

## 12 Step CNMP Inventory Sheet (Full Version)

Development of a Comprehensive Nutrient Management Plan (CNMP) requires an inventory of individual farm information related to:

- manure handling and storage
- land application of manure
- land management practices that influence nutrient runoff and leaching
- management of dead animals
- feed management
- soil and manure testing

This information is necessary in order to determine manure nutrient content, as well as to identify practices that may be needed to solve potential pollution problems. The following sheets provide a format for farmers and ranchers to gather and record inventory information on their farms. This information is necessary in order to develop a CNMP. If it is not clear what information is needed or how to gather the information, help is available from the Natural Resources Conservation Service (NRCS), County Extension Agent, Soil Conservation District, producer association, or a private consultant.

The **plot drawing** should show the general outline of the feedlot or facility where the animals are confined. It should also show buildings such as feed storage areas and housing areas, storage structures, and ditches or other waterways that run through or are adjacent to the facility. If necessary an additional sheet should be used. Lot size in square feet is calculated by multiplying the length and the width in feet of the lot. Where more than one feedlot or facility exists on the individual farm or ranch, information should be provided for each one. Aerial maps may be obtained from you local Farm Service Agency.

**Soil and manure testing** are two very important components of the inventory gathering process. Contact the County Extension Agent or NRCS for help in taking soil and manure tests. Initially, soil tests should be taken on every field. The soil test should be taken for soil phosphorus levels only, unless manure will be applied to an annual crop. When manure is to be applied to an annual crop, the soil test should include a test for soil nitrogen level as well as phosphorus. Manure tests should be taken separately for different manure types. This information should be attached to the inventory worksheets.

**Feed management** is an optional part of a CNMP. If feed management practices are not being used or will not be used, this information can be left blank.

The information provided should be as specific and accurate as possible. The numbers provided have a large impact on the design of storage and handling systems and on the potential for nutrient runoff and leaching. If additional room is needed, record the information on a blank sheet and attach it to the inventory sheets. The information should reflect any plans to increase the number or type of animals, to purchase additional land, or to make other changes in the way manure is handled or stored, or in land management practices.

Additional information such as Farm A Syst worksheets, Best Management Practices for Dairies, or other brochures can be obtained through the County Extension Agent, NRCS or over the Internet. These informational materials can be used to identify potential pollution problems as well as provide possible solutions to the problems.

Name(s):

Address:

City, State & Zip:

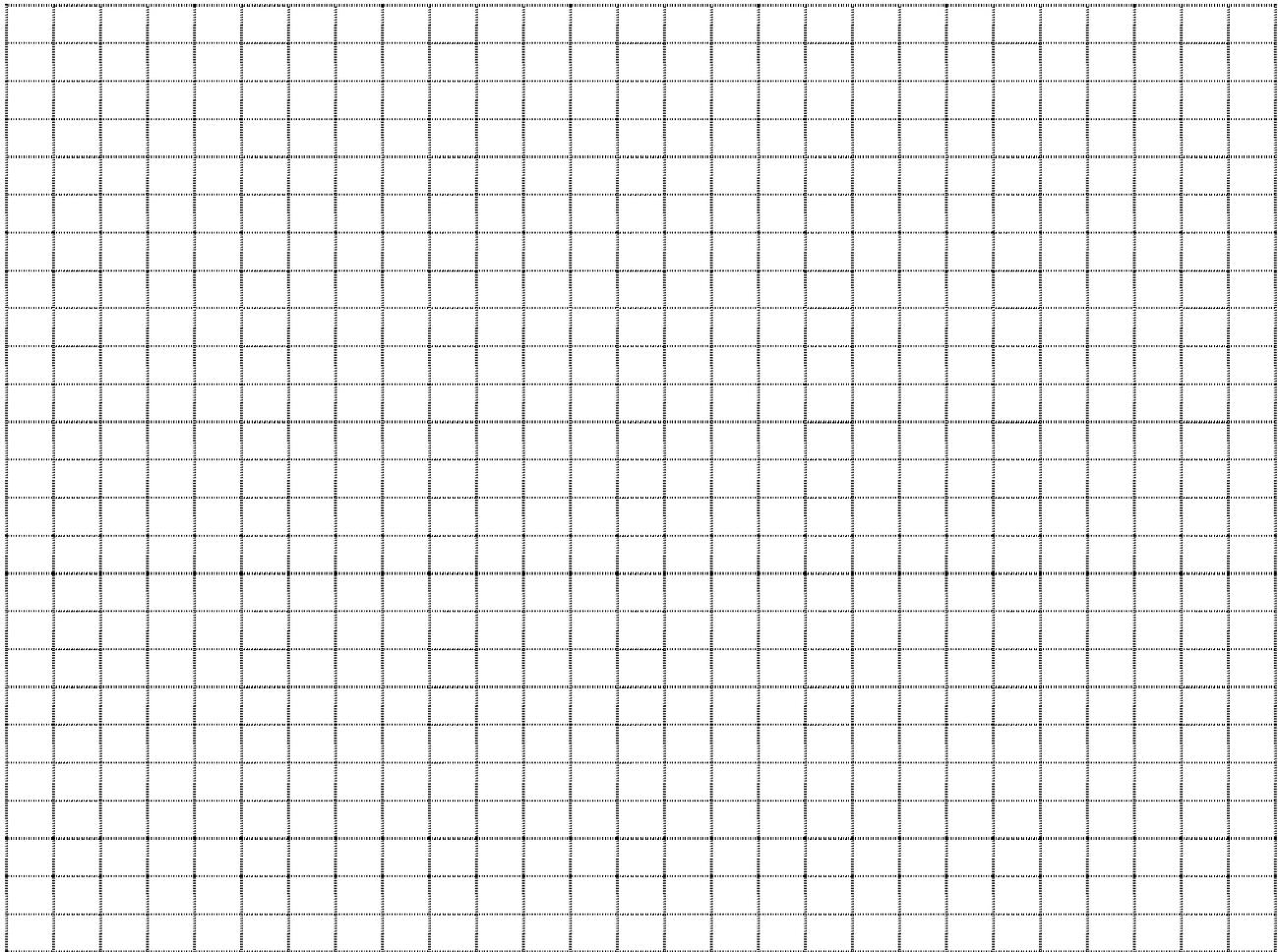
Operation Name:

Phone Number:

**Operation/Environmental Objectives (Check all that apply):**

- To maximize productivity and profitability
- To correct unacceptable environmental conditions
- To improve efficiency of manure handling facilities
- To get the highest possible benefit from all available resources
- To stay in compliance with state and federal laws and regulations
- To prevent runoff and/or leaching of nutrients and pathogens into surface and groundwater
- Other \_\_\_\_\_

**Plot Map (Draw a picture of the feedlot including buildings, feed storage, etc.):**



\*Attach aerial map if available

Lot Surface Type:  Concrete  Paved  Dirt  Combination concrete and dirt  
 Other \_\_\_\_\_

Lot Size (sq. ft): width (ft) \_\_\_\_\_ X length (ft) \_\_\_\_\_ = \_\_\_\_\_ sq. ft.

**Lot Runoff (Check all that apply):**

- Lot runoff flows off the lot onto a field or other area
- Lot runoff flows off the lot onto someone else's property
- Lot runoff flows directly into a ditch, stream, river, or other waterbody
- Lot runoff is directed into a sediment basin, pond, or other collection area
- Lot has a dike or diversion that prevents clean water from running **onto** the lot
- Water from plate coolers, troughs, roads, etc. is kept from running **onto** the lot
- Lot has a dike or diversion that prevents liquid manure from running **off** the lot

**Roof Runoff (Check all that apply):**

- All roof runoff falls onto the lot
- All roof runoff is diverted off the lot
- All roof runoff is diverted into drinking water troughs

**Production Information:**

Type of Animal(s)	Actual Animal #'s	Planned Animal #'s	Avg. Weight (lbs)	Number of Days Confined

**Bedding (Enter the type and amount of bedding used – leave blank if none is used):**

Type of bedding	*Amount Used	**How Often	Total Tons Used Yearly
_____	_____	_____	_____
_____	_____	_____	_____

\*Loads, tons, or bales, \*\*Daily, weekly, or monthly

**Facility Wash, Parlor, and/or Flush Water (Enter the amount of water used):**

*Type of Water	**Amount Used	***How Often	Total Gallons Used Yearly
_____	_____	_____	_____
_____	_____	_____	_____

\*Barn, Parlor, Plate Cooler, etc., \*\*Gallons, \*\*\*Daily, weekly, or monthly

- Check if flush water or other water is recycled

**Housing (Enter the animal type, number and check the type of housing used):**

Animal Type	Number								
_____	_____	<input type="checkbox"/>	Open lot	<input type="checkbox"/>	Free Stall	<input type="checkbox"/>	Stanchion	<input type="checkbox"/>	Covered
_____	_____	<input type="checkbox"/>	Open lot	<input type="checkbox"/>	Free Stall	<input type="checkbox"/>	Stanchion	<input type="checkbox"/>	Covered
_____	_____	<input type="checkbox"/>	Open lot	<input type="checkbox"/>	Free Stall	<input type="checkbox"/>	Stanchion	<input type="checkbox"/>	Covered
_____	_____	<input type="checkbox"/>	Open lot	<input type="checkbox"/>	Free Stall	<input type="checkbox"/>	Stanchion	<input type="checkbox"/>	Covered

**Dead Animal Management (Enter animal type and how dead animals are disposed of):**

Animal Type										
_____	<input type="checkbox"/>	Burial	<input type="checkbox"/>	Rendering	<input type="checkbox"/>	Incineration	<input type="checkbox"/>	Composting	<input type="checkbox"/>	Landfill
_____	<input type="checkbox"/>	Burial	<input type="checkbox"/>	Rendering	<input type="checkbox"/>	Incineration	<input type="checkbox"/>	Composting	<input type="checkbox"/>	Landfill

**Manure Collection:**

Solid:  
\*Type \_\_\_\_\_ \*\*Area \_\_\_\_\_ \*\*\*Method \_\_\_\_\_  
How Often  Daily  Weekly  Monthly  Semi-Annually  Annually  
 Manure Pack  Other \_\_\_\_\_

\*Type \_\_\_\_\_ \*\*Area \_\_\_\_\_ \*\*\*Method \_\_\_\_\_  
How Often  Daily  Weekly  Monthly  Semi-Annually  Annually  
 Manure Pack  Other \_\_\_\_\_  
\*Beef, dairy, etc..., \*\*Holding area, cement lot, dirt lot, feeding area, \*\*\*Scrape, flush, or left in place

Liquid:  
\*Type \_\_\_\_\_ \*\*Area \_\_\_\_\_ \*\*\*Method \_\_\_\_\_  
How Often  After Each Milking  Twice Daily  Once Daily  Other \_\_\_\_\_

\*Type \_\_\_\_\_ \*\*Area \_\_\_\_\_ \*\*\*Method \_\_\_\_\_  
How Often  After Each Milking  Twice Daily  Once Daily  Other \_\_\_\_\_  
\*Barn, flush, runoff etc..., \*\*Milk barn, lanes/alleys, feeding area \*\*\*Spray down, flush, or below pen pit

**Manure Transfer (Check all that apply):**

Solid:  Tractor/Loader/Bobcat  Gutter/Gravity Flow  Scrape lanes/alleys  Flush tanks/alley/lanes  Pump/pipeline  Mechanical Scraper  Push off ramp  Vacuum  Conveyor  Solid Spreader  Dump Truck  Irrigation System  Slatted Floor  Other \_\_\_\_\_

Liquid:  Flush tanks/alley/lanes  Gutter/Gravity Flow  Pump/pipeline  Vacuum  Liquid Spreader  Irrigation System  Slatted Floor  Other \_\_\_\_\_

**Manure Treatment (Check/circle all that apply):**

Solid:  Composting  Mechanical Separation (Concrete, Static Incline, Vibrating Screen, Rotating Screen)  Settling Basin  Dilution  Other \_\_\_\_\_

Liquid:  Anaerobic  Aerobic  Mechanical Aeration  Evaporation  Filter Separation  Mechanical Separation (Concrete, Static Incline, Vibrating Screen, Rotating Screen)  Dilution  Other \_\_\_\_\_

**Manure Storage (Check all that apply):**

Solid:  Open Lot (Manure Pack)  Concrete Bunker  Concrete Pit  Roofed Storage  Manure Staging Area  Waste Storage Pond  Other \_\_\_\_\_

Size: length (ft) \_\_\_\_\_, width (ft) \_\_\_\_\_, depth (ft) \_\_\_\_\_

Liquid:  Waste Storage Pond  Anaerobic Lagoon  Aerobic Lagoon  Evaporation Pond  Above Ground Tank  Below Ground Tanks  Pit  Other \_\_\_\_\_

Size: length (ft) \_\_\_\_\_, width (ft) \_\_\_\_\_, depth (ft) \_\_\_\_\_

**Manure Application Timing (Check all that apply):**

Solid:  Spring  Summer  Fall  Winter  Not Applied

Liquid:  Spring  Summer  Fall  Winter  Not Applied

**Crop(s) Manure is Applied To:**

Solid: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

Liquid: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

**Manure Incorporation (Check all that apply):**

Solid:  Within 1 day following application  Within 1 week following application  Within 1 month following application  Not Incorporated  Other \_\_\_\_\_

Liquid:  With injection equipment  With irrigation system  Within 1 day following application  Within 1 week following application  Within 1 month following application  Not Incorporated  Other \_\_\_\_\_

Equipment Used for Incorporation:  Plow  Disk  Chisel  Harrow  Injection Equipment  Irrigation System  Other \_\_\_\_\_

**Manure Application Equipment (Check/Circle all that apply):**

Solid:  Box Spreader  Dump Truck/Blade  V Box Spreader  Slinger  Flail Spreader

Truck Spreader  Other \_\_\_\_\_

Liquid:  Tank (Free flow, Baffle, PTO Driven, Other)  Slinger  Injection Spreader

Irrigation System (Big Gun, Center Pivot, Sideroll Sprinkler, Handline, Gated Pipe, Open Ditch)  Other \_\_\_\_\_

Manure Application Equipment (Solid and Liquid)					
Type of Spreader	Dimensions (l-w-h)(dia)	Capacity (ft <sup>3</sup> ,bu,gal)	Number and Kind of Spreader Setting(s)	Spread Width (ft)	Spread Distance (ft)

l=length, w=width, h=average height when full of manure, ft<sup>3</sup>=cubic feet, bu=bushels, gal=gallons, type of spreader=box, slurry, tank, etc., kind of spreader settings=PTO, apron, etc.

**Manure Application Rates:**

Solid: \_\_\_\_\_ tons/acre, or \_\_\_\_\_ loads/acre

Liquid: \_\_\_\_\_ gallons/acre, \_\_\_\_\_ loads/acre, or \_\_\_\_\_ acre-inches

**Soil/Manure Testing (Check all that apply):**

How often are soil tests taken:  Yearly  Once every 2-3 years  At least once every 5 years  Never When are they taken:  Spring  Fall  Other \_\_\_\_\_

How often are manure tests taken:  Yearly  Once every 2-3 years  At least once every 5 years  Never When are they taken:  Spring  Fall  Other \_\_\_\_\_

(Attach copies of all soil and manure tests taken within the last 5 years)

**Feed Management (Check all that apply):**

Animal Type

\_\_\_\_\_  Phytase Feeding  Milk Urea Testing  Lower Nutrient Content Feeds  
 Feeding of Composted Manure  Intensive Grazing  
 Other \_\_\_\_\_

\_\_\_\_\_  Phytase Feeding  Milk Urea Testing  Lower Nutrient Content Feeds  
 Feeding of Composted Manure  Intensive Grazing  
 Other \_\_\_\_\_

