



590 – NUTRIENT MANAGEMENT ADVANCED NUTRIENT MANAGEMENT IMPLEMENTATION REQUIREMENTS

Participant Name:	Tract No.(s):
Assisted by:	Financial Assistance Program: EQIP
Date:	Contract Number:

Practice Purposes

- ✓ To meet requirements of the NRCS National Nutrient Management Strategy;
- ✓ To encourage adoption of innovative nutrient management techniques that will reduce nutrient runoff and stream loading from cropland fields;
- ✓ To focus attention on system-based combinations of management practices for nutrient management implementation;
- ✓ To add water quality protection effectiveness through adoption of improved levels of nutrient management above Basic 590 scenarios.

Conditions of Practice Eligibility

A producer is eligible to implement advanced nutrient management if he/she has a current nutrient management plan and is willing to adopt precision management technology at a higher level than he/she is currently implementing.

Producer's Initials

Practice Requirements

Nutrient Management Plan – Implement a current nutrient management plan that meets the NRCS 590 Standard and Delaware Department of Agriculture Regulations.

Nutrient Application – Implement the 4R's (Right Source, Right Time, Right Rate, and Right Method). Apply nutrients as close to crop uptake as possible by implementing application methods such as: split application of nutrients, slow release nutrients, nitrogen inhibitors, and proper timing of application.

Concentration Nutrient Testing – Depending on growing crop and type of nutrient(s) used, implement applicable nutrient tests such as: Pre-side dress Nitrogen Test (PSNT) if manure is utilized, Corn Stalk Nitrate Test (CSNT), Fall Nitrate Test for small grains, Leaf Chlorophyll Meter (LCM), or Tissue test, etc. **If a producer is already doing one of these tests, he/she would have to implement a second test.**

Incorporation of Manure (optional) – **If manure is utilized**, inject or incorporate within 12 hours of application to reduce nitrogen loss through volatilization. Plug or spike aerators (such as Aerway®), seed bed conditioners, and vertical till (such as Turbotill™) may be used for incorporation. Current manure analysis is required and any applicable in-season Concentration Nutrient Test.

Smart Soil Sampling – Take samples in different landscapes, soil groupings, or Crop Management Zones. Examples: low ground (hydric soils); high ground (non-hydric); droughty areas. Grid sampling is acceptable. Inputs do not have to be reflected in the NMP but are utilized to provide information to begin to understand variables throughout a field. If variable rate fertilizer is selected, the inputs would utilize the smart sampling results.

Precision Agriculture – Utilize GIS software to improve field based applications. The minimum for this level would be utilizing a GPS yield monitor and RTK technology so there is no overlap in fertilizer application or seeding. If the participant is already utilizing this technology, he/she would also have to do one of the following:

- Utilize GPS yield maps to apply variable rate fertilizer application and/or seeding;
- Utilize GPS guided technology for fertilizer application and/or seeding.

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Certification Checklist

Document implementation of NRCS Nutrient Management Strategy requirements.

THE FOLLOWING CHECKLIST MUST BE COMPLETED TO BE ELIGIBLE FOR PAYMENT.

Year 1	Year 2	Year 3
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Nutrient Management Plan - The nutrient management plan must include a nutrient budget, current field specific soil test analysis, current manure/compost analysis, and record keeping documents. A nutrient budget includes crops grown, anticipated and actual crop yields, types and quantities of nutrients applied (including animal waste), dates of application, and the use of any green manure crops.

Year 1	Year 2	Year 3
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Nutrient Application - Apply nutrients as close to crop uptake as possible by implementing application methods such as: split application of nutrients, slow release nutrients, nitrogen inhibitors, and/or proper timing of application.

Year 1	Year 2	Year 3
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Concentration Nutrient Testing - Depending on growing crop and type of nutrient(s) used, implement nutrient testing strategies such as: Pre-side dress Nitrogen Test (PSNT) if manure is used, Corn Stalk Nitrate Test (CSNT), Fall Nitrate Test for small grains, Leaf Chlorophyll Meter (LCM), etc. Record the specific test(s) used during each year of the contract:

Year 1 _____

Year 2 _____

Year 3 _____

Year 1	Year 2	Year 3
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Incorporation of Manure (optional) - **If manure is utilized**, inject or incorporate within 12 hours of application to reduce nitrogen loss through volatilization. Plug or spike aerators (such as Aerway®), seed bed conditioners and vertical till (such as Turbotill™) may be used for incorporation.

Year 1	Year 2	Year 3
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Smart Soil Sampling - Take samples in different landscapes, soil groupings, or Crop Management Zones. Grid sampling is acceptable. Inputs do not have to be reflected in the NMP but are utilized to provide information to begin to understand variables throughout a field. If variable rate fertilizer is selected, the inputs would utilize the smart sampling results.

Year 1	Year 2	Year 3
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Precision Agriculture - Utilize GIS software to improve field based applications. The minimum for this level would be utilizing a GPS yield monitor and RTK technology so there is no overlap in fertilizer application or seeding. If the participant is already utilizing this technology, implement one of the following:

- Utilize GPS yield maps to apply variable rate fertilizer application and/or seeding;
- Utilize GPS guided technology for fertilizer application and/or seeding.

Record the technology(ies) used during each year of the contract:

Year 1 _____

Year 2 _____

Year 3 _____

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Certification of Practice Completion	
I certify that the 590 Nutrient Management Practice (Advanced Nutrient Management) has been completed per NRCS standards and specifications.	
First Year	
Participant Signature	Date
Designated Conservationist Signature	Date
Second Year	
Participant Signature	Date
Designated Conservationist Signature	Date
Third Year	
Participant Signature	Date
Designated Conservationist Signature	Date