



United States Department of Agriculture

Natural Resources
Conservation Service

 *NRCS Programs
Update*

KEITH KLOUBEC
ASSISTANCE STATE CONSERVATIONIST-
PROGRAMS

ST. PAUL, MN

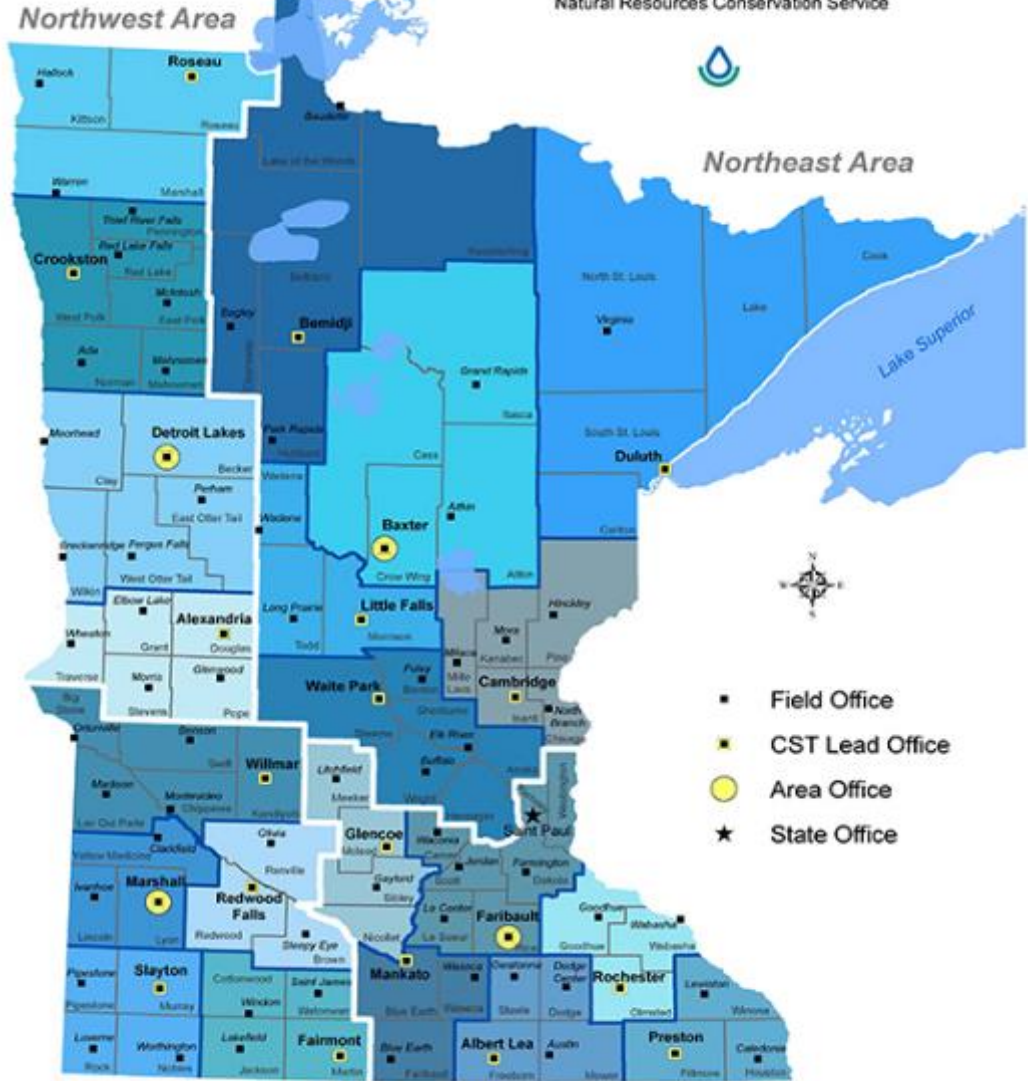


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Customer Service Teams

Minnesota
Natural Resources Conservation Service



NRCS Minnesota

- 4 Areas
- 21 Teams
- ~ 250 staff

Programs

Financial and Technical Assistance

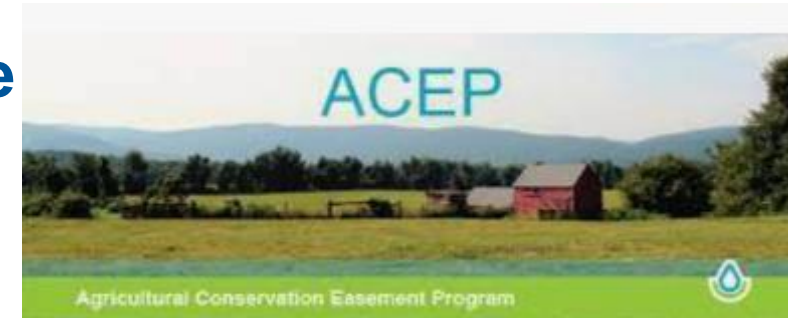
Technical Service Providers

Program Rules (Goals)

Practice/Activity

-Standards

-Jobs Sheets/IR Sheets



Environmental Quality Incentives Program (EQIP)

Provides financial and technical assistance to address natural resource concerns and delivers environmental benefits such as improved water and air quality, conserved ground and surface water, reduced soil erosion and sedimentation, and improved or created wildlife habitat.



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TOP PRACTICES in 2022 (2021 Practice Rank) \$20.3M ~66% in top 10

Practice	Obligated	Count of Practice
Cover Crop (2)	\$ 3,942,074.37	646
Roofs and Covers (1)	\$ 3,732,955.72	34
Waste Storage Facility (3)	\$ 3,007,925.14	38
Pest Management Conservation System (10)	\$ 1,783,587.01	147
Underground Outlet (5)	\$ 1,658,123.59	349
Grade Stabilization Structure (7)	\$ 1,546,850.84	97
Nutrient Management(4)	\$ 1,452,066.78	180
Fence (8)	\$ 1,290,664.33	216
Heavy Use Area Protection (6)	\$ 1,064,204.87	154
Water and Sediment Control Basin (11)	\$ 843,807.26	271



What are CPAs, DIAs, and CEMAs? (previously call Conservation Activity Plans (CAPs))

- **Conservation Planning Activities (CPAs):** Activities that result in a conservation plan consistent with steps 1-7 of the NRCS conservation planning process. The CPA will document client decisions regarding selected alternatives including identification of desired primary and supporting practices that the client would like to use to treat identified resource concerns.
- **Design and Implementation Activities (DIAs):** Activities that allow for development of specific practice designs, management prescriptions, or other instructions that allow the client to implement the conservation practice or system of conservation practices. These activities are consistent with Step 8 of the NRCS conservation planning process. (Does not include assistance with conservation practice installation, review, and checkout.)
- **Conservation Evaluation and Monitoring Activities (CEMAs):** Activities that include evaluation, monitoring, testing, or assessment for a specific purpose, to complete practice implementation requirements, or to determine the effectiveness of conservation practices and activities. CEMAs are consistent with Step 9 of the NRCS conservation planning process but may be used at any point in the planning process.



Soil Health Testing Activity – CEMA 216

An opportunity for the EQIP contract holder to complete quantitative testing for physical, biological or chemical characteristics of the soil

This is a newer activity in EQIP: Currently not utilized much.

Soil Organic Carbon

- Measured by dry combustion

Respiration

- Using 1, 2, 3 or 4 day incubation

Active Carbon

- Measured by Permanganate Oxidation

Bioavailable Nitrogen

- Measured by ACE Protein method

Wet Macro-Aggregate Stability

- Using ARC or NRCS methods or sprinkle infiltrometer



Additional Single Indicator Soil Health Tests

PLFA-Phospholipid fatty acid

- Coarse community structure information
- Microbial biomass
- Bacteria to Fungi Ratios

Enzyme testing

- Beta-Glucosidase and etc...
- General microbial activity



Soil Health Tech Note 450-03

Published May 2019, Updated November 2019

Goes into detail on how testing methods were evaluated for the document

Numerous discussion papers on soil health indicators and methods

<https://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=44475.wba>

Soil Health Technical Note No. 450-03

Recommended Soil Health Indicators and Associated Laboratory Procedures



Tech Note 450-03 supports and guides soil health testing

4 main criteria for selecting reliable soil health (SH) tests:

- SH Indicator Effectiveness
 - Management sensitive, Short-term sensitivity, Interpretable, Useful
- Production Readiness
 - Ease of use, Cost effectiveness for producers on a per-sample basis
- Measurement Repeatability
 - Level of precision of method is within acceptable limits
- Interpretable for Ag management decisions
 - Measured values are ‘directionally understood’
 - Management practices that improve the measure are known
 - Regional potential ranges are known
 - Outcome based thresholds are known



Conservation Stewardship Program (CSP)

Helps agricultural producers maintain and improve their existing conservation systems and adopt additional conservation activities to address priority natural resource concerns. Participants earn CSP payments for conservation performance—the higher the performance, the higher the payment.





Conservation Stewardship Program

Top 5 Activities Scheduled under Ag Land contracts:

- 1) CP595-Pest Management Conservation System
- 2) CP590-Nutrient Management
- 3) CP340-Cover Crop
- 4) E590A-Improving nutrient uptake efficiency & reducing the risk of nutrient losses
- 5) E595A-Reduce risk of pesticides in surface water by utilizing precision pesticide application techniques



590 Nutrient Management –REMINDERS

- **Updates to Practice Standards from January 14, 2022**
- **Minor Changes:**
 - Use soil tests no older than 2 years when developing new nutrient management plans (baseline plans).
 - New soil resource map reviews for groundwater sensitive feature risk assessment.
 - Reference FOTG Section IV: 590 and supporting documents

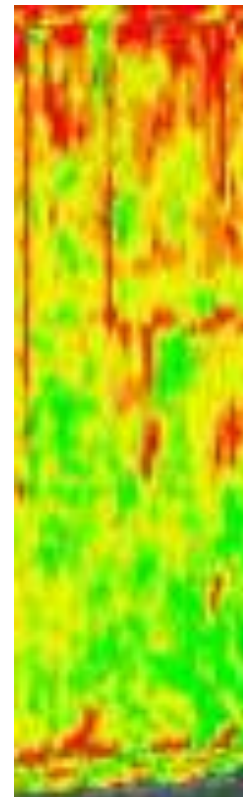


590 NM-- E590B Enhancement

Questions and Answers

1. In my area phosphorus and sometimes potassium are adequate in the soil and based on the grid sampling, no additional P or K is needed. In this situation I would not recommend the producer applying any P or K except in starter, and we cannot variable rate that. Can we still do this Enhancement?

Answer: The enhancement requires nutrient rates of application (minimum N-P-K) are planned and applied according to management zones. The plan must include planning efforts to apply N, P, and K. If the final recommendation is to apply no P or K based on the grid sampling results then the enhancement has been met. If P and K are applied, they need to be variable rate applied. If no nutrients are applied, then this enhancement would not be applicable in the year of no nutrient application.



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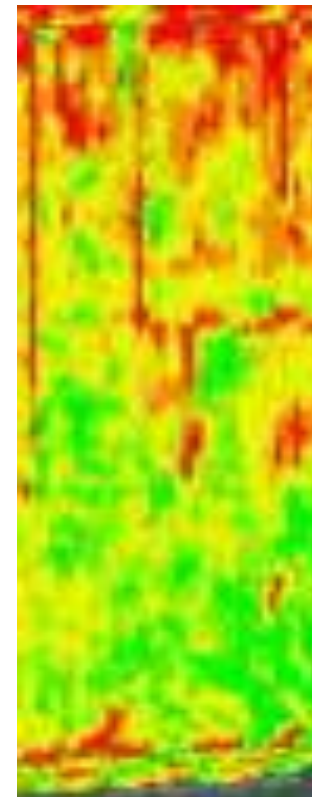
590 NM-- E590B Enhancement

Questions and Answers

2. Does Yield Data have to be included in the final report or just utilized when making VRT prescriptions?

Answer: The requirements include the following:

Prior to implementation, develop site-specific yield maps and use them to develop management zones within the field. Yield maps and data are not required post application. They are necessary for the development of the initial plan and Zones.



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590 NM-- E590B Enhancement

Questions and Answers

3. When making VRT prescriptions, do we need to utilize a low, medium, high zone of application or can we VRT every 2.5 acres based on the grid sample results?

Answer: You can VRT based on soil samples and the other criteria mentioned in the enhancement. All Criteria need to be met in the development of this plan. The more data used during the development of the variable rate application maps the more accurate the nutrients are being applied where they are needed. More than three zones can be used.



590 NM-- E590B Enhancement

Questions and Answers

4. How does VRT manure fit into this? If the producer is VRT liquid manure based on N or P does that qualify for this enhancement?

Answer: Yes, manure can be spread as VRT or in conjunction with a VRT commercial fertilizer application. The producer would need to adjust their manure rates based on grid sampling zone map and yield history information just like a commercial fertilizer producer. The application rate and placement needs to match the plan recommendations following the 590-conservation practice standard.



590 Nutrient Management -- E590B

Questions and Answers

5. Do "as applied" output maps need to be provided

from the machines?

Answer: Documentation needs to be provided that the N, P, and K applied was applied according to the planned maps.

If that documentation is the field output maps from the machines, then Yes. The documentation needs to show what was applied to each zone.

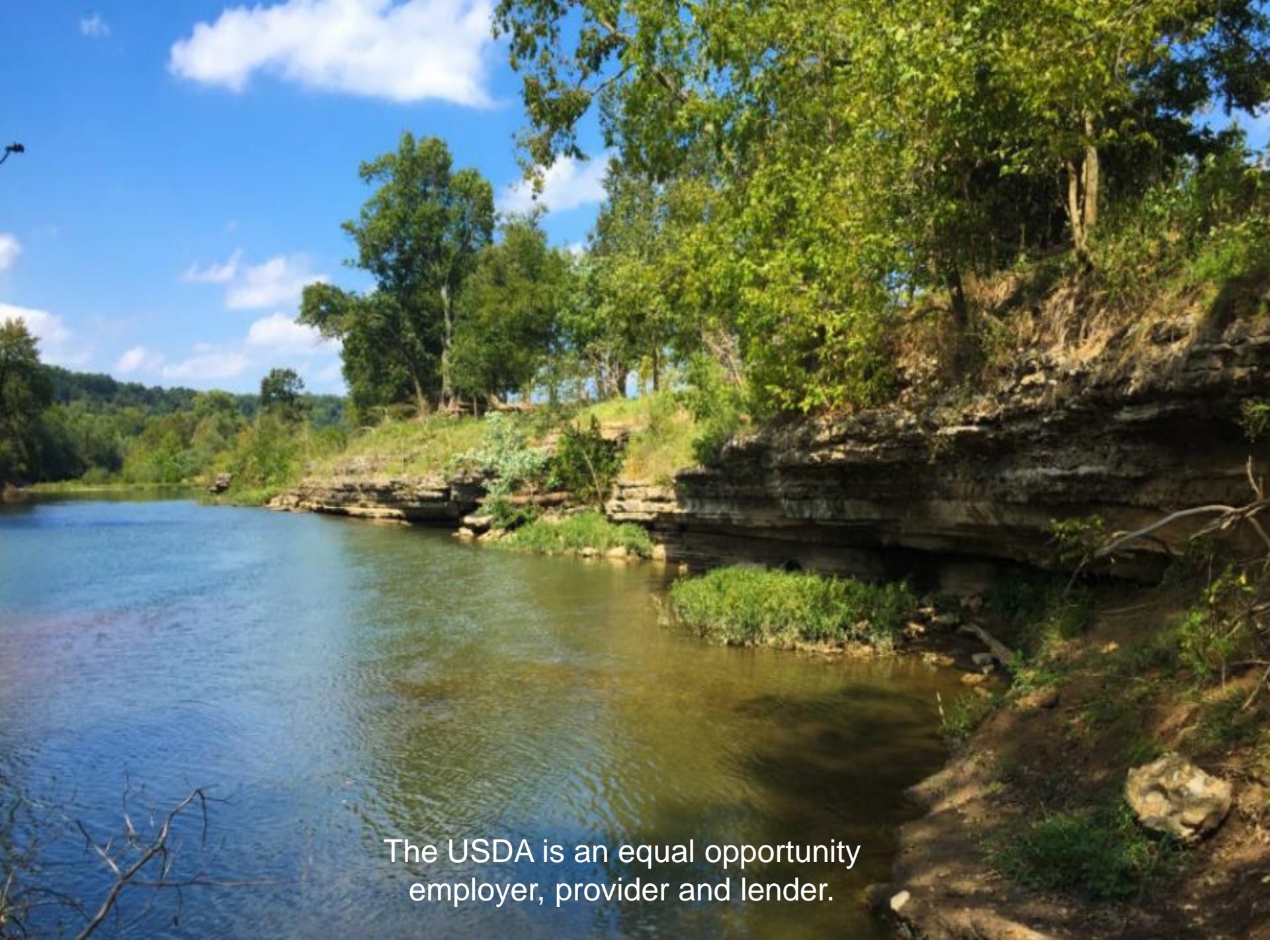
Note: These maps would be provided on a per field bases.

Signed into Law on August 16, 2022

To raise \$737 billion and spending on energy and climate change, Affordable Care Act subsidies, prescription drug reform, and tax reform.

\$19.5 Billion in new conservation funding to support Climate Smart Agriculture.





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