



# MINNESOTA'S GROUNDWATER PROTECTION RULE



The Groundwater Protection Rule minimizes potential sources of nitrate pollution to the state's groundwater and protects our drinking water. The rule restricts fall application of nitrogen fertilizer in areas vulnerable to contamination, and it outlines steps to reduce the severity of the problem in areas where nitrate in public water supply wells is already elevated. More information about the rule and maps of the areas affected can be found on the MDA's website at: [www.mda.state.mn.us/nfr](http://www.mda.state.mn.us/nfr).

## Nitrogen Fertilizer Management Plan

The rule is based on the Nitrogen Fertilizer Management Plan (NFMP). The NFMP is the state's blueprint for preventing and minimizing impacts of nitrogen fertilizer on groundwater. It emphasizes involving local farmers and agronomists in minimizing nitrate losses in areas vulnerable to groundwater contamination and in problem-solving in areas with elevated nitrate in groundwater. The rule supports the goals and strategies outlined in the NFMP. View the NFMP at: [www.mda.state.mn.us/nfr](http://www.mda.state.mn.us/nfr).

## Content of the Rule

The rule contains two parts. Each part contains separate criteria and requirements. Depending on where you farm, you may be subject to one part of the rule, both parts, or none at all. To find more detail how the rule may apply to your area, visit: [www.mda.state.mn.us/nfr](http://www.mda.state.mn.us/nfr).

The rule focuses on vulnerable groundwater areas and those areas surrounding public water supply wells, called Drinking Water Supply Management Areas (DWSMAs), that have high levels of nitrate. DWSMAs are determined by the Minnesota Department of Health under the Wellhead Protection Program. The boundaries of a DWSMA are based on highways, section lines or other well-known boundaries.

## Part 1 of the Rule

Part 1 of the Groundwater Protection Rule focuses on restrictions to fall application of nitrogen fertilizer if you farm in 1) an area with vulnerable groundwater, or 2) the protection area around a public well with high nitrate. e.

Vulnerable groundwater areas are determined by coarse textured soils, shallow bedrock, or karst geology and are designated by quarter sections. An entire quarter section is included if 50% or more of a quarter-section is considered vulnerable. The MDA has an interactive map of vulnerable groundwater areas available at: [www.mda.state.mn.us/nfr](http://www.mda.state.mn.us/nfr). This map will be updated every year by January 15.

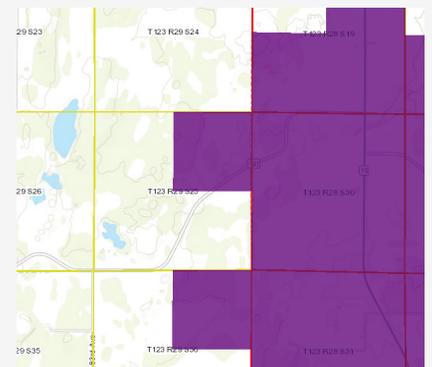


Figure 1: Vulnerable Groundwater Areas determined by quarter section.

## Part 2 of the Rule

Part 2 of the rule responds to DWSMAs that already have elevated nitrate. The goal is to take action to reduce nitrate in groundwater before a public well exceeds the health standard for nitrate. The rule is structured using a sliding scale of voluntary and regulatory actions based on the concentration of nitrate in the well and the use of best management practices (BMPs). The MDA will form a local advisory team with farmers, agronomists and other community members to review and advise the MDA on appropriate practices or requirements to reduce nitrate in the DWSMA.

There are four mitigation levels used to determine voluntary and regulatory actions, two voluntary levels, and two regulatory levels. All areas will begin at a voluntary level and move to regulation only if BMPs are not adopted or if nitrate contamination in the groundwater increases.

## Best Management Practices (BMPs) and Alternative Management Tools (AMTs)

The rule is intended to promote appropriate nitrogen fertilizer BMPs and to involve local farmers and agronomists in adopting the most current science-based and economically viable practices that can reduce nitrate in groundwater. These other practices are called Alternative Management Tools (AMTs). Find more information at: [www.mda.state.mn.us/nitrogenamts](http://www.mda.state.mn.us/nitrogenamts).

## Status of the Rule

The rule was published on April 30, 2018, for a formal comment period. During the summer of 2018, five public hearings were held across the state and over 3,000 written comments were submitted on the draft rule.

- The rule has been approved by an Administrative Law Judge.
- Notification of areas subject to fall application restrictions would occur in January 2020. Restrictions would take effect in September 2020.
- Earliest regulation under Part 2 of the rule could be three years after the rule takes effect and after a DWSMA is determined to meet the criteria for Level 2 outlined in the rule.

The goal is to involve local farmers and agronomists in problem-solving to address increased levels of nitrate in groundwater.

### LEARN MORE

For more details  
on the rule visit  
[www.mda.state.mn.us/nfr](http://www.mda.state.mn.us/nfr)

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