



Conservation Compliance Requirements

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2025

YOU HAVE A NUTRIENT MANAGEMENT PLAN...WHAT DOES THAT MEAN?

Agreeing to meet certain conservation standards.

- Meet tolerable soil loss on each field (minimize erosion)
- Maintain an average Phosphorus Index of 6 or less on each field (Reduce potential of phosphorus reaching surface waters)
- Follow UW fertility recommendations
- Follow requirements for surface and groundwater protection
 - Manure application prohibited areas





SnapPlus

Wisconsin's Nutrient Management Software

snapplus.wisc.edu

CALCULATIONS WITHIN SNAPPLUS:

UNDERSTANDING THE EQUATIONS RUNNING BEHIND THE SCENES IN SNAPPLUS



RUSLE 2

Revised Universal Soil Loss Equation 2

Daily time-step version of USLE

Erosion ton/acre/yr = R x K x LS x C x P

- **R= Erosivity**
- **K= Soil erodibility**
- **LS = Slope % and length**
- **C = Crop and tillage (management)**
- **P= Practices (e.g. contouring, terraces)**



WHAT GOES INTO THE C FACTOR?



- Canopy cover (*vegetation that intercepts raindrops*)
- Ground cover (*reduces waterdrop impact and runoff*)
- Surface roughness (*increasing infiltration, deposition, slows runoff*)
- Ridge height (*ridges parallel to flow lead erosion, cross flow increase deposition*)
- Soil biomass (*live and dead roots, buried residue*)
- Soil consolidation (*soil becomes less erodible over time after disturbance*)
- Tillage (*frequency and amount of soil disturbance*)
- % Surface disturbance (*more disturbance greater chance for erosion*)



T=TOLERABLE SOIL LOSS:

- Manage on-farm soil erosion
 - Help reduce soil loss to tolerable levels (T)
 - T=Tolerable Soil Loss
 - T levels are based on soil type
 - Range from 1-5 tons/acre/year

Dominant critical soil details:
Name: Kewaunee
Symbol: KnB Slope: 4.0
Texture: Silt Loam

Rotation Settings
Start 2021 Years 5

Contouring
 None
 On contour
 Strip crop

Filter Area
 None
 Designed, field edge
 Designed, in field

Summary 2021 to 2025
Avg soil loss 4.1 t/ac/yr
Field "T" 3 t/ac/yr
Avg P Index 4 SCI 0.2

	P205	K20	
Removal	305	305	lb/ac
Balance	-177	-56	lb/ac

Soil test P is 50 or less so no P205 balance target is needed.



WHAT CAN WE DO TO MEET T?

Alter Crop Rotations

Increase years of perennial crops

Increase years with cover crops

Reduce years of biomass/residue removal

Improve crop/residue production

Change Tillage Practices

Eliminate tillage

Reduce intensity of tillage practices

Eliminate fall tillage where no manure

Reduce total number of passes

Use Conservation Practices

Strip Cropping

Contour Farming

Vegetative strips/buffers

Hard Practices



PHOSPHORUS (P) INDEX

- Estimate the average amount of phosphorus delivered to surface water through runoff and erosion (lbs/A/yr)

Dominant critical soil details:
Name: Kewaunee
Symbol: KnB Slope: 4.0
Texture: Silt Loam

Rotation Settings
Start 2021 Years 5

Contouring
 None
 On contour
 Strip crop

Filter Area
 None
 Designed, field edge
 Designed, in field

Summary 2021 to 2025

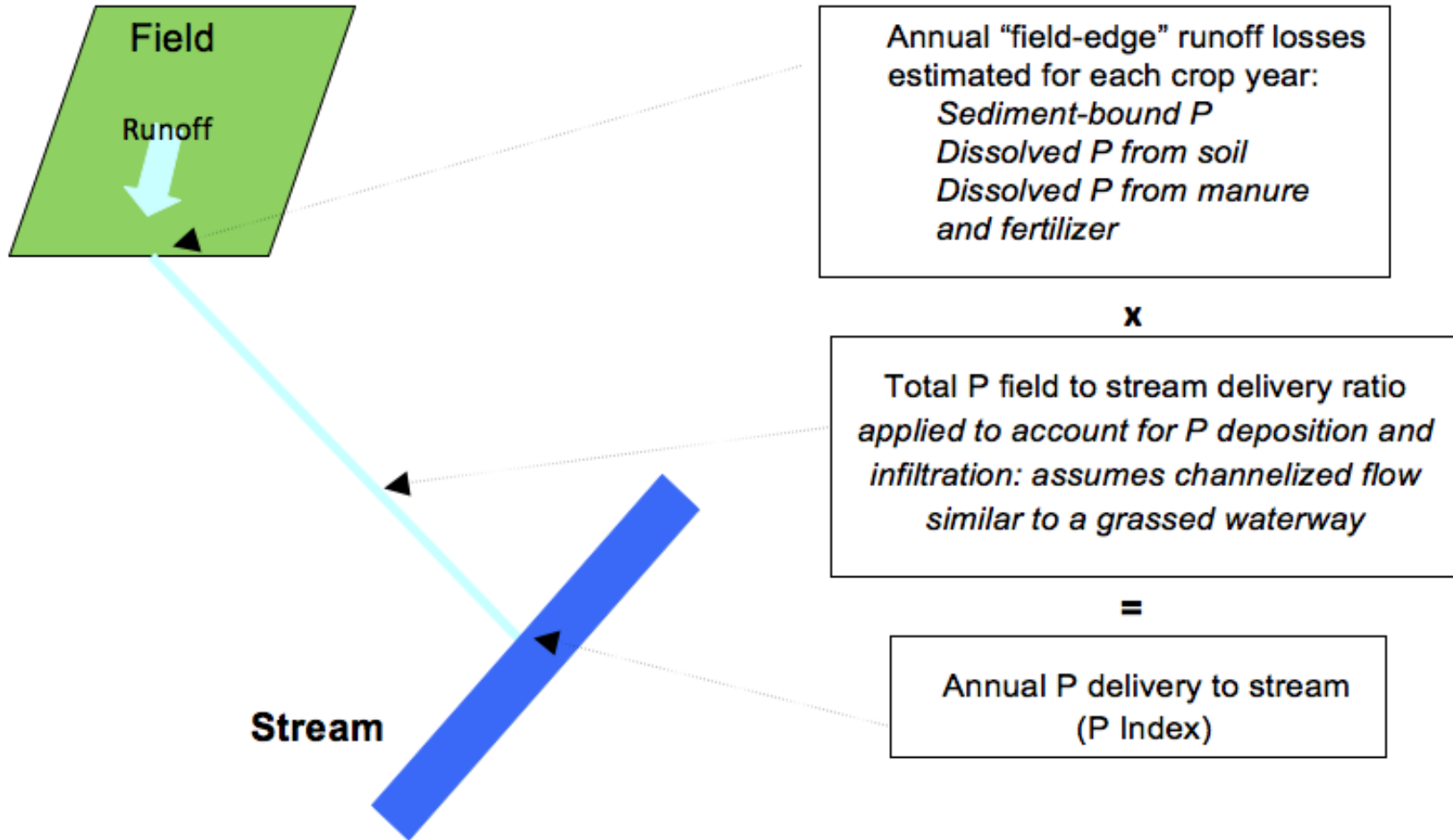
Avg soil loss	4.1	t/ac/yr
Field 1	3	t/ac/yr
Avg P Index	4	Soil 0.2

	P205	K20	
Removal	305	305	lb/ac
Balance	-177	-56	lb/ac

Soil test P is 50 or less so no P205 balance target is needed.



WISCONSIN P INDEX



P205 BALANCE

- P205 removal shows the expected crop removal across the rotation
- P205 Balance represents the difference between the total application and the crop removal over the rotation
- Positive balance indicates that soil P concentrations are likely rising
- Negative balance indicates that soil P concentrations may be going down over the rotation

Dominant critical soil details:
 Name: Mchenry
 Symbol: MdC2 Slope: 9.0
 Texture: Silt Loam

Rotation Settings
 Start: 2023 Years: 4

Contouring
 None
 On contour
 Strip crop

Filter Area
 None
 Designed, field edge
 Designed, in field

Summary 2023 to 2026

Avg soil loss	2.4	t/ac/yr
Field "T"	5	t/ac/yr
Avg P Index	2	SCI 0.1

	P205	K20	
Removal	160	480	lb/ac
Balance	-140	-410	lb/ac

Soil test P is 50 or less so no P205 balance target is needed.

Rotation Settings
 Start: 2023 Years: 4

Contouring
 None
 On contour
 Strip crop

Filter Area
 None
 Designed, field edge
 Designed, in field

Summary 2023 to 2026

Avg soil loss	3.4	t/ac/yr
Field "T"	5	t/ac/yr
Avg P Index	3	SCI -0.2

	P205	K20	
Removal	160	480	lb/ac
Balance	-140	-400	lb/ac

Soil test P is greater than 100 ppm so P205 balance should be less than -40 lb / acre.



WHAT CAN WE DO TO ACHIEVE A GOOD PI?

P Applications

- Minimize surface applications
- Do not apply nutrients to frozen soils

Optimum Soil P Levels

- Nutrient applications should not exceed soil test recommendations to prevent building soil P.
- Removal of crop biomass can reduce soil test P levels over time

Alter Crop Rotations

Reduce Tillage Practices

Using Conservation Practices



SOIL CONDITIONING INDEX (SCI)

Rotation Settings

Start Years

Contouring None On contour Strip crop

Filter Area None Designed, field edge Designed, in field

Summary 2022 to 2024

Avg soil loss	<input type="text" value="1.6"/>	t/ac/yr
Field "T"	<input type="text" value="5"/>	t/ac/yr
Avg P Index	<input type="text" value="1"/>	SCI <input type="text" value="0.3"/>

	P205	K20	
Removal	<input type="text" value="150"/>	<input type="text" value="190"/>	lb/ac
Balance	<input type="text" value="-110"/>	<input type="text" value="-7"/>	lb/ac

Soil test P is 50 or less so no P205 balance target is needed.

- SCI predicts the impact of a cropping system on surface soil organic matter (SOM)
- What impacts SCI?
 - Organic matter going back into the soil
 - Effect of field operations on organic matter breakdown (this is where the STIR comes in)
 - Erosion



HOW DO WE IMPROVE OUR SCI?

Organic Additions

- Manures
- Composts
- Organic byproducts

Alter Crop Rotations

Reduce Tillage Practices

Using Conservation Practices



HOW TO REVIEW A NUTRIENT MANAGEMENT CHECKLIST



SNAPPLUS 20 NM8 CHECKLIST REPORT



ARM-LWR-400.docx (REV. 06/22/17)



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

Use this form to check nutrient management (NM) plans for compliance with the WInRCS 2015-590 Standard.

Nutrient Management Checklist *Wis. Stat. §92.05(3) (k), Wis. Admin. Code §ATCP50.04(3) and Ch. 51*

COUNTY	DATE PLAN SUBMITTED	GROWING SEASON YEAR PLAN IS WRITTEN FOR (from harvest to harvest)	
TOWNSHIP: (T. N.)	RANGE: (R. E., W.)	CHECK ONE: <input type="checkbox"/> Initial Plan or <input type="checkbox"/> Updated Plan	
NAME OF FARM OPERATOR RECEIVING NM PLAN First Name Last Name		FARM NAME (OPTIONAL)	BUSINESS PHONE () -
STREET ADDRESS		CITY	STATE ZIP
REASON THE PLAN WAS DEVELOPED: <u>Click and choose.</u> (Ordinance, NR 243 WPDES or NOD, DATCP-FP or cost share (cs), DNR-cs, USDA-cs, Other)		CROPLAND ACRES (OWNED & RENTED)	
RENTED FARM(S) LANDOWNER NAME(S) AND ACREAGE: add sheet(s) if needed			
WAS THE PLAN WRITTEN IN SNAPPLUS? <input type="checkbox"/> YES <input type="checkbox"/> NO <i>If yes, which software version, if known?</i>			
CHECK PLANNER'S QUALIFICATION: <u>Click and choose.</u> (1. NAICC-CPCC, 2. ASA-CCA, 3. SSSA-Soil Scientist, 4. DATCP approved training course, 5. Other approved by DATCP)			
NAME OF QUALIFIED NUTRIENT MANAGEMENT PLANNER First Name Last Name		BUSINESS PHONE () -	
STREET ADDRESS		CITY	STATE ZIP

Use header sections to add comments. Mark NA in the shaded sections if no manure is applied.

1. Does the plan include the following nutrient application requirements to protect surface and groundwater? <i>This section applies to fields and pastures. If no manure is applied, check NA for i.c., i.h., i.l., i.n., i.o., i.q., i.s.</i>	Yes	No	NA
a. Determine field nutrient levels from soil samples analyzed by a DATCP certified laboratory.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. For fields or pastures with mechanical nutrient applications, determine field nutrient levels from soil samples collected within the last 4 years according to 590 Standard (590) and UWEX Pub. A2809, <i>Nutrient Application Guidelines for Field, Vegetable, and Fruit Crops in Wisconsin</i> (A2809) typically collecting 1 sample per 5 acres of 10 cores. Soil tests are not required on pastures that do not receive mechanical applications of either of the following applies: 1. The pasture average stocking rate is one animal unit per acre or less at all times during the grazing season. 2. The pasture is winter grazed or stocked at an average stocking rate of more than one animal unit per acre during the grazing season, and a nutrient management plan for the pasture complies with 590 using an assumed soil test phosphorus level of 150 PPM and organic matter content of 6%.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. For livestock siting permit approval, collect and analyze soil samples meeting the requirements above in 1. b., excluding pastures, within 12 months of approval and revise the nutrient management plan accordingly. Until then, either option below maybe used: 1. Assume soil test phosphorus levels are greater than 100 ppm soil test P, OR 2. Use preliminary estimates analyzed by a certified DATCP laboratory with soil samples representing > 5 ac/sample.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Identify all fields' name, boundary, acres, and location.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Use the field's previous year's legume credit and/or applications, predominant soil series, and realistic yield goals to determine the crop's nutrient application rates consistent with A2809 for ALL forms of N, P, and K.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Make no winter applications of N and P fertilizer, except on grass pastures and winter grains.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Document method used to determine application rates. Nutrients shall not runoff during or immediately after application.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Identify in the plan that adequate acreage is available for manure produced and/or applied.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Apply a single phosphorus (P) assessment using either the P Index or soil test P management strategy to all fields within a tract when fields receive manure or organic by-products during the crop rotation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Use complete crop rotations and the field's critical soil series to determine that sheet and rill erosion estimates will not exceed tolerable soil loss (T) rates on fields that receive nutrients.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. Use contours; reduce tillage; adjust the crop rotation; or implement other practices to prevent ephemeral erosion; and maintain perennial vegetative cover to prevent reoccurring gullies in areas of concentrated flow.	blank	blank	blank
l. Make no nutrient applications within 8' of irrigation wells or where vegetation is not removed.	blank	blank	blank
m. Make no nutrient applications within 50' of all direct conduits to groundwater, unless directly deposited by gleaning/pasturing animals or applied as starter fertilizer to corn.	blank	blank	blank

n. Make no untreated manure applications to areas within 1000' of a community potable water well or within 100' of a non-community potable water well (ex. church, school, restaurant) unless manure is treated to substantially eliminate pathogens. **blank**

o. Make no manure applications to areas locally delineated by the Land Conservation Committee or in a conservation plan as areas contributing runoff to direct conduits to groundwater unless manure is substantially buried within 24 hours of application.

p. Make no applications of late summer or fall commercial N fertilizer to the following areas UNLESS needed for establishment of fall seeded crops OR to meet A2809 with a blended commercial fertilizer. Commercial fertilizer N applications shall not exceed 36 lbs. N/acre on:
 • Sites vulnerable to N leaching PRW soils (P=high permeability, R= bedrock < 20 inches, or W= wet < 12 inches to apparent water table);
 • Soils with depths of 5 feet or less to bedrock;
 • Area within 1,000 feet of a community potable water well.
 On P soils, when commercial N is applied for full season crops in spring and summer, follow A2809 and apply one of the following:
 1. A split or delayed N application to apply a majority of crop N requirement after crop establishment.
 2. Use a nitrification inhibitor with ammonium forms of N.
 3. Use slow and controlled release fertilizers for a majority of the crop N requirement applied near the time of planting.

q. Limit manure applications in late summer or fall using the lesser of A2809 or the following 590 rates on PRW soils. Use ≤ 120 lbs. available N/acre on:
 P and R soils on *all crops, except annual crops*. Additionally, manure with ≤ 4% dry matter (DM) wait until after soil temp. < 50°F or Oct. 1, and use either a nitrification inhibitor OR surface apply and do not incorporate for at least 3 days.
 W soils or combo. W soils on *all crops*. Additionally, manure with ≤ 4% DM on *all crops* use at least one of the following:
 1. Use a nitrification inhibitor; 2. Apply on an established cover crop, an overwintering annual, or perennial crop;
 3. Establish a cover crop within 14 days of application; 4. Surface apply & don't incorporate for at least 3 days;
 5. Wait until after soil temp. < 50°F or Oct. 1.
 Use ≤ 90 lbs. available N/acre on:
 P and R soils on *annual crops* wait until after soil temp. < 50°F or Oct. 1. Additionally, manure with ≤ 4% DM use either a nitrification inhibitor OR surface apply and do not incorporate for at least 3 days.
 W soils or combination W soils receiving manure with ≤ 4% DM on *all crops*.

r. Use at least one of the following practices on non-frozen soils for all nutrient applications within Surface Water Quality Management Area (SWQMA) = 1000' of lakes/ponds or 300' of rivers: 1. Maintain > 30% cover after nutrient application; 2. Effective incorporation within 72 hours of application; 3. Establish crops prior to, at, or promptly following application; 4. Install/maintain vegetative buffers or filter strips; 5. Have at least 3 consecutive years no-till for applications to fields with < 30% residue (silage) and apply nutrients within 7 days of planting.

s. Limit mechanical applications to 12,000 gals/acre of unincorporated liquid manure or organic by-products with 11% or less dry matter where subsurface drainage is present OR within SWQMA. Wait a minimum of 7 days between sequential applications AND use one or more of the practice options on non-frozen soils listed in 1.r.1. through 1.r.5.

of all mechanically applied manure or organic by-products? *This section doesn't apply to winter gleaning/pasturing meeting 590 N or*

If no manure is applied, check NA for 2.a. through 2.g.

a. Identify manure quantities planned to be spread during the winter, or the amount of manure generated, whichever is greater. For daily haul systems, assume 1/3 of the manure produced annually will need to be applied. **blank**

b. Identify manure storage capacity for each type applied and stacking capacity for manure ≥ 16% DM liquid manure if storage does not exist. **blank**

c. Show on map and make no applications within the SWQMA.

d. Show on map and make no surface applications of liquid manure during February and March where Silurian dolomite is within 60 inches of the soils surface OR where DNR Well Compensation funds provided replacement water supplies for wells contaminated with livestock manure.

e. Show on map and make no applications of manure within 300 feet of direct conduits to groundwater.

f. Do not exceed the P removal of the following growing season's crop when applying manure. Liquid manure applications are limited to 7,000 g/acre. All winter manure applications are not to exceed 60 lbs. of P2O5/acre.

g. Make no applications of manure to fields with concentrated flow channels unless using two of the following:
 1. Contour buffer strips or contour strip cropping; 2. Leave all crop residue and no fall tillage; 3. Apply manure in intermittent strips on no more than 50% of field; 4. Apply manure on no more than 25% of the field waiting a minimum of 14 days between applications; 5. Reduce manure app. rate to 3,500 gal. or 30 lbs. P2O5, whichever is less; 6. No manure application within 200 feet of all concentrated flow channels; 7. Fall tillage is on the contour and slopes are lower than 6%.
 Make no applications to slopes greater than 6% (soil map units with C, D, E, and F slopes) unless the plan documents that no other accessible fields are available for winter spreading AND two of the options 2.g.1. through 2.g.5. are used.

I certify that the plan represented by the answers on this checklist complies with Wisconsin's NRCS 2015-590 NM Standard or is otherwise acceptable.

Qualified NM planner signature NAICC-Certified Professional Crop Consultant, ASA-Certified Crop Adviser, or SSSA-Soil Scientist

Qualified NM farmer-planner or Authorized farm operator signature Date Signature if reviewed for quality assurance receiving and understanding the plan



SECTION I. CHECKING NUTRIENT APPLICATION REQUIREMENTS TO PROTECT WATER QUALITY



If every field has soil samples entered

This section applies to fields and pastures. If no manure is applied, check NA for 1.c., 1.h., 1.i., 1.n., 1.o., 1.q., 1.s.

	Yes	No	NA
a. Determine field nutrient levels from soil samples analyzed by a DATCP certified laboratory.	X		
b. For fields or pastures with mechanical nutrient applications, determine field nutrient levels from soil samples collected within the last 4 years according to 590 Standard (590) and UWEX Pub. A2809, Nutrient Application Guidelines for Field, Vegetable, and Fruit Crops in Wisconsin (A2809) typically collecting 1 sample per 5 acres of 10 cores. Soil tests are not required on pastures that do not receive mechanical applications of nutrients if either of the following applies: 1. The pasture average stocking rate is one animal unit per acre or less at all times during the grazing season. 2. The pasture is winter grazed or stocked at an average stocking rate of more than one animal unit per acre during the grazing season, and a nutrient management plan for the pasture complies with 590 using an assumed soil test phosphorus level of 150 PPM and organic matter content of 6%.	X		
c. For livestock siting permit approval, collect and analyze soil samples meeting the requirements above in 1. b., excluding pastures, within 12 months of approval and revise the nutrient management plan accordingly. Until then, either option below maybe used: 1. Assume soil test phosphorus levels are greater than 100 ppm soil test P, OR 2. Use preliminary estimates analyzed by a certified DATCP laboratory with soil samples representing > 5 ac/sample.			X
d. Identify all fields' name, boundary, acres, and location.	X		

Soil Test Problems

NM2 Compliance Check

No Soil Test Problems

Soil Test Problems Legend	
Too Few Soil Samples	Less than one sample per five acres.
Soil Test Data Too Old	Soil test is greater than 4 years old

All fields have borders in SnapMaps
Otherwise blank

acres	SnapMap Soils	SnapMap Features										
farm	Field Name	Field County	Field Acres	Soil Map Symbol (critical)	Soil Map Symbol predominant	Slope	Slope Length	Below Field Slope To Water	Distance To Perennial Water	Is Locked	Notes	Field Borders
	6300	Sauk	16.6	WxC2	RhB	8	150	2.1 - 6	1001 - 5000	<input type="checkbox"/>		MULTIPOLYGON
	1100	Sauk	8	MdC2	ScB	9	150	2.1 - 6	301 - 1000	<input type="checkbox"/>		MULTIPOLYGON
	1200	Sauk	17.1	ScB	ScB	4	200	2.1 - 6	301 - 1000	<input type="checkbox"/>		MULTIPOLYGON
	1400W	Sauk	6.2	ScB	ScB	4	200	2.1 - 6	301 - 1000	<input type="checkbox"/>		MULTIPOLYGON
	1500N	Sauk	1.6	ScB	ScB	4	200	2.1 - 6	1001 - 5000	<input type="checkbox"/>		MULTIPOLYGON
	1500SW	Sauk	3.8	MdD2	ScB	16	100	2.1 - 6	1001 - 5000	<input type="checkbox"/>		MULTIPOLYGON



Responsive Fields

To figure out how many samples you need for a **responsive field**, take the acres in the field and divide by 5, then round to the nearest whole number of samples.

Rounding Note:
When rounding,
0-4 rounds down
5-9 rounds up

Example 1 : Field size = 36 acres

$$36 \text{ acres} \times \frac{1 \text{ sample}}{5 \text{ acres}} = \frac{7.2 \text{ samples}}{\text{acre}}$$

or $36 \div 5 = 7.2$

7.2 rounds to 7

7 samples are required

Example 2: Field size = 58 acres

$$58 \div 5 = 11.6$$

11.6 rounds to 12

12 samples are required

Example 3: Field size = 6 acres

$$6 \div 5 = 1.2$$

1.2 rounds to 1

1 sample is required

For fields that are less than 5 acres, take 1 sample for the entire field. Strips that are smaller than 5 acres can be combined for sampling if they have the same management history.

CALCULATING NUMBER OF SAMPLES NEEDED



SOILSAMPLINGFORASNAPPLUSNMPLAN.PDF (WI.GOV)



State of Wisconsin

Department of Agriculture, Trade and Consumer Protection



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Nutrient Management Trainings

Nutrient Management Regional Meetings

[SEE FLYER HERE](#)

Join us for the Annual Nutrient Management Regional Meetings! It's been a long time coming, but we're excited to be back together again to share knowledge, updates, tips, and tricks related to nutrient management. CEU's will be available. Don't miss out on this opportunity to learn, grow, and connect with your peers in the industry!

- August 28 - [Register](#)
9 a.m. to 12 p.m.
Rib Mountain Municipal Use Center
227800 Snowbird Ave., Wausau, WI 54401
- August 29 - [Register](#)
9 a.m. to 12 p.m.
James P. Coughlin Center (CPCC)
625 E. County Road O, Oshkosh, WI 54901

Training Resources

[Online Nutrient Management](#)

[Curriculum](#)

[Nutrient and Pest Management
Team Map](#)

[Step by Step SnapPlus Video
Tutorials](#)

[Entering Organic Byproduct
Analysis in SnapPlus](#)

[Nutrient Management on Pastures](#)

[Nutrient Management Soil
Sampling Guidance](#)



If applications follow A2809 recommendations

e. Use the field's previous year's legume credit and/or applications, predominant soil series, and realistic yield goals to determine the crop's nutrient application rates consistent with A2809 for ALL forms of N, P, and K.

Yes	No	NA
X		

2020		
Corn silage		
30.1-35		
No Till		
2019-03-07		
NOT MET		
<input type="checkbox"/> Irrigated	0.05/MRTN	
N	P2O5	K2O
190	145	310
-	0	0
190	145	310
150	-	-
0	-	-
88	74	155
10	20	10
248	94	165
58	-51	-145
NA		

In plan year:

No red flags for N in excess of recommendations

No red flags for excess N on legumes

No orange flags for P₂O₅ commercial fertilizer over rotation

Extra 20 lb N and 23 lb P₂O₅ allowed as starter for corn must be in Spring and Subsurface

Source name	Season	Spread method	Area	Acres applied	Rate	Units	Ti
Liquid 9-18-9	Sp...	Unincor...	En...	47.1	10	gals...	

N applied as starter to corn should be applied at planting and placed subsurface with, or in a band in close proximity to, the seed.



Always because Snap won't allow

	Yes	No	NA
f. Make no winter applications of N and P fertilizer, except on grass pastures and winter grains.	X		
g. Document method used to determine application rates . Nutrients shall not runoff during or immediately after application.	X		

Document spreader calibration methods

Nutrient Application Rate Documentation

Document the methods used to calibrate your equipment spreading rates.

Calibration methods - Select all that apply

- Custom applications
- Equipment calibration
- Amount applied / Acres

Accept Cancel

SECTION I. CHECKING NUTRIENT APPLICATION REQUIREMENTS TO PROTECT WATER QUALITY



	Yes	No	NA
h. Identify in the plan that adequate acreage is available for manure produced and/or applied.	X		
i. Apply a single phosphorus (P) assessment using either the P Index or soil test P management strategy to all fields within a tract when fields receive manure or organic by-products during the crop rotation.	X		
j. Use complete crop rotations and the field's critical soil series to determine that sheet and rill erosion estimates will not exceed tolerable soil loss (T) rates on fields that receive nutrients.	X		

NM2 Compliance Check

Rotational Restriction Problems

No Rotational Problems found

Prior year

Known Annual Volume	Volume Units
6,000,000	Gallons
500	Tons
1,700	Tons

Plan year

Known Annual Volume	Volume Units
5,600,000	Gallons
350	Tons
1,500	Tons

Next year

Known Annual Volume	Volume Units
5,600,000	Gallons
450	Tons
1,500	Tons

Available	Applications	Remaining
6,000,000	8,085,670	-2,085,670
500	2,988	-2,488
1,700	4,534	-2,834

Available	Applications	Remaining
5,600,000	5,364,089	235,911
350	2,549	-2,199
1,500	2,249	-749

Available	Applications	Remaining
5,600,000	5,768,820	-168,820
450	570	-120
1,500	1,197	303

If at least 90% of the manure produced is applied for each source in each of these 3 years

If "Known Annual Volume" or Planned applications are not entered for each of these years, the answer will be blank



SECTION I. CHECKING NUTRIENT APPLICATION REQUIREMENTS TO PROTECT WATER QUALITY



	Yes	No	NA
k. Use contours; reduce tillage; adjust the crop rotation; or implement other practices to prevent ephemeral erosion ; and maintain perennial vegetative cover to prevent reoccurring gullies in areas of concentrated flow.			

Field Problems

Record your field problems

Field problems

Field Name	Problem	Start year	Year fixed	Notes
1900	Gully	2019	↑	

Usually blank

Unfixed gullies or ephemeral erosion lead to No

l. Make no nutrient applications within 8' of irrigation wells or where vegetation is not removed .			
m. Make no nutrient applications within 50' of all direct conduits to groundwater , unless directly deposited by gleaning/pasturing animals or applied as starter fertilizer to corn.			
n. Make no untreated manure applications to areas within 1000' of a community potable water well or within 100' of a non-community potable water well (ex. church, school, restaurant) unless manure is treated to substantially eliminate pathogens.			

Exclusion areas

- Not farmed
- Grass filter area
- Vegetated buffer
- Non-metallic mine
- Water
- Sinkhole/other karst feature
- Other

Points

- Drinking Well
- Public well
- Irrigation well
- Sinkhole
- Non-metallic mine
- Fractured bedrock
- Other direct conduit

These will always be blank. If all wells, direct conduits to groundwater, and uncropped areas are mapped, check Yes.





	Yes	No	NA
o. Make no manure applications to areas locally delineated by the Land Conservation Committee or in a conservation plan as areas contributing runoff to direct conduits to groundwater unless manure is substantially buried within 24 hours of application.			X

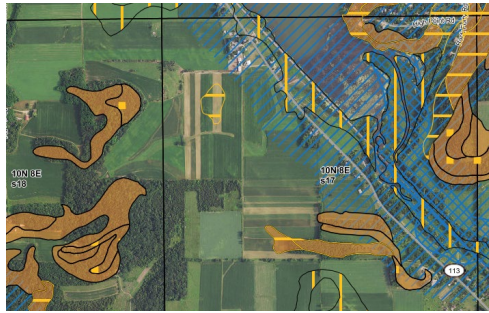
Most likely will be NA. Only Kewaunee and Manitowoc counties has this kind of locally delineated layer in SnapMaps.
 If do have field that intersects a locally delineated layer, will be blank



 Local Prohibitions



SECTION I. CHECKING NUTRIENT APPLICATION REQUIREMENTS TO PROTECT WATER QUALITY



Bedrock depth <5ft
N Restricted (P,R,W soils)
 P - High Permeability
 R - Bedrock <20"
 W - Wet <12" to Watertable

<p>p. Make no applications of late summer or fall commercial N fertilizer to the following areas UNLESS needed for establishment of fall seeded crops OR to meet A2809 with a blended commercial fertilizer. Commercial fertilizer N applications shall not exceed 36 lbs. N/acre on:</p> <ul style="list-style-type: none"> • Sites vulnerable to N leaching PRW Soils (P=high permeability, R= bedrock < 20 inches, or W= wet < 12 inches to apparent water table); • Soils with depths of 5 feet or less to bedrock; • Area within 1,000 feet of a community potable water well. <p>On P soils, when commercial N is applied for full season crops in spring and summer, follow A2809 and apply one of the following:</p> <ol style="list-style-type: none"> 1. A split or delayed N application to apply a majority of crop N requirement after crop establishment. 2. Use a nitrification inhibitor with ammonium forms of N. 3. Use slow and controlled release fertilizers for a majority of the crop N requirement applied near the time of planting. 	X		
<p>q. Limit manure applications in late summer or fall using the lesser of A2809 or the following 590 rates on PRW Soils. <u>Use ≤ 120 lbs. available N/acre on:</u> P and R soils on <i>all crops, except annual crops</i>. Additionally, manure with ≤ 4% dry matter (DM) wait until after soil temp. < 50°F or Oct. 1, and use either a nitrification inhibitor OR surface apply and do not incorporate for at least 3 days. W soils or combo. W soils on <i>all crops</i>. Additionally, manure with ≤ 4% DM on <i>all crops</i> use at least one of the following: <ol style="list-style-type: none"> 1. Use a nitrification inhibitor; 2. Apply on an established cover crop, an overwintering annual, or perennial crop; 3. Establish a cover crop within 14 days of application; 4. Surface apply & don't incorporate for at least 3 days; 5. Wait until after soil temp. < 50°F or Oct. 1. <u>Use ≤ 90 lbs. available N/acre on:</u> P and R soils on <i>annual crops</i> wait until after soil temp. < 50°F or Oct. 1. Additionally, manure with ≤ 4% DM use either a nitrification inhibitor OR surface apply and do not incorporate for at least 3 days. W soils or combination W soils receiving manure with ≤ 4% DM on <i>all crops</i>.</p>	X		

NM2 Compliance Check

Application Restriction Problems

Field Name	Year	Problem	Explanation
1 IS031	2019	Overapplication of fertilizer N of 60 lbs N/acre	

Late summer or fall **manure or organic by-products** limit rates to 90 or 120 lbs N/ac

No Compliance messages for applications to 590 P,W, or R soils



SECTION I. CHECKING NUTRIENT APPLICATION REQUIREMENTS TO PROTECT WATER QUALITY



	Yes	No	NA
r. Use at least one of the following practices on non-frozen soils for all nutrient applications within Surface Water Quality Management Area (SWQMA) = 1000' of lakes/ponds or 300' of rivers: 1. Maintain > 30% cover after nutrient application; 2. Effective incorporation within 72 hours of application; 3. Establish crops prior to, at, or promptly following application; 4. Install/maintain vegetative buffers or filter strips; 5. Have at least 3 consecutive years no-till for applications to fields with < 30% residue (silage) and apply nutrients within 7 days of planting.	X		
s. Limit mechanical applications to 12,000 gals/acre of unincorporated liquid manure or organic by-products with 11% or less dry matter where subsurface drainage is present OR within SWQMA. Wait a minimum of 7 days between sequential applications AND use one or more of the practice options on non-frozen soils listed in 1.r.1. through 1.r.5.	X		

NM2 Compliance Check

Application Restriction Problems

Field Name	Year	Problem	Explanation
1 (S03)			

No Application Restriction Problems for inadequate SWQMA conservation practices or high liquid manure rates in SWQMA or tilled fields



SECTION 2. CHECKING REQUIREMENTS FOR WINTER APPLICATIONS



	Yes	No	NA
a. Identify manure quantities planned to be spread during the winter , or the amount of manure generated in 14 days, whichever is greater. <i>For daily haul systems, assume 1/3 of the manure produced annually will need to be winter applied.</i>			
b. Identify manure storage capacity for each type applied and stacking capacity for manure $\geq 16\%$ DM if permanent storage does not exist.			

Always blank

	Storage Name	Storage Source	Storage Type	Tons or Gallons	Maximum Allowed Storage Capacity	No. of times emptied per year	Collected Annually (tons or gallons)
▶	Stack	Pack	Dairy, solid	Tons	100	3	300

Manure produced in the winter needs to be stored, spread, or grazed.



Section 2. Checking requirements for winter applications



When frozen or snow-covered soils prevent effective incorporation at application:

Will be NA if no winter manure applications

	Yes	No	NA
c. Show on map and make no applications within the SWQMA.	X		
d. Show on map and make no surface applications of liquid manure during February and March where Silurian dolomite is within 60 inches of the soils surface OR where DNR Well Compensation funds provided replacement water supplies for wells contaminated with livestock manure.	X		
e. Show on map and make no applications of manure within 300 feet of direct conduits to groundwater.	X		

- Update winter manure prohibited areas
- - Feb/Mar liquid manure prohibited areas
 -
 - Winter manure prohibited areas



- Field Restrictions**
- Field in 590 SWQMA
 - Drinking water well or conduit to groundwater 50 ft
 - Local prohibitions for winter applications
 - Slope restriction for winter applications
 - Concentrated flow channel
 - February/March prohibition on liquid manure

As long as all fields have boundaries, will be Yes or NA

Always if DNR Well Comp or <5' to Silurian

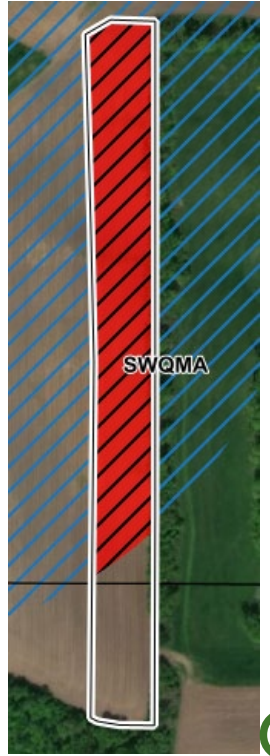
Guidance: This field is in an area with Silurian dolomite soils. Liquid manure and/or organic by-products are prohibited in February and March.

Spreadable Acres

Field Name	Field Acres	Total Acres	FSA Acres	Cropping Acres	Manure spreadable acres	Manure prohibited acres	Winter Spreadable acres
SWQMA	6.3	6.3	6.3	6.3	6.3	0	1.5

Manure / Biosolid Applications 6.3 1.5

Source name	Season	Spread method	Area	Acres applied	Rate
Dairy Liquid	Winter	Unincorporated	Spreadable	1.5	6,000
Dairy Liquid	Spring	Unincorporated	Winter manure prohibited	4.8	6,000



Only 1.5 acres spreadable in winter



When frozen or snow-covered soils prevent effective incorporation at application:

	Yes	No	NA
f. Do not exceed the P removal of the following growing season's crop when applying manure. Liquid manure applications are limited to 7,000 g/acre . All winter manure applications are not to exceed 60 lbs. of P2O5/acre .	X		

Do not exceed the P removal of the following growing season's crop when applying **manure**. Liquid manure applications are limited to **7,000 g/acre**. All winter manure applications are not to exceed **60 lbs. of P2O5/acre**.

As long as no compliance issues for winter P2O5 application rate

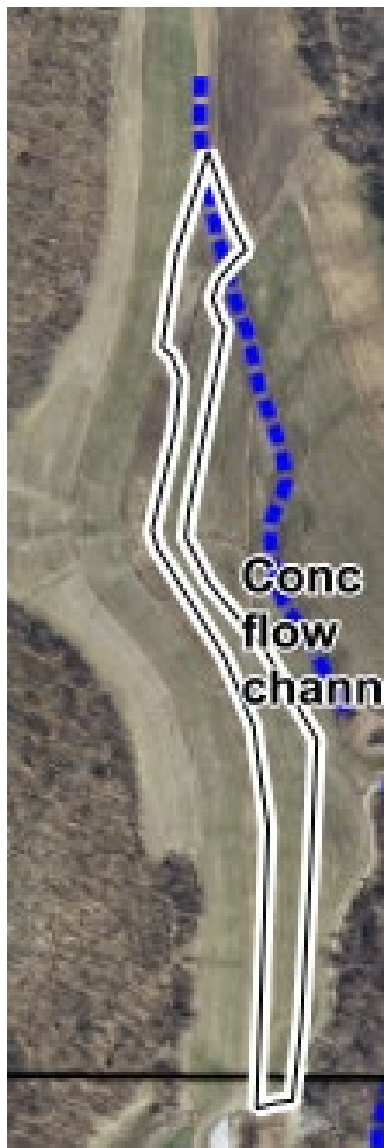
NM2 Compliance Check

Application Restriction Problems

Field Name	Year	Problem	Explanation
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When frozen or snow-covered soils prevent effective incorporation at application:



g. Make no applications of manure to fields with **concentrated flow channels** unless using two of the following:
 1. Contour buffer strips or contour strip cropping; 2. Leave all crop residue and no fall tillage; 3. Apply manure in intermittent strips on no more than 50% of field; 4. Apply manure on no more than 25% of the field waiting a minimum of 14 days between applications; 5. Reduce manure app. rate to 3,500 gal. or 30 lbs. P2O5, whichever is less; 6. No manure application within 200 feet of all concentrated flow channels; 7. Fall tillage is on the contour and slopes are lower than 6%.
 Make no applications to **slopes greater than 6%** (soil map units with C, D, E, and F slopes) unless the plan documents that no other accessible fields are available for winter spreading AND two of the options 2.g.1 through 2.g.5. are used.

Yes	No	NA
X		

Application Restriction Problems

NM2 Compliance Check

Field Name	Year	Problem	Explanation
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No problems with winter practices

Apply Nutrient System Create Nutrient System **Field Restrictions**

Manure / Biosolid Applications **Winter Practices** Grazing Est.

Source name	Season	Spread method	Area	Acres applied	Rate	Units	NO ₃ Inh.	Actual
Beef Solid	Wi...	Uninc...	Sp...	24.7	10	ton...	<input type="checkbox"/>	<input type="checkbox"/>
Beef Solid	Sp...	Uninc...	Wi...	1.7	10	ton...	<input type="checkbox"/>	<input type="checkbox"/>

2015 590 - Winter manure spreading practices.

Practices for fields with slope > 6%. The slope of this field is 4%.
 Winter spreading practices are not required but may be selected.

- a. Contour buffer strips or contour strip cropping.
- b. Leave all crop residue (this prohibits removal of silage or bedding) and no fall tillage.
- c. Apply in intermittent strips on no more than 50% of the field.
- d. Apply on no more than 25% of the field during each application waiting a minimum of 14 days between applicati
- e. Reduce application rate to 3,500 gallons or 30 pounds of P2O5, whichever is less.



FARMER SIGNATURE ON CHECKLIST!!

I certify that the plan represented by the answers on this checklist complies with Wisconsin's NRCS 2015-590 NM Standard or is otherwise noted.

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Qualified NM planner signature	NAICC-Certified Professional Crop Consultant, ASA-Certified Crop Adviser, or SSSA-Soil Scientist	Date	
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Qualified NM farmer-planner or Authorized farm operator signature receiving and understanding the plan	Date	Signature if reviewed for quality assurance	Date
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137.15 Legal recognition of electronic records, electronic signatures, and electronic contracts.

(3) If a law requires a record to be in writing, an electronic record satisfies that requirement in that law.

(4) If a law requires a signature, an electronic signature satisfies that requirement in that law.





Andrea Topper

Nutrient Management Outreach Specialist

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WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION (DATCP)

2025