

Advisory Committee Meeting Summary

January 30, 2023

Virtual



Meeting Participants

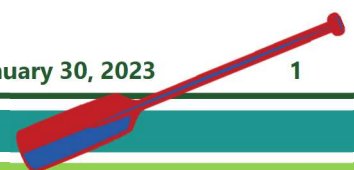
Becca Reiss (NSLSWCD), Phil Norvitch (NSLSWCD), Ada Tse (St. Louis County), Amy Mustonen (MPCA), Christine McCarthy (Lake County), Erin Loeffler (BWSR), Ilena Hansel (Cook SWCD), Kari Hedin (Lake SWCD), Jeff Hrubes (BWSR), Julie Marinucci (St. Louis County), Tara Solem (Lake SWCD), Moriya Rufer (HEI), Aaron Frankl (HEI), Marty Rye (USFS), Ryan Clark (Carlton SWCD), Tyler Kaspar (1854 Treaty Authority)

Meeting Purpose

The purpose of this meeting was to review the draft Priority Issues section of the plan and the Prioritized Lakes and Streams for establishing measurable goals.

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.



Issues Plan Section Review and Lakes & Stream Prioritization

With no meeting in December, the Advisory Committee first reviewed the progress of the planning effort.

Issues have been gathered from numerous sources and synthesized into “Issue Statements.” The Issue Statements were reviewed and revised by the steering and advisory committees. The Policy Committee approved the Issue Statements (with no primary or secondary issues identified) at the January Policy Committee Meeting.

The Advisory Committee received a draft plan section on the “Issues Section” for the plan along with draft prioritization of Lakes and Streams. A Jamboard and survey (see attached) were used for input in addition to discussion during the meeting. Productive discussions and modifications to the issues and lake/stream prioritization was incorporated into a revised draft plan section that will be sent to the Advisory Committee. Suggested revisions are requested by February 21st, prior to the next Advisory Committee Meeting.

Next Steps

- **February 21:** Suggested revisions to Draft Issue Section and Lake & Stream Prioritizations due
- **February 27:** Advisory Committee (Virtual)
 - Review revisions and developing measurable goals
- **March 3:** Policy Committee Meeting
 - Approve draft of issues section and Lake & Stream Prioritization

Emerging Concerns

* Contaminants of Emerging Concern
PFOHs, PFAS

* Boundary (school Realignment) Land Exchanges
Ownership

Move to Local Concerns and parcelization

This could be covered under the parcelization and future development concern

could lead to additional private ownership/development/fire interface and management
Marty: federal lands that are traded will potentially be sold to private folks

With the addition of sulfate and a couple other pollutants that were mentioned, we might have to enumerate which pollutants the plan is addressing

Major wildfire potential

Local concerns of "too much protection" How much is enough. There can be backlash... Just a place to acknowledge?

Local Concerns

* Mining

Consider listing the pollutants/parameters of concern- TSS, flow, temp, ions, mercury methylation due to sulfate, wild rice and aquatic life protection.

* Chloride

Shouldn't this just be considered a pollutant?

yes, included in issue statement

* Parcelization & Future Development

include increased water traffic with increased development

* Lead Free Tackle

Lead shot and bullets as well as tackle

* Ice Fishing Waste

* Fish Consumption Advisories

* New Trail Development (ATV, snowmobile, etc, forest road development.

Thoughts? Edits?



Issue Lenses - St. Louis 1W1P

Important Considerations

While identifying issues that apply across the watershed, four important considerations were utilized as a 'lens' to set geographic, strategic, and funding priorities. These considerations lead us to ask deeper questions and uncover potentially overlooked opportunities --increasing our ability to accomplish the plan's objectives over the long-term.



Climate Change and Resilience

Climate change will make it more difficult to address existing water and environmental concerns, while creating opportunity for new concerns to emerge. Building resilience to climate change impacts will be important for achieving plan goals and ensuring durability of changes made.



Equity

Everyone impacts and—to differing degrees—is impacted by water and the environment. However, benefits and impacts are not equitably distributed. Efforts made through this planning process can reduce historic and current inequities through meaningful involvement, support for cultural ties and heritage, acknowledgement of treaty rights, consideration of economic constraints, protection of public access, and support for human health including food access and consumption, protection from pollution, employment, and water quality.



Social Capacity

Making progress towards plan goals will depend on the ability of individuals, businesses, and organizations to change behaviors or carry out actions for the environment and water. To do this, they need adequate knowledge, skills, relationships and funding/resources. Building capacity for collaboration across individuals and groups with diverse perspectives, yet shared interests, is needed to accomplish collective environmental goals.



Cultural significant Species

Some species play an especially important role in our lives—they connect us, they feed us, they spiritually sustain us. Considering where they are in the watershed and the challenges they face will be useful in targeting and prioritizing efforts in the plan. Examples of these species include wild rice, native trout, other cold-water fish and river sturgeon.

How it was used to tie into each Plan Goal: Forest Protection Goal

Important Considerations



Protecting forests can mitigate impacts of **climate change** by reducing peak flows during increasingly common high rainfall events and replenishing groundwater supplies. Some climate change predictions include increased rain events of over one inch of precipitation (*Stults, 2016, p. 26*)



This goal addresses **equity** by protecting streams for recreation. In parts of this planning area, as many as 55% of people reported income less than 185% of the poverty level and 12% are people of color ([MPCA Understanding Environmental Justice in Minnesota, 2016-2020 data](#)). Small streams are often the only water resource available to disadvantaged communities.



Education and outreach can increase **social capacity** to increase participation in forest protection activities, including easements.



Protecting forests can protect wild rice lakes. Wild rice is a **culturally significant species**

Issue Lenses : RH-V



Climate Variability and Resilience

Larger storm events, drought, rising population due to climate migration, increased algal blooms (sentinel lakes, monitoring data, atmospheric deposition of phosphorus)

Trauma from flooding this past year

Really highlight how this area could be a climate refuge for coldwater species - increases importance of protection.

maybe also link increased algal growth and warming waters to decreasing coldwater habitat in lakes? increased algal decomposition decreases oxygen for CW fish.



Cultural Resources

Wild rice, cold water fish, for... of the area, (loss of access due to land exchanges)

Great point Kari to add loss of access. Important to note tribal members can only exercise their treaty rights on public lands in 1854 CT, so loss public land impacts to treaty right

Clip art note: looks like an "x" strike out



Equity

Access to resources, including all voices

Social Capacity

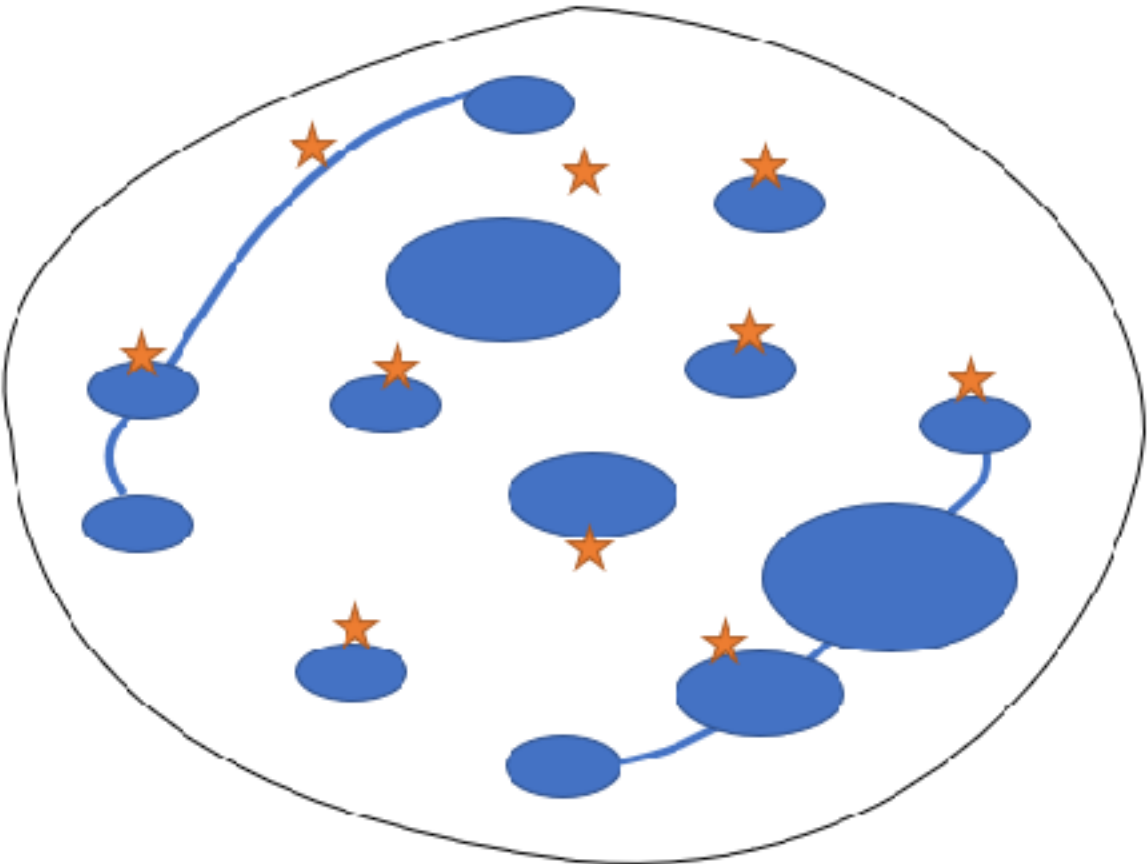
human impacts - mental health, trauma of climate events, etc. Human Health?

Lake Prioritization

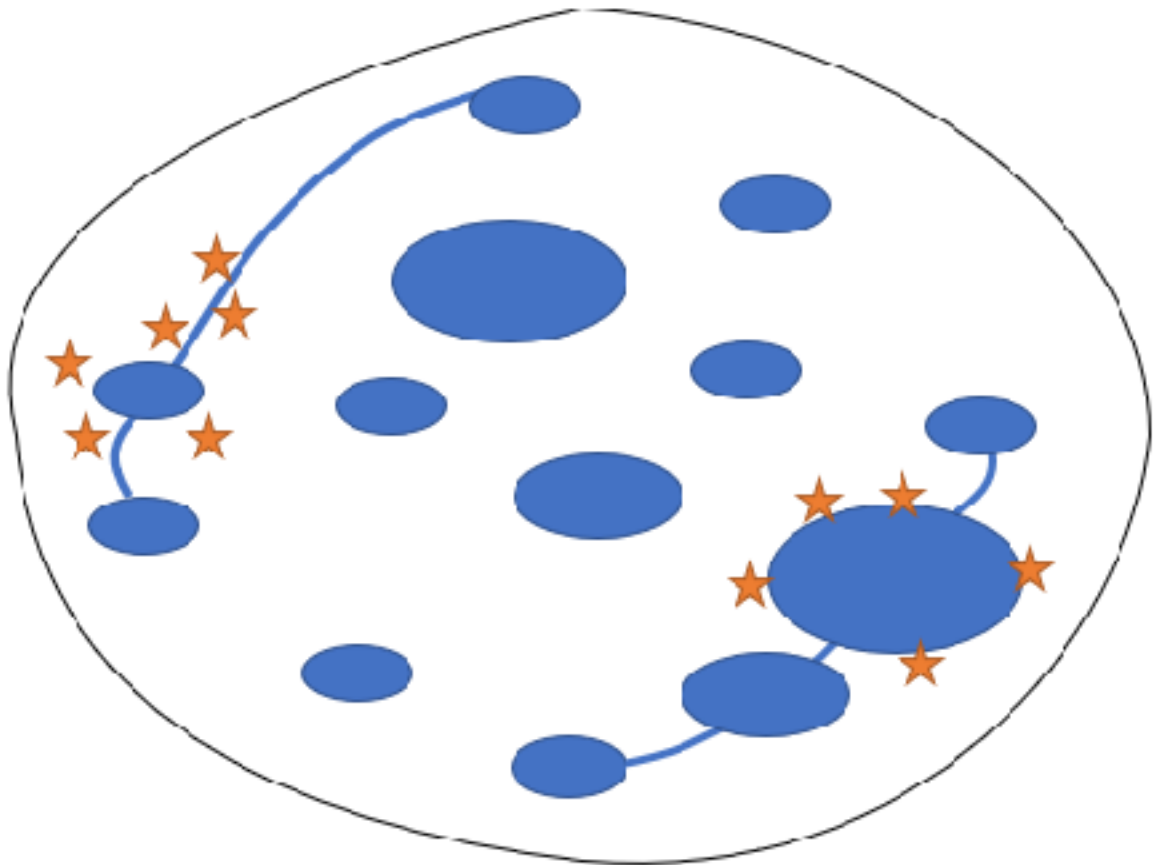
1,691 Lakes



Where are we going to focus the next 10 years?



vs.



Lake Prioritization

Greenwood lake, Ojibway

Birch Lake... long, impounded, several bays, 2 mining facilities with discharge into tributaries. WQ is variable across the lake. sulfate/wild rice, nearly impaired?

Sandy and little sandy are impaired by sulfate

Is there a sense of the source for the sulfate impairments and/or potential series of actions for sulfate impairments that this plan can influence? Or is that an emerging concern?

Table 2. Priority lakes from the WRAPS and management strategies.

Count	Major Watershed	Lakes with Development (WRAPS)	Lake ID	Water Clarity Declining Trend	Nearly Impaired	<75% Minor Watershed Protected	Management Strategy	Phosphorus Sensitivity	Lakes Benefit Cost Ratio	Biological Significance	Priority
1	Rainy H.	Burntside	69-0110-00	x			ENHANCE	l highest	l highest	Outstanding	x
2	Rainy H.	Sand	38-0735-00			x	ENHANCE	l higher	l high	Outstanding	x
3	Rainy H.	Shagawa	69-0069-00			x	ENHANCE	l high	l high	l high	x
4	Rainy H.	White Iron	69-0004-00			x	ENHANCE	High	High	High	x
5	Vermilion	Eagles Nest 2	69-0285-02	x			ENHANCE	Highest	Higher	Moderate	x
6	Vermilion	Pelican	69-0841-00		x		ENHANCE	Higher	Highest	Outstanding	x
7	Rainy H.	Bear Island	69-0115-00				PROTECT	High	Higher	Moderate	x
8	Rainy H.	Big	69-0190-00				PROTECT	Highest	Highest	High	x
9	Rainy H.	Birch	69-0003-00	is it nearly impaired? it is impounded			PROTECT	High	High	Outstanding	x
10	Rainy H.	Black Duck	69-0842-00				PROTECT				
11	Rainy H.	Elephant	69-0864-00				PROTECT				
12	Rainy H.	Fall	38-0811-00				PROTECT	High	High	High	x
13	Rainy H.	Farm	38-0779-00				PROTECT	High	High	Outstanding	x
14	Rainy H.	Garden	38-0782-00	is there a declining trend?			PROTECT	High	High	Outstanding	x
15	Rainy H.	Gunflint	16-0356-00				PROTECT			Lake Trout?	x
16	Rainy H.	Kabetogama	69-0845-00				PROTECT				
17	Rainy H.	Loon	16-0440-00				PROTECT	l highest	l higher	Outstanding	x
18	Rainy H.	Sea Gull	16-0629-00				PROTECT	l high	l high	Outstanding	x
19	Vermilion	Crane	69-0616-00				PROTECT	High	High	Outstanding	x
20	Vermilion	Eagles Nest 1	69-0285-01				PROTECT	Highest	Higher		x
21	Vermilion	Eagles Nest 3	69-0285-03				PROTECT	Highest	Highest	High	x
22	Vermilion	Eagles Nest 4	69-0218-00				PROTECT	Highest	Higher	High	x
23	Vermilion	Elbow	69-0711-00				PROTECT	Higher	Higher		x
24	Vermilion	Elephant	69-0810-00				PROTECT	Higher	Higher	High	x
25	Vermilion	Moose	69-080-600				PROTECT				
26	Vermilion	Vermilion	69-0378-01				PROTECT	Higher	Highest	Outstanding	x
27	Vermilion	Myrtle	69-0149-00			x	RESTORE	Impaired			

1,691 Lakes

Vermilion Lake, Sand R, Pike R, Sandy lakes all have sulfate impairments.

Developed Lakes

ENHANCE
Declining Trend,
<75% Protected, and/or
Nearly Impaired
(6 lakes)

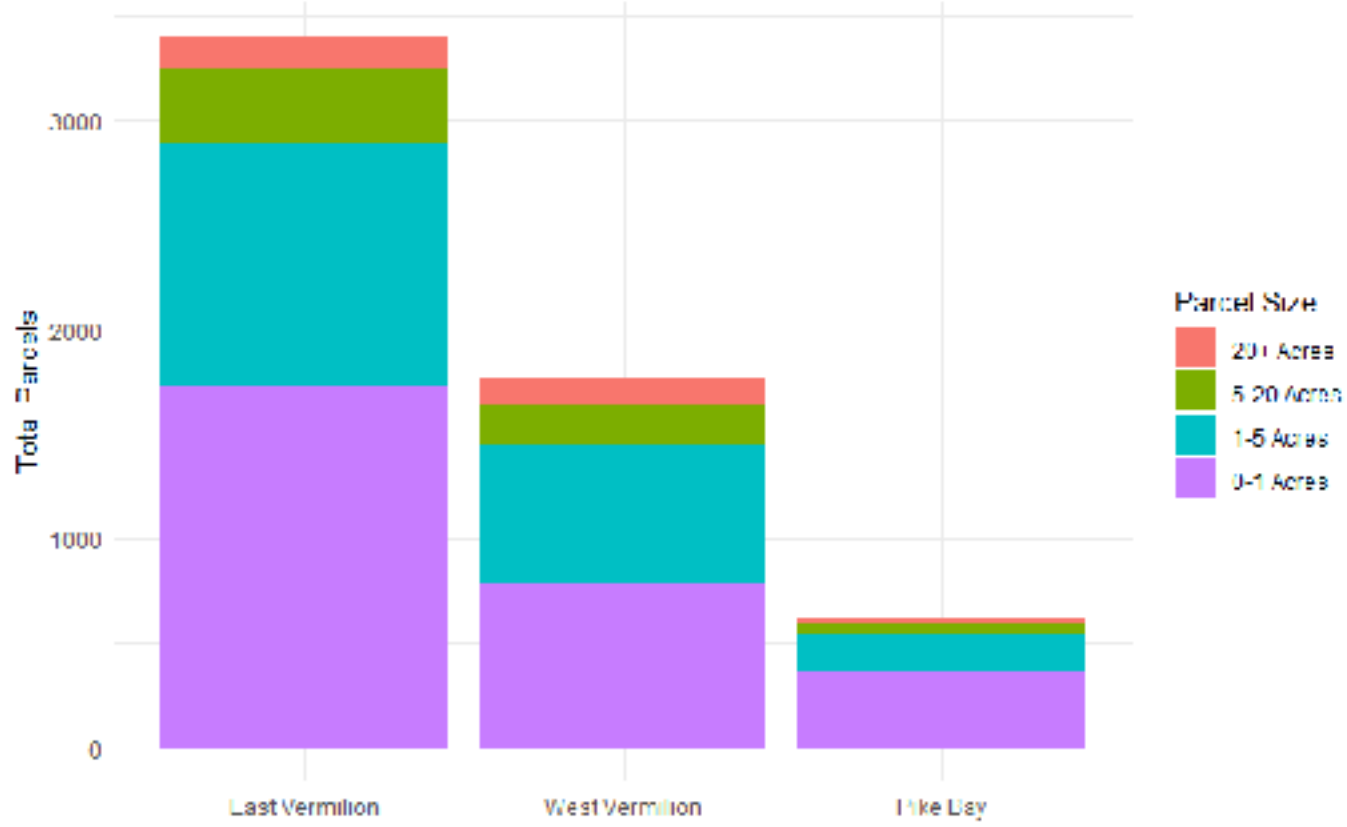
PROTECT
Stable or Improving
Trend and <75%
Protected
(20 lakes)

RESTORE
Impaired for
nutrients
(1 lake)

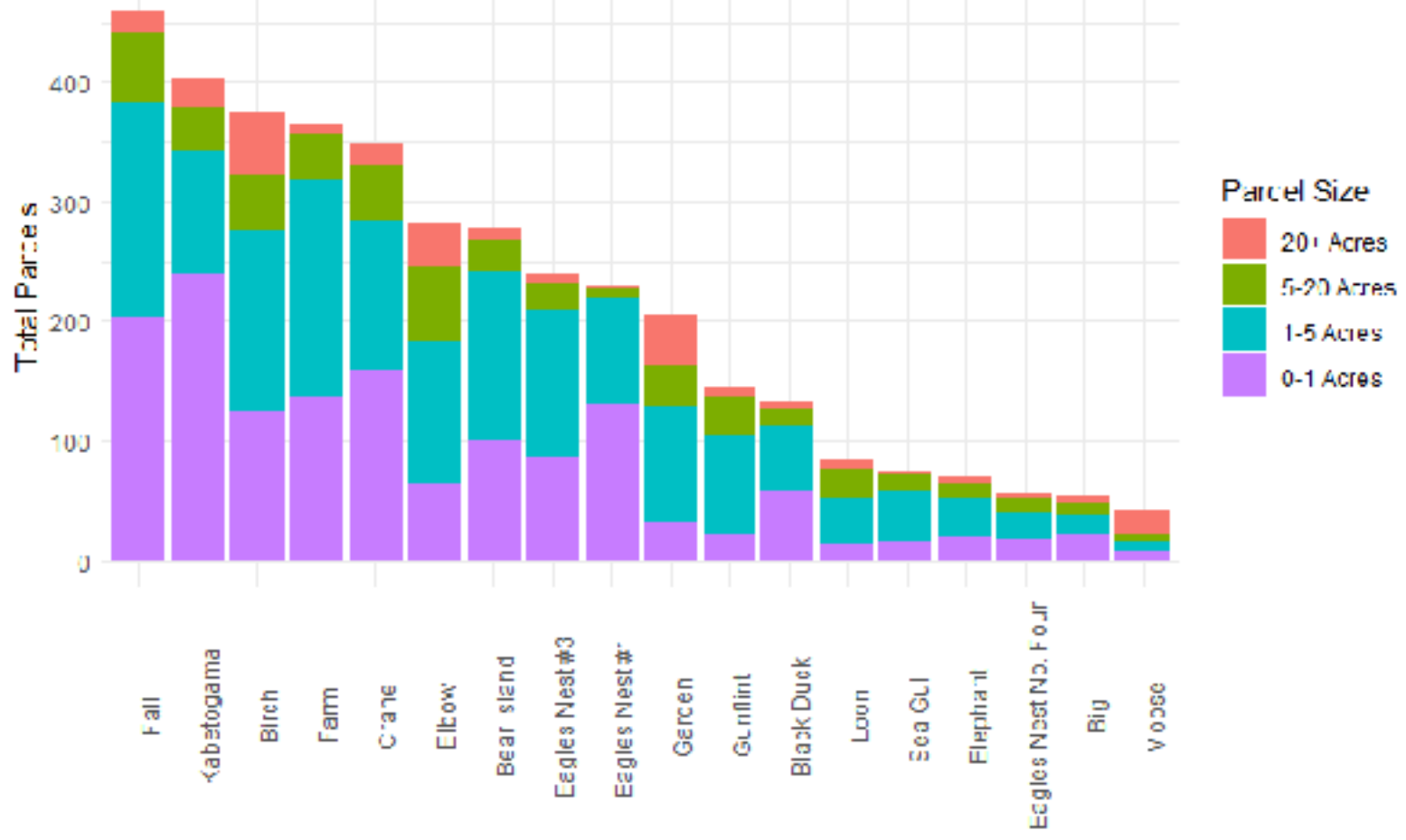
State water trails and recreation destinations intentionally draw people to the resource rather than them accessing a random stream or lake.

Confused why Garden Lake isn't included as having a declining Secchi trend - WRAPS says it has a statistically significant decline in transparency of about one foot per decade

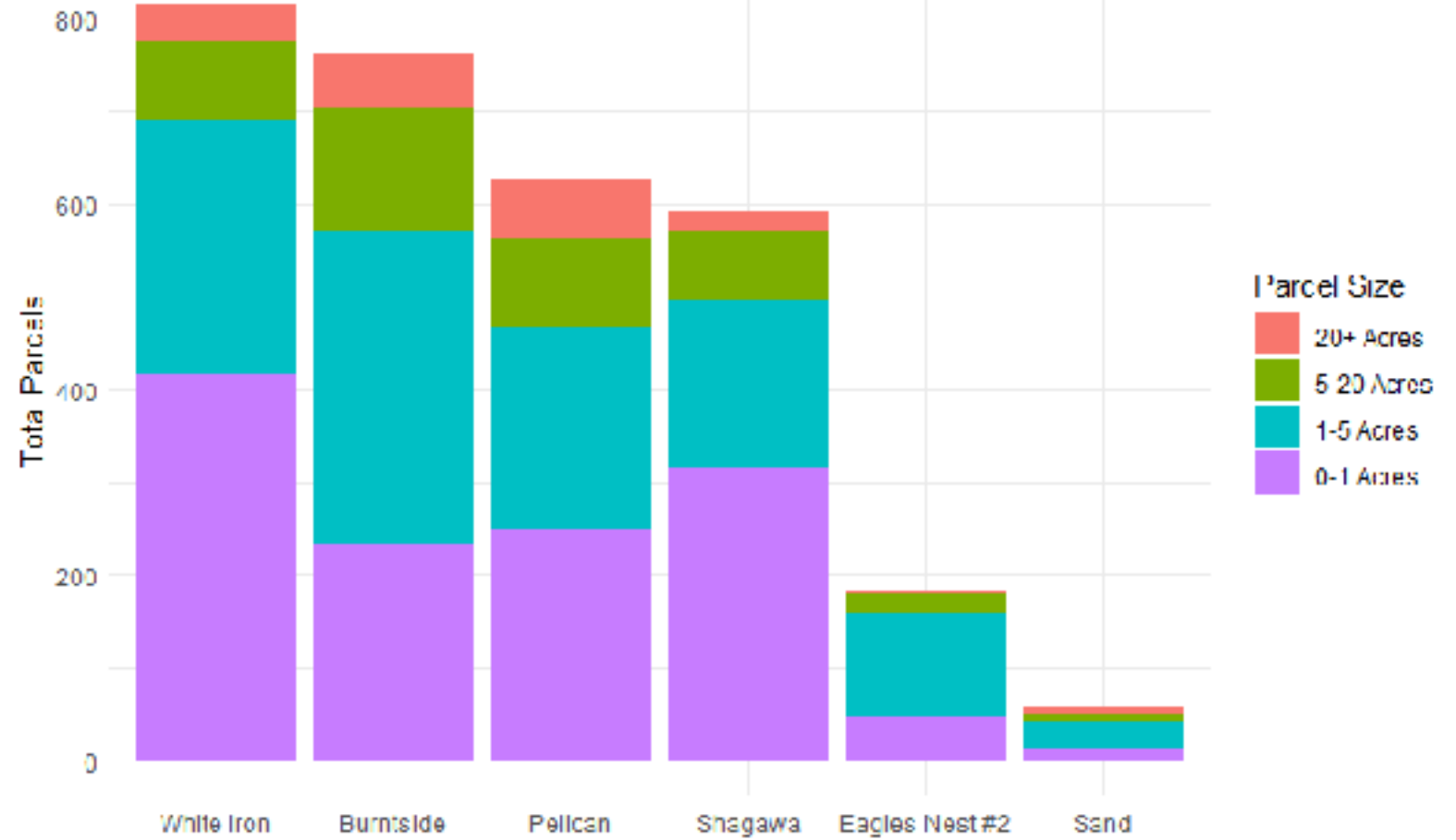
Lake Vermilion Parcel Sizes



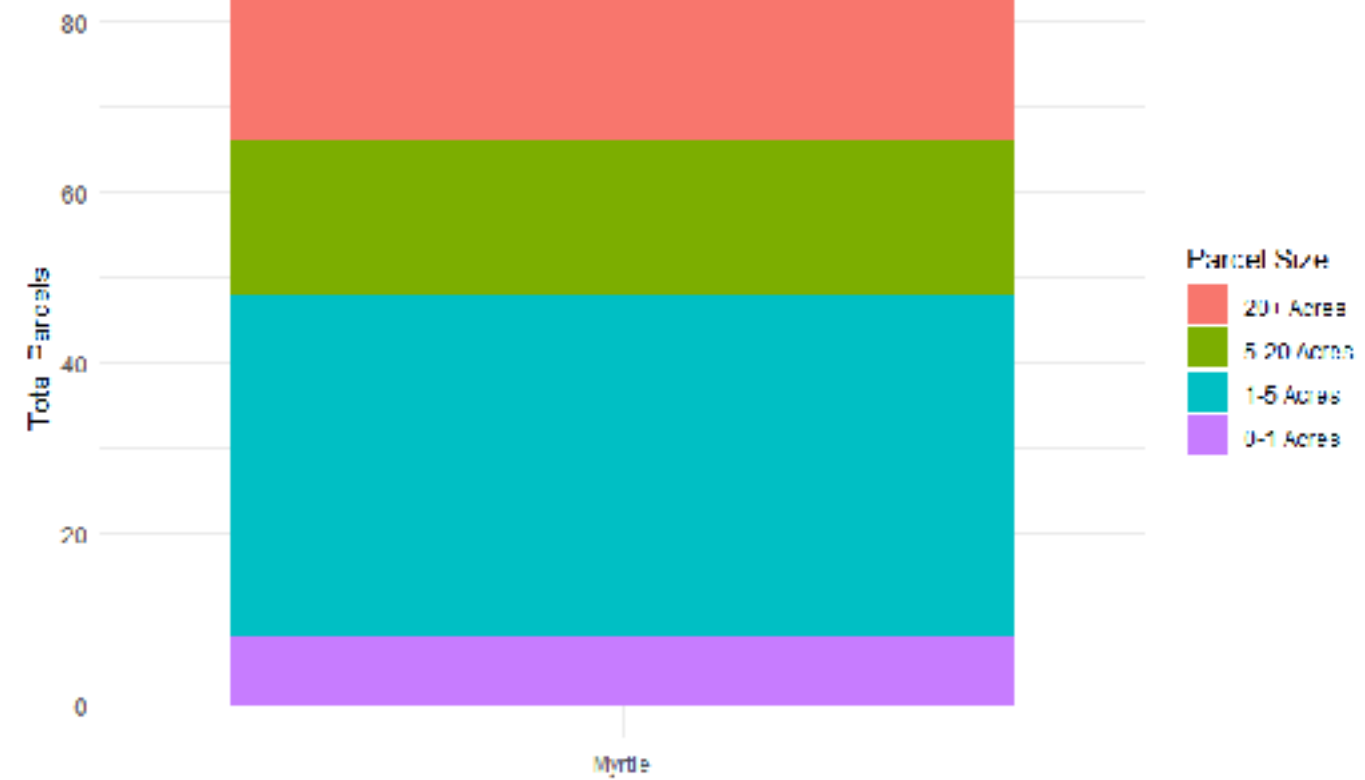
PROTECT Strategy Parcel Sizes



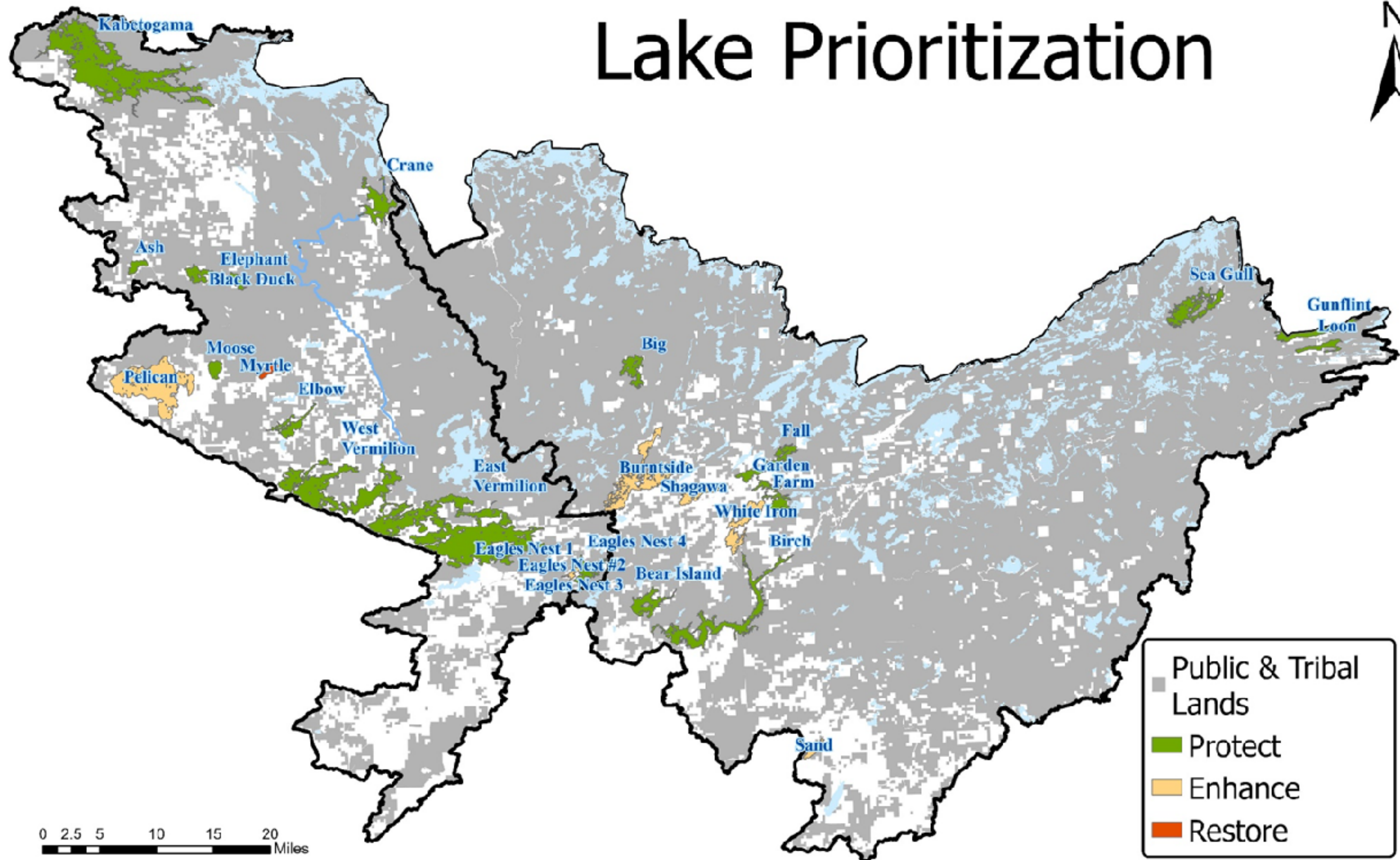
ENHANCE Strategy Parcel Sizes



RESTORE Sizes



Lake Prioritization



Stream Prioritization



RESTORE
Impaired for TSS, *E. coli*
(2 streams)

Langley Creek also could be impacted by mine closure, same as Dunka River

Maybe adding the East Two River because it contributes to the drinking water supply to Tower/Soudan?

Addressing the Blackduck will help the Ash

ENHANCE
Vulnerable, <75% Protected, and/or Nearly Impaired
(4 streams)

PROTECT
>75% Protected and ???

Dean Perron (DNR) protection streams for cold water fish

Table 2. Priority Streams and management focus.

Major Watershed	Name	AUID	Management Focus	Impairment Parameters	<75% Protected	Nearly Impaired	Exceptional Use Standard	WRAPS Notes
RH	Ash River	09030001-818	RESTORE	TSS		P		May change use class.
RH	Blackduck River	09030001-820	RESTORE	TSS, <i>E. coli</i>				Focus restoration efforts here. Mine closures in the future could increase flows.
RH	Dunka River	09030001-987	ENHANCE		x			
V	Sand River	09030002-501	ENHANCE	Sulfate	x			sulfate mostly mining related
V	Pike River	09030002-503	ENHANCE	Sulfate	x	P & TSS		
V	Echo River	09030002-532	ENHANCE			Bacteria		
RII	Bezhik Creek	09030001-975	PROTECT				X	
RH	Cross River	09030001-966	PROTECT				X	
RH	Denley Creek	09030001-627	PROTECT				X	
RH	Jack Pine Creek	09030001-564	PROTECT				X	
RH	Little Isabella River	09030001-530	PROTECT				X	
RH	Milawan Creek	09030001-568	PROTECT				X	
RH	Shagawa River	09030001-535	PROTECT					Added by Steering Co
RH	Snake River	09030001-542	PROTECT				X	

closure plan: 32% increase in flows to the Dunka River, a 60% decrease of flows to tributary Langley Creek, and a 500% increase in flows to an unnamed tributary

I think this should be an enhance... not sure what there is for data on this reach

Other possible risks:

- Forest harvest impacts (are state-level guidelines adequate in sensitive areas?, harvest by different groups – federal, state, county coordination)
- Connectivity barriers – DNR and county culvert inventories
- Trails (bike, ATV, etc.), single use vs multi-use

Other possible "Quality" criteria for "Protect" streams are listed below. The issue with these is it doesn't narrow down the list much because there are so many!

- DNR State Water Trails (Vermilion River and Pike River)
- Trout streams
- Highest IBI scores
- Wild Rice

Correction- Pike River is not a State water trail... but it's easier to canoe in some ways than the Vermilion River

Do we need the PROTECT category?

Any other streams at risk to land use change?

Stream Prioritization



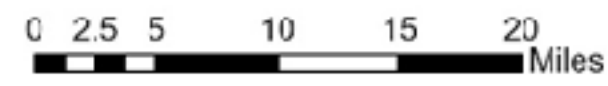
protection for upper Ash River

Consider adding Ash (upper) to protection- Upper Ash could become a Blackduck River if placed under the same pressures.

each county has culvert inventory

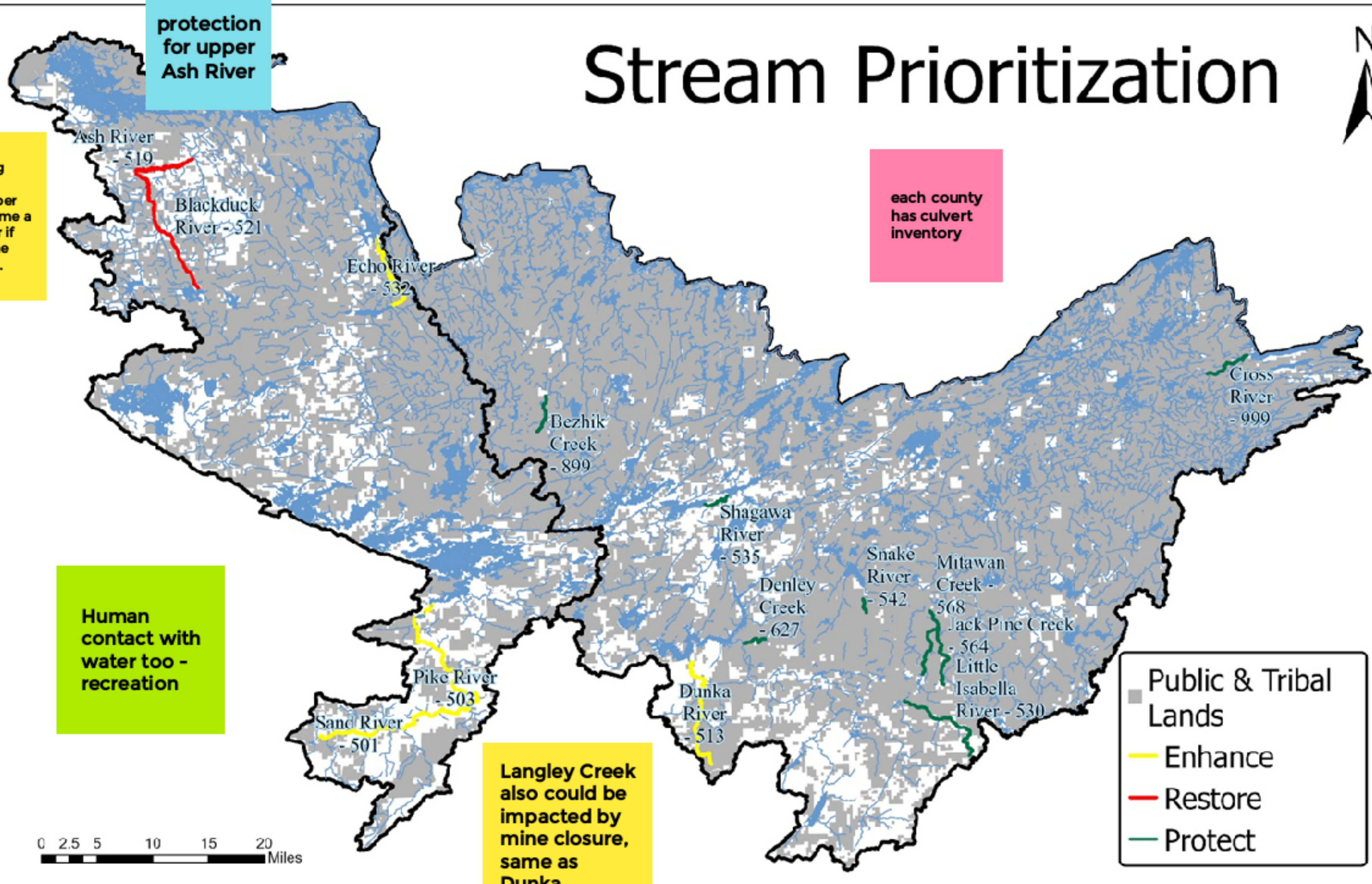
Human contact with water too - recreation

Langley Creek also could be impacted by mine closure, same as Dunka



Public & Tribal Lands

- Enhance
- Restore
- Protect



Next Steps: Goals

Issue:

Nutrient Loading



Measurable Goal:

Phosphorus Reduction

Reduce phosphorus in Primary Focus Lakes by 5%

Next Meeting: February 27, In person?