

ACWA

AGRICULTURE'S CLEAN WATER ALLIANCE

2005 PROGRESS REPORT



MISSION

To reduce the nutrient loss – specifically nitrate – from farm fields and to keep the nutrients from entering the Raccoon River and its tributaries.

ACWA

Celebrating five years

This year, ACWA celebrates five years of working together. ACWA is comprised of 10 fertilizer dealers in the Raccoon River watershed. Members sell and apply most of the nitrogen fertilizer used on 1.7 million acres of cropland in the watershed. ACWA members help farmers apply the best agronomic science on farms in the watershed by providing them with information about the watershed, sound management advice, and products that improve the performance of management practices.



VISION

Ag and the Environment

As you look through this progress report, you'll see a collection of viewpoints from members of ACWA. Taken piecemeal, each represents the individual perspective of our industry members. Added together, they become a roadmap into the future of how we see our efforts relating to the work of others on the issue of water quality.

But a critical piece of the puzzle — in order for there to be progress made — is that the industry continues to assure others that we're doing everything possible to meet public environmental standards. We need to know more about where we are starting from. In other words, the process starts with the collection of data.

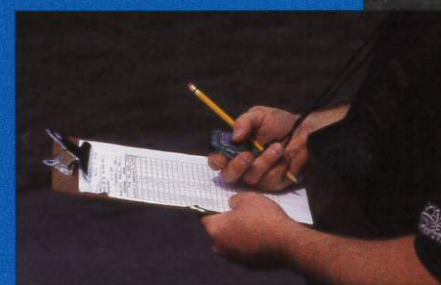
In that mindset, we are undertaking an emotionless, data-based evaluation of the environmental condition of the Raccoon River watershed. Once we know where we stand, then we can begin to test the impact of changes in management practices. In that way, we'll be able to make scientifically-sound linkages between changed management practices on the field and improved water quality.

These efforts are a critical first step in providing a structure for the industry to initiate and engage in its own effort to address environmental issues. As we do that work, we also think that it is important to start the process of reaching out and helping others become more aware of the connections between agronomy, economics and the environment.

It's an exciting time for us because a lot of learning is going on right now. We've got a great set of partners helping us. We're establishing a track record and generating a large quantity of data.

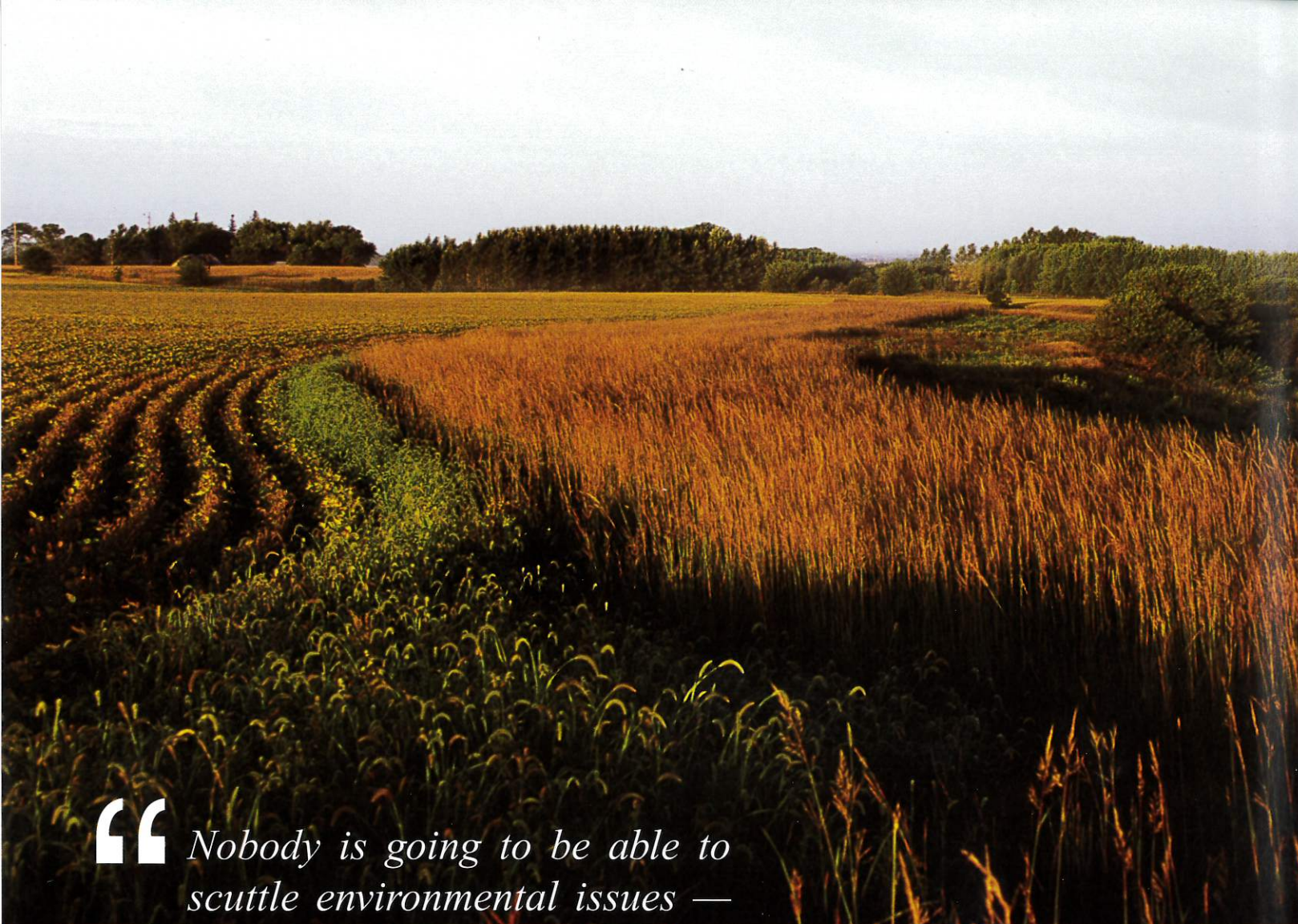
As you read some of the comments made by the people in this industry, we hope you begin to see a common thread — that we're here, we're engaged, and we're working hard to make a difference, too. And as you go about your work on the issue of water quality, we invite you to ask us about the work of ACWA.

Evaluation Data



“Once we know where we stand, then we can begin to test the impact of changes in management practices. In that way, we'll be able to make scientifically-sound linkages between changed management practices on the field and improved water quality.”





“Nobody is going to be able to scuttle environmental issues — a safe food supply and a clean environment will always be high priorities for our entire food chain.”

Steve Becraft | *Ag Partners, LLC*



Priority

Ag Partners, LLC

Albert City, Iowa

Years in business — eight years as a joint venture; over 100 years for both parent companies

Service area — serves farmers across a nine county trade territory that covers much of Northwest Iowa



Steve Becraft | *Agronomy Team Leader*

Nobody is going to be able to scuttle environmental issues — a safe food supply and a clean environment will always be high priorities for our entire food chain. And our involvement with ACWA is an extension of how seriously we take those responsibilities.

We joined ACWA because we think it's critical that we take a leadership role in the issue of water quality. But we also know that being part of ACWA is one more way we can support producers in our area.

Ag Partners, LLC provides producers with a full range of products and services — from precision ag to risk management and grain handling and livestock feed. Right now we are experiencing tremendous growth in the livestock sector as well as expansion in ethanol production.

Because we see on-going growth, we know that nutrient and manure management will continue to be key issues for the state. In fact, comprehensive nutrient management plans and manure management plans are going to become a major part of our customers' business plans over the next five years. Our industry and the people in it will need to play a major role in developing these plans and others like them.

ACWA can help us deal with these issues credibly and successfully — from collecting information to developing strategies that help others understand how we can achieve improved nitrate levels in our water. We can also make sure we are helping customers apply best management practices — ways of doing their business that are science-based, potent, and practical.

Along the way, we've also recognized the need to become more aware of (and sensitive to) both the real and the perceived issues surrounding production agriculture. With ACWA in place, we can take our role seriously, address the issues properly, and have a lasting impact.

NEW Cooperative, Inc.

Fort Dodge, Iowa

Years in business — Several coops merged to form NEW Cooperative, Inc. in 1973

Service area — 17 communities in Webster, Calhoun, Pocahontas, Humboldt, Sac, Buena Vista, Kossuth and Hamilton counties



Brent Bunte (General Manager)

It's our goal to be part of any long-term game plan that's designed to improve water quality in our area. We know that sounds like a big goal and that we're not going to do it by ourselves. Joining ACWA is a critical

step in having input in the decisions made — on and off the farm — about nutrient management in the Raccoon River watershed.

That's the big picture. The smaller ones involve trying to figure out how we go about it. Right now, ACWA is conducting important research and gathering data that is going to point us in the right direction — improvement that we can prove, repeat, and build on.

Although I think producers keep doing a better job all the time, a part of that also includes the need to continue improving recordkeeping in terms of what we do to the soil. I also think the precision ag work we're doing lends itself very well to managing soil nutrient levels and helping producers become better stewards of the soil.

As time goes on, I think we'll probably see the application of farm nutrients more closely defined by regulators in terms of 'what, when, and how.' Our involvement with ACWA is going to give us an opportunity to be part of refining those definitions as they are being designed, and then communicating them to our farmer-members.

One of the reasons that NEW Cooperative exists is to create value for our farmer-members. I think that being part of ACWA fits in very well with that service philosophy.

UAP (United Agri-Products)

Kasota, MN



Years in business — Founded in 1978

Service area — United Agri Products develops and distributes crop production products and services to growers across the United States and Canada

Dave Jenkins (Environmental and Regulatory Services Manager)

At UAP, our mission is to provide our customers with fast and reliable access to the products and services they need to produce food and fiber for US markets and the world.

We know from broad experience that agriculture is becoming a more and more complex business. And many forces are working every day to increase the pace of change to the face of production agriculture.

UAP helps farmers meet the challenges of higher crop yields and healthier production practices in this changing business environment. In fact, it is our goal to serve every farmer as

a superior resource for information and access to emerging technologies. And because those are our targets, we've recognized that each farming operation is unique.

Yet it's our philosophy that we can only succeed by participating in a production system that is clean, safe and environmentally sound. And we recognize that water quality is a key component of that system.

That's why being part of ACWA appeals to us. We like the ACWA approach — it's knowledge-based, it relies on sound research, and it promotes a decision-making process that has a real impact.

As we continue in our mission and as we continue serving farmers, we hope that our high quality products and advanced crop protection technology provide our customers with the tools to meet production targets as well as address environmental concerns. And we consider ACWA to be a significant part of that equation.

Heartland Coop

West Des Moines, Iowa



Years in business — 100+
Service area — 30 locations in Iowa

Dave Coppess (Vice President of Sales and Marketing)

The Des Moines Waterworks invited us to join ACWA in 1999. At that time, we already knew that we wanted to be an active participant in addressing the issue of water quality because it was compatible with our philosophy of environmental stewardship.

These days, our primary goal for ACWA is for it to become the bridge that links together the leading edge of science and the farmer. That's because it's the farmer who is out there making decisions about his operation and implementing the conservation management practices that are going to help us achieve cleaner water and cleaner air.

Ultimately, we need to understand that to meet the expectations of the public, we need to be creating and marketing a clean environment just like we would any other product off the farm.

However, even though cleaner water and air will continue to be a priority, with a growing world population, there is going to be an even stronger demand for food. Learning to balance the environment with continued production is only going to become more important as time goes on.

Another factor in the mix will be changing demographics. If current trends hold, then there will be fewer and fewer people who will be held increasingly accountable for farming practices. We need to know what we're doing and have the ability to

transfer that knowledge quickly and efficiently.

So even though our objective is to help farmers produce and market grain profitably, we've interpreted environmental stewardship as a key part of grain marketing.

Finally, we think it's important to note that since it has taken a long time to recognize these problems, it's also going to take us a long time to address them. But it starts now.

Dedham Cooperative Association

Dedham Iowa



Years in business — Dedham Cooperative Association was incorporated in 1939

Service area — 60% of our territory is in Raccoon River watershed around Dedham — we have another location that is not in this watershed

Roger Shaw (General Manager)

We're a farmer-owned coop — our reason for being is to serve our farming members. We joined ACWA for a couple reasons: first, because we felt that it will give us a voice in the writing of potential fertilizer legislation; and second, because we see the need for a powerful two-way conduit between legislators and public agencies and farmers.

Along the way, we've also found that ACWA has developed a very good working relationship with the Des Moines Water Works, providing a connection between urban and rural communities in Iowa.

Where is all of this taking us? Well, when I envision the future of ag and the environment, I don't think we're seeing how a blanket approach could be successful. Water quality has generated a lot of news coverage, and while ag has been the main target, I would say there are other contributing factors.

That's why we're on a fact-finding mission, hoping to be better informed as decision-making time comes. We're learning that the things that can affect water quality — topography, soil types, rainfall — all vary, even within our territory. Obviously, we know that we don't have all the solutions in hand right now, so it's critical to us to continue with our work in gathering data.

ACWA membership may extend beyond the 'traditional service' outlined in our mission as a farmer-owned cooperative. But it gives us a way to give input and take action on behalf of farmers and agriculture, and it's a necessary part of the whole picture in today's world.

Van Diest Supply

Webster City, Iowa



Years in business — Van Diest Supply has been serving agriculture as a manufacturer, wholesaler and retailer since 1956

John Van Diest (Vice President of Marketing)

We play several roles in the agricultural product marketplace — manufacturer, distributor and retailer. But, no matter what our position in the supply chain happens to be at any point in time, it is our responsibility to help provide growers with the best possible advice on nutrient management.

Because of that, until all the facts are in, we are keenly interested in seeing that the products and services we provide are not prematurely condemned as pollutants, or misrepresented as harming the environment.

Being involved with ACWA is one way to get on with the business of finding credible, third-party, science-based, real-world answers to the problem of water quality. We already know that sound crop science is pointing out to us that the most efficient use of nutrients is to put them into the crop and not the environment.

The research and accumulation of data that is going on through ACWA will point out where agriculture is doing a good job, as well as where we might be able to do better.

The outcome can't be predicted and it may reveal some surprises. But that's the point — working with agriculture means that we are always investigating. It's an ever-evolving process of looking at the combination of resources given to us by Mother Nature, coupled with scientific research.

West Central Cooperative

Ralston, Iowa



Years in business — Ralston farmers incorporated Farmers Elevator Company in 1907

Service area — trade territory spans ten counties and extends 55 miles in each direction

Harry Ahrenholtz (Executive Vice President of Agronomy)

We're in business to provide information and products that help our customers produce crops profitably. Over the years, we've

seen the obvious need to address water quality, and we think that ACWA is one of the best ways to deal with the issue because it builds a coalition of people who are working in this business.

Our primary goal for ACWA is to continue the research — to pursue and identify the sources of water quality issues in the Raccoon River watershed. Our membership in ACWA and our support of the ongoing research reflects our feeling that it is much better to be proactive and find solutions ourselves, than to become reactionary, be put on the defensive, or have our industry face broad regulatory mandates.

For those who are watching this process unfold, it's important to remember that farmers and those who supply them have always had an eye turned toward the environment, since we breathe the same air and drink the same water that everyone else does. In other words, since we live here, we have a keen interest in bettering the environment.

What's more, the research is helping us find new and more efficient ways to produce crops. ACWA is about continually developing an awareness of pitfalls, finding ways to better and more efficiently utilize inputs, and producing bigger crops with fewer total pounds of input.

With ACWA, we're finding that production efficiency goes hand-in-hand with environmental improvement — they are not at odds with one another. From timely applications to variable rates of application and other strategies, we are finding more ways to put nutrients into production rather than into the environment.

First Coop

Cherokee, Iowa



Years in business: Since 1926
Service area: 1256 square miles — 803,840 acres

Jim Carlson (General Manager)

At First Coop, we're proud of maintaining a pretty straightforward customer-oriented focus, which is reflected in our mission statement: 'first in marketing, service and supplies to improve members' profitability.'

And I think if you talked to our members, they would tell you that our being a player in ACWA is another part of the total service package that we've agreed to provide to them.

That's because ACWA helps with overall awareness, both in talking to the public about what we're trying to accomplish in agriculture, as well as what those of us in agriculture might need to be doing to comply with any possible regulations.

It's about the big picture. And when we start looking at the big picture — what we think is going to happen next in ag and the environment — well, I've thought about that a lot. I would guess that agriculture needs to look into the future in order to be a sustainable industry that is going to do what is right with both profitability and the environment.



Monitor

New Water Monitoring Equipment

This season an automated set of water monitoring equipment has been installed in the Raccoon River watershed. In the automated system, a collection hose is positioned in the creek, along with a sensing device. When water levels in the creek rise, the sensing device triggers a sampler to collect a series of samples at specific time intervals, in a number of bottles.

Mechanized water monitoring

provides a more reliable and more robust sampling capability that will lead to the collection of a higher level of data. And putting this new set of equipment in place makes the Raccoon River watershed the most-heavily monitored watershed in Iowa. Tests run on these samples will help ACWA build even more data about the watershed, and can begin to reveal how seasonal rainfall events impact water quality.

So we'd like to continue the work we've started — monitoring water and developing plans that can help us to make things better in the Raccoon River watershed. Instead of acting alone, ACWA puts both producers and dealers in position to make sure that water quality remains suitable into the future.

What makes ACWA a good organization is that being part of it helps our members gain better control of their own destiny.

Farmers Cooperative Company

Farnhamville, Iowa



Years in business: The first grain elevator was built in Farnhamville in 1881

Territory: Members are served from 49 locations in Iowa

Roger Koppen (General Manager)

It's all about water quality. We know that it's an important issue to many people, but I think what some people lose sight of is the fact that water quality is of critical importance to us out here in the country. After all, we live here and we depend on water quality, too. That's the issue that drives our participation in ACWA.

Our primary goal is to understand what we do that might affect water quality, and then to be there to help implement the right plan to improve it. That folds right into our service philosophy of helping our membership be profitable in agriculture — to do better every day environmentally and economically.

And I think as technology gets more involved in agriculture, we're going to have far more information about inputs and about how to position products and inputs to get better results. Technology means we'll be able to prove that we're much more environmentally friendly, and any problems we do identify, we'll be able to treat on a very focused basis.

I've been really interested in the positions that our memberships holds regarding ACWA, so I've asked around. The answer is that they're really glad we're doing this — and this is from the perspective of a production ag membership. They're glad we're investing their money and trying to help.

Frankly, that amazed me. But the essential message of that sentiment is that farmers don't want to do the wrong thing.

Pro Coop

Gilmore City, Iowa



Service area — Calhoun, Pocahontas, and Humboldt counties

Jim Day (Agronomy Manager)

When the subject of ACWA came up, it was a natural fit for us. That's even though just the southern tip of our trade area is in the Raccoon River watershed,

with the remainder in the Des Moines River watershed. But since the Des Moines River is a secondary source of water for the Des Moines Water Works, we are interested in the water quality of both rivers.

It's also important to us to be part of the discussion surrounding water quality and nitrogen in Iowa. That's because we want to do our part to improve the environment — and helping farmers better utilize nitrogen has always been among our goals as an organization.

Another benefit of being part of ACWA is that it gives us an opportunity to talk to people who don't work in agriculture about why nitrogen is so important to farmers.

Also important to us is seeing that the state legislature — and any others who work in the public sector in positions and can regulate farming practices — have a chance to hear the message that we still need to raise corn as competitively as we can. That means not letting others dictate what we're doing, and not letting them cost farmers money.

Ultimately, we're in business to help farmers be successful. We don't like for our customers to spend more money than needed. If we learn that farmers can make adjustments in nitrogen applications that make their farming operation more profitable, then that's going to bring business in and make us more profitable as well.

I also think that, as time goes on, we'll see things coming in the utilization of nitrogen and corn production that will help the environment. For example, in our territory, we're doing more variable rate application based on soil types. Technology and GPS are going to have a tremendous impact on productivity and cost control.

The key is going to be that we are ready to educate the farmer and play our role to make it happen as we move forward.

ACWA 2005 Water Monitoring Schedule

Thursday, April 28th

Thursday, May 12th

Thursday, May 26th

Thursday, June 9th

Thursday, June 23rd

Thursday, July 7th

Thursday, July 21st

Thursday, August 4th

Thursday, August 18th

Thursday, September 1st

Data Summary and Interpretation

Adapted from the report "Nitrate in the Raccoon River: Historical Perspective and 2004 Summary"
compiled by Chris Jones, Des Moines Water Works January, 2005

Importance of Raccoon River watershed

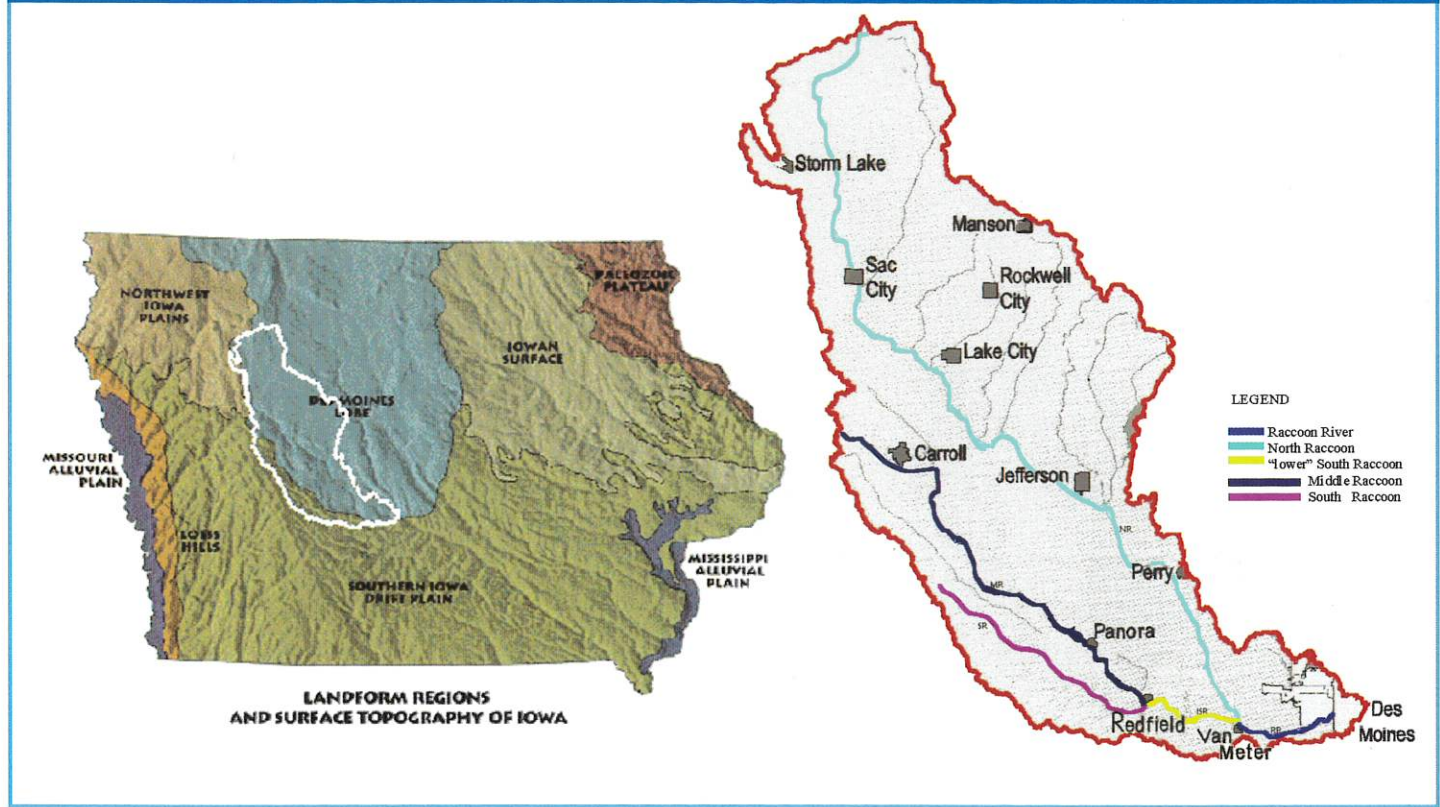
Every year, Des Moines Water Works treats about 15 billion gallons of water from the Raccoon River and shallow groundwater wells heavily influenced by it. The water is intended for consumption by approximately 500,000 people — 17% of Iowa's population. In the Upper Midwest, only Lake Michigan, the Mississippi River, and the Missouri River supply water to more people from a surface water resource.

Raccoon River watershed facts:

- 17 counties / 6.4% of Iowa's total land area
- 3,600 square miles / 2.3 million acres
- 74% of the land area is farmed
- corn / soybeans are grown on 1.7 million acres
- 47 registered feedlots
- 127 unregistered feedlots
- 54 permitted animal feeding operations
- 40 municipal wastewater treatment plants

River Stem	Place of origin	Length	Confluence
Raccoon River	Buena Vista County	200 miles +/-	Joins the Des Moines River in the city of Des Moines
Middle Raccoon	Carroll County	76 miles +/-	Joins the Raccoon near Van Meter
South Raccoon	Guthrie County	50 miles +/-	Joins the Middle Raccoon near Redfield

Raccoon River: Subwatersheds



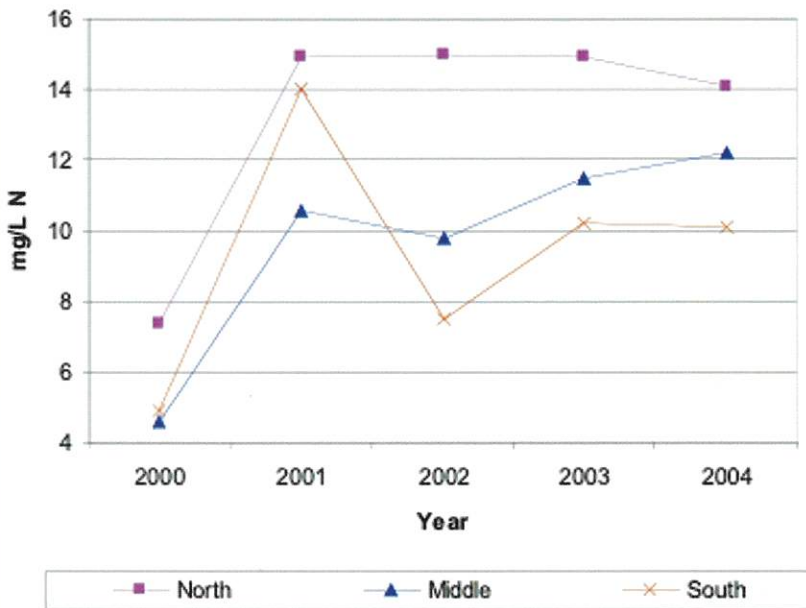
The chart summarizes findings since 2000. Des Moines Water Works and ACWA have monitored water quality at 40 sites throughout the watershed. Results show the bulk of nitrate in the Raccoon Watershed coming from the North Raccoon. Of the three branches, the North Raccoon is the most intensely cultivated, and has the highest concentration of drain tile. Although high, nitrate levels in the North Raccoon have not worsened over the past few years, compared to the apparent upward trend in the Middle Raccoon.

Summary — is there hope that nitrate levels will decrease?

Many farmers are aware of and concerned about nitrate in surface water, and they are implementing practices that may make a difference. And although nitrogen application rates have been constant, Raccoon River nitrate concentrations continue to increase.

It's possible that some of the nitrogen flowing down the Raccoon River today was applied years ago. A huge bank of excess nitrate may reside deep in the soils, fueling groundwater nitrate, which subsequently increases river nitrate. What we do know is that high nitrate levels in the Raccoon River did not happen overnight — even with reductions in nitrogen inputs, correcting the situation may take decades.

Raccoon River Nitrate: Subwatersheds



ACWA MEMBERS

Farmers Cooperative Company | Farnhamville, Iowa

Ag Partners, LLC | Albert City, Iowa

New Coop, Inc. | Fort Dodge, Iowa

UAP | Kasota, Minnesota

Heartland Coop | West Des Moines, Iowa

Dedham Cooperative Association | Dedham, Iowa

Van Diest Supply | Webster City, Iowa

West Central | Ralston, Iowa

First Coop Association | Cherokee, Iowa

Pro Coop | Gilmore City, Iowa



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