



2020 ANNUAL REPORT

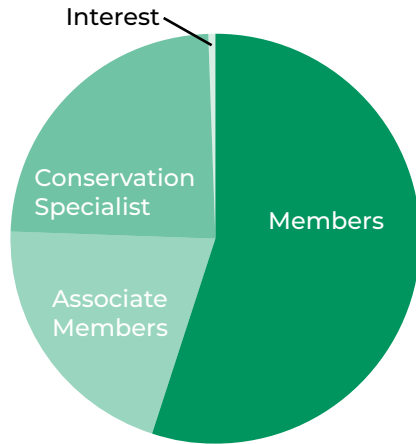
The year 2020 was one unlike any other. The Covid-19 pandemic changed how we all worked and interacted with one another. The August Derecho devastated farm fields and communities. But ACWA members continued to accomplish the goals set forth by the organization including water monitoring, a state Water Quality Initiative (WQI), placing conservation agronomists in the field and embarking on a strategic plan. This report provides an overview of the work achieved and the work to be conducted. It's an exciting time for the future of ACWA, even in the midst of our hardships.

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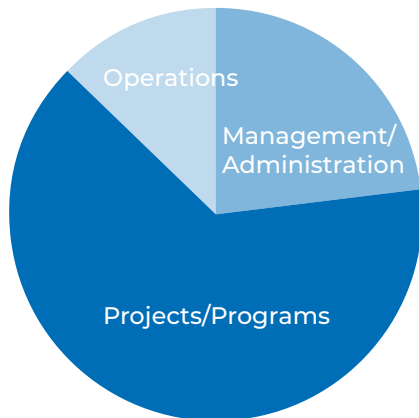


2020 FINANCES



Revenue

Members.....	\$242,372
Conservation Specialist, Farm to River Partnership.....	106,000
Associate Members	90,000
Interest	1,500
Total Revenue	\$439,872



Expenses

Projects/Programs.....	\$331,000
Management/Administration/ Communications.....	119,080
Operations	65,653
Total Expenses	\$515,733

ACWA MEMBERS

Ag Partners LLC

Albert City, Iowa | www.agpartners.com

First Cooperative Association

Cherokee, Iowa | www.first.coop

Gold-Eagle Cooperative

Goldfield, Iowa | www.goldeaglecoop.com

Heartland Co-op

West Des Moines, Iowa | www.heartlandcoop.com

Helena Agri-Enterprises LLC - Midwest Division

West Des Moines, Iowa | www.helenaagri.com

Key Cooperative

Roland, Iowa | www.keycoop.com

Landus Cooperative

Ames, Iowa | www.landuscooperative.com

NEW Cooperative, Inc.

Fort Dodge, Iowa | www.newcoop.com

Nutrien Ag Solutions

Wall Lake, Iowa | www.nutrienagsolutions.com

Pro Cooperative

Gilmore City, Iowa | www.procooperative.com

Van Diest Supply

Webster City, Iowa | www.vdsc.com

ASSOCIATE MEMBERS

Corteva Agriscience

Indianapolis, IN | www.corteva.com

Calcium Products

Ames, IA | www.calciumproducts.com

Iowa Agriculture Water Alliance

Ankeny, IA | www.iowaagwateralliance.com

Koch Fertilizer, LLC

Wichita, KS | www.Kochind.com

Nationwide

www.nationwide.com

Truterra, LLC, sustainability business of Land O'Lakes

Arden Hills, MN | www.truterraag.com

Verdesian Life Sciences

Cary, NC | www.sfp.com

ACTIVE COLLABORATORS

Capital Crossroads

Coalition to Support Iowa Farmers

Dallas County Conservation Board

Farm Journal – Trust in Food™

Great Outdoors Foundation

Greater Des Moines Partnership

Guthrie Center FFA

Iowa Cattlemen's Association

Iowa Corn Growers Association

Iowa Department of Agriculture and Land Stewardship

Iowa Farm Bureau

Iowa Pork Producers Association

Iowa Soybean Association

Iowa State University Extension and Outreach

Iowa Water Center

Lake Panorama Association

National Fish and Wildlife Foundation

National Laboratory for Agriculture and the Environment

Raccoon River Watershed Association

Soil and Water Conservation Districts: Boone, Calhoun, Carroll,

Dallas, Greene, Polk, Sac

Soil and Water Conservation Society

Southern Calhoun FFA

The Nature Conservancy – 4R Plus

USDA – Natural Resources Conservation Service

U.S. Geological Survey

Whiterock Conservancy

Water Monitoring

The mission of ACWA is to identify and advance solutions that reduce nutrient loss, build healthier soils, and improve Iowa's waters. Their commitment to stream monitoring in the Raccoon, Des Moines and Boone rivers and their tributaries is their hallmark. The nitrate-N database that ACWA began in 2000 continues today, amassing more than 20 years of data. It is one of the most extensive in the state, and possibly the Midwest, that tracks export levels of nitrogen from these rivers and streams.

In 2008, ACWA added the oversight of edge-of-field water monitoring on private farms in the Raccoon and Des Moines River watersheds. Tile-drained water sampling provides information to specific fields, which relates to the farmer's management of that field including crop grown, fertilizer applications and conservation practices such as cover crops. In 2020, ACWA sponsored analysis of 590 water samples from 150 tile outlets and 9 sites with bioreactors or saturated buffers. The sample numbers are fewer than the previous year due to drought conditions most of the area.

The aggregated data has helped ACWA target areas for watershed improvement implementation, such as the Elk Run and Farm to River Partnership Water Quality Initiatives. This data also brings to light long-term trends and provides farmers with feedback on their individual operations.

Nitrogen loss from a watershed is the product of river flow and the nitrogen concentration in that water. During high flow, concentrations are diluted but the sheer volume of water moving through the system tends to lead to high losses. High nitrate concentrations pose a risk for drinking water but are not necessarily correlated with a large amount of total loss if the flow is consistently low. Figure 1 shows the export of nitrogen for the major rivers that ACWA monitors between April and July.

In 2020, the Raccoon River and Boone River each had a combination of lower-than-average concentrations and river flows resulting in low overall losses

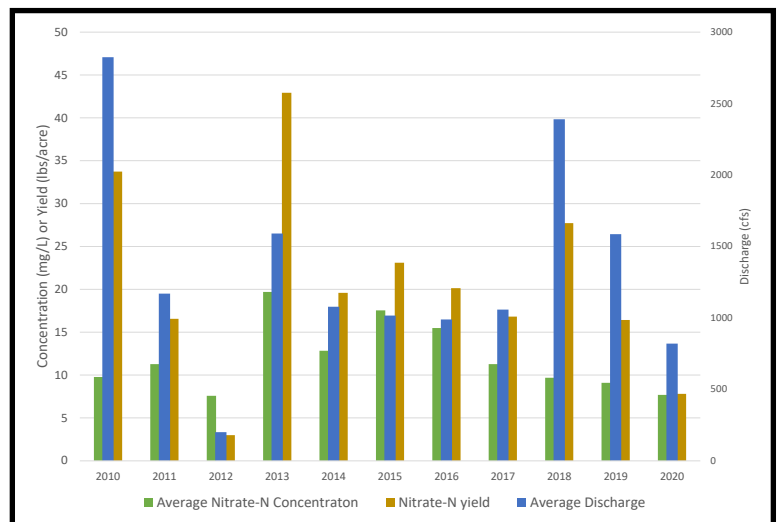


Figure 2. Boone River Nitrogen Loss and River Flow from 2010 through 2020.

	Beaver Creek	Des Moines River	Upper Boone River	Boone River	Upper North Raccoon River	North Raccoon River	Middle Raccoon River	South Raccoon River
Acres	236,475	3,739,942	266,985	541,309	1,030,905	1,462,636	384,544	240,291
2020	5.6	6.8	8.7	7.8	7.6	7.5	1.6	3.1
2007-2019 Average	17.8	12.9	23.9	22.0	17.4	18.0	10.6	14.8

Figure 1. Average export of nitrogen in pounds per acre in 2020; estimated load divided by total acres.

of about eight pounds of nitrogen per acre from April through July. Figure 2 illustrates this for the Boone River for the decade. Note that 2012 was a drought year.

Further focusing on the Elk Run watershed, which is within the Raccoon River watershed, provides an

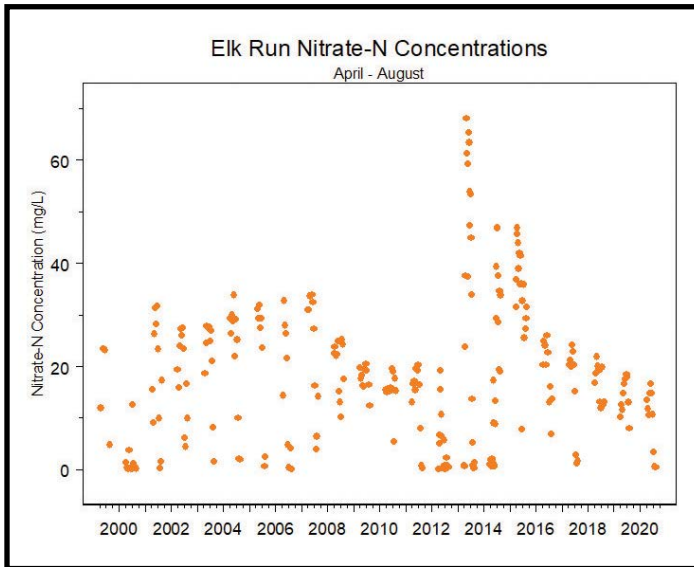
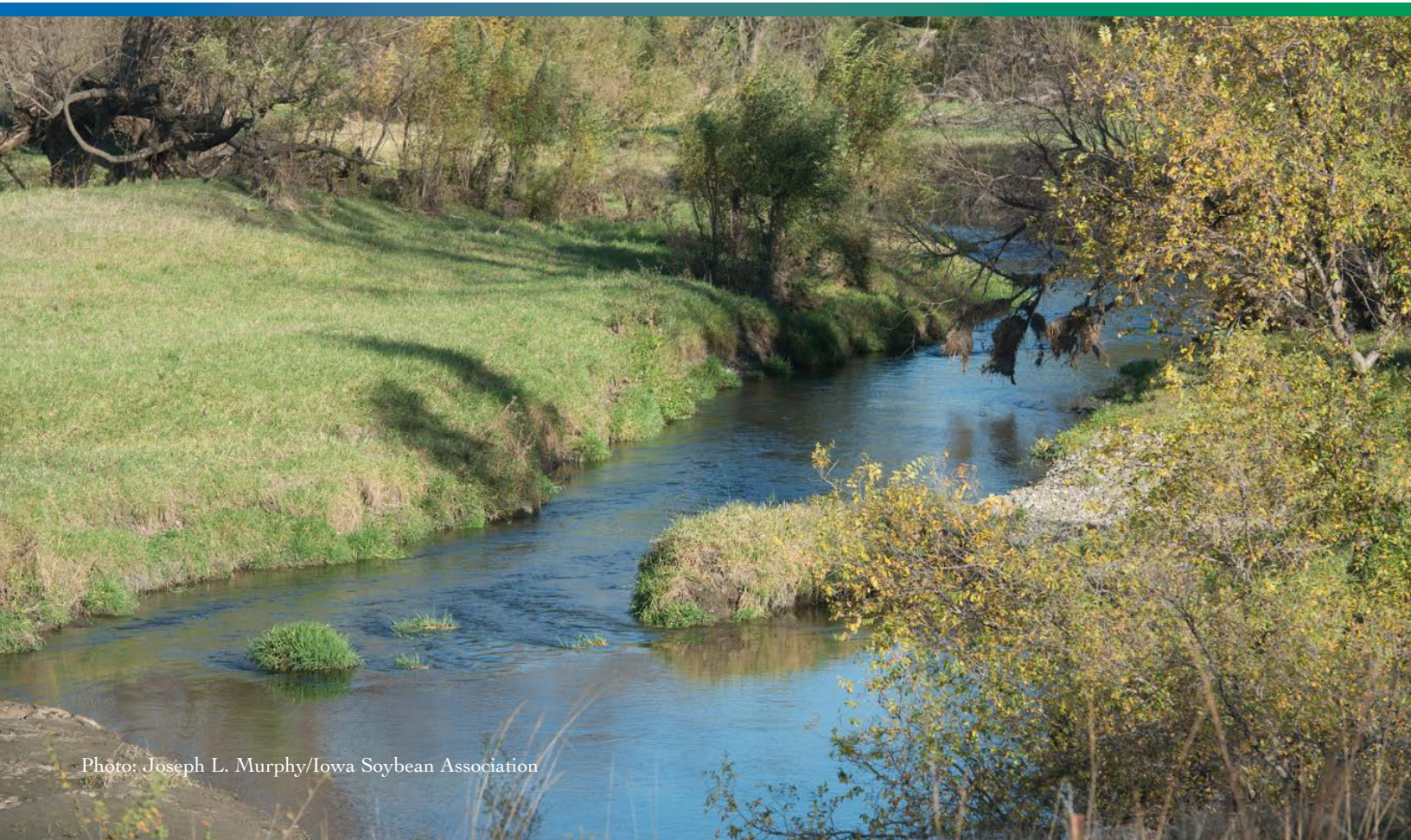


Figure 3. Elk Run watershed Nitrate-N concentrations between 2000-2020.

example of what has been happening with nitrate concentrations on a smaller scale. Figure 3 looks at the watershed over 20 years, from 2000 through 2020. It shows considerably high nitrate-N concentrations between 2000-2008, and a slight decline during the very wet years of 2008-2010. Nitrate-N was very low during the drought years of 2011-2012. There was a large increase in 2013, not unlike what was happening over the entire Raccoon River watershed, but 50-60 mg/L is a high concentration even for tile lines.

In 2018, the Farm to River Partnership Water Quality Initiative began, which included the Elk Run watershed in the project area. Farmers began to use cover crops and change their nutrient management strategies, which one could hope, is reflected in the graph.

ACWA members care about the waters that flow across the land they serve. They care about those living downstream who rely on the Raccoon, Boone, and Des Moines rivers for drinking water. They are concerned about the water quality for those who use the rivers for recreation. ACWA is working with numerous partners — urban and rural — with the common goal of reducing nutrients in these waterbodies in the near future and for years to come.





Strategic Planning

After ACWA celebrated its 20th anniversary in 2019, board members looked toward the future of the organization. To answer the ‘what next?’ question and make the path clearer, board members embarked the strategic planning journey.

“When we looked at how much of the state our members and associate members touch through their regional offices, we realized that ACWA affects approximately two-thirds of Iowa,” says Roger Wolf, ACWA executive director. “We needed to explore how to make a greater impact with our members, and possible new members, as a key trusted advisor for farmer customers and for the sake of improving water quality.”

After months of facilitated workshops, committee meetings, and creative thinking, ACWA is beginning a revised annual work plan and enacting efforts to achieve long-term goals. Some of the outcomes from the strategic planning work include:

- a geographic expansion to additional Iowa regions to make a statewide impact
- a new membership dues structure that is more equitable for all members
- a recognition to enlist of potential new partners that have similar values and goals of ACWA
- a new work plan focusing on member services, outreach and targeted implementation initiatives.

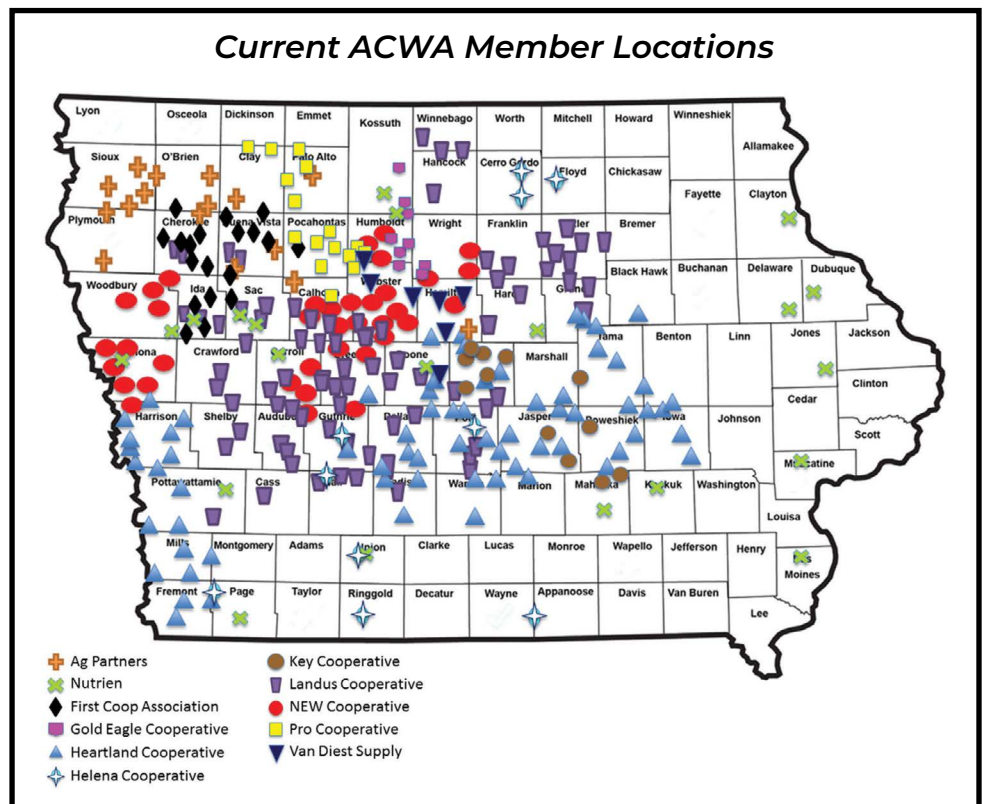
These new ideas and goals reflect how ACWA is adapting to changes in ag retail, collaborating with existing and new partners for water quality im-

ACWA Mission
Identify and advance solutions that reduce nutrient loss, build healthier soils, and improve Iowa’s waters.

ACWA Vision
ACWA is recognized for its ability to build upon its members’ extensive relationships with farmers to improve Iowa’s waters.

provement while continuing some of the tried-and-true activities in which the organization has been involved.

One of the outcomes from the strategic planning exercises was establishing new mission and vision statements to reflect ACWA goals. This mission and



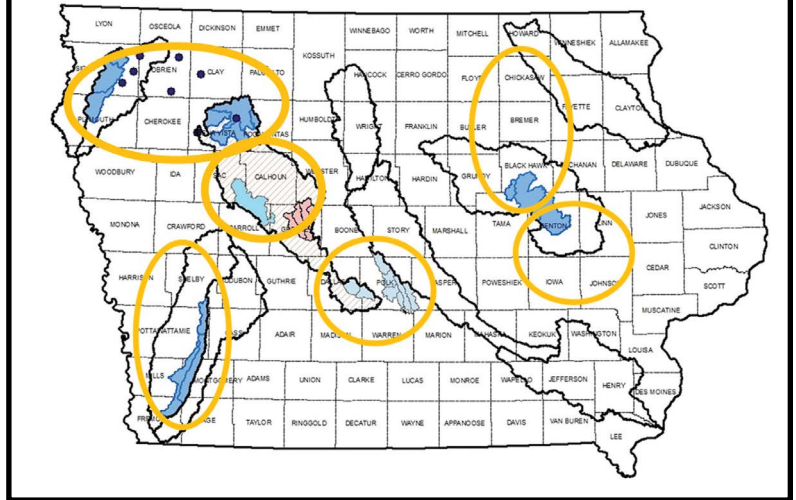
vision are built upon the 20-year foundation of ag retailers working together for clean water and they acknowledge there is still work to do.

“We know water monitoring has been ACWA’s strength for the last two decades, and we have the data that illustrates long-term water quality trends in the state,” says Harry Arhenholtz, ACWA chairman. “The organization will continue water monitoring as a priority, and we plan to expand monitoring in other key watersheds.”

One of the tactics ACWA has employed to increase member collaboration and inform their farmer customers is the creation of the conservation agronomist position. Currently, there are four conservation agronomists in partnership with ACWA and its members, working in tandem with ag retail staff to increase conservation practices on the land including the addition of cover crops, and the installation of bioreactors, saturated buffers, and wetlands. The conservation agronomists also can help farmers with other conservation efforts such as whole-farm conservation assessments and nutrient management plans. An ACWA goal for 2021 includes additional conservation agronomists placed in priority watersheds.

ACWA is a long-standing collective group of like-minded, competitive ag retailers and

2021 Conservation Agronomist Territories



aligned members who have come together with a unified mission and voice to assist with and advocate on behalf of helping farmers adopt sustainable and profitable conservation practices. ACWA can bring forth common sense approaches, as members work with farmers every day and understand the challenges of modern-day agriculture.

As ACWA continues to build its reputation across Iowa, collaborative efforts will become paramount to increase water monitoring, to establish agricultural practices that improve the quality of Iowa’s rivers and streams, and to keep productivity and profitability top-of-mind for the Iowa farmer.





Regional Conservation Partnership Program

Agriculture's Clean Water Alliance (ACWA) and 11 partnering organizations are recipients of a Regional Conservation Partnership Program (RCPP) award courtesy of the U.S. Department of Agriculture's Natural Resources Conservation Service (USDA-NRCS), announced in 2020.

A defining feature of the five-year program, totaling \$25,828,730, is the establishment of area conservation agronomists working in cooperation with ag retailers located within the North Raccoon watershed. This localized approach will boost the delivery, efficiency and effectiveness of conservation services to farmers.

"ACWA is eager to join with all the partners to advance and expand new conservation practices made possible by the new RCPP award," says Harry Ahrenholtz, ACWA chairman. "This funding is a critical element that will help bridge the gap to implementation of high-quality projects to make a positive difference in the watershed."

The North Raccoon Watershed extends roughly 160 miles north and west of Des Moines to Buena Vista County. It touches roughly a dozen counties, with 85 percent of its land area devoted to soybean and corn production.

Over the next five years, farmers will be implementing practices that will reduce an estimated 781,000 lb. of nitrogen export from the watershed as well as 33,600 tons of reduced sediment loss.

Funding from the RCPP totals \$9.8 million and will support the following conservation practice goals:

- Enrolling 150,000 acres of cover crops over four years
- Achieving 57,600 acres of reduced or no-till management
- Construction of 22 bioreactors and 25 saturated buffers
- Construction of an additional 5 wetlands in tile-drained stream segments
- Restoration of 20 oxbow wetlands for wildlife habitat and water quality improvement.



North Raccoon Watershed

Partner contributions totaling \$16 million will support additional conservation practice implementation, program administration, communication and monitoring.

Former NRCS Chief Matthew Lohr says the innovative program deploys conservation practices and systems through collaboration and aligning resources toward a common goal.

"We're excited to be engaging agricultural producers and our partners to implement conservation practices and systems generating positive environmental outcomes for farmers as well as downstream water and recreational users," Lohr says. "In doing so, we'll make an impact for natural resource conservation that could never have been realized on our own."

The NRCS is investing \$206 million in 48 partner-driven conservation projects across 29 states through its Regional Conservation Partnership Program (RCPP). Partners, like those involved in the North Raccoon Watershed, are making nearly \$300 million in contributions.

"To implement the number of practices involving the number of acres needed to make an impact, resources and partners must be aligned and leveraged," says Roger Wolf, ACWA executive director. "This project does both."

The project's goals are ambitious, as are the expected outcomes. Farmers and landowner enrollment will begin in 2021.

The RCPP is a partner-driven approach to conservation that funds solutions to natural resource challenges on agricultural land. By leveraging collective resources and collaborating on common goals, RCPP demonstrates the power of public-private partnerships in delivering results for agriculture and conservation.

North Raccoon Watershed RCPP Partners

- Ag Partners LLC
- Agriculture's Clean Water Alliance
- Iowa Soybean Association
- City of Des Moines
- Heartland Co-op
- Iowa Agriculture Water Alliance
- Iowa Department of Agriculture and Land Stewardship
- Iowa Department of Natural Resources
- North Raccoon River Watershed Management Authority
- Syngenta LLC
- U.S. Fish and Wildlife Service
- Upstream Tech



Photo: Joseph L. Murphy/Iowa Soybean Association



Conservation Agronomists: Setting the Standard for the Future

The term conservation agronomist is not common in the agriculture industry, but ACWA members are advocating for it to become a standard position in Iowa ag retail businesses.

With the Farm to River Partnership Water Quality Initiative (WQI), managed by ACWA, the position of conservation agronomist was vital to the project's success. This position pivots from the traditional field agronomist staff found at most ag retailers. The conservation agronomist carries the same knowledge as field agronomists, but they focus their time on environmental agriculture issues such as nutrient runoff and erosion control.

"The topic of conservation practices is exploding this year in regular conversations," says Michael Fritch, western Iowa conservation agronomist with Heartland Cooperative. "Iowa Agriculture Secretary Mike Naig is really promoting cover crops and edge of field practices. And we're available if a farmer wants more information about them."

There are several conservation agronomists working across state and in different capacities. Fritch and fellow conservation agronomist Ruth McCabe are employed at Heartland Cooperative, one of the first ag retailers to include the position as part of the staff.

"For Heartland Cooperative to come out and say 'we want you to be part of our employee base,' I think it bodes well for the cooperative system," says Fritch. "We provide a

service to our growers. It's been a challenge to figure out what this looks like, but it's working out very nice. I think this will be a solid position in the future."

The other conservation agronomists are Ryan Johnson, who works for Iowa Soybean Association and is embedded with Ag Partners in northwest Iowa; and Joseph Wuebker is with the Farm to River Partnership. He works with Landus Cooperative, NEW Cooperative and Nutrien Ag Solutions offices in Sac, Calhoun, Carroll and Greene counties.

ACWA is no stranger to innovative concepts. The organization of ag retailers have kept water quality a priority for more than 20 years and have overseen stream monitoring for nitrate since 1999. ACWA introduced the conservation agronomist concept to the Iowa Department of Agriculture and Land Stewardship (IDALS) as part of the Farm to River Partnership and it was met with a willingness to experiment with the position.

"We've altered and molded this position as the Farm to River Partnership continued and I believe we've arrived at a good place," says Roger Wolf, ACWA executive director. "The ag retailers involved in the project contributed their ideas as well to help evolve this position and other ACWA members are coming on-board. IDALS is discovering how valuable conservation agronomists are becoming."

The conservation agronomists are getting their feet wet — all were hired in the fall of 2020 — and they have been busy building relationships with the agronomists they work with, county NRCS and Soil and Water Conservation



Ruth McCabe



District (SWCD) staff, and farmers. But the Covid-19 pandemic has made this more difficult.

“Because of the Covid environment, I’ve not been able to get out easily and meet people,” says Johnson. “The Ag Partners offices have been open by appointment only. But I’ve managed to have more than 150 conversations with farmers either over the phone or in person, however they feel most comfortable.”

And each of conservation agronomists have been well-received by farmers. McCabe, who concentrates on eastern Iowa, says the farmers she’s been in touch with have been very excited about her position and has received only positive feedback.

Johnson approaches the concept of adding a conservation practice slowly with some of the farmers who have been less eager to try.

“Cover crops is a simple one to start with,” Johnson says, “as there have been articles in almost every ag publication around. So, I suggest planting cover crops in a wash-out area where they’ve seen some erosion problems, just to introduce the concept onto their farm.”

These four professionals are setting a precedent for how ag retailers may work in the future. McCabe and Fritch are literally writing the manual on how to make this new relationship work.

“Heartland Coop has a goal of creating a framework that we can present to other cooperatives on how to make the conservation agronomist position viable and valuable,” says McCabe. “Michael and I are fleshing that out

now. Every week there’s something new we can do or a new potential partnership to explore.”

All of the conservation agronomists see the potential for these positions to stick. Ag retailers could become the one-stop shop for their customers’ needs. When a producer can turn to the same resource for seed, fertilizer, and conservation practice expertise, it could build trust and peace of mind.

“As a former retail agronomist, I know the workload they have,” says Johnson. “We’re helping to take some of the burden off their shoulders. The staff agronomists have someone trustworthy to turn to with questions about conservation practices they may not be as familiar with, and I can help them understand why it’s important — it helps us all.”

McCabe has had a similar experience. She has built a great rapport with her agronomists, communicating with them regularly.

“They tell me if a grower has a question, and I provide answers and materials to help them; or they set up a meeting with me and the grower, or I contact the grower directly,” says McCabe. “The agronomists and I communicate a lot, so there’s never a surprise when I contact a grower.”

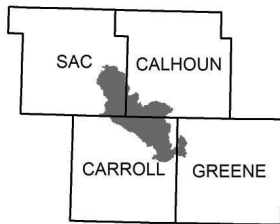
Whatever the model for the conservation agronomist — an ag retail employee, staffed through an external or non-profit agency, or even a self-employed consultant — this position will be integral to bridge the relationship between agriculture and the environment to increase farmer profitability, improve soil health and water quality.



Photo: Joseph L. Murphy/Iowa Soybean Association

Farm to River Partnership

The Farm to River Partnership, a nearly \$3 million Iowa Water Quality Initiative (WQI), began in 2018 to increase conservation farming practices on the land for improved water quality in the North Raccoon River watershed.



The project area covers Sac, Calhoun, Carroll and Greene counties, with the goals of adding cover crops to 11,500 acres, edge-of-field practice installation including 15 bioreactors and 15 saturated buffers, and construction of two targeted wetlands.

The Farm to River Partnership uses a unique approach to helping farmers implement conservation practices by collaborating with NEW Cooperative, Nutrien Ag Solutions and Landus Cooperative and their agronomists located within the project area. The WQI project is administered by Agriculture's Clean Water Alliance (ACWA), an organization of ag retailers and support companies — including the three involved in this project — that collaborate to improve water quality in the North Raccoon River watershed.

Current progress for 2020 includes more than 6,300 new acres of cover crops enrolled. The goal of 11,500 new cover crop acres was met last year, with more than 7,000 new acres enrolled in 2019.

A total of eight edge-of-field practices have been installed, with three more to be completed. Edge-of-field practice goals have been slower to achieve, but the processes for installing a bioreactor or saturated buffer are also more involved. The edge-of-field practices are 100 percent paid through the Farm to River Partnership. The good news for farmers interested in these kinds of practices is this project helps coordinate all the pieces for getting the work done, including siting and design expertise and coordinating financial assistance paperwork.

Proving water quality improvement

One of ACWA's long-standing accomplishments is water monitoring of streams and edge-of-field locations, which continued this summer at 20 sites in the project area. Since the Farm to River Partnership launched in 2018, there has been a steady decline in nitrogen concentrations. As aggregate water samples were reviewed from the area over last decade, a positive indication is showing nitrogen concentration levels are reducing to lower than the early declines in 2008-2010.

New personnel and work protocols

Conservation Agronomist Joseph Wuebker joined the Farm to River Partnership in August and immediately began to work toward the project goals. It has been a challenge trying to conduct visits and meetings during the Covid-19 pandemic, but Wuebker is making it work.



"In my outreach to farmers, landowners and ag retail staff, I'm adjusting to their level of comfort," Wuebker says. "I'm willing to use formats where people are most comfortable — whether it's in-person with masks and being socially distanced, or over the phone, through a Zoom call, by email or even text messages."

Outlook for the future

The three-year WQI for the Farm to River Partnership with Iowa Department of Agriculture and Land Stewardship (IDALS) will end in March 2021, but the commitment of those involved remains strong. Several groups have contributed to the Farm to River Partnership in various ways including providing monetary support, communicating news of the project, and hosting meetings. Organizations involved beyond the three ag retailers include: Carroll, Sac, Calhoun and

Greene Soil and Water Conservation Districts, Iowa Farm Bureau Federation, the Coalition to Support Iowa Farmers, Practical Farmers of Iowa, Iowa Corn Growers Association, Iowa Pork Producers Association, Iowa Cattlemen's Association, Iowa Soybean Association, and Iowa Agriculture Water Alliance (IAWA).

"We want to ensure those who have participated in the Farm to River Partnership maintain and grow their conservation efforts," says Roger Wolf, ACWA executive director. "For example, if they tried cover crops because of this partnership, I hope they expand their usage and even become advocates for conservation agriculture."

Leaders of the organizations involved are beginning to formulate what the future may look like for this key area. The sub-watersheds in the Farm to River Partnership are in the new Regional Conservation Partnership Program (RCPP) area, a national initiative that will begin early next year supported through the Natural Resources Conservation



Farm to River Partnership

Service (NRCS). This will be taken into consideration as future goals take shape.

In the meantime, Wuebker and the ag retailers will continue to search for possible edge-of-field sites and encourage farmer and landowner participation. To discuss possible sites for a bioreactor or saturated buffer, contact Wuebker at: 712-790-1415 or email: jwuebker@iasoybeans.com.

Below: A bioreactor is installed near Lake City as part of the Farm to River Partnership. This edge-of-field practice can remove nitrate from tile-drained water before it travels downstream. The team lays a barrier at the base prior to filling the trench with wood-chips, which is where the denitrification takes place.

