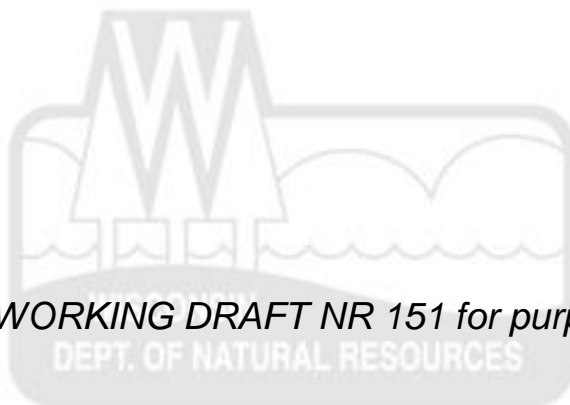


Summary of Draft NR 151 – Groundwater Nitrogen Targeted Performance Standard and Prohibitions

January 15, 2021

These slides are a description of WORKING DRAFT NR 151 for purposes of UW economic analysis focus groups.





Purpose of Draft NR 151

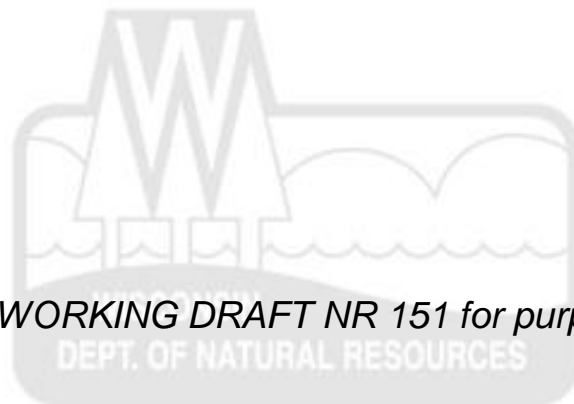
To establish targeted agricultural nonpoint source performance standards that:

- Reduce groundwater nitrate pollution in targeted areas of the state that are susceptible to groundwater contamination
- Achieve compliance with the nitrate groundwater standard of 10 mg/L

These slides are a description of WORKING DRAFT NR 151 for purposes of UW economic analysis focus groups.

Targeted Areas Identified in Draft NR 151

These slides are a description of WORKING DRAFT NR 151 for purposes of UW economic analysis focus groups.





Targeted Areas

For context, targeted areas are composed of:

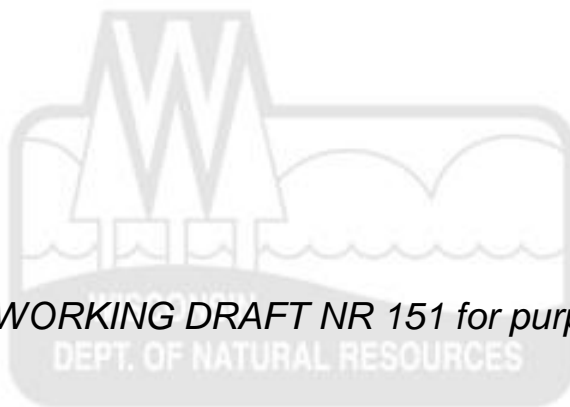
- Soils that meet the definition of nitrogen restricted soils in the NRCS 590 nutrient management standard (December 2015)
- Fields that are in nitrogen restricted areas, which are based on groundwater data and listed in the draft rule by county, township, range, and section*
- Fields that are in areas identified in a municipal wellhead protection plan when the municipal water system reaches a nitrate threshold of 5 mg/L

*Nitrogen restricted areas were identified using a screening process that was developed with input from the Technical Advisory Committee.

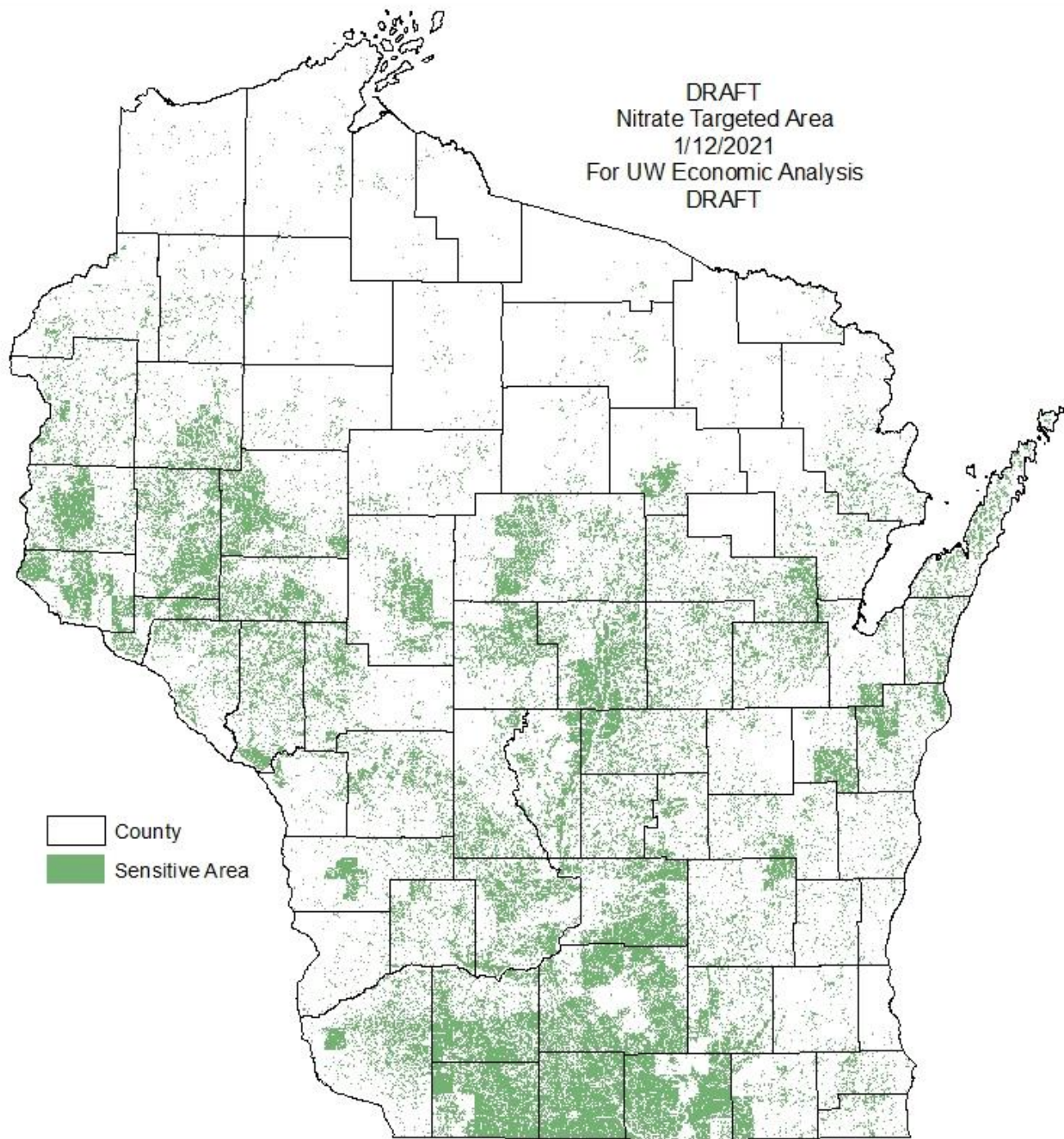
Targeted Area Maps

****Draft maps of the targeted areas are a combination of N restricted soils and nitrogen restricted areas only (the first two bullets in previous slide). Area described in bullet #3 in previous slide will be shown on map of targeted areas accompanying the draft EIA and rule.***

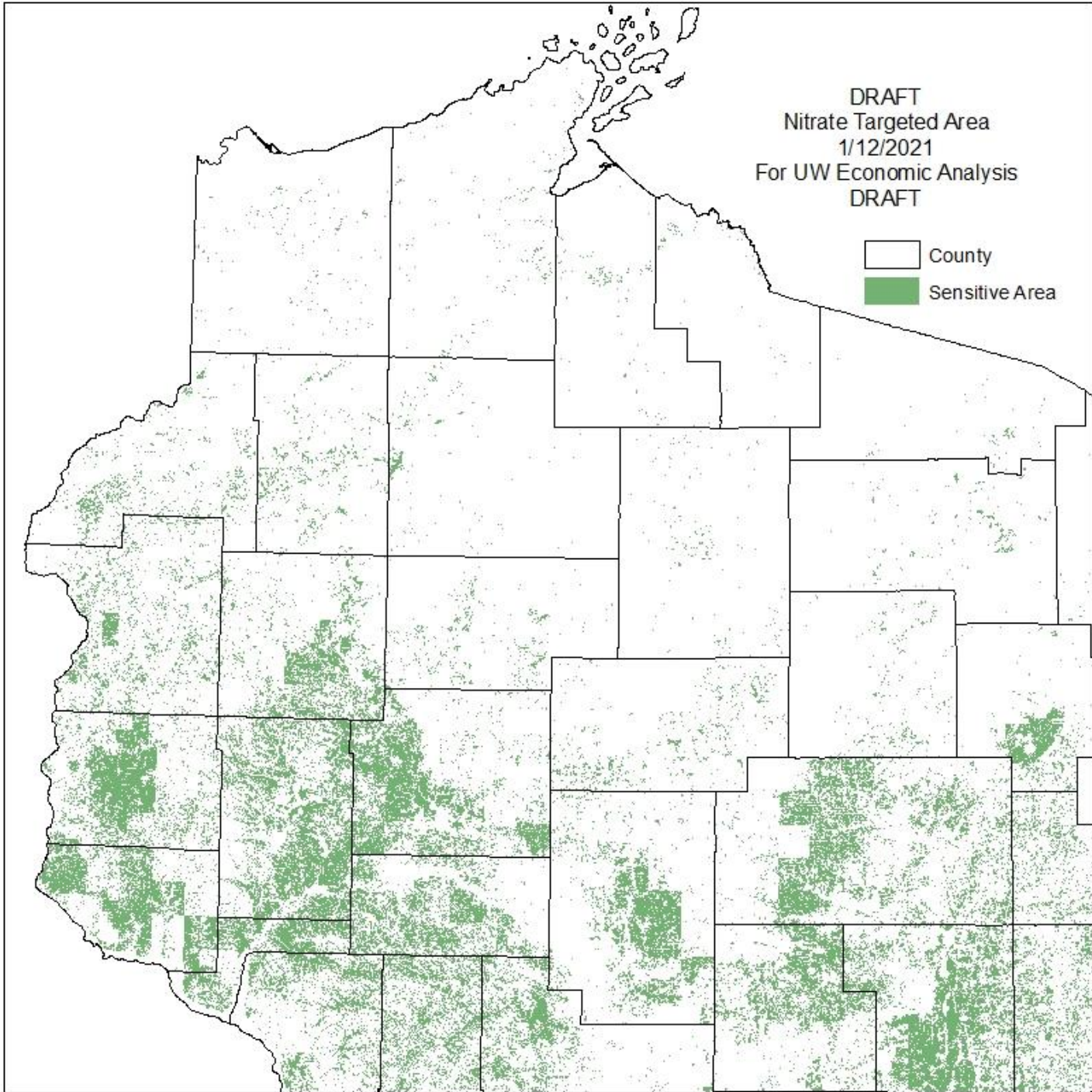
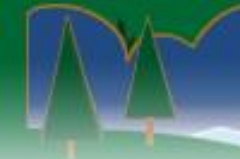
These slides are a description of WORKING DRAFT NR 151 for purposes of UW economic analysis focus groups.



DRAFT
Nitrate Targeted Area
1/12/2021
For UW Economic Analysis
DRAFT



- County
- Sensitive Area

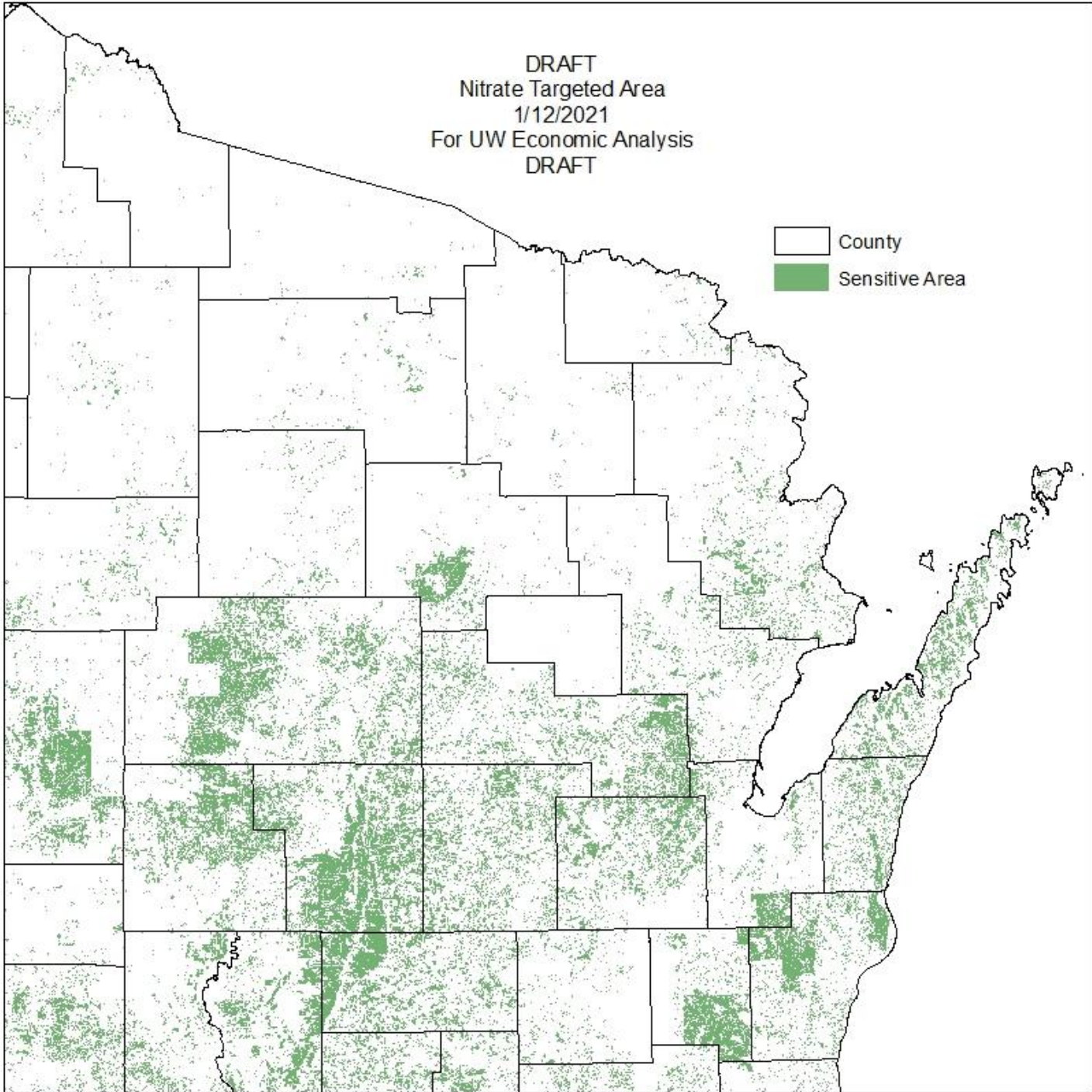


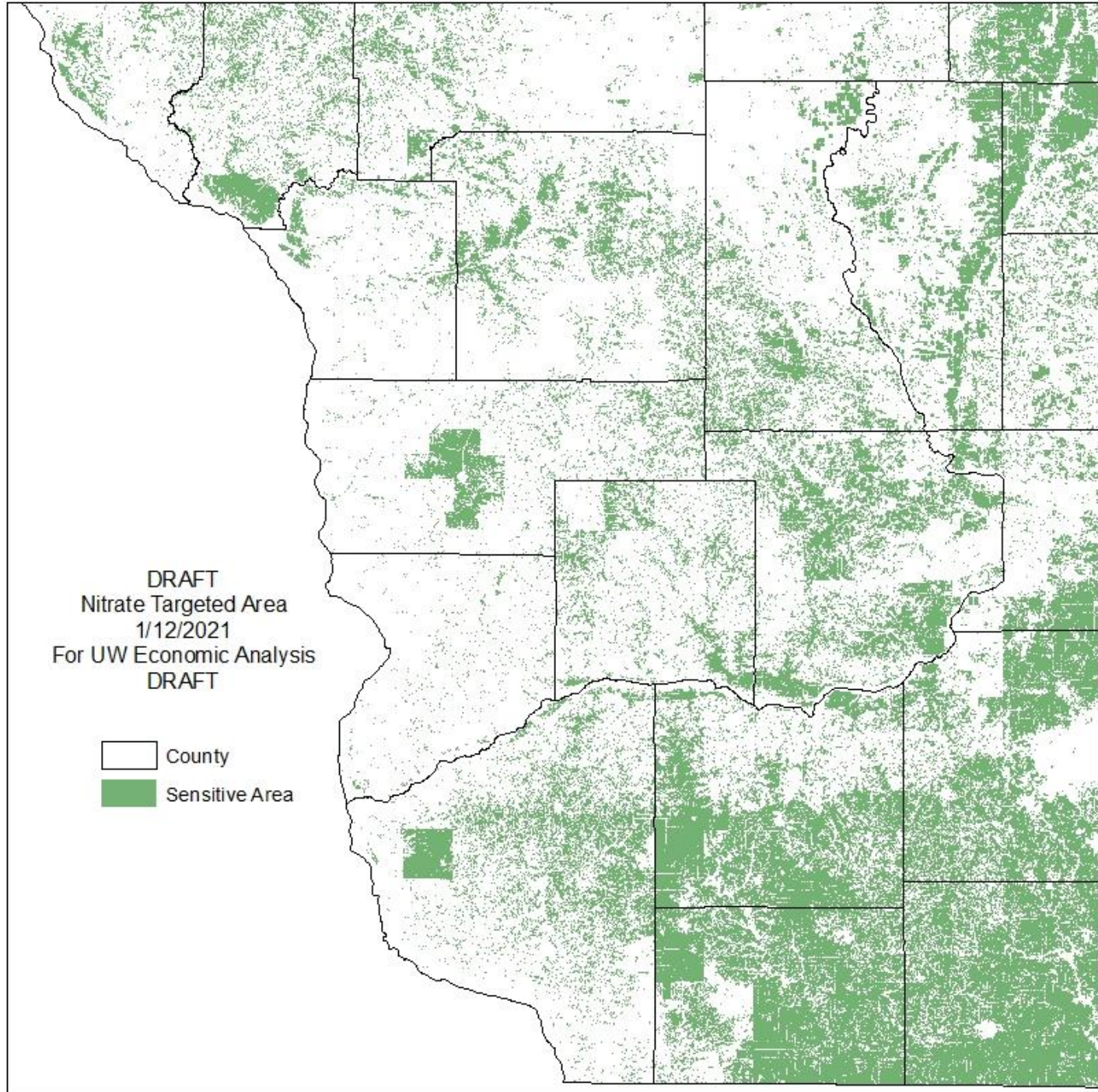
DRAFT
Nitrate Targeted Area
1/12/2021
For UW Economic Analysis
DRAFT

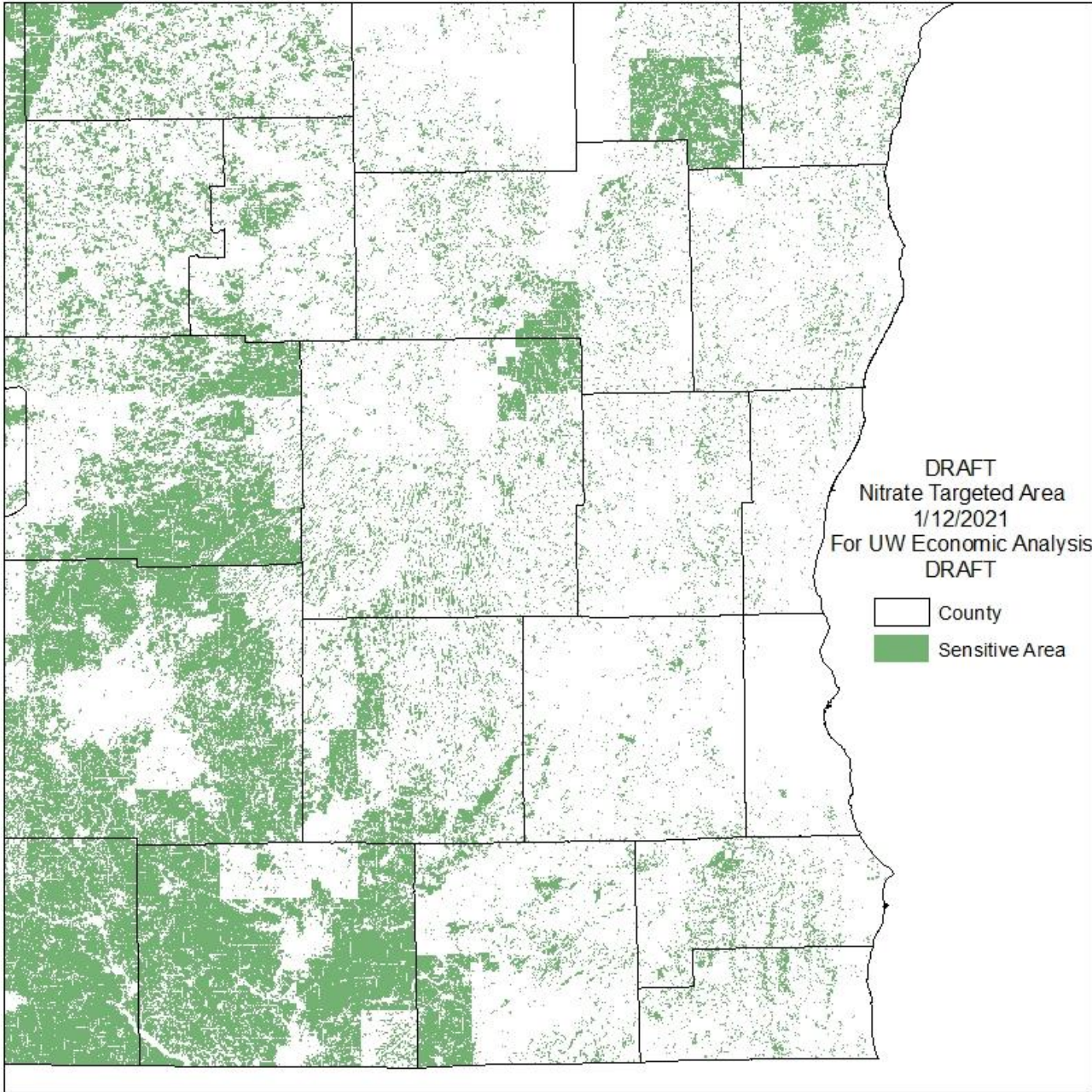
County
Sensitive Area

DRAFT
Nitrate Targeted Area
1/12/2021
For UW Economic Analysis
DRAFT

County
Sensitive Area

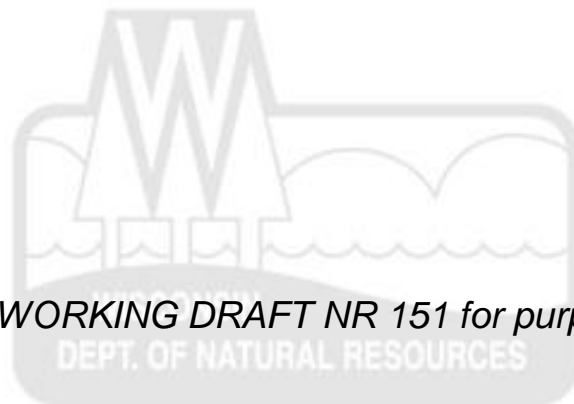






Performance Standards & Prohibitions in Draft NR 151

These slides are a description of WORKING DRAFT NR 151 for purposes of UW economic analysis focus groups.





Performance Standards

Goal

- Establish standards to prevent excessive leaching of nitrogen from agricultural fields to groundwater that will cause or contribute to an exceedance of the groundwater quality standard for nitrate-nitrogen of 10 mg/L

How does draft NR 151 do this?

- Inside the targeted areas, a numeric performance standard limits the amount of nitrogen leaching from fields identified in a producer's nutrient management plan (NMP) by an amount that is less than the groundwater quality standard of 10 mg/L

These slides are a description of WORKING DRAFT NR 151 for purposes of UW economic analysis focus groups.



Performance Standards

Sets a nitrogen leaching limit of less than 2.2 pounds of nitrate per acre per inch of groundwater recharge (equivalent to less than 10 mg/l), which is expressed in draft NR 151:

- As an average annual limit across all acreage in an NMP
- As an average limit for each field over a rotation

Flexibility and assurances are part of the design:

- N losses for high N demanding crops can be offset by other crops
- No single field will have excess N loss over the rotation

These slides are a description of WORKING DRAFT NR 151 for purposes of UW economic analysis focus groups.



Performance Standards

Additional notes on the performance standard:

- Applies to all targeted areas
- Implemented at the farm-scale through a nutrient management plan
- Producers may seek approval from the department to use an alternative nitrogen leaching amount in an NMP if the proposed amount can be shown to achieve compliance with groundwater quality standards
- Technical standards will need to be developed to establish nutrient application practices which limit nitrate leaching from the soil and can be included in nutrient management plans

These slides are a description of WORKING DRAFT NR 151 for purposes of UW economic analysis focus groups.



Irrigation Water

A producer's nutrient management plan must account for all sources of nitrogen, including nitrogen that is applied to fields through irrigation water

These slides are a description of WORKING DRAFT NR 151 for purposes of UW economic analysis focus groups.



Prohibitions

Goal

- To prevent significant leaching of nitrate from the soil in spring before crops are established, the proposed rule seeks to prohibit applications of commercial fertilizer and liquid manure to fields in the fall and winter when there is no crop need for nitrogen.

Notes on the prohibitions:

- Implemented through nutrient management plans
- For commercial nitrogen fertilizer, applies to all targeted areas
- For liquid manure, applies only to the following areas:
 - 'P soils' – coarse textured soils
 - 'R soils' – less than 20 inches to bedrock
 - Within 1,000 feet of a community well
 - Municipal wellhead protection areas with nitrate at 5 mg/L or greater

These slides are a description of WORKING DRAFT NR 151 for purposes of UW economic analysis focus groups.



Prohibitions

Prohibition on applications of commercial nitrogen fertilizer after September 1 with exceptions for:

- Fall seeded crops*
- Fall cover crops in potato rotations to reduce applications of soil fumigants to future potato crops*
- Established perennial crops with a maximum rate of 36 pounds per acre or in accordance with rates allowed under an NRCS 590 nutrient management plan, whichever is less

*Applied in accordance with rates allowed under an NRCS 590 nutrient management plan

These slides are a description of WORKING DRAFT NR 151 for purposes of UW economic analysis focus groups.



Prohibitions

Prohibition on applications of liquid manure after September 1 with exceptions for:

- Establishment of fall seeded crops*
- Established crops*
- One fall application at a rate reduced to 25% or less of rates allowed under an NRCS 590 nutrient management plan**

*Applied in accordance with rates allowed under an NRCS 590 nutrient management plan**

**Producers may seek approval from the department to use an alternative liquid manure application rate in an NMP if the proposed rate can be shown to achieve compliance with groundwater quality standards

These slides are a description of WORKING DRAFT NR 151 for purposes of UW economic analysis focus groups.

NR 151 Timeline for Public Involvement

- Public comment period on draft rule economic impact analysis - Begins February 2021
- Producer participation in UW-led focus groups for purposes of UW economic analysis on the draft rule – February 2021
- Public comment period on the draft rule – Late spring 2021
- Natural Resources Board meeting to request adoption – September 2021

These slides are a description of WORKING DRAFT NR 151 for purposes of UW economic analysis focus groups.

