

Agriculture's Clean Water Alliance

Newsletter

Summer/Fall 2023

ACWA Members Reaffirm Code of Practice for Nitrogen Fertilizer

At their recent board meeting, ACWA members agreed to the Environmental Code of Practice for Nitrogen Fertilization, which states they will delay fall anhydrous applications without a nitrification inhibitor until soil temperatures are 50 degrees Fahrenheit and trending lower. This reduces nitrate loading in water leaving farm fields before it enters lowa's rivers and streams.

"For 24 years now — since ACWA's founding in 1999 — our members have agreed to this Code of Practice," said Dan Dix, NEW Cooperative general manager and ACWA president. "Last year, every member reported implementing Code of Practice requirements, and 95% of our members reported using a nitrogen stabilizer. The organization's footprint continues to expand, enabling members to reach more farmers and landowners for a greater positive impact on water quality."

Because of the members' locations, ACWA's footprint touches 81 of Iowa's 99 counties, enabling the Code of Practice to have a greater impact on water quality than ever before.

As a membership requirement, ag retailers self-report to ACWA to validate their conformance to the Code of Practice, which takes place usually in mid to late October. Colder soils hinder the conversion of ammonium nitrogen to nitrate, which reduces leaching, or denitrification, and keeps ammonium in the soil. AWCA members encourage the use of nitrogen stabilizers, slow-release fertilizers, incorporation or injection, soil nitrate testing and other tools that minimize loss of nitrogen to water sources.

ACWA also endorses 4R Plus, which focuses on nutrient stewardship using fertilizer from the Right Source, at the Right Rate, the Right Time, and the Right Place. The Plus refers to conservation farming practices for soil health and water quality improvement. Farmers and landowners can use conservation practices including no-till, cover crops, bioreactors and saturated buffers, which keeps nutrients and soil in farm fields and reduces loading into waterbodies.

Petersen Elected to ACWA Executive Committee

At the recent ACWA Board meeting, Chris Petersen at Gold-Eagle Cooperative, was elected to secretary for the group. The secretary position had been combined with the treasurer role for many years, but as ACWA expands membership and activity, the group felt it was time to separate these positions. Petersen will serve through the current fiscal year.



The ACWA Executive Board: Treasurer Thomas Fawcett, Heartland Co-op; Vice President Molly Toot, Landus; Secretary Chris Petersen, Gold-Eagle Cooperative; and President Dan Dix, NEW Cooperative.

10 Years of the Iowa Nutrient Reduction Strategy: ACWA Making an Impact

The federal <u>Gulf of Mexico Hypoxia Task Force</u>, established in 1997, released an action plan in 2008 to reduce excess nutrients and sediment flowing into the Gulf. States along the Mississippi River began to develop nutrient reduction strategies. In 2013, Iowa completed their strategy in support of that action plan. Now at the 10-year mark, the <u>Iowa Nutrient Reduction Strategy</u> (INRS) is still significant and necessary.

Agriculture's Clean Water Alliance has been integral to the progress of the INRS goals. In 1999, ACWA began to monitor the Raccoon River and its tributaries for nitrate-N levels to measure the severity and to pinpoint key areas of concern. Currently, ACWA water monitoring includes the Raccoon River, Boone River, Beaver Creek (a Des Moines River tributary) as well as private tile lines at no charge to the farmer.

Between 2013 and 2022 — since the INRS has been in place — ACWA processed more than 9,300 water samples for nitrate-N and turbidity and 1,200 samples were also analyzed for *E. coli* bacteria. Since 2016, more than 6,000 samples from 300 tile outlets were processed and results were shared with individual farmers. Many of the tile outlets include structures such as a bioreactor, saturated buffer or pond. Monitoring data is used to help guide where implementation projects can be deployed, as well as tracking changes as a result of efforts. Additionally, these data helps users understand the dynamics of nutrient loss across wet and dry cycles, including combinations of land uses and management systems.

The AWCA water monitoring dataset is one of the most extensive collections in Iowa and possibly the Midwest that tracks nitrogen export levels from these rivers. It has led to the creation of the new conservation agronomist (CA) position concept. The CA is knowledgeable about ways farmers and landowners can improve soil health and water quality including reduced or no-tillage, cover crops, and

edge-of-field practices such as a bioreactor or a saturated buffer. When the CA works alongside the ag retail field agronomist, farmers benefit most from their combined agronomic knowledge and conservation knowhow. Currently, there are eight CAs that serve the majority of the state, with more to come.

Within the last two years alone, the CAs and ACWA members have made an impact on lowa's landscape by adding nearly 94,000 acres of farmland with cover crops, nearly 10,000 acres with improved nutrient management practices, converted 9,300 acres to no-till or strip-tillage; and implemented 128 edge-of-field practices. These translate to nearly 1.5 million pounds of nitrogen and 32,000 pounds of phosphorus removed from Iowa waterways. These significant numbers are through ACWA and the CA network only.

Within the 10 years of INRS implementation, ACWA's resumé includes a substantial water monitoring dataset, numerous informative meetings and events, innovative practice implementations, and expanded coverage to include the entire state – all to achieve the greater goal of improved water quality while helping farmers in their agronomic needs.

Agriculture's Clean Water Alliance (ACWA) is a non-profit association whose mission is identifying and advancing solutions that reduce nutrient loss, build healthier soils, and improve Iowa's waters. ACWA is recognized for its ability to build upon its members' extensive relationship with farmers across Iowa.

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