

## **11/6/12 DRAFT**

Standards Oversight Council

590 Nutrient Management Team

### **Team Charge**

Compare the current Wisconsin NRCS 590 Nutrient Management Conservation Practice Standard (09/05) with the revised NRCS National 590 Nutrient Management Conservation Practice Standard (01/12) and utilize a facilitated team process to develop a revised DRAFT Wisconsin 590 practice standard for review by the Wisconsin NRCS State Conservationist for acceptance or acceptance with modification. Stated Purposes of the practice standard are to: budget, supply and conserve nutrients for plant production; minimize agricultural nonpoint source pollution of surface and groundwater; properly utilize manure and organic by-products as a plant nutrient source; protect air quality by reducing odors, nitrogen emissions and the formation of atmospheric particulates; maintain and improve the physical, chemical and biological condition of the soil. The Wisconsin NRCS 590 practice standard must include the national practice standard's Title, Definition, and Purpose. The DRAFT practice standard produced by the team must address ALL criteria in the NRCS national practice standard and cannot be less restrictive than the national practice standard unless a variance is granted by NRCS national leadership.

### **Team Sponsor**

Patrick Murphy, State Resource Conservationist Wisconsin NRCS

### **Team Leaders**

TBD

### **Team Timeline**

Initiate team process: January 2013

Preliminary DRAFT for comment: October 2013

Final DRAFT to Wisconsin NRCS State Conservationist: June 2014

### **General Team Sideboards**

Changes to the current Wisconsin 590 practice standard may include clarifying existing language in the definitions section and/or updating reference material to retain the link to the current 590 practice standard. This strategy will minimize the need for retraining users of the current practice standard and limit the need to update citations of the current practice standard in cost-sharing program guidance and Wisconsin administrative code.

The effects of actions required or recommended by the practice standard shall be evaluated utilizing the NRCS Environmental Evaluation system (Soil, Water, Animals, Plants, Air, Energy, and Human) and the Conservation Practice Physical Effects documentation structure.

## **Scope of Technical Issues to be Addressed by the 590 Revision Team**

The scope of the technical issues to be addressed by the SOC 590 Revision Team shall be limited to the resource concerns, criteria and considerations defined by the NRCS national practice standard. The addition of any additional resource concerns, criteria and/or considerations will be at the discretion of Wisconsin NRCS, as the custodian of the 590 practice standard.

The following technical issues have been identified as obvious needs to be addressed by the 590 revision team (The text in the parentheses after each topic below identifies the location of each item within the NRCS National Standard.):

**Nitrogen Loss Risk Assessment Tool (Criteria)** - a tool must be available to evaluate the impacts of Nitrogen management alternatives to meet the requirements of the current NRCS national practice standard. The existing Wisconsin 590 practice standard does define areas with a high risk for loss of Nitrogen based on soil conditions. The existing Nutrient Application Risk Assessment Maps define the location and extent of the high risk areas for Nitrogen loss but do not provide a responsive model to assess the relative increase or decrease in the risk for loss of Nitrogen from the crop root zone based on alternative management scenarios.

**Winter Nutrient Spreading Risk Assessment (Criteria)** - a tool must be available to evaluate the relative risk for offsite delivery of nutrients to meet the requirements of the current NRCS national practice standard. The current Wisconsin 590 practice standard does require a conservation plan when manure applications are prohibited locally when “frozen and snow covered soils prevent effective incorporation at the time of application”. The current Phosphorus Index (PI) calculated by the SNAP-Plus tool provides an assessment of the potential for nutrient loss due to surface runoff but may not be sensitive enough to document the potential for nutrient loss when applying nutrients to sub-field management units.

**Soil Test P (Criteria)** - use of the current Wisconsin 590 practice standard Soil Test P option may not be allowed in 303 d watersheds impaired by nutrients. The Soil Test P option may be used in areas where the risk for loss of P has been determined to be low.

**Soil Test Recommendation Revisions (Criteria)** - evaluate the effects of changes to the University of Wisconsin “Nutrient Application Guidelines for Field, Vegetable and Fruit Crops in Wisconsin” (A2809) on use and interpretation of the NRCS 590 Nutrient Management Conservation Practice Standard. *Nutrient Application Guidelines for Field, Vegetable and Fruit Crops in Wisconsin* describes how to interpret soil test results, provides nutrient application guidelines to maximize yield and profitability, and outlines the assumptions underlying the guidelines.

**Manure Ammonium N content (Criteria)** - to meet the requirements of the current NRCS national practice standard manure analysis must include available Ammonium Nitrogen content. Ammonium N is immediately available for conversion to Nitrate N in the soil which can easily be lost by leaching.

**Potential for transport of nutrients to tile (Criteria)** – an evaluation of the potential for transport of nutrients to tile must be conducted. Where a risk is identified the plan must provide alternatives to

mitigate the risk by adjusting the manure application rates and/or timing or the installation of other Best Management Practices to meet the requirements of the current NRCS national practice standard.

**Adaptive Nutrient Management (Consideration)** - develop a process to establish a representative yield check strip when nutrients are applied above the rates established by the standard to address unanticipated crop production conditions (similar to the current Wisconsin 590 option to address “special agronomic conditions”). Addressing this consideration is mandatory to support NRCS financially assisted practices funded by the Environmental Quality Incentives Program (EQIP). The practice may conflict with the current farm conservation practices (ATCP 50.04(3)(f)). The team will include a specific definition of Adaptive Nutrient Management to distinguish the NRCS practice from the adaptive management watershed planning methodology.

**Manure Land Base Estimate (Plans and Specifications)** - for Animal Feeding Operations. If an adequate land base is NOT present the plan shall document the client’s strategy to utilize the remaining projected volume of manure or other organic nutrient source produced on the farm.

**590 Plan Alternative Format** - evaluate the potential to develop a simplified 590 plan format for fields with a low risk for nutrient loss to the environment.

### **Team Process**

The team process as outlined by the Standards Oversight Council (SOC) process handbook will be utilized to implement the practice standard revision. The team will be facilitated by Gini Knight, SOC Coordinator.

The primary team shall consist of 8 – 12 individuals who have technical expertise in one or more of the following areas: agronomy; livestock production systems; agricultural production systems typical to Wisconsin; environmental science, scientific modeling or monitoring methods and current sources of modeling/monitoring data related to environmental conditions. Individuals offering substantial nutrient management experience and a broad statewide perspective are preferred to optimize team efficacy and the quality of the final product.

Individuals with these qualifications and who have an interest in participating in the full team process should submit a letter of interest with a short summary of their experience to the SOC coordinator at [gini@wlwca.org](mailto:gini@wlwca.org) by Friday, December 14 to be considered as a potential primary team member. Team members will be notified of their acceptance on the team by December 20<sup>th</sup>. The first full team meeting is expected to occur in late January and continue as frequently as monthly.

Team members will be expected to attend all meetings. If a conflict arises the team member may submit comments or materials to the team facilitator for discussion during the meeting. The use of substitutes to represent a team member shall be at the discretion of the team facilitator and team sponsor. Team meeting time shall not be spent briefing a substitute on prior meeting discussions or decisions.

Team members shall interact respectfully and follow the direction of the team facilitator. A team member may be removed from the team at the discretion of the team sponsor for disruptive behavior,

reoccurring absences from team meetings or other actions determined to be detrimental to the operation of the team.

Team members who accept an assignment from the team facilitator shall make every possible effort to meet established deadline. If it becomes apparent that a deadline cannot be met the team member shall contact the team facilitator immediately to discuss options to keep the team process moving forward.

Team leaders will be responsible to managing the team process in cooperation with the facilitator. Team leaders will encourage participation in the team process by all members and provide technical support to the facilitator.

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