Nutrient Management Practice Planning * Assist * Tool

General

The intent of this Nutrient Management Practice Planning *Assist* Tool (NMPP) is to aid the conservation planning process as an assessment to determine if water quality/nutrients concerns exist. It is also the intent of this tool to determine if the unit of concern is currently meeting the requirements of Natural Resources Conservation Service practice code 590 Nutrient Management or if practice code 590 Nutrient Management needs to be included in the conservation plan.

Prerequisites

- Conservation plan map with all conservation management units (CMU's) (fields and subfields) is identified and labeled
- Soils map with CMU's is prepared
- Soil loss for sheet and rill erosion has been calculated for all CMU's
- Nitrogen Leaching index has been determined for all CMU's
- Sensitive areas (total maximum daily load (TMDL's) and Kansas Geological Survey (KGS) ground water sensitive areas) have been determined
- Flooding frequency has been determined for all CMU's
- Average crop yields have been determined
- Historical nutrient application rates have been determined

Results of the Assessment

If each of the boxed sections can be answered “Yes,” a resource concern may not exist or nutrients are being managed according to practice code 590 Nutrient Management.

The boxed sections that are answered “No” indicate that a water quality/nutrients resource concern may exist and practice code 590 Nutrient Management is needed in the conservation plan. Other practice codes may be needed to address the water quality concern and will be incorporated in the conservation plan when needed.
Nutrient Management Practice Planning * Assist * Tool
For Water Quality – Nutrient Concerns

Producer: ________________________________ Date: ____________
Legal Description: ______________________ Planner: ________________

Check box that applies

YES  NO

• Are the crop yields at or above county average and is the producer satisfied with yields?  

A response of “NO” to this question alone does not indicate a water quality concern but the conservation plan should address one or more of the following as they relate to crop production concerns:

1) Acquire a soil test
2) Low nutrient levels are identified in current soil test
3) Soil pH above 8.5 or below 5.5
4) Nitrogen leaching potential
5) Perched or seasonal high water table
6) Crop rotation
7) Soil compaction issue
8) Deficiency of micro nutrients or other soil amendments
9) Improper timing of nutrient application(s)
10) Improper placement of nutrient application(s)
11) Improper application of irrigation water

• Do all fields have an erosion rate less than T?

List fields with erosion rate greater than T. (fields__________)  

If the response to this concern is NO, the conservation plan should address reducing soil loss.

• Are all fields free of ephemeral and gully erosion?

List fields that have gullies or ephemerals. (fields__________)  

If the response to this concern is NO, the conservation plan should address reducing ephemeral and/or gully erosion.

• Is the producer currently applying nitrogen, phosphorous and potassium fertilizer in amounts within 10 percent of the recommended amounts (recommendation based on soil test)?  

The KSU Fertilizer Recommendation Program Download can be found on their web site at http://www.oznet.ksu.edu/agronomy/SoilTesting.  

If the response to this concern is NO, the conservation plan should address getting a soil test and follow nutrient recommendations.

• Irrigation water management is practiced on all irrigated fields in the CMU.

No irrigated fields.  

If the response to this concern is NO, the conservation plan should address rate, timing and application of irrigation water.
### Check box that applies

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
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- If the soil map unit for the field has a high leaching potential:
  - Are split N applications used to manage leaching potential? [ ]
  - Is nitrogen fertilizer applied after the crop has emerged? [ ] [ ]
  - Is a nitrification inhibitor used during the initial application? [ ] N/A

- Phosphorous fertilizer is placed with planter
  - or injected deeper than 2 inches [ ]
  - or broadcast and incorporated within 48 hours [ ] [ ]
  - or broadcast and not incorporated in fields of standing corn, grain sorghum or small grain residues, growing summer crops and established hay and pasture between November 1 and February 28 or July 1 through August 31.

*If the response to this concern is NO, the conservation plan should address phosphorous application rate, timing, placement and method of application.*

- Soil test level for phosphorus is 50 ppm or less (Melich III or Bray) or 31 ppm Olsen. [ ]
  - or Fields have never had animal waste applied. [ ] [ ]
  - or General knowledge of the area would indicate there is no concern for excess soil test phosphorous. [ ]

*If the response to this concern is NO, the conservation plan should address getting a current soil test and address application rate, timing, placement and method of application.*

- Are all livestock waste or organic by-products being properly applied as a nutrient source? Is livestock waste subsurfaced or incorporation by tillage within 24 hours of application on soil with an occasional or greater flooding frequency? [ ] [ ]

*If the response to this concern is NO, address all other NO concerns on the NMPP "Assist" Tool.*

- The distance from the lowest point of the CMU to a perennial or intermittent stream, pond, lake, wetland or drainage feature is greater than 300 feet.
  - Not applicable if soil loss is less than T and buffers are greater than 30 feet. [ ] N/A

*If the response to this concern is NO, address all other NO concerns on the NMPP "Assist" Tool.*
Additional Notes and Documentation: