

Forests & Wetlands Topic Meeting Summary



Introduction

Located in remote northern Minnesota is the wild Little Fork River Watershed (LFRW). The LFRW is a large watershed covering 1,872 square miles. The confluence with the Rainy River is about 160 miles from the headwaters, 11 miles west of International Falls. The Little Fork River begins in the north-central portion of St. Louis County near the town of Cook (MPCA, 2017). The watershed consists of three counties: Koochiching County (39%), St. Louis County (48%), and Itasca County (12%; DNR, 2015). There are no large cities within LFRW: the largest towns are Littlefork (population of 674) and Cook (population of 667; Koochiching County, 2018).

The LFRW One Watershed, One Plan (1W1P) is a planning partnership between Koochiching County, Koochiching County, Itasca County, Itasca SWCD, St. Louis County, North St. Louis SWCD, and the City of Littlefork. Over the next year, this planning partnership will create a plan that will help maintain the high quality of the natural resources in the LFRW as well as restore valuable resources. Through this process, the planning partners, with guidance from local experts and stakeholders, will develop a comprehensive watershed management plan that identifies key issues in the watershed, creates measurable goals to help address those issues, and develop targeted implementation actions that help work towards achieving those goals.

The 1W1P process is outlined in **Figure 1** below. The first steps of the 1W1P process are a series of topic meetings that will be held to gather local input and kick-off the planning process by gathering issues, prioritizing issues, and targeting resources. These meetings will bring together the stakeholders and local experts to provide a strong background in each topic to ensure that the 1W1P adequately addresses the most important local concerns. The resources that will be covered in these meetings are Rivers & Lakes, Forests & Wetlands/Peatlands, Urban Stormwater & Drainage, and Farms & Groundwater.



Figure 1 Planning process for the LFRW 1W1P.

Little Fork River Forests & Wetlands/Peatlands Overview

Wetlands and forest dominate the LFRW. Almost half of the watershed is classified as wetlands and peatlands (46%). It is estimated that a large majority (93-98%) of pre-settlement wetlands in St. Louis and Koochiching counties remain today (MPCA, 2006). Another 37% is forest, which is made up of 18% deciduous forest, 13% mixed forest, and 6% evergreen forest (DNR, 2017). The peatlands are predominantly in the northern portion of the watershed while the evergreen and deciduous forests are more common in the central and southern portion of the watershed (Figure 2).

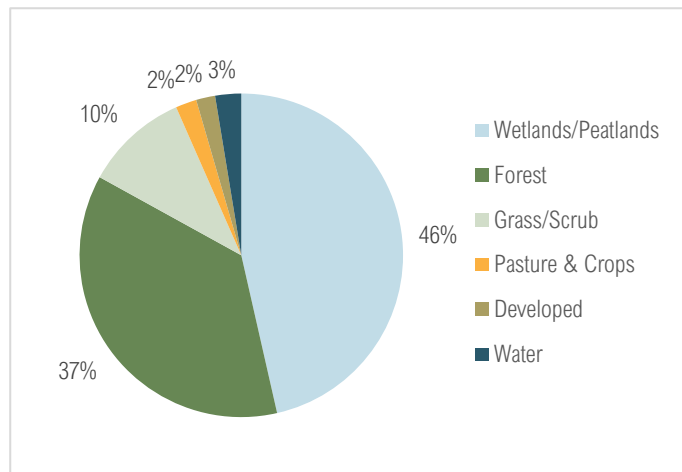


Figure 2. Land Use in the LFRW.

Peatlands are different than depressional wetlands in that they are at higher elevations and slowly release water to stream channels. They consist of partially decayed vegetation, organic matter, and sphagnum moss. Peatlands are known for their inefficiency at moving water. They are ecologically unique for fish, bird, and wildlife habitat, water storage, and carbon storage. However, they are considered unproductive economically. The LFRW lies within one of the largest continuous boreal peatlands in the contiguous United States. The Little Fork River flows through the bed of glacial Lake Agassiz. Glacial lake plains are ideal environments for peat formation (Severson, et. Al, 1980).

The LFRW generally is well protected due to its high percentage of forests and wetlands, as both ecosystems are important in land protection. Over half of the minor watersheds in the LFRW are over 75% protected, and only a small number as less than 40% protected. The northern half of the watershed is extremely well protected, as those lands are mostly peatlands.

The LFRW has a large Aspen population throughout the watershed. Other significant forest types include pine, northern white-cedar, spruce, and ash. These forests have been a significant economic resource for the watershed. Historical logging has impacted water quality, both due to altered hydrology and increased erosion and turbidity (MPCA, 2006). Corresponding to the expected changes in nutrient export from forested watersheds during the reforestation following logging events is likely to impact nutrient levels within the watershed (MPCA, 2017). Best management practices will need to be considered to bring harmony between the logging industry and water quality. The decrease in long-term stream flow is the result of land cover changes related to logging and reforestation (MPCA, 2006).

The forests are also a recreational and ecological resource. Roughly 52% of the land in the watershed is open to the public. There are several state forests and the Superior National Forest that provide opportunities for hunting, fishing and canoeing. Being an area of pristine condition, there is 5% high and 8% moderate ranked sites of biological significance (DNR, 2017). There are four Scientific Natural Areas (SNA) within the watershed: Nett Lake Peatland SNA, Myrtle Lake Peatland SNA, Potato Lake SNA, and Lost Lake Peatland SNA. Four state



forests (Smokey Bear State Forest, Koochiching State Forest, George Washington State Forest and Sturgeon River State Forest) and one National Forest (Superior National Forest) are spread throughout the watershed, which provide space for recreation and habitat.

In this packet, there are figures related to forests, wetlands, and peatlands to provide additional context: current land cover (**Figure 7**) in the LFRW, percent protected lands (**Figure 8**), and peatland extent (**Figure 9**).

Issues

The general process of planning and convening the topic meetings are shown in the graphic below. The process begins with gathering issues from existing studies and documents before the meeting. At the meeting, participants brainstorm issues, discuss these issues in greater depth, prioritize them, and brainstorm possible actions to address these issues (**Figure 3**).

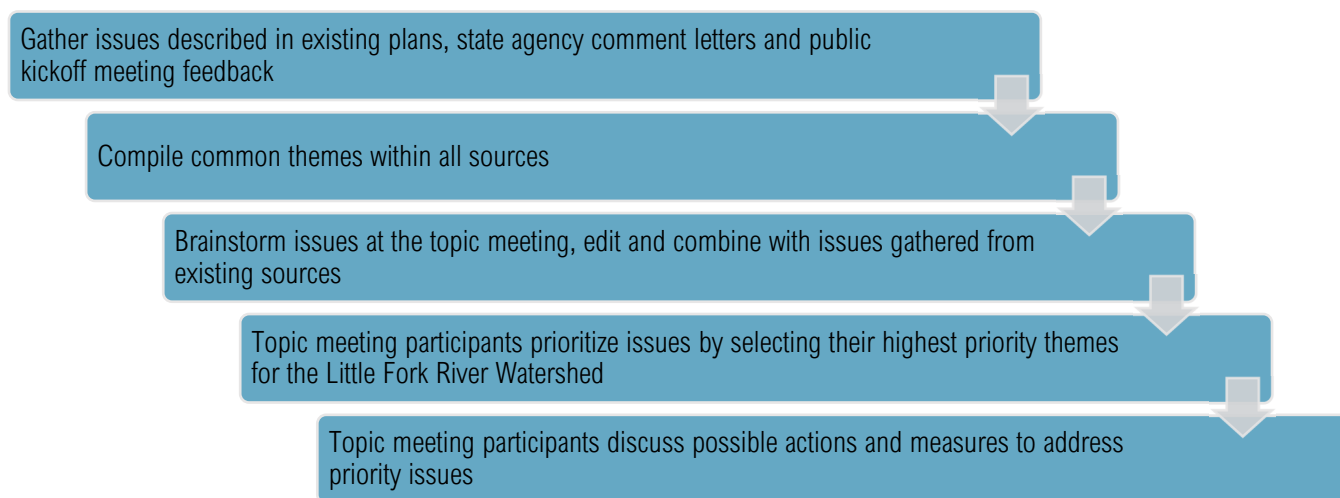


Figure 3 Issue development for the BFRW 1W1P during topic meetings

The Forest & Wetland Topic meeting for the 1W1P planning effort was held on September 4, 2025 in the city of Littlefork. To gather the diverse viewpoints about water quality of stakeholders and experts in the watershed, we began the meeting by asking each member of the Advisory Committee to describe the forests and wetlands in the LFRW in a few words. Their responses are shown below in a word cloud (Figure 4).





Figure 4 Word cloud when participants were asked about forests and wetlands in the BFRW.

Prior to large group discussions, the group heard two presentations: one from Mitch Brinks (TSA 8 GIS specialist) who discussed current progress on the upcoming Landscape Stewardship Plan in the LFRW, and one from Matt Picklo concerning forest health in the LFRW. At the meeting, attendees were asked to write about issues and opportunities related to forests and wetlands on sticky notes (Figure 5). These notes were then clustered into themes to determine if the Advisory Committee priorities align with the themes gathered from the plans, reports comment letters, and public input. Themes were then adjusted, regrouped, or new themes were created based on feedback and advice from the committee. The group then finalized a list of 5 themes related to forests and wetlands (Table 1).



Figure 5 Brainstorming results for issues and opportunities about forests and wetlands in the LFRW.



Table 1 Draft issue statements for forests and wetlands in the BFRW.

Draft Issue	Draft Issues Statement	Sources (see key below)
Land Protection	Sufficient protection is needed for outstanding resources and sensitive species (i.e., trout, cisco, wild rice) to maintain water and habitat quality.	BWSR Letter, DNR Letter, Itasca County, Koochiching County, Monitoring, MPCA Letter, TMDL, WRAPS
Forest Health	Managing forest health for invasive species, climatic changes, and changes in plant communities is essential to maintaining an important economic and recreational resource.	Itasca County, Koochiching County, Monitoring, TMDL, WRAPS, BWSR Letter
Forest and Recreational Infrastructure	Forest and recreational infrastructure impacts hydrology and increases erosion if not managed properly.	DNR Letter, MPCA Letter, Itasca County, Logging, Monitoring, Monitoring, Trends, EPA TMDL
Altered Hydrology/Ditching	Altered hydrology , such as culverts, previous ditching, and channelization has altered stream flow and impacted aquatic habitats.	EPA TMDL, Koochiching County, MPCA Letter, WRAPS, BWSR Letter
Wetland/Peatland Health	Wetland and peatland health needs to be managed for invasive species, changing climate impacts, wildlife habitat, changing plant communities, and wildfire deposition.	DNR Letter, Koochiching County, MPCA Letter, St. Louis County, Itasca County

BWSR Letter – BWSR 60 Day Letter | **DNR Letter** – DNR 60 Day Letter | **EPA TMDL** – EPA Total Maximum Daily Loads Support Letter | **Itasca County** – Itasca County Local Water Management Plan | **Koochiching County** – Koochiching County Comprehensive Local Water Management Plan | **Logging** – MPCA Effect of Historical Logging Report | **MDH Letter** – MPCA 60 Day Letter | **Monitoring** – MPCA Monitoring and Assessment Report | **MPCA Letter** – MPCA 60 Day Letter | **Select Lakes** – MPCA Water Quality Assessment of Select Lakes | **St. Louis County** – St. Louis County Comprehensive Water Management Plan | **TMDL** – MPCA Sediment Reduction Project Total (Total Maximum Daily Load) | **Trends** – MPCA Watershed Assessment and Trends Update | **WRAPS** – Little Fork River Watershed Restoration and Protection Strategy Report |



Next, each participant was asked to use sticky dots to identify their top three issues for forests and wetlands. An image of this process can be found below (Figure 6). The highest priority items were altered hydrology (14 votes), forest health (14), and impacts on hydrology and erosion (11). Wetland/peatland health (7) and land protection (5) received less priority votes. Although some received higher prioritization during this exercise, all issues will be addressed in the plan.

Figure 6 Prioritizing issues at the forest and wetland topic meeting.

Forests and Wetlands Actions

Actions were brainstormed to help address the issues that were prioritized during the meeting. These actions will be implemented into the plan, with more actions added during the planning process.

Forest Actions

- Forest stewardship plans (private lands)
- Diversify ash stands
- Invasive species monitoring
- Tree planting in marginal farmland
- Support for public lands
- Public outreach
- Infrastructure and culvert inventory
- Forestry BMP promotion (site level guidelines)
- Coordination of infrastructure improvements (state, federal, county)
- Smart parcel shoreline management
- Upshed water storage from ravines
- Feasibility and pilot project to restore ravines from erosion
- Look at ravine study on Minnesota River
- Outreach to public on how to identify EAB
- Grade school and high school engagement

Wetland Actions

- Idea to explore having mining companies restore ravines for wetland credits
- Feasibility study for peatland restoration
- Monitor health of wetlands and peatlands – how? Look at MPCA IBI data
- Use sediment fingerprinting for peatland health
- Aerial monitoring of peatlands



Meeting Attendees

- Ada Tse – St. Louis County
- Cal Saari, Itasca SWCD Board Supervisor
- Chad Severts - BWSR
- Dan Disrud - MDH
- Danae Schafer, Koochiching County
- David Demmer, BWSR
- Holly Hoy, City of Littlefork
- James Aasen, Koochiching SWCD
- Jeff Hrubes- BWSR
- Jólen Simon – Koochiching SWCD
- Lynda Ponting, BWSR
- Matt Gutzmann - Itasca SWCD
- Matt Picklo, Itasca SWCD
- Mike Kennedy, MPCA
- Mitch Brinks, GIS Specialist TSA 8
- Pam Tomevi - Koochiching SWCD
- Skyler Webb, St. Louis County
- Tristian Nelson, North St. Louis SWCD
- Waylon Glienke, Itasca SWCD
- Whitney Sims - Koochiching County
- Moriya Rufer, Houston Engineering
- Aaron Frankl, Houston Engineering



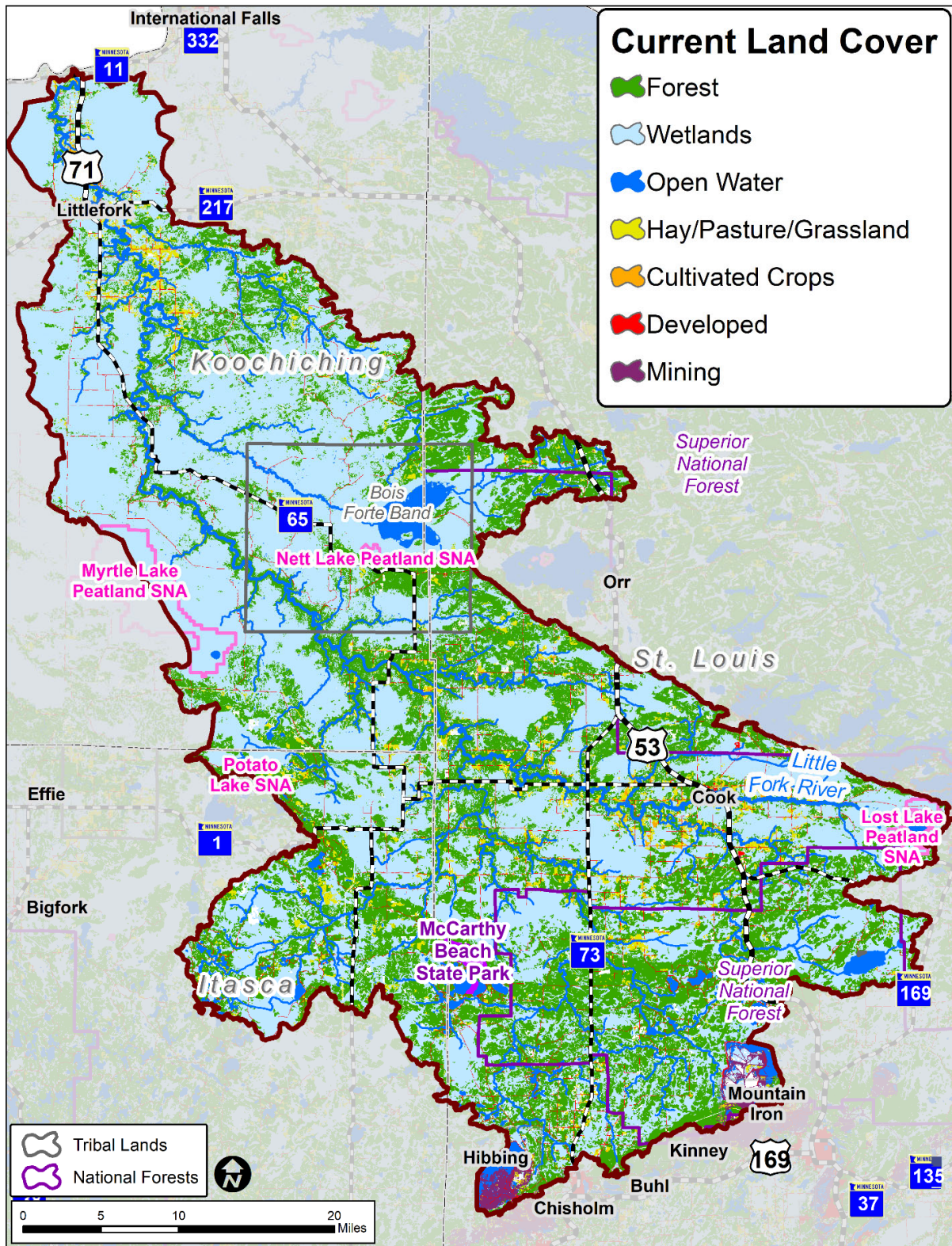


Figure 7. Land use in the LFRW.

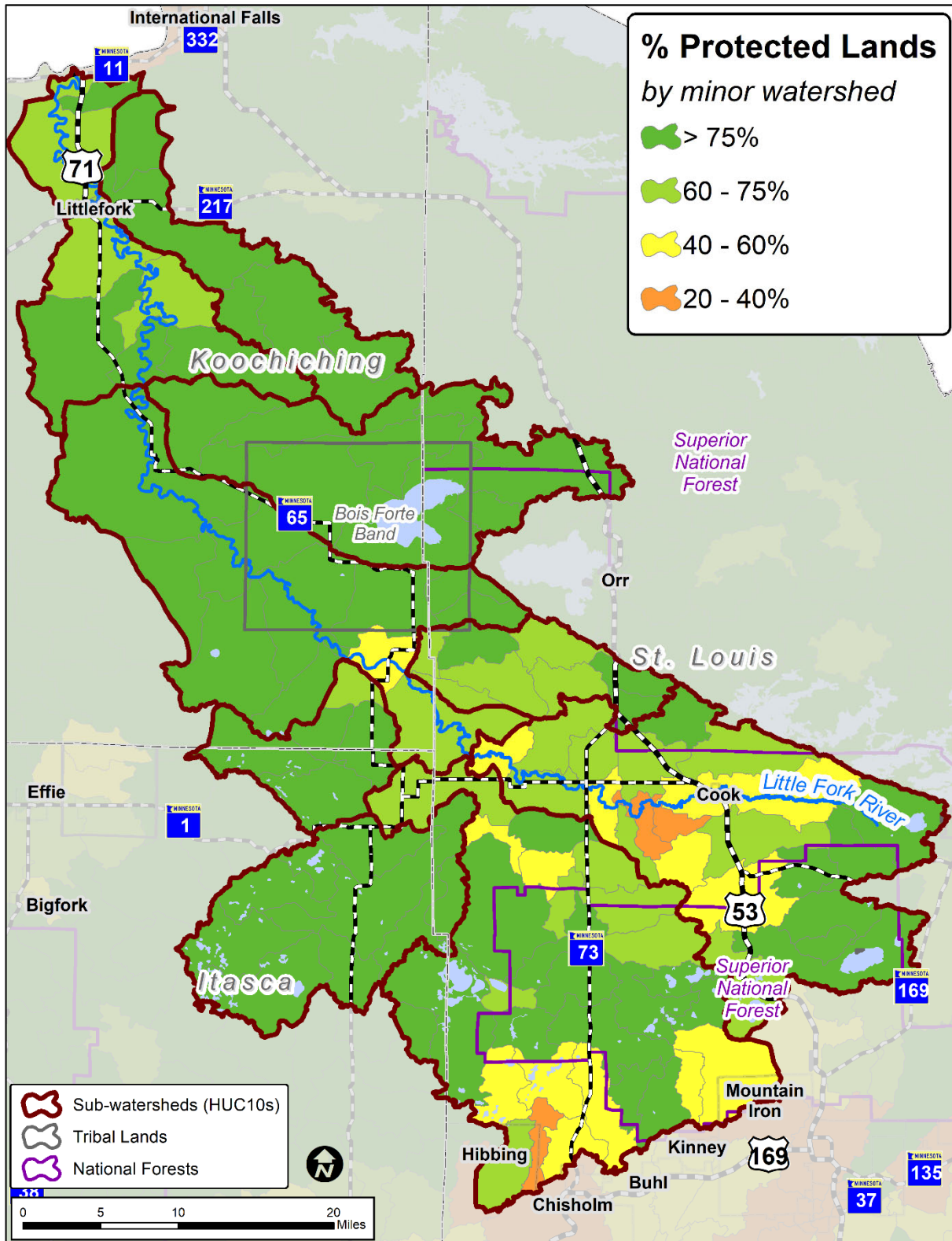


Figure 8. Protected lands in the LFRW.

References

Minnesota Department of Natural Resources (DNR), 2015. Watershed Health Assessment Framework.

Minnesota Department of Natural Resources (DNR), 2017. Watershed Context Report.

Minnesota Pollution Control Agency (MPCA), 2006. Effect of Historical Logging on Geomorphology, Hydrology, and Water Quality in the Little Fork River Watershed.

Minnesota Pollution Control Agency (MPCA), 2017. Little Fork River Watershed Restoration and Protection Strategy Report.

Severson, L.S., H.D. Mooers, and T.J. Malterer. 1980. Inventory of peat resources Aitkin County, Minnesota.

