

Why Conduct an Ag Retail Survey?

Minnesota Crop Production Retailers (MCPR) is partnering with the Minnesota 4R Nutrient Stewardship Council (MNSC) to gather statewide data from agricultural retailers on conservation and nutrient management practices to support Minnesota's stewardship and conservation goals. This summer, Minnesota will be participating in its very first Ag Retail Survey. Modeled after the work done in both Iowa and Illinois, the Minnesota Ag Retail Survey will survey randomly selected retailers and farm fields across the state. The data collected will generate actionable trendlines for Minnesota growers, support MCPR's advocacy efforts, provide additional information for the Minnesota Nutrient Reduction Strategy, and can be compared with similar initiatives in Iowa and Illinois.

- The Minnesota Ag Retail Survey is funded and supported by several of Minnesota's agricultural groups. By including multiple groups, this ensures consistent messaging and engagement among retail locations and farmers.
- 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 Minnesota Nutrient Reduction Strategy?

Minnesota established a statewide Nutrient Reduction Strategy in 2014 to guide the state in reducing excess nutrients in its waterways, coming from point and nonpoint sources. The strategy was developed and adopted by 11 organizations to ensure that water quality goals are met.¹ The Nutrient Reduction Strategy is using the latest science, research, and data to recommend the most effective strategies to reach the 2040 goals that aim to restore Minnesota's waters and those downstream of Minnesota. The state-level strategy called for reducing nutrient levels by 10 to 20% over much of the state between 2014 and 2025, with 45 to 50% reductions by 2040.² Updates to this strategy coming in late 2025.

- In the Mississippi River, achieve 45% total phosphorus reduction by 2040 from the 1980-1996 baseline and meet in-state lake and river water quality standards.
- In the Mississippi River, achieve 45% total nitrogen reduction by 2040 from the 1980-1996 baseline.

¹ MPCA. 2014. *The Minnesota Nutrient Reduction Strategy*. wq-s1-80. September 2014.
<https://www.pca.state.mn.us/sites/default/files/wq-s1-80.pdf>

² MPCA. 2022 (Interim). *Watershed nutrient loads to accomplish Minnesota's Nutrient Reduction Strategy Goals*. wq-s1-86. August 2022. <https://www.pca.state.mn.us/sites/default/files/wq-s1-86.pdf>

On Minnesota's cropland, combinations of tactics are needed to meet initial nutrient reduction targets for both the Mississippi and Red Rivers.³

- Conservation tillage and erosion control on an additional 6.5 million acres of cropland.
- Vegetative cover increases during spring and fall on 2.6 million acres, including cover crops where crops are harvested early, and perennials on riparian lands and marginal cropland.
- Fertilizer and manure application efficiency improvements on 2.2 million acres for phosphorus and 11.9 million acres for nitrogen.
- Storing and treating tile line waters draining 0.6 million acres of row crops by constructing wetlands, bioreactors and restricting drainage at non-critical times of the year.

How is the MN Ag Retail Survey Performed?

The Minnesota Ag Retail Survey and associated sampling framework was designed by the Iowa State University 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 among Iowa retailer locations and Illinois retailer locations. 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 2024 crop year. Data will be collected in the summer of 2025. Project coordination and contracting with ISU was done by the Iowa Nutrient Research & Education Council (INREC).

- Minnesota is divided into nine regions or crop reporting districts (CRD) to represent each region of the state. The number of ag retail locations within each CRD will determine how many field samples each liaison needs to collect.
- From a total population of 316 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 representative sample.
- Regional liaisons will be utilized to meet in person with the ag retailers, conduct random selection protocols, and collect the survey information on an online survey form maintained on a private, secure server. Paper copies of the survey may be utilized as well.
- The average time spent at each ag retail location to carry out the random selection protocol and collect the information 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 also be reported at the state aggregate level.

What Could the Data reveal?

The data collected from this survey could have the ability to inform stakeholders and drive progress toward Minnesota's nutrient reduction goals. Annual reports summarizing trends and conservation adoption could provide potential insights for new initiatives related to nutrient stewardship. The Minnesota Ag Retail Survey is modeled

³ MPCA. 2014. *Minnesota's Strategy to Reduce Nutrients in Water*. wq-s1-80q. December 2014.
<https://www.pca.state.mn.us/sites/default/files/wq-s1-80q.pdf>

after a similar survey that has been conducted annually in Iowa over the past seven years. For more information about their survey results, please refer to the INREC website: <https://iowanrec.org/progress-measurements/>.

Need More Information?

Please reach out to Emma Haydock, 4R Coordinator with Minnesota Crop Production Retailers, at (507) 719-4899 or emma@mcpr-cca.org. For more information about the sources cited throughout this document, please reference:

- MPCA. 2022 (Interim). *Watershed nutrient loads to accomplish Minnesota's Nutrient Reduction Strategy Goals*. wq-s1-86. August 2022. <https://www.pca.state.mn.us/sites/default/files/wq-s1-86.pdf>
- MPCA. 2014. *Minnesota's Strategy to Reduce Nutrients in Water*. wq-s1-80q. December 2014. <https://www.pca.state.mn.us/sites/default/files/wq-s1-80q.pdf>
- MPCA. 2014. *The Minnesota Nutrient Reduction Strategy*. wq-s1-80. September 2014. <https://www.pca.state.mn.us/water/nutrient-reduction-strategy>

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