

# Concentrated Animal Feeding Operations (CAFO) WPDES Permit Program (Ch. NR 243)

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**Mark Cain, WI DNR**



# What is a CAFO\*?

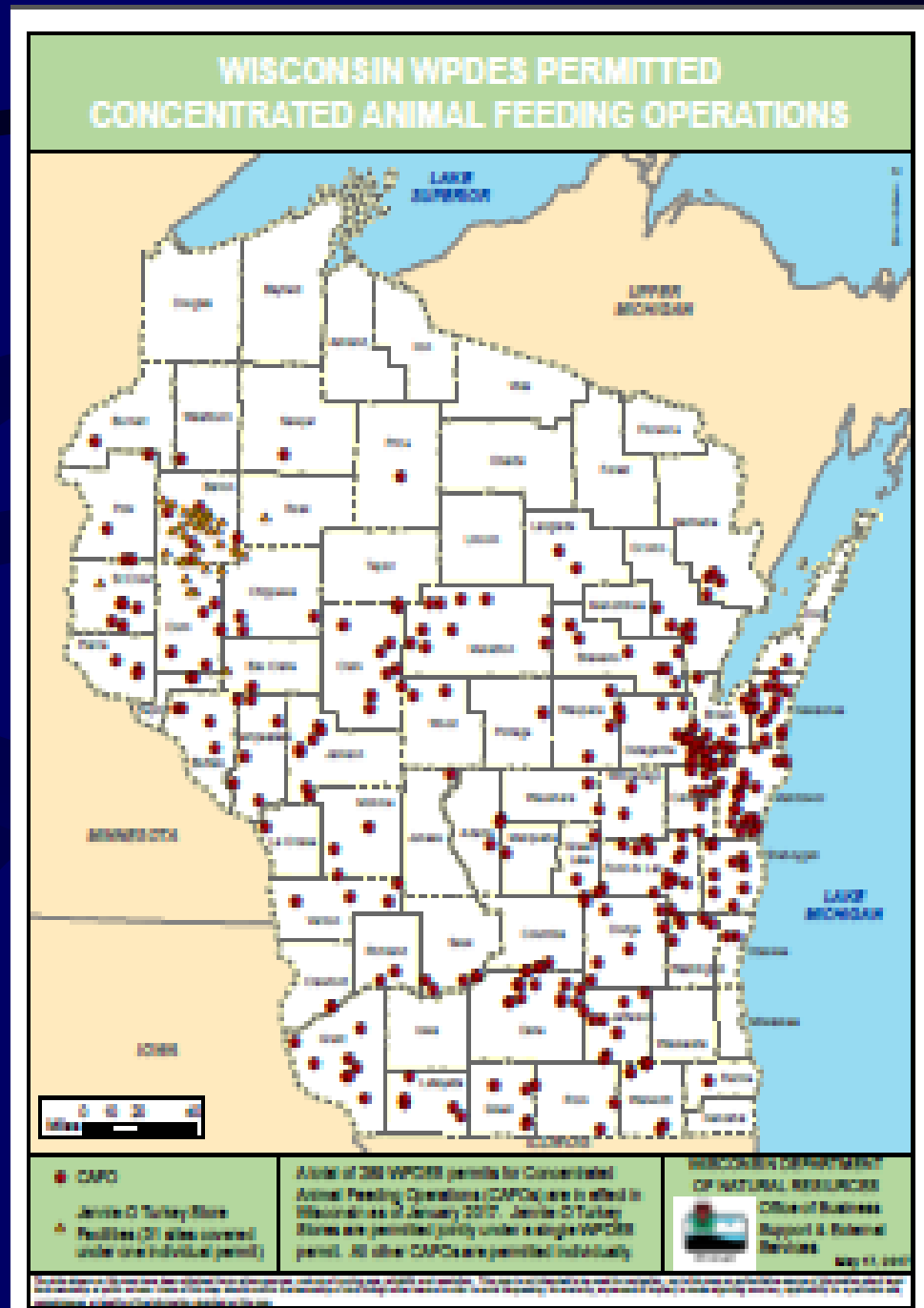
**$\geq 1,000$  AU**

Require coverage under a WPDES permit

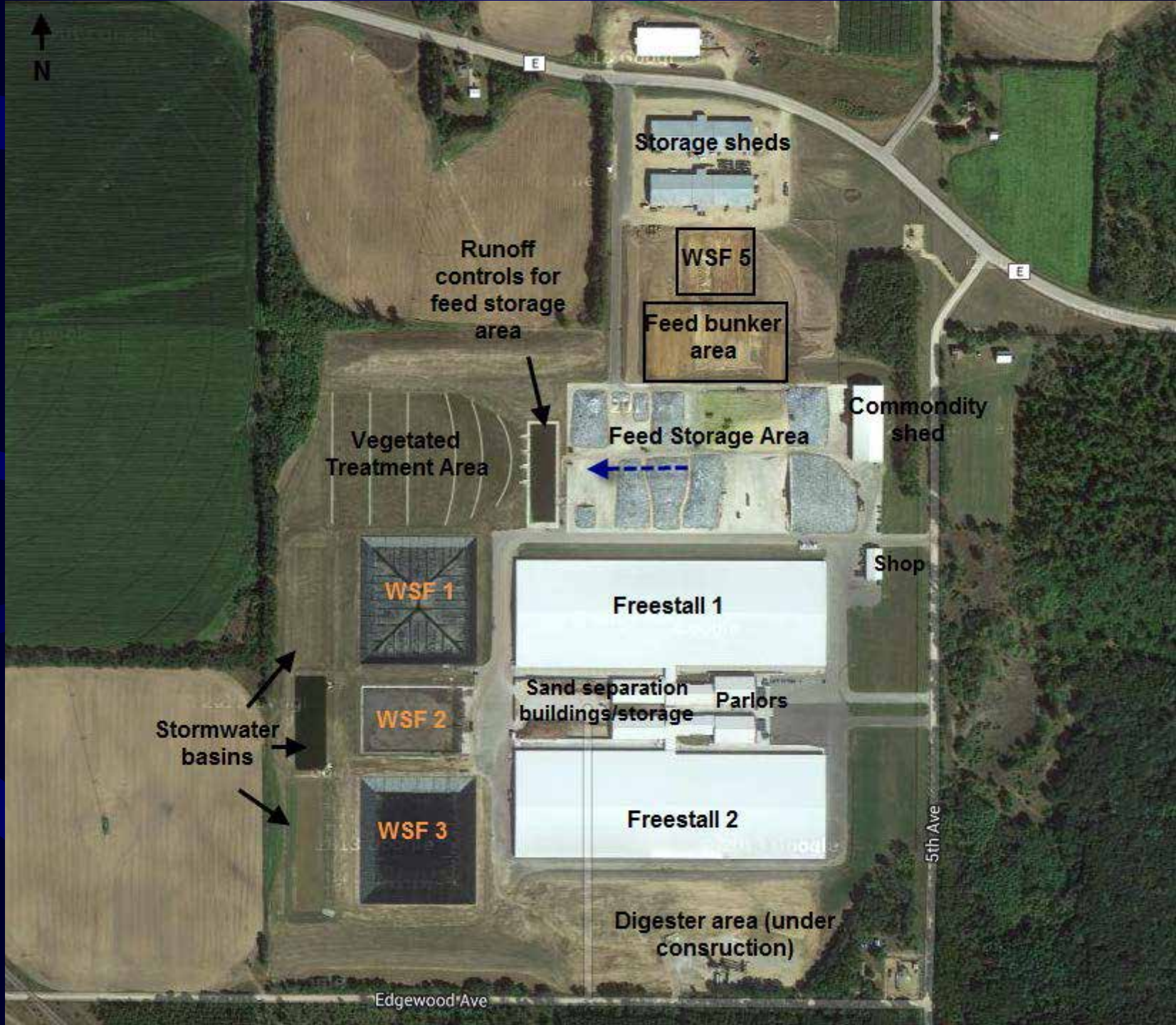
**$< 1000$  AU**

May be required to obtain a DNR WPDES permit based on discharges

\*Currently 305 CAFOs



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	<b>150,000</b>	= <b>750 AU</b>	.008 x	<b>150,000</b>	= <b>1200 AU</b>
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)		



Storage sheds

WSF 5

Feed bunker area

Runoff controls for feed storage area

Vegetated Treatment Area

Feed Storage Area

Commodity shed

Shop

Freestall 1

Sand separation buildings/storage Parlors

Freestall 2

Digester area (under construction)

Edgewood Ave

5th Ave

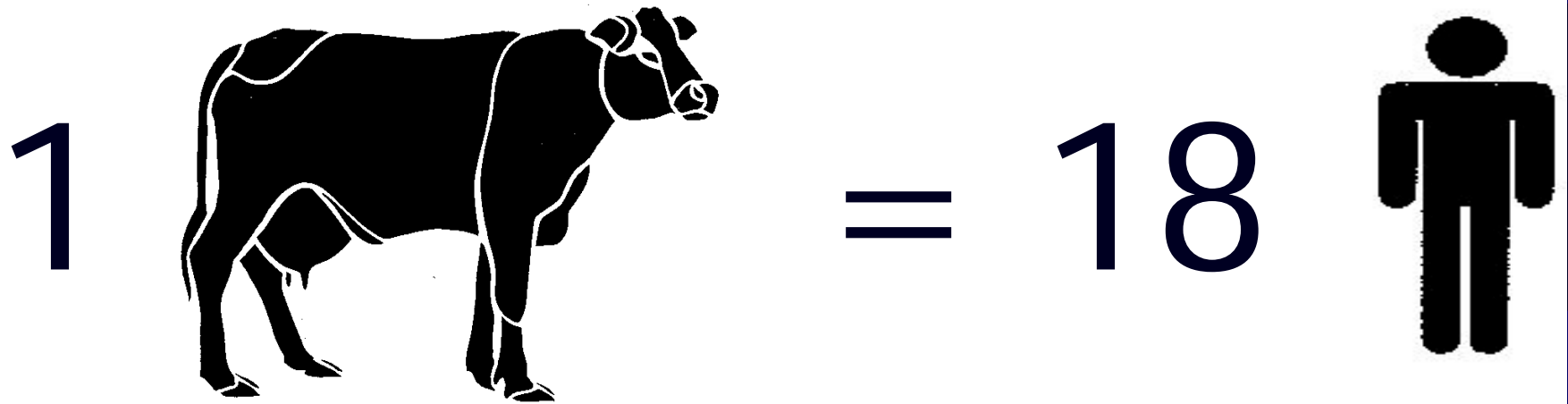
Stormwater basins

WSF 1

WSF 2

WSF 3

# Potential to Pollute



Monroe = 600 cows or 840 AU

1000 AU CAFO\* ~ Wisconsin Rapids\*\*

\* Annual CAFO WPDES Fee = \$345

\*\* Annual WPDES Fee = \$23,002



# NR 243

## CAFO WPDES Permit Program

- Water quality protection permits
  - Regulates CAFO manure and process wastewater handling/land application
  - **NOT** a siting program
- Does not address air, odor, noise or traffic issues

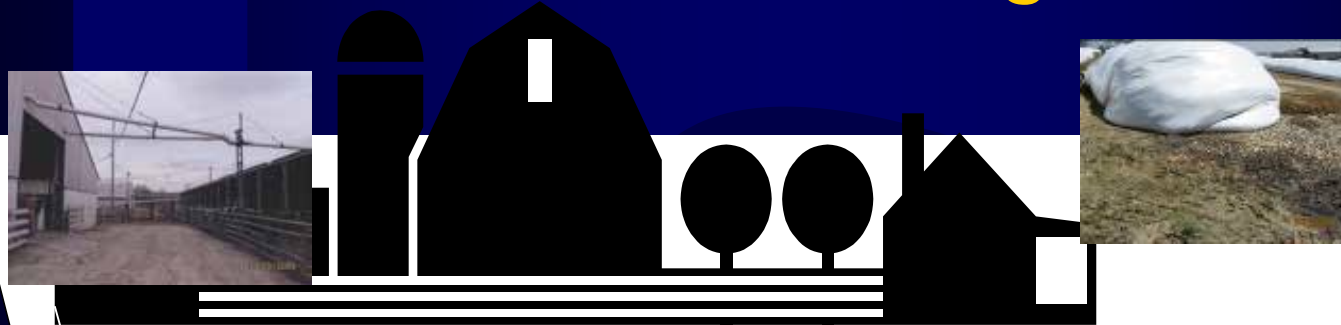


# CAFO WPDES Permit Requirements

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- Production Area
  - “No discharge” of pollutants from animal production areas to navigable waters
  - Review of designed structures in production area (e.g., manure storage)
- Cropped Fields
  - Nutrient Management – 5 year plan
  - How, when, where, amounts manure and process wastewater is land applied
  - Winter Spreading Restrictions

# "No Discharge" from Animal Production Area to Navigable Waters



1. Contaminated runoff from 25-yr 24-hr storm

2. Process waste water  
(milking center waste, feed storage leachate)

3. Manure

**Overflows prohibited, unless 1, 2, and 3 contained**



**Seepage (allowed, provided no exceedance of groundwater standards)**



# CAFO WPDES Permit Requirements

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- Monitoring and Reporting
  - Self monitoring
  - Monitoring and Inspection Plan
    - Outlines how and what is monitored
    - Calendar is provided
  - Submittal of annual reports
  - Submittal of NMP updates each year
  - DNR inspections
- Emergency Response Plan

# Processing a WPDES Permit

Operator submits preliminary application (12 months prior to reaching 1000 AU)  
- Application forms/site map

DNR Site Visit

Operator submits final application (6 months prior to reaching 1000 AU)  
- Application forms/site map  
- Complete Nutrient Management Plan  
- Design plans/evaluations for reviewable structures  
- 180-day manure storage calculation  
- Environmental Analysis questionnaire (if required)

Plan Approval

Plan & Spec Review  
Evaluation Review

Draft Permit Prepared

Permit Public Notice

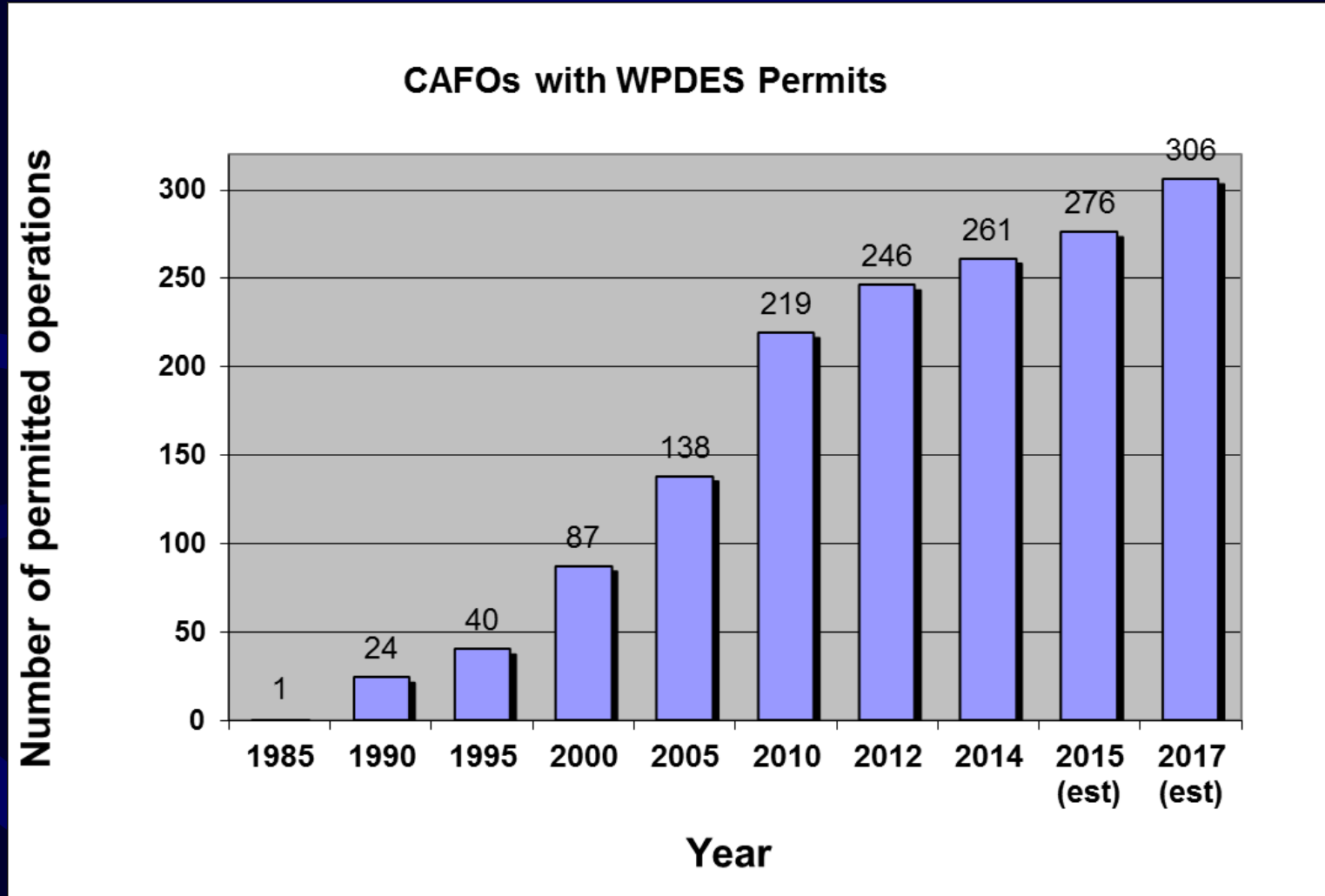
Permit Public Hearing (if needed)

Respond to Public Comments

Permit Issuance\*

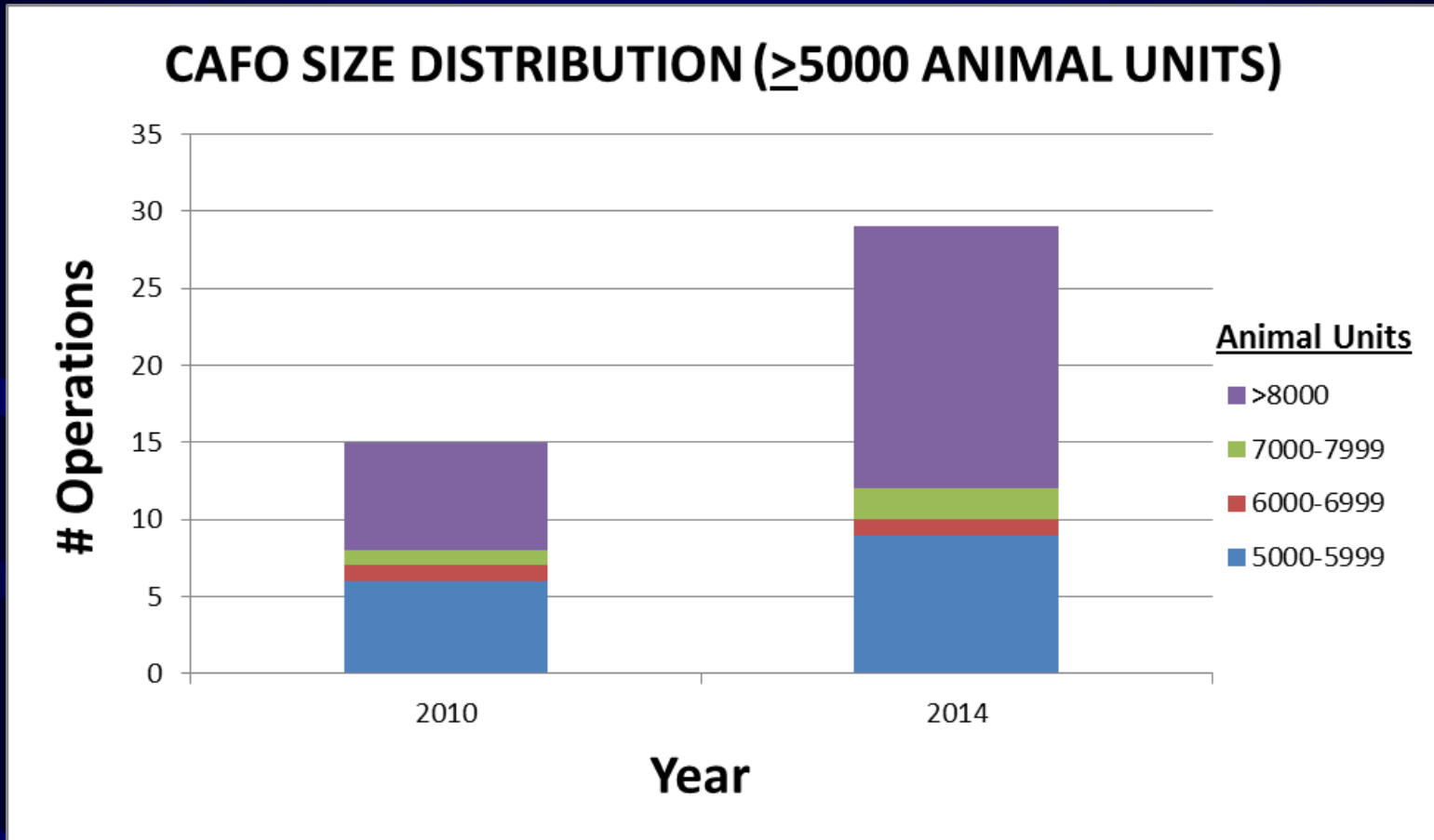
\* In some cases, an Environmental Impact Statement (EIS) may be completed prior to/in conjunction with the permit issuance process

# Growth Trends in the Livestock Sector



DNR receives ~15 CAFO application per year (mostly dairy)

# Growth Trends in the Livestock Sector



# Staffing

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23.5 staff positions

- 8.5 Central Office
- 15 Regional
- Specialists in NMP, Engineering and Intake



# Hot Topics

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- EPA compliance inspection report
- New Technologies and surface water discharges
- Reissuance of the CAFO Large Dairy General Permit
- Staffing levels
- CAFO fees
- Leg Audit Report



## More Hot Topics

- NR 150 – WEPA (Wisconsin Environmental Policy Act)
  - Revised December 2015
- Legal challenges
- Hi cap well issues
  - cumulative effects
- Dairy Business Association Lawsuit
  - Settled in October 2017
- Move to DATCP?

# Technology and Outreach

- Webpage Upgrades
  - General Program Information
  - Specific Information on CAFOs and Permitting
- E Permitting System (Sharepoint)
  - Permit application submittal
  - Public Access
  - Simple modification requests
- Improved permitting and data management
- CAFO Workshops
  - Dodgeville – February 8<sup>th</sup>
  - Jefferson – February 9<sup>th</sup>

**Questions?**