

Practice Certification Checklist
USDA, Natural Resources Conservation Service
Wisconsin
Nutrient Management (590)
Basic Plan

Client Name _____ Tracts _____

Program Participant Information

Name (print): _____

Contract Number: _____ Contract Item #(s): _____

Tract Number: _____ County: _____ Location: T. ____ S. ____ R. ____

Contractor Information (If installed by someone other than participant)

Name (print): _____

CROP YEAR: _____

Initial Plan or Annual Plan Update (Circle One)

Use the following checklist as guidance to review and certify 590 nutrient management plans. An electronic copy of the SNAP+ database (where available) shall be submitted upon request to facilitate completion of the plan review.

The following SNAP+ reports (where available) shall be submitted with the 590 checklist: Compliance Check, Field Crop Report, Field Data and 590 Assessment, Manure Tracking (where applicable).

Signed Checklist Present

_____ Current version of the 590 checklist signed by a qualified nutrient management planner. Current checklist link below: http://datcp.wi.gov/Farms/Nutrient_Management/Planning/index.aspx

Planner Credentials

_____ Planner signing the checklist has been verified as a "qualified" 590 Nutrient Management Planner (circle the applicable credential). Professional Agronomist (CCA, ARPACS), NRCS Certified Conservation Planner, Farmer Training Graduate, OTHER (approved by ARC/State Agronomist).

_____ **ALL EQIP FUNDED 590 PLANS** - The planner signing the checklist MUST be TechReg certified as a 590 Nutrient Management Planner TSP.

Eligible Acreage Criteria

_____ Verify acreage eligible for payment - Cross-reference 590 plan fields/acreage with the NRCS contracted tract(s)/fields. The financial assistance payment is limited to the total acres verified to meet the 590 practice standard and the smaller of:

1) The total acreage reported by the planner: _____ Acres or

2) The total acreage by tract(s) contracted _____ Acres

NOTE: EQIP payment is ONLY authorized for acres that fully comply with the 590 practice standard.

Plan Narrative Criteria

_____ Verify that the plan contains a detailed introductory narrative describing implementation of the nutrient management plan on the overall farm operation. The narrative shall include a summary of crops by total acres grown, typical crop rotation(s), tillage practices by crop and a summary of any nutrient sources applied other than commercial fertilizer. For livestock farms the livestock type, number, size classes, typical manure land application schedule and application method shall be addressed.

_____ Verify the narrative addresses planning factors that may affect nutrient recommendations such as prior year drought, premature hay death, emergency winter application of manure or failure of an initial crop planting due to flooding, crusting etc.

_____ Verify the use of a single Phosphorus management strategy: (Circle one)

Phosphorus Index

Soil Test Phosphorus

_____ Verify deficiencies in the plan and known by the planner were documented in the narrative and a strategy provided to address the deficiency during the development of the next annual plan update.

Soil Test Criteria

_____ Verify soil tests were conducted by a DATCP certified lab.

_____ Verify a minimum of one composite soil sample per 5 acres.

_____ Verify soil test analysis was conducted within the last 4 years. Note: For initial plans, soil test print-outs from the lab shall be included.

Where Gleaning/Pasturing of Livestock Occurs

_____ Verify that when nutrients are mechanically applied the rate, timing and form is recorded in the nutrient management plan, based on soil test recommendations and complies with the 590 practice standard.

_____ Verify that when nutrients are deposited by grazing animals an estimate of nutrients deposited as manure within a field are credited and do not exceed N and P requirements for the crop. The 590 plan shall include an assessment of animal units per acre, over the entire grazing season. Pastures stocked at greater than 1 AU/acre must have a nutrient management plan and a calculated PI. The location of feeding areas and the duration of feeding on each site must be documented in the plan.

Plant Tissue Analysis Criteria

Verify the following:

_____ DATCP approved laboratory used.

_____ Nutrient application recommendations (rate, timing, form) were based on a UW recommendation for the plant tissue analysis results. When UW recommendations are not available cite the basis for the nutrient application recommendation.

_____ The actual nutrient applications were done according to the tissue analysis recommendation.

Crop Management and Nutrient Application Criteria for Each Field

_____ Verify documentation of current and prior year crops and projected yield goals per crop. Planned yield goals substantially above regional averages must be supported by prior year yield data.

_____ Verify the presence of a record of planned nutrient application recommendations and documentation

of an “actual” applied rate for all major nutrients by form and source.

- _____ Verify that lime applications are planned to maintain soil pH within the range for optimal nutrient uptake for the most PH sensitive crop in the rotation OR the narrative documents that client has decided that liming to achieve optimum pH is not desired.
- _____ Verify that Potassium (K) nutrient applications are planned to maintain levels in the optimum range OR the plan narrative documents that the client has decided fertilizing to achieve optimum K levels is not desired.

Nitrogen (N) application rates (select all applicable responses below):

- _____ Verify that the agronomically predominant soil map unit was selected to reflect the relative productivity of the entire field.
- _____ Verify N starter fertilizer applied at rates greater than 20lbs./ac. for corn or 40lbs./ac. potatoes was included in the total N annual recommendation.
- _____ Verify N application rates did not exceed the N requirements of the crop to be grown by more than 20% when legumes, manures or other organic sources are used to meet the entire N requirements of the crop.
- _____ Verify that when commercial or a combination of commercial plus organic sources of N are applied the total N applied did not exceed the annual N requirements of non-legume or legume crops based on the guidelines outlined in UW Publication A-2809 *Nutrient Application Guidelines for Field, Vegetable, and Fruit Crops in Wisconsin—Chapter 6*.
- _____ Verify that supplemental in-season N applications during the growing season in excess of the UW recommendation were based on pre-side dress soil nitrate test, tissue analysis or OTHER documentation.
- _____ Verify the appropriate legume credits were applied to the Nitrogen recommendations.

Phosphorous Management Strategy Criteria

- _____ Identify fields that have soil test P levels in the “non-responsive” range for the highest P demanding crop in the rotation and verify that commercial P fertilizer applications were limited to 20 lbs./ac. of P205 starter fertilizer annually for corn or UW starter fertilizer recommendations for other crops.

Verify the following where a Phosphorous Index P management strategy has been adopted (select the appropriate response below):

- _____ The PI calculated by SNAP+ does not exceed 6 (or a lower value established as the plan target).
- _____ The field slope, slope below the field and distance to surface water used to calculate the PI have been reviewed and verified as valid (remote sensing or in field verification).

Verify the following when the Soil test P strategy is used:

- _____ Less than 50 ppm soil test P - nutrient application rates does not exceed the total P corrective fertilizer recommendation for the crop rotation and the N needs of the following crop or the N removal for the following legume crop.
- _____ 50-100 ppm soil test P - P application does not exceed the total crop P removal for crops to be grown over the rotation (maximum length of 8 years).
- _____ Greater than 100 ppm soil test P - no P applications, unless required by the highest P demanding crop in the rotation. When P applications occur, the application rate shall be 25% less than the cumulative annual crop removal over the planned rotation (maximum length of 8 years).
- _____ For land with potatoes in the rotation, total P applications shall not exceed crop removal over a maximum rotation length of 8 years when soil tests are in the optimum, high, or excessively high range for potatoes.

Manure Management Criteria

- _____ Verify organic nutrient sources other than manure applied to fields were analyzed for nutrient content and properly credited in the plan.
- _____ Verify liquid manure applied within a Surface Water Quality Management Area on non-frozen soils does not exceed the soil infiltration rate based on soil surface texture class and surface residue cover per field.
- _____ Verify documentation of the manure type (solid/slurry/liquid), nutrient analysis results by source as applied, application methods, rates, locations, timing and method of incorporation are documented for livestock operations.
- _____ Verify first year available manure nutrient credits were appropriately applied to crop nutrient recommendations based on manure analysis by an approved DATCP lab. (UW approved book values may be used for development of an initial plan).
- _____ Verify calibration of manure/organic nutrient source application equipment is documented in the plan.
- _____ Verify that an estimate of the quantity of manure generated annually is included in the plan and that estimates of manure production and application volumes are relatively comparable. Significant differences or removal of manure from the farm not documented in the land application plan shall be addressed in the plan narrative.

Soil Erosion Control Criteria

- _____ Verify that concentrated flow channels are vegetated. A review of aerial photos, soil and topographic maps shall be conducted to determine areas where concentrated flow channels are likely to occur.
- _____ Verify the soil loss estimates for the “entire declared” rotation for each field are at tolerable levels or below for the **dominant critical** erosion planning soil map unit. Documentation shall include computation results utilizing SNAP + /RUSLE2 or WEPS planning tools. Review the tillage and residue management by crop to validate the soil loss calculation.

Plan Map Criteria

- _____ Field boundaries for crop field maps, nutrient application restriction maps and soil maps shall be clearly defined and consistent between maps. Field acreage and field identification number shall be clearly labeled and consistent. A map key explaining symbols, coloration or other features displayed on the maps shall be included.
- _____ Verify that a cross reference list is provided when soil test record and/or nutrient management plan map field numbers do not match the NRCS conservation plan and/or Financial Assistance contract maps.
- _____ Restriction maps shall clearly identify sensitive features including Surface Water Quality Management Areas, wells, highly permeable soils, high water table soils, shallow soils over bedrock, concentrated flow channels, slopes with winter spreading restrictions, non-farmed wetlands, direct conduits to groundwater (sinkholes, non-metallic mines, tile inlets).

General Nutrient Management Restrictions/Prohibitions

Verify that the following general nutrient application restrictions/prohibitions were addressed when writing the plan and identified on a reference map to prevent inappropriate application of nutrients (select **ALL** that apply):

- _____ Fields exceeding tolerable soil loss (T)
- _____ Surface water, established concentrated flow channels, non-harvested permanent vegetative buffers, non-farmed wetlands, sinkholes, nonmetallic mines and wells
- _____ Manure applications within 50 feet of a potable drinking water well
- _____ Areas contributing runoff within 200 feet upslope of direct conduits to groundwater such as a well, sinkhole, fractured bedrock at the surface, tile inlet, or nonmetallic mine (nutrients applied within these areas must be effectively incorporated within 72 hours).

_____ Land where vegetation is not removed mechanically or by grazing (except to provide nutrients for establishment and maintenance).

Frozen or Snow-covered Soils Nutrient Application Restrictions:

_____ Rates did not exceed the P removal of the following growing season's crop when manure was applied or 7,000 gallons per acre when liquid manure was applied.

_____ No commercial nutrients applied on slopes greater than 9%. Manure application is allowed on slopes up to 12% if the field is contoured or contour strip cropped. **Restriction Map required.**

_____ Nutrients were not applied within a Surface Water Quality Management Area or to locally identified areas as contributing nutrients to direct conduits to groundwater or surface water as a result of runoff. **Restriction Map required.**

_____ No commercial N or P sources applied except to pastures or winter grains. The pasture/winter grain exclusion DOES NOT apply to areas covered by additional site specific nutrient application restrictions (SWQMA/direct conduit to groundwater).

_____ Verify nutrient application on non-frozen soil within a Surface Water Quality Management Area includes at least one of the following supporting practices (select **ALL** that apply):

_____ Established vegetative buffers

_____ 30% or more residue or vegetative cover

_____ Nutrients are incorporated within 72 hours

_____ Cover crop applied

Areas With an Identified Risk of Delivery of Nutrients to Groundwater (high permeability soils, soils with < 20 inches to bedrock, soils with <12 inches to apparent water table, fields within 1000 feet of a municipal well. **Restriction Map required.**

Verify on irrigated fields the use of **ONE** of the following management strategies:

_____ Split or delay N application to apply a majority of crop N requirement after crop establishment.

_____ On irrigated fields use a nitrification inhibitor with ammonium forms of N was used

_____ Verify no fall commercial N sources applied except for establishment of fall seeded crops. The fall seeded crop exclusion DOES NOT apply to areas covered by additional site specific nutrient application restrictions. Allowed commercial nutrient applications shall be restricted to 30 lbs./ac. of available N per acre. **NOTE:** Sources of Nitrogen that are associated with a corrective application of commercial Phosphorous fertilizer (MAP/DAP) are exempted from this requirement if; the Phosphorus application rate is done according to a current soil test and the planner verifies in the plan narrative that NON-ammonium based Phosphorus fertilizer formulations were unavailable). All fall nitrogen fertilizer applications **MUST** be credited toward the following years crop requirement.

Verify when manure is applied in late summer or fall to meet the fertility needs of next year's crop and **soil temperatures are greater than 50 degrees F**, **ONE** of the following strategies was implemented:

_____ Nitrification inhibitor with liquid manure and a maximum N rate of 120 pounds available N per acre was applied.

_____ Applications of manure occurred after September 15 and a maximum available N rate of 90 pounds per acre was applied.

_____ Fields with perennial crops or fall-seeded crops and a maximum N application rate of 120 pounds of available N per acre or the crop N requirement, whichever is less was applied.

_____ Verify when manure is applied in the fall when **soil temperatures are 50 degrees F or less**, no more than 120 pounds per acre of available N or the crop N requirement of the following year crop, whichever is

less, was applied.

I certify that the 590 Nutrient Management plan has been developed and implemented in accordance with the criteria of the practice standard, the technical note guidance and meets the documentation requirements in this checklist.

Client Certification of Practice Completion

Date _____

Practice Approval Rational:

Approved by: _____
Certified Conservation Planner or TSP

Date _____

