

# Feed Management - An Ingredient in Whole Farm Nutrient Management



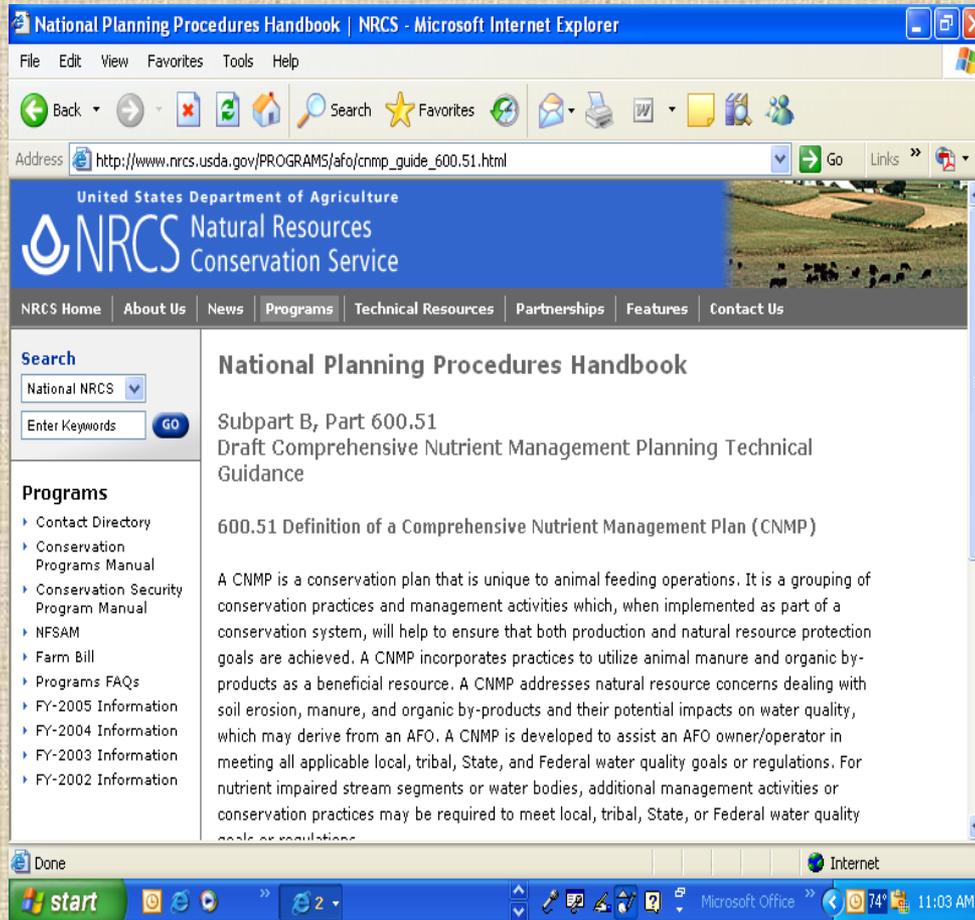
Intro

Feed Management



A Key Ingredient in Livestock  
and Poultry Nutrient Management

# Feed Management as Part of a CNMP



National Planning Procedures Handbook | NRCS - Microsoft Internet Explorer

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Address [http://www.nrcs.usda.gov/PROGRAMS/afo/cnmp\\_guide\\_600.51.html](http://www.nrcs.usda.gov/PROGRAMS/afo/cnmp_guide_600.51.html)

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**National Planning Procedures Handbook**

Subpart B, Part 600.51  
Draft Comprehensive Nutrient Management Planning Technical Guidance

**600.51 Definition of a Comprehensive Nutrient Management Plan (CNMP)**

A CNMP is a conservation plan that is unique to animal feeding operations. It is a grouping of conservation practices and management activities which, when implemented as part of a conservation system, will help to ensure that both production and natural resource protection goals are achieved. A CNMP incorporates practices to utilize animal manure and organic by-products as a beneficial resource. A CNMP addresses natural resource concerns dealing with soil erosion, manure, and organic by-products and their potential impacts on water quality, which may derive from an AFO. A CNMP is developed to assist an AFO owner/operator in meeting all applicable local, tribal, State, and Federal water quality goals or regulations. For nutrient impaired stream segments or water bodies, additional management activities or conservation practices may be required to meet local, tribal, State, or Federal water quality goals or regulations.



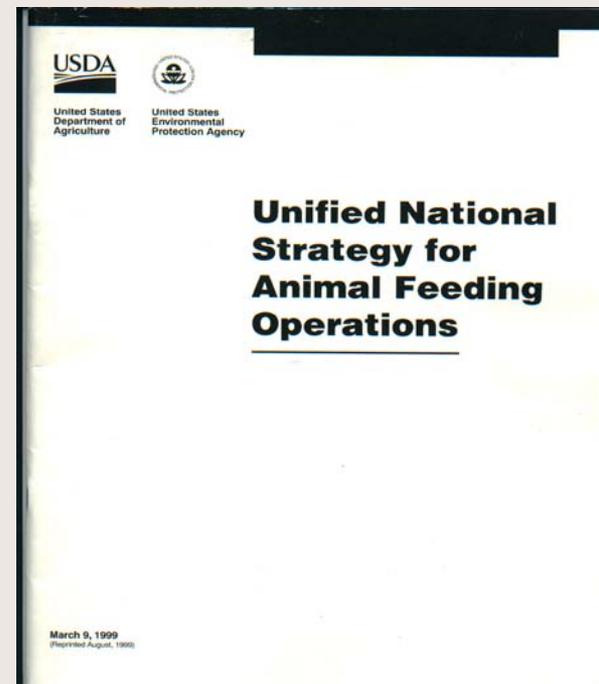
# National Issue

## EPA & USDA Unified National Strategy

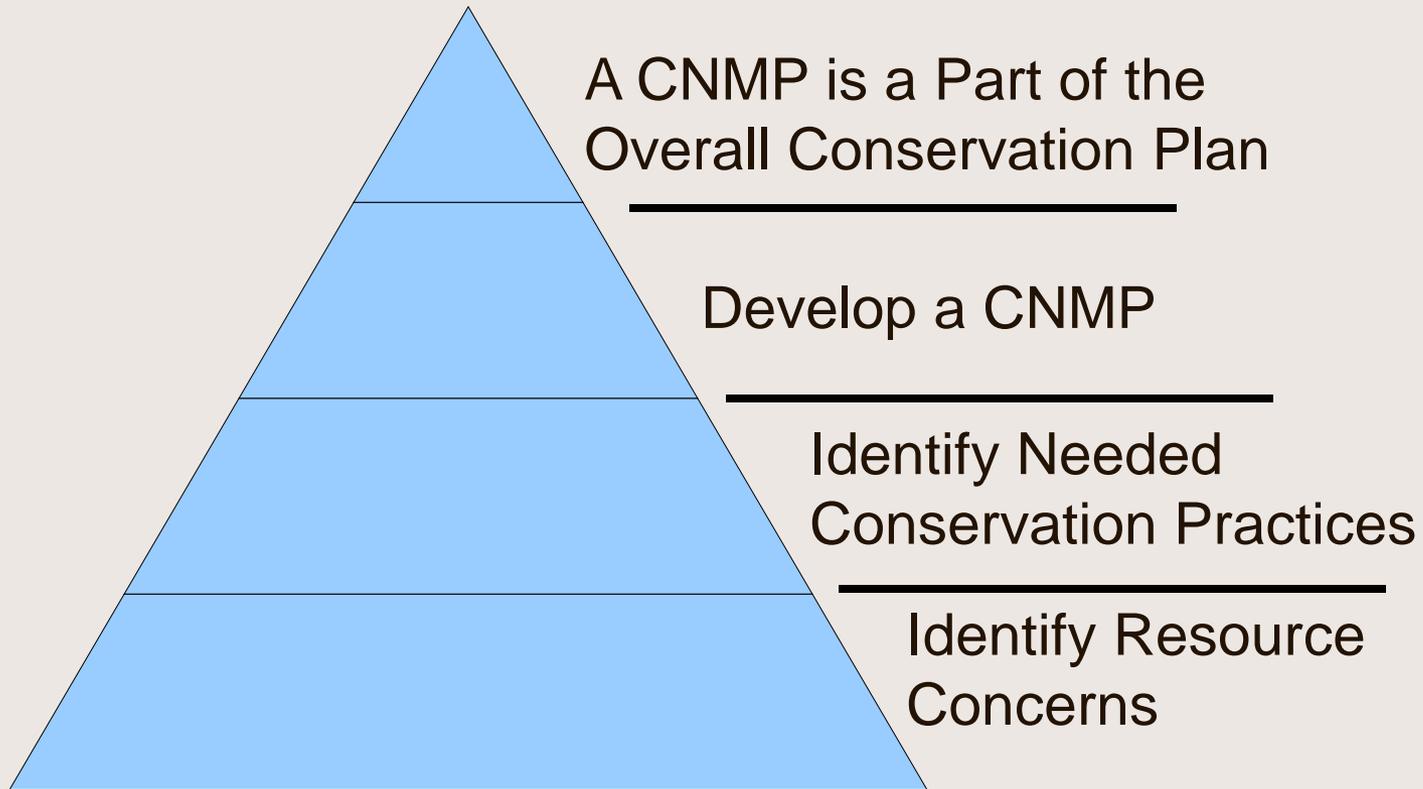
Developed to minimize the environmental and public health impacts of AFOs

### Supporting Key Element

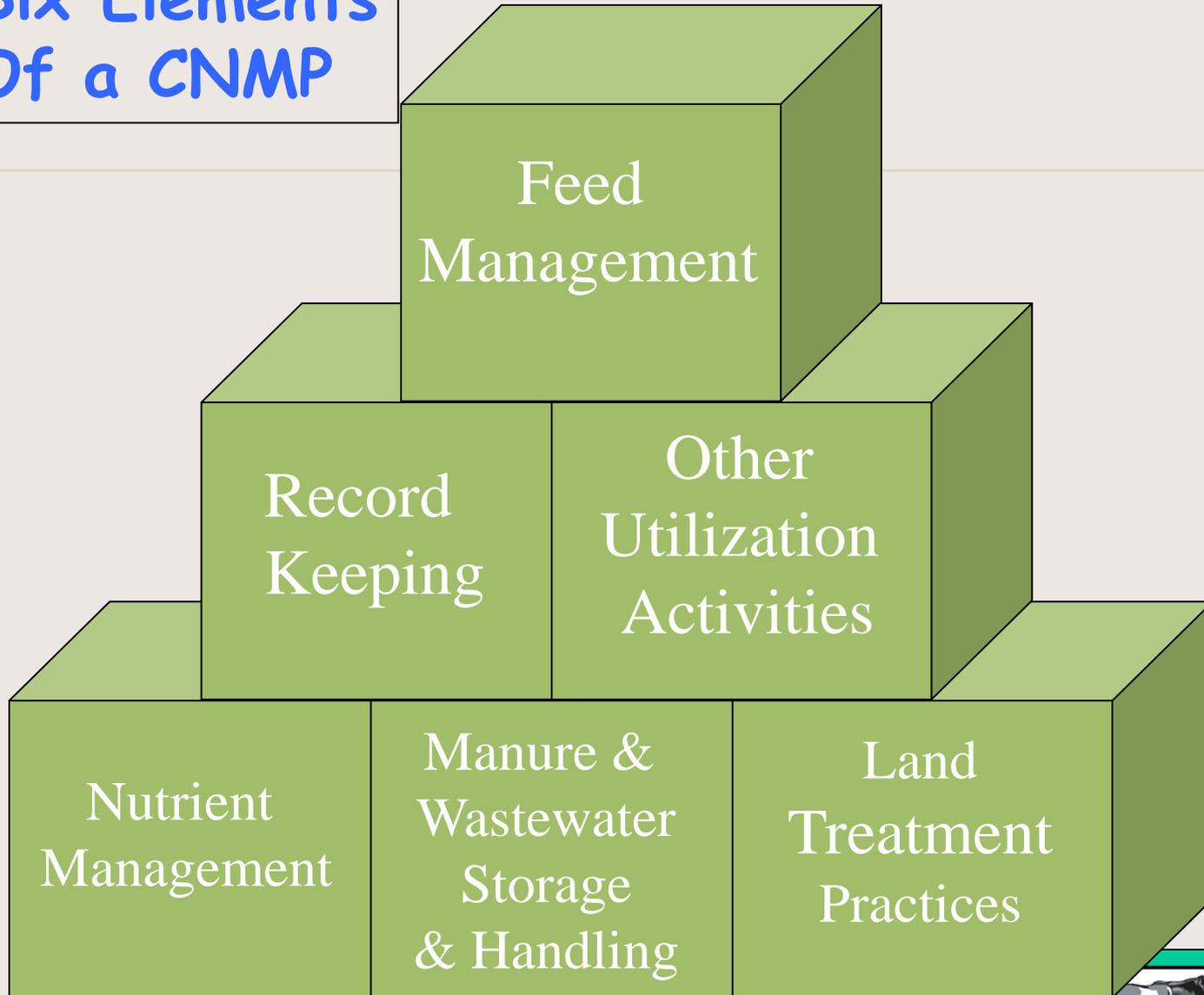
All AFO have a CNMP developed by a certified specialist by 2008

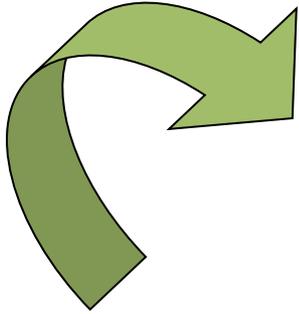


# NRCS Conservation Planning Process



# Six Elements Of a CNMP





**Consulting  
Nutritionist**

Conduct On-Farm  
assessment to  
provide basis  
for FMP

**Feed Management 592**

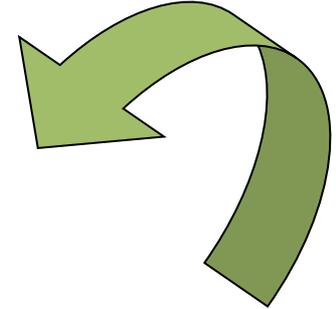
Feed Management Plan  
development

FMP Implementation

FMP Monitoring

Sampling and  
Analysis

Record  
Keeping



**NRCS, TSP,  
CNMP  
Planner**

Determine if  
operation is  
candidate for  
FM



# Feed Management Practice Code 592

## NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

### FEED MANAGEMENT

(No. of Systems and AUs Affected)

CODE 592

#### DEFINITION

Managing the quantity of available nutrients fed to livestock and poultry for their intended purpose.

#### PURPOSE

- Supply the quantity of available nutrients required by livestock and poultry for maintenance, production, performance, and reproduction; while reducing the quantity of nutrients, especially nitrogen

#### CRITERIA

##### General Criteria Applicable to All Purposes

The diets for specific species of animals shall be developed in accordance recommendations from one of the following:

- Standards outlined in the most current recommendations of the National Research Council (NRC).
- Recommendations of the land grant university.

<http://www.nrcs.usda.gov/technical/efotg/>



# Feed Management

Feed management activities may be used to reduce the nutrient content of manure at the farm. Feed management activities may be dealt with as a planning consideration and not as a requirement that addresses specific criteria; however, AFO owners/operators are encouraged to incorporate feed management as part of their nutrient management strategy.

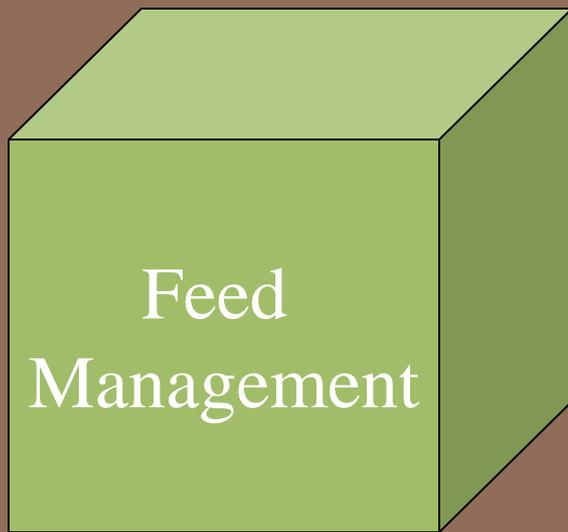


# Feed Management 592

## Definition:

Manage the quantity of available nutrients fed to livestock and poultry for their intended purpose





**Step 1) Determine purpose**

**Step 2) Identify conditions  
where practice applies and  
assess the Opportunities**

**Step 3) Economic evaluation**

**Step 4) Feed management plan  
development**

**Step 5) Implement and monitor**



# Feed Management 592 Implementation Flow Chart

CNMP\* Activity

**Activity**

**Who**

Step 1) Determine purpose

Step 1) Nutrient Management Planner  
and Producer

Step 2) Identify conditions where practice  
applies and assess the Opportunities

Step 2) Nutrient Management Planner  
and Producer

Step 3) Economic evaluation

Step 3) Nutrient Management Planner,  
Producer, and Nutritionist

Step 4) Feed management plan  
development

Step 4) Nutritionist and Producer

Step 5) Implement and monitor

Step 5) Nutritionist and Producer

\*CNMP= Comprehensive Nutrient Management Plan



# Purpose of Feed Management 592 Practice Standard

**Feed to minimize  
excess nutrients in  
manure while  
maintaining  
production,  
performance, and  
reproduction**

**Feed to improve  
net farm income  
by feeding more  
efficiently.**



# Applying Feed Management

Where does the Feed Management Standard apply?

- 1) Whole farm imbalance
- 2) Soil nutrient build-up
- 3) Land base not large enough
- 4) Seeking to enhance nutrient efficiencies



# CNMP\* Activity

# Feed Management 592 Implementation Flow Chart

**Step 1)**  
**Determine purpose**  
*(TSP and Producer)*

**Feed to minimize excess nutrients in manure while maintaining production, performance, and reproduction**

**Feed to improve net farm income by feeding more efficiently.**

**Step 2)**  
**Identify conditions where practice applies and assess the Opportunities**  
*(TSP and Producer)*

**Conditions where practice applies:**  
1) Whole farm imbalance  
2) Soil nutrient build-up  
3) Land base not large enough  
4) Seeking to enhance nutrient efficiencies  
*If one or more apply, continue on to next step*

**Determine the FM opportunities for addressing resource concerns**  
Use Opportunity Checklist (NRCS, TSP may want to collaborate with nutritionists)

**Conditions where practice applies:**  
Seeking to enhance nutrient efficiencies  
*If applies, continue on to next step*

**Little opportunity** for FM to address resource concern, no FMP developed

**Determine the FM opportunities for improving net farm income**  
Use Opportunity Checklist (NRCS, TSP may want to collaborate with nutritionists)

**Consider other opportunities of the CNMP:**  
1) Manure and waste water handling and storage  
2) Nutrient management  
3) Land treatment

**Opportunities exist** for FM to address resource concern

**Opportunities exist** for FM to improve net farm income

**Little opportunity** no FMP developed

**Step 3)**  
**Economic evaluation**  
*(TSP, Nutritionist Producer)*

**Evaluate options based upon:**  
• Economics of feed change (*Nutritionist*)  
• Economics and time requirements for manure transport (*NRCS, TSP and Nutritionist*)  
• Land access requirements including costs (rent lease or purchase) (*Producer*)

**Step 4)**  
**Feed management plan development**  
*(Nutritionist and Producer)*

Transport manure or increasing land base more profitable- no FMP

**Ration change more profitable**

Nutritionist utilizes the FMP Checklist to develop & complete FMP

Nutritionist communicates ration change to TSP as it relates to changes in manure excretion

**Step 5)**  
**Implement and monitor** (*Nutritionist and Producer*)

**Nutritionist and producer work to implement and monitor FMP**

\*CNMP= Comprehensive Nutrient Management Plan; FMP= Feed Management Plan; NRCS= Natural Resources Conservation Service; TSP= Technical Service Provider

# Resources



Fact Sheets

Flow Charts

Checklists

Decision Aid Tools

