

# Minnesota Agricultural Water Quality Certification Program

*Certifying that Minnesota's farms  
and waters can prosper together*



**Brad Jordahl Redlin**  
**Minnesota Department of Agriculture**

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# Pilot Operations

- Biennial appropriation available to June 30, 2018

## ***FY14/FY15***

### **State - Clean Water Fund**

Pilot Operations/Administration/Staff	\$1,400,000	
Financial and Technical Assistance	\$1,600,000	Local TA & FA pass through
<b>Total Biennium</b>	<b>\$3,000,000</b>	

## ***FY14/FY15***

### **Leveraged Funds**

Federal - NRCS Producer Contracts	\$3,500,000	EQIP
The McKnight Foundation	\$100,000	
<b>Total Biennium</b>	<b>\$3,600,000</b>	



<u>Pilot</u>	<u>Farms</u>	<u>Acres</u>
Elm Creek	1	231
Middle Sauk	12	2,996
Whiskey Creek	7	5,327.5
Whitewater River	23	16,064.7



United States  
Department of  
Agriculture

THE MCKNIGHT FOUNDATION

# Pilot Lessons

- Work with and via local professionals, especially SWCDs along with private service providers.
- Each certification is different, and ultimately (and appropriately) conducted at the producer's pace.
- Motivations are as varied as the producers; financial assistance, regulatory certainty, and management 'check-up' consistently cited as leading motivators.
- Crop Advisors and dealers are trusted resources of management records and strategies.

## KAP Study Characteristics

- Studies are done twice: pre/post project
- Each study is customized and unique, scalable
- Everything is local: KAP explores issues with local relevance
- Flexible method (door-to-door, mail, phone, community workshop, etc.)
- Focused on core constructs
- Inexpensive

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## Also Measuring Social Changes

What are **motivators** to engage individuals and communities in protecting vital water resources?

What **constrains** individuals and communities from engaging in water resource management?

How can resource professionals, policy-makers, and citizens **enhance individual and community capacity** to protect and restore Minnesota's water resources?



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## Knowledge, Attitudes and Practices Results

- About half say they "don't know" if their operation contributes to pollution; 1/3 say they are "uncertain"
- Many producers said soil erosion was a concern, few said that water quality was a concern
- Soil loss, money, yields and time are the most important issues for producers
- Identified real differences in nitrogen fertilizer management between watersheds
- Barriers: potential cost; need to know more; and acreage reduction are concerns
- Incentives: cost-share, education and training, and technical assistance are most important

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# MAWQCP status

## RESULTS AS OF NOVEMBER 30, 2015:

**71** certified farms totaling  
**39,695** certified acres implementing  
**195** NEW conservation practices.



**...and 260+ signed applications received.**



## CONSERVATION DELIVERED

A total of 195 new structural conservation practices have been installed or will be installed as part of the MAWQCP. These practices include:

- Water and Sediment Control Basins
- Agricultural Waste Facilities
- Contour Buffers
- Terrace Projects
- Streambank Protection Projects
- Grassed Waterways
- Cover Crops

# MAWQCP status



- 2,010 tons of sediment avoided per year
- 2,418 lbs of Phosphorus loss avoided per year
- 2,468 tons of soil saved per year
- Nitrogen loss on treated acres projected at 49% reduction

<sup>1</sup> Sediment, Soil and Phosphorus numbers calculated using BWSR's Pollution Reduction Estimator and associated inputs from NRCS's RUSLE2, field notes, certification records and aerial measurements

<sup>2</sup> The sources used to estimate effectiveness of conservation practices for nitrate-nitrogen are compiled from either the MDA's Agricultural BMP Handbook for Minnesota or the MPCA's Nutrient Reduction Strategy. Employing a weighted average of practices *where data is available*, the conservation practices installed to date may have reduced nitrate-nitrogen losses by up to 55% on contributing acres.



# FY16 Operations

- Annual appropriation to June 30, 2016



## **FY16**

### **State - Clean Water Fund**

Statewide Operations/Administration/Staff	\$862,500	
Financial and Technical Assistance	\$1,637,500	Local TA & FA pass through
<b>Annual Total</b>	<b>\$2,500,000</b>	



## **FY16**

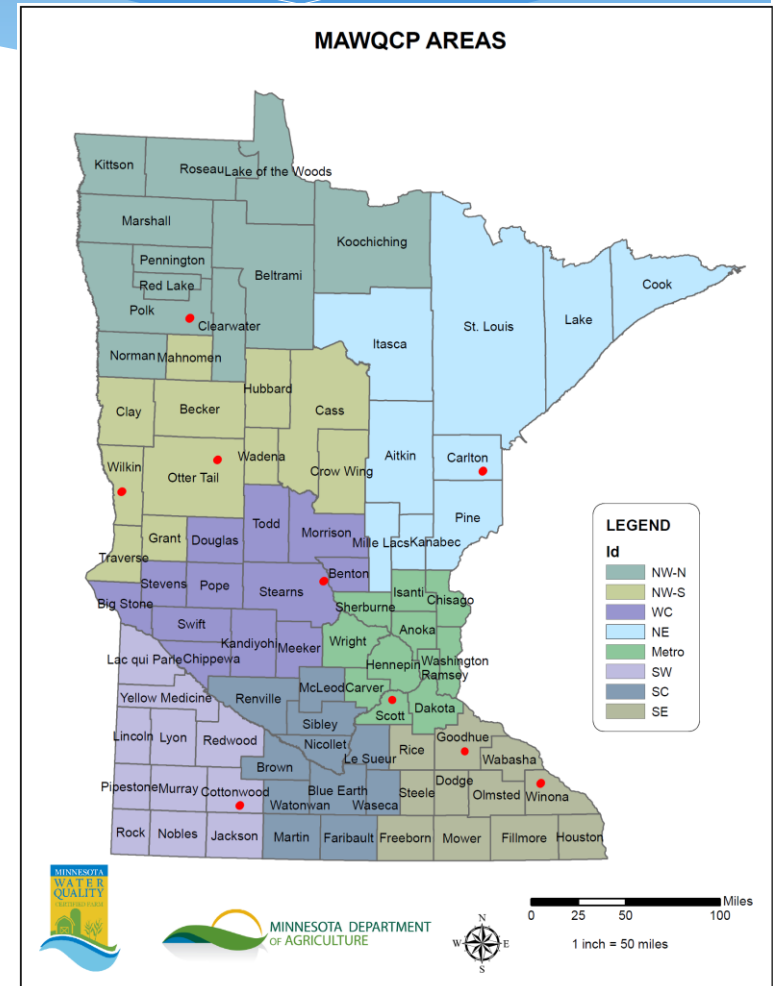
### **Leveraged Funds**

Federal - NRCS Regional Conservation Partnership Program (RCPP)

NRCS FY16 Producer Contracts	\$2,250,000	EQIP, ACEP, CSP
<b>RCPP Total FY16-FY19</b>	<b>\$9,000,000</b>	

# Regional Structure

- North-Northwest: East Polk SWCD
- South-Northwest: E.OtterTail/Wadena SWCD
- Northeast: Carlton SWCD
- West Central: Stearns SWCD/TSA Area 2
- Southwest & South Central: GBERBA
- Metro: Scott SWCD/TSA Area 4
- Southeast: Goodhue SWCD/TSA Area 7



# Area Specialists, Support Staff

Fiscal Agents manage service areas:

- **Area Certification Specialist (ACS)** full-time lead staff coordinating certification services for each Area
- MDA staffed, area-designated **Intermittent Certification Specialists**; part-time/on-call position for certification support
- A pool for hourly reimbursement of SWCDs for technical assistance or conservation design





# Private Sector Participation

Access and engage agricultural expertise in providing MAWQCP certification services:

- Pilot project of Crop Advisors/Consultants to work with producers
- Fee for service for conducting MAWQCP farm assessments
- Limited to \$5,000/individual Crop Advisor during pilot project (FY16)

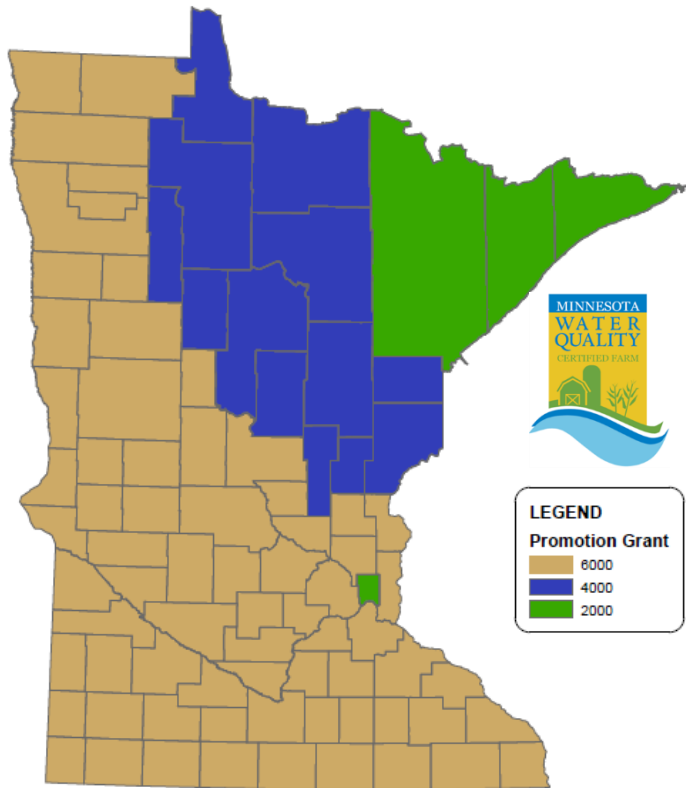


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# Statewide Activities - BWSR



1. **Promote** the MAWQCP through producer contacts, newsletters, local papers, radio spots, etc. provided by MAWQCP.
2. MAWQCP Program and Assessment Tool **Training.**
3. 10 (**brown** counties) or 5 (**blue** counties) **producer applications** by May 31.

***Supplying more than 700 new applicants by May 2016***

# Assessment Tool Update

- Updated assessment tool online at:  
<https://mnwatercertify.mda.state.mn.us/wqcpapp/>
- Current project with Houston Engineering for nutrient management updates/precision ag
- Also will host and integrate with a new Nutrient Management Planner



Draw your field

Looking up data, this may take a minute, please wait...

Map Layers

- Base Map
  - Streets
  - Aerial
  - Topographic
- Map Layers
  - Counties
  - PLS Sections
  - Watersheds
  - Slope
  - Soil Names
  - Soils - Hydrologic Group
  - Soils - K-Factor
  - Soil - Organic Matter
  - Contours
  - Search

cold spring mn

Found Address: Cold Spring, Minnesota, United States

Select Township...  
Select Range...  
Select Section...

Help

Step 1: Find your field on the map



Calculate and return

Return without calculating

**Nutrient Management** *Certification Eligible*

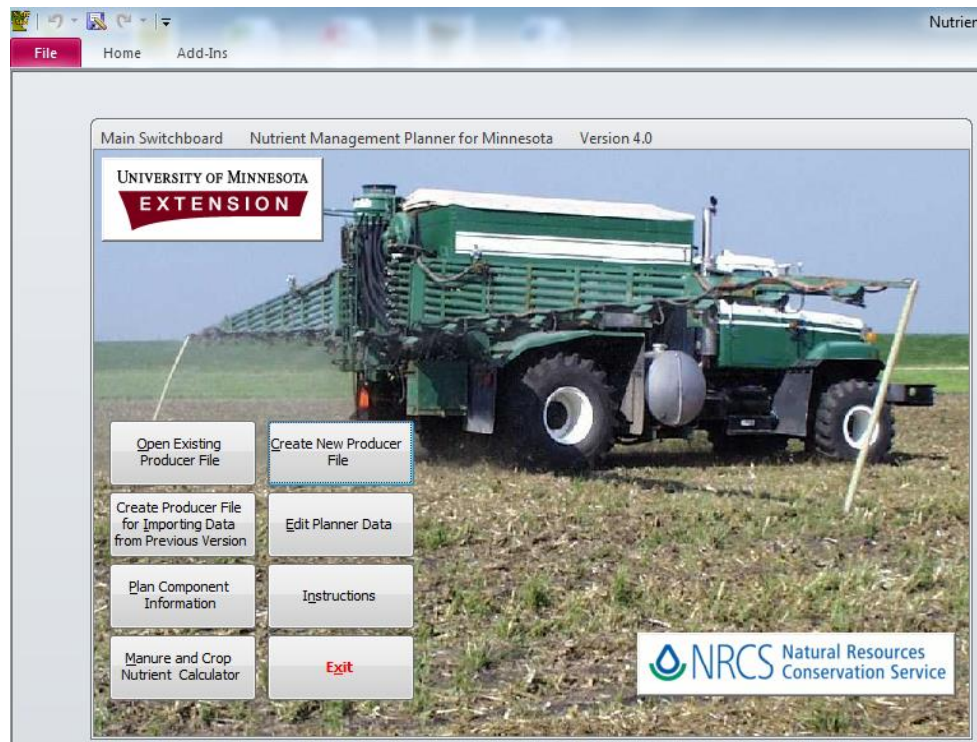
Field	Nutr. Mgmt	Tillage	Pest Mgmt	Base Score	Irr/Drng Adjust	Final
( 6.69 )	( 9.49 )	( 9.00 )	( 10.00 )	8.74	7.68	8.73

		Risk index score
Nitrogen application rate	MN BMP recommendation	10.00
Phosphorus application rate	1-10% over the UMN recommen...	9.00
Commercial fertilizer timing	Recommended	10.00
Commercial fertilizer source	Acceptable with Risk	6.00
Commercial fertilizer placement	Recommended	10.00
Manure application timing & placement	Incorporated / Injected Fall ST <...	10.00

# Nutrient Management Planner



- Existing planning software is unsupported on old version of Access
- Existing version is not user friendly
- New online version integrates with MAWQCP Assessment Tool
- Produce simplified reports farmers will use
- Produce product exportable for NRCS, PCA, other reporting



# Partners



Minnesota Pollution Control Agency



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# Certification & Recognition



# Questions?



[www.mda.state.mn.us/awqcp](http://www.mda.state.mn.us/awqcp)

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