# Lower Minnesota River West

Policy Committee January 7<sup>th</sup>, 2021

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# **Priority Issues and Plan Expectations**

### What's Included Within:

- Process
- Plan Content
- Specific Priority Issues
- Nonpoint Priority Funding Plan (NPFP)
- Drainage
- Wetlands
- Conservation Easements
- GRAPS
- WRAPS
- Lakes
- Landscape Resiliency and Climate Adaptation
- Local Controls
- Soil Erosion/Soil Health
- Surface and Groundwater Quality
- Altered Hydrology/Flooding/Water Quantity

- Protecting Pollinator Populations
- Aquatic/Terrestrial Invasive Species
- Urban Stormwater
- Data Collection and Monitoring
- Minnesota Department of Ag

# **Process and Plan Content**

### **Process**

Partnership must follow: One Watershed, One Plan Operating Procedures (Version 2.0)

- Involve a broad range of stakeholders
- Reassess the agreement for planning purposes when finalizing the implementation schedule and programs in the plan
- Follow the revised and agreed upon planning boundary (per Oct 4, 2019 letter)
  - Bevens/Silver Creek to the Sibley County line
    - Specifically called out in the plan for implementation
  - Invite Carver SWCD, Carver WMO and Carver County

### **Plan Content**

Partners must follow: <u>One Watershed, One Plan – Plan Content Requirements</u> (<u>Version 2.1</u>)

- Analysis of issues, using available science
- Sufficient measurable goals indicating a pace of progress for addressing issues
- A thorough analysis of issues, using available science and data, in the selection of priority resource concerns.
- Description of programs, activities, decision making and evaluation



# **The Nonpoint Priority Funding Plan (NPFP)**

- Emphasizes prioritizing Clean Water Investments
- Clarifies high level state priorities
- Requirement of the Clean Water Accountability Act

#### Resource

**NPFP** 

# **Drainage**

- Engage Chapter 103E drainage authorities in the planning process
- Include identification of Chapter 103E drainage systems and drainage areaprioritization
- Include multipurpose drainage management in the approach for targeting best management practices within drainage area
- Measurable outcomes for nutrient/sediment reduction, detention storage, etc. should correlated with 103E drainage systems.
- Lay out a coordinated approach for implementing the plan coordinates 103E processes/proceedings

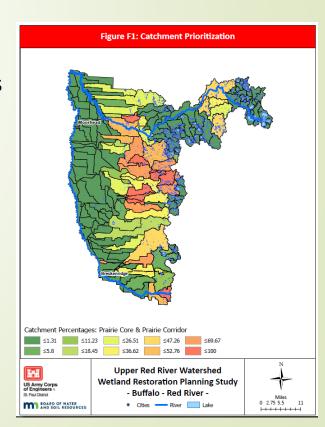


### **Wetlands**

- Benefit water quality, flood damage reduction, wildlife habitat
- Plan should support implementation of WCA
- Identify high priority areas for wetland restoration and target projects

#### Resource

- Restorable Wetland Prioritization Tool
- "Lower Minnesota River West 1W1P Wetland Section Comments"
  - Wetland restorations focus on restoring pre-disturbance conditions
  - BSA 9 low supply of wetland bank credits and high demand
    - Compensation Planning Framework



### **Conservation Easements**

- The state considers local prioritization of areas for easement enrollment
- Consider areas with higher risk of surface/subsurface degradation
  - Ex. highly erosive or wellhead protection areas
- 2020-2022 nearly 3,400 acres of Conservation Reserve Program (CRP) practices are scheduled to expire within partnership counties.
- Plan should recognize impact of expiring contracts
  - Management of those areas (prioritize)

#### Resource

**Conservation Reserve Program** 

Minnesota Conservation Reserve Enhancement Program

Reinvest In Minnesota

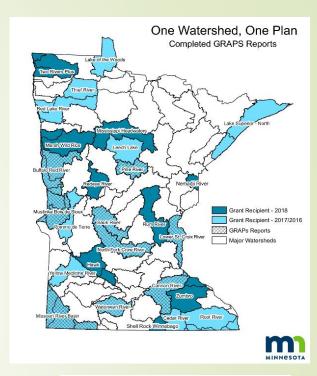


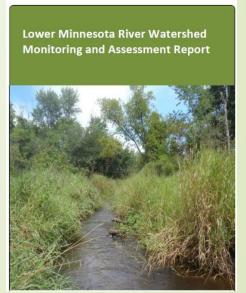
### **Groundwater Restoration and Protection Strategies (GRAPS)**

- Groundwater Restoration and Protection Strategies (GRAPS)
- Report coordinated through the MDH
- Contains maps and data describing groundwater conditions
- Identifies local groundwater concerns and issues
- Helps guide/assist goal setting and implementation activities
- Lower MN West- currently under development, available in near future

### Watershed Restoration and Protection Strategies (WRAPS)

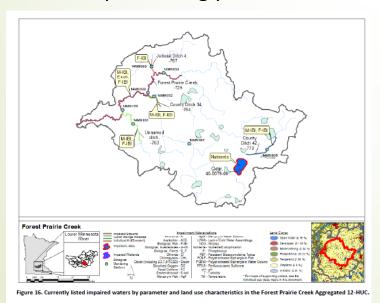
- Watershed Restoration and Protection Strategies (WRAPS)
- Report completed by MPCA in 2019
- Outlines water quality reduction goals for excess sediment, phosphorus, nitrogen and E. coli Bacteria.
- Identifies areas for protection and goals to address degraded stream habitat
- Provides strategies to meet restoration goals and protection targets
- BWSR Guidance document: <u>Using WRAPS Reports in Local Water Planning</u>





### **Lakes**

- Not a major component to the land area
- Several lakes listed as impaired
  - Eutrophication impairments: Clear, Silver, Titlow and High Island (Main)
  - Bakers is an important local resource
- Important to quality of life, local economies
- Sensitive to nutrient enrichment and runoff
- Consider prioritizing practice listed in WRAPs and NPFP



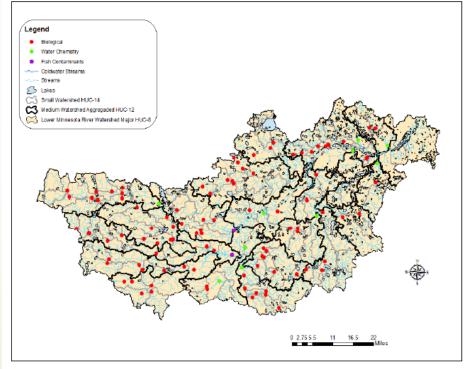


Figure 2. Intensive watershed monitoring sites for streams in the Lower Minnesota River Watershed.

### **Landscape Resiliency and Climate Adaption**

Increased frequency/severity of extreme weather events

**Urban Landscapes** 

- Consider extreme weather events and their impacts to water and land resources in the prioritization process
- Utilize (update frequency charts) NOAA Atlas 14 when designing projects

#### **Available Resources**

- BWSR Landscape Resiliency Toolbox
- White Paper from Minnesota Interagency Climate Adaptation Team:

"Building Resiliency to Extreme Precipitation in Minnesota" provides

resiliency strategies



Conservation Lands and Natural Areas

Landscapes





### **Local Controls**

- Review of inconsistencies, gaps, commonalities, differences
  - Local ordinances, policies, enforcement
  - Examples: Redetermination of ditches, SSTS compliance inspection requirements (property transfer, variances, etc.), shoreland regulations, level III feedlot inventories
- Can impact success of plan implementation
- Allows for conversation on opportunities for coordination of actions/goals

Table 5-6 Existing Public Participation and Engagement Programs

	Big S	tone	Dou	glas	Gra	ant	Otte	r Tail	Ste	vens	Sw	/ift	PDTRA
Program	С	S	С	S	С	S	С	S	С	S	С	S	
Aquatic Invasive Species Plan	х		х		x		X	х		х	х		
MN Agricultural Water Quality Certification Program (MAWQCP)		x		x		x		x		x		x	
Awards Program				X		Х		X		Х		X	
K-12 Education (e.g. Envirothon, field trips)	х		x	х		х		х		х		x	x
Nitrate Testing		Х		х		Х		X		х		х	
Household Waste Management Program (e.g. Take it to the Box, Waste Pesticide Collection Program)	x		x		x		x		x		x		
Outdoor Education Days (e.g. Conservation Tours, Field Days)		x		x		x		x		x		x	x
Social Media Program		х	х	х	х		X	х	х	х	x	х	х
Tours and Demonstrations				Х		Х		X		Х		Х	x
Newsletter		Х		Х				X		Х		Χ	
Shoreland Protection and Restoration		х	х	х		х		х		х		x	

Table 5-1. Existing Incentive Programs

		Big S	Stone	Dou	ıglas	Gr	ant	Otte	r Tail	Ste	vens	Sv	vift	PDTRA
Program	Funding Entity	С	s	С	s	С	s	С	s	С	s	С	s	
Agricultural Nonstructural Practices - Cover Crops, Conservation Tillage, Soil Health Practices, Buffers & Filter Strips														
Nonstructural Land Management Practices (NLMP)	BWSR, NRCS		х		х				х		х		x	
Working Lands	DNR				X		Х				X			
Conservation Reserve Program (CRP)	FSA		х		х		х		х		х		х	
Continuous Conservation Reserve Program (CCRP)	FSA		х		х		х		х		х		x	
Conservation Stewardship Program (CSP)	NRCS		х		х		х		х		х		х	
Agriculture BMP Loan Program	MDA				х		х		х	х			х	
Agricultural Structura Pit Closures, Grade Stab										ile Inta	akes, C	attle E	xclusio	ns, Waste
State Cost-Share	BWSR		Х		Х		Х		Х		Х		Х	

Table 5-5. Existing Regulatory and Enforcement Programs

	Big Stone		Douglas		Grant		Otter Tail		Stevens		Swift	
Program	С	s	С	s	С	s	С	s	С	s	С	s
Riparian Buffer Ordinance (Buffer Initiative)	x		x		X		х	х	х		х	
Erosion Control & Stormwater Management	x		x		х						х	
Feedlot Ordinance	X		X						X		X	
Floodplain Management	х		х		х				X			
Noxious Weed Law			Х		Х		х	Х		Х	Х	Х
Shoreland Management	х		х		Х		х		Х		Х	
Soil Loss Ordinance												
Subsurface Sewage Treatment System Program	x		x		х		x		х		х	
Wetland Conservation Act Authority	x			х	х		x			х	х	
Zoning Ordinance	х		х						Х		Х	
Right-of-Way Ordinance/Policy	x						х		х			

Note: C stands for County and S stands for SWC

### **Soil Erosion**

- Near-channel erosion (e.g. ravine/streambank) is the dominant loading source for TSS in the watershed
- Accelerated soil erosion is a significant issue
  - Ex higher slopes adjacent to the river



- 498,715 acre Lower Minnesota River West planning area is agriculture
- Soil Health practices = positive impacts
- Decrease soil erosion, increase water infiltration, nutrient scavenging, increase soil organic matter, etc.
- Examples include reduce/no tillage, cover crops, continuous living cover, extended crop rotations.
- Important to prioritize for implementation





## **Surface and Groundwater Quality**

- Degraded water quality are significant issues
- Examine current efforts to address issues
- Focus on efforts to reduce pollutants before they reach water resource
- Examine listed impairments and locations (Prioritizing Impairments-WRAPs)



# **Altered Hydrology/Flooding/Water Quantity**

- Hydrologic conditions have changed over time
  - More precipitation, more runoff, more frequently low flows, high flows, etc.
- Creates instability of watercourses, degraded wetland habitat, loss of agricultural productivity, bank sluffing, increased flooding.
- Recognize the significance as a priority issue in the plan
- Focus on opportunities to store water in the upper reaches of the watershed
  - Flooding issue ex. Henderson

### **Protecting Pollinator Populations**

- Identify projects that benefit pollinator populations
- Multi-benefit

#### Resource

**BWSR Pollinator Toolbox** 



# **Aquatic and Terrestrial Invasive Species**

- Recommend cooperative approach
- Prioritize based on risk to ecosystem, agriculture, recreation and human health
- Focus on emerging weeds such as Palmer amaranth (threat to ag production)
- Utilize adaptive management strategies
  - Maintain ecological function



### **Urban Stormwater**

- Urban stormwater contains pesticides, fertilizers, sediment, salt and debris
- Contributes to degradation, alters natural flow and infiltration, harms or eliminates aquatic organisms/ecosystems
- Provide this consideration

## **Data Collection and Monitoring**

- Data collection and monitoring activities necessary to support implementation
- Assess and evaluate progress
- Evaluate existing and potential future efforts





# Minnesota Department of Agriculture (MDA)

Did not submit an individual letter, provided comments/resources

#### Resources

- Ag BMP handbook provides suitability information on BMPs
- Minnesota Nitrogen Fertilizer Management Plan (NFMP) blueprint for addressing nitrate in groundwater and nitrogen management
- Groundwater Protection Rulehttps://www.mda.state.mn.us/chemicals/fertilizers/nutrientmgmt/nitrogenplan/mitigation/wrpr/wrprpart1/vulnerableareamap
- Nitrogen fertilizer/pesticide use or monitoring surveys and information- <u>National</u>
   <u>Agricultural Statistics Service (NASS)</u> and <u>Annual Monitoring and Assessment Results</u>
- Minnesota Agricultural Water Quality and Certification Program (MAWQCP)
  - 13 certified farmers operating 3,745 acres,
  - 12 producers in process with 11,973 acres assessed.

Any questions contact Jeff Berg

# Any Questions