

NRCS Update—Nutrient Management Strategy

State Technical Committee Meeting

October 17, 2011

KEY POINTS

- In October 2010, NRCS issued a new strategy that emphasized the implementation of combinations of conservation practices as more effective than single practices in addressing water quality issues related to applied cropland nutrients
- The strategy, and the technical requirements therein, were based on results gathered from a Conservation Effects Assessment Program (CEAP) project on cultivated cropland in the Upper Mississippi River Basin
(<http://www.nrcs.usda.gov/technical/NRI/ceap/umrb/index.html>)
- The strategy established 'core' (basic) practices on 'organic' and 'conventional' cropland that are now required to be planned and implemented in order to qualify for EQIP cost sharing on practice code 590—Nutrient Management
- The 'core' practices include, in addition to applying nutrients in accordance with a nutrient management plan, practices that will control water table levels at crop specific levels in order to prevent nutrients leaving a field site, practices that will control erosion to a sustainable level, AND for organic cropland, crop rotations and cover crop use.
- The strategy also established 'enhanced' levels of nutrient management that are additive to the 'core'/basic level. The 'enhanced' management strategies include the adoption of advanced precision agriculture methods such as variable rate application and use of the new chlorophyll reader technology
- NRCS in NC, through work with our partners in the NCSU Soil Science Dept, identified several of the proposed nutrient management techniques as ineffective in and/or not applicable to NC cropping systems
 - Nitrification inhibitors for fall applied nitrogen
 - Urease inhibitors for surface applied N in the Spring when using urea or UAN
 - 'Controlled-release' fertilizers in corn and wheat
- Because these management techniques have not been endorsed by NCSU, they are not required to be part of NC 590 EQIP scenarios.
- The development of 'regional' payment scenarios has added to the challenge of implementing 590 in EQIP, as well as the pending release of the new 590 standard. NC NRCS ECS/Programs staffs will determine how current 590 scenarios will correlate with Regional scenarios. Projected 2012 EQIP Regional practice scenarios:
 - Basic, Agronomic (Current NC EQIP: Cropland and Pastureland Soil Sampling)
 - Specialty, Organic (Current NC EQIP: Organic Basic Nutrient Mgmt Strategy)
 - Grid-based Variable Rate (Current NC EQIP: Basic Prec Ag/Enhanced Variable Rate)
 - Sensor-based Variable Rate (Current NC EQIP: Enhanced Chlorophyll Reader)