

STATEMENT OF WORK
Nutrient Management (590)
Louisiana

DESIGN

Deliverables:

Written plans and specifications shall be provided to the client that adequately describes the requirements to implement the practice. Nutrient Management Plans include:

- a. Practice purpose(s) as identified in the conservation plan (**see Nutrient Management Jobsheet, page 1**).
- b. Maps that identify areas on which nutrients will be applied (**Toolkit/GIS maps**).
- c. Record drainage class, saturated hydraulic conductivity, available water capacity, depth to water table, restrictive layers, and flooding and/or ponding frequency (**See Online Web Soil Survey and record on Page 2 of the Nutrient Management Jobsheet**).
- d. Location of setbacks or other sensitive areas with nutrient application restrictions (**Toolkit/GIS maps**).
- e. Guidance for nutrient applications on setbacks or other sensitive areas (**see Nutrient Management Specifications**).
- f. A nutrient budget for nitrogen, phosphorus, and potassium that compares recommended to planned nutrient application rates (**see Nutrient Balance Sheet and Nutrient Management Jobsheet, page 2**). Items needed to complete the nutrient budget include:
 - i. Soil analysis and nutrient recommendations for the planned crop(s)
 - ii. Realistic yield goals (**see Nutrient Management Standard, page 1**)
 - iii. Records of nutrient types and nutrient application rates
- g. Site risk assessment for phosphorus transport when off-site movement of P could be an issue (definitely when manure or other organic materials are a source of nutrients). (**see Phosphorus Index and guidance on page 1 of the standard**).
- h. Documentation of the Leaching Rating to assess the potential for downward movement of nitrogen (**Toolkit/GIS map layer Leech rating**).
- i. If precision agriculture is utilized, soil sampling grid/EC maps, and nutrient application recommendation maps. Once nutrients are applied, as-applied maps and, if applicable, yield data maps must be provided and will become part of the farm records. This information will replace Table 1 and Table 2 of the Nutrient Balance Sheet. (Note: nitrogen is not typically precision applied. Nitrogen balance information will almost always need to be completed in Table 1 and Table 2)
- j. Guidance for operation and maintenance (**see Nutrient Management Jobsheet, page 1**).
- k. **Agronomic Record Forms** will be completed as fertilizer, lime or animal waste is applied.
- l. Any other requirements outlined under the Plans and Specifications section of the Nutrient Management Standard that are applicable.

A copy of the complete Nutrient Management Plan, and not just the Nutrient Management Jobsheet, must be given to the producer. The completed nutrient Management Plan will consist of the following documents (in this order):

1. Nutrient Management Jobsheet
2. Conservation plan map(s)
3. Nutrient Balance Sheet(s)
4. Phosphorus Index Calculations (if applicable)
5. Soil analysis and nutrient recommendation reports. If precision application technology is being utilized, soil sampling grid/EC maps, soil analysis and application recommendation maps, as-applied maps, and yield data maps must also become part of the Nutrient Management Plan.
6. Applicable water, compost, manure, organic by-product, or tissue test results.

7. Completed Agronomic Record Forms (if precision ag. is not utilized).

Nutrient Management Plans must be prepared when nutrients or animal wastes are scheduled to be applied in an overall Conservation Plan. A copy of the Nutrient Management Plan will be filed in Part 5 of the NRCS 6 part folder when it is part of an overall Conservation Plan. If Nutrient Management is planned on cropland, and for financial assistance, Irrigation Water Management (irrigated land only) and Drainage Water Management (when feasible) must also be planned. In addition to the above two practices, organic or transitioning to organic producers must also plan Conservation Crop Rotation and Cover Crop (unless the growing season prohibits its use after one or more of the annual crops).

INSTALLATION

Deliverables

- a. A pre-implementation conference should be held with the client to review the Nutrient Management Plan. Items of particular importance to review with the producer:
 - i. Setback requirements for wetlands, water bodies, streams, and other nutrient sensitive areas
 - ii. Custom fertilizer blends created to meet the requirements of this Nutrient Management Plan (If proposed blends and application rates are provided by the producer, the calculations should be checked).
 - iii. This is a good time to remind the producer that as-applied maps and, if applicable, yield maps must be provided once nutrients have been applied.
- b. If modifications are needed, they should be completed at this time.
- c. Finally, advise the producer of all applicable federal, state, tribal, and local laws, regulations and NRCS policies before nutrient application.

CHECKOUT

Deliverables

Once nutrients, lime or animal waste is applied, the following items need to be collected and made part of the Nutrient Management Plan:

1. Records indicating that nutrients, lime or animal waste has been applied according to the Nutrient Management Plan (The Agronomic Record Form, if completed, will supply all required information)
2. Receipts, if available, should be collected and checked for discrepancies in farm records.

GENERAL GUIDANCE

- Apply nutrients according to soil test recommendations.
- Account for nutrient credits from all sources.
- Consider effects of drought or excess moisture on quantities of available nutrients.
- Use split applications of nitrogen fertilizer for greater nutrient efficiency, if applicable.

If requested by a producer or identified as a resource concern, a site-specific environmental assessment of the potential risk of nutrient management should be conducted. The boundary of the nutrient management assessment is the agricultural management zone (AMZ), which is defined as the edge of

field, bottom of root zone and top of crop canopy. Environmental risk is difficult to access beyond the AMZ.

Within an area designated as having impaired or protected natural resources (soil, water, air, water, plants and animals) the nutrient management plan should include an assessment of the potential risk for nitrogen and phosphorus to contribute to water quality impairment.

The Leaching Index (LI), the Phosphorus Index (PI), erosion prediction models (RUSLE2 and/or WEPS), and water quality monitoring or any other acceptable assessment tools may be used to make risk assessments.

Evaluate other areas that might have high levels of nutrients, produced or applied, that may contribute to environmental degradation. For example, areas with high livestock concentrations or large areas of high intensity cropping, such as continuous potatoes, corn or specialty crops, may be contributing heavy nutrient loads to surface or ground water.

Nutrient management plans written for animal feeding operations (AFOs), confined animal feeding operations (CAFOs), or for producers accepting and applying animal waste need to be a part of an overall Comprehensive Nutrient Management Plan (CNMP). The outline, and information required for completing CNMPs, can be found in **eFOTG\Section III\A. CNMP Technical Criteria**.

REFERENCES

- NRCS Field Office Technical Guide (eFOTG), Section IV, Conservation Practice Standard – Nutrient Management, 590
- NRCS General Manual Title 450, Part 401.03 (Technical Guides, Policy and Responsibilities) and Title 190, Part 402 (Ecological Sciences, Nutrient Management, Policy)
- NRCS National Planning Procedures Handbook (NPPH), CNMP Technical Guidance Document
- NRCS National Agronomy Manual (NAM) Section 503
- NRCS Agricultural Waste Management Field Handbook, Chapter 4 – Agricultural Waste Characteristics
- NRCS National Environmental Compliance Handbook
- NRCS Cultural Resources Handbook