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# Mississippi River Basin Initiative (MRBI) / National Water Quality Initiative (NWQI)

02/02/2021 | MN NRCS State Office Staff

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# Welcome and Agenda

- **Initiative Background– Jessica Weis**
- **Technical Requirements – Shannon Carpenter**
- **Programmatic Items**
  - CSP-Andrea Horsman**
  - EQIP-Yara Gonzalez**
- **Questions and Answer**



# MRBI Overview



- **Improve water quality and assist States in implementing their nutrient reduction strategies**
- **MRBI focus area watersheds (HUC 8)**
  - Focus watersheds represent greatest nutrient loads
  - MRBI targets small priority watersheds (HUC 12)
- **Implement practices that improve water quality, restore wetlands, enhance wildlife habitat and sustain agricultural profitability**
  - Environmental Quality Incentives Program (EQIP)
  - Conservation Stewardship Program (CSP)



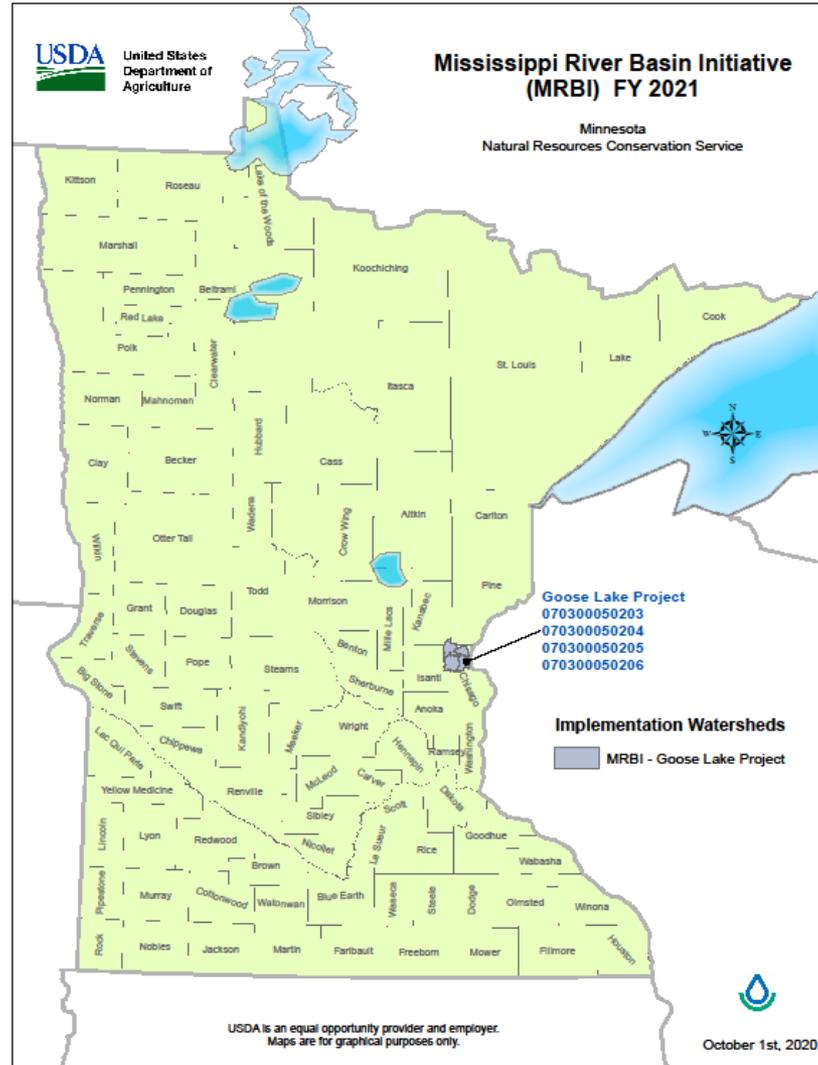
# MRBI – How It Works

- **Funding available for HUC 12 watersheds**
- **Delivered through multiyear implementation plan**
  - Developed by STC, State and Local partners
- **Document annual targets for treatments utilizing watershed assessments**
  - Nutrient and sediment loss
- **Plan must include quantifiable interim metrics**





# MRBI Current Watersheds



# NWQI Overview



- **Areawide efforts to improve water quality in high-priority areas.**
- **Areas defined by subwatersheds (HUC 12)**
  - Reduce the runoff of sediment, nutrients, and pathogens into surface waters where water quality is a critical concern.
- **Implement practices to control and trap nutrient and manure runoff that improve water quality and aquatic habitats in impaired streams.**
  - Environmental Quality Incentives Program (EQIP)
  - Conservation Stewardship Program (CSP)



# NWQI – Source Water Protection

- **Includes surface and ground water public water systems**
- **Assists partners in adapting and expanding source water protection plans to identify critical source areas needing further treatment.**
- **Assists with implementation on priority source water protection areas (SWPAs), where the drinking water source is surface or ground water.**
  - Addresses identified threats to drinking water, either to remediate impairments or protect clean sources.

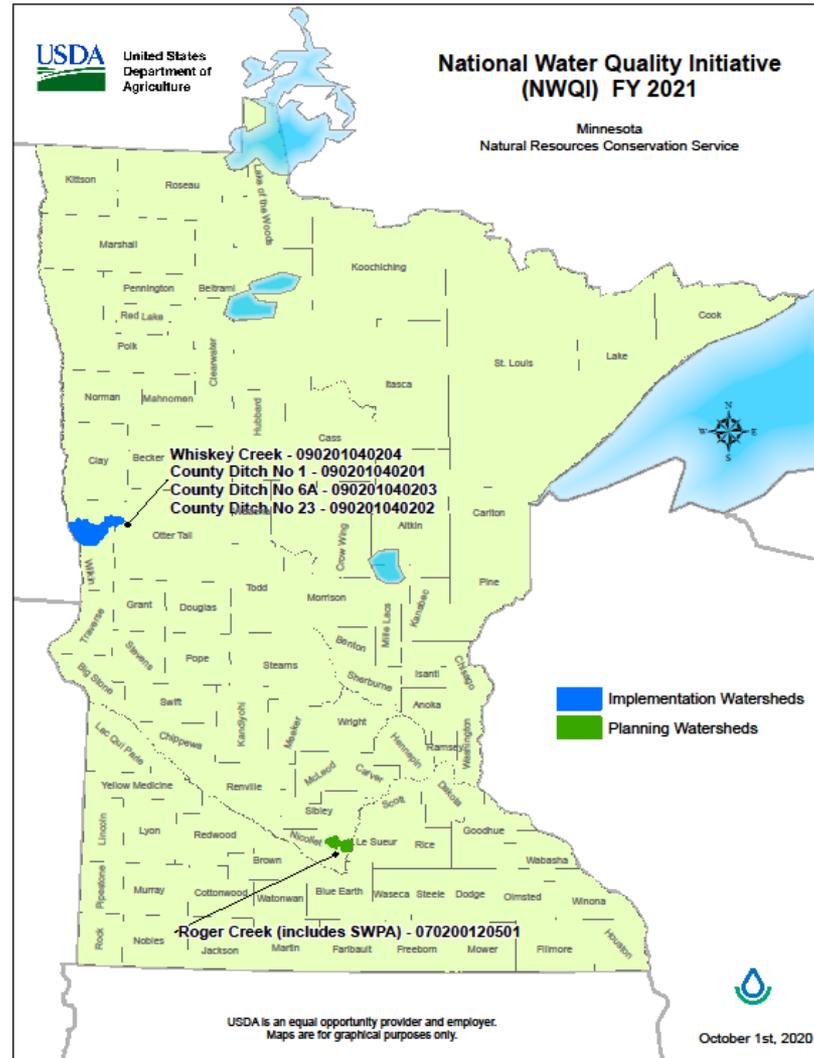


# NWQI – How It Works

- **Delivered through watershed assessment and planning and use of multi-year budgets**
- **Partnership with state water quality agencies and the U.S. Environmental Protection Agency**
- **State and other partners contribute resources for watershed planning, implementation and outreach.**
  - Monitoring efforts track water quality improvements over time.



# NWQI Current Watersheds



# National Instruction 440-307



- <https://directives.sc.egov.usda.gov/Default.aspx>
- MRBI
  - 307.27
- NWQI
  - 307.28





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# Technical Requirements



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# Watershed Assessment plan required

Based on the NPPH 180, part 600 subpart F “Area Wide Planning” which is defined as:

Areawide conservation plans are voluntary, comprehensive plans for watersheds or other broad-based geographical areas. Areawide conservation plan development considers all natural resources in the planning area as well as relevant social and economic considerations. Plan development follows the established nine-step planning process to assist local people, through a voluntary locally led effort, to assess their natural resource conditions and needs, set goals, identify programs and other resources to achieve those goals, develop proposals and recommendations, implement solutions, and measure their success. The locally led effort should consider all Federal, State, and local conservation programs and private sector programs, singly and in combination, as tools to solve natural resource concerns.



# Areawide Conservation Planning

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# Areawide Conservation Planning of?

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and recommendations, implement solutions, and measure their success. **The locally led effort**

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**programs and private sector programs, singly and in**

**combination, as tools to solve natural resource concerns.**



# Minnesota Watershed Planning and Implementation



State



HUC-8



HUC-12



Site

Programs and strategies

Initial assessments, goals, priorities, & strategies

Identify specific sources, critical areas, practices and activities

Landowner practice selection, pre-design and cost analysis

Plans

- Nutrient Reduction Strategy
- Nitrogen Mgmt. Plan
- WRAPS
- 1W1P
- Comprehensive Plans
- TMDLs
- GRAPS
- NRCS Watershed Assessments – NWQI/ MRBI
- MPCA Section 319 9-Element Plans
- NRCS Conservation Planning Process

Process

## Stakeholder engagement and Partnership building

Assess condition



Model impacts



Gather landscape data

MN Water Mgmt. Framework – NRCS Areawide Planning – Small WS Planning

Tools

- Monitoring
- IBIs
- NBS, BEHI/BANCS
- P Index
- WHAF
- NP-BMP
- HSPF, SWAT, SPARROW
- GSSHA, P8, WinSLAMM
- HSPF-SAM, EBI, WEPP
- BATHTUB, RUSLE2
- Land survey
- Soil survey
- Vegetation survey
- Hydroconditioned LiDAR elev. data
- Terrain analysis
- PTMApp
- ACPF
- Zonation
- Landowner contacts
- BMP manual
- Cost-benefit
- NRCS **GIS toolbox**
- Agren **design tool**

# What is happening in MN?



**1W1P – One Watershed One Plan**; Board of Water and Soil Resources

**TMDL/WRAPS- Total Maximum Daily Load/ Watershed Restoration and Protection Strategy**; Minnesota Pollution Control Agency

**GRAPS- Groundwater Restoration and Protection Strategies**; Minnesota Department of Health.

**319 9-Element Plans** – EPA approved small watershed plans completed with support of MPCA staff.

**Clean water implementation project technical assistance** from regional/field staff with deep local knowledge of hydrology and stream geomorphology; MN DNR



# What is Required?



## NWQI / MRBI Watershed Assessment plan

The NWQI/MRBI watershed assessment is an areawide conservation assessment conducted at the **HUC-12 watershed scale**. The NWQI/MRBI watershed assessment will have a much greater focus on hydrologic processes and factors affecting those processes and upon the resulting water quality conditions than a typical NRCS areawide assessment.

- **Outcome:** To identify “Critical Source Area” documented by a GIS data layer.



# NWQI / MRBI Watershed Assessment plan

Start

- Information from other available HUC8 level plans should be utilized to confirm HUC12's of greatest priority for additional planning and used to reference baseline information.

Question  
?

- Are there GAPS in data or analysis to complete to complete a watershed assessment plan for the identified HUC12(s)?

YES

- Apply for a Planning Phase dollars to complete the NWQI or MRBI Watershed Assessment Plan



# Do you apply for NWQI or MRBI?

## NWQI

- Identified Targeted efforts are to delist a current impairment waterbody?
- Include a SWP (DWMSA)?
- HUC12 is not located within MRBI Priority HUC8 Watershed?

## MRBI

- HUC12 is Within a MRBI Priority HUC8 Watershed?
- Identified Nutrients and/or Sediment loading as primary concern.
- Primary focus to plan Conservation practices that Avoid, Control and Trap sediment and nutrients.



# How to Apply?



Submit applications at the time of announcement to Minnesota Watershed Subcommittee of the NRCS State Technical Advisory Committee (MSTAC).

**Announcements will be posted to: [MN NRCS Watershed webpage](#)**

MN NRCS Watershed Subcommittee Recommends new Planning and Implementation Watershed to the full MSTAC and the NRCS State Conservationist



# How to Apply?



NRCS State Conservationist makes final decisions and forwards onto NRCS NHQ

NRCS NHQ makes final selections based on allotted funding verses number of applications received Nation wide.

Interested?  
Start Planning NOW!



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# Minnesota State Technical Committee Watershed Selection Criteria



## 1. Existing Documents

- a. 303d listing or Vulnerable DWMSA
- b. WRAPS, TMDL, or other identification of pollution issues
- c. Comprehensive watershed planning



## 2. Local Readiness

- a. Willingness
- b. Capability (partnership infrastructure)
  - i. local farmer lead organizations
  - ii. Local industry support
- c. Outreach support



## 3. Multiple benefits: high needs and/or opportunities [or restoration potential]



# What makes a good Watershed Project?

## Well Defined Scoped Goal and Objectives – Dave Jones, NRCS State Engineer

- **Existing HUC 8 level planning documents completed**
- **Strong local partnerships with commitment to success of the project**
  - Coordination among local, state, and federal partners
  - Including Farmer led organizations
  - Local industry support
- **Unified outreach effort among partnerships**
- **Local capacity to assist with planning and designing of projects.**
- **Shovel Ready projects**



# Technical Requirements Resources

[MN NRCS Watershed webpage](#) -- has the following resources:

- The “Minnesota State Technical Committee Watershed Selection Criteria” 3-1-2018  
<https://www.nrcs.usda.gov/wps/portal/nrcs/mn/water/watersheds/>
- Assessment guidance for NWQI with or without Source Water Protection Area, and MRBI.
- NWQI and MRBI assessment checklist

**What is a Critical Source Area?**

- [NRCS CEAP - Identifying Critical Source Areas](#)
- [EPA – Identifying Critical Source Areas](#)



# Watershed Planning Resources

- NWQI Pilot Webinar: *Water Assessments in CEAP – Insights and Lessons Learned*. <https://usdanrcs.adobeconnect.com/p82q23lmxqb/>
- NRCS Conservation Webinars <http://conservationwebinars.net/>
  - *Watershed Planning from an NWQI Perspective*
  - *Managing Small Scale Watersheds for Water Quality*
- EPA: *A Quick Guide to Developing Watershed Plans to Restore and Protect Our Waters*, 2013.  
[https://www.epa.gov/sites/production/files/2015-12/documents/watershed\\_mgmnt\\_quick\\_guide.pdf](https://www.epa.gov/sites/production/files/2015-12/documents/watershed_mgmnt_quick_guide.pdf)
- Osmond, D.L., et al. (eds). 2012. *How to Build Better Agricultural Conservation Programs to Protect Water Quality: The National Institute of Food and Agriculture–Conservation Effects Assessment Project Experience*. Ankeny, IA: Soil and Water Conservation Society. Chapter 8- Synthesis of CEAP watershed studies.  
[http://www.swcs.org/en/publications/building\\_better\\_agricultural\\_conservation\\_programs/](http://www.swcs.org/en/publications/building_better_agricultural_conservation_programs/)



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# (CSP) Conservation Stewardship Program



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# (CSP) Conservation Stewardship Program

## PURPOSE:

Encourages producers to address priority resource concerns and improve and conserve the quality and condition of natural resources in a comprehensive manner by-

- (1) Undertaking additional conservation activities
- (2) Improving, maintaining, and managing existing conservation activities across the entire agricultural operation in a manner that increases or extends the conservation benefits in place at the time a contract application is accepted by NRCS



# CSP-MRBI Eligibility Requirements

Three Eligibility Requirements: (1) Applicant, (2) Land, & (3) Stewardship

## Applicant:

- Be the operator, owner, or other tenant of an agricultural operation in the Farm Service Agency (FSA)
- Share in the risk of producing a crop and participant in the daily management, administrative, and performance of the operation for the land included in the contract.
- Have effective control of the land for entire contract period
  - CSP Contracts are required to be 5 years



# CSP-MRBI Eligibility Requirements

## Land:

- Enrolling all land under applicant's agricultural operation
- Eligible land uses: Crop, Pasture, Farmstead, and Associated AgLand

## \*Additional Land requirements under a CSP-MRBI:

- **50% or greater of the applicant's agricultural operation needs to be within the MRBI watershed**



# CSP MRBI Eligibility Requirements

## Stewardship: Conservation Assessment Ranking Tool (CART)

- (1) Meet at least 2 Resource Concerns at time of application
  - Current management on operation
- AND
- (2) Meet at least 1 additional Resource Concern by the end of the contract
  - Planned additional activities

- **Specific Requirements for CSP-MRBI:**
- **Core Conservation Activities must be scheduled or documented as already applied on the land under contract to be eligible for MRBI**



# CSP-MRBI RESOURCE CONCERNS

- Concentrated Erosion
- Field Pesticide Loss
- Field, Sediment, Nutrient, and Pathogen Loss
- Soil Quality Limitations
- Source Water Depletion (applicable to irrigation)
- Storage and Handling of Pollutants (applicable to Farmstead)
- Wind and Water Erosion



# CSP MRBI RANKING



- **National Required Questions:**
  - CSP regulations
  - Purpose of the Program
  - National MRBI objectives
- **Additional Ranking Questions:**
  - Local Partners and NRCS Local Field Staff
  - Based on the Watershed Assessments
  - Focus on the Nutrient Loss Reduction Strategies



# CSP MRBI PAYMENTS

- **Existing Activity Payment:**
  - # Resource Concerns met at time of application
  - Land use payment rate X total acres of land use
- **Additional Activity Payment:**
  - Payment schedules (just like EQIP)
  - Financial Assistance to adopt new activities
- **Process CSP payments in October**



# CSP MRBI



## Benefits of having CSP MRBI:

- Less competition when competing within a MRBI watershed project
- Focus on local watershed objectives
- Additional financial assistance to your local area



# CSP MRBI PROPOSALS

- **Review the NRCS CSP data:**
  - Average # of CSP applications/Fiscal Year (FY)
  - Large or Small Farms located in this watershed project
  - Include 5 years of funds/application per FY
- **Outreach**
  - Targeting specific Water Quality Conservation Activities
  - Sell CSP
    - Learn to know the basic program requirements
    - Determine the popular conservation activities





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# (EQIP) Environmental Quality Incentives Program



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# (EQIP) Environmental Quality Incentives Program

**EQIP provides financial and technical assistance to agricultural producers to address natural resource concerns and deliver environmental benefits**

- **Who is eligible?**

Farmers, ranchers, and forest landowners who own or rent agricultural land



# EQIP- MRBI & EQIP- NWQI Eligibility



Eligibility	MRBI	NWQI
EQIP – Applicant eligibility	X	X
Land Uses: Crop, Range, Pasture, Farmstead, Water, Associated Ag Land	X	X
50% or greater of PLU needs to be within the watershed	X	X



# EQIP- MRBI & EQIP- NWQI Ranking



## Resources Concerns:

- Field Sediment, Nutrient and Pathogen Loss
- Concentrated Erosion
- Degraded Plant Condition
- Field Pesticide Loss
- Aquatic Habitat
- Salt Losses to Water
- Soil Quality Limitations
- Soil Water Depletion
- Storage and Handling of Pollutants
- Wind and Water Erosion



# Core Practices

**Core practices must have a water quality purpose**

At least one of the applicable core practice must be included

or

must be completing a conservation system that supports core practices that are documented as already applied on the land under contract.

Core Practices	
Practice Code	Practice Name
<b>Avoiding</b>	
472	Access Control
327	Conservation Cover
328	Conservation Crop Rotation
340	Cover Crop
590	Nutrient Management
528	Prescribed Grazing
612	Tree/Shrub Establishment
<b>Controlling</b>	
330	Contour Farming
342	Critical Area Planting
554	Drainage Water Management
512	Forage and Biomass Planting
412	Grassed Waterway
449	Irrigation Water Management
329	Residue & Tillage Management, No-Till
585	Stripcropping
600	Terrace
<b>Trapping</b>	
656	Constructed Wetland
332	Contour Buffer Strips
605	Denitrifying Bioreactor
393	Filter Strip
436	Irrigation Reservoir
391	Riparian Forest Buffer
390	Riparian Herbaceous Cover
604	Saturated Buffer
601	Vegetative Barrier
635	Vegetated Treatment Area
658	Wetland Creation
659	Wetland Enhancement
657	Wetland Restoration



# EQIP- MRBI & EQIP- NWQI Ranking



## Program Questions:

- EQIP regulations
- Purpose of the Program

## Resource Questions (local):

- Local Partners and NRCS Local Field Staff
- Overall Initiative objectives
- Watershed assessments



# EQIP- MRBI & EQIP- NWQI



## Overall Benefits:

- Address local needs
- Dedicated funding to your local area for conservation implementation
- Form new partnerships
- Measured results of improvements





# Q&A



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