

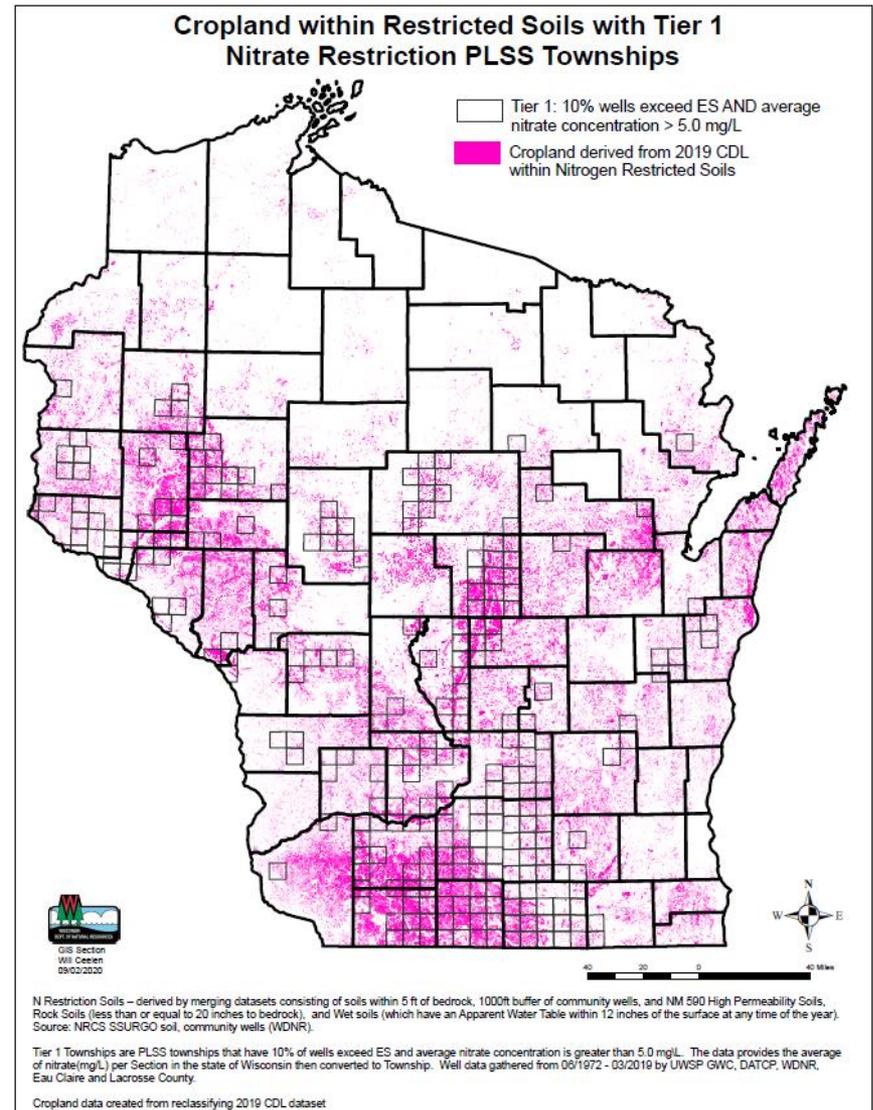
NR 151 Technical Advisory Committee September 16, 2020



Sensitive Areas

Sensitive areas defined as:

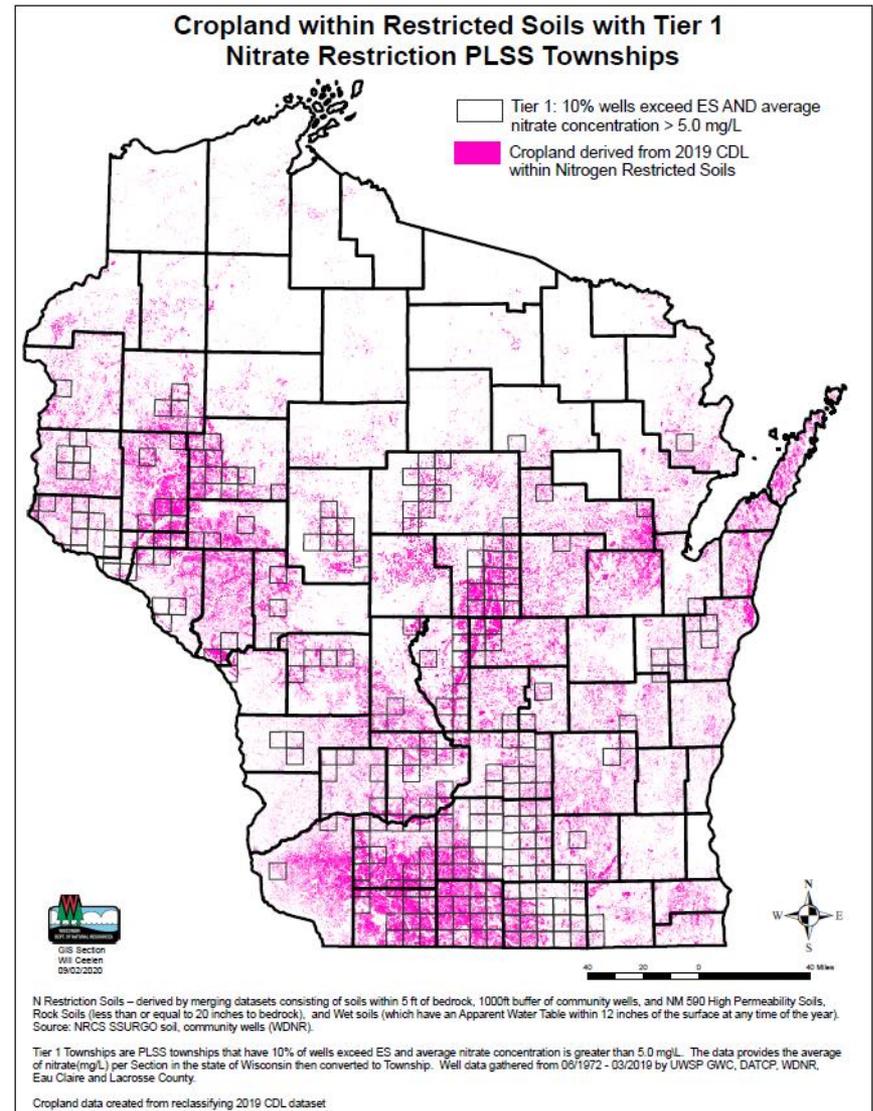
1. Nitrogen restricted soils means N restricted soils as provided in NRCS Technical Standard 590, dated December 2015.
2. Nitrogen restricted townships (to be defined in standard).
~15% of towns (PLSS)



Sensitive Areas

Sensitive areas current coverage of agricultural lands:

- 4.7 million cropland acres are N restricted soils.
- 1.5 million of the cropland acres that are N restricted soils also are within a nitrate restricted town.
- An additional 1.7 million cropland acres are also within nitrate restricted towns (non N restricted soils).
- Currently, the sensitive areas definition covers approximately 6.4 million acres.





Sensitive Areas

Next steps: screen each nitrate restricted town.

1. Identify portions of tier 1 towns that are not impacted by nitrates and remove. Limit to the quarter town. (UWSP's Well Water Viewer)
2. Review adjacent towns not identified as tier 1 to identify nitrate impacted areas that that may have been missed. (UWSP's Well Water Viewer)
3. Identify towns, less areas removed, that have less than 3% agricultural land review town for high density development and remove if necessary. (2019 cropland data layer)
 - Estimated 3% ag land = 1 home/septic per 20 acres
 - Minnesota rule excludes counites with <3% ag land



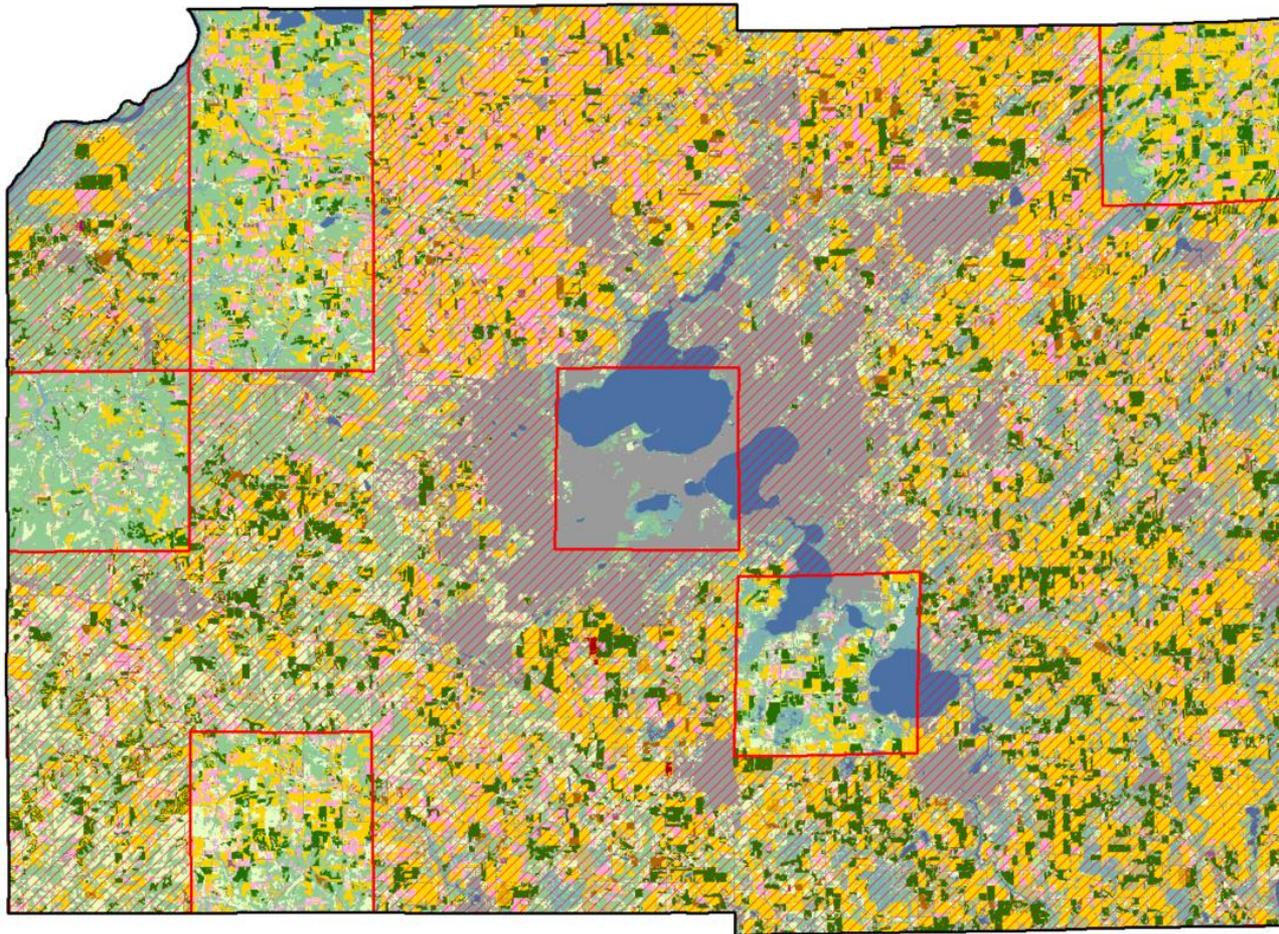
Sensitive Areas

Next steps: screen each nitrate restricted town.

4. Identify towns with significant wastewater (industrial, septage, and biosolids) land application and further screen town to determine if wastewater applications are a significant source of nitrogen. (SWAMP-Internal Database)
 - 25% or more of the ag land in town is approved for wastewater applications.
5. Identify potential point sources that are major contributors to nitrates in groundwater. (Surface Water Data Viewer)
6. Identify significant spill events that may have contributed to nitrates in groundwater. (BRRTS on the Web)
7. Send review of items 1 through 6 and results to County LCDs for their input.

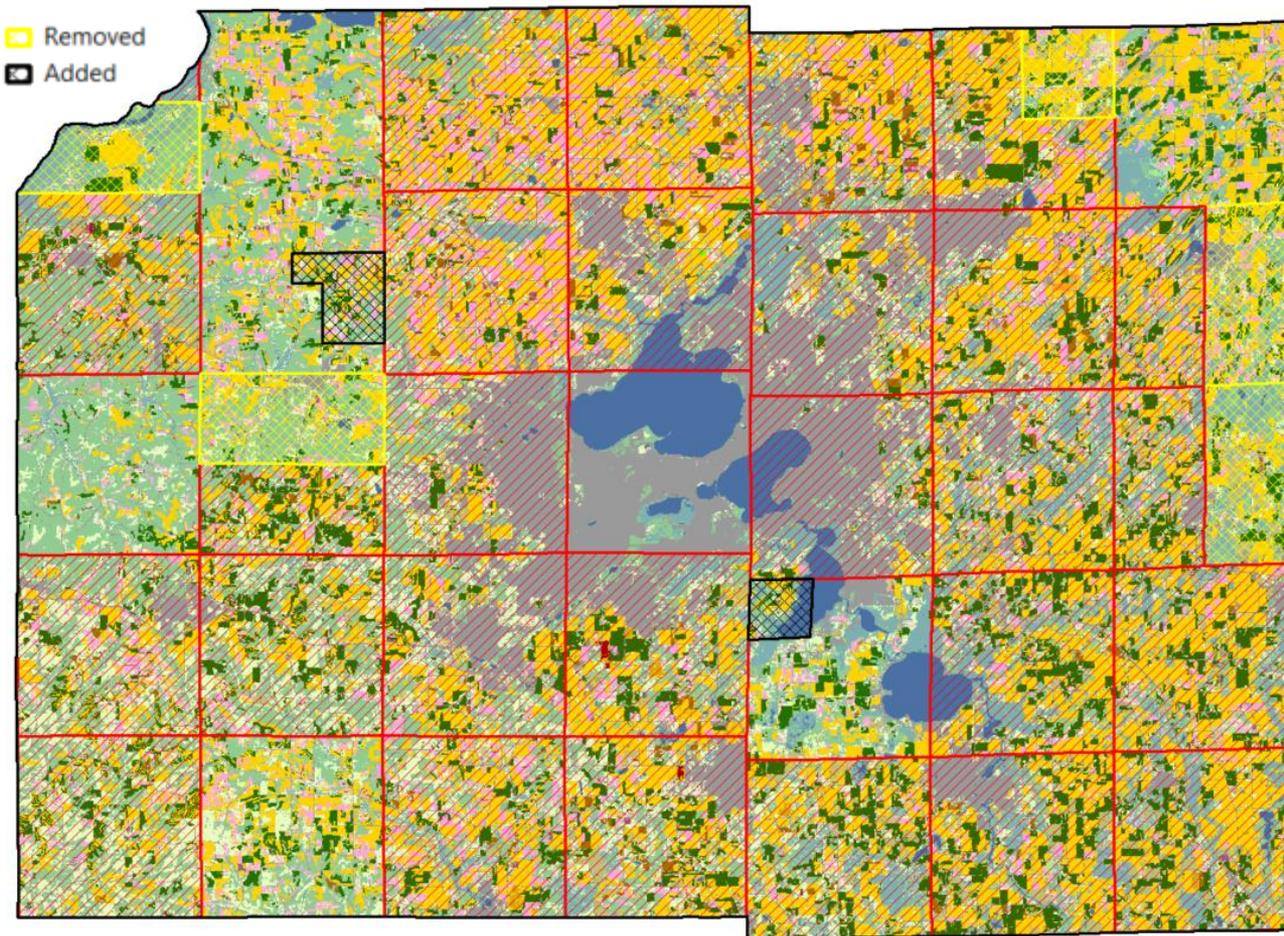
Sensitive Areas

Screening example: Dane County, prior to screening



Sensitive Areas

Screening example: Dane County, after initial screening



Breakout Groups





Standards & Prohibitions

Last meeting the nitrate leaching limit was introduced.

b. All croplands, pastures, and winter grazing areas identified in the producer's nutrient management plan shall have a calculated nitrogen leaching amount that meets both of the following:

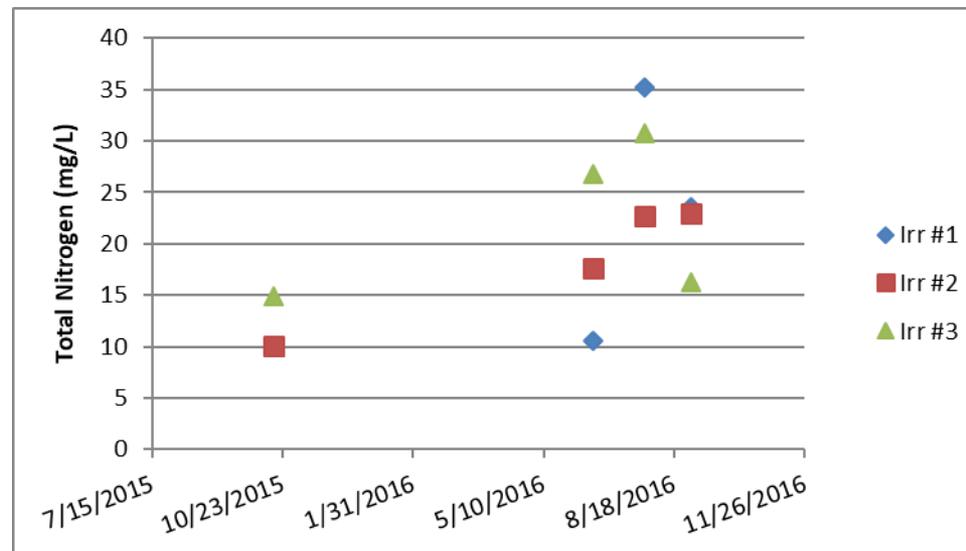
- i. An average annual leached nitrogen over all acreage equal to or less than 2.3 pounds per acre per inch of groundwater recharge provided nutrient application rates on any field shall not exceed application rates allowed under ATCP 50.04(3).*
- ii. For each individual field, an averaged leached nitrogen equal to or less than 2.3 pounds per acre per inch of groundwater recharge averaged over the accounting period provided that in no year shall nutrient application rates on any field exceed application rates allowed under ATCP 50.04(3).*

Standards & Prohibitions

New Standards & Prohibitions:

For all irrigated cropland, the nutrient management plan must account for nitrogen applied through irrigation water applied to crops.

- A significant amount of N can come from irrigation water.
- Already required to be accounted for in a NMP (nutrient source).





Standards & Prohibitions

New Standards & Prohibitions:

Application of commercial nitrogen fertilizer to croplands, pastures, and winter grazing areas after September 1 is prohibited except as follows:

- a. where needed for establishment of fall seeded crops and must be applied in accordance with application rates allowed under ATCP 50.04(3).*
- b. for growing fall cover crops within a potato rotation to reduce applications of soil fumigants to future potato crops.*
- c. to established perennial crops with a maximum rate of 36 lbs. per acre or in accordance with application rates allowed under ATCP 50.04(3), whichever is less. Applications to perennial crops are prohibited after October 1st.*



Standards & Prohibitions

New Standards & Prohibitions:

Fall mechanical application of liquid manure to croplands, pastures, and winter grazing areas is prohibited except where one the following apply:

- a. where needed for establishment of fall seeded crops and must be applied in accordance with application rates allowed under ATCP 50.04(3).*
- b. where applied on a fall-started, actively growing cover crop.*
- c. when application rates are reduced to 25%, or less, of the rates allowed under ATCP 50.04(3) with only one application occurring in the fall.*

OTHERS?

- Applies to liquid manure only.
- Gives producer options for compliance.



Standards & Prohibitions

New Standards & Prohibitions:

Application of nitrogen fertilizer or manure is prohibited when rainfall greater than one inch is forecast within 24 hours of planned application.

- Intended to reduce the risk of nitrate loss below the root zone.

Breakout Groups

