AGRICULTURE'S CLEAN WATER ALLIANCE





In 1999, a group of concerned fertilizer dealers gathered to address the issue of high nitrate levels in the Raccoon River in western Iowa.

These 14 agriculture retailers had the foresight to work together, even though they were in direct competition, to find solutions to improve the quality of the river and its tributaries.

The formation of this nonprofit group was ground-breaking, and after 20 years, ACWA members are still committed to their mission of helping farmers improve their agronomic performance while supporting environmental improvement efforts. The group continues to work with their clients, municipalities and environmental groups to improve water quality through voluntary efforts.

1999

ACWA established.

2000

Water sampling begins in the Raccoon River watershed.

2001

First commitment to a formal Code of Practice for fall nitrogen application, an annual commitment since.

2005

Purchase and installation of four automated water monitoring samplers in the Raccoon River. ACWA manages 32 collection sites, 10 sampling periods between April and August.

2006

Purchase and manage, with Iowa Department of Natural Resources and Des Moines Water Works, remote monitor near the Van Meter bridge, downstream from the confluence of the Raccoon River North, Middle and South branches.

Water quality technician, Anthony Seeman, hired to lead implementation of water monitoring work plans and water sample collection.

ACWA participates in the governor's lowa High School Water Summit, November. A competition to encourage student understanding of the importance of protecting lowa's water resources and promote awareness of the water challenges across lowa.





2007

Provide funding support for installation and demonstration of 3-5 bioreactors in the North Raccoon River watershed in spring 2008.

Other organizations such as Agribusiness Association of lowa (AAI) supports ACWA Code of Practice; other lowa ag retailers are encouraged to follow it as well.

2008

New territory in Des Moines River watershed and new members added

Install largest known tile line bioreactor in the U.S. on the Mike Bravard farm, Greene County. Sand County Foundation and ACWA share installation costs.

1,423 water monitoring samples were collected and analyzed, adding Des Moines and Boone River watersheds.

2009

Celebrating 10 years of ACWA

Three bioreactors installed in Hancock, Hamilton, and Webster counties

ACWA and DMWW increase monitoring for cyanobacteria and algae in Des Moines and Raccoon Rivers to better understand the factors that allow them to survive in the rivers.

Brushy Creek watershed three-year project begins in Carroll County. Partnering with Dedham Coop, Des Moines Water Works, Natural Resources Conservation Service and Iowa Soybean Association.

2010

City of Panora recognizes ACWA and the successful partnership of organizations and individuals who helped fund and install a continuous nitrate monitor, giving Panora advance information about upstream nitrates and enabling the city to manage its water quality accordingly.

ACWA takes part in the Iowa Water & Land Legacy (IWILL) Coalition, working with more than 130 Iowa organizations for passage of the IWLL amendment. Nearly two-thirds of Iowans voted for the amendment.

ACWA participates in developing the Water Quality Master Plan for the Raccoon River.

ACWA water monitoring network includes 138 sampling sites, 11 automated samplers and a corps of certified samplers in the Raccoon and Des Moines watersheds. A total of 1,497 water monitoring samples were collected and analyzed in 2010.

Two bioreactors installed in Carroll and Greene Counties.

2011

ACWA recognized with a Greater Des Moines Environmental Impact Award. Award sponsors: Des Moines Metro Waste Authority, Des Moines Water Works, Greater Des Moines Partnership, Center for Sustainable Communities.

Brushy Creek project completed, results included a 50 percent reduction in E. coli bacteria at Dedham.

2012

Six bioreactors installed in the Raccoon, Boone and Des Moines river watersheds over the last three years. Bioreactors are included in the Iowa Nutrient Reduction Strategy, based on data collected from ACWA bioreactors.

Work begins on \$80,000 McKnight grant in Lyons subwatershed. ACWA partners with Iowa State University to conduct time-of-travel study, evaluating water flow in three tilesheds.

2013

Iowa Nutrient Reduction Strategy released.

Hosted Environmental Discovery Tour in Boone River watershed with 50 people in attendance including politicians, reporters, city officials and others. Farms of Tim Smith, Arlo and Claudia Van Diest, AJ and Kellie Blair were tour stops.

2014

Harry Ahrenholtz transitions from ACWA president to Chairman, working exclusively for AWCA.

ACWA hosts August field day at Smeltzer Learning Farm, Otho. About 50 people, urban and rural, attend to learn of practices including bioreactors and a restored oxbow to reduce nutrients in Iowa waters.

One Water Mississippi River Nutrient dialogues: Ahrenholtz and Wolf participate in the two-year process culminating at the One Water Summit, Kansas City. They present session on an upstream-downstream partnership between farmers and downstream water consumers.

ACWA supports four watershed projects — Boone River, Lyons Creek, Lizard Creek and Black Hawk Lake — through water monitoring, education and outreach.

2015

ACWA receives a three-year grant for the Elk Run Watershed through Iowa Department of Agriculture and Land Stewardship Water Quality Initiative, Calhoun County Urban-Ag Conservation Tour, hosted by Calhoun Soil and Water Conservation District. Tour showcased conservation practices urban and rural to manage stormwater and flood reduction upstream and downstream.

"Conservation at Work" field day at Smeltzer Learning Farm, Otho, hosted by ACWA. More than 60 farmers attend to learn of conservation practices including a restored oxbow, bioreactor, buffer strips, restored prairie and more.

2017

"Current Conversations on Water Quality" event, Roelyn. Hosted by NEW Cooperative, ACWA and Capital Crossroads. Event held at NEW Coop's fertilizer and chemical warehouse. The tour helped urban neighbors better understand farming and the decisions producers make.

Bioreactor recharge at Bravard farm in Greene County that was installed in 2008. ACWA holds field day as excavator installs new wood chips so attendees can see how a bioreactor works.

2018

North Raccoon Farm to River Partnership grant awarded in five watersheds including Elk Run led by ACWA. Three-year grant expands the Elk Run project for scaling up conservation ag practices.

Farm to River Partnership is part of new grant from National Fish and Wildlife Foundation. Working with Farm Journal's Trust in Food™ division to explore targeted marketing messages for conservation practice implementation in the North Raccoon watershed.

2019

ACWA and Capital Crossroads host "An Exchange for Ag and City Leadership" event in Dallas Center. Des Moines area leaders, watershed coordinators, ag retailers and farmers met to discuss priorities, actions being taken and next steps for improving Raccoon and Des Moines river management.



"Without ACWA, a critical piece of the puzzle would be missing – a real connectivity between farm inputs, farming decisions and environmental quality impacts. We could still work with farmers, but as soon as the farmers turn to their suppliers, information could begin to vary. We've got to have the whole agronomic team working together, and we all need to be on the same page."

— Jerry Hatfield, National Soil Tilth Lab (now NLAE), 2004 ACWA annual report

"We'd all like to do something today and see results tomorrow. But the truth is that it takes a long time to see things move through the soil profile. It could be as long as ten years before we see any benefits of this work."

- LD McMullen, Des Moines Water Works, 2004 ACWA annual report

"Bioreactors are a new enough technology that scientists have not yet identified the specific identity and community dynamics of the microorganisms that participate in the denitrification in the bioreactors. Preliminary findings show that both bacterial and fungal species are important in the process.

"The installation of this bioreactor signals an exciting transition for ACWA. With this project, we're moving from collecting data and investigating solutions to doing actual project implementation and scientific research." — Dave Coppess, ACWA president, 2008

"No doubt, the issues we are working on are important to our farmers, but having the folks downstream recognize and applaud our efforts is a tangible result of the investment and the work accomplished by the ACWA over the past 12 years." — Roger Wolf, 2011 Annual Report



1255 SW PRAIRIE TRAIL PARKWAY ANKENY, IOWA 50023 (PH) 515-727-0648 (FAX) 515-251-8657 WWW.ACWA-RRWS.ORG