

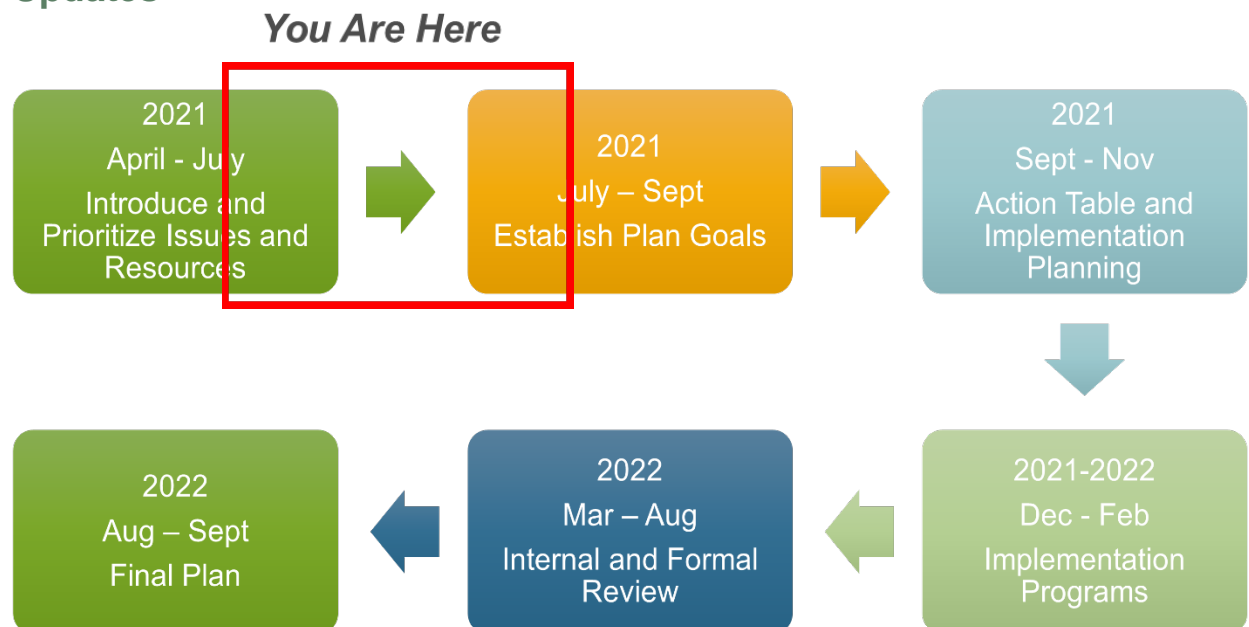
Steering Committee Meeting Summary

September 1, 2021

Participants

Darren Mayers (BWSR), Matt Fischer (BWSR), Jacob Snyder (Polk County), Katrina Haugen (MSTRWD), Kylie Beard (HEI), Nicole Bernd (West Polk SWCD), Rachel Olm (HEI), Tony Nordby (HEI), Mori Maher (MSTRWD), Josh Johnston (Marshall County)

Updates



Prioritizing Resources and Measurable Goals

The goal of this Steering Committee (SC) meeting was to finalize priority issue and resource recommendations for the Advisory Committee (AC) and to continue to establish measurable goals for the group to reach in the 10-year 1W1P.

Resource prioritization is a process that identifies natural resource assets on which to focus implementation funding and efforts first.

At the August 4 meeting, SC and AC members were assigned to subcommittees for each issue to identify potential goals. In the September 1 meeting, HEI walked through each of these groups of issues or goal themes with the SC, covering groundwater quality and quantity;

wetland and upland habitat; in-channel erosion and instability and riparian buffers; drainage systems and drainage of agricultural lands; and altered hydrology and flooding.

The SC discussed the lists of goals and actions that subcommittees had created to address issues in each planning region. Several decisions were made including the updating and approval of prioritized planning regions and resources and identifying the beginnings of short-term (10-year) goals. Slides of the modifications and initial goal ideas are attached to this meeting summary.

Groundwater quantity and quality

- Potential Short-Term Goal:
 - Sealing wells
 - Drought plan



Wetland/upland habitat

- Potential Short-Term Goal:
 - Increase acres of land in protection programs by XXXX acres
 - # of contracts (20% of average size)



In-channel erosion/instability and riparian buffers

- Potential Short-Term Goal:
 - Miles or feet of channels stabilized/restored/enhanced
 - Riparian habitat goal: pursue multiple benefits



Drainage systems/drainage of agricultural lands

- Potential Short-Term Goal:
 - Miles or feet of ditch stabilized/restored/enhanced



Altered hydrology and flooding

- Potential Short-Term Goal:
 - Distributed Detention Study acre-feet goals



PTMApp

PTMApp (Prioritize, Target, and Measure Application) is a tool used in watershed planning that can identify problem areas and the costs and benefits of solutions on the ground. An update for the PTMApp process was provided: hydroconditioning is currently being reviewed locally. Point persons are identifying Priority Resource Points (PRPs) for the Watershed. HEI will run PTMApp once these tasks are complete.

Priority Resource Points

PRPs are locations within the watershed that serve to estimate phosphorus, nitrogen, and sediment loading in PTMApp. These points help to make decisions about where to prioritize projects and funding.

Typically, PRPs are located:

- At watershed and subwatershed inlets and outlets
- Downstream of impaired waters
- At lakes, reservoirs, and/or impoundments
- At locations of large projects

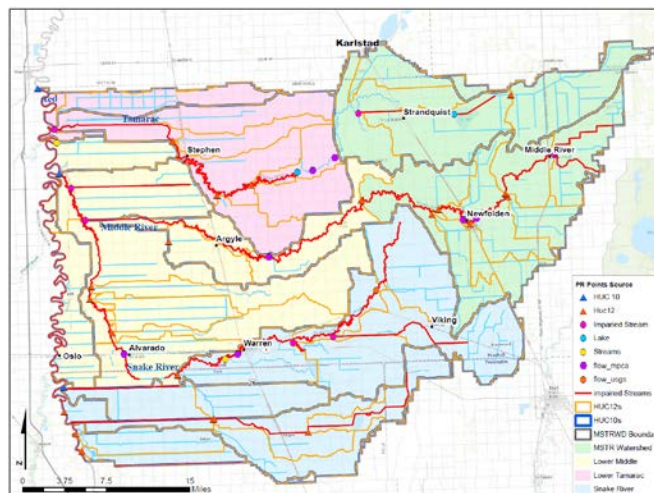


Figure 1: A first look at potential PRPs in the MSTR Watershed

Next Meetings

Regularly scheduled meetings for each planning committee are as follows:

- **Steering Committee:** First Wednesday of every month, 9:00 – 11:00 AM
- **Advisory Committee:** Third Wednesday, every other month, 9:00 – 11:00 AM
- **Policy Committee:** Third Wednesday, every other month (following the Advisory Committee meeting), 11:00 AM – 12:00 PM

Next Scheduled Meetings:

- **Advisory and Steering Committees:** Tuesday, September 14, 9:00 AM – 11:00 AM
- **Steering Committee:** October 6, 1:00 PM – 3:00 PM

An aerial photograph showing a large, dark blue reservoir in the center of a rural landscape. The reservoir has a prominent, elongated island in the middle, densely covered with trees that appear to be in autumn, showing shades of yellow and orange. The surrounding land is a patchwork of agricultural fields in various colors, including brown, tan, and green, separated by roads and fences. The sky is clear and blue.

September 1, 2021

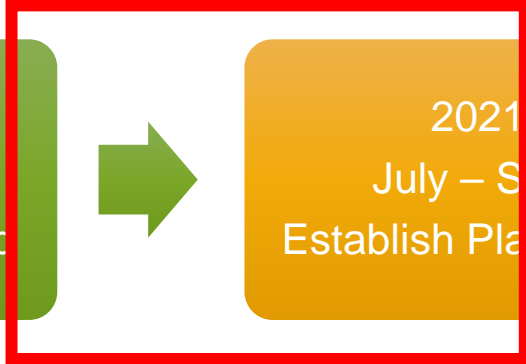
Middle-Snake-Tamarac Watershed

One Watershed, One Plan

TIMELINE

You Are Here

2021
April - July
Introduce and
Prioritize Issues and
Resources



2021
July – Sept
Establish Plan Goals



2021
Sept - Nov
Action Table and
Implementation
Planning



2022
Aug – Sept
Final Plan



2022
Mar – Aug
Internal and Formal
Review



2021-2022
Dec - Feb
Implementation
Programs

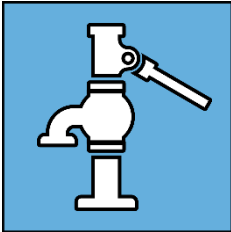

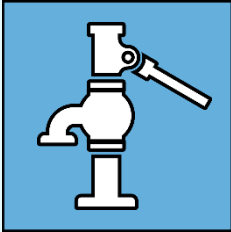

ROADMAP FOR TODAY

AGENDA ITEMS	ACTION	TIME
1. Welcome and Introductions	--	5 min
2. Prioritizing Resources and Measurable Goals <ul style="list-style-type: none">Review homework responses as a groupFinalize priority issue recommendationsFinalize priority resource recommendationsContinue development of measurable goals	Discuss	90 min
3. PTMApp- Update and Next Steps	Discuss	20 min
4. Action Items and Next Steps <ul style="list-style-type: none">Parking Lot: Meeting to discuss tile and groundwater recharge	Discuss	5 min

GROUNDWATER QUANTITY / QUALITY



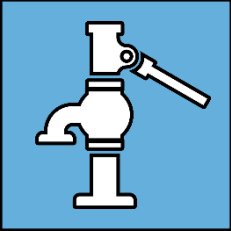
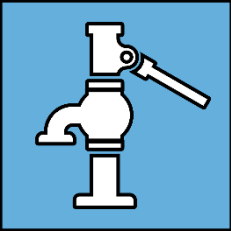
Issue statement and planning region priority...

Category	Priority by Planning Region	Issue Statement
		Protection of groundwater supplies from overuse and loss of recharge
		Contaminants in groundwater

GROUNDWATER QUANTITY / QUALITY



Actions and prioritized resources / areas...

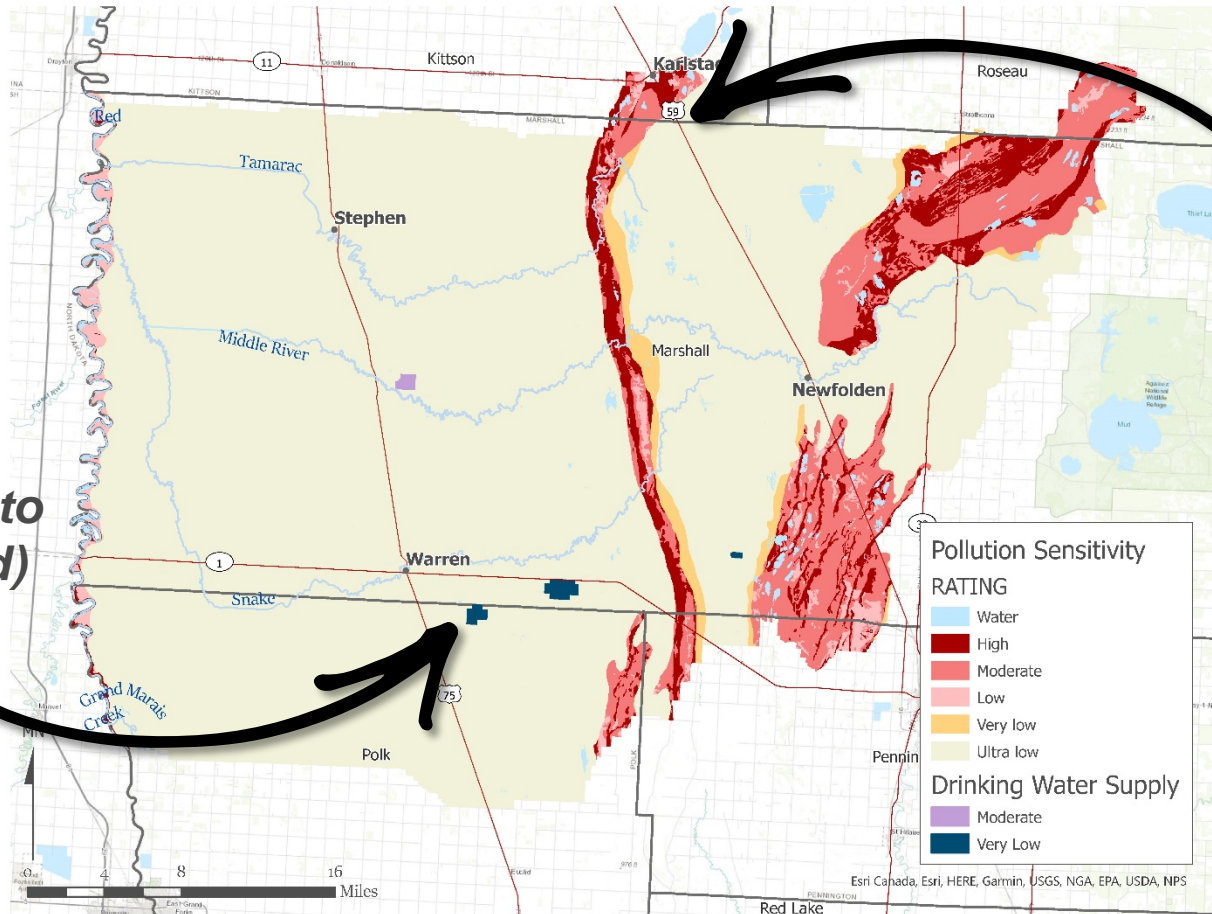
Issue	Action	Resource Focus Area
 (GW supplies)	Groundwater level monitoring and data sharing (quantity, monitor against recharge and discharge)	Beach Ridge / Middle River Surficial Aquifers
	Conservation outreach	
	Promotion of technology for strategic irrigation mgmt.	
	Contingency plan for drought (minimum 2 research papers – one on surficial Beach Ridge / Middle and one for deep aquifer)	
	Prioritize outreach for CRP	Recharge areas
	Complete Geologic Atlas A and B	Watershed-wide or county level
 (GW	Sealing abandoned wells (<i>can do about 10/yr. (sealing wells) with current funding (\$600 - \$800 / well). SWCD is the lead on this; Wellhead protection manager in lead if in a DWSMA</i>)	Watershed wide-Focus DWSMAs
	Land use Mgmt. and coordination	
	Private well water testing clinics	
	Promoting of BMPs for well contamination controls	



GROUNDWATER QUANTITY / QUALITY



Supporting map...



Recharge areas

*DWSMAs
(Shapefile to
be updated)*





GROUNDWATER: GOALS

Short term:

- *Sealing wells*
- *Drought plan / research plan*

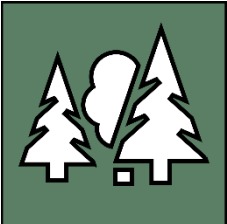

Long term:

- *Safe and sustainable groundwater supplies*



HABITAT


Issue statement and planning region priority...

Category	Priority by Planning Region	Issue Statement
		<p>Loss of upland and wetland habitat impacting species richness and diversity, water storage, and water quality.</p>



HABITAT

Actions and prioritized resources / areas...

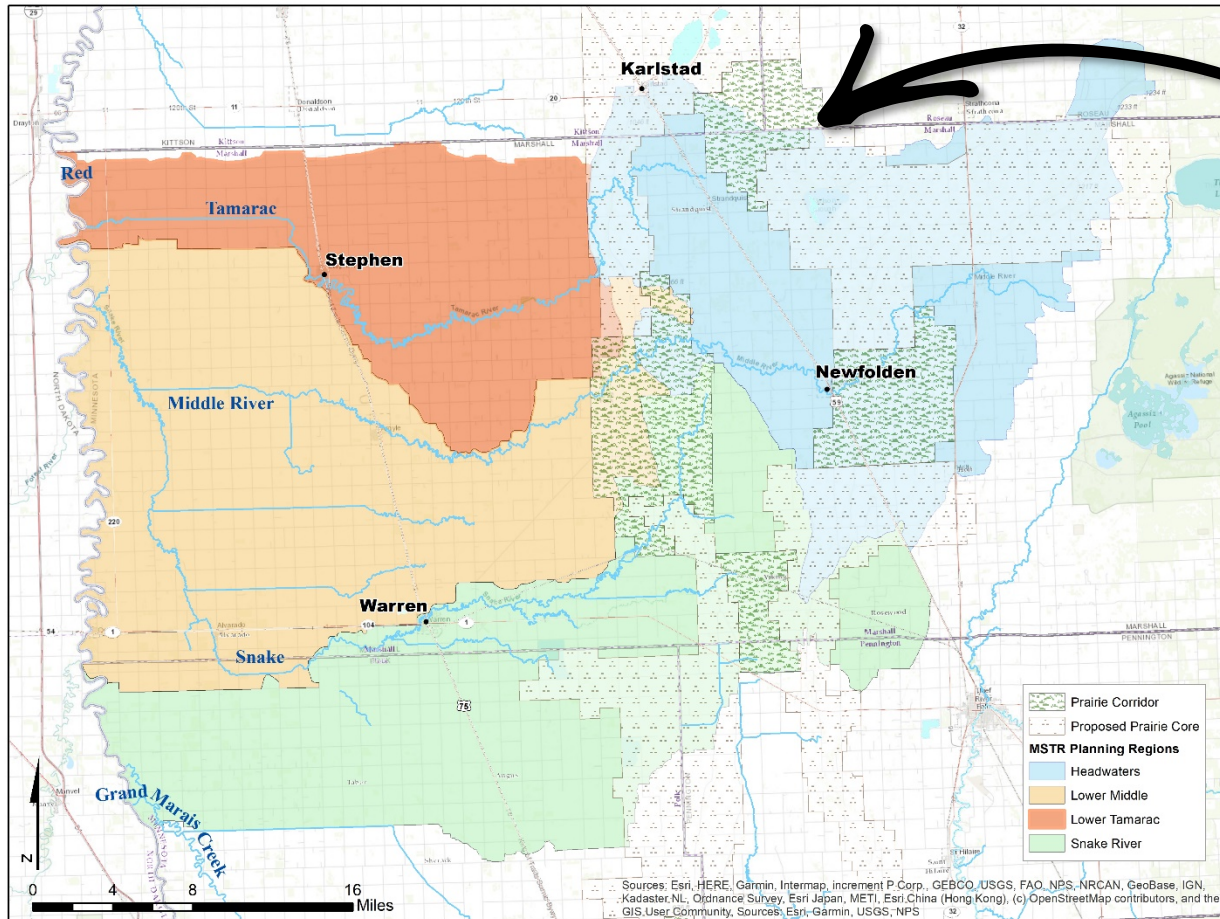
Issue	Action	Resource Focus / Area
 Upland/ Wetland Habitat	Create a strategic plan with Prairie Plan Technical Team to use to apply for funding	Prairie Plan Areas
	Maintenance and mgmt. of invasive species	Prairie Plan Areas
	Promotion or incentivizing CRP	Lands taken back out of CRP- Headwaters and Snake

Notes: Habitat largely funded by partners- not CWF
WBIF can be used as match to incentivize CRP



HABITAT

Supporting map...



Prairie Plan areas

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community, Sources: Esri, Garmin, USGS, NPS





HABITAT: GOALS

Short term:

- ***Increase [7,000 using all of W. Polk as placeholder] acres of land in protection programs ← confirm w Darren***
- ***# of contracts – Average size – take 20% of that***
- ***(connect to a portion of the Prairie Plan)***

Long term:





- ***(connect to Prairie Plan)***

Notes: Statistics on CRP (trends? Acres expiring?)– Darren is working on this; MPCA Healthier watersheds may be a resource to consider

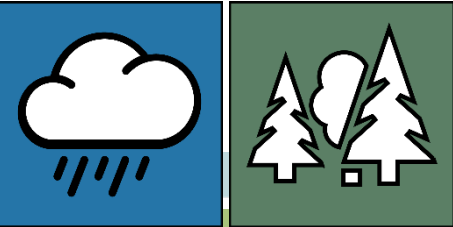


IN-CHANNEL EROSION / INSTABILITY; BUFFERS

Issue statement and planning region priority...

Category	Priority by Planning Region	Issue Statement
	<p>Headwaters to a medium</p> 	Streambank and in-channel erosion and channel instability impacting water quality and habitat
		Loss of riparian habitat and inadequate buffer areas

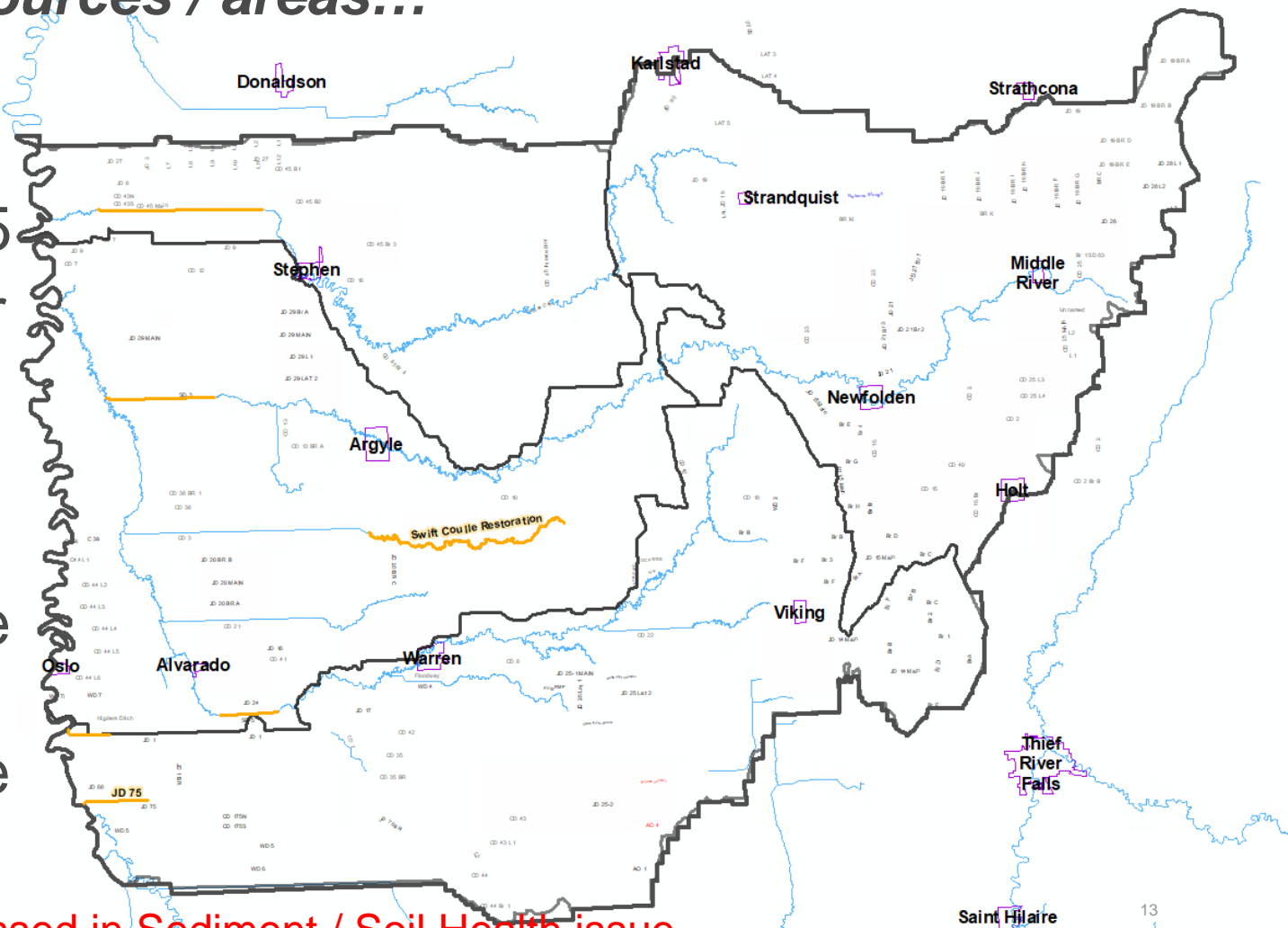
Headwaters to a Low;
protection a focus in
headwaters



IN-CHANNEL EROSION / INSTABILITY; BUFFERS

Prioritized resources / areas...

- Tamarac River / CD 45
- Middle River / SD 3
- JD 75
- JD 1
- SD5 / Snake River
- Swift Coulee



Wind erosion addressed in Sediment / Soil Health issue



IN-CHANNEL EROSION / INSTABILITY; BUFFERS

Short term goal:

- *Miles or feet of channels stabilized / restored / enhanced*
- *Riparian habitat goal- pursue multiple benefits*





Long Term:

- *[Placeholder for AC meeting – fix / enhance all?]*



DRAINAGE SYSTEMS; DRAINAGE OF AG LANDS

Issue statement and planning region priority...

Category	Priority by Planning Region	Issue Statement
	<p>Drop Headwaters down to a Medium</p> 	<p>Drainage system instability and inadequacy, and need for management and maintenance</p>
		<p>Inadequate drainage of agricultural lands impacting crop productivity</p>



DRAINAGE SYSTEMS; DRAINAGE OF AG LANDS

Prioritized resources / areas...



Channel or Bank

Sloughing:

- County Ditch 45 / Tamarac River
- State Ditch 3 / Middle River
- Judicial Ditch 75
- State Ditch 5 / Snake River
- Judicial Ditch 19
- Watershed Ditch 5
- Judicial Ditch 1

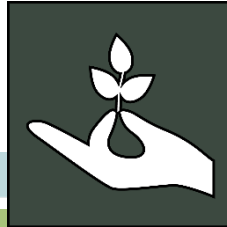
Ensure language is in plain English- easy to understand to public

Consult this list w County Engineers (Lon and Rich)

Actions:

- *Repair and resloping the ditch slopes, creating benches and installing French drain systems in major sloughing areas have all been solutions to past sloughing repairs conducted by the district. As soon as the plan is approved, engineers will be consulted to provide case specific solutions for each individual project.*





DRAINAGE SYSTEMS; DRAINAGE OF AG LANDS

Prioritized resources / areas...



Outlet Head Cutting / Erosion:

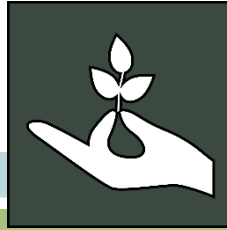
- JD 14 – Lilac Ridge/JD 14
- JD 25-2 – Sections 31-32
- WD 4 – 2015 Rock Structure
- JD 16
- JD 20
- JD 24
- JD 29 – 2017 Rock Structures
- MCD 7
- MCD 38
- MCD 44
- **PCD 35**

Tie these to TMDL
targets; Rank
accordingly

Actions:

- *The installation of rock structures and other grade stabilization structures in the ditch bottoms to help preserve the ditch bottom grade. Stabilizing the bottom will prevent future erosion and help mitigate future sloughing issues.*





DRAINAGE SYSTEMS; DRAINAGE OF AG LANDS

Prioritized resources / areas...

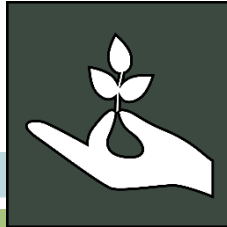


Inadequate drainage of ag lands:

- Most severe along Red River and in the northwest areas of the District

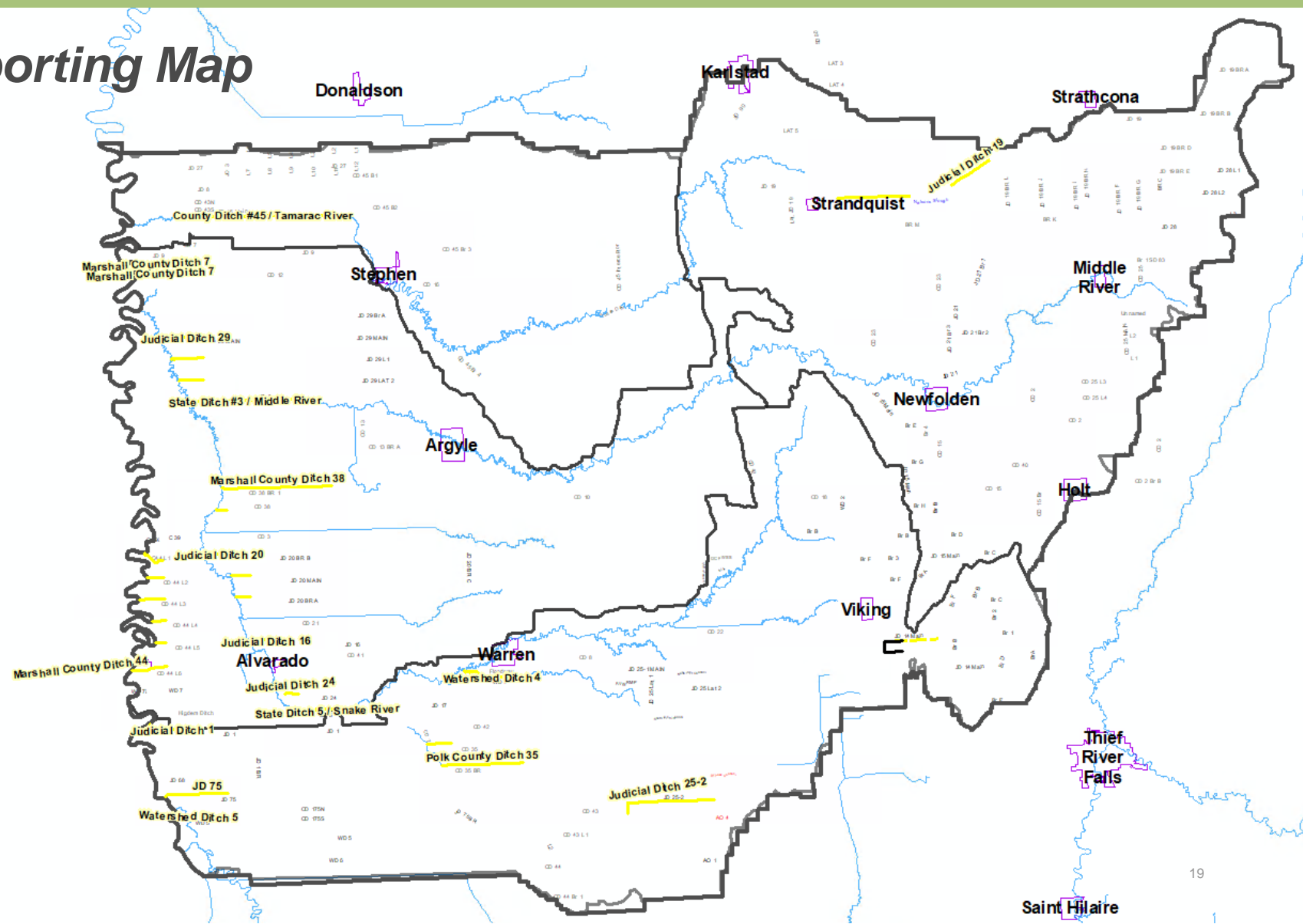
Actions:

- *Increase culvert sizing to remove waters before the peak flow arrive, slow water down from the east through impoundments/culvert sizing, remove debris and maintain the rivers/drainage systems to allow for waters to continue downstream.*



DRAINAGE SYSTEMS; DRAINAGE OF AG LANDS

Supporting Map





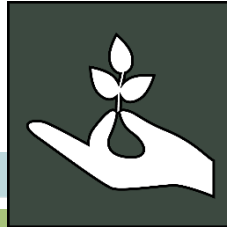
DRAINAGE SYSTEMS; DRAINAGE OF AG LANDS

Short term goal:

- ***Miles or feet of ditch stabilized / restored / enhanced***





Long Term:

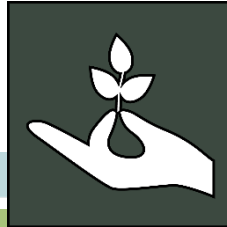
- ***[Placeholder for AC meeting – fix / enhance all?]***
- ***Adequate drainage of all land (10-year event)***



ALTERED HYDROLOGY; FLOODING

Issue statement and planning region priority...

Category	Priority by Planning Region	Issue Statement
		<p>Altered hydrology and inconsistent flow impacting geomorphology and aquatic life</p>
		<p>Economic and ecological impacts of flooding on the landscape</p>

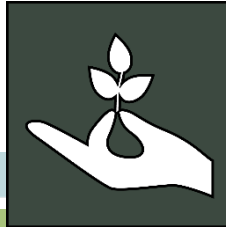


ALTERED HYDROLOGY; FLOODING

Actions and prioritized resources / areas...

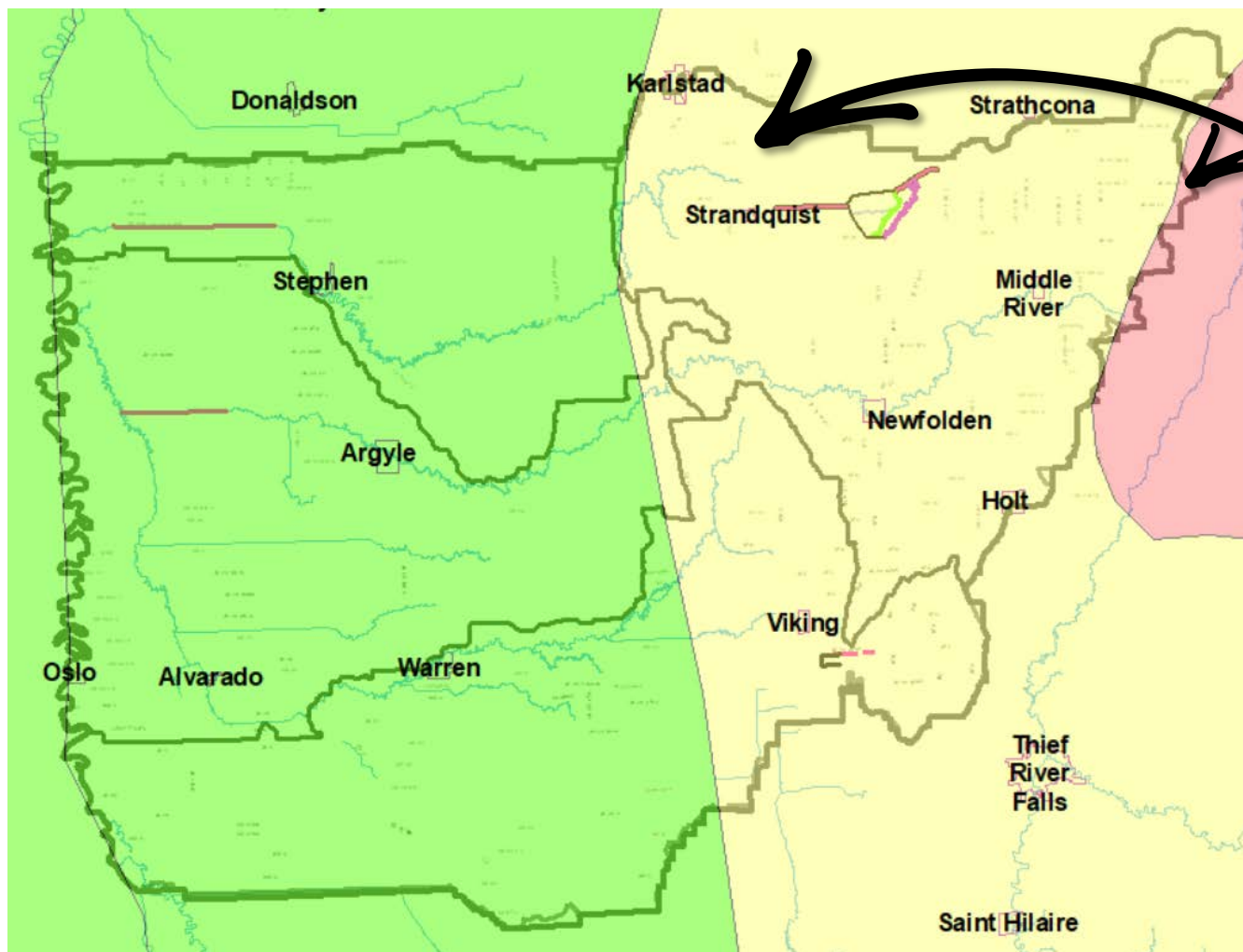
Action	Resource Focus / Area
Capital Improvement Projects (i.e. Impoundments)	See CIP map
Agricultural practices	“Middle” and “Late” areas
Ag. Levy maintenance and repair along the Red	Red River
Conservation practices in environmentally sensitive areas (i.e. wetlands and floodplains)	“Middle” and “Late” areas
Grade stabilization and sluff repairs	CD #45 / Tamarac River and SD#3 / Middle River

Ring dikes if needed



ALTERED HYDROLOGY; FLOODING

Supporting map...





ALTERED HYDROLOGY; FLOODING

Initial goals... Open Word Doc

ROADMAP FOR TODAY

AGENDA ITEMS	ACTION	TIME
1. Welcome and Introductions	--	5 min
2. Prioritizing Resources and Measurable Goals <ul style="list-style-type: none">• Review homework responses as a group• Finalize priority issue recommendations• Finalize priority resource recommendations• Continue development of measurable goals	Discuss	90 min
3. PTMApp- Update and Next Steps	Discuss	20 min
4. Action Items and Next Steps <ul style="list-style-type: none">• Parking Lot: Meeting to discuss tile and groundwater recharge	Discuss	5 min

PTMAPP



Next steps:

- Complete planning scale hydroconditioning
- Local review
- Run PTMApp for entire plan area

PTMAPP: PRIORITY RESOURCE POINTS

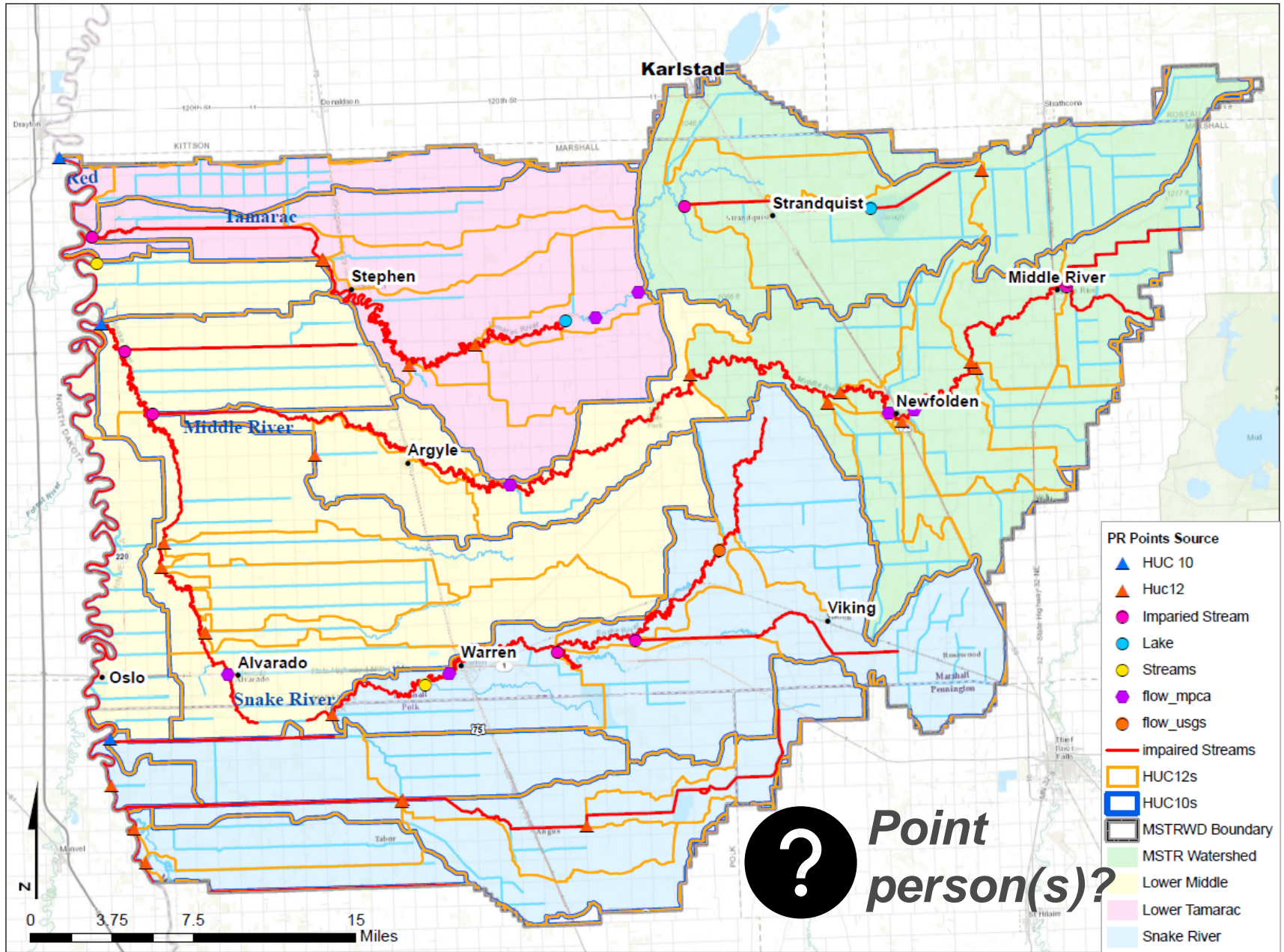
Priority Resource Points:

- Locations where you get loading information from PTMApp

Things to Consider:

- Watershed (and subwatershed) outlets
- Downstream of impaired waters
- Lakes / reservoirs / impoundments
- Locations of large projects

DRAFT PRIORITY RESOURCE POINTS





Questions / Discussion

Rachel Olm

rolm@houstoneng.com