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Larry Gunderson
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Mr. Gunderson:

As President of the Minnesota Canola Council, I appreciate the opportunity to comment on the Minnesota Department of Agriculture's proposed Draft Nitrogen Fertilizer Rule which proposes to restrict fall fertilizer applications in areas considered to have vulnerable groundwater.

MDA has used the criteria of saturated hydraulic conductivity of a soil (Ksat), karst geology, and near-surface bedrock to create a draft map of what it believes are vulnerable groundwater areas in Minnesota. It is in these areas that fall fertilizer aplications will be restricted. The problem with this approach, however, is that it does not make distinctions between diverse geographic regions in Minnesota, but rather takes a "one size fits all" approach without regard to regional differences in topography, climate, and agriculture systems.

For example, while the draft map of vulnerable groundwater areas includes much of northwestern Minnesota, there is no actual evidence of high nitrate in groundwater in that area. An area deemed vulnerable based on geology may have groundwater with elevated nitrate levels or it may not. Any effort to regulate nitrogen must be accompanied by documented nitrate impacts to groundwater associated with the use of nitrogen fertilizers.

In addition to the regional differences, farmers with local knowledge of soils have indicated that the vulnerable groundwater map is inaccurate because it includes areas of heavy clay soils. MDA needs to work with local experts, such as farmers, crop consultants and SWCD staff, to lend rigor and credibility to any vulnerable groundwater designation that is made.

We suggest that the identification of vulnerable groundwater areas be considered as a separate step from the evaluation of groundwater nitrate levels. A state as large and diverse as Minnesota deserves local and regional approaches to improving or maintaining ground water quality rather than one blanket regulation.

Canola is a nutrient dependent crop. Many canola farmers in northwestern Minnesota rely on the ability to fall-fertilize. Fall fertilization provides the following benefits:

- Greater assurance of achieving the seedbed nutrients required for high-yielding canola
- Soil compaction associated with fall application is offset by over winter freezing and thawing
- More time and better fall weather
- Fewer soil drying operations in the spring
- Earlier and more timely seeding

These advantages make fall application of nitrogen fertilizer an attractive and viable alternative to spring application. In fact, University of Minnesota Extension publication titled, "*Best Management Practices for Nitrogen Use in Minnesota*" specifically states:

The northwestern region is characterized by the least rainfall and evaporation. The parent material is predominantly lacustrine. While soils formed in lacustrine deposits are poorly drained, the reduced rainfall in this region decreases concerns for N losses from leaching and denitrification. Therefore, fall applications of nitrogen can be tolerated without a large concern about losses if soils do not have a sandy texture (sand, loamy sand, sandy loam).

When applied appropriately, we believe fall application of nitrogen in northwestern Minnesota should be an acceptable practice. The Minnesota Department of Agriculture should work with local and regional stakeholders and experts to determine all of the appropriate management practices in combination that make fall application of nitrogen acceptable.

As you know, the majority of farmers in northwestern Minnesota rely on safe, clean groundwater to meet their family's household water needs. No one has a greater interest in maintaining the quality of that water than those who use it and rely on it every day.

Thank you for your consideration of our concerns with regard to the Draft Nitrogen Fertilizer Rule. If you should have any questions, please do not hesitate in contacting us.

Sincerely,

Beth C. H. Nelson

Beth Nelson
President