



June 26, 2020

Kate Kubiak
Conservation Specialist, South St. Louis County SWCD
215 North 1st Avenue East
Room 301
Duluth, MN 55802

Dear Kate,

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 for the St. Louis and Cloquet Rivers and the Lake Superior South Watersheds. I am writing on behalf of DNR Commissioner Sarah Strommen to share our priorities and express our support.

We convened a team representing DNR's divisions of Ecological and Water Resources, Fisheries and Wildlife, Forestry, Lands and Minerals, and Parks and Trails to identify Agency priorities for these watersheds. We encourage you to consider these as you develop the plan. A plan centered on these priorities will help sustain water resources in ways that enhance the quality of life for all who live, work, and enjoy the outdoors in this watershed.

The DNR can supply scientific data and information related to the attached priorities. We also offer tools and services that can help stakeholders get to know the watershed and explore water resource values.

Our lead staff person for this One Watershed One Plan (1W1P) project is Sam Martin, Support Hydrologist, 218-834-1442, Samuel.martin@state.mn.us, based at the DNR office in Two Harbors. Please contact Sam if you have questions or want more information about the attached priorities or the types of technical support we can provide.

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,

Patty Thielen

DNR Regional Director, Northeast Region

cc: Sam Martin (DNR), Darrell Schindler (DNR), Barbara Weisman (DNR), Erin Loeffler (BWSR), Margaret Wagner (MDA), Luke Stuewe (MDA), Carrie Raber (MDH), Chris Parthun (MDH), Karen Evens (MPCA)

DNR Priorities for the St. Louis River, Cloquet and Lake Superior South Watersheds

The St. Louis River One Watershed One Plan boundary encompasses three HUC08 watersheds: the St. Louis River, Cloquet River and the southwest portion of the Lake Superior South watershed. The new watershed plan should look to improve and maintain priorities such as water quality, aquatic habitat, riparian forests, and outdoor recreation opportunities. These efforts will help vulnerable resources better withstand future impacts from climate change and human activity. Below we offer the priority resource concerns and opportunities identified by DNR’s multi-disciplinary team, grouped under the categories of Water Quality and Land Cover, Habitat and Outdoor Recreation, and Other Issues.

DNR PRIORITY RESOURCE CONCERNS & OPPORTUNITIES	CATEGORY
<p>Manage streams using the five component framework: biology, connectivity, geomorphology, hydrology, and water quality. Protect stable free flowing streams with healthy riparian buffers and restore stream connectivity to floodplains and groundwater using natural channel design principles. Address anthropogenic constraints such as dams, ditched stream channels, and improperly sized culverts as these can alter flow regimes, cause channel instability, affect water temperature and create barriers to fish passage and sediment transport. The St. Louis River Watershed overall has good to fair water quality, with spotty areas of poor water quality, so there are locations suitable for restoration. The Cloquet River watershed generally has excellent water quality suitable for protection. There are locations in the Cloquet where restorations are recommended. The Lake Superior South watershed has many exceptional water resources, but there are locations where conditions are impaired.</p> <p>Impairments are generally due to local conditions, especially improperly-sized culverts and road crossings which affect water temperature, sediment transport and fish passage in a number of HUC10 subwatersheds, including West Two River, Sand Creek, Embarrass River, Hellwig Creek, and Beartrap Creek. Current and legacy metallic mining has altered the drainage of several subwatersheds across the northern boundary of the watershed, and future mining is likely. The interaction of groundwater and surface water is one factor that affects the hydrology of these subwatersheds, which in turn affects water temperature. DNR has developed several tools useful for addressing stream management, including geomorphic assessment and a stream crossing index. These tools are useful for developing stream restoration and protection plans. For example, DNR is part of a team planning restoration in the Amity Creek subwatershed.</p> <p>Manage lakes to protect riparian and shoreland areas, especially using shoreline surveys to identify suitable locations for attention. Overall, water quality is excellent, and impairments are generally due to local conditions. One planning tool is DNR Fisheries’ identification of approximately 60 lakes of biological significance, so designated for the presence of certain plants, aquatic species or birds in the lake or its riparian zones. DNR has also identified shallow lakes, wild rice lakes, designated trout waters and lakes that are highly sensitive to phosphorus as potential priority locations for protection or restoration. In addition, wild rice lakes including Breda, Wolf, Ricehaven/Leman, Miller, Deadfish, Rice Portage, Jaskari and Perch, are very important for the ricing resource and the waterfowl and aquatic furbearers. DNR collaborates with 1854 Treaty Authority and Fond Du Lac Band of Lake Superior Chippewa to monitor and restore wild rice in the watershed and in the St Louis River Estuary.</p> <p>Manage wetlands to protect wetland functions, water flow, ground water recharge and habitat for important and rare species. DNR can help identify priority areas for restoration, including those associated with the extensive peatlands of the St Louis River watershed. Significant wetlands include the Wawina Peatlands, the Sax Zim Bog, and the coastal wetlands of the St.</p>	<p>WATER QUALITY & LAND COVER</p>

<p>Louis River Estuary. Sax-Zim Bog and the St Louis River Estuary have been designated important bird areas by the National Audubon Society.</p> <p>Minimize environmental effects of aggregate mining. Gravel extraction has affected water quality for the lower Cloquet River, in the Beartrap Creek subwatershed, a place where aggregate resources and high value biological and water resources overlap. Best management practices in aggregate operations reduce sedimentation and protect water quality, while retaining economic benefits for local infrastructure projects and reducing their costs.</p>	
<p>Continuous forest cover is a significant resource of these watersheds. DNR’s Division of Forestry practices sustainable harvest on state lands, with the goal of maintaining diverse, mixed-age, continuous forest cover. DNR works collaboratively with its partners in local and federal government and industry to advance sustainable forest management on all public lands. Monitoring shows that the St Louis and Cloquet River watersheds have the highest compliance following guidelines statewide. These watersheds also have High Conservation Value Forests located near the Floodwood Bog, the St. Louis River Headwaters and the Cloquet River corridor, as well as old growth and lowland conifer forest. Large tracts of private forests are vulnerable to being split into parcels, sold and converted to non-forest land uses. The DNR can help identify priority tracts of privately owned forestland at risk of development, where collaborating to promote sustainable timber harvest management could help protect water quality and high-priority fisheries. This can be accomplished by helping private owners develop forest stewardship plans that share best management practices used by the state.</p> <p>Managing terrestrial invasive species, such as Emerald Ash Borer, is a DNR initiative throughout the watershed. The Division of Forestry has implemented guidelines for addressing the threat of Emerald Ash Borer on state-administered lands. These guidelines promote forest resiliency by focusing on ecosystem function and health, and especially, hydrologic function.</p> <p>Maintain high quality stream habitats that support diverse fisheries, especially those habitats critical for all lifestages of coldwater species such as brook trout and steelhead. The DNR works with partners to assure free-flowing riparian systems with access to floodplains from headwaters to Lake Superior, and that lakes and streams are shaded by healthy buffers. In order to restore or protect coldwater fisheries, biologists evaluate whether beaver activity, including dams, affects water storage, flashiness, bank susceptibility, and temperature. Fisheries biologists are also working to identify minimum standards of water levels required for in-stream biological uses, especially as changing climate affects stream temperature and water regimes. The DNR’s fisheries staff work cooperatively with local units of government to manage fisheries impacts due to road crossings, ditch, gravel operations and beaver dams in the Hellwig Creek and Beartrap Creek subwatersheds of the Cloquet River watershed and Water Hen Creek, Elbow Creek, Unnamed (Little Swan) Creek and Wyman Creek, subwatersheds of the St Louis River watershed. DNR has worked on several cooperative projects to support resilient trout populations, such as Tischer Creek, as well as supporting steelhead or brook trout populations in Mission Creek, Knowlton Creek, and Kingsbury Creek.</p> <p>Managing wildlife, and especially species of concern, is a DNR priority. Certain riparian areas provide habitat for species of concern. The DNR has adopted a conservation plan to maintain and enhance wood turtle populations at these types of locations with the goal of having viable populations. The plan provides strategies for the state, local partners and private landowners to protect and restore this habitat.</p> <p>Outdoor recreation is an important resource of these watersheds. Managing access to recreational areas is challenging. Access is provided to off-road vehicles on forest roads in the state forests, but some users ride where there are no trails, or where vehicle traffic may harm</p>	<p>HABITAT & OUTDOOR RECREATION</p>

water or ecological resources. For example, some winter-use only snowmobile trails cross wetlands – an allowable use under winter conditions. Using snowmobile trails out of season can damage water or ecological resources. Off-road vehicle riders may be using canoe campsites on the St. Louis, Cloquet and Whiteface Rivers, creating a potential conflict with water-based users.

The St. Louis River watershed is underlain by a diverse geologic landscape that includes surficial landforms and bedrock units that host mineral resources of local, regional, and national and international significances. The exploration, development, use and reclamation of these mineral resources is governed by Minnesota statutes, rules and policies. This ensures that the state’s mineral resources are developed and used in balance with other natural resource and natural environment values. As the watershed plan develops, DNR’s Division of Lands and Minerals is available to provide information, expertise, and assistance as needed.

These watersheds include nearly two million acres of public lands, of which one-third is administered by the state. DNR manages these lands on behalf of our citizens and continually strives to improve the state’s land portfolio through strategic purchases, sales and exchanges. Doing so ensures that the state’s public land base meets recreation, conservation and economic needs into the future.

Climate change is impacting Minnesota's wildlife, plants, waters, historic resources, infrastructure, and outdoor recreation areas. These watersheds will change as the region experiences warmer winters and more intense storms. DNR provides information about climate conditions and resources to manage the multiple impacts of climate change. DNR hydrologists have started an in-depth analysis of climate and hydrologic data for the St. Louis River Watershed and we will share the detailed results in the coming months. Minnesota’s Lake Superior Coastal Program is addressing impacts of climate change, especially changing precipitation and temperature patterns, by providing scientific data and technical resources to local units of government to identify, manage and mitigate the effects of climate change on natural resources. The program’s work with coastal communities will mitigate these impacts through outreach, education, and training.

The St. Louis River Board published the St. Louis River Management Plan in 1994; it applied to lands along St. Louis, Cloquet, and Whiteface rivers and its purpose was to provide protection to these important headwaters. The Plan was developed by a 26 member Citizen Advisory Committee representing a broad spectrum of interests, who relied on a technical advisory panel made up of representatives from local, state, federal, and tribal land management and regulatory agencies. The plan outlines alternative strategies for managing the St. Louis River lands in a way that reflects the intent of the partners to protect and enhance these important waterways.

With newer tools like GIS and other developing technologies, ratification of the Sustainable Forest Resources Act and establishment of the Minnesota Forest Resources Council in 1995, publication of the Forest Management Site Level Guidelines in 1999 and many other advances, resource management and monitoring techniques have continuously improved and been modified to support comprehensive landscape-scale management. The Department is committed to communicating and coordinating with local, federal, and tribal governments on how the priorities and objectives of the St. Louis River Management Plan can be achieved using existing values, policies, and guidelines. The Department systematically considers goals and intentions of a wide array of interests (wildlife habitat, fisheries health and populations, forest health, ETS species, etc.) when making management decisions on lands we manage, including here. Some of these goals and intentions are:

- Healthy forests composed of native vegetation,
- Diversity in vegetation structure and composition,

**OTHER ISSUES:
MINING, PUBLIC
LANDS, CLIMATE
CHANGE AND
COLLABORATIVE
MANAGEMENT**

- Managing towards forest communities consisting of longer-lived conifers and hardwoods which act as core wildlife areas, and
- Strategic vegetation management which benefits wildlife, fisheries, water quality, cultural preservation, overall forest health, local economies and aesthetics.

The Department is committed to completion of the action items in the St Louis River Estuary Area of Concern, which has remediated legacy pollution and is restoring significant areas of fish and wildlife habitat, in the river's estuary, which is part of the headwaters of Lake Superior and the Great Lakes.