



WHITE EARTH RESERVATION

CHAIRMAN Michael Fairbanks **SECRETARY-TREASURER** Michael LaRoque
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September 5, 2025

Minnesota Pollution Control Agency
Corrie Layfield
520 Lafayette Road
St. Paul, MN 55155

RE: Minnesota Nutrient Reduction Strategy 2025 Update

Dear Ms. Layfield,

The White Earth Nation appreciates the opportunity to comment on the Minnesota Nutrient Reduction Strategy 2025 Update. As stewards of the land and waters of northern Minnesota since time immemorial, we assert our responsibility to protect the health of the ecosystems and resources guaranteed to us by treaties, federal laws, and court decisions. These include rights reserved in the 1837, 1855, and other Treaties that affirm our ability to hunt, fish, and gather on lands and waters our ancestors ceded to the United States. These rights are increasingly threatened by the cumulative environmental impacts of non-point source and point source pollution in our shared surface and ground waters.

The fish, water, and wild rice that sustain our people are not merely resources, they are also our relatives. Our culture and way of life is deeply connected to our ability to exercise these rights in relation with these resources, our relatives. The presence of nitrates, phosphorous, bacteria, pharmaceuticals, personal care products, household cleaning products, industrial contaminants, pesticides, manure, and fertilizers runoff or discharge into surface waters and leaching into groundwaters directly harms fish populations, wild rice beds, and the ecosystems we depend upon for our cultural survival, subsistence, and spiritual continuity. These harms weaken and impair our relatives and their critical ecosystems which in turn undermines our Treaty Reserved Rights to continue to hunt, fish, and gather. Any degradation to these resources constitutes a violation of the Treaty obligations by the State of Minnesota and the United States federal government.

We support the MPCA's acknowledgement that there have been tremendous achievements in nutrient management and updated water quality data, modeling, and water quality monitoring that has increased significantly in the past 10 years which include but are not limited to:

- Updated practice adoption and program data. State, federal, local, and private programs addressing nutrients has expanded. Some programs have established tracking systems to show how well adopted practices are reducing nutrients.
- Updated watershed strategies and planning. Comprehensive watershed science assessments and planning efforts now cover the entire state of Minnesota. Social sciences and an understanding of the human dimension have advanced.

- Updated science on nutrient-reducing practices. Research to better understand the science of nutrient reduction solutions has advanced. Models to predict water quality changes with practices to the land have improved.
- Updated information about downstream goals. Nutrient-reduction progress towards goals in the Gulf, Lake Winnipeg, and Lake Superior has been evaluated to determine remaining reduction needs for these waters.
- Updated science on climate and other external influences. Extreme weather events and rapid shifts between these extremes have increased, which affects nutrient management efforts. Changes in land use, cropping system types, soil drainage, and impervious lands can also influence nutrient delivery.

The Mississippi River Basin states met the interim nitrogen reduction goal of 20% by 2025, however the interim phosphorus goal has not been met. These levels are still well above the Task Force goal of reducing the hypoxia zone to 1,930.5 square miles. To achieve nutrient reduction goals in the Mississippi River Basin, there needs to be overland runoff controls for 1 million acres, changes in tillage with more crop residue in 2 million acres, fertilizer and manure management for 3 million acres, tile water management and treatment for 3 million acres, and continuous living cover increased for 8 million acres. Priority phosphorus sources were verified. Based on the original 2014 NRS nutrient source assessment and a supplementary source analysis in 2024, the largest contributors of phosphorus loads were found to vary by large-scale basin, as follows:

- Mississippi River Basin: (1) cropland runoff, (2) wastewater point sources, and (3) streambank erosion.
- Lake Winnipeg Basin: (1) cropland runoff, (2) wastewater point sources, and (3) streambank erosion.
- Lake Superior Basin: (1) nonagricultural rural runoff, (2) wastewater point sources, and (3) streambank erosion.

Statewide, agricultural cropland runoff contributes about 53% of Total Phosphorus to rivers. Another 20% comes from the combination of streambank erosion, nonagricultural rural runoff, and forest runoff. Municipal and industrial wastewater combined with urban stormwater contributes and estimated 21% of Total Phosphorus, and the remaining 6% is estimated to be from atmospheric deposition directly into waters.

Table 2-17. Simulated average annual loads by sources category and major basin from the 2024 source assessment.

Source category	Mississippi River TP	Mississippi River TN	Lake Superior TP	Lake Superior TN	Lake Winnipeg TP	Lake Winnipeg TN
Agriculture ^a	72%	79%	4%	3%	63%	48%
Atmospheric deposition	2%	3%	2%	2%	4%	7%
Developed ^a	7%	4%	4%	4%	6%	5%
Forest/wetland ^a	5%	4%	62%	69%	20%	30%
NPDES-permitted wastewater discharge ^b	6%	8%	10%	18%	3%	5%
Various ^a	9%	3%	18%	4%	4%	8%

Given these current trends and the unmet goals to reduce degraded surface, ground and rain water quality throughout the state that impact the Gulf, Lake Winnipeg, Lake Superior, and Treaty protected resources, the **White Earth Nation supports and urges MPCA to incorporate the following policy recommendations:**

1. Private homes

More outreach and education needs to be conducted on the products that people use in their homes that are sources of nutrient pollution. Many laundry, dish, and car washing soaps contain a form of phosphates which are carried from our homes into the wastewater system. Another common source of nutrient pollution is pet waste. Education on the importance of cleaning up pet waste in their yards or neighborhoods. Pet waste contributes to nitrogen, phosphorus, parasites, and bacteria to water bodies when it is not disposed of properly. Pet waste that is not properly disposed of can lead to conditions in local water bodies that are unsafe for human recreation. A potential solution could be implementing ordinances to ensure pet waste is not washed into waterways.

2. Septic Systems

Many Minnesotans use on-site septic systems, decentralized wastewater systems. These systems can malfunction or fail and easily become a source of nutrient pollution to local waterways. The White Earth Nation suggests more restrictive laws on septic systems including regular testing requirements for functionality to ensure the system is operating as intended.

3. Shoreline Properties

Shoreline properties can have a significant impact to nutrient loading in water bodies. Educating property users and owners as well as implementing regulations for the prohibition of use of certain nutrients for lawn care on shoreline properties would decrease the amounts of nutrients that runoff into the waterbodies and waterways. The majority of shoreline properties are at a slope towards the waterways. With this type of topography, any amount of precipitation would result in nutrients applied to lawns and gardens running off into the water.

4. Wastewater Treatment

Wastewater Treatment facilities are one of the largest regulated discharge sectors in the United States with over 17,200 permitted facilities nationwide. Wastewater treatment facilities are significant sources of nitrogen and phosphorous from human waste, food, and certain soaps and detergents. With this being a point source pollution that is readily regulated, White Earth suggest implementing the Wastewater Nitrogen Reduction Strategy fully, with phased permit limits, optimization, and eventually a statewide TN discharge restriction of 10 mg/L.

5. Urban run-off

Stormwater runoff in urban and suburban areas includes nutrients from household uses such as lawn and garden fertilizers, pet waste, and detergents along with other pollutants such as trash, bacteria, oil, sediment, and other household or pharmaceutical chemicals. During periods of heavy rainfall or snowmelt some wastewater treatment plants can overflow and discharge untreated sewage directly into waterways-this is known as combined sewer overflows (CSOs). Roadside storm drains often directly lead to local streams, rivers, or waterbodies so anything that flows into them often makes it to local waterways without any treatment. White Earth suggest expanding stormwater BMPs and green infrastructure in urban growth areas, prioritizing nutrient hotspots.

6. Agriculture

The current voluntary BMP of a 50 foot buffer does not adequately mitigate runoff and erosion issues. There needs to be more extensive buffer systems implemented. A 50 foot buffer of turf grass is not going to filter nutrients and pesticides. The buffers need to have more phytoremediation potential. A protective buffer would include native grasses with longer root systems, trees, and shrubs. This type of buffer would reduce the sediment erosion that enters the waterways and waterbodies and the extensive root systems would absorb a significant amount of nutrients before they reach the water.

Drain tile is a growing concern for the White Earth Nation. We have expressed our concerns to the watershed districts in the issuance of these permits. There has not been enough research conducted on the impacts of drain tile, nutrient and pesticide movement as well as the impacts of drain tile on ground water recharge. This seems like a new fad in northern Minnesota. We have seen an increase in drain tile permits and installation of drain tile in the region and on the reservation. This also introduces a new source of other contaminants including plastics that will eventually break down to microplastics in the ground. There needs to be regulations for testing and filtration of the effluent from the drain tile pumps. White Earth supports drainage water management and treatment practices in tile-drained areas, paired with incentives for adoption. With agriculture being the largest contributor to nutrient pollution, it would be efficacious to make voluntary BMPs and mandatory statutes. This would include larger buffers and more extensive laws on the application of nutrients. Currently neither the MPCA or the MDA regulates nutrients aside from the application of manure. Without regulation of key agricultural inputs that are a source of pollution for our waters, particularly nitrates and phosphorous, the chances of reaching Minnesota's nutrient reduction goals are next to zero.

Minnesota's land use and land cover has changed immensely in the past 100 years. In the early 1900's, after the passing of the Nelson Act, Dawes Act, Steenerson Act, and Burke Act, White Earth Nation saw significant changes in the landscape. Thousands of acres of previously forested land was converted to agriculture. The changes to the land, have negatively impacted our environment, water quality, and ways of life. Prioritizing conversion of agricultural lands that are no longer utilized back to forested lands or native prairies would improve water quality by reducing the amount of erosion of the fields and associated runoff. White Earth suggests the MPCA collaborate with the MN DNR, BWSR, and USDA to work together more efficiently to achieve Minnesota's Nutrient Reduction Strategy goals.

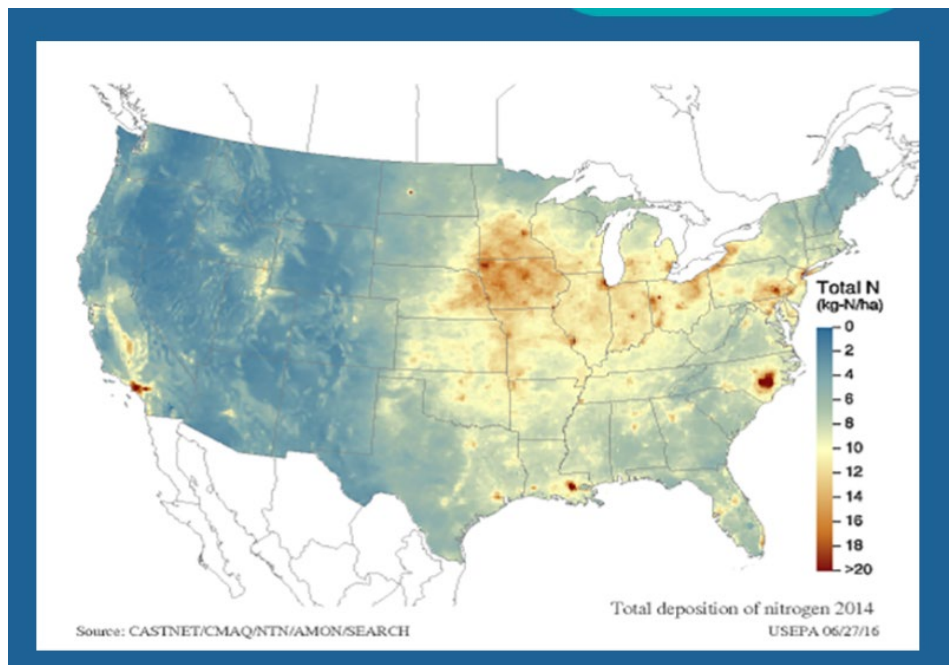
White Earth suggests the MPCA collaborate with NRCS to provide and accelerate adoption of continuous living cover (CLC) crops. This is essential for achieving nitrogen reduction goals. We suggest expanding Minnesota's Ag Water Quality Certification Program and soil health initiatives to reach more producers.

7. Streambank stabilization

White Earth Nation encourages increased technical and financial assistance for streambank stabilization and erosion control, which contribute substantially to phosphorous loads. White Earth Nation suggests that streambank stabilization programs should be offered to Animal Feeding Operations that have riparian areas which are impacted by their farming practices.

8. Atmospheric deposition

Nitrogen in the form of N_2 is the most abundant gas in our atmosphere. However, in order for nitrogen to be available to plants it must be fixed, or converted in nature by bacteria or lightning into ammonium (NH_4^+). Bacteria in soil can convert ammonium into nitrate (NO_3^-) via a process called nitrification. This form is water soluble and if not taken up by plants for growth is easily transported to groundwater or other water bodies via runoff during wet weather. Nitrogen in the air settles into water bodies from electric power production, industry, agriculture, and transportation. In agriculture, nitrogen is volatilized as ammonium in the atmosphere from fertilizers applied in excess to farmland. Studies have indicated that atmospheric deposition directly onto the water surfaces of estuaries and coastal waters can contribute anywhere from 1 to 40% of the total nitrogen inputs.



The White Earth Nation would like to make the following additional suggestions:

Continuing research, innovation, and monitoring.

White Earth Nation suggests to continue strong investment in UMN research and demonstration projects on nutrient reduction practices and new technologies, expand nutrient recovery research in wastewater and agriculture to make marketable byproducts. Maintain and expand river load monitoring and modeling through 2040 and beyond to track progress.

Funding and incentives.

White Earth Nation suggests developing a long-term funding strategy beyond the 2034 expiration of the Clean Water Legacy Amendment. Engage private industry, agribusiness, and landowners with incentives and market-based approaches to reduce reliance on public funds and support public-private partnerships to scale up conservation and nutrient reduction investments.

Equity, awareness, and engagement.

White Earth Nation suggests increased outreach to landowners and communities, especially absentee landowners, using trusted networks like SWCDs, NRCS, and agronomists to promote public awareness of nutrient reduction successes to build support and participation, and ensure Tribal and community engagement in nutrient reduction planning and implementation with early and often consultation, coordination, and collaboration.

White Earth Nation would like to thank the Minnesota Pollution Control Agency for the opportunity to provide comment on this crucial issue and we look forward to continued collaboration and coordination in addressing issues that pollute the waters and impact Treaty resources.

Sincerely,

A handwritten signature in black ink, appearing to read 'Michael Fairbanks'.

Michael Fairbanks (Sep 6, 2025 15:43:24 CDT)

Michael Fairbanks, White Earth Chairman

MPCA NRS Comment Letterhead (AS edits)

Final Audit Report

2025-09-06

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