

State and Local Regulations of Livestock Operations

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Existing Regulations

- NR 151 (Standards and prohibitions)
- ATCP 51 (Livestock facility siting law)
- NR 243 (CAFO water quality permits)
- NRCS 590 Standard (Nutrient management)
- Road weight limits
- Local manure storage ordinance
- Local operational ordinances
- US EPA – TMDL (impaired waters)

NR 151 - Subchapter II

**Agricultural Performance
Standards and Prohibitions**

Agricultural Performance Standards

- Soil loss less than “T” (NR 151.02)
- 5’ tillage setback from lakes and streams (NR 151.03)
- Phosphorus index rotation (8 years) average less than 6, individual year less than 12 (NR 151.04)

Agricultural Performance Standards

- New manure storage structures built to minimize risk of structural failure and minimize leakage (NR 151.05)
- Manure storage structures built after 2011 designed to accommodate 25yr-24hour storm
- Manure storage facilities not used for 24 months required to be closed

Agricultural Performance Standards

- Process wastewater cannot be discharged to waters of the state (NR 151.055)
- Livestock facilities within 1000' of a lake or 300' of a navigable stream shall divert runoff away from feedlots, manure storage areas, barnyards (NR 151.06)

Agricultural Performance Standards

- Nutrient management plans are required when applying manure or other nutrients (NR 151.07)

Manure Management Prohibitions (NR 151.08)

- No overflow from manure storage facilities
- No unconfined manure within 1000' of a lake/pond, 300' navigable stream
- No direct runoff from a feedlot or stored manure into waters of the state
- No unlimited access of livestock to waters of the state in a location where animals prevent maintenance of adequate sod or vegetation

NR 151

Implementation and Enforcement

What if someone is not compliant.....

- First, DNR determines...
 - Whether new or existing cropland
 - Costs of bringing into compliance with standards
 - Whether cost-sharing is available

NR 151

Implementation and Enforcement

What if someone is not compliant.....

- Then...
 - If new cropland then landowner shall comply with standards
 - If existing cropland then landowner shall comply with standards if:
 - Cost-sharing has been offered, or
 - Corrective measures do not involve eligible costs

Existing Regulations

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ATCP 51

Livestock Facility Siting

Livestock Facility Siting Rules

- Only apply in Counties or Towns that adopt the rules via a local ordinance
- Only apply to operations greater than 500 animal units (new operations or expansions greater than 20%)
 - Lactating cow – 1.4 au
 - Dry cow 1.4 au
 - Heifers (400-800 lbs) 0.6 au
 - Heifers (800-1200 lbs) 1.1 au
 - Calves 0.2 au

How It Works (as a farmer)

- If you don't make any changes, you don't have to do anything
- If you expand by more than 20% and exceed 500 animal units you will need to apply for a license from Bayfield County
- To apply for a license you will need to submit 5 worksheets to demonstrate you meet the standards of ATCP 51

ATCP 51 Standards

- Setbacks
- Odor
- Nutrient Management (Cropland)
- Manure Storage
- Runoff Management (Barnyard, Feed Storage)



Property Lines: 100'

Road ROW: 100'

Setbacks – Barns (<1000 au)



Property Lines: 200'

Road ROW: 150'

Setbacks – Barns (>1000 au)



Property Lines: 350'

The image is an aerial photograph of a rural area with green fields and some buildings. A red vertical line and a red horizontal line intersect at a point marked by a green circle. The red lines extend from the circle to the edges of the frame, indicating setbacks from the property lines and the road right-of-way.

Road ROW: 350'

Setbacks – Manure Storage



Exceptions

Existing barns can be expanded (no closer)

Existing pits can be expanded (no closer)

New storage can be built (same size, within 50 feet of existing facility)

Odor Standard

- Nothing is measured, compliance is based on practices (no “sniff test”)
- Odor is not eliminated
- Considers odor from structures only
- Does not consider odor from land spreading

How are odors related to air emissions?

- Related, but not the same
- Air Emissions = odor, gases, and dust
- Example:
 - Hydrogen sulfide and ammonia are independent chemical compounds released into the air and may be regulated separately
 - Odor is how compounds such as ammonia and hydrogen sulfide interact with each other, and then impact the human olfactory sense

Who must meet the odor standard?

Only those applying for a siting license

REQUIRED (within 2,500 feet of neighbor)

- Expanding operations over 1,000 AU
- New operations over 500 AU

OPTIONAL

- Expanding operations under 1,000 AU
- New operations under 500 AU
- Operations farther than 2,500 feet from neighbor

Odor score elements

1. Type of operation
2. Surface area and location of structures
3. Location, density, and type of nearby neighbors
4. Management of the operation

Example Odor Score Calculation

$$\begin{array}{|c|} \hline \text{Separation} \\ \hline \text{Score} \\ \hline \end{array} + \begin{array}{|c|} \hline \text{Management} \\ \hline \text{Credits} \\ \hline \end{array} - \begin{array}{|c|} \hline \text{Predicted} \\ \hline \text{Odor} \\ \hline \text{Score} \\ \hline \end{array} = \begin{array}{|c|} \hline \text{Total} \\ \hline \text{Odor} \\ \hline \text{Score} \\ \hline \end{array}$$

Predicted Odor Score

- Column A – Animal Housing Area
 - (PGSF- Pork Nursery, slatted floor)
- Column B – Odor Generation Number
 - 46 (PGSF- Pork Nursery, slatted floor)
- Column C – Exposed Surface Area
 - 8 ($200 \times 400 / 10,000$)
- Column D – Odor Control Codes
 - B3 (fresh water flush), C1 (windbreak)

Predicted Odor Score

- Column E – Multiplier Odor Control Practice
 - 0.4 (fresh water flush), 0.9 (windbreak)
- Column F – Predicted Odor
 - $46 * 8 * 0.4 * .90 = \mathbf{132.5}$
- Column G – Distance to Nearest Neighbor
 - 300 ft
- Column H – Weighted Distance
 - 39,750

Separation Score

- Total of Weighted Distances / Total Predicted Odor Score
 - $39,750 / 132.5 = 300$
- Compass Direction Multiplier
 - 1.3 (West)
- High or Low Density
 - Low (no more than 5 residences within 1300 ft)
- Separation Score
 - **534** (from Chart 1)

**Separation
Score**

534

+

**Management
Credits**

80

-

**Predicted
Odor
Score**

132.5

=

**Total
Odor
Score**

481

Odor score

500 points or more = Pass

If under 500 points:

- **Add more practices**
- **Consider other options**
 - **Relocate structures**
 - **Make management changes**
 - **Ask for 30 points - local discretion**

Future expansions

- Distance to affected neighbor is “fixed”
- Density also “locked in”



ATCP 51 Standards

- Setbacks
- Odor
- Nutrient Management (Cropland)
- Manure Storage
- Runoff Management (Barnyard, Feed Storage)

Nutrient Management Planning

- Required to submit a checklist verifying the nutrient management plan meets the 590 Standard

Waste Storage Facilities

- Certified engineer signs off that existing and new facilities meet NRCS standards (if not they must be improved)
- Abandoned structures (24 months) closed to NRCS standards
- Storage capacity according to nutrient management plans plus space to accommodate 25-year, 24-hour storm

Runoff Management



Runoff Management

- New animal lots must conform with 635 Standard (ATCP 51.20 sub 1)
- Existing lots (ATCP 51.20 sub 2)
 - No direct discharge to groundwater
 - Limits on phosphorus runoff
- Feed storage (ATCP 51.20 sub 3)
 - Surface water diversion
 - Leachate collection and treatment
- Incorporation of NR 151.08 (Manure Management Prohibitions)

Existing Regulations

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- Road weight limits
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NR 243

**Animal Feeding Operations
(CAFO Water Quality Permits)**

Animal Feeding Operations

- Operations with more than 1000 a.u. are required to have a WPDES permit from the DNR
- Operations less than 1000 a.u. can be required to have a WPDES permit in response to discharge to waters of the state

CAFO WPDES Permit Requirements

- Production area discharge limitations (NR 243.13)
 - No discharge of pollutants from animal production areas to navigable waters, except as a result of a certain storm events

Dairy/Cattle=25yr/24hr, Swine/Poultry=100yr/24hr

- Nutrient Management (NR 243.14)
 - How, when, where, amounts of manure are land applied
- Plans/Specifications Review of storage, transfer, runoff control, etc. structures (NR 243.15)

CAFO WPDES Permit Requirements

- Monitoring and Reporting (NR 243.19)
 - Sampling of manure and soil
 - Self-inspection/reporting to determine permit compliance
 - Annual reports for land application/self-inspection

Manure Storage Capacity – ATCP 51

- Storage capacity according to nutrient management plans plus space to accommodate 25-year, 24-hour storm
- Built to 313 Standard
- Only applies to livestock operations with more than 500 animal units

Manure Storage Capacity – NR 243

- Storage capacity sufficient to ensure manure and wastewater can be properly stored and land applied in compliance with the permit and nutrient management plan
- Built to 313 Standard

Manure Storage Capacity – NR 243

- For liquid manure, must have 180 days of storage to contain all manure, wastewater, and precipitation and runoff from 100year 24 hr storm (5.4 in.)
- 180-day level indicator in storage structure must be visible at least one day between October 1 and November 30.....

Manure Storage Capacity – NR 243

- Except for liquid manure remaining due to unusual fall weather conditions prohibiting manure applications during this time period

Manure Storage Capacity – NR 243

- Emergency application of manure in the winter to pre-approved fields is allowed if the manure storage is full due to unusual weather conditions, equipment failure, or other unforeseen circumstances beyond the control of the permittee (prolonged storm events, early onset frozen ground)

Spreading Windows on Clay In the Far North

- Top-dressed on forages after each harvest (volume limitations)
- In the spring, before planting
- In the fall, after corn harvest
- In the late-summer, after small grain harvest
- In the winter

Wet Fall On Clay

- Compaction
- Rutting
- No chance for injected manure



Wet Fall On Clay

- No Compaction
- No Rutting
- Harvested in January
- No chance for fall injected manure



Spreading Windows on Clay In the Far North

- The key is flexibility and storage capacity
- If a window is missed, then what?
- The answer is more storage capacity, more acres, or emergency allowances
- Ideal is to have at least six months capacity as of December 1 of every year

Spreading Windows on Clay In the Far North

- Emergency winter spreading is an emergency for a reason
- For our region, we must have sufficient risk management strategies in place to make sure there is 180 days of storage capacity as of December 1

Existing Regulations

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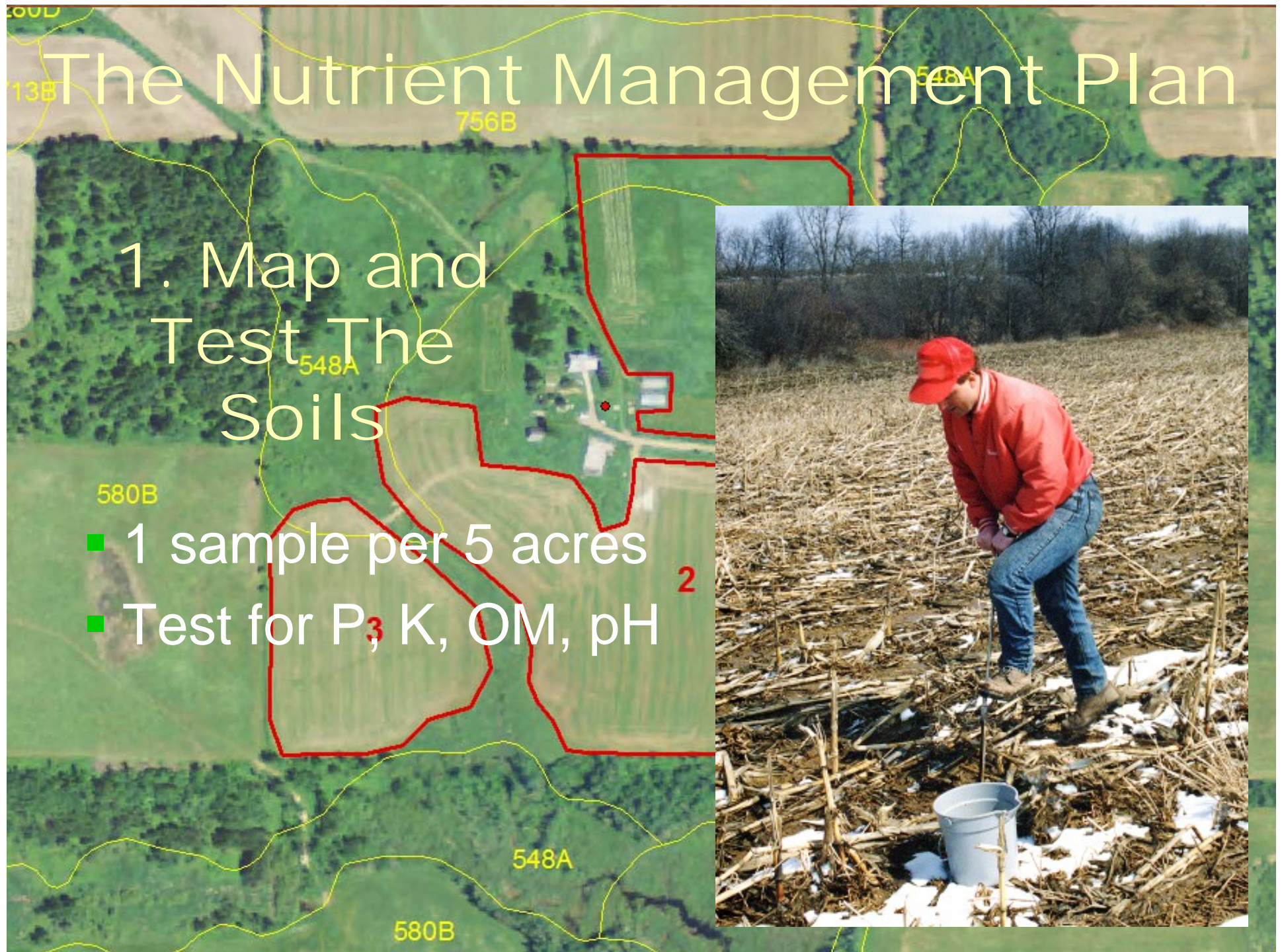
590 Standard (ATCP 51, NR 243)

Nutrient Management Planning

Nutrient Management Planning and Water Quality

- Limit soil erosion (Tolerable Soil Loss)
- Meet but not exceed crop nutrient needs
 - Soil testing
 - Crediting existing nutrients
- Minimize non-point nutrient/manure loss
 - Spreading restrictions
 - Phosphorus restrictions
 - Nitrogen restrictions

Meeting But Not Exceeding
Crop Nutrient Needs



The Nutrient Management Plan

1. Map and Test The Soils

- 1 sample per 5 acres
- Test for P, K, OM, pH

The Nutrient Management Plan

2. Set Crop Rotations

- Year 1 – Alfalfa
- Year 2 – Corn
- Year 3 – Alfalfa seeding
- Year 4 - Alfalfa



3. Calculate Crop Nutrient Needs

- Nitrogen depends on the crop
- P and K depend on the crop, yield goals, and soil tests



Year	Soil Test	pH	OM	P	K
2013	2013-11-21	6.7	3.3	26	120



Rotation Wizard

Crop Year (Fall to Fall):

2013

Crop:

Corn silage

Corn

Yield Goal:

20.1-25

20.1-

Tillage:

Spring Chisel, disked

Spring

Soil Test Date:

2013-11-21

2013

Lime Rec:

NA

Irrigation / MRTN info:

☐ Irrigated 0.05/MRTN

☐ In

Season notes:

(lbs/acre)

UW Recommendation:

Prior years' extra:

Adjusted UW recommendation:

1st & 2nd year legume credit:

2nd & 3rd year manure credit:

This year's manure:

This year's fertilizer:

Total credits & applications:

Over(+)/Under(-) adj UW rec:

Annual Total PI:

Particulate PI:

Soluble PI:

N	P2O5	K2O	N
145	40	185	145
-	0	0	-
145	40	185	145
0	-	-	0
0	-	-	6
16	24	40	16
46	0	0	0
62	24	40	22
-83	-16	-145	-123
3			
1.0			
1.6			

The Nutrient Management Plan

4. Account for On-Farm Nutrients

- Nitrogen from legumes
- N, P, K from manure



Manure Nutrient Content - Liquid

First-year *available* nutrient content averages.¹

SPECIES	N	P ₂ O ₅	K ₂ O
	-----	lbs/1,000 gal	-----
Dairy	7 (10)	6	17
Beef	5 (6)	6	12
Swine (indoor pit)	22 (28)	14	22
Swine (outdoor pit)	9 (12)	6	8
Swine (nursery indoor pit)	10 (14)	6	10
Chicken	27 (29)	35	26

¹ Source: Wisconsin soil test labs.

² Use values in parenthesis for incorporated manure.

Manure As Fertilizer Example

- **Corn Crop Nutrient Need:** 145 – 40 – 185
- **Manure Nutrients:** 14 – 6 – 10 (lbs/1000 gal)
- No phosphorus restrictions, can apply based on nitrogen
- **10,000 gallons/acre = 140 – 60 – 100**

Manure As Fertilizer Example

(the manure test matters)

- **Corn Crop Nutrient Need:** 145 – 40 – 185
- **Manure Nutrients:** 28 – 14 – 22 (lbs/1000 gal)
- No phosphorus restrictions, can apply based on nitrogen
- **5,000 gallons/acre = 140 – 70 – 110**

Manure As Fertilizer Example

(the crop nutrient need matters)

- **Wheat Crop Nutrient Need:** 65 – 20 – 75
- **Manure Nutrients:** 28 – 14 – 22 (lbs/1000 gal)
- No phosphorus restrictions, can apply based on nitrogen
- **2300 gallons/acre = 64 – 32 - 51**

Manure As Fertilizer Example (Acres Needed To Spread 1M gallons)

- **Continuous Corn w/Low Test Manure:**
 - 100 acres
- **Continuous Corn w/High Test Manure:**
 - 200 acres
- **Corn/Wheat Rotation w/High Test Manure:**
 - 100 acres year 1, 435 acres year 2

Example SNAP-PLUS Spreading Report

Crop Removal						Soil Test ppm		Adjusted Recs lb/ac			Planned Applications and Credits lb/ac			Over(+) Under(-) Adj. UW Recs lb/ac			Applications			
Prior Crop	2014 Crop	Yield Goal	P205	K20	Tillage	Avg P	Avg K	N	P205	K20	N	P205	K20	N	P205	K20	Product Name and Analysis	Appln Rate and Method	N-P205-K20 credit	Total Amt
Corn grain	Corn grain	131-150	55	40	SCD	57	232	145	0	0	124	74	168	-21	74	168	Corn Starter 20-10-20	200 lb Spring Incorp	40-20-40	2,200 lb
																	Dairy Liquid 10-6-17	4000 gal Spring Incorp	28-24-68	44,000 gal
																	Dairy Solid 3-3-6	10 ton Spring Incorp	20-30-60	110 ton
Corn grain	Corn grain	131-150	55	40	SCD	96	326	145	0	0	124	74	168	-21	74	168	Corn Starter 20-10-20	200 lb Spring Incorp	40-20-40	2,200 lb
																	Dairy Liquid 10-6-17	4000 gal Spring Incorp	28-24-68	44,000 gal
																	Dairy Solid 3-3-6	10 ton Spring Incorp	20-30-60	110 ton
Corn grain	Corn grain	131-150	55	40	SCD	10	99	145	85	70	152	30	60	7	-55	-10	Corn Starter 20-10-20	300 lb Spring Incorp	60-30-60	9,900 lb

Manure As Fertilizer Example (Acres Needed To Spread 1M gallons)

- **The more acres needed the longer the travel distances from the storage to the fields**
 - **More expensive**
 - **More tanker miles**
 - **Longer spreading times**
- **Are the travel distances economically feasible? Can the roads handle it?**

Spreading Restrictions and Prohibitions

Spreading Restrictions and Prohibitions

- Primary means to limit nutrient/manure loss to surface and groundwater
- Some are basic, some are complicated
- Often requires ground-truthing
- Restrictions in 590 Standard and NR 243 are not always the same
- Winter
- SWQMAs

The Simple Restrictions

Nutrients shall not be applied to: (any time of year)

- Water, wetlands, gravel pits, concentrated flow channels
- Areas within 200 feet upslope of wells, sinkholes, tile inlets, gravel pits
- Fields exceeding tolerable soil loss “T”
- Non-cropland (forests, brushland)
- Manure within 50’ of a well (100’ if CAFO)

The Winter Restrictions (590 Standard/NR 141)

- Winter-spreading plan
- No applications within SWQMA (frozen or snow-covered)
- Liquid manure limited to 7000 gallons/ac
- No nutrients on slopes greater than 9%
- Manure ok up to 12% slopes when contoured

590 Draft Revisions – Field Risk Values

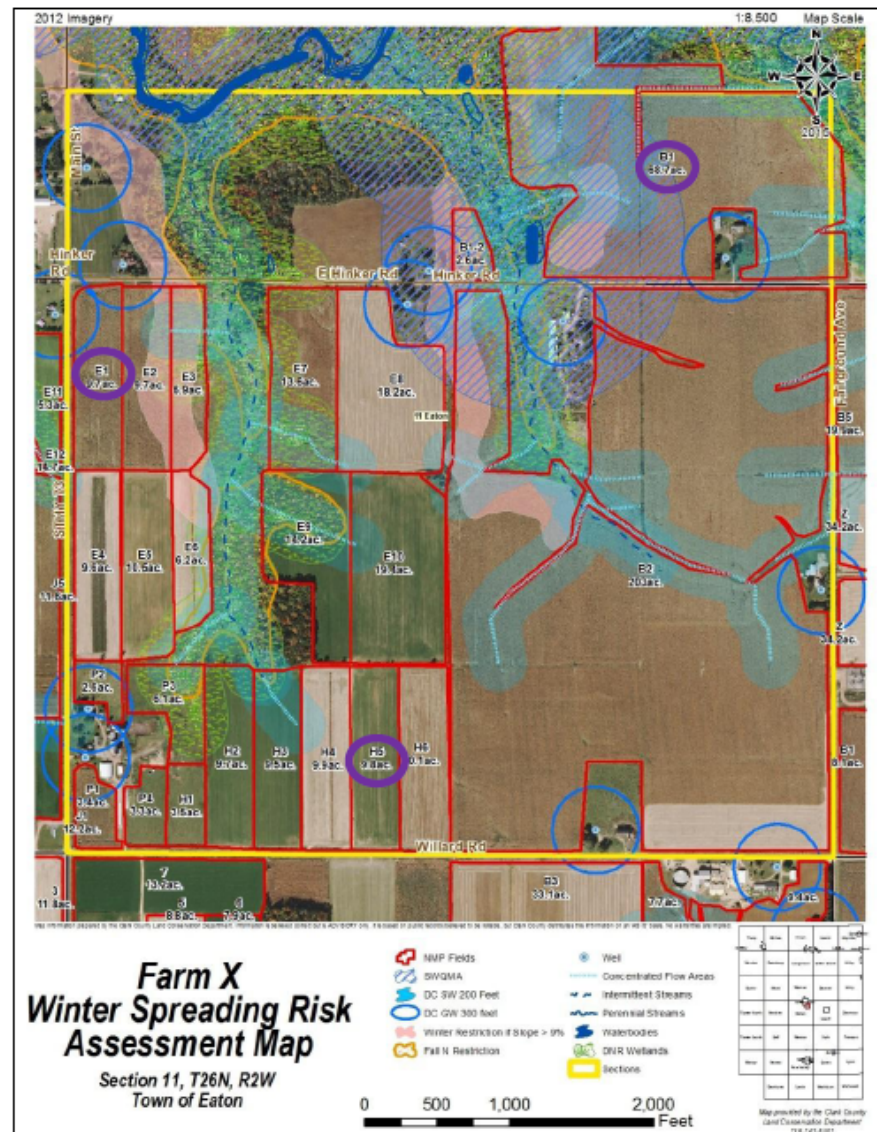
Example

What % Area of Field is Risky?

- Field H5
 - No Risk= 1
- Field E1
 - Limited= 2
- Field B1
 - Substantial= 4

Winter Spreading Risk Value

No Risk: 0%	1
Limited Risk: 1-35%	2
Substantial Risk: >35%	4



The Winter Restrictions (NR 243)

- Winter-spreading plan required
- Surface liquid manure prohibited on frozen ground or snow-covered (over 4")
- Surface liquid on snow (up to 4") ok if incorporated
- Injected liquid ok on snow-covered
- Surface solid and liquid manure prohibited Feb 1-Mar 31
- Solid ok (outside SWQMA) in other months with additional restrictions
- See Table 4 for solid restrictions

The SWQMA Restrictions

(Surface Water Quality Management Area)

What Is A SWQMA?

- 590 Standard
 - 1000' buffer along ponds, lakes, flowages
 - 300' buffer along a perennial stream (USGS 1:24,000 topo maps)
- NR 243 (CAFO)
 - 1000' buffer along ponds, lakes, flowages
 - 300' buffer along non-lake navigable waters
 - 300' buffer along conduits to navigable waters

SWQMA – 590 Standard

- No application of manure or fertilizer on frozen or snow-covered ground if effective incorporation is not possible
- Up to 5000 gallons unincorporated liquid manure per acre on non-frozen, non-saturated soils
- For any application of nutrients must have one of the following in place
 - Permanent vegetative buffers in place
 - A minimum of 30% crop residue in place
 - Incorporate within 3 days
 - Cover crops established after application

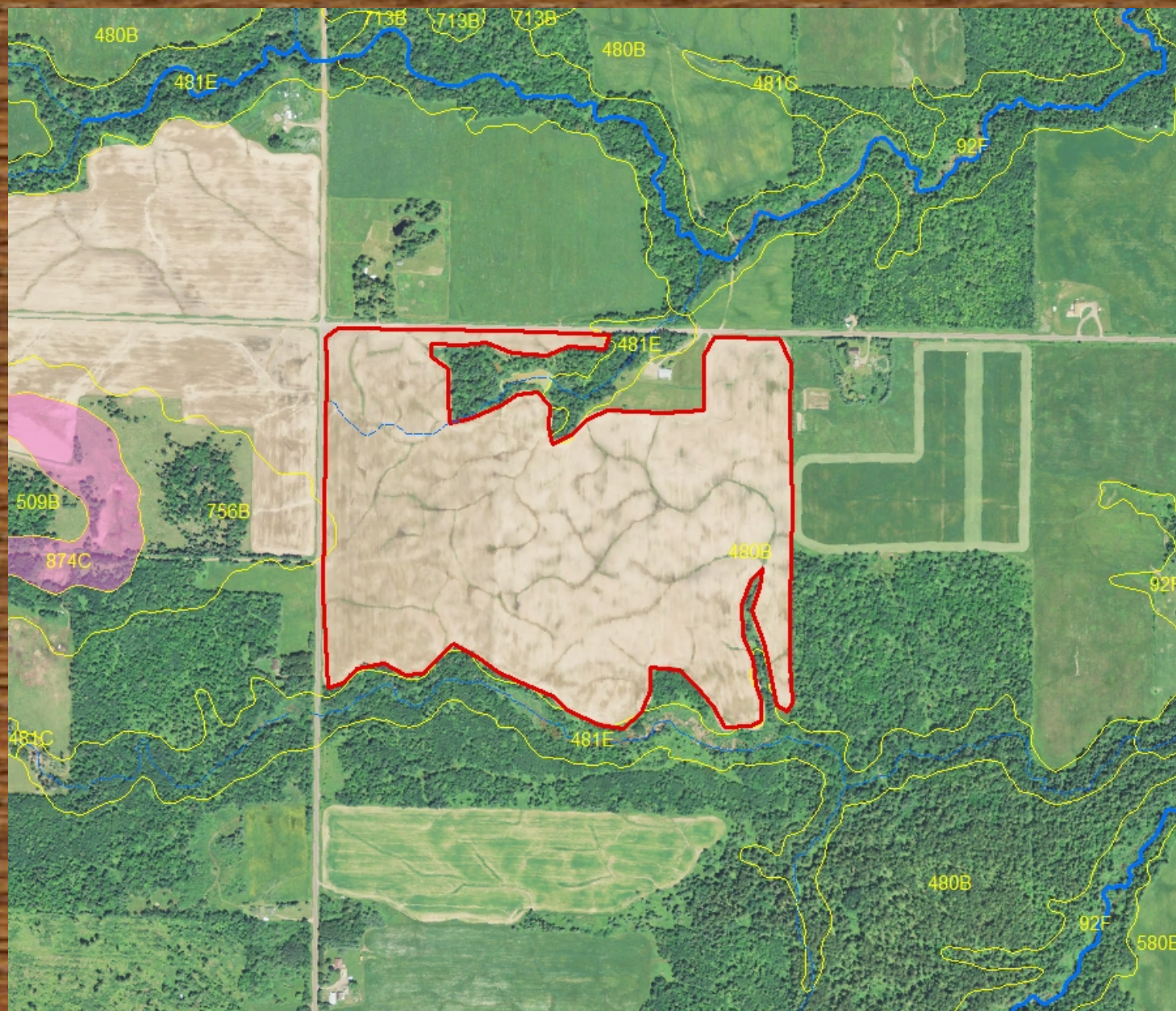
SWQMA – NR 243

- Must follow one of five options when applying manure in a SWQMA
- No winter applications in a SWQMA

SWQMAs In Practice

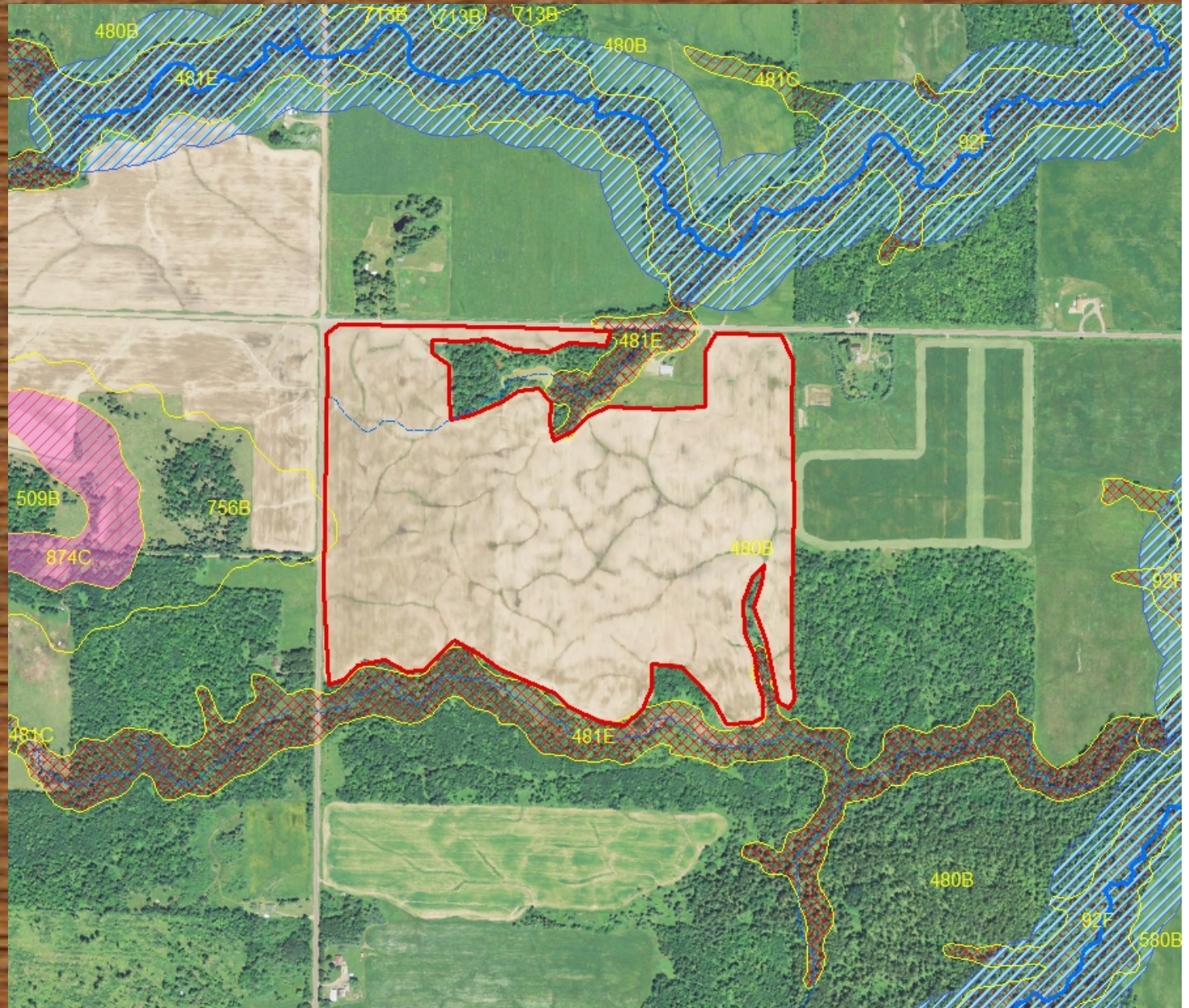
Example Field

101.7
acres



590 Slope and SWQMA Restrictions

- 300' SWQMA (blue)
- Winter slope restrictions (red)
- Fall N restrictions (pink)



CONCENTRATED FLOW AREAS

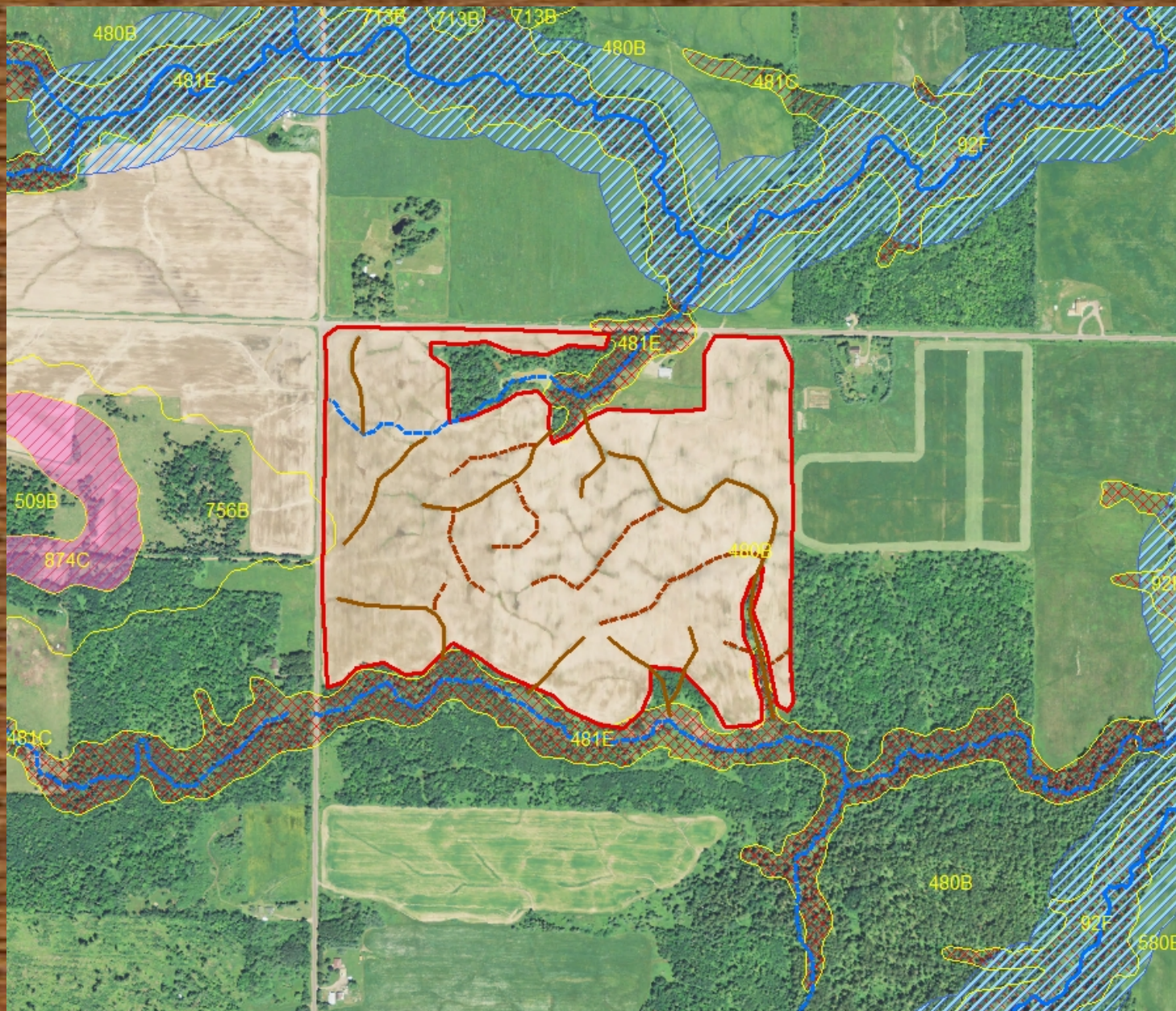
A natural channel or constructed channel that has been shaped or graded to required dimensions and established in perennial vegetation for the stable conveyance of runoff. This definition may include non-vegetated channels caused by ephemeral erosion. These channels include perennial and intermittent streams, drainage ditches, and drainage ends identified on the NRCS soil survey and not already classified as SWQMAs. Concentrated flow channels are also identifiable as contiguous up-gradient deflections of contour lines on the USGS 1:24,000 scale topographic map. The path of flow to surface water or direct conduits to groundwater must be documented.





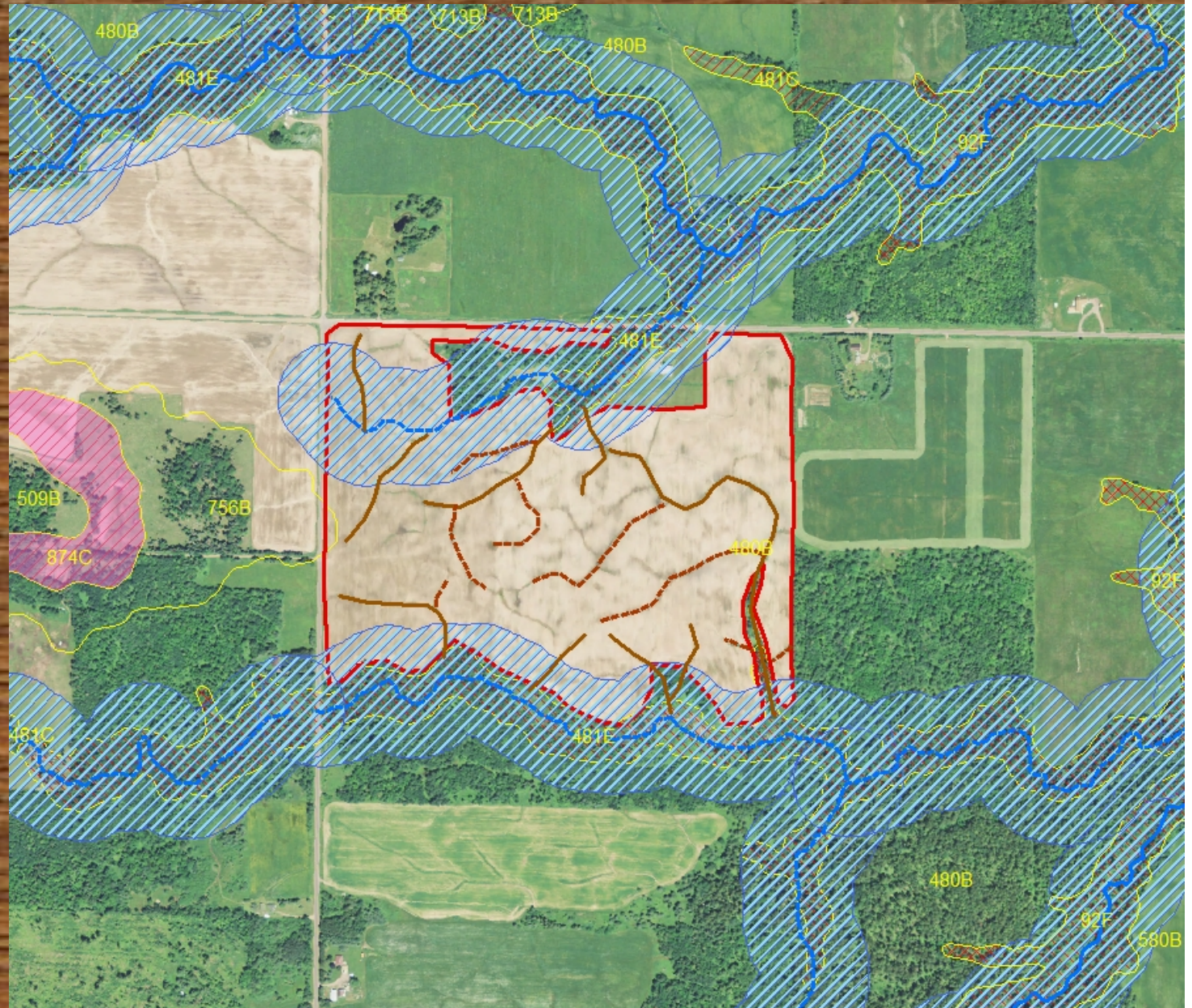
590/243 Concentrated Flow Areas (No manure)

**99
Acres
(10ft flows)**



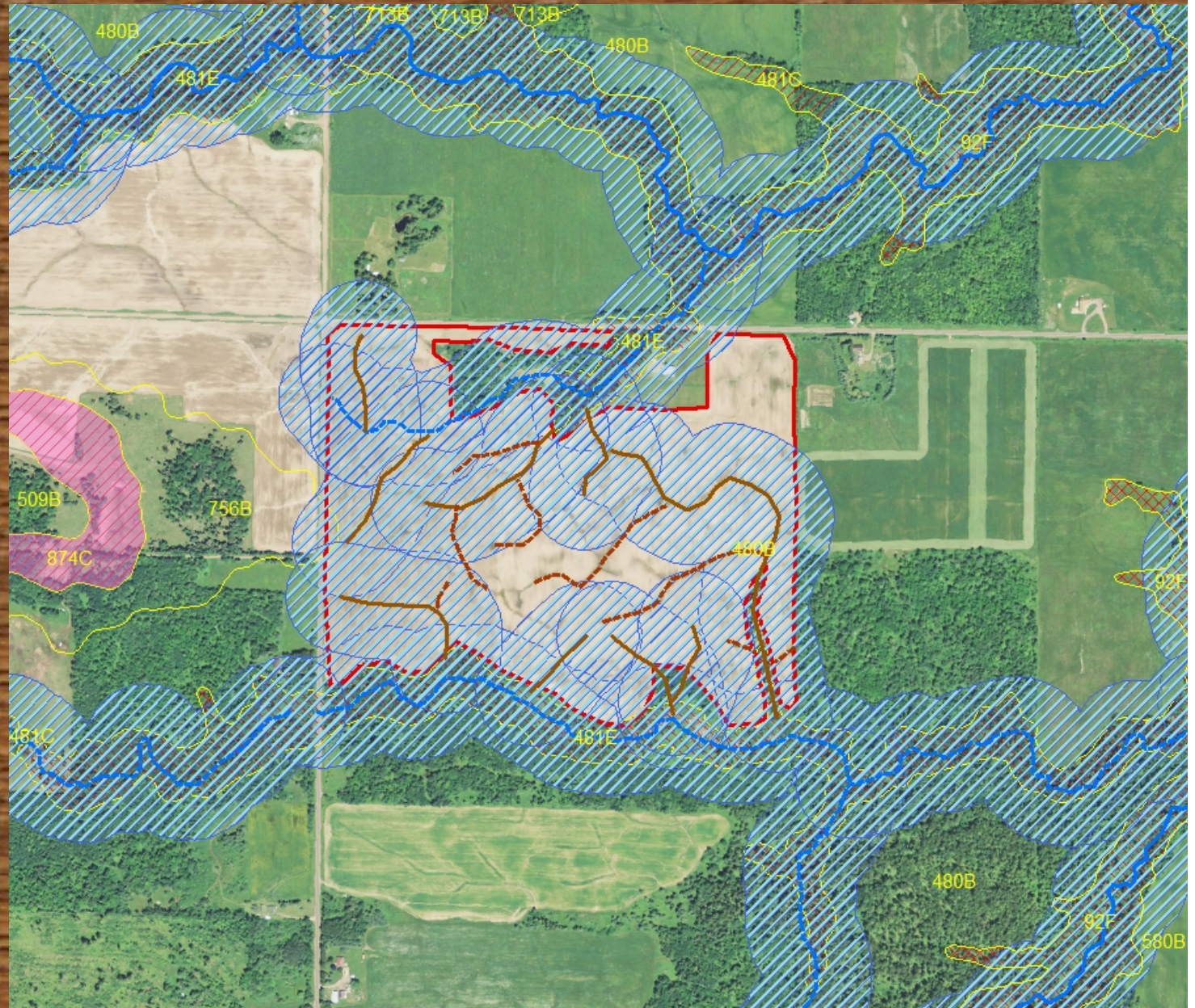
Additional 243 SWQMA Restrictions

- 300' along navigable waters (intermittent streams)



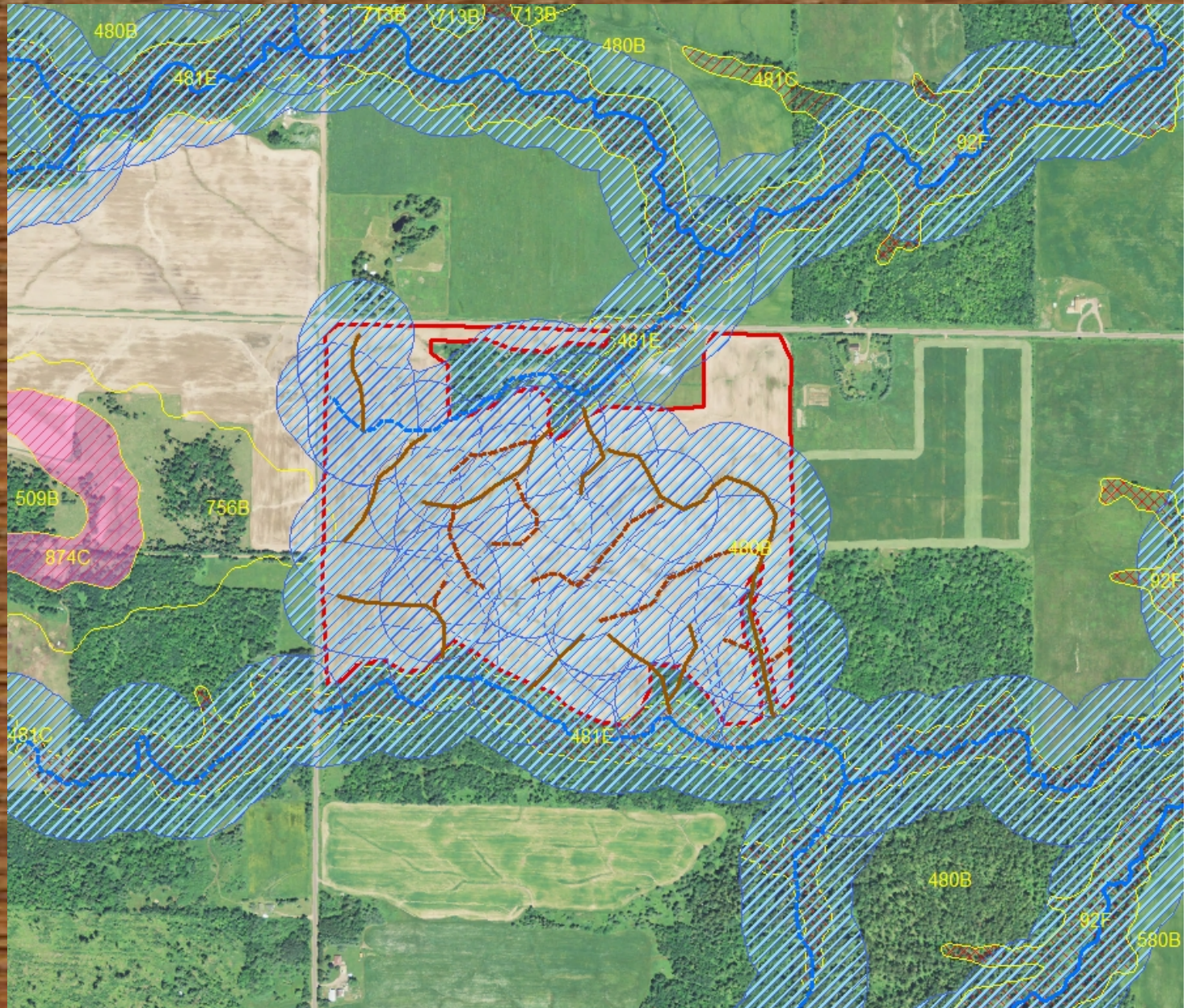
Additional 243 SWQMA Restrictions

- 300' along direct conduits to navigable waters



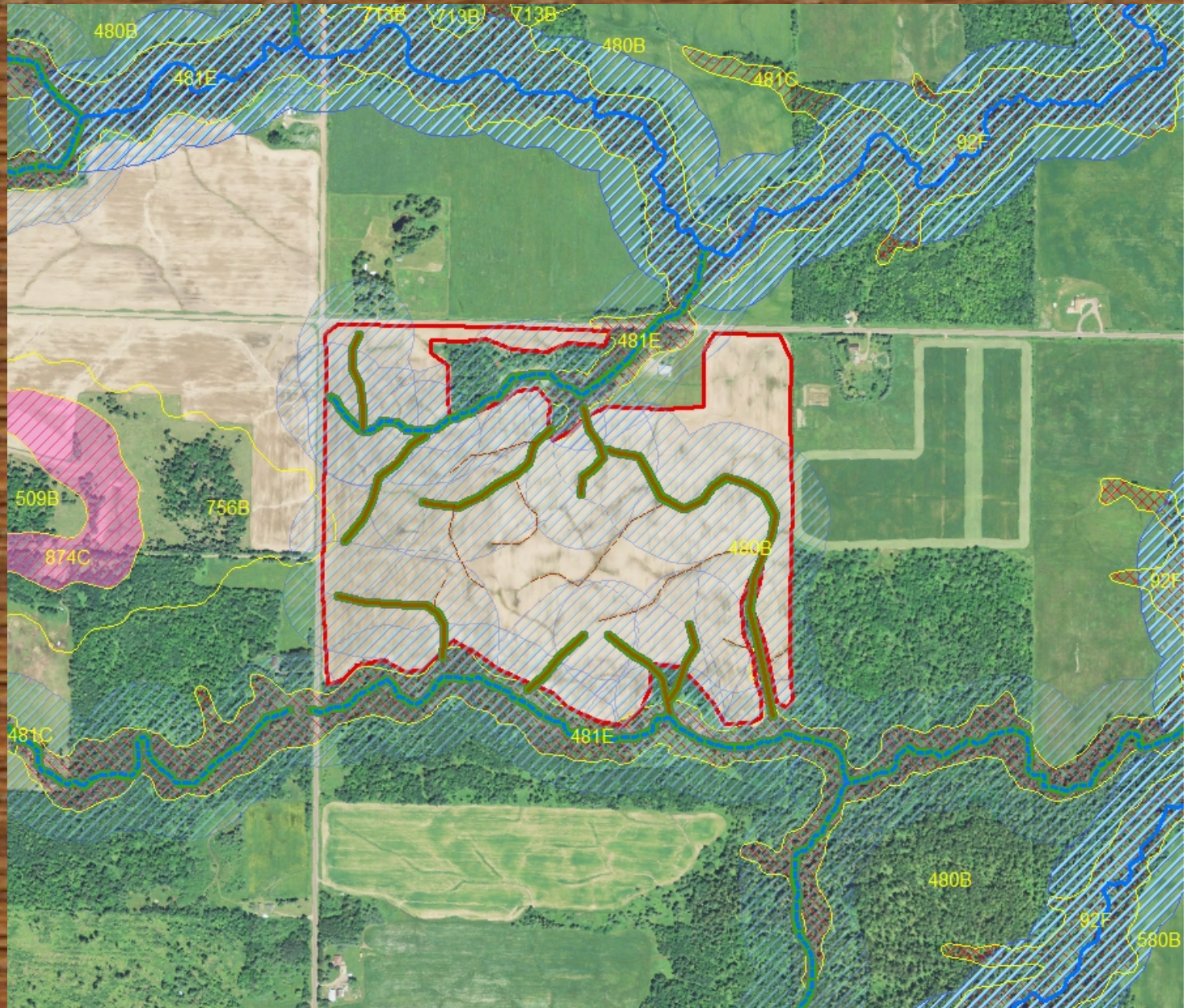
Additional 243 SWQMA Restrictions

- Do feeders to direct conduits also have a 300' SWQMA buffer?
- Should they?



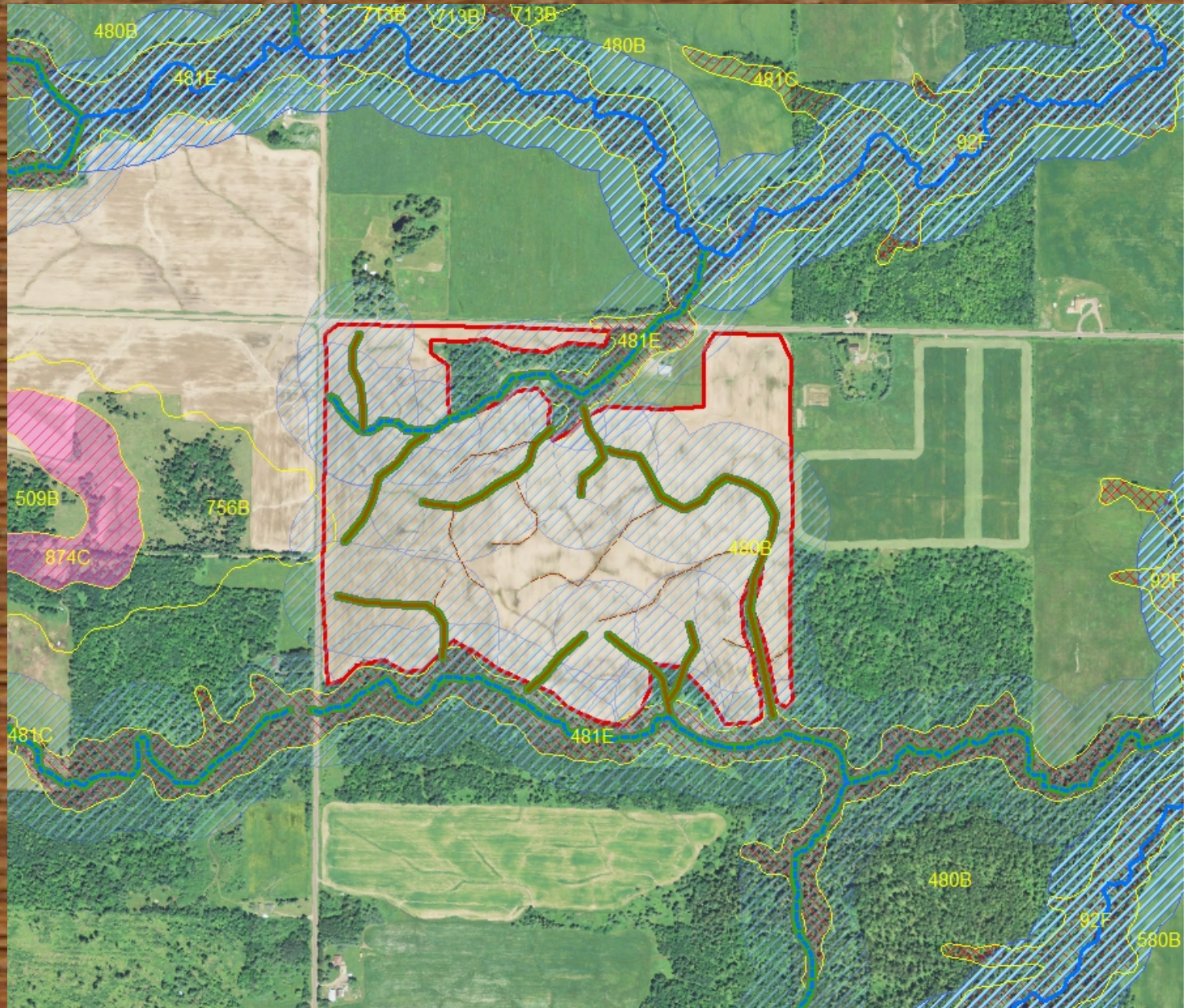
Option 1 – SWQMA Manure Applications

- 25' buffers
- 96 acres
- inject or incorporate in all other areas in SWQMA



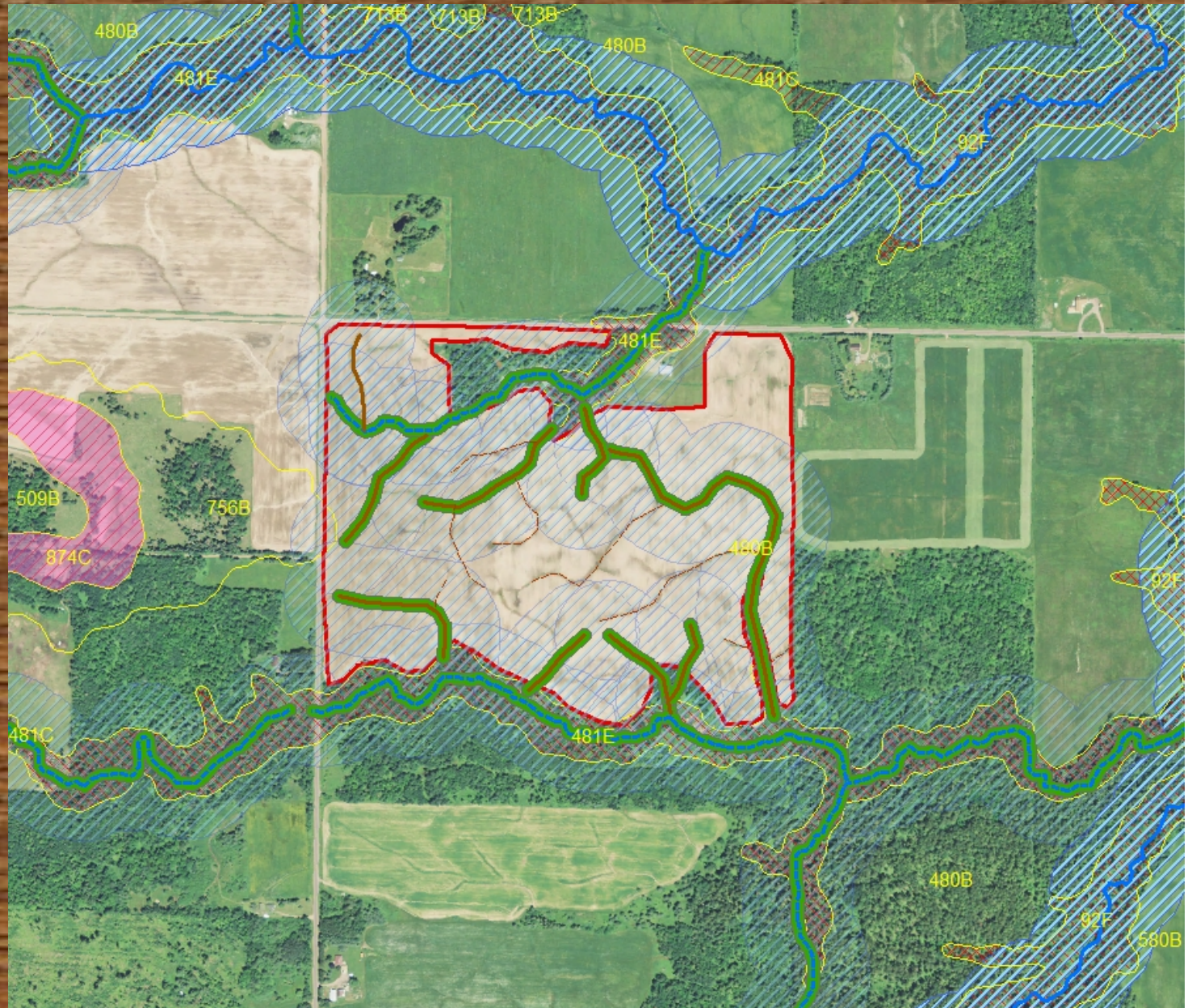
Option 2 – SWQMA Manure Applications

- 25' buffers
- 96 acres
- Surface apply
<5000
gallons/acre
on no-till
ground with
30%
residue



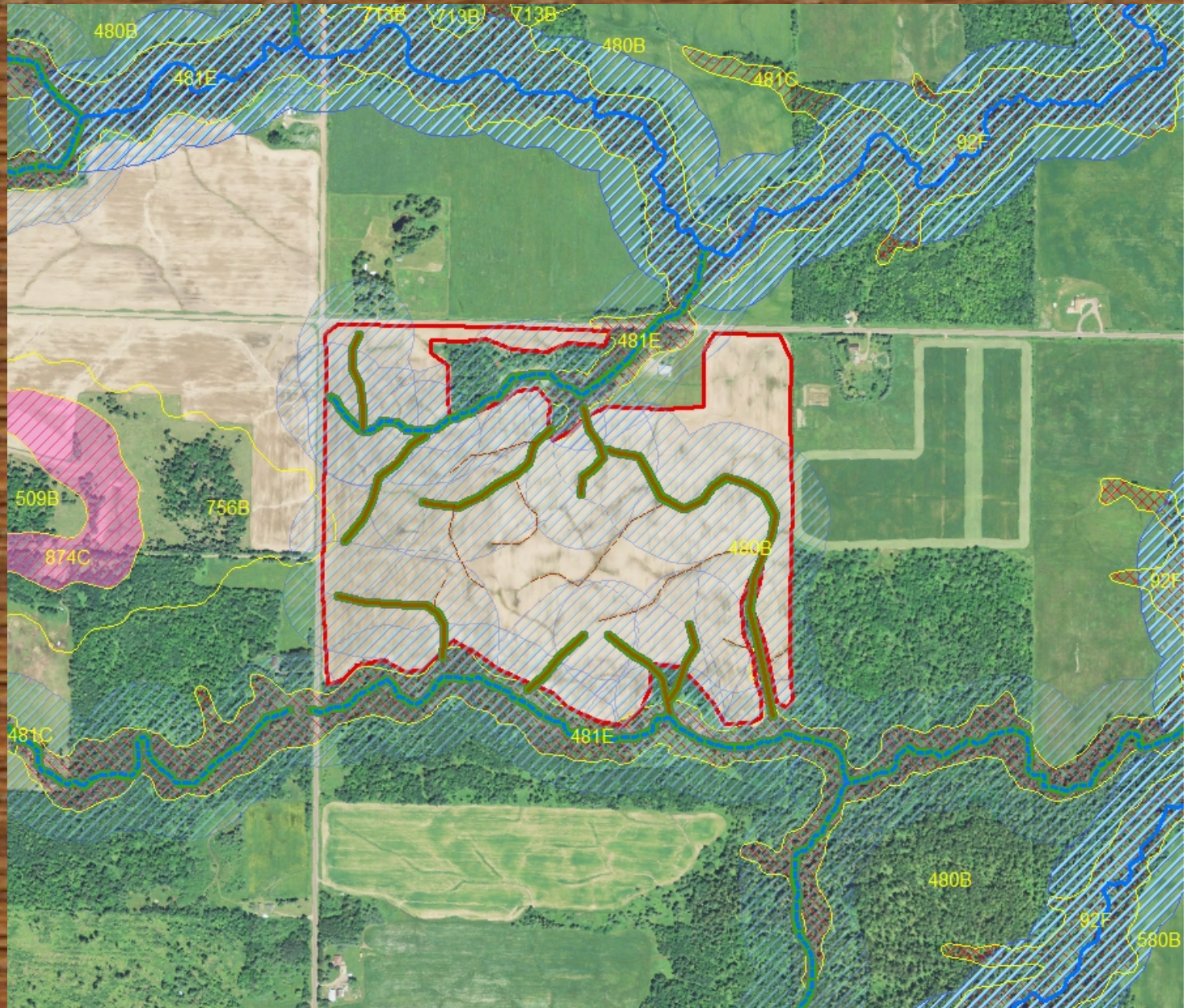
Option 3 – SWQMA Manure Applications

- 35' vegetated buffers
- 94 acres
- inject or incorporate elsewhere
- or
- <5000 gallons/acre with 30% residue



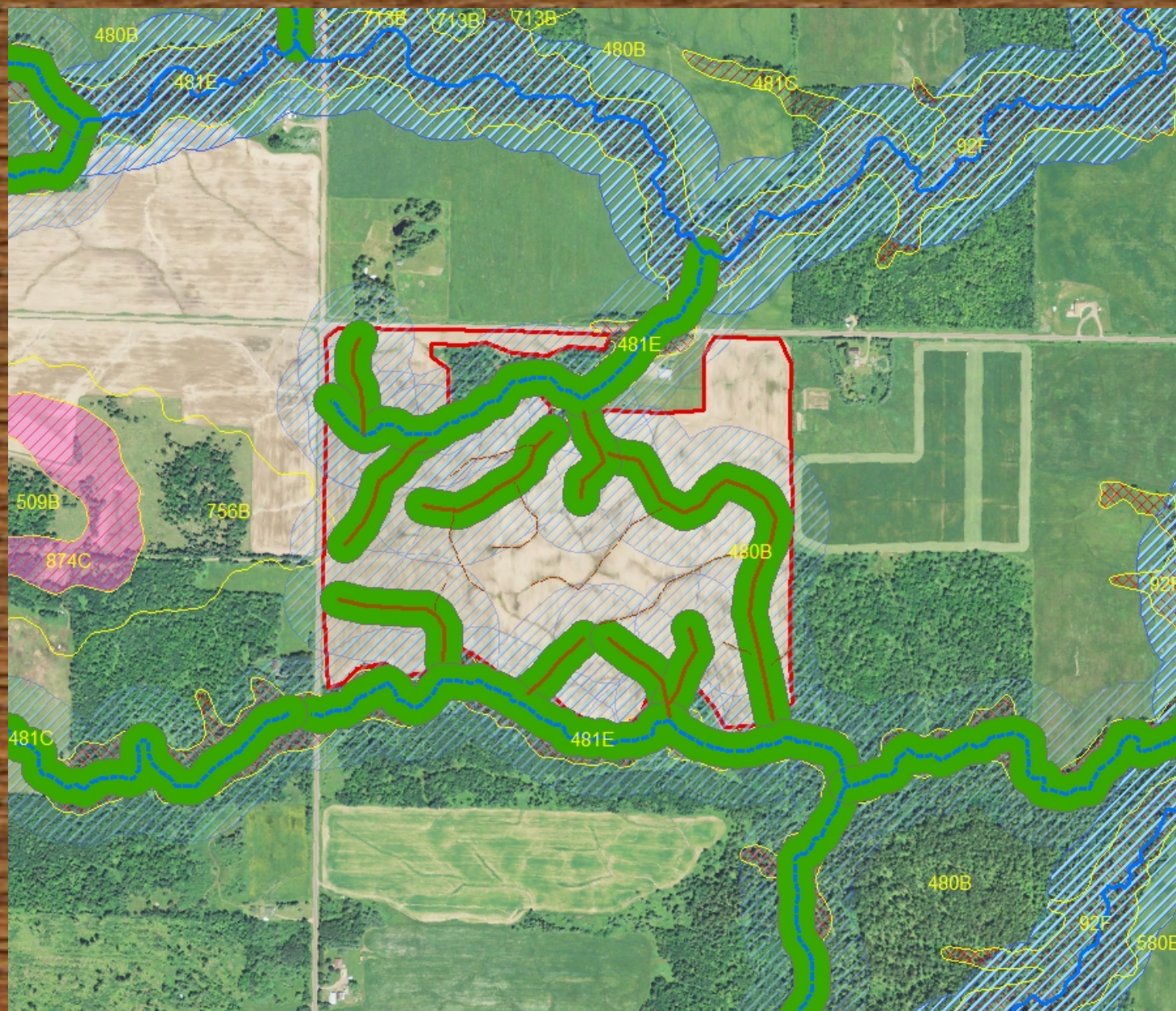
Option 4 – SWQMA Manure Applications

- 21' filter strip
- 97 acres
- inject or incorporate elsewhere
- or
- <5000 gallons/acre with 30% residue



Option 5 – SWQMA Manure Applications

- 100' no-spread buffer
- 82 acres



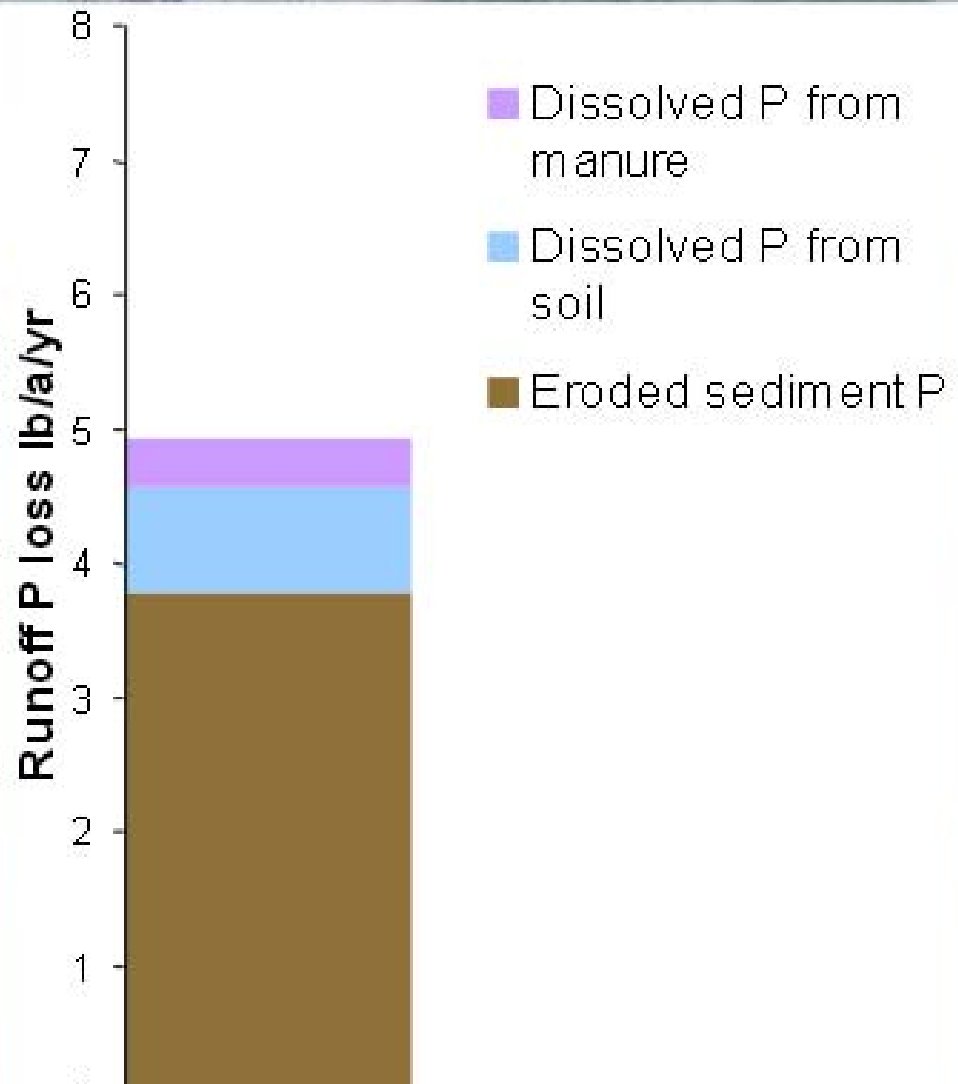
Phosphorus Restrictions

Example field:

3.5 T/a/yr soil loss

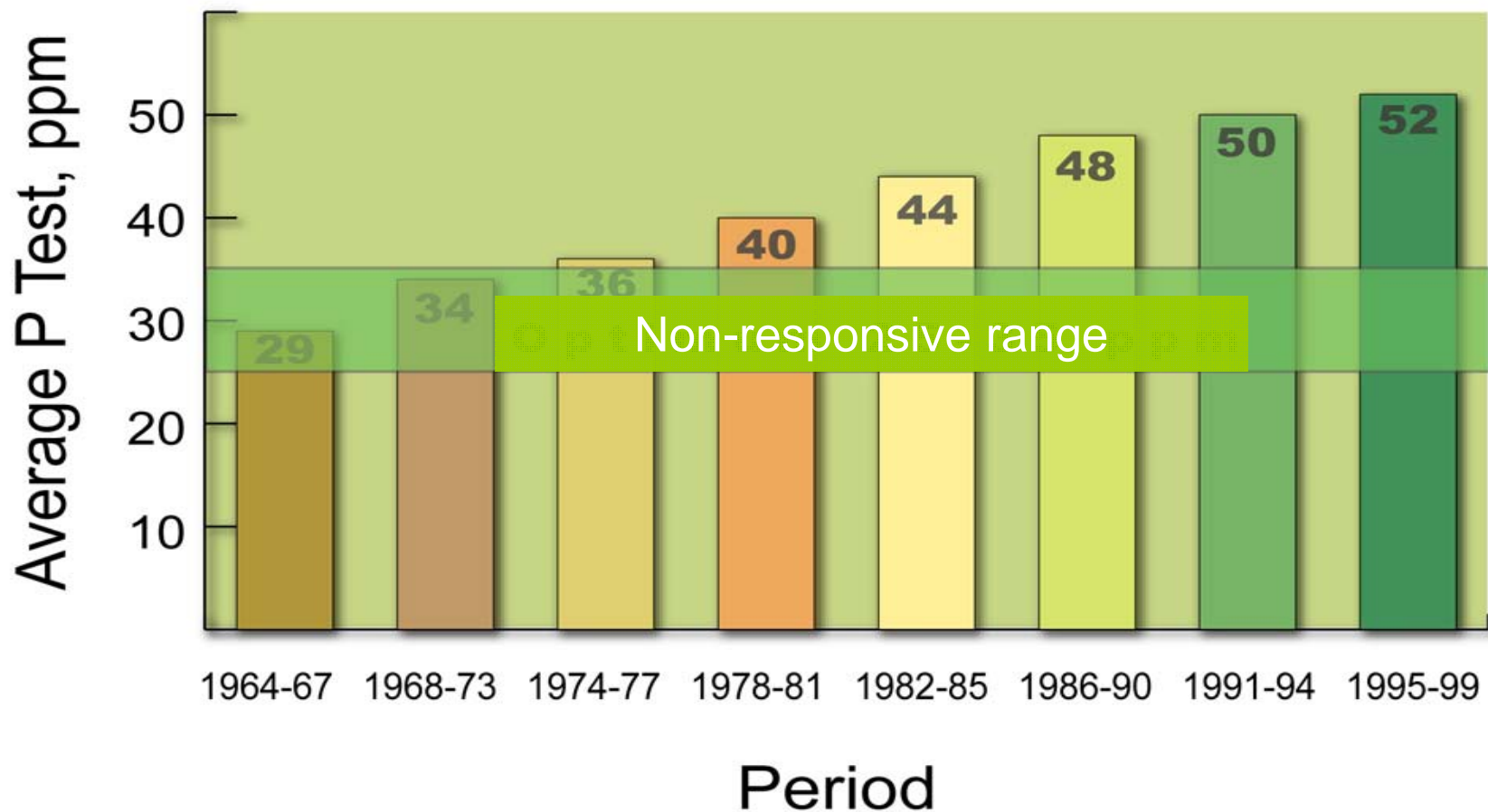
Bray P: 70 ppm

10,000 gallon/acre in fall before corn

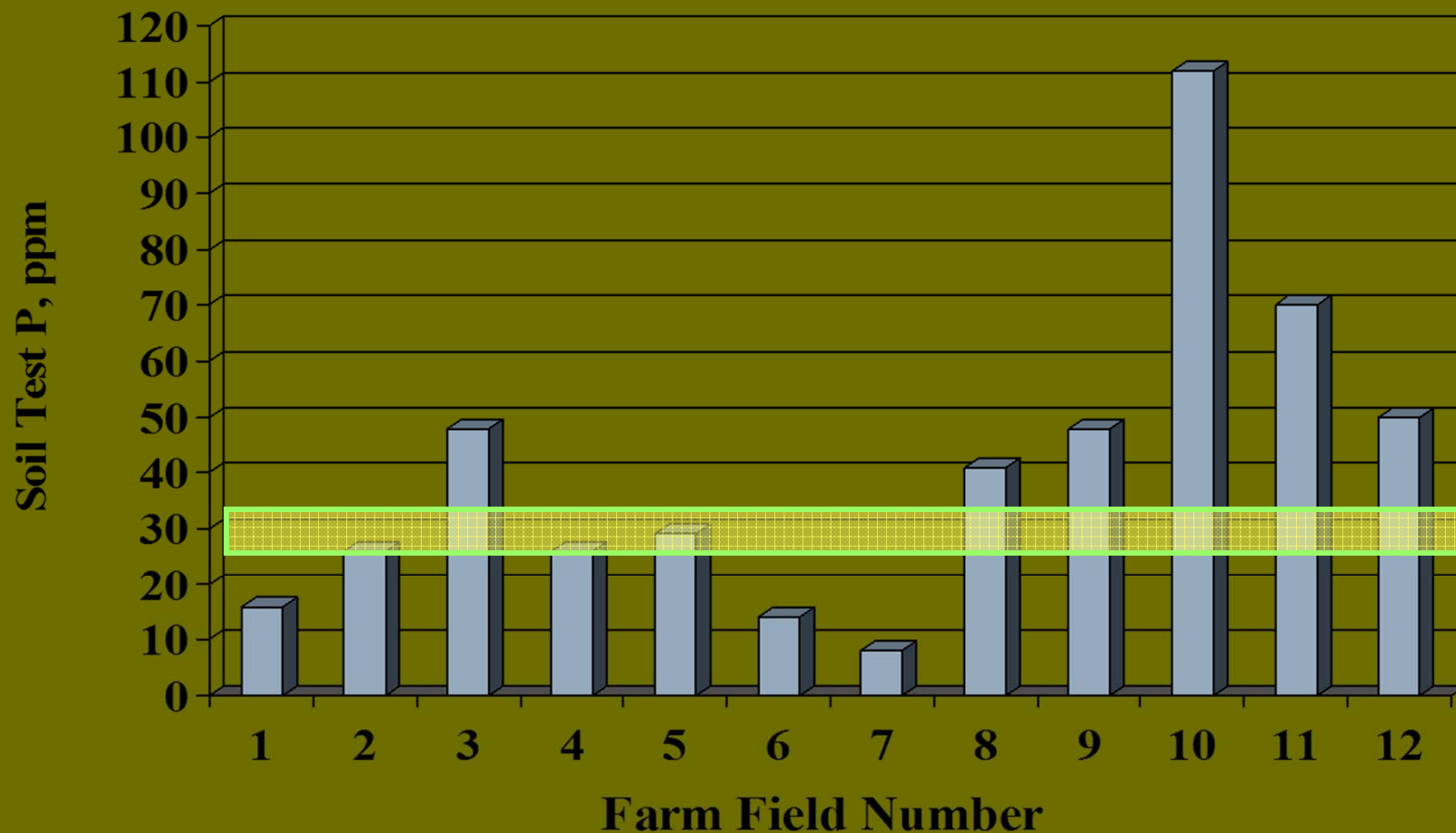


*Source: Laura Ward-Good,
UW Soils*

Average soil test P levels of Wisconsin cropland fields over time.



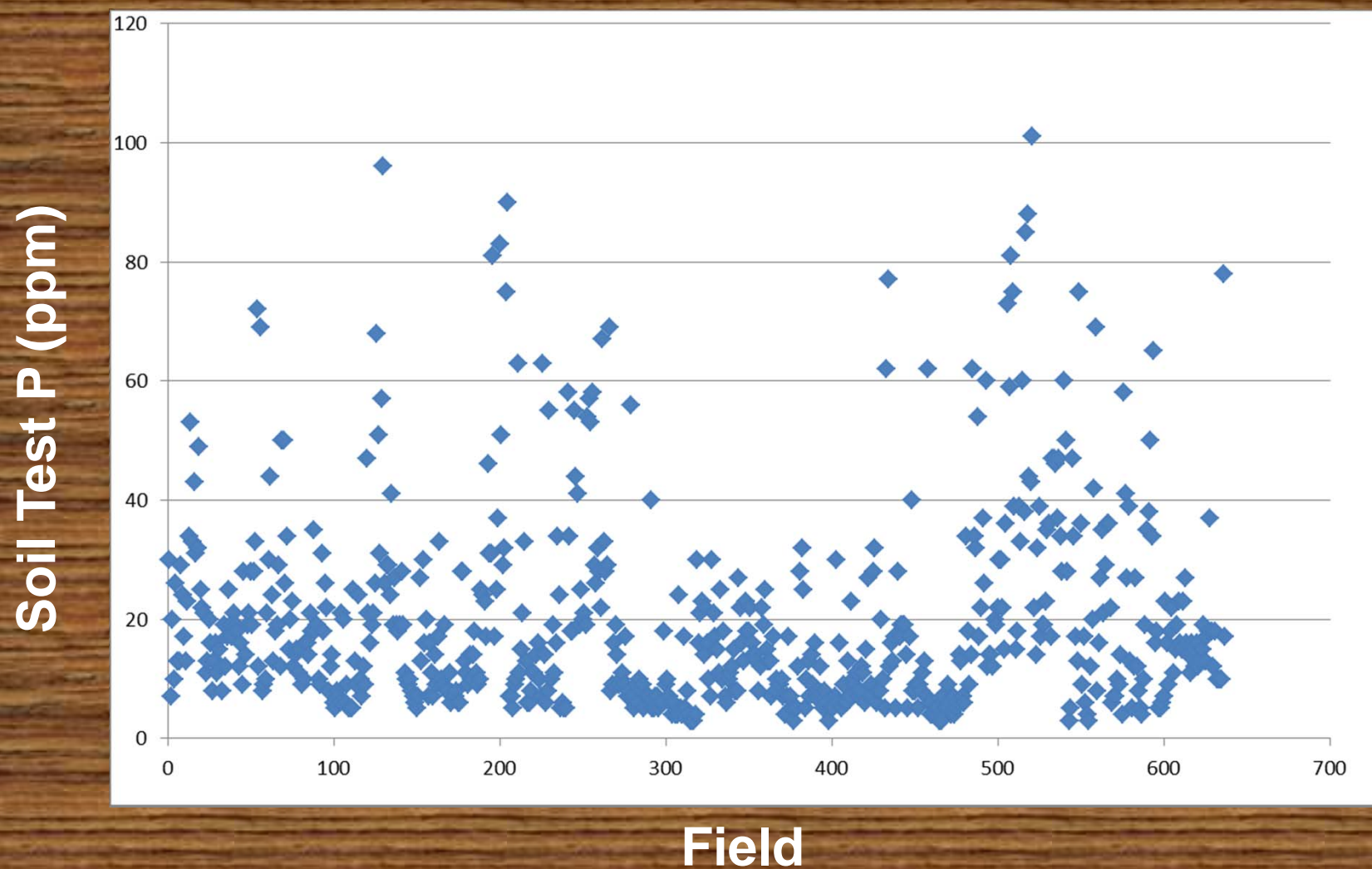
Soil Test Phosphorus Variability from a Wisconsin Dairy Farm



Local Soil Test P

22 farms in Ashland/Bayfield, 637 fields, 11,675 acres

Average = 19.9 PPM



11,675 Acres Tested

Soil Test P	Acres	%
<10 PPM	3419	29%
10-20 PPM	5077	43%
21-30 PPM	1830	16%
31-50 PPM	950	8%
51-100 PPM	395	3%
>100	5	0.04%

Soil Test Phosphorus

- Critical Values -

- < 50 ppm P:
N-based manure spreading plan.
- 50 – 100 ppm P:
P application not to exceed total crop P removal over the rotation.
- > 100 ppm P:
Eliminate P applications
 - Unless required for high-demanding crop in rotation.
 - Unless no other option, then apply at less than crop removal of P with soil conservation practices in place.
 - Use P Index.

Phosphorus Index

- Measures the relative potential for a field to deliver P to surface waters.
- Evaluates site loading (quantity of P) and transport potential (erosion and runoff) from individual fields.
- Agricultural management practice recommendations based on PI value.

Interpretation of the Wisconsin PI

- 0 - 2:** Minimal risk, N-based management
- 2 - 6:** PI should not increase over 4 years or length of average rotation
- 6 -10:** Implement plans to decrease PI to <6 over two rotations (max. 6 years)
- > 10:** Lower PI to <10 over one rotation or 4 years, and decrease PI to <6 over two additional rotations or 6 years

Manure As Fertilizer Example

(The Phosphorus Clock)

- **Corn Crop Nutrient Need:** 145 – 40 – 185
- **Manure Nutrients:** 28 – 14 – 22 (lbs/1000 gal)
- No phosphorus restrictions, can apply based on nitrogen
- **5,000 gallons/acre = 140 – 70 – 110**

Manure As Fertilizer Example

(The Phosphorus Clock)

- **Corn @ 120 bushels/acre removes 46 lbs P/acre**
- **70 lbs – 46 lbs = 24 lbs**
- **18 lbs P to move soil test 1 ppm**
- **Each year soil test P up 1.3 ppm**
- **In 23 years, volume limitations are possible (starting soil test P – 20 ppm)**
- **P-Index may provide more flexibility**

Summary

- Nutrient management planning is designed to minimize loss of nutrients/manure to water
- Does it work?
 - If plans are followed
 - If accidents don't happen
 - If soils don't erode
 - If there is enough storage to avoid spreading when runoff is likely to occur
 - If there are enough acres to allow for flexibility

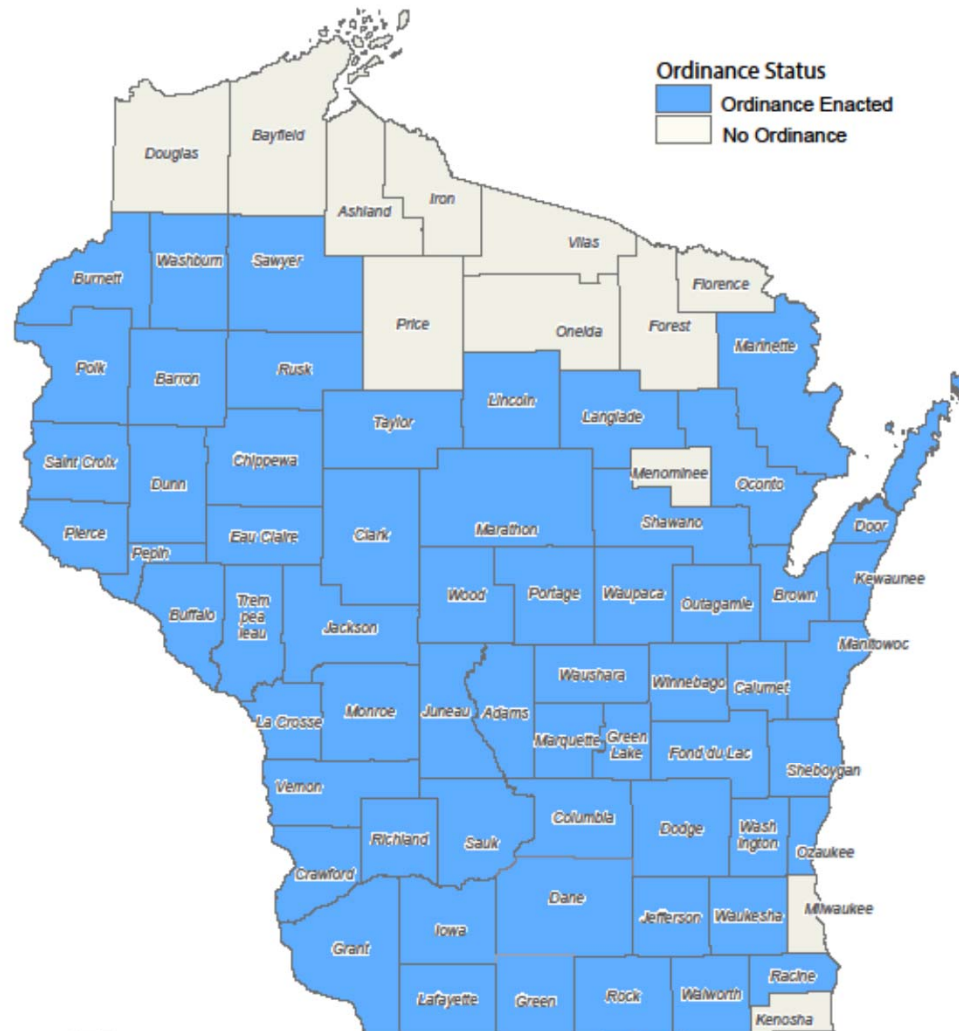
Existing Regulations

- NR 151 (Standards and prohibitions)
- ATCP 51 (Livestock facility siting law)
- NR 243 (CAFO water quality permits)
- NRCS 590 Standard (Nutrient management)
- Road weight limits
- Local manure storage ordinance
- Local operational ordinances
- US EPA - TMDL

Manure Storage Ordinance

- Livestock siting rules do not apply to operations less than 500 au
- Some Counties have manure storage ordinances to cover operations less than 500 au

Counties with Manure Storage Ordinances

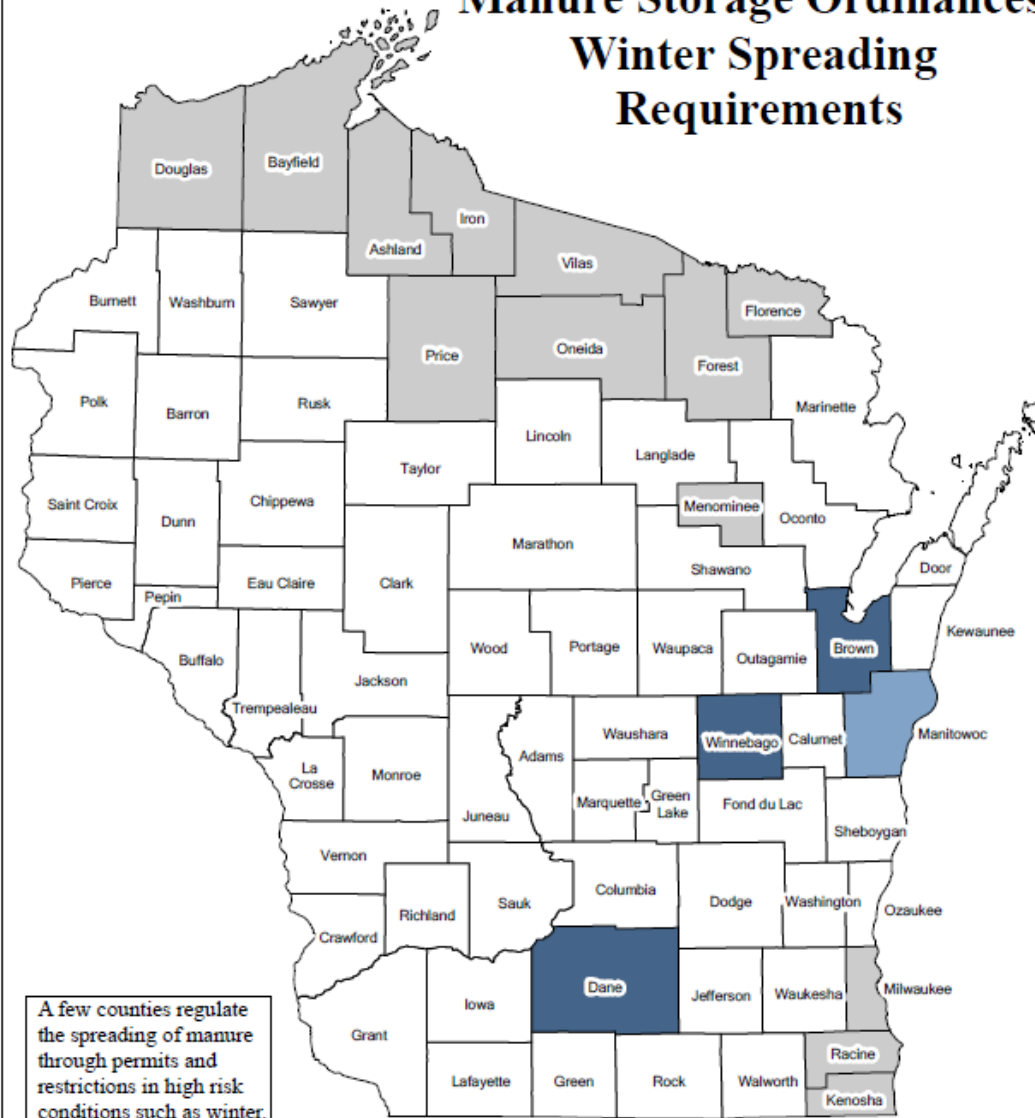


Wisconsin Department of Agriculture, Trade and Consumer Protection
Bureau of Land and Water Resource Management

A Manure Storage Ordinance

- A permit required for a manure storage structure regardless of farm size
- Most apply ATCP 51 storage facility standards and require a nutrient management plan
- Some go further and require a permitted winter manure spreading plan

Manure Storage Ordinances: Winter Spreading Requirements



A few counties regulate the spreading of manure through permits and restrictions in high risk conditions such as winter.



Winter Spreading Regulation

- Requirements Incorporated Into Manure Storage Ordinance
- Requirements Incorporated Into Other Ordinances
- No Winter Spreading Requirements
- No Manure Storage Ordinance



Map Updated: 11/20/2007