

Why Conduct the Minnesota Ag Retail Survey?

Minnesota Crop Production Retailers (MCPR) and the Minnesota 4R Nutrient Stewardship Council (MNSC) saw a need to gather additional data to better tell the story of how growers across the state are implementing conservation and nutrient management practices to support Minnesota's stewardship and conservation goals. The Minnesota Ag Retail Survey will survey randomly selected agricultural retailers and farm fields across the state each year. The data collected will generate actionable trendlines for Minnesota growers, support MCPR's advocacy efforts, provide additional information for the updated Minnesota Nutrient Reduction Strategy, and can be compared with similar initiatives throughout the Midwest.

- The Minnesota Ag Retail Survey is funded and supported by several of Minnesota's agricultural and commodity groups. By including multiple groups, this ensures consistent messaging and engagement among retail locations and growers.
- The Minnesota Ag Retail Survey will focus on nitrogen and phosphorus application rates, conservation practices, manure and soil testing utilization, and adoption factors for nutrient management.
- The survey's design will provide the agriculture industry with the tools needed to track nutrient management practice adoption and quantify nutrient loss reduction achieved across the state for years to come.
- This approach allows Minnesota agriculture to showcase progress and fortify why a voluntary agricultural framework is vital.

What is the 2025 Minnesota Nutrient Reduction Strategy?

Minnesota established a statewide Nutrient Reduction Strategy (NRS) in 2014 to guide the state in reducing excess nutrients in its waters, coming from point and nonpoint sources. In order to assess nutrient reduction progress and better guide the state in meeting its nutrient reduction goals by 2040, the Minnesota NRS has been updated after ten years of implementation. The 2025 revision highlights measurable progress, offers recommendations to reduce excess nutrients, and presents new tools to support Minnesota's efforts. For example, the strategy shares goals and progress for the Mississippi River Basin, where most of Minnesota's nutrient losses flow out of the state:

- Based on average conditions between 1980 and 1996, Minnesota will apply a 45% load reduction goal for both total nitrogen (TN) and total phosphorus (TP) at various monitoring points between the Twin Cities and the state line with Iowa. This goal was established by the national-level Gulf Hypoxia Task Force.
- Recent estimates from 2023 indicate improvement since the baseline period of 1980-1996, with a 32% load reduction in TP and roughly a 6% load reduction in TN.

On Minnesota's cropland, a combination of tactics or best management practices (BMPs) are needed to reach nutrient loss reduction goals. Some of these multi-benefit strategies include conservation crop rotation, perennial crops and pastures as working lands, cover crops, reduced tillage methods, in-field nutrient management, drainage water recycling, and wetland installation.

This strategy continues to use the latest science, research, and data to recommend the most effective methods to reach the 2040 goals that aim to restore Minnesota's waters and those downstream of Minnesota, including the Gulf, Lake Winnipeg, and Lake Superior. For more information about recent trends related to total phosphorus and nitrogen loads, both across and leaving the state, please review the updated 2025 Minnesota Nutrient Reduction Strategy.

How is the MN Ag Retail Survey Performed?

The Minnesota Ag Retail Survey and associated sampling framework was designed by Iowa State University's Center for Survey Statistics and Methodology (ISU CSSM) to provide practice implementation information on randomly selected farm fields using ag retailer records. This approach matches similar retail surveys conducted in Iowa, Illinois, and Indiana. Regional liaisons appointed by MCPR will survey randomly selected ag retail locations, then acquire anonymous data related to agricultural practices from grower/customer records for the 2025 crop year. This data will be collected in the summer of 2026, for year two of the Minnesota Ag Retail Survey. Project coordination was done by the Iowa Nutrient Research & Education Council (INREC).

- Minnesota is divided into nine regions or crop reporting districts (CRDs) to represent each region of the state. The number of ag retail locations within each CRD will determine how many field surveys each liaison needs to collect.
- From a total population of roughly 300 ag retail locations offering agronomy services across Minnesota, 90 will be randomly selected to participate in providing 12 randomly selected individual farm field records. Ultimately, the goal set by ISU CSSM is to collect data from at least 500 fields across the state, the number determined to be a representative sample.
- Regional liaisons will be utilized to meet in person with the ag retailers, conduct the random farm field selection protocol, and collect the survey information on an online survey form maintained on a private, secure server.
- The average time spent at each ag retail location to carry out the random selection protocol and collect the data is approximately one hour.
- Ag retail locations and individual growers will be given the opportunity to opt out of the survey process and not have their data included if they choose.
- The protocol is designed to be efficient and ensure that no personal information related to the grower is recorded. The data will be reported at the state aggregate level.

What Could the Data Reveal?

The very first Minnesota Ag Retail Survey took place over the summer of 2025, collecting data from the 2024 crop year. As of September 30, 2025, Minnesota's three regional liaisons were able to visit 52 sites,

collecting survey data from 609 farm fields. Only three grower opt-out cards were received. After processing the year one data, ISU CSSM reported:

- The average size of the fields surveyed was 101.2 acres.
- Corn-soy was the most prevalent crop rotation, accounting for 79.3% (13,717,986 acres).
- In the fall of 2023, 7.0% planted cover crops (1,217,537 acres).
- The most common tillage practice in the fall prior to corn and soy was conventional tillage, at 78.1% (6,458,172 acres) and 85.6% (6,388,556 acres), respectively.
- The entire application of commercial N occurring in spring pre-plant was 49.4% (4,080,735 acres).
- The average commercial N rate on corn-soy was 173.0 pounds per acre.
- Commercial P was applied on 77.5% of fields (13,410,911 acres), 39.1% applied P at the crop removal rate (5,245,014 acres) and 49.1% applied P at the rate needed to bring up/keep at optimum level (6,580,141 acres).

The data collected from this survey could have the ability to inform stakeholders and drive progress toward Minnesota's nutrient loss reduction goals. Annual reports summarizing trends and conservation adoption could also provide potential insights for new initiatives related to nutrient stewardship. To review the full report from year one, please visit the [MCPR website](#). With continued awareness and support, this survey will have the ability to reach more agricultural retailers and farm fields each year.

Need More Information?

Please reach out to Emma Haydock, 4R Coordinator and CCA Administrator with Minnesota Crop Production Retailers, at (507) 719-4899 or emma@mcpr-cca.org. For more information about the 2025 Minnesota Nutrient Reduction Strategy, please reference:

- Minnesota Pollution Control Agency. (January 2026). *2025 Minnesota Nutrient Reduction Strategy* (wq-s1-87a). <https://www.pca.state.mn.us/sites/default/files/wq-s1-87a.pdf>

This survey is supported by:

