



A success story

The rebirth of Iowa's trout streams

Practically since settlement of the state, Iowa trout streams had to be stocked to maintain a trout population. But improvements in water quality are leading to healthier, self-sustaining trout populations – and local communities are reaping the benefits.



Sediment creates a muddy future

for Iowa trout and Iowa water

Stocking trout in the coldwater streams of northeast Iowa has been around almost as long as the state itself.

As settlement and agriculture increased in the young state, numbers of brook trout, the only native Iowa trout species, began to decline. Stocking of brown and rainbow trout began in the late 1800s.

By 1980, only six Iowa streams were sustaining a trout population naturally. As sediment poured into streams each year, Iowa's trout hit rock bottom. More accurately, the trout hit mud bottom.



For years, sediment and other pollutants made it hard for eggs to survive; the DNR had to stock fish to keep trout populations alive.

As you'll read on the next page, trout need clean water and a clean rock streambed to eat, spawn and survive.

But mud was covering that rock bottom. Erosion from hilly northeast Iowa sent hundreds of tons of soil into trout streams. Excess sediment, nutrients and bacteria from intensive farming washed into the streams. Grazing cattle trampled and eroded streambanks.

All that sediment – as well as other pollutants – in the streams made it difficult for trout eggs to survive, and made Iowa trout populations dependent on stocking.

“We were losing a lot of soil into the streams. Too much mud makes spawning impossible,” said Bill Kalishek, a DNR fisheries biologist at the Decorah hatchery.

Today, the water is becoming clearer in many Iowa trout streams. That's thanks to work in the areas that drain into the streams – their watersheds.

Landowners working with DNR-funded watershed projects, as well as in-stream habitat improvements, are keeping streams cleaner and making it easier for trout to reproduce on their own.

“There was a layer of silt on the

stream bottoms that kept the water muddy for a long time after a rain,” said John Beard, a Decorah trout fisherman. “Now in a lot of these watersheds we can get a big rain event and not see any discoloration (in the water).”

**“WE’RE CHANGING
THE WAY WATER
COMES INTO THE
STREAM.”**

- BILL KALISHEK

Today, 32 trout streams boast naturally reproducing trout populations. That includes Spring Falls in Delaware County, which had no naturally sustained brown trout in 1991. Today, there is a naturally reproducing population with more than 1,000 trout per mile of stream.

Why the success? It's simple. Trout depend on clean water to survive. Water quality depends on how land in the watershed is managed. To keep trout thriving, watershed work needs to continue.

“We're changing the way water comes into the stream, and the trout are benefiting,” Kalishek said.

Cattle can trample streambanks, sending sediment and bacteria into trout streams. Watershed projects work to fence cattle out of streams and find alternative water sources for cattle.

Creating the right conditions for Natural reproduction

To promote natural reproduction of trout, the solution is clear. Clear water.

Keeping sediment out of a stream is the key to creating an environment where trout eggs can thrive. To spawn, a trout digs a nest in clean gravel with its body, lays the eggs and leaves. Brown and brook trout spawn in November, and the eggs don't hatch until March.

During that time, if excess sediment washes into the stream and covers the nest, it can cut off oxygen to the eggs, killing them.

Excess sediment can also kill a newly-hatched trout, called a "fry."

Trout also depend on clean gravel to attract dinner. Gravel and rock-bottom streams have more insects and a better diversity of insects than a stream full of mud. Trout feed mostly on insects until they become adults.

"Natural reproduction is important because it's completely self-sustaining," said Bill Kalishek, a DNR fisheries biologist in Decorah.

"Plus, many anglers see added value in fishing wild trout," he added. "It's also an indicator of



Lowell Washburn, DNR

Trout need clean stream beds, like the one above, to thrive.

good water quality - both in the stream and in groundwater, which a lot of people use for drinking water."

What's been done so far

A start to a success story

A number of factors have led to success in Iowa trout streams:

Watershed work

Farmers and landowners are making a big difference by starting farming projects that reduce the amount of sediment, nutrients and bacteria reaching streams, called conservation practices.

Funding from the DNR and the Iowa Department of Agriculture and Land Stewardship supports watershed projects, which help landowners use these practices.

To learn how these practices keep streams clean, see page 6.

Cattle roundup

Watershed projects often work to move cattle away from streams. Cattle can trample streambanks, speeding streambank erosion. Waste from cattle can add nutrients and bacteria.

Moving cattle away from streams, along with better manure management and storage, has

reduced the amount of pollutants in streams.

In-stream work

DNR Fisheries has placed a number of wooden boxes, called bank hides, underwater to provide trout overhead cover habitat and protection from predators.

In addition, DNR land acquisition efforts protect the streams through streambank stabilization and in-stream habitat work.

Wild things

Historically, trout streams have been stocked with offspring from domesticated, captive trout. Recently, the DNR began using eggs from naturally reproducing wild trout. The fish are raised to two inches.

When stocked, these wild trout survive three to four times better than fish raised from captive brood stock. Plus, they are reproducing naturally on many streams.

Volunteer efforts

In addition to landowners, groups are also donating their time. Groups like Trout Unlimited and the Hawkeye Fly Fishing Association have helped complete and fund stream projects.

These efforts are just a starting point. To keep improving our streams, work needs to be ongoing. Please see page 8 to learn what we can do to continue our successes.

About trout streams

There are about 105 coldwater trout streams in 10 northeast Iowa counties. The area contains exposed bedrock and abundant springs to feed the streams a constant supply of cold, 50 degree Fahrenheit water. The cool water from springs keeps water temperatures cold enough for trout, normally lower than 75 degrees Fahrenheit, during the heat of the critical summer months.

Trout tourism: Good for trout, good for Iowans

Improved water quality helps trout, and anglers benefit nearby communities in turn.

They're small streams, but they mean big business for northeast Iowa.

As water quality improves in Iowa's trout streams, it's not only good for trout, but for Iowa towns and businesses as well.

According to a 2006 DNR trout angler survey, licensed anglers made an estimated 535,064 trips to Iowa trout fisheries. At about \$27 per trip – that includes food, lodging, transportation and equipment – anglers spend more than \$14.4 million annually on trout in Iowa.

The 2006 survey also shows that anglers have taken 161,000 more trips to Iowa trout streams than they did in 2001. That includes residents of 45 other states and Canada, Australia and England.

It's proof that better water quality is an important investment in Iowa on many levels.

A bigger, better catch

With cleaner water, streams

have better aquatic insects for trout to feed on, and anglers are rewarded with a greater diversity of trout, according to John Beard, a Decorah trout fisherman.

"I've fished a lot of other streams, and we have some of the best spring creeks anywhere," said Beard. "The variety of habitat we have is wonderful."

Beard remembers catching his first trout as a child. He also remembers the sediment that would run into creeks after a rain.

But Beard has also seen the creeks clear up and fishing improve as wild trout begin to thrive.

"The fishing's gotten better because there's more natural reproduction of trout," said Decorah angler Steve Matter, a 40-year Iowa trout veteran. "The streams seem healthier than they ever were."

Bob Cobbs has been part of that improvement to improve water quality and the catch. As president of the Iowa Driftless Chapter of

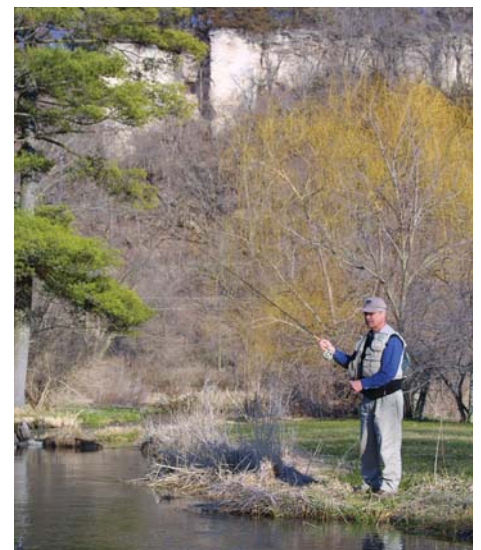
Trout Unlimited, his group has worked on a number of stream and habitat improvement projects.

MORE THAN \$14.4 MILLION IS SPENT ON TROUT FISHING IN IOWA EACH YEAR.

"Improving the water quality improves fishing and the whole environment," said Cobbs. "The banks have improved, there's less erosion, and we've actually seen the fish population increase."

The Hawkeye Fly Fishing Association has also donated labor and funding to improve trout and other streams.

"We want to make sure that the resource is preserved and ensure it exists for future generations," said Ron Stahlberg, the group's president. "And there are economic benefits to having nice recreational places."



All the community benefits

For many small businesses in northeast Iowa, a large portion – if not all – of their business depends on trout anglers.

“We would not be here if it weren’t for them,” said Bev Stortz, who owns Highland General Store and Campground, along with her husband Gary.

For Glanz Landing Sports in Manchester, trout fishing accounts for 90 percent of its fishing business, said Patti Glanz, who owns the business with her husband Gary.



Patti Glanz, Glanz Landing

Glanz calls the business “a real mom and pop store” that also carries other sports equipment and clothing.

Almost all the trout anglers that stop in Glanz’s store or visit the Highland General Store are from out of town, the owners said. Many are from across the Midwest - Iowa City, Des Moines, Kansas City, Chicago, even as far away as Colorado and Texas, Glanz said.

They come for at least a two-day trip, if not a week, and sometimes bring family and friends. They spend time and money in sports stores and at local hotels, gas stations, restaurants and other small shops.

Dave Nading sees the same clientele at his Strawberry Point convenience and sports store, Nading’s Service and Sporting.

“We do cater to the trout fisherman, and in northeast Iowa a big chunk of sales come from that,” Nading said. “When they come, they come to buy.”

Better water quality means more anglers

As water quality has improved in recent years, local stores have also seen an increase in business.

To meet demand, the Stortzes added three log cabins to their campground, located on South Bear Creek northeast of Decorah.



Dave Nading, Nading’s Service and Sporting

“People love fishing the Iowa streams,” Stortz said. “It amazes me, the influx of people. I never imagined when we bought the store that so many people would come to this remote area.”

Nading, who grew up near Ensign Hollow in northeast Iowa, has also noticed a difference – in both the water and business.

“When I grew up, there were clear bottoms and lots of rock. Then it silted in. Now you can see rock bottoms again,” Nading said. “There are way more anglers now than there ever used to be.”

Businesses also recognize that if work isn’t done to maintain improvements in trout streams, business could decline along with the water quality.

“WE WOULDN’T BE HERE IF IT WEREN’T FOR THEM.”

- BUSINESS OWNER BEV STORTZ ON ANGLERS

“It’s just getting harder and harder for small businesses in small towns to survive,” Nading said. Losing trout anglers would make it even harder, he said.

Glanz agreed. “Trout fishermen would have found someplace else to go, like Wisconsin or Minnesota,” she said of poor water quality. “But they tell me how well-maintained the streams are here.”

To help struggling businesses, the Fayette County Tourism Council publicizes its trout streams with the “It’s About Trout” campaign.

In 2006, a fishing event drew anglers from as far away as Cedar Rapids, Des Moines and Fort Dodge. An educational event at Echo Valley State Park introduced young anglers to trout fishing. The council is planning another event in 2008, according to Robin Bostrom, executive director of the West Union Chamber of Commerce.

“The trout streams we have are little hidden gems, and that’s a good reason to bring people into the county,” said Ollie Pleggenkuhle, former director of the Fayette County Tourism Council.



The above chart shows how different factors affect water quality success. Many communities and businesses depend on fishing tourism; fish and fishing depend on good water quality to thrive; and clean water depends on what happens in the watershed.

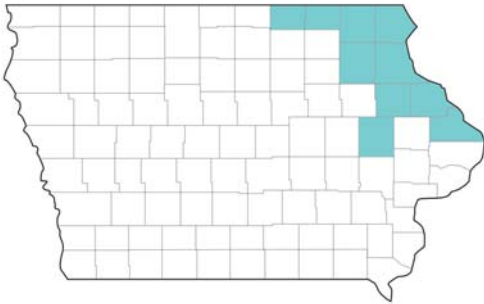
Far left: Decorah angler John Beard fishes North Bear Creek in Winneshiek County.

Middle: Mason Stortz, 5, gets a trout fishing lesson at the Highland Campground from his dad, Mitch, brother Gavin, and grandparents Bev and Gary Stortz. His mom, Amanda, looks on. Bev and Gary own the Highland General Store and Campground along South Bear Creek.

Right: Decorah trout fisherman Steve Matter fishes Trout Run in Winneshiek County.

Working together: Local watershed projects

Funding projects makes work with landowners possible.



Iowa trout country: The counties shaded in blue boast trout streams.

Iowa trout projects

Trout streams with completed or ongoing watershed projects funded by the DNR:

STREAM	COUNTY
Bear Creek	Winneshiek
Bigalk/Bohemian	Howard, Winneshiek
Big Mill	Jackson
Bloody Run	Clayton
Burr Oak/Turtle	Mitchell
Coon	Winneshiek
Coldwater/Pine	Winneshiek
Elk Creek	Delaware
Ensign	Clayton
Fountain Springs	Delaware
Glovers Creek	Fayette
Grannis Creek	Fayette
Little Mill	Jackson
Little Mill (Lower)	Jackson
Little Paint	Allamakee
Little Paint (Upper)	Allamakee
McCloud Run	Linn
Middle Bear	Winneshiek
Mink Creek	Fayette, Clayton
North Bear	Winneshiek
Sny Magill	Clayton
South Bear	Winneshiek
South Pine	Winneshiek
Spring Branch	Delaware
Spring Falls	Delaware
Staff/Beaver	Howard
Trout Run	Winneshiek
Twin Springs	Winneshiek
Upper Catfish	Dubuque
Maquoketa River (Upper)	Clayton, Fayette, Delaware

Across the state, local watershed projects are cleaning up lakes, rivers and streams. That includes a number of projects in Iowa's trout country.

Watershed projects work with landowners to reduce the amount of pollutants coming from their fields. Project coordinators work one-on-one with landowners to find practices to help farming operations and water quality.

Landowners use conservation practices, which are ways to manage the land to reduce the amount of sediment, nutrients and bacteria reaching streams or lakes.

Practices range from building structures like ponds or terraces to planting grass buffers; from changing how producers manage manure and fertilizer chemicals to planting land to prairie. Common practices in trout stream watersheds are explained on the next page.

Cost-share and financial assistance for farmers using conservation practices are made available through watershed projects.

Local watershed projects are often sponsored by county Soil and Water Conservation Districts or other local groups. The DNR funds many of these projects.

This funding is made possible through the Section 319 program of the U.S. Environmental Protection Agency, which provides DNR funding for nonpoint pollution programs.

The DNR generally funds local watershed projects in cooperation with the Iowa Department of Agriculture and Land Stewardship and the Natural Resources Conservation Service.

Why trout streams?

Many lakes and streams throughout Iowa have seen the benefits of a watershed project. But the unique trout streams of northeastern Iowa have been a priority.

"Trout streams represent high quality and high value resources for the state, and are a resource that needs protection," said Steve Hopkins of the DNR's Watershed Improvement Program.

Because trout need both clean and cold water to thrive, work in the watershed is critical.

"Without watershed projects working with landowners to keep soil on the fields and nutrients out of the streams, our trout streams would be in trouble," Hopkins said.

Working in the watershed: Conservation practices

Using the following practices in the watershed improves water quality.

Conservation Reserve Program (CRP)

Enrolling land in CRP reduces erosion, increases wildlife habitat and improves water quality. CRP converts cropland to grasses, trees or other permanent vegetation and includes annual rental payments to landowners.



Erosion control ponds

The ponds trap sediment from their drainage area, keeping it from reaching a stream. They also add recreational, wildlife and aesthetic benefits to landowners.



Streambank stabilization

Stabilizing streambanks with rocks (rip rap), grass, trees or other cover works to reduce erosion, filter out nutrients and reduce flood damage.



Photo by USDA NRCS

Livestock exclusion from streams

Fencing livestock away from streams prevents livestock from trampling streambanks and keeps livestock waste on the land. Buffer areas along the stream filter runoff water and provide habitat for small animals and birds.



Manure containment structures

These structures allow farmers to store manure until conditions are right for land-applying. The structures help keep manure out of streams and can help landowners save on fertilizer costs.



Conservation buffers

Conservation buffers slow sediment and filter runoff water before it reaches a stream. In addition, buffers reduce erosion from wind and provide habitat for wildlife.



Photo by USDA NRCS

Grassed waterways

Grassed waterways are shaped and placed in areas with concentrated water flow to slow water, guide it off the field and reduce gully erosion. Grassed waterways help disperse water, preventing small gullies from forming. They can also trap nutrients and sediment.



Photo by USDA NRCS

Watershed work is the key

Elk Creek

Landowners come together to reduce the amount of pollutants reaching four trout streams in the watershed.

Problems

Sediment was threatening four Delaware County trout streams: Elk Creek and three of its tributaries, Fountain Springs, Schechtman Branch and Twin Springs (Spring Falls).

Natural reproduction was lacking in these streams, all in the Elk Creek watershed.

THE WATERSHED PROJECT KEEPS 13,000 TONS OF SOIL FROM REACHING STREAMS EACH YEAR.

Sediment harmed trout and aquatic insects by destroying spawning areas, clouding the water, and making streams wider and shallower.

The sediment eroded from farm fields and cattle-trampled streambanks. Nutrients, pesticides and manure washed in from fields.

Solutions

About 70 percent of landowners in the watershed installed conservation practices with the Elk Creek Watershed Project, funded by DNR and the Iowa Department of Agriculture and Land Stewardship.

Those practices included enrolling land in the Conservation Reserve Program (CRP), and

building ponds, grassed waterways, contours, terraces and structures to properly store manure.

Landowners also manage how they use nutrients and exclude cattle from streams.

“The landowners are the most important part of the project,” said Mike Freiburger, project coordinator.

“They need to continue doing what they’re doing to keep improving water quality.”

DNR projects improved in-stream habitat by adding rock to Fountain Springs and Spring Falls to stabilize streambanks.

The DNR also added bank hides, which are wooden boxes placed underwater to provide trout overhead cover habitat and protection from predators.

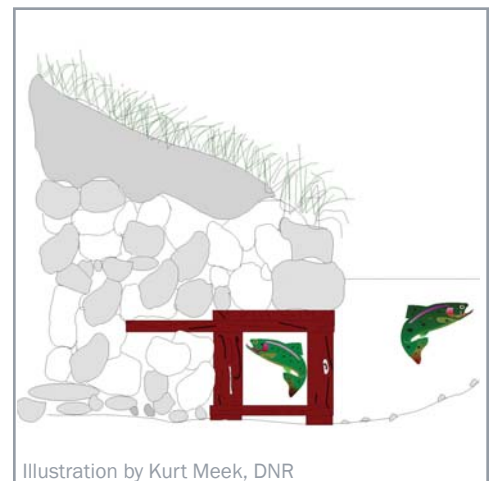
However, those in-stream improvements depend on landowners continuing and maintaining their conservation practices in the watershed.

“It’s usually a two-sided approach to improving water quality,” said Bryan Hayes, a DNR fisheries biologist. “The in-stream work will be negated if we have poor land management in the watershed.”



Left: Clear water runs through Fountain Springs in the Elk Creek watershed.

Below: Bank hides provide overhead cover and protection from predators for trout.



“THE LANDOWNERS ARE THE MOST IMPORTANT PART OF THE PROJECT.”

- COORDINATOR MIKE FREIBURGER

Elk Creek landowner makes a change for land, water



Mike Hunt

When Mike Hunt started farming in the Elk Creek watershed in 1985, he knew the land needed some changes.

Over time, he’s made plenty. And those changes have made a difference in his farming operation and water quality.

Hunt uses no-till and nutrient management practices. Through the Elk Creek Watershed Project, he installed waterways, terraces, contours and enrolled land in CRP. So far, anyway.

More projects, like filter and buffer strips, are planned.

“Everything we’ve done has really helped control erosion and runoff,” Hunt said of his farm near Greeley, where he raises corn, beans, hay and cattle.

With fewer passes through the field, practices like no-till and contours have also reduced his input costs. That savings, along with available cost-share funding, made many of the practices possible.

The practices have also made a change in the environment. Soil stays on the fields and out of the creeks, and wildlife like pheasant are finding a home in the terraces, Hunt said.

“I feel responsible for the ground, that it maintains its productivity for generations to come,” Hunt said.

Project results

By helping landowners use conservation practices on their land, the Elk Creek Watershed Project has reduced pollutants in the stream and made an impact on trout.

- The watershed project has reduced sediment reaching Elk Creek from 29,974 tons per year to 16,707 tons per year.

That saves 13,267 tons per year. If you put all that soil into dump trucks, you’d have a line of trucks just more than four miles long.

- In addition, nutrient management practices mean fewer nutrients are being applied to crop fields in the watershed.

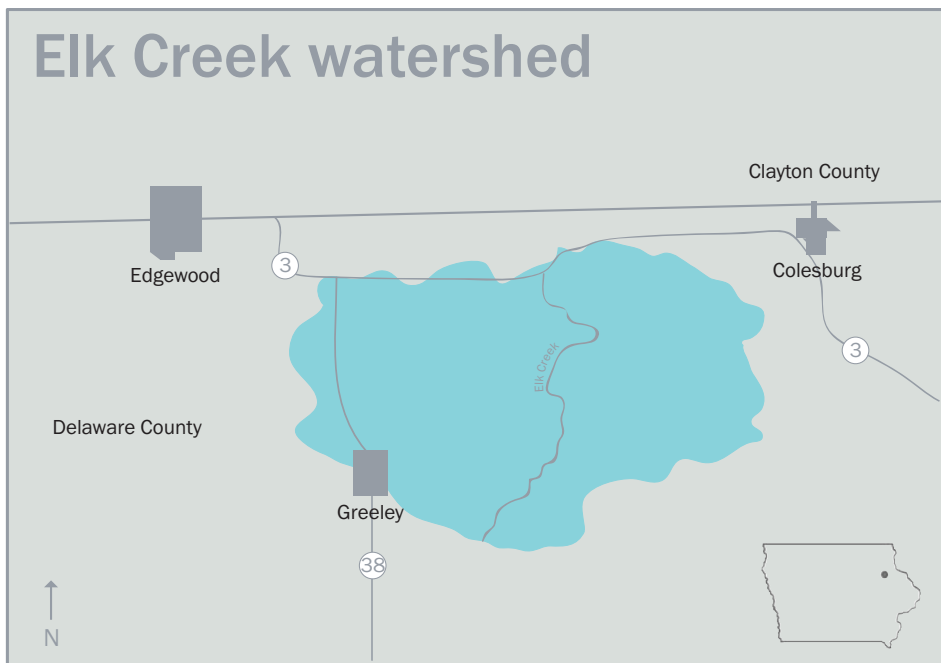
Fewer nutrients applied means there’s fewer nutrients reaching Elk Creek.

The improvements are evident in the trout:

- The brown trout population in Spring Falls depended entirely on stocking in 1991.

Now, there is a self-sustaining population that offers more than 1,000 trout per mile of stream.

- Brown trout in Fountain Springs are reproducing naturally, although that population is not yet self-sustaining.



Turning around Grannis Creek

Sediment in the stream destroyed trout habitat. With the work of landowners, the creek is cleaner and trout are thriving.

Problems

Take a look at the deep valleys and gently sloping uplands around Grannis Creek, and it's no surprise that 97 percent of the watershed is classified as "highly erodible land."

By far, sediment is the largest problem in the Grannis Creek watershed.

In addition, the area's karst topography includes sinkholes and coldwater springs, which can

Land Stewardship, to install conservation practices. About 85 percent of owners and operators in the watershed participated in the project.

Those practices included ponds, filter and buffer strips, terraces, streambank stabilization work and more.

"Even people reluctant at first were doing a lot of work by the end of the project," said Carrie Davis,

were set to expire, which if not renewed, could have increased erosion.

With less livestock production and pasture land in the area, the hilly land coming out of CRP would have likely been put into heavily tilled corn and bean rotations.

"That would have made a big difference," Davis said. "It would have sent a lot of soil into Grannis Creek."

Re-enrolling that land in CRP saved an estimated 1,000 tons of soil per year, Davis said.

Habitat improvements were also made in-stream. The project installed bank hides as part of a 350-foot sidewalk that provides fishing access to people with disabilities.

Bank hides are wooden boxes placed underwater to provide trout overhead cover habitat and protection from predators.

Plus, work was done to stabilize streambanks and reestablish prairie along the stream.

THE WATERSHED PROJECT REDUCED THE AMOUNT OF SEDIMENT REACHING THE CREEK BY 56 PERCENT.

allow surface pollutants to enter groundwater and streams.

Solutions

To prevent excess sediment from reaching the stream, landowners worked with the Grannis Creek Watershed Project, funded by DNR and the Iowa Department of Agriculture and

project coordinator. "Benefits of the project spread by word-of-mouth. They knew what their neighbors were doing over the fence, and they wanted to be a part of it, too."

A number of landowners also renewed or signed new Conservation Reserve Program (CRP) contracts, covering 514 acres of cropland. A number of contracts



Left: Clear water flows through Grannis Creek in Fayette County. Rocks stabilize the banks and prevent erosion.

Below: A section of the sidewalk that provides fishing access to Grannis Creek for people with disabilities.



Lowell Washburn, DNR

Project helps landowners install practices, improve creek

Levern Thyer has farmed this 400-acre farm southeast of Fayette his entire life – he was even born



Shirley and Levern Thyer

here – raising corn, oats, hay, and beef and dairy cattle.

But recently, he and his wife, Shirley, installed a number of conservation practices that are improving the farm and nearby Grannis Creek.

The farm is a conservation showpiece, with buffer and filter strips, CRP land, a pond, structures to hold manure and fencing to keep cattle out of the creek. The Thyers also practice pasture management.

During heavy rains, the pond and filter strips catch excess sediment before it reaches the creek, and they also attract wildlife. It's common to see pheasant and wild turkey along the buffer and filter strips, Thyer said.

Thyer installed the practices because he felt it was important to act now, before practices could become mandatory and while funding is available. Being able to use cost-share and other available funding made the practices easier to install, he said.

“I think it's money well spent, to help farmers and to do this,” Thyer said. “Otherwise, farmers aren't going to do as many projects. It's important for the environment, for the wildlife.”

Project results

At the end of the four year watershed project, the trout have told the tale of success.

As a result of using conservation practices in the Grannis Creek watershed, the project accomplished the following:

- Brown trout increased from 85 fish per mile of stream in 2002 to 1,491 fish per mile in 2006.
- Natural reproduction of brown trout has returned, although the stream does not yet naturally maintain a population.

This success was possible through the reduction of sediment reaching Grannis Creek.

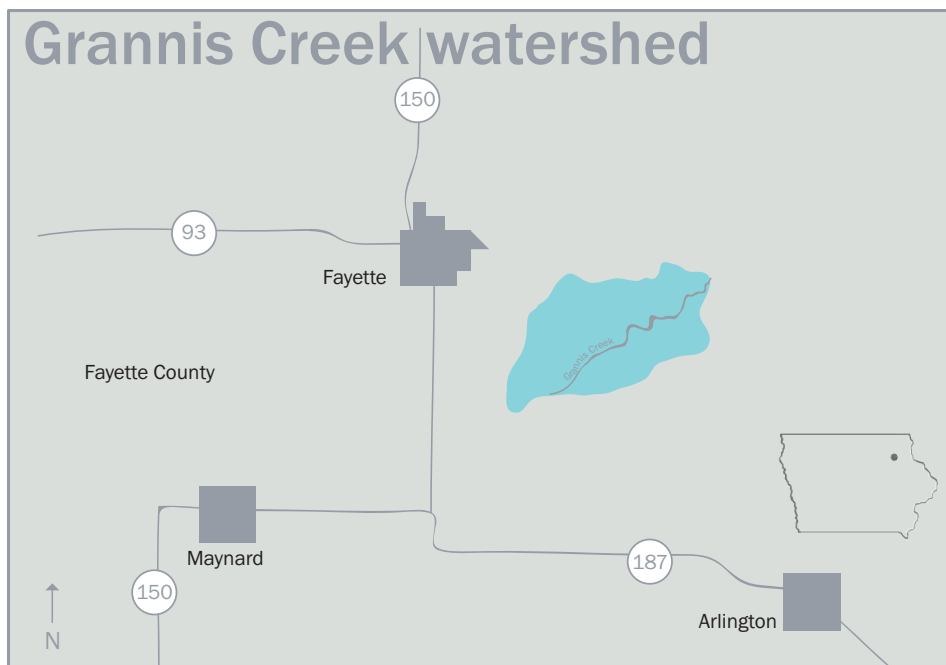
- In total, the watershed project has reduced sediment delivery to the stream by 5,547 tons per year.

That's a 56 percent reduction in total sediment delivery.

If you were to put the amount of soil saved in one year into dump trucks, it would fill 370 truck loads.

“EVEN PEOPLE RELUCTANT AT FIRST WERE DOING A LOT OF WORK BY THE END OF THE PROJECT.”

- COORDINATOR CARRIE DAVIS



Maintenance and preservation

Continuing the effort

Expanding successes and maintaining quality

Water quality is not a one-time fix. To keep enjoying improved trout streams, we need to maintain and continually improve water quality. That starts in the watershed.

"The landowners can be proud of what they've done," said Bryan Hayes, DNR fisheries biologist. "But even when projects end, we need to build on what we started and maintain what we've put in place."

One goal is to keep highly erodible fields protected. Keeping land enrolled in the Conservation Reserve Program (CRP) is one way to do that.

"With more grasses, we're holding water on the land longer. That means slower stream flows, which means less streambank erosion," said Bill Kalishek, DNR fisheries biologist. "Plus, less soil washes off fields into streams."

Iowans have made significant progress, but there are still many fields and miles of trout streams to address.

Many watershed and habitat projects on trout streams are planned or already underway, like along Upper Catfish Creek near Dubuque.

What you can do

If there is a watershed project in your area, contact the project coordinator. Or, work with neighbors, local groups, the local Soil and Water Conservation District or the DNR to organize a project for your stream.

Individual landowners are encouraged to contact their local Natural Resources Conservation Service (NRCS) office to learn about using conservation practices on their land.

Watershed projects can offer funding and cost-share assistance to help landowners make improvements to their fields and lawns.

Watershed projects are made possible through the Section 319 program of the U.S. Environmental Protection Agency, which provides DNR funding for nonpoint pollution programs.

The DNR generally funds local watershed projects in cooperation with the Iowa Department of Agriculture and Land Stewardship and NRCS.

Get involved

Watersheds and conservation practices:
watershed.iowadnr.gov

DNR Fishing: www.iowadnr.gov/fish/

Trout Unlimited: www.tu.org
Iowa Driftless Chapter (Decorah):
Bob Cobbs, (563) 547-3940

Spring Creeks Chapter (Iowa City):
Nate Hopkins (319) 338-8262

North Bear Chapter (Boone):
Scott Sickau (515) 432-6026

Hawkeye Fly Fishing Association:
www.hawkeyeflyfishing.com
P.O. Box 8145, Cedar Rapids, IA 52408

Dubuque Fly Fishers
<http://members.aol.com/dbqff/dffmain.htm>

IDALS Division of Soil Conservation:
www.agriculture.state.ia.us/soilconservation.html

Iowa NRCS: www.ia.nrcs.usda.gov/

The publication of this document has been funded by the Iowa Department of Natural Resources through a grant from the U.S. Environmental Protection Agency under the Federal Nonpoint Source Management Program (Section 319 of the Clean Water Act). Federal regulations prohibit discrimination on the basis of race, color, national origin, sex or handicap. If you believe you have been discriminated against in any program, activity or facility as described above, or if you desire further information, please write to the address to the right.

An Iowa Department of
Natural Resources
publication, 2007
First published 2006



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