

# Wisconsin's Improving Nutrient Management

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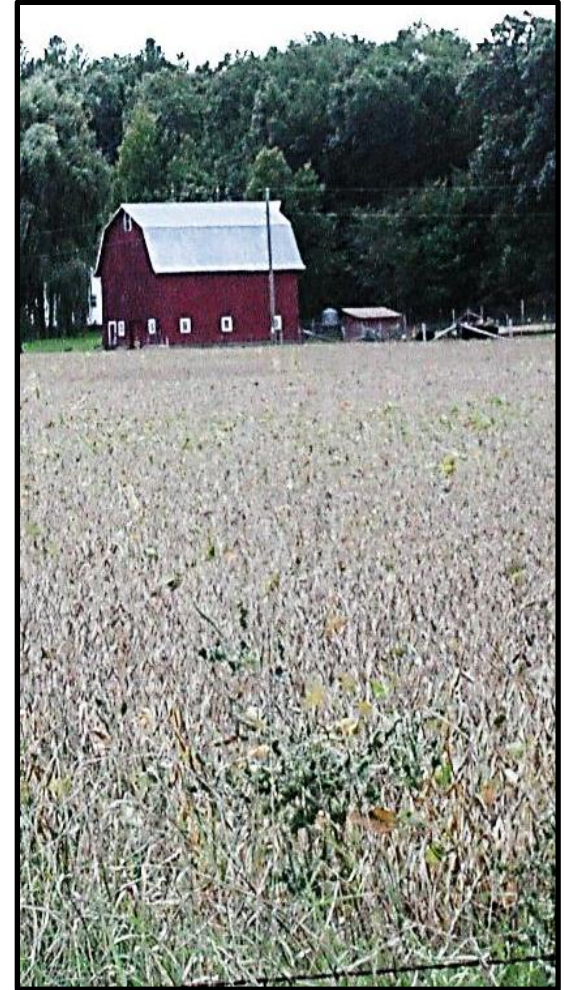
608-224-4605

WI Dept. of Agriculture, Trade and  
Consumer Protection

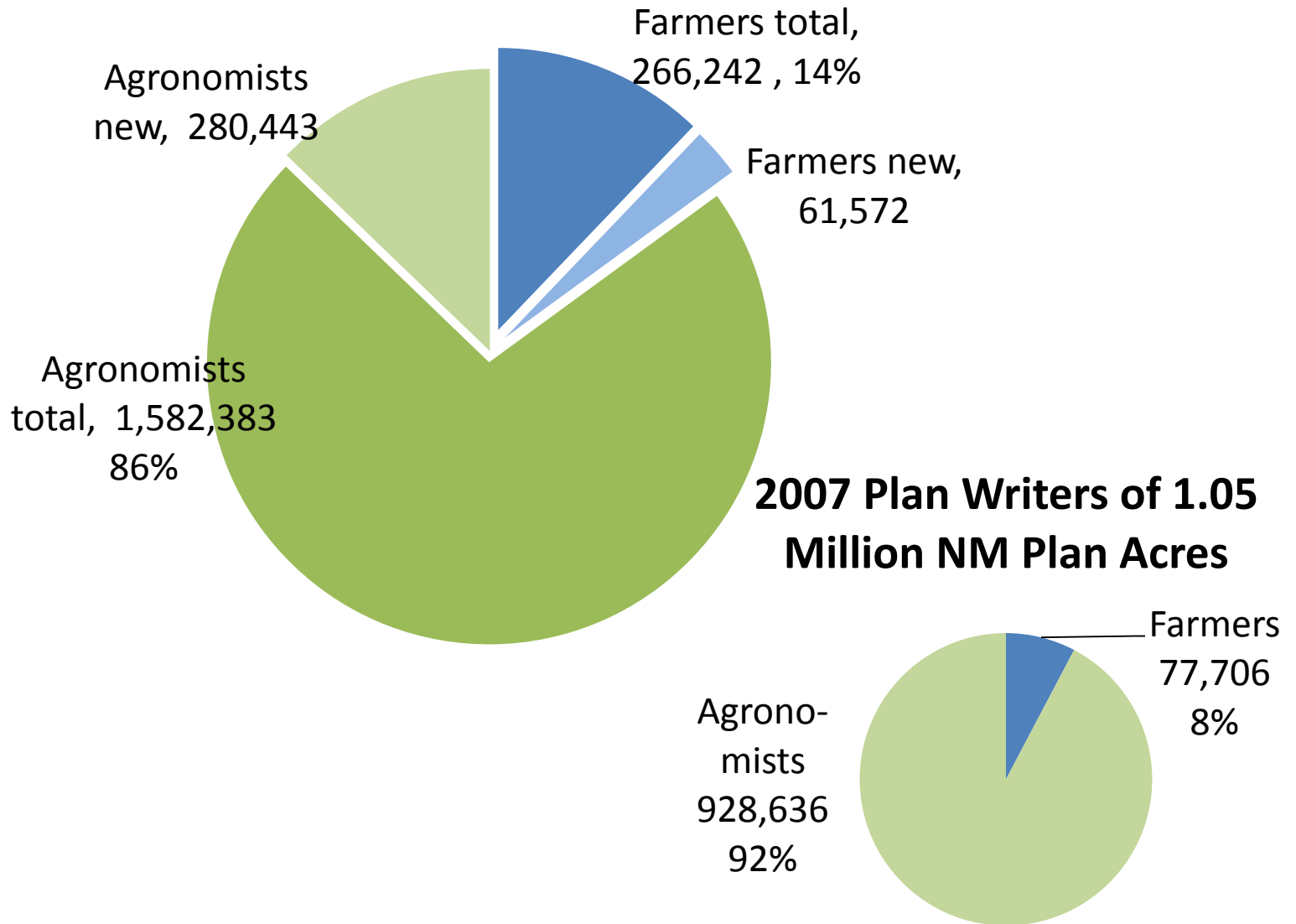


# 2011 NM Highlights

- 1.8 M acres planned in 2011 up 23%
- 238 more farmers wrote their own plans in 2011 than in 2010
- We reviewed 65 plans on more than 50,000 acres:
  - 56 used Snap Plus (86%)
  - 12 plans were farmer written and only 4 did not use Snap Plus
  - 11 plans were written by agronomists that were reviewed previously and most showed improvements

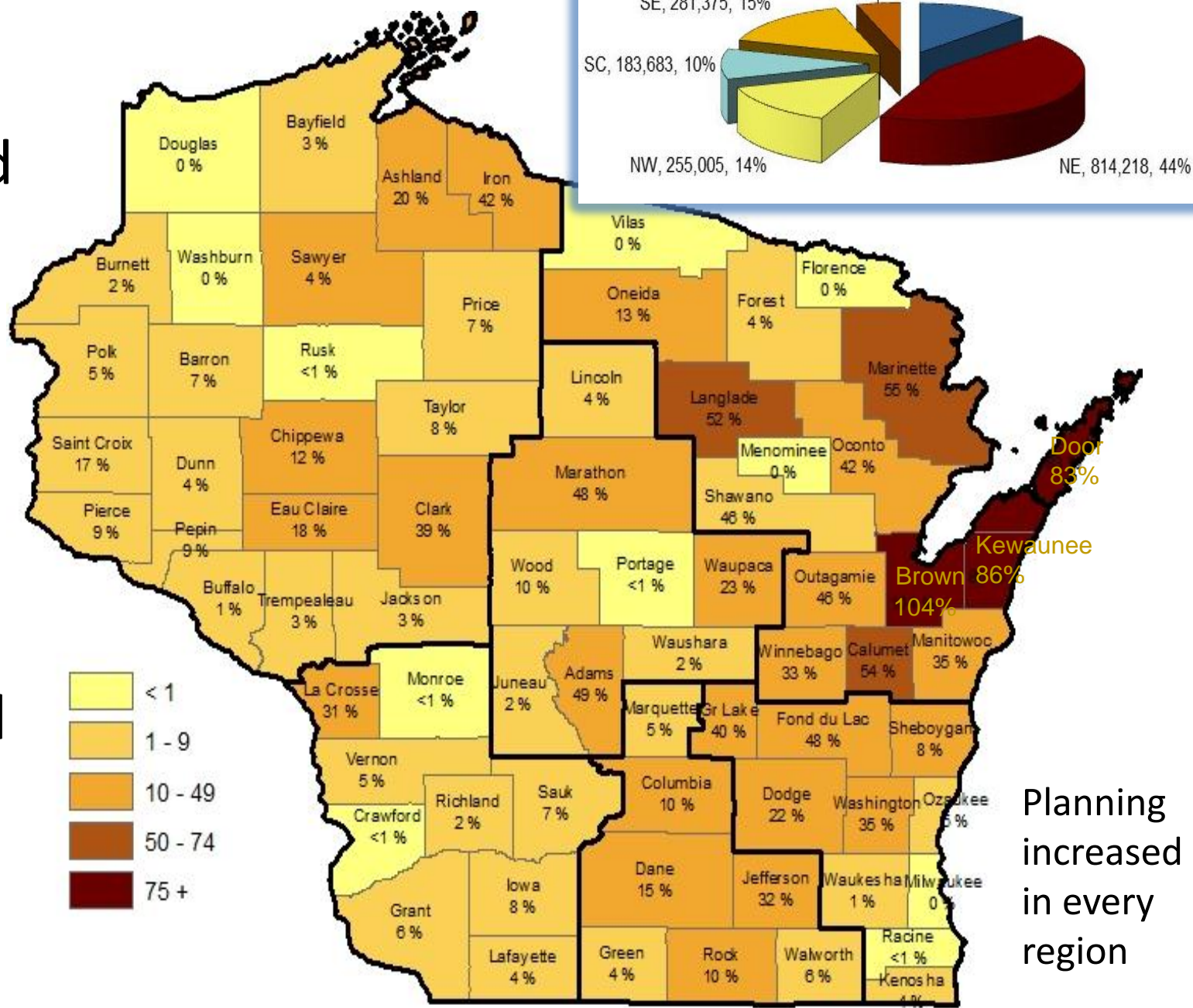


# 2011 NM Plan Writers & Acres



21% of  
WI's  
Cropland  
with NM  
plans

1.8  
million  
acres  
reported  
in 2011



Planning  
increased  
in every  
region

# A WI Nutrient Management Plan is Updated Annually

Follows NRCS 590 standard

Soil tested by a DATCP certified lab every 4 years every 5 acres

Accounts for all N-P-K applied to fields each year of the crop rotation

**Farms can be required to follow a NM Plan with a \$28/ac cost share offer or when:**

- Regulated under a **County Ordinance** for manure storage or livestock siting
- Participating in a **Farmland Preservation Zoned District** or **AEA**
- Regulated under a DNR **WPDES** permit
- Causing a **pollution discharge** to waters of the state



# How do you manage your data?

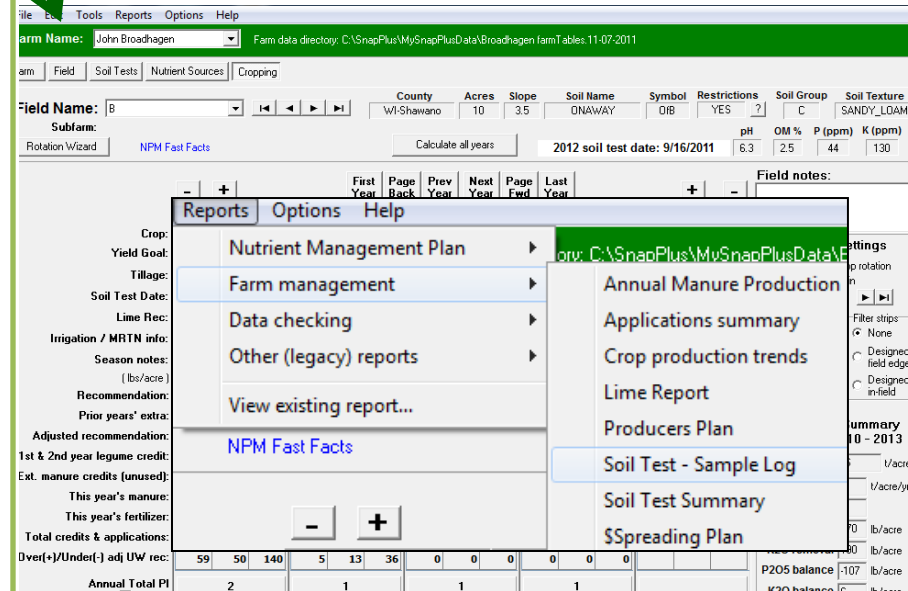
- Do you notice where you store your files?

**Your file's location is on the GREEN stripe on every page in Snap Plus**

- Are you using the current 1.132.8 version of Snap Plus?
  - First stages of tying the map to the database to check spreading restrictions against applications
  - Clone and split fields
  - Combine fields using soil test import file & edit field numbers for each samples
  - Old versions will not transfer into Ver. 2 **update today**



[www.snapplus.net](http://www.snapplus.net)



# Developing or Reviewing Plans in Snap Plus

File Edit Tools Reports Options Help

**Farm Name:** Training Farm Farm data

Farm **Field** Soil Test [Go to soil and restriction maps website](#)

Soil Map Symbol	Soil Series Name	Restriction Features	Field Slope (%)	Field Slope Length (ft)	Below Field Slope to Water (%)	Distance to Perennial Water (ft)
ChB	CHASEBURG		4	200	0 - 2	0 - 300

**Spreading Restriction Features**

**Spreading Restriction Features for Field K01**

**Note:** If any part of the field has an N restricted soil or is in a SWQMA, then it should be marked as such below.

**Fall N Restriction**

Soil type for N restrictions: BrA

N Restriction code for selected soil: P [N Restriction definitions](#)

**Field Restrictions**

☒ Field in SWQMA

☐ Drinking water well within 50 ft of field edge

☐ Local prohibitions for winter applications

☐ Slope restriction for winter applications

**Conduits to groundwater within 200 feet downslope of field**

☐ Sinkholes ☐ Fractured bedrock at surface

☐ Tile inlets ☐ Well

☐ Other direct conduit to groundwater

ARM-LWR-479 (08/10)

Wisconsin Department of Agriculture, Trade & Consumer Protection  
Division of Agricultural Resource Management  
Bureau of Land and Water Resources  
PO Box 8911, Madison WI 53708-8911, Phone: 608-224-4605

**Nutrient Management Plan Review**

ATCP 50.04(3) Wis. Admin. Code

Sec. 92.05(3)(k), Wis. Stats.

This form and Snap Plus software are used to review nutrient management (NM) plans for compliance with the NRCS 590 Standard (Soil Conservation Service). The reviewer will underline any item that is lacking in the second column and may provide more information in the last column. To improve future plans, copies of this review may be provided to the farmer, planner, and local conservation staff.

(please type or print)

Review date: \_\_\_\_\_ Reviewer Name: \_\_\_\_\_ NM Plan's Crop Year \_\_\_\_\_ County: \_\_\_\_\_

Planner Name: \_\_\_\_\_ Planner Address: \_\_\_\_\_

Farmer Name: \_\_\_\_\_ Farmer Address: \_\_\_\_\_

Does the NM plan have:	How to Check Using Snap Plus v 1.132	Yes	No	Comments
1. A Snap Plus database	Plan Name: (underline plan problem) Open unzipped database in Snap Plus with File then Open. Browse for the file.			
2. Consistent field boundaries, numbering, and acres, adjusted slope & distance to water not "Missing", correct identification of soil type and application restrictions for all fields properly explained & mapped on	Compare map features to the Field Screen. Correct any soil type that does not reflect the steepest soil that covers 10% or more of the field. Correct any soil type's slope that is not consistent with the dominant critical series slope range. Make a note of which fields were changed then run <i>Field Data &amp; 590 Assessment Report</i> see columns: Field Name and Acres, Soil series & map symbol, Below Field Slope To Water (%), Distance To Water (ft), N and Field Restrictions.			

- Link to restriction maps and restrictions for each field
- Select the field's dominant critical soil type covering 10% or more of the field.
- Below Field Slope and Distance to Water follow the soil types from edge of field down hill to solid blue line

Orange

# Flags

Red

Click on flags

**Field: 24**      **Acres: 12**  
**Year: 2010**

**Field Application Restrictions:** N Winter Slope S  
**Manure / Biosolid Applications**

Add nutrient app    Delete nutrient app    Crop Year: Fall 2009 - Summer 2010

Season	Source name	Spread method	Rate	Unit
Winter	dairy slurry	Unincorporated	5000.0	Gal

Field Name: C    County: WI-Shawano    Acres: 11.2    Slope: 10.5    Soil Name: FAIRPORT    Symbol: FpC    Restrictions: YES    Soil Group: C    Soil Texture: SANDY\_LOAM

Subfarm:    pH: 6.6    OM %: 2.3    P (ppm): 86    K (ppm): 157

Rotation Wizard    NPM Fast Facts    Calculate all years    2012 soil test date: 9/16/2011

	2010	2011	2012	2013	2014
Crop:	Corn grain	Soybeans 15-20 inch	Corn grain	Corn grain	Corn grain
Yield Goal:	131-150	36-45	131-150	131-150	131-150
Tillage:	Spring Chisel, no disk	No Till	Spring Chisel, no disk	Spring Chisel, no disk	No Till
Soil Test Date:	9/16/2011	9/16/2011	9/16/2011	9/16/2011	9/16/2011
Lime Rec:	NA	NA	0	0	0
Irrigation / MRTN info:	<input type="checkbox"/> Irrigated 0.05/MRTN	<input type="checkbox"/> Irrigated	<input type="checkbox"/> Irrigated 0.05/MRTN	<input type="checkbox"/> Irrigated 0.05/MRTN	<input type="checkbox"/> Irrigated 0.05/MRTN
Season notes:					
(lbs/acre)					
Recommendation:	N 120 P205 0 K20 0	N 0 P205 0 K20 0	N 110 P205 0 K20 0	N 125 P205 0 K20 0	N 125 P205 0 K20 0
Prior years' extra:	0 0 0	50 160	63 196	63 196	63 196
Adjusted recommendation:	120 0 0	0 0 0	110 0 0	125 0 0	125 0 0
1st & 2nd year legume credit:	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Ext. manure credits (unused):	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
This year's manure:	100 50 160	0 0 0	0 0 0	0 0 0	0 0 0
This year's fertilizer:	79 0 0	5 13 36	110 0 0	110 0 0	0 0 0
Total credits & applications:	179 50 160	5 13 36	110 0 0	110 0 0	0 0 0
Over(+)/Under(-) adj UW rec:	59 50 160	5 13 36	0 0 0	-15 0 0	-125 0 0
Annual Total PI	3	3	5	3	

Field notes:

**Rotation Settings**

4 year crop rotation starting in 2010

Contouring: ☒ None    Filter strips: ☒ None

☐ On contour    ☐ Designed, field edge

☐ Strip cropping    ☐ Designed, in-field

**Rotation Summary Results 2010 - 2013**

Avg soil loss: 4.1 t/acre/yr

Field "T": 2 t/acre/yr

Avg P Index: 3

P205 removal: 195 lb/acre

K20 removal: 175 lb/acre

P205 balance: -132 lb/acre

K20 balance: 21 lb/acre

Soil test P is greater than 50 ppm so P205 balance should be less than zero lb/acre.

To see why

Unincorporated or grazing applications upslope of conduits to groundwater: sinkhole, fractured bedrock. Slope must be less than 12% for winter spreading with contouring.

Please explain non-compliant applications:

Explanations show on the "Compliance Check Report"

# Nitrogen and Soil Loss Flags

1. Flags red if fields exceed T over rotation

2. Flags excess annual N application

- “Over application of manure or fertilizer N of XXX lbs N/acre.”

- “This field has fall or late summer N applications in excess of what is allowed for soils with a high N leaching potential.”

arm Field Soil Tests Nutrient Sources Cropping

Field Name: C County: WI-Shawano Acres: 11.2 Slope: 10.5 Soil Name: FAIRPORT Symbol: FpC Restrictions: YES ? Soil Group: C Soil Texture: SANDY\_LOAM

Subfarm: Rotation Wizard NPM Fast Facts Calculate all years 2012 soil test date: 9/16/2011 pH: 6.6 OM %: 2.3 P (ppm): 86 K (ppm): 157

	2010	2011	2012	2013	2014
Crop:	Corn grain	Soybeans 15-20 inch	Corn grain	Corn grain	Corn grain
Yield Goal:	131-150	36-45	131-150	131-150	131-150
Tillage:	Spring Chisel, no disk	No Till	Spring Chisel, no disk	Spring Chisel, no disk	No Till
Soil Test Date:	9/16/2011	9/16/2011	9/16/2011	9/16/2011	9/16/2011
Lime Rec:	NA	NA	0	0	0
Irrigation / MRTN info:	<input type="checkbox"/> Irrigated 0.05/MRTN	<input type="checkbox"/> Irrigated	<input type="checkbox"/> Irrigated 0.05/MRTN	<input type="checkbox"/> Irrigated 0.05/MRTN	<input type="checkbox"/> Irrigated 0.05/MRTN
Season notes:					
(lbs/acre)	N P205 K20	N P205 K20	N P205 K20	N P205 K20	N P205 K20
Recommendation:	120 0 0	0 0 0	110 0 0	125 0 0	125 0 0
Prior years' extra:	0 0 0	50 160	63 196	63 196	63 196
Adjusted recommendation:	120 0 0	0 0 0	110 0 0	125 0 0	125 0 0
1st & 2nd year legume credit:	0	0	0	0	0
Ext. manure credits (unused):	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
This year's manure:	100 50 160	0 0 0	0 0 0	0 0 0	0 0 0
This year's fertilizer:	79 0 0	5 13 36	110 0 0	110 0 0	110 0 0
Total credits & applications:	179 50 160	5 13 36	110 0 0	110 0 0	110 0 0
Over(+)/Under(-) adj UW rec:	59 50 160	5 13 36	0 0 0	-15 0 0	-125 0 0
Annual Total PI	3	3	5	3	

Field notes:

Rotation Settings

4 year crop rotation starting in 2010

Contouring: ☐ None ☐ On contour ☐ Strip cropping

Filter strips: ☐ None ☐ Designed, field edge ☐ Designed, in-field

Rotation Summary Results 2010 - 2013

Avg soil loss 4.1 t/acre

Field "T" 2 t/acre/yr

Avg P Index 3

P205 removal 195 lb/acre

K20 removal 175 lb/acre

P205 balance -132 lb/acre

K20 balance 21 lb/acre

Soil test P is greater than 50 ppm so P205 balance should be less than zero lb/acre.



# Well Flags

Identify wells on the restriction map Field Screen's **Restriction Features**:

1. Flags for **mechanical manure** applications within 50 feet of drinking water wells
2. Flags unincorporated **solid N fertilizer manure** or **grazing** applications upslope conduits to groundwater

**Liquid N commercial fertilizer** applications within 200' of groundwater conduit **will not Flag** in Snap Plus. These applications are considered **effectively incorporated through infiltration** regardless of spread method.

**590 Definition of Effectively Incorporated** means mixing with the topsoil or residue or subsurface placement of nutrients with topsoil by such means as injector, disc, sweep, mold-board plow, chisel plow, or other tillage/infiltration methods. Nutrients will not run off the field or drain to subsurface tiles during application.

**590 Gleaning / Pasturing definition** says...Manure deposited near a well by grazing of livestock **does not require incorporation**.

**590 A.2. a.(3)** The area within 50 feet of a potable drinking water well shall not receive **mechanical** applications of manure.

## Field Restrictions

- ☐ Field in SWQMA
- ☐ Drinking water well within 50 ft of field edge
- ☐ Local prohibitions for winter applications
- ☐ Slope restriction for winter applications

## Conduits to groundwater within 200 feet downslope of field

- ☐ Sinkholes
- ☐ Fractured bedrock at surface
- ☐ Tile inlets
- ☒ Well
- ☐ Other direct conduit to groundwater

# Commercial P Fertilizer Flags

Flags **commercial P2O5** if the total P2O5 Rec. for the rotation has already been applied.

Only corn  
can get 20 lbs.  
P2O5/ac if  
0 lbs.  
Recommended

2010	2011			2012			2013			2014		
<input type="text" value="Soybeans 15-20 inch"/>	<input type="text" value="Soybeans 15-20 inch"/>			<input type="text" value="Corn grain"/>			<input type="text" value="Corn grain"/>			<input type="text" value="Corn grain"/>		
<input type="text" value="36-45"/>	<input type="text" value="36-45"/>			<input type="text" value="131-150"/>			<input type="text" value="131-150"/>			<input type="text" value="131-150"/>		
<input type="text" value="el, no disk"/>	<input type="text" value="No Till"/>			<input type="text" value="Spring Chisel, no disk"/>			<input type="text" value="Spring Chisel, no disk"/>			<input type="text" value="No Till"/>		
<input type="text" value="9/16/2011"/>	<input type="text" value="9/16/2011"/>			<input type="text" value="9/16/2011"/>			<input type="text" value="9/16/2011"/>			<input type="text" value="9/16/2011"/>		
NA	NA			0			0			0		
<input type="checkbox"/> 0.05/MRTN	<input type="checkbox"/> Irrigated			<input type="checkbox"/> Irrigated			<input type="checkbox"/> Irrigated			<input type="checkbox"/> Irrigated		
205 K20	N	P205	K20	N	P205	K20	N	P205	K20	N	P205	K20
0 0	0	0	0	110	0	0	125	0	0	125	0	0
0 0		50	160		63	196		63	196		63	196
0 0	0	0	0	110	0	0	125	0	0	125	0	0
	0			0			0			0		
0 0	0	0	0	0	0	0	0	0	0	0	0	0
50 160	0	0	0	0	0	0	0	0	0	0	0	0
0 0	5	13	36	110	0	0	110	0	0	0	0	0
50 160	5	13	36	110	0	0	110	0	0	0	0	0
50 160	5	13	36	0	0	0	-15	0	0	-125	0	0

# Winter Flags

## Flags for applications on frozen & snow covered ground

### Field Restrictions

- ☐ Field in SWQMA
- ☐ Drinking water well within 50 ft of field edge
- ☐ Local prohibitions for winter applications
- ☐ Slope restriction for winter applications



**Planners should identify safe places to go with manure in the winter and summer that will not exceed restrictions**

Winter Grazing in SWQMA will not flag 590 A.2. b.(1) Do not apply nutrients within the SWQMA except for manure deposited through winter gleaning/pasturing of plant residue.

- Winter **mechanical** applications within **SWQMA**
- **Local** areas delineated in a conservation plan as contributing nutrients to **direct conduits to ground water or surface water** as a result of runoff.
- On **slopes** from 9% to 12% that are not contoured or contour strip cropped.
- Winter **manure rates**
  - P2O5 applications must be less than crop removal.
  - liquid manure rate must be less than 7000 gallons/acre.

# non-frozen SWQMA Flags



For all nutrient applications on non-frozen soil within a SWQMA use 1 or more practices:

- permanent buffer.
- >30% crop cover after application
- Incorporate nutrients within 72 hrs
- Est. cover crops after application

1. Flags **unincorporated liquid manure** rate is higher than 590:

- Potential excess rate for single application without incorporation in SWQMA. Calculate soil loss to get better information.

2. Flags **unincorporated manure or N or P2O5 fertilizer** applications:

- Calculate soil loss
- Inadequate runoff management flag “Field has at least one unincorporated application with no filter strip and inadequate surface residue or canopy cover.”

**Snap checks SWQMA practices and RUSLE2 for > 30% cover**

# 2011 NM plan review

65 plans on 50,310 acres

## Does the NM plan have properly tested soil?

42% (27 of 65) soil tested every 4 year  
every 5 acres up 23%, most improved



## Does the NM plan have the correct soil type?

65% (42 of 65) NM plans used the  
“**Dominant Critical Soil**” type on all  
fields, most erosive soil that covers  
10% or more of the field up 32%

**48 plans 28,423 acres in 2010**

most problematic issues

- 19% Properly soil testing
- 33% Identifying the dominant critical soil

most improvement

- Nutrient spreading restrictions

# Does the NM plan have the correct soil type and meet T?

**66%** (43 of 65) had every field meeting **tolerable soil loss (T)** for sheet and rill erosion up 12%

*Field Data and 590 Assessment Plan Report shows P target, P balance, soil loss....*

## Does the NM plan have protected concentrated flow areas?

**38%** (25 of 65) had established grassed waterways protecting areas of **concentrated flow** with perennial cover where nutrients are not applied, most problematic issue

*Narrative and Crops Report shows narrative, planned crops, and yields for rotation*

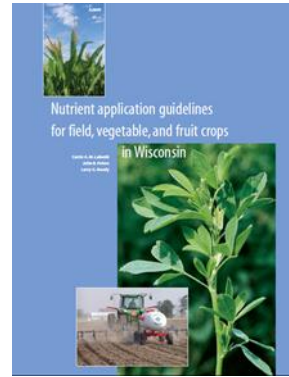
*Use the narrative to explain compliance issues and when they will be resolved.*

# Does the NM plan have enough land for all the phosphorus & follow N recs?

69% (45 of 65) followed UW N recs for every field

48% (31 of 65) accounting for all the manure produced annually & P fertilizer necessary for the crop rotation

***Compliance Check Report** shows both the Soil Test P option and the P Index. Cropping Screen tracks soil-banked P & K in years between soil tests.*



## Does the NM plan have a spreader calibration?

55% (36 of 65) used **calibrated** manure applications, up 20%

***Manure Tracking Report** shows annual manure: production, use by source, livestock numbers, storage capacity, and spreader calibrations.*



# Does the NM plan have correct application restrictions?

**O** 200' setback from wells, sinkholes, fractured bedrock at the surface - nutrient applications must be incorporated within 72 hours.

**Blue** No winter apps 300' from perennial streams, 1,000' from lake and ponds. Other non-winter application restrictions required.

**Red** No winter apps.

**Pink** and **clear** can have winter manure apps if contoured or if slopes are 9% or less. Winter manure apps can not exceed 7,000 gals/acre or P removal of the crop.

**Yellow Dots** No fall apps of fertilizer N. Fall manure apps limited. Best to Spring apply.

## % meeting nutrient spreading restrictions

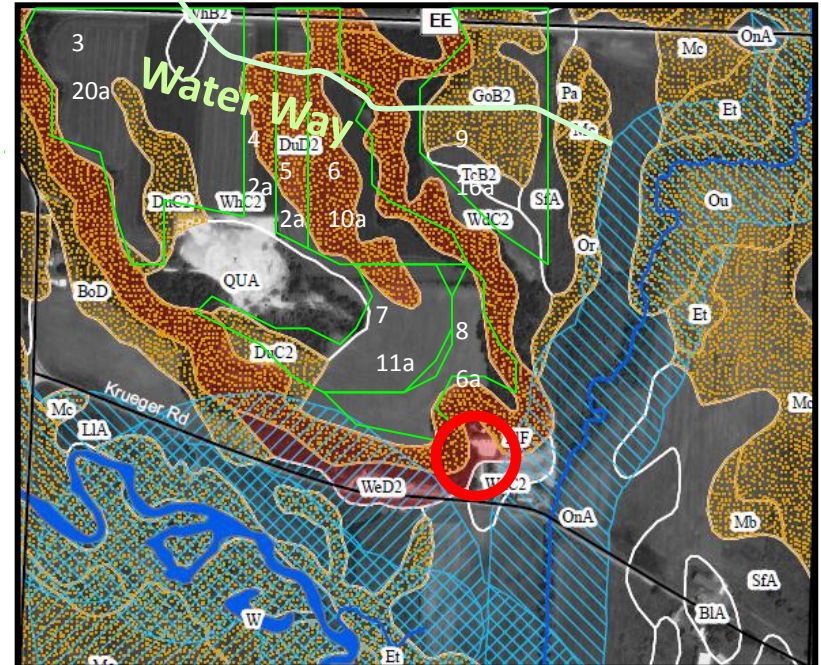
**89% (58 of 65) surface water**

**82% (53 of 65) N soils**

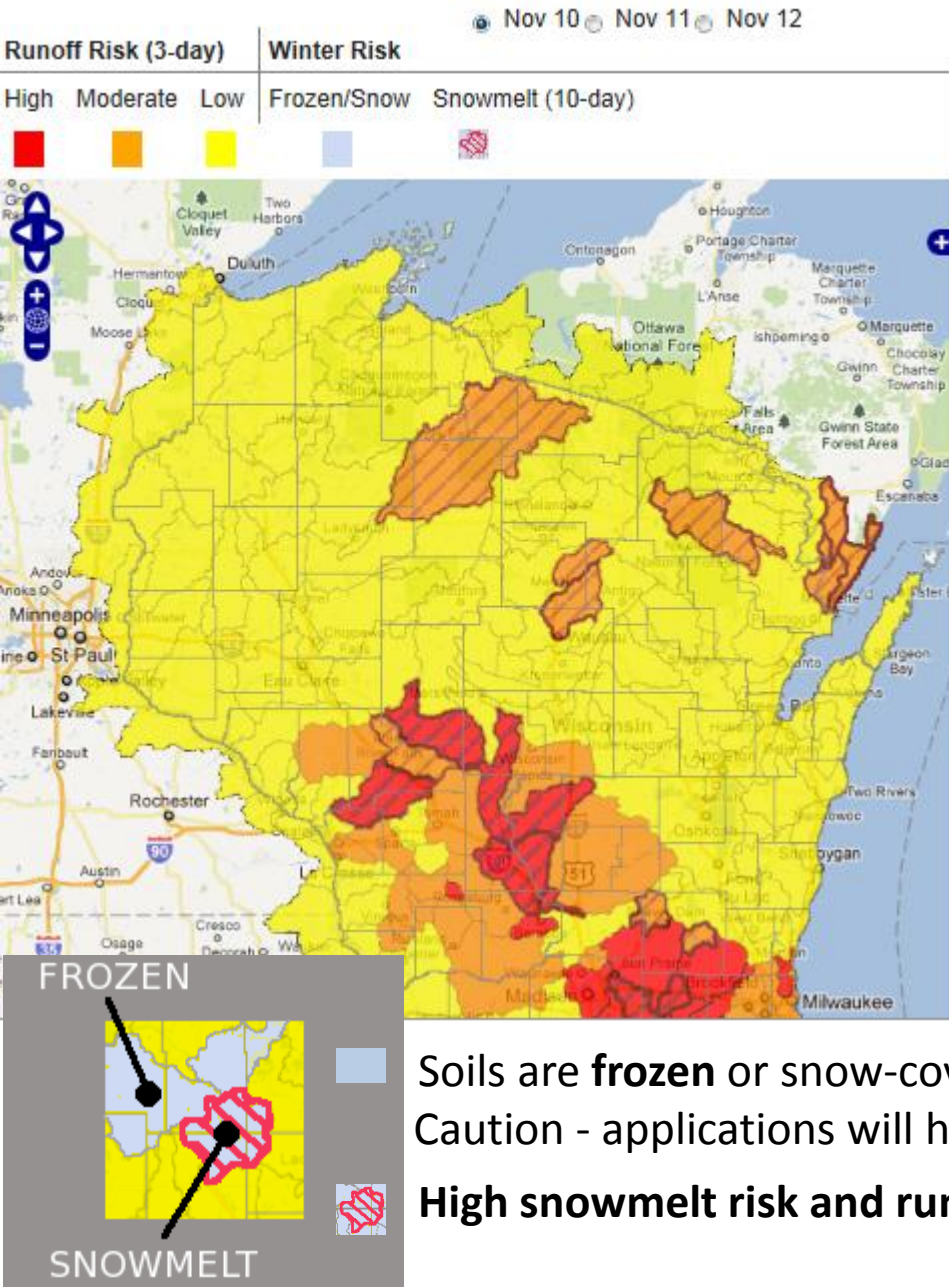
**75% (49 of 65) winter spreading**

**62% (40 of 65) wells**

***Compliance Check Report shows orange & Red application flags***



# www.manureadvisorysystem.wi.gov



**Runoff Risk Advisory Forecast Maps** from National Weather Service's flood forecasting

**Assess the risk for each field before an application,** fields can be saturated and still have a low risk of runoff if no rainfall is predicted

**Liquid manure applications increase soil moisture** so runoff risk of liquid manure will be higher than what is shown on the risk map

## Winter Runoff Risk

Soils are **frozen** or snow-covered and not yet forecasted for runoff. Caution - applications will have limited soil contact and infiltration.

**High snowmelt risk and runoff** is predicted within 10 days

# 2011 Farmland Preservation

protecting water resources & soil productivity

**Working Lands Initiative** Started July 1, 2009

\$27M to WI farmers **decreasing tax due or increasing tax refund** in exchange for keeping land in AG use and complying with soil and water conservation requirements

**\$7.50/acre** in a Certified farmland preservation zoning district

**\$5.00/acre** if farmland preservation agreement in Agricultural Enterprise Area AEA (15 year agreements)

**\$10.00/acre** if agreement in AEA and zoning



*Wisconsin farmland preservation credit*

*Schedule FC and instructions*

*2011*

## **Farmers with a Farmland Preservation Agreement Prior to July 1, 2009**

- Use WI Income Tax Schedule FC with pre-tax year 2010 formula
- 3,500 farms covered by old farmland preservation agreements currently in effect ~6000 farms claimed with this 2010 form
- Attach the agreement
- A **Certificate of Compliance** is not required for old agreements

# **FC-A** *Wisconsin farmland preservation credit*

***Schedule FC-A and instructions 2011***

## **Farmland Preservation Zoning Districts & New or Modified agreements 2010 tax year or later**

- Use WI Income Tax Schedule FC-A
- No more zoning certificates
- Eligible for \$5.00/ac/year with a new or modified agreement
  - DATCP has modified ~ 50 agreements
- Eligible for \$7.50/ac/year on all land zoned for Farmland Preservation in a certified ordinance
  - Cropland, pastureland, farmstead, woodland, wetland etc....
- Include a Certificate of Compliance

# **FC-A** *Wisconsin farmland preservation credit*

**Schedule FC-A and instructions 2011**

## **Farmland Preservation Zoning Districts & New or Modified agreements 2010 tax year or later**

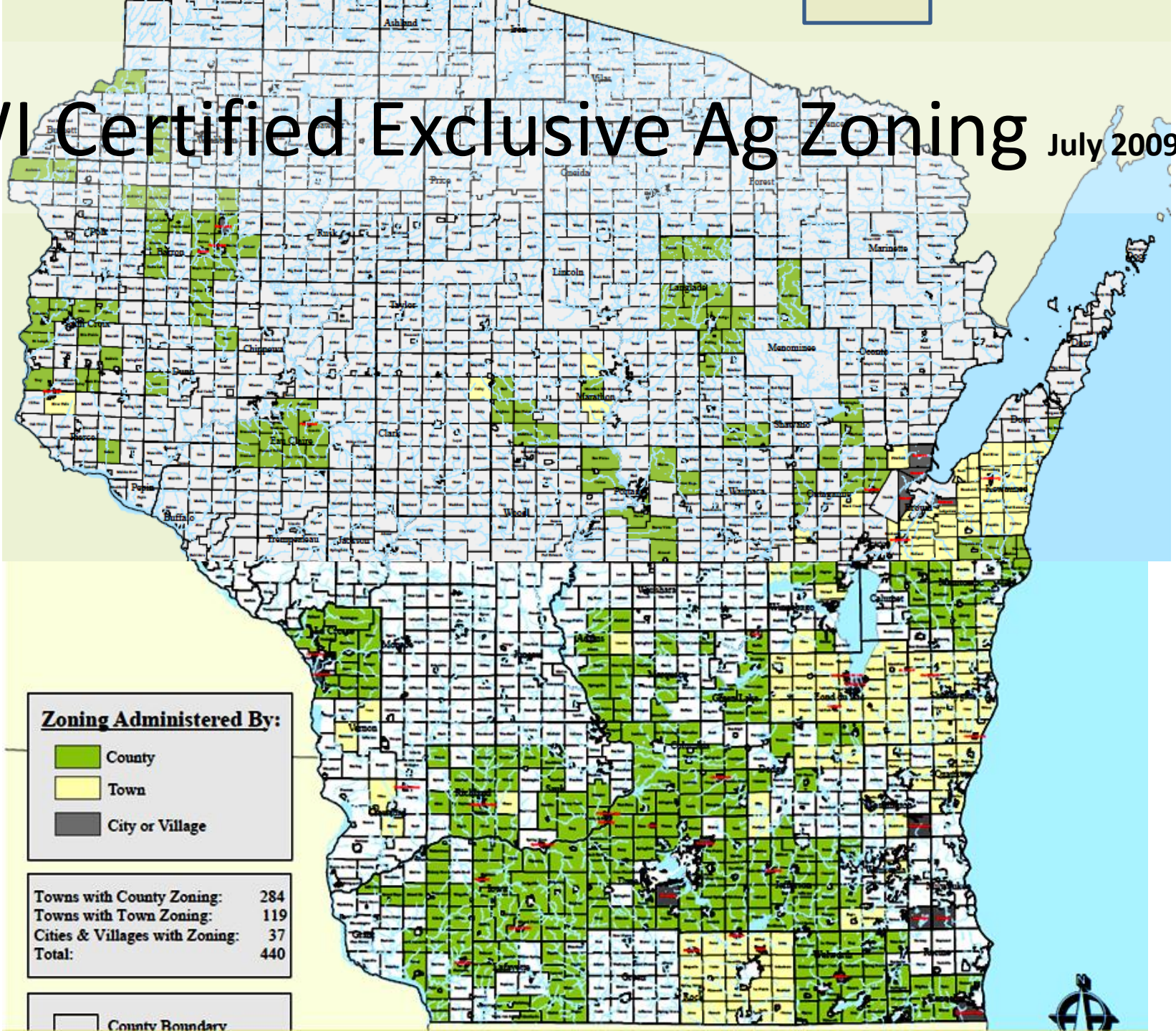
farmers that did not collect a farmland preservation tax credit in the previous year:

- **Must obtain a Certificate of Compliance** from the County Land Conservation Committee showing compliance with the state agricultural performance standards under NR 151 & ATCP 50
- **Include with the tax return**

farmers that did collect a tax credit without a Certificate of Compliance in the previous year:

- **Must obtain a Schedule of Compliance** that enables claimants to comply with state conservation standards by a specific deadline set by the county before 2016

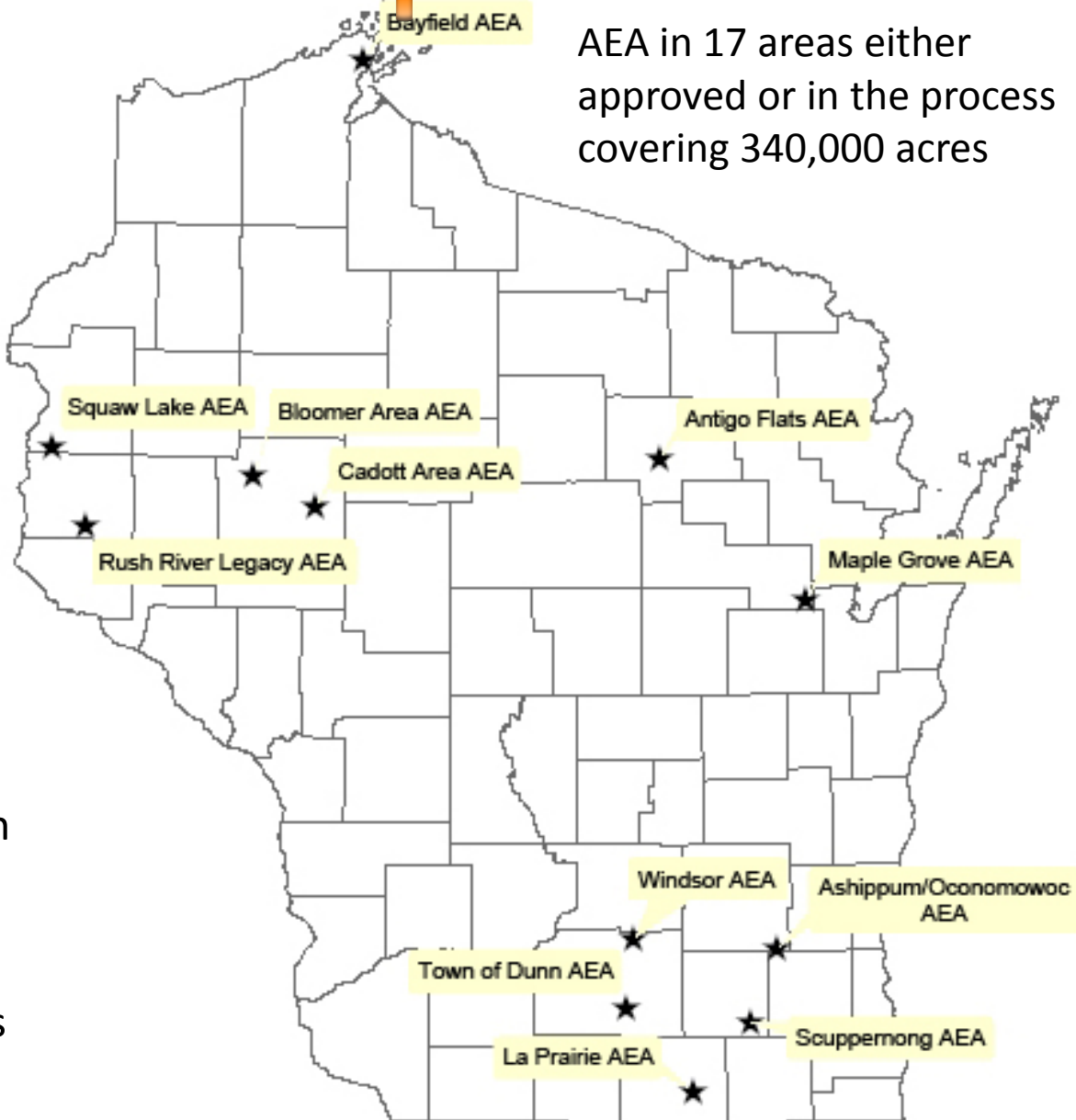
# WI Certified Exclusive Ag Zoning July 2009



# Agricultural Enterprise Areas

- Locally targeted for agricultural use and preservation
- After July 1, 2009 FPP agreements must be 15 years & within an approved AEA  
*agreements will bring 28,000 acres into conservation compliance*
- Petitioners to DATCP from at least 5 eligible farm owners located in a contiguous area primarily in agricultural use
- State designates, through Administrative Rule process

AEA in 17 areas either approved or in the process covering 340,000 acres



# Existing WI Agricultural Performance Standards

counties will monitor compliance and may suspend eligibility for tax credits

- **Meet tolerable soil loss (T)** on cropped fields
- **Follow 590 NM plan technical standard**
- **Prevent direct runoff from feedlots** or stored manure to waters of the state
- **Limit livestock access** along waters to maintain vegetative cover
- **Maintain manure storage** structures to prevent leaking and overflow
- **Follow manure storage technical standards** for constructing and abandoning

Near surface water or  
areas susceptible to groundwater contamination

- **Do not stack** manure in an unconfined pile
- **Divert clean water** away from feedlots, manure storage, and barnyards

# When is NM Required on Pastures?

1. If the pasture has mechanical nutrient applications
2. If the pasture in a SWQMA is winter grazed

*ATCP 50(ATCP 50.04(3)): Follow 590 where nutrients are mechanically applied.*

*NRCS 590 Std. (A.2.b.(1) page3&4): Prohibits applications in winter next to surface water – EXCEPT when grazing in the SWQMA and the field is included in the NM plan.*

*(A.1.m. page 3) Where pasturing occurs, verify through computations that the nutrients...do not exceed the N and P requirements of 590.*

# Code Revision to ATCP 50

If the PI is not available for:

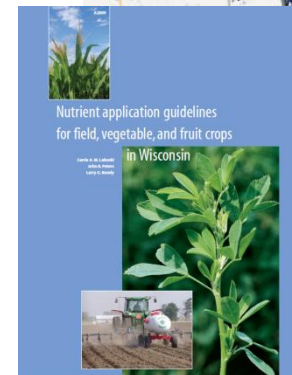
- some soils
- fruit crops like cranberries and others
- some vegetable crop sequences
- crops without a RUSLE2 soil loss estimate
- crops without a UW soil test recommendation



Wisconsin Cranberries



*590 currently requires fields with only commercial fertilizer applications to follow UW soil test recommendations. The P Index or soil test P options are currently only used where manure or other organic by-products are applied. Concentrated animal feeding operations (CAFO) allow the use of either option; and in some instances when soil test P levels are above 100 PPM P, both the PI & soil test P are used.*



# NM Plans Then and Now

**1997** WI's legislature amended Statute 281.16 & 92 requiring NM

**2002** NR 151 /ATCP 50 passed NM requirements


**2005** 590 Std. updated - P management

**2008** P management could be required

**2009** - New Farmland Preservation Program \$7.50/ac/yr EX-Ag zoning, Application Restriction maps available for all WI

**2010** QAT tests beta ver. Snap Plus with restriction features/reports to help planners meet 590

**2011** 1st crop year with Snap Plus 1.132. restriction flagging and new interactive web restriction maps

A photograph of several cows grazing in a lush green field. In the foreground, a light-colored cow with a red ear tag labeled '280' is looking towards the camera. Behind it, a brown cow is also visible. To the right, a white cow with a red ear tag is partially visible. The background shows a line of trees and a clear sky.

## Impressive improvements in NM planning

- Thanks to UW Snap Plus developers for improvements to help with 590 compliance
- Thanks to the agronomists and trainers for helping more farmers get better plans every year