

SnapPlus

Wisconsin's Nutrient Management Software

Basic Concepts

590 Restriction Maps: What the Legend Colors Mean

The Manure Advisory System maps are color and pattern coded to indicate specific areas on your fields. This publication explains what the defined areas of the map mean in terms of nutrient management using Wisconsin's 590 Nutrient Management Standard. To make a map of your farm, go to www.ManureAdvisorySystem.wi.gov

For more information about nutrient management, please visit the Department of Agriculture, Trade and Consumer Protection's website: datcp.wi.gov/Farms/Nutrient_Management or email their nutrient management specialists at datcpnutrientmanagement@wi.gov

Legend*	
--	Intermittent Streams
—	Perennial Streams
■	Waterbodies
▨	SWQMA 300 Feet
▩	SWQMA 1,000 Feet
■	Fall N Restriction
■	No Winter App. Slope > 12%
■	Winter Restriction if Slope > 9%
■	Wetland Inventory
□	Township-Range

Blue-lined areas: SWQMAs

What is a SWQMA? An area that is 300 feet from a stream/river or 1000 feet from lakes/ponds; the acronym stands for Surface Water Quality Management Area.

Note: SWQMA is often pronounced as swik-muh.

In the winter, nutrient applications are prohibited in SWQMAs

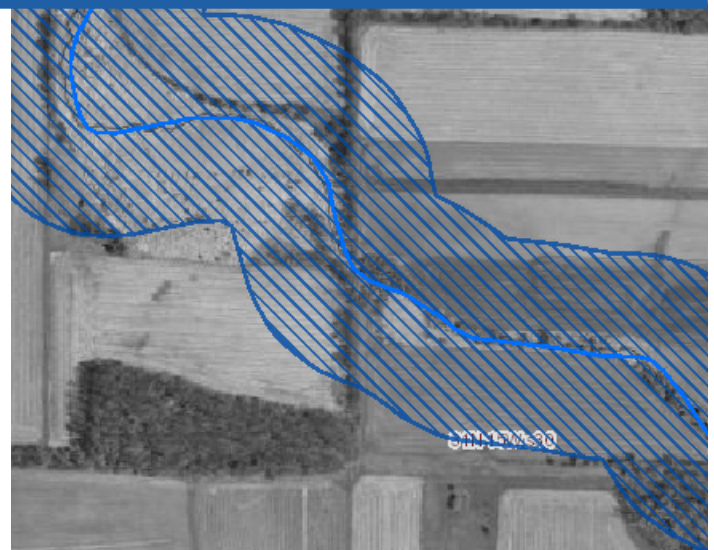
(Winter is defined as being unable to effectively incorporate due to frozen soil or snow cover).

In non-winter conditions, nutrient applications are restricted in SWQMAs.

Any nutrient applications must also be accompanied by one of the following:

- ✓ Establishment of permanent vegetative buffers **OR**
- ✓ Maintenance of greater than 30% residue or vegetative cover **OR**
- ✓ Incorporation of nutrient within 3 days **OR**
- ✓ Establishment of cover crops after application **OR**
- ✓ Unincorporated liquid manure application rates are restricted to those in the table.

Note: Your soil texture can be found by using the Get Info button on the soils layer in the interactive map website.



Max. Unincorporated Liquid Manure Application Rate within a SWQMA on Unsaturated soils		
Percent crop residue or vegetative cover on surface after manure application	< 30%	≥ 30%
Fine soil texture clay, silty clay, silty clay loam, clay loam	3,000	5,000
Medium soil texture sandy clay, sandy clay loam, loam, silt loam, silt	5,000	7,500
Coarse soil texture loamy sand, sandy loam, sand, peat, muck	7,000	10,000

Yellow dotted areas: Fall nitrogen (N) restricted soils

What are N restricted soils? These soils are considered risky because of the strong possibility that they are direct conduits to groundwater. N Restricted soils fall into one of three categories: 1) highly permeable, 2) less than 20 inches to bedrock, or 3) less than 12 inches to groundwater.

In general, these soils should have N put on as close to crop uptake as possible; in other words, **applications should be made in the spring and avoided in the fall.**

Commercial N restrictions:

Fall application of commercial N is prohibited, except for establishment of fall-seeded crops (maximum 30 lbs N/ac).

Manure N restrictions:

When manure is applied in the fall and soil temperatures are above 50° F:

- ✓ Use a nitrification inhibitor with liquid manure and limit rate to 120 lb N/ac, **OR**
- ✓ Apply after Sept. 15 and limit rate to 90 lb N/ac **OR**
- ✓ Apply to perennial or fall-seeded crops and limit rate to 120 lb N/ac or crop N need, whichever is less.

When manure is fall-applied and soil temperatures are below 50° F, limit the application rate to 120 lb N/ac or the crop's N need, whichever is less.

On irrigated fields:

- ✓ Split N applications, applying the majority of N after crop establishment **OR**
- ✓ Use a nitrification inhibitor with ammonium forms of N.



Legend*	
--	Intermittent Streams
—	Perennial Streams
■	Waterbodies
▨	SWQMA 300 Feet
▩	SWQMA 1,000 Feet
■ (yellow dotted)	Fall N Restriction
■ (red)	No Winter App. Slope > 12%
■ (pink)	Winter Restriction if Slope > 9%
■ (green)	Wetland Inventory
□ (red outline)	Township-Range

Red and pink areas: Winter restricted soils

When is winter? Winter conditions are defined as having frozen or snow-covered soils that prevent effective incorporation at the time of application.

Red area on map (soils have slopes over 12%):

- ✓ Applications of nutrients are prohibited on slopes greater than 12%.

Pink area on map (soils have slopes between 6 and 12%):

- ✓ If the actual slope of the field is less than 9%, then there are no restrictions.
- ✓ If the actual slope is between 9 and 12% then applications are prohibited **unless** the cropland is contoured or contour strip cropped, then there are no restrictions.

