

A photograph of three men walking through a field. The man on the left is wearing a blue shirt and a tan cap. The man in the middle is wearing a red jacket, a blue cap, and holding a clipboard. The man on the right is wearing a red jacket and a white cap. They are walking through a field with rows of young corn plants. In the background, there is a line of trees under a bright sky.

DNR Nutrient Management Regulations

Fertilizer, Aglime and Pest
Management Conference

January 17, 2008

Nutrient Management Regulations

- Livestock operations with 1,000 Animal Units (AUs) or more
 - DNR water quality protection permit (NR 243/WPDES)
 - Operations called Concentrated Animal Feeding Operations (CAFOs)
 - ~170 permitted operations with ≥ 1000 AUs
- Crop producers and livestock operations with fewer than 1,000 AUs and
 - Agricultural performance standards and prohibitions (NR 151/ATCP 50)
 - WPDES permit may be issued (limited usage)

ANIMAL TYPE		A. NUMBER OF MIXED ANIMAL UNITS (CURRENT NR 243 EQUIVALENCIES)			B. NUMBER OF NON-MIXED ANIMAL UNITS (FEDERAL EQUIVALENCIES)		
		Equ. Fac.	Number of animals	Equivalent Animal Units	Equ. Fac.	Number of animals	Equivalent Animal Units
<i>Example- Broilers (non-liquid manure):</i>		.005 x	150,000	= 750 AU	.008 x	150,000	= 1200 AU
DAIRY/BEEF CALVES (under 400 lbs.)		0.2 x		=	<i>(Note: Federal numbers in this column comply with 40 CFR s. 122.23.)</i>		
DAIRY CATTLE	Milking and Dry Cows	1.4 x		=	1.43 x		=
	Heifers (800 lbs. to 1200 lbs.)	1.1 x		=	1.0 x		=
	Heifers (400 lbs. to 800 lbs.)	0.6 x		=	(categories combined: Heifers (400-1200 lbs))		
BEEF	Steers or Cows (400 lbs. to market)	1.0 x		=	1.0 x		=
	Bulls (each)	1.4 x		=	(categories combined)		
VEAL CALVES		0.5 x		=	1.0 x		=
SWINE	Pigs (55 lbs. to market)	0.4 x		=	0.4 x = (categories combined: swine (55 lbs. to market))		
	Sows (each)	0.4 x		=			
	Boars (each)	0.5 x		=			
	Pigs (up to 55 lbs.)	0.1 x		=	0.1 x		=
CHICKENS	Layers (each)-non-liquid system	0.01 x		=	0.0123 x		=
	Broilers/Pullets (each)-non-liquid system	0.005 x		=	0.008 x		=
	Layers or Broilers-liquid system	0.033 x		=	0.0333 x		=
DUCKS	Ducks (each)-liquid system	0.2 x		=	0.2 x		=
	Ducks (each)-non-liquid system	0.01 x		=	0.0333 x		=
TURKEYS (each)		0.018 x		=	0.018 x		=
SHEEP (each)		0.1 x		=	0.1 x		=
HORSES (each)		2.0 x		=	2.0 x		=
TOTAL ANIMAL UNITS:		TOTAL MIXED AU = (add all rows above)			TOTAL <u>NON-MIXED</u> AU = (enter the single highest number from any row above; do NOT add the totals)		

CAFO WPDES

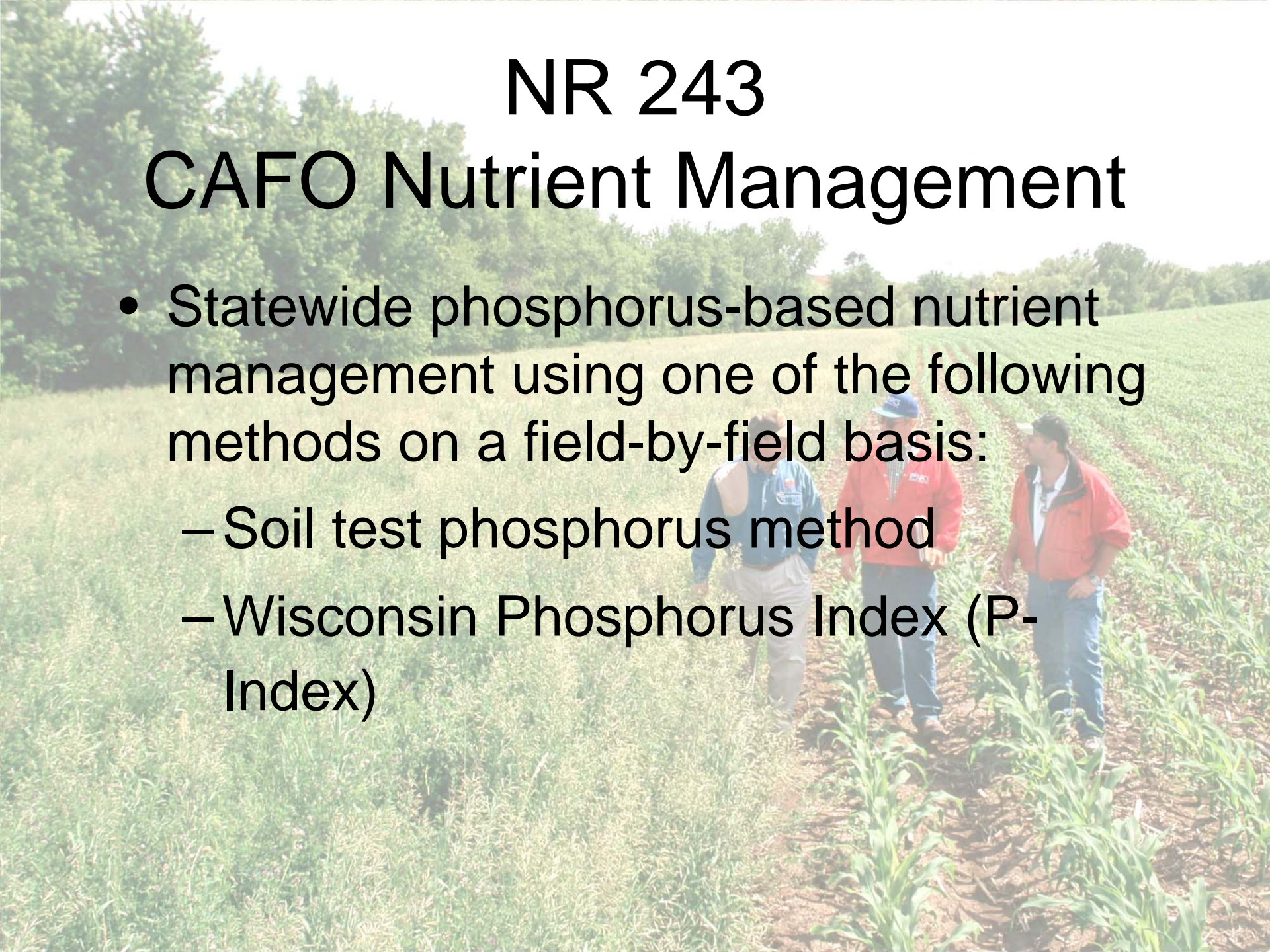
Permit Program (NR 243)

- In place since mid-1980's with creation of NR 243
- Same program that applies to other industries (paper mills, nonmetallic mines) and municipal treatment plants
- Permit to operate at ≥ 1000 AUs
- Water quality protection permits
- Does not address non-water quality related issues (e.g., air, odor, noise and traffic)
- NR 243 revisions completed in July 2007

NR 243

CAFO Nutrient Management

- Statewide phosphorus-based nutrient management using one of the following methods on a field-by-field basis:
 - Soil test phosphorus method
 - Wisconsin Phosphorus Index (P-Index)



NR 243

CAFO Nutrient Management

SWQMA Restrictions

- SWQMA (Surface Water Quality Management Area) = 1000 feet of a lake, 300 feet of a stream/direct conduit to a navigable water
- Within SWQMA, implement a 100-foot setback from navigable water/direct conduit or equivalent practice
 - 35-foot vegetated buffer/25-foot setback with other conservation practices within rest of SWQMA (no-till, residue management, reduced application rate, etc.)
 - Permittees may propose alternative practices provided they can demonstrate equivalency to 100-foot setback

NR 243

CAFO Nutrient Management

- Increased winter spreading restrictions
 - No surface applications of solid manure on frozen/snow-covered ground Feb.-March
 - No surface application of liquid manure on frozen/snow-covered ground at any time*
 - Operations may store or stack solid manure during Feb.-March
 - Six-months storage for liquid manure*
- * Existing operations have until 2010 to comply

NR 243

CAFO Nutrient Management

- Emergency response plan
 - What do you do in the case of a runoff event?
- Winter spreading plan
 - Identification of allowable/potential winter spreading fields
- Monitoring and reporting
 - Soil and manure sampling
 - Daily logs/Annual reports
- DNR may require a permit for smaller-scale operations whose land application practices result in the bacterial contamination of a well

NR 243

CAFO Nutrient Management

- Current and Future Issues
 - Predicted precipitation
 - Drain tiles
 - Karst topography

NR 151- Nutrient Management Performance Standard

- Crop and livestock producers shall apply nutrients in accordance with a nutrient management plan
- In effect statewide Jan. 1, 2008
- Compliance with standard contingent on cost-sharing in many cases
- ATCP 50 contains the technical standard for nutrient management (NRCS 590)

Contact Information

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