

# CNMP'S

## Comprehensive Nutrient Management Plans

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# CNMP

**“A CNMP is is a strategy for using plant nutrients wisely to to enhance farm profits while protecting water resources. It is a plan that looks at every part of your farming operation and helps you make the best use of manure, fertilizers and other nutrient sources.”**

# What makes them different?

- **Site specific**
  - **Matches needs to individual farm**
- **Management makes a difference**
- **Nutrient budgeting for animal producers**
- **Nutrient balance is extremely important**
- **Tool for producer to eliminate waste of nutrients**

# Parts of a CNMP

- **Nutrient Supply**
  - manure analysis
  - inorganic fertilizers
  - soil tests
  - legume credits
- **Nutrient Needs**
  - crop removal
  - optimum yields
- **Site Characteristics**

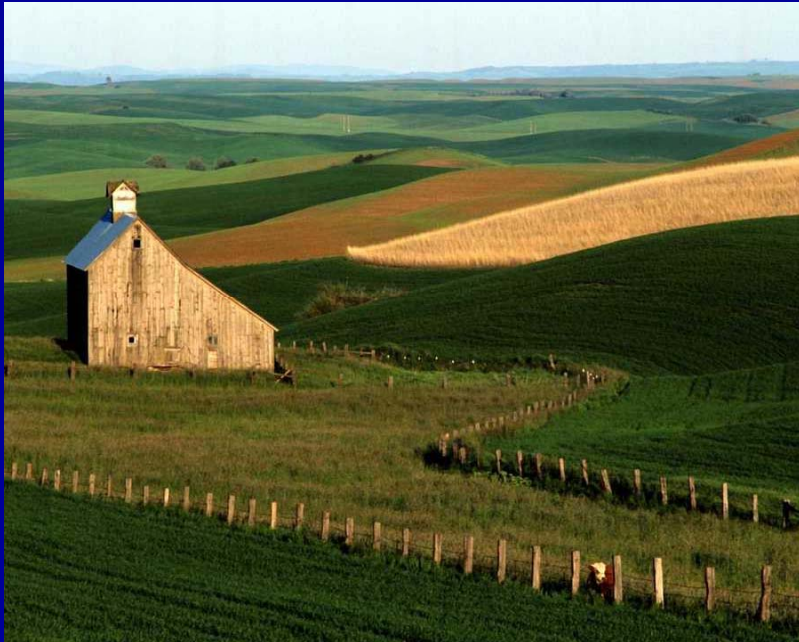


# Management Aspect

- **Waste handling and storage**
  - Covered vs Open
- **Waste application**
  - rates
  - timing
  - methods



# Mortality Management



- **Incineration**
- **Composting**
- **Rendering**
- **Digesting**

# Other Parts of CNMP

- **Alternate use of Waste Product**
- **Preventative Maintenance and Inspections**
- **Emergency Response Plans**
- **General Farm BMPs**

# What is needed for CNMP

- **Soil Survey**
- **Aerial photos of farm**
- **Soil Analysis**
- **Manure Analysis**
- **Planned management practices**
- **Record keeping methods**



**CNMPs**

**CNMP uses Phosphorus Index**



**Phosphorus Index**

# Phosphorus Index Considers Individual Fields

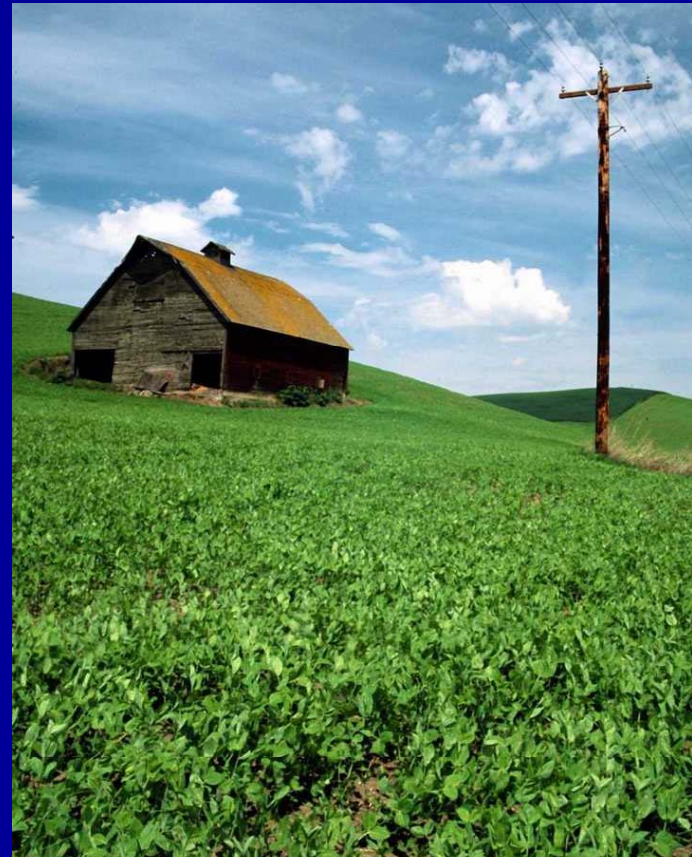
- **Field Data**
  - soil analysis
  - nutrient removal by crops
  - Distance from water bodies
  - Soil surface drainage
  - slope
  - soil type and characteristics

# Phosphorus Index Considers Nutrient Characteristics

- **Nutrient analysis of waste product**
- **Amount to be applied**
- **Crop removal of crop**
- **Amount of inorganic to also be applied**

# Phosphorus Index Management

- **Application Rates**
- **Application Methods**
- **Application Timing**
- **Placement of Waste**
- **Crops Chosen**



# Phosphorus Index

## Part A. - Site Characteristics

- a) Erosion
- b) Soil runoff class
- c) Sub-surface drainage
- d) Distance to surface waters
- e) Priority of receiving waters

*Each Characteristic receives a numerical rating.*

# Phosphorus Index

## Part B. - Management Practices

- a) Soil test fertility
- b) P fertilizer application rate
- c) P fertilizer application method
- d) P fertilizer application timing

*Each characteristic receives a numerical rating.*

# Phosphorus Index Calculation

Part A \_\_\_\_\_ X Part B \_\_\_\_\_ =P.I.

*Lowest Score wins....Just like golf!!*

# Phosphorus Index

## Ranking

Low....Apply animal waste based on nitrogen needs of crop

Med....Apply animal waste based on nitrogen needs of crop

High....Apply animal waste based on P needs of crop

Very High.... No application of animal waste.

# Phosphorus Index

## The Beauty of the Beast

**With the use of management practices, producers are able (majority of the time) to utilize animal wastes for crop production on their individual farms with high soil phosphorus levels.**

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