



THE INDIAN CREEK PROJECT

UNFOLD THE STORY



WWW.CTIC.ORG

WATERSHED MOMENTS: PARTNERSHIP GUIDE

The Indian Creek Watershed Project is a conservation success story not just because the six-year project inspired farmers to implement new best management practices (BMPs) on more than half of the watershed's farmland or because of the dozens of demonstration plots that were conducted and reported on in the area. The Indian Creek project also brought together a wide array of partners to explore BMPs, measure their impact on water quality and promote conservation systems that improved both the environment and local farmers' profitability.

The effort drew upon the district and NRCS office, as well as the staff of the Conservation Technology Information Center (CTIC), which provided support in communications, coordination and capacity building. It also represented outstanding coordination among a wide range of partners, from crop consultants who oversaw the demonstration plots to multinational agribusinesses and local agricultural retailers who helped with their development.

Over the course of six years, participants in the Indian Creek Watershed Project learned a great deal about nutrient use efficiency, filter strips, cover crops and other best management practices (BMPs). They made connections between conservation systems on the land and the quality of water in the creek. In addition to demonstrating the power of best management practices, they also demonstrated great practices in building partnerships.



ABOUT THE INDIAN CREEK WATERSHED

The Indian Creek watershed encompasses 51,243 acres in north-central Illinois. It is home to several towns, the city of Fairbury, thousands of acres of corn and soybeans, beef herds, contract hog operations, and a few small dairies. Indian Creek is a tributary to the Vermilion River, which provides drinking water to the cities of Streator and Pontiac. Listed by the U.S. Environmental Protection Agency on its 303(d) list of impaired waters for high levels of nitrates, total nitrogen, sediment and total suspended solids (TSS)—all of which can be associated with agricultural runoff—the Vermilion, and the citizens who rely on it as a primary drinking source, would benefit from improved water quality in its tributaries.

In 2010, Terry Bachtold of the Livingston County Soil and Water Conservation District (SWCD) and Eric Gerth of the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) began recruiting farmers in the Indian Creek watershed to join a steering committee for an ambitious project. The top goal: to enroll more than half of the farmland in the watershed in new conservation practices and measure the impact on water quality in Indian Creek.

This document distills the key elements that were modeled in the Indian Creek Watershed Project, and can be adopted in other watersheds.



THE INDIAN CREEK PROJECT

COMMON GOAL

Chris Berry, market developer for nitrogen stabilizers for Dow AgroSciences, said a key draw of the Indian Creek project was the firm commitment of all participants to a common goal—reducing nitrates in surface water.

Tim Smith of CropSmith, an agronomist who conducted the Indian Creek project's demonstration plots with Dr. Harold Reetz, added that the plots were framed as explorations of the 4Rs of Nutrient Stewardship—the Right fertilizer source, at the Right rate, at the Right time and in the Right place. Every demonstration dealt with at least one of those principles, and discussions of the plots' results at summer field days and winter meetings were presented in the 4Rs context.

Poorly defined goals or a range of individual agendas can weaken a project, limiting a group's ability not only to communicate its message, but even to make good decisions. A landmark 1972 paper in *Administrative Science Quarterly* by Michael Cohen and colleagues at Stanford University and the University of Bergen defined groups without clear goals as "organized anarchies," doomed to addressing challenges and making decisions before discovering their preferences and direction.

COMMUNITY SPIRIT

The small community living in the Indian Creek watershed was already close-knit, with long ties through family relationships and church memberships, making it natural and fun to unite around the conservation goals of the project.

"Church plays a big role in this area," noted Bachtold, adding that the steering committee was free of big egos that can derail cooperation in many projects. "The farmers are genuinely friendly. They like each other and they get along."

Smith said watershed events—including planning for CTIC's 2013 Conservation in Action tour, which brought more than 270 people from 20 states to the watershed to see the project in action—helped build on those close relationships and engage more friends and neighbors.

"They used community people to cook and serve the food, brought the FFA kids in to bus the tables, keeping the full range of community involvement in those kinds of meetings, too," Smith noted.



"The Indian Creek Watershed Project was flexible enough to allow producers in the watershed to determine which conservation practices worked best for their operation while at the same time improving water quality. This framework contributed to the project becoming a national success story."

– Trevor L. Sample
Illinois Environmental Protection Agency

DIVERSE COMMITTEE

The project and its steering committee were centered around a small community, but grew to include participants from all over the region representing a wide range of perspectives.

"Their annual meeting would have retailers, basic suppliers/manufacturers, government agencies, farmers and such," noted Berry. "They had EPA people talking, NRCS people talking, scientists, universities. They had everybody involved in this, and everybody kind of felt they were part of it."

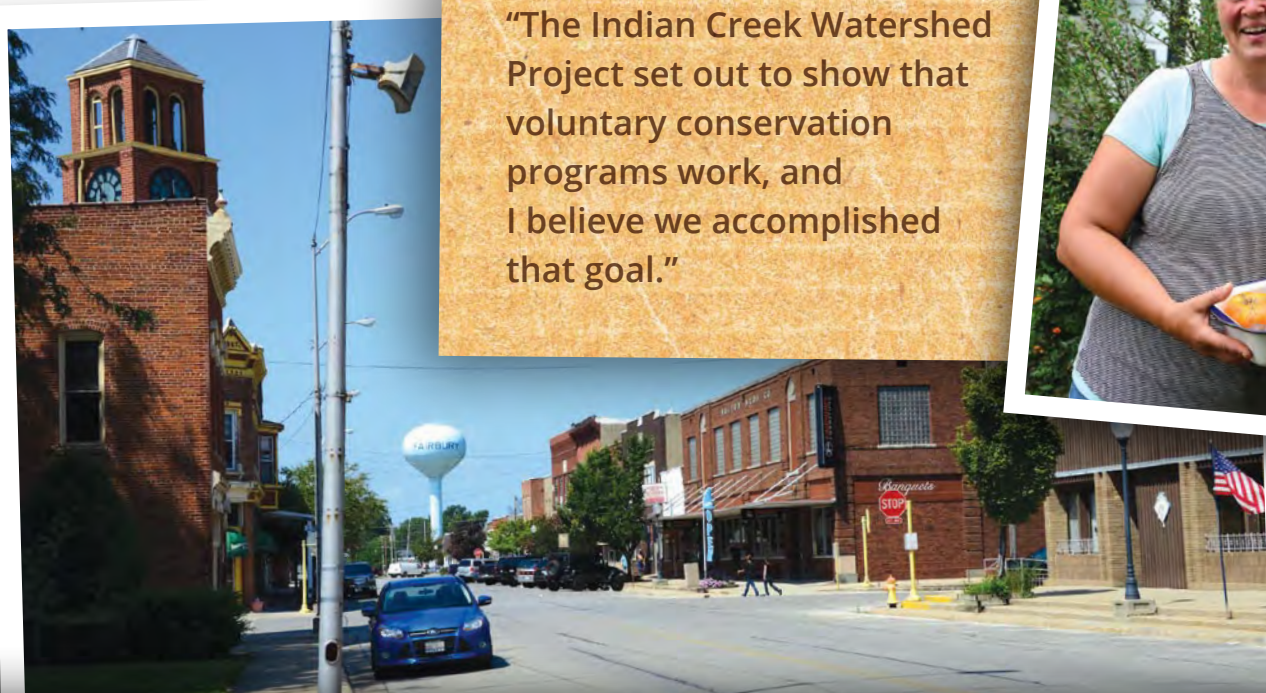
"Not many times do we get to sit at the same table," he added. "The number-one benefit was the people I've met through this."

Steering committee member John Traub noted that he and his fellow local farmers also appreciated the perspectives provided by agribusiness partners.

"With those folks, you got a whole other perspective and a whole other set of expertise with our sponsors," Traub said. "So as we were planning projects and plot demonstrations, they had either experience or expertise to say, 'you know, maybe you want to set it up this way.' So not only does it give us a base and credibility, but also it's in a format that can be repeatable elsewhere."



"The Indian Creek Watershed Project set out to show that voluntary conservation programs work, and I believe we accomplished that goal."





“The Indian Creek Watershed Project is a good example of watershed stakeholders working together toward achieving a common goal, which is why it has garnered national attention.”

SHARE THE LOAD

Chad Watts, CTIC’s executive director, pointed out that the project’s steering committee was an active group, with each participant shouldering part of the load and actively participating in the project. That brought out the best in everybody, he added, and prevented a common challenge in many groups in which a single organization or approach dominates the effort.

“Everybody had something of value to offer,” said Watts. “CTIC didn’t have to bring everything to the table. Dow didn’t have to. Illinois EPA didn’t have to. This wasn’t about ‘my organization’ or ‘your organization.’ Everybody just put their Indian Creek hat on.”

The Illinois EPA specifically called for demonstration plots, not research trials. Smith said the demonstration plot approach provided the opportunity to explore how BMPs or products worked—or could work better—rather than trying to prove whether or not they were valid.

“We were demonstrating BMPs that were already established,” Smith said. “We have these tools to help us manage. We have to see how to make them work. Farmers want to know, ‘Is there a return on my investment? How does it affect my nitrogen management?’”



VALUE OPINIONS

Creating a well-balanced, active steering committee required a strong commitment to valuing each member’s contributions, noted Watts—starting with the producers who farm in the watershed.

“We said, ‘You’re in the lead. This is your house. You tell us what we ought to do and we’ll work together to get it done,’” Watts recalled. “It was about giving people the authority and the tools.”

The producers stepped up to accept the challenge, which provided invaluable guidance to Smith and Reetz as they mapped out the demonstration plots and engaged with host farmers.

“A big part of this was listening to them—what they wanted to get out of it—and learning from them which of these practices they already were doing and what things they didn’t know, so they could maximize their learning from what we were doing,” Smith said. “It was also asking, ‘is this useful information for you?’”

Smith pointed out that actively engaging farmers for their direction and questions also created a great opportunity to turn important questions into great demonstration plots.

“People had good ideas: ‘We think this is a good thing to do; how do we show it?’” Smith said. “We could turn around and say, ‘If somebody’s interested in doing that, we need some volunteers to help make that happen.’”



“We didn’t pit one company against another,” he added. “We also worked with companies to say, ‘this is how we’re going to demonstrate your product. Is this an acceptable way to do this?’”



“Illinois EPA views the Indian Creek Watershed Project as a successful template to use in other watersheds to meet the goals of the Illinois Nutrient Loss Reduction Strategy.”
– **Trevor L. Sample**
Illinois Environmental Protection Agency



Smith noted that company experts often responded with great ideas on how to better use the products, or with questions of their own that they wanted to explore with farmers in the watershed.

Berry said the Indian Creek demonstration plots provided a more constructive approach than many demonstrations that pit products against each other in a battle of winners and losers.

“They positioned this as, ‘Here’s a product or tool that could really help you, so let’s figure out how it can help,’ rather than, ‘Let’s see if this really works,’” Berry said. “Where we saw misses, we could say, ‘Let’s figure out what happened here.’”

PROJECT PARTICIPANTS SAY:

"This watershed did a good job of bringing farmers together. Different farmers trying different things and then passing the word amongst them. It brought conservation and water quality – the awareness of it to the community."

– **Mike Trainor**

"I got involved in the Indian Creek project to see what we could do in a watershed on a small scale – to see how we could use better conservation systems, and use them wiser to clean up our water."

– **Marcus Maier**

"I started out on the steering committee so I got my feet wet that way. It seemed like a good project to get into. I think we all want to do the right thing as far as cleaning the water up so everyone can have a good water source."

– **Greg Myers**

"That's the beauty of the Indian Creek project. Getting the attitude out there that 'Let's try something a little different that may be out of our realm a bit from what we're used to – a worthwhile project. We're out here to be good stewards and leave the ground better than it was when we received it.'"

– **Tom Yoder**

"The Indian Creek watershed project highlighted all the practices we knew we should be doing, but also why we should be doing them. We can improve water quality and reduce nutrient loading. It can benefit not only ourselves, but our community of Fairbury, IL and the water quality of Indian creek."

– **John Traub**

"I hope that we show how proactive we've been in Indian Creek with water quality. I hope it becomes a way of life – not just something people try."

– **Danny Harms**

TAKING RISKS, SEEING BENEFITS

The demonstration format was not competitive, noted Berry, but it was aggressive—designed to seek out the details on how to get the very best performance and economy from the practices. One of the most striking examples was the eagerness of the demonstration plot designers and the host farmers to push well below standard nutrient recommendations to figure out how much nitrogen is truly necessary for high yields in the area.

"In another project, I've had somebody tell me, 'I can't afford to have my cooperators lose a bushel in a trial,'" Berry recalled. "If that's how you approach it, you're not going to achieve your goal. You're not going to demonstrate effectiveness. You really didn't prove or disprove anything."

In contrast, the results in Indian Creek were dramatic. Though conventional recommendations were 1.2 pounds of nitrogen needed for every bushel of corn produced, the Indian Creek Watershed Project demonstration plots found that local farmers could produce a bushel with just 0.64 pounds of N per acre. That was a real eye-opener not just for local farmers, but for many partners, too.

Smith added that understanding how much applied nitrogen the area's fertile soils actually need—and, on the other side of the coin, how to properly utilize the nutrients available in the soil—is a vital part of living by the 4Rs of Nutrient Stewardship.

"That was a critical piece of this—the range of rates, so farmers have comfort knowing they don't need insurance nitrogen," Smith said.



KEEP IT INTERESTING

A remarkable success of the Indian Creek project is that the energy level among participants remained high throughout its six-year funding cycle. Many projects lose steam after a few years as participants are drawn in other directions, noted Watts at CTIC.

A key part of maintaining the energy in Indian Creek was keeping meetings interesting by bringing in outside speakers. From Dan Schaefer of the Illinois Fertilizer & Chemical Association, to Trevor Sample of Illinois EPA, speakers added insight from outside the watershed. They provided new insights on conservation practices, as well as context for the project's efforts.

"Farmers will come and hear other farmers, and it seems like you need a third party involved in it to explain what's taking place," noted Mike Trainor, a farmer and grain elevator owner who served on the steering committee.



MULTIPLE CONTACTS WITH FARMERS

The Indian Creek Watershed Project maintained a rigorous schedule of meetings, field days and other contacts with local stakeholders. The result was a closer connection with farmers and an opportunity to more successfully communicate the key messages of the project.

"People say you have to tell somebody something seven times before they learn it," said Berry. "In Indian Creek, they had the demonstration, the whole story, and they would tell the whole group three or four times a year, compared to other projects that meet maybe once a year."



POSITIVE MESSAGE

A crucial element of success was that every element was geared to helping farmers succeed rather than browbeating them about environmental problems, Berry pointed out.

"A farmer doesn't want to get dressed up and go to a field day to hear that what he's doing is wrong," Berry noted. "The Indian Creek project was approached as, 'this is what can help you put more dollars on the bottom line and at the same time help the environment.'"

Smith added that Indian Creek partners maintained that positive approach by focusing on helping farmers in the watershed succeed rather than focusing on sales pitches.

"It's about community and adding value to the community," Smith said. "If you're bringing partners in, they have to add value. It's not about selling products. It's about, 'We have this product and here's how it can help you.'"

Ultimately, the close working relationships, diverse perspectives, focused demonstration and outreach efforts, and positive messages made Indian Creek Watershed Project gatherings a must-attend item on the calendars of local stakeholders and project partners, noted Watts. That included not just the summer field days or the annual winter meetings, but even the quarterly steering committee meetings, which evolved into much more than just run-throughs of the business and logistics of the project.

"Over time, people got to enjoy the steering committee meetings—they became more of an information-sharing event," Watts noted. "We had got to the point where we had such a good thing going on that everybody wanted to be a part of it and learn from it."



CONSERVATION TECHNOLOGY INFORMATION CENTER (CTIC)

Providing technical, educational and practical support to advance conservation farming success since 1982.

CTIC connects people from across agriculture and the conservation community to encourage greater adoption of farming systems that are economically and environmentally sustainable. We link farms, universities, government and business in projects that explore and champion conservation agriculture.

CTIC IS AGRICULTURE'S TRUSTED SOURCE

CTIC brings people together to put conservation on the ground, benefitting farmers and the environment. Our work has three key elements:



CONNECT

We build coalitions that connect farmers, agribusiness, researchers, regulators and policymakers to explore issues, demonstrate systems and share information.



INFORM

CTIC is America's top clearinghouse for information on cover crops, conservation tillage, soil health, water quality and more.



CHAMPION

We demonstrate and advocate for conservation agriculture from the field to the halls of government—highlighting success and setting the stage for farmer-friendly policies and programs.



TOOLS AND TECHNOLOGY FOR CONSERVATION

CTIC counts many of the most innovative companies in agriculture among our members and partners, and we work with scientists from some of the nation's top universities as well as state and federal agencies.

We don't represent a particular brand or a product. That allows us to share a wide range of information without worrying about brands, sales goals or competition. It means we can connect people with the systems and concepts that make sense on their farms and fit their management style, tapping into tried-and-true practices as well as state-of-the-art technologies.

We can point you to experts we know when you're ready. The information we share, the demonstrations we conduct and the partnerships we build are designed to help stakeholders in every direction achieve their goals and push conservation forward to benefit farmers, society and the environment.

To become a member, or to join one of our tours or programs, call us at (765) 494-9555 or visit www.ctic.org and take a look at the vast resources we have online to share.



CTIC CHAMPIONS A WIDE RANGE OF CONSERVATION SYSTEMS

We've come a long way since our initial emphasis on conservation tillage more than 30 years ago. From those early days helping focus the knowledge around saving "soil, toil and oil" with no-till and mulch tillage, we've grown to encompass the wide range of goals, including:

- Greater profitability on the farm and ranch
- Soil health
- Water quality
- Water conservation
- Air quality and particulate matter control
- Pollinator habitat
- Wildlife, hunting and agritourism opportunities
- Building opportunities for markets and premiums

We gather, generate and share information on systems to achieve those goals. Here are some of them:

- No-till, strip-till and reduced tillage systems
- Cover crops
- Crop rotation
- Nutrient and manure management
- Drainage water management
- Irrigation management
- Rotational grazing and stream protection
- Buffers, waterways and other structural improvements



LEARN MORE AND CONNECT WITH EXPERTS NATIONWIDE AT WWW.CTIC.ORG.

THE INDIAN CREEK PROJECT



INDIAN CREEK WATERSHED PROJECT PARTNERS INCLUDED:

Agrium	Illinois Council on Best Management Practices
A.J. Sackett & Sons Company	Illinois Environmental Protection Agency
Altorfer, Inc.	Illinois Fertilizer and Chemical Association
Argonne National Laboratory	Illinois Soybean Association
BASF	John Deere
Brandt	Koch Agronomic Services
Case IH	Livingston County SWCD
Crop Production Services	Monsanto
Cropsmith	The Mosaic Company
Dow AgroSciences	National Wildlife Federation
The Fertilizer Institute	New Leader
Fishers and Farmers Partnership	Syngenta
GROWMARK	USDA Natural Resources Conservation Service
Illinois American Water	US Geological Survey
Illinois Corn Marketing Board	

Produced by the Conservation Technology Information Center (CTIC) www.ctic.org
Funding provided (in part) by the Illinois EPA through Section 319 of the Clean Water Act