality – (Continued)</p>	<p>-<u>Bingham Lake</u> - (Protection) Additional development is occurring on the lake. Again, administration of the Shoreland Ordinance should be a priority.</p> <p>-<u>Fedji Lake</u> – (Restoration) This lake may benefit from a Lake Management plan, including potential draw downs and vegetative management.</p> <p>-<u>Perch Creek</u> – (Protection) Perch Creek is home to several rare and endangered species, including both plants and wildlife. Targeted conservation practices including buffers, storm water management, minimizing tillage, and the use of cover crops could be pay dividends.</p>
<p>Outdoor Recreation and Natural Heritage</p> <p>Promote and increase opportunities for outdoor recreation. Protect and restore perennial vegetation.</p>	<p>Issue: The Watonwan River Watershed is home to unique opportunities for outdoor recreation. The hundreds of stream and river miles, as well as numerous lakes, are home to diverse plants and wildlife. Continued land use conversion pressure poses a threat to fragmented ecosystems.</p> <ul style="list-style-type: none"> • Opportunity: With less than 1% of the native prairie remaining, protecting grassland and wildlife habitat is one of the most critical environmental challenges facing Minnesota. Documents such as the Prairie Plan Corridor aim to preserve this landscape through protection, restoration and enhancement. Easement or set-a-side programs may help protect the highest quality areas. • Opportunity: Promote state and local programs such as the Walk in Access (WIA) program, to increase outdoor recreation opportunities while maintaining private property ownership. • Opportunity: Landuse Ordinances and decisions should protect large tracts of floodplain or other natural areas from fragmentation. • Opportunity: Increase outreach and education regarding rare and natural animals in the watershed. Increase awareness of species, such as Blanding’s Turtles, and how to protect and restore habitat.
<p>Water Quantity</p> <p>Protect existing aquifers and water supplies through education and usage monitoring.</p>	<p>Issue: Expanded usage of groundwater resources can deplete aquifer volume, decrease water quality, and disrupt public water private water supply. Several communities have drilled new wells, or limited water usage in the surrounding area due to sustainability concerns.</p> <ul style="list-style-type: none"> • Opportunity: The City of St James should promote the wellhead protection area success. Local involvement and efforts should be highlighted as a path forward to others success. • Opportunity: The DNR provides the Community-based Aquifer Management Partnership (CAMP) program to raise awareness of water supply issues, infrastructure, and water availability considerations for future need with local government units. Increased knowledge of groundwater resource will lead to improved landuse decisions ad community design.

Water Quantity (Continued)

- **Opportunity:** Expand education and outreach at a LGU/watershed level to high volume users including irrigators and livestock facilities. Encourage large volume users to work cooperatively, share information on improvements in efficiency. Educate irrigators on application rates, timing, and scheduling programs. Help MNDNR get appropriate permitting in place in order to broaden water use reporting for better aquifer characterization.
- **Opportunity:** Work with the DNR to expand the ground water monitoring network. Work with local communities to instrument and monitor local water usage and groundwater sustainability.