Feed Management within the Comprehensive Nutrient Management Planning Process
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Introduction
This fact sheet has been developed to support the implementation of the Natural Resources Conservation Service Feed Management 592 Practice Standard. The Feed Management 592 Practice Standard was adopted by NRCS in 2003 as another tool to assist with addressing resource concerns on livestock and poultry operations. Feed management can assist with reducing the import of nutrients to the farm and reduce the excretion of nutrients in manure.

A Comprehensive Nutrient Management Plan (CNMP) is a conservation plan developed specifically for an animal feeding operation. It consists of conservation practices that at a minimum must address water quality and soil resource concerns associated with animal feeding operations. Air quality goals and pathogens should also be considered in the CNMP. A conservation plan addresses problems and concerns associated with all the resources at the site. A facility owner/operator first determines the resource management goals for the facility. Then, a Technical Service Provider (TSP) or NRCS employee can work with the producer to determine the conservation practices that should be put in place to reach the established resource management goals. The result is a CNMP designed to address the specific resource concerns on the facility.
There are six elements of a CNMP that should be considered:

1. Manure & Wastewater Storage & Handling,
2. Nutrient Management,
3. Land Treatment Practices,
4. Feed Management,
5. Record Keeping, and
6. Other Utilization Activities.

This fact-sheet focuses on the feed management element, but with consideration of the effect it can have on the nutrient management plan. While the feed management element of a CNMP will be completed by a TSP or an approved NRCS employee, completion of the feed management plan requires an animal nutritionist.

**CNMP Feed Management**

Feed management is not a required component of a CNMP, but it can be an effective approach to reducing nutrient excretion and should be encouraged.

Reduction of manure nutrient content can result in the requirement for less land to effectively utilize the manure produced at a facility.

However, adoption of feed management strategies may not be a viable or acceptable alternative for all animal feeding operations. The Natural Resource Conservation Service Feed Management Standard (Code 592) describes activities that can be considered to achieve the desired effects. Within the CNMP, feed management can be dealt with as a planning consideration; it does not have to reflect specifics of a feed management plan developed by a nutritionist. But, when the feed management plan is implemented, the nutrient management element of the CNMP should reflect the changes, and the feed management plan should be amended to the CNMP.

Changes to a facility’s current feed management strategy will affect the nutrient management plan. If achieved, a reduction in excreted nutrients may reduce the required land application area.

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Producer:
Work with a nutritionist/ feed consultant to meet nutrient reduction goals

CNMP Developer:
Identify nutrient reduction goals and need for feed management

Nutritionist/Feed Consultant:
Work with the CNMP developer to insure the CNMP reflects the feed management plan
Examples of the effect implementation of a feed management plan could have on manure nutrient utilization at a production facility are provided.

The CNMP provider has a critical role in the early stages of feed management planning, as they likely have the most knowledge about the operation’s nutrient management planning needs. After identifying the opportunity for implementing a feed management plan, the CNMP developer should contact the facility owner/operator to discuss what can be achieved through feed management and the possible advantages and disadvantages of altering the current feeding plan. The facility may have a nutritionist with whom they prefer to work or they may look to the CNMP plan provider for advice on selecting one. After the feed consultant develops a feeding plan to reduce manure nutrient content, the CNMP plan provider should interact with the nutritionist to understand the effects of the new feeding strategy. The nutrient management element of the CNMP should then be modified to reflect the reduced manure nutrients.

### How can modifying the feeding strategy at an animal operation affect manure nutrient utilization?

- **Changing ration components**
  - may reduce the nutrients excreted in manure which in-turn will reduce the nutrients available as fertilizer
  - may increase or decrease the volume of manure that must be stored and applied
  - could lead to a change in the cropping system of the farm

- **Changing the farms cropping system to produce different types or quantities of feedstuffs**
  - may increase/decrease land requirements for manure application
  - may alter the timing of manure applications
  - may alter erosion potential due to a change in crop cover or management

- **Increasing or decreasing grazing**
  - could alter the farm or field specific nutrient balance
  - could increase or decrease the required manure storage volume depending on the change in animal confinement time.
Project Information

Detailed information about training and certification in Feed Management can be obtained from Joe Harrison, Project Leader, jharrison@wsu.edu, or Becca White, Project Manager, rawhite@wsu.edu.

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