

NUTRIENT MANAGEMENT CODE 590

Maryland Conservation Practice Implementation Requirements and Certification

Required Only for Financial Assistance

Cooperator Name	County	Planner	Date
Farm/Tract/Field(s)	Program/Contract No. (if applicable)		Amount Planned AC

Purpose

- | | |
|---|--|
| <input type="checkbox"/> Budget, supply, and conserve nutrients for plant production
<input type="checkbox"/> Minimize agricultural nonpoint source pollution of surface and groundwater resources
<input type="checkbox"/> Properly utilize manure or organic by-products as a plant nutrient source | <input type="checkbox"/> Protect air quality by reducing odors, nitrogen emissions (ammonia, oxides of nitrogen), and the formation of atmospheric particulates
<input type="checkbox"/> Maintain or improve the physical, chemical, and biological condition of soil |
|---|--|

Description of Work

The producer is implementing the following EQIP practice scenario:

- Basic with Manure
- Basic Organic (Organic/Transitioning to Organic System Plan required)
- Small Farm Diversified (10 acres or less)
- Manure Injection
- Advanced Nutrient Management

Additional Information (if needed):

Associated Practices

This practice may be applied alone or in combination with other supporting Maryland conservation practice standards.

- The following practices are needed, and have been or will be implemented: (check all that apply)
- Conservation Crop Rotation (328)
 - Cover Crop (340)
 - Residue and Tillage Management, No-Till (329)
 - Residue and Tillage Management, Reduced Till (345)
 - Integrated Pest Management (595)
 - Irrigation Water Management (449)
 - Other practices (specify):

No associated practices are needed.

Practice Specifications

For All Scenarios

- ✓ Implementation of a current nutrient management plan that meets NRCS 590 Standard and Maryland Department of Agriculture Regulations. The nutrient management plan must include a nutrient budget, current soil test analysis, current manure/compost analysis (if being utilized), 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.
- ✓ Implementation of the 4R's (Right Source, Right Time, Right Rate, and Right Method) - Nutrients should be applied 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.
- ✓ Concentration Nutrient Testing – Depending on growing crop, implement applicable nutrient tests such as (select all that apply):
 - Pre-side dress Nitrogen Test (PSNT) if **manure is utilized**
 - Fall Nitrate test for small grains
 - Corn Stalk Nitrate Test (CSNT)

Advanced Nutrient Management – must implement the following items in addition to those listed above:

- ✓ **Soil Sampling** – Method of sampling should allow for management zones to be established. Samples should be taken in different landscapes, soil groupings, and/or crop management zones (i.e. hydric or non-hydric soils, etc.). Grid sampling is acceptable. Example: Currently taking one soil sample per 20 acres, and would like to implement a more intensive management of one sample per 2.5 acres. Record the current soil sampling methodology and frequency and the new sampling strategy in the table below.

Tract	Field #	Current Practice	Planned Practice

- ✓ **Variable Rate Application** – Utilize GIS software to improve field based applications. The minimum level would be utilizing a GPS yield monitor and GPS guided technology so there is no overlap in seeding and/or fertilizer application. If this level of management is already being implemented, the participant must increase his/her management by doing the following:
 - Utilize GPS yield maps, light-bar, and/or GPS guided technology to apply variable rate nutrient application and/ or seeding. Yield maps and field specific nutrient application recommendations should be developed based on zone soil sampling maps and soil test analysis. Record the current technology (if any) and the new technology (more intensive) that will used in the table below.

Tract	Field #	Current Practice	Planned Practice

<p>Supporting Documentation (for file)</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><input type="checkbox"/> Map showing practice location</p> <p><input type="checkbox"/> Concentration Nutrient Testing – Pre-Side-dress Nitrogen Test (PSNT) if manure is utilized; Corn Stalk Nitrate (CSNT), Fall Nitrate Test for small grains</p> </div> <div style="width: 45%;"> <p><input type="checkbox"/> Nutrient Management Plan</p> <p><input type="checkbox"/> Organic/Transitioning System Plan (Basic Organic Only)</p> <p><input type="checkbox"/> Management Zone Maps – Ex. Soil, Planting & Yield Maps (Advanced NM)</p> </div> </div>	
<p>Planning Certification</p> <p>This practice was planned according to NRCS standards and specifications.</p> <p style="text-align: center;">Job Class: _____</p> <p>_____ Signature by individual with appropriate JAA Date</p>	<p>Implementation Certification</p> <p>This practice was applied according to NRCS standards and specifications.</p> <p style="text-align: center;">Amount: _____ Date: _____</p> <p>_____ Signature by individual with appropriate JAA Date</p>
<p>Reporting Checklist</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><input type="checkbox"/> CPA-06 Notes</p> <p><input type="checkbox"/> File copy of completed IR sheet</p> </div> <div style="width: 45%;"> <p><input type="checkbox"/> Report in Toolkit</p> <p><input type="checkbox"/> Other reporting tools (optional)</p> </div> </div>	

Note: This Implementation Requirements sheet is not required when the cooperator is not receiving financial assistance and the specifications are included in the practice narrative of the conservation plan. The supporting documentation and reporting checklist items must be addressed in all cases.