

# North Dakota Nutrient Reduction Strategy

## Frequently Asked Questions (FAQ's)

1. What are the effects of excessive amounts of nutrients (nitrogen and phosphorus) in our rivers, streams, lakes and reservoirs?

While nitrogen and phosphorus are natural parts of aquatic ecosystems, when too much of these nutrients enters the environment (usually from human activities) water can become polluted. Nutrient pollution in water causes algae to grow faster than the ecosystem can handle. Significant increases in algae can harm water quality, food resources and habitats, and decrease the oxygen that fish and other aquatic life need to survive. Some algae blooms are harmful to humans because they produce elevated toxins that can make people sick when they come into contact with the polluted water or drink contaminated water.



*Algal bloom on a North Dakota lake. Photo courtesy Jim Collins Jr., NDDoH*

2. Are there waters in North Dakota currently being impacted by nutrients?

Yes, since the department began monitoring for harmful algal blooms (HABs) in 2016, 19 separate lakes have had algal blooms producing toxins above safe levels. Currently, 47 lakes and reservoirs are assessed as impaired due to nutrients; 93.3 percent of rivers and streams are impacted by excess nitrogen, and 77 percent are affected by excess phosphorus ([2016 Integrated Report, North Dakota Department of Health](#)).

3. What are the major sources of nutrients in North Dakota?

Some of the more common sources are erosion and runoff from cropland, runoff from animal feeding operations, industrial and municipal wastewater treatment, stormwater runoff (e.g., residential fertilization) and failing septic systems.

4. Is this a new regulation?

No, the nutrient reduction strategy is not a new rule or regulation. It utilizes current rules in a coordinated way to address the problem. A successful strategy means no new rules or regulations will be required.

5. Will this strategy restrict how I can apply fertilizer or require certification?

The strategy will highlight methods that can help ag producers use fertilizer more effectively to prevent losing nutrients off the fields. It doesn't govern fertilizer application or add any new requirements for certification.



*A producer applying nutrients. Photo courtesy Lynn Betts, USDA-NRCS*

6. Will preventing nutrient pollution hurt my profitability?

In many cases, the strategy may help with profitability. More efficient use of fertilizer can lead to lower input costs and higher yields. Improvements to soil health increases the soil's productivity. At the same time the water quality of nearby water resources is improved because nutrient runoff is reduced.

7. What limits will Publicly Owned Treatment Works have to meet and when?

The limits and timing for municipal wastewater treatment plant will vary depending on the waterbody to which they discharge. Municipalities will have time to plan for upgrading their treatment systems and many have already started.

8. How will the strategy be implemented?

The North Dakota Department of Health (soon to become the North Dakota Department of Environmental Quality) will begin by changing its internal policies to focus on the nutrient reduction actions in the strategy. Other stakeholders will take the steps they've agreed to as they can. Some things are already being done by the department and stakeholders, such as watershed implementation projects and the Pheasants Forever Precision Agriculture and Conservation Program.

9. When will the department develop numeric nutrient criteria?

First, the department will prioritize waterbodies across the state, then collect data and review the science of the waterbody to determine appropriate criteria. Stakeholders will have an opportunity to comment on our work before anything is finalized. Only after that is completed will criteria be adopted.

10. What are other states doing?

Most states are going through similar processes and taking actions that address their state specific conditions.

Iowa:

[www.nutrientstrategy.iastate.edu/](http://www.nutrientstrategy.iastate.edu/)

Minnesota:

[www.pca.state.mn.us/water/nutrient-reduction-strategy](http://www.pca.state.mn.us/water/nutrient-reduction-strategy)



Figure 3. Checking the soil to determine fertilizer needs. Photo Courtesy Amy Smith, USDA-NRCS

Questions or comments?  
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