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:**

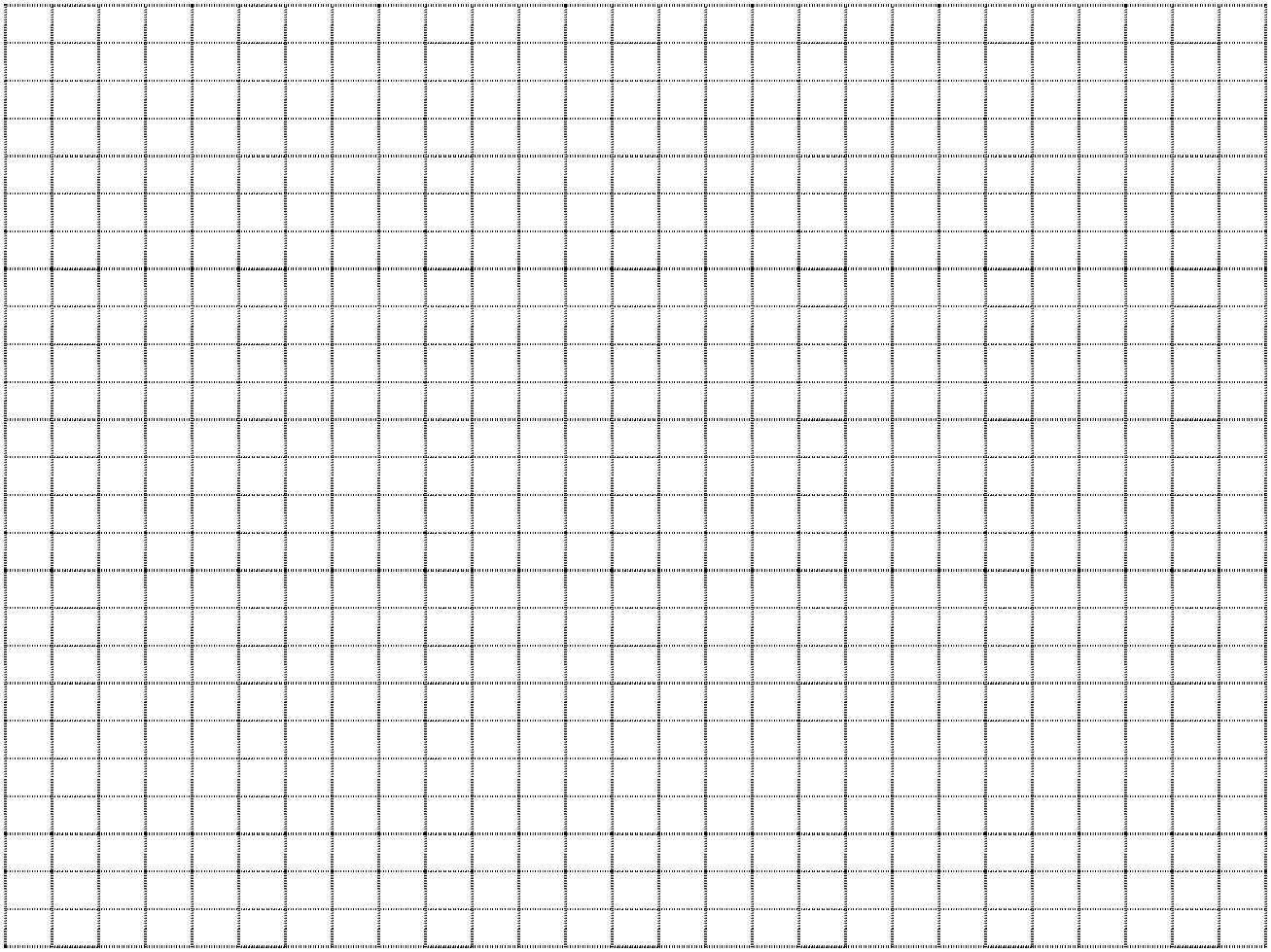
City, State & Zip:

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

_____ _____ ❑ Open lot ❑ Free Stall ❑ Stanchion ❑ Covered

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_____ _____ ❑ Open lot ❑ Free Stall ❑ Stanchion ❑ Covered

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

Animal Type

_____ ❑ Burial ❑ Rendering ❑ Incineration ❑ Composting ❑ Landfill

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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/lanes/alleys ❑ Pump/pipeline ❑ Mechanical Scraper ❑ Push off ramp ❑ Vacuum ❑ Conveyor ❑ Solid Spreader ❑ Dump Truck ❑ Irrigation System ❑ Slatted Floor ❑ Other _____

Liquid: ❑ Flush tanks/lanes/alleys ❑ 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^3,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^3=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 _____

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Crop Rotation(s): _____

*Field # or Name	Crop	Acres	Yield	*STP	*Sensitive Areas	*Site Problems

*Enter only fields that have had or will have manure applied to them. STP = Soil Test Phosphorus (ppm), Sensitive Areas = areas next to water, wetlands, etc., Site Problems = problems such as rocky or sandy soils, watertable, shallow soil depths, steep slopes, etc.

Conservation Practices You Believe Are Needed (List and describe the practices such as changes needed in collection, storage, treatment, transfer, or utilization, changes in land management practices, animal numbers or type, feed management, etc.):