

**2021 ANNUAL REPORT**

# **IOWA WATER QUALITY INITIATIVE**

**IOWA'S NUTRIENT  
REDUCTION STRATEGY  
IN ACTION**



**IOWA DEPARTMENT OF  
AGRICULTURE &  
LAND STEWARDSHIP**

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## UPDATE FROM SECRETARY NAIG

The Iowa Department of Agriculture and Land Stewardship is working alongside our public and private partners to add science-based conservation practices in priority watersheds (map on page 4) throughout our state. We're targeting these areas because that's where conservation practices have the greatest effect on soil health and water quality.

The Department has achieved some important milestones in 2021. We completed the 100th CREP-funded wetland in September. There are now 110 water quality wetlands completed and more than 40 state-funded, locally led wetland projects under development in Iowa as of the fall of 2021. We've installed 47 saturated buffers and 18 bioreactors this year. An INREC survey shows farmers and landowners are now planting more than 2 million acres of cover crops in Iowa, and the use of conservation tillage and no-till are up too. These statistics are important because changes to the landscape and soil management lead to positive changes in water quality locally and downstream.

We have been focused on scaling up the number of soil health and water quality practices in Iowa, but there's still work to do to achieve the goals outlined in the Iowa Nutrient Reduction Strategy.

During the 2021 legislative session, I requested additional funding to help farmers and landowners install more soil health and water quality practices. Thank you to the Iowa Legislature and Gov. Kim Reynolds for answering the call and passing a 10-year extension of the water quality infrastructure funding. This dedicated funding source allows the Department to continue allocating dollars to support future conservation projects so there's a continuous stream of edge-of-field projects in the works.

Because we've been able to show success with our locally led soil health and water quality projects, the state has been awarded more than \$40 million in federal funding in 2021 to support new and ongoing conservation partnership programs. These federal funds help the Department and its public-private partners better leverage state and private dollars so we can add even more practices to our fields.

Thank you for your continued support as we enrich the health of our soil and water quality.

### Mike Naig

Iowa Secretary of Agriculture



## 2021 WATER QUALITY INITIATIVE (WQI) HIGHLIGHTS

**4.2K** FARMERS & LANDOWNERS  
ENROLLED IN 2021

**19.5K** FARMERS & LANDOWNERS  
ENROLLED IN WQI SINCE 2013

**\$21M** WQI FUNDS  
OBLIGATED IN 2021

**42** WETLANDS  
UNDER DEVELOPMENT

**614K** COVER CROP ACRES APPROVED  
FOR WQI FUNDS IN 2021

**100+** SATURATED BUFFERS AND BIOREACTORS  
UNDER DEVELOPMENT

# FUNDING SOURCES

## WATER QUALITY INITIATIVE

The Water Quality Initiative (WQI) was established during the 2013 legislative session to help implement the Iowa Nutrient Reduction Strategy. The Nutrient Reduction Strategy provides a roadmap to achieve a 45 percent reduction in nitrogen and phosphorus losses to our waters through collaborative efforts between point and nonpoint sources and public and private partners. The WQI cost share funds help farmers and landowners install nutrient-reducing conservation practices around the state.

## WATER QUALITY INFRASTRUCTURE FUND

In 2018, the Iowa Legislature, with support from Gov. Kim Reynolds, passed Senate File 512, which allocated more than \$270 million to help fund the state's water quality efforts through 2029. During the 2021 Legislative Session, legislators passed a 10-year extension, making an additional \$320 million of funding available through 2039 to help implement water quality practices including wetlands, saturated buffers, bioreactors and urban conservation projects.

In 2021, the Department used this funding to provide technical resources in targeted watersheds and to construct 6 wetlands, 47 bioreactors and 18 saturated buffers.

## USDA NRCS REGIONAL CONSERVATION PARTNERSHIP PROGRAM

The Department is currently leading or participating in 13 USDA Natural Resources Conservation Service (NRCS) Regional Conservation Partnership Programs (RCPPs). Through this federal program, NRCS co-invests with state and local conservation partners to implement projects that offer solutions to on-farm, watershed or regional natural resource concerns. The Department and its conservation partners were awarded more than \$40 million in RCPP funding in 2021 to support new and ongoing projects, including the:

- Floyd River Water Quality Partnership
- Cedar River Source Water Partnership
- Southeast Iowa Watershed Partnership
- Soil and Water Outcomes Fund
- Iowa Partners for Natural Infrastructure
- Midwest Ag Water Quality Partnership (renewal)

## EPA "FARMER TO FARMER" GRANT PROGRAM

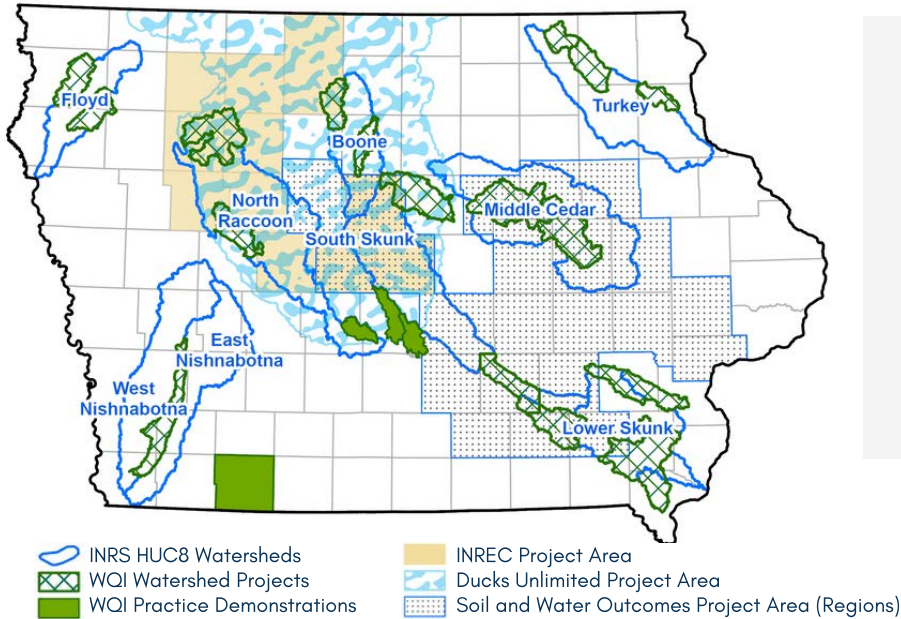
The U.S. Environmental Protection Agency (EPA) awarded the Department \$1 million through the "Farmer to Farmer" grant program in 2021. These federal dollars are being used to build eight wetlands as part of a demonstration project in the North Raccoon River watershed, which is a source of drinking water for more than 500,000 residents and helps support recreational opportunities in Iowa's rivers and lakes.

# LEVERAGING STATE FUNDS

EPA Gulf of Mexico	NRCS Mississippi River Basin	NRCS Regional Conservation Partnership Programs	Private/Non- Government Organizations
\$3.3M	\$20.2M	\$82.5M	\$843,600



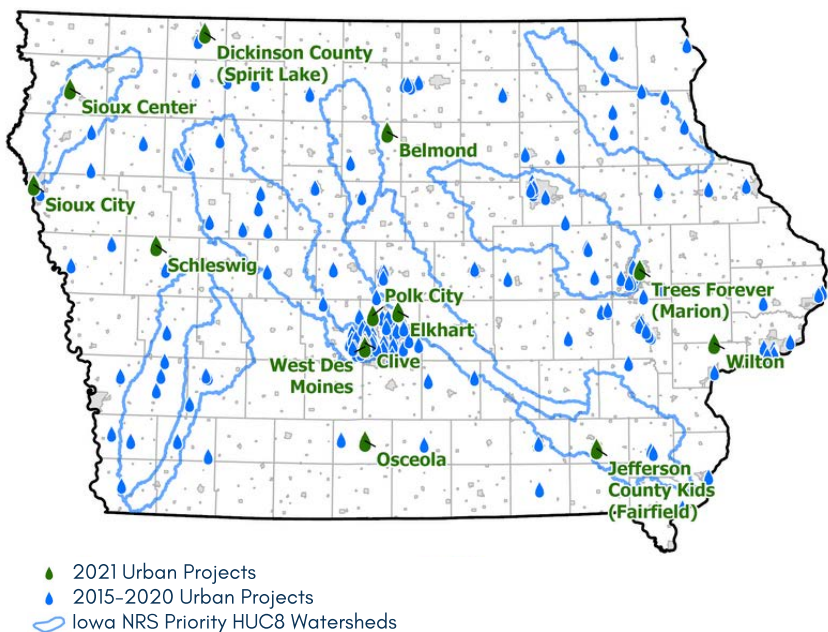
# 2021 WQI PLANNING, DEVELOPMENT AND IMPLEMENTATION PROJECTS



- 2** NEW PROJECTS FUNDED IN 2021
- \$12M** WQI FUNDS OBLIGATED IN 2021
- 52** PROJECTS FUNDED SINCE 2013
- \$37M** WQI FUNDS OBLIGATED SINCE 2013

# 2021 URBAN CONSERVATION PROJECTS

Urban conservation projects capture storm water and allow it to soak into the soil instead of running off the surface, reducing the property's contribution to water quality degradation, stream flows and flooding.



- 13** PROJECTS FUNDED IN 2021
- \$1.1M** WQI FUNDS OBLIGATED IN 2021
- 80** PROJECTS FUNDED SINCE 2015
- \$6.1M** WQI FUNDS OBLIGATED SINCE 2015

# COVER CROP INSURANCE DISCOUNT PROGRAM

Through a joint project with USDA Risk Management Agency (RMA), farmers who plant cover crops in the fall may be eligible for a \$5 per acre reduction on their cash crop insurance premiums the following spring. To qualify, the cover crop acres cannot be enrolled in other state or federal cost share programs. Interest in the program grows each year.

Since the program began five years ago, more than 1,700 farmers and landowners have enrolled more than 700,000 acres of cover crops in the WQI crop insurance discount program. Illinois and Indiana have created similar programs to encourage the adoption of cover crops within their states.



## COVER CROP INSURANCE DISCOUNT PROGRAM HIGHLIGHTS



**660** FARMERS & LANDOWNERS ENROLLED IN 2021



**200K** COVER CROP ACRES ENROLLED IN 2021



**\$1M** WQI FUNDS OBLIGATED FOR COVER CROPS IN 2021

# STATEWIDE COST SHARE FOR IN-FIELD CONSERVATION PRACTICES

Each summer, the Department encourages farmers and landowners to enroll in the WQI cost share program and adopt in-field conservation practices that improve soil health and water quality, including cover crops, no-till/strip-till practices or a nitrification inhibitor. Since this initiative began, more than 13,700 farmers and landowners have enrolled more than 1.3 million acres of cover crops in this WQI program.

**\$6.9M**

WQI FUNDS OBLIGATED IN 2021

**3.5K**

FARMERS & LANDOWNERS ENROLLED IN 2021

**\$14M**

ESTIMATED FARMER & LANDOWNER CONTRIBUTIONS IN 2021

**13.7K**

NEW NO-TILL/STRIP-TILL ACRES APPLIED FOR IN 2021

**413K**

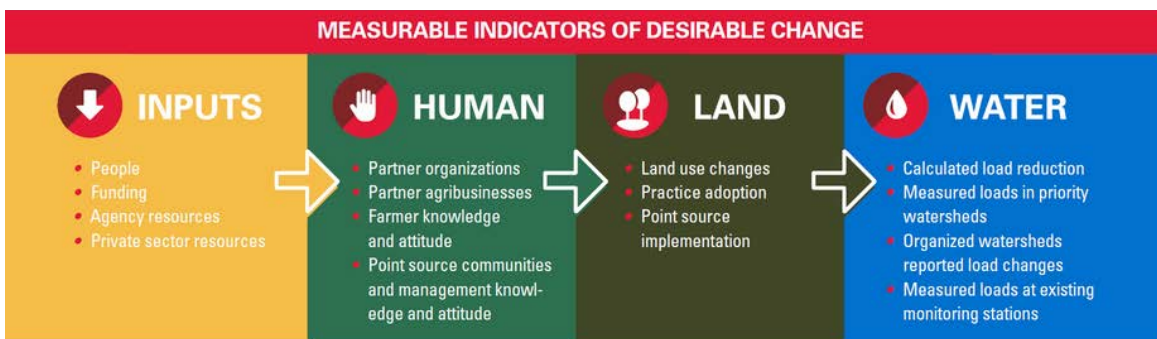
COVER CROP ACRES APPLIED FOR IN 2021

**5.4K**

NEW NITRIFICATION INHIBITOR ACRES APPLIED FOR IN 2021

# NEW ONLINE REPORTING DASHBOARD

The Iowa Department of Agriculture and Land Stewardship, Iowa Department of Natural Resources and Iowa State University launched an online dashboard to improve the Iowa Nutrient Reduction Strategy’s reporting process in 2021. The online dashboard uses visual reporting tools, like charts, graphs and maps, to share the data. The online dashboards will be updated regularly as data is collected from a variety of sources and partners. Each update will focus on one of the “measurable indicators of desirable change” – inputs, human, land and water – that guide the Nutrient Reduction Strategy. The online dashboard is available at [nrtracking.cals.iastate.edu](http://nrtracking.cals.iastate.edu).



*The Logic Model of the Iowa Nutrient Reduction Strategy, guided by measurable indicators of desirable change.*

## PARTNERS IN MEASURING PROGRESS

The Department is working alongside hundreds of public and private partners to execute the Iowa Nutrient Reduction Strategy. This includes federal agencies, private businesses, individual landowners, farmer-led organizations, community groups and local municipalities. Private partners provide significant financial assistance to help leverage state funding and additional technical resources to support farmers and landowners at the local level. The success of these partnership projects has allowed the state to secure additional federal funding to further scale-up conservation efforts. Working together, Iowans are adding more conservation practices at a significantly faster rate and much more cost-effectively today than when the WQI began in 2013.



# PARTNERSHIP SUCCESS STORIES

## CENTRAL IOWA WATER QUALITY INFRASTRUCTURE PROJECT

The Department joined Polk and Dallas Soil and Water Conservation Districts, Polk County, USDA NRCS and the Agricultural Drainage Management Coalition to complete the first phase of the Central Iowa Water Quality Infrastructure Project in 2021.

The unique water quality project created a framework to streamline and scale up the adoption of saturated buffers and denitrifying bioreactors in Polk and Dallas Counties by simplifying the financing and construction processes for landowners.



### 2021: PHASE 1

**40**

SATURATED BUFFERS



**11**

BIOREACTORS



### 2022: PHASE 2

**80-100**

ADDITIONAL PRACTICES IN PROCESS





# PARTNERSHIP SUCCESS STORIES

## GULF OF MEXICO PROJECTS

The Department is actively managing three Environmental Protection Agency (EPA) Gulf of Mexico Division (GOM) funded Farmer to Farmer projects focused on advancing innovative water quality infrastructure projects in priority watersheds. A portion of this funding also supported the before mentioned Central Iowa Water Quality Infrastructure Project.

In 2021, the Department facilitated the installation of two of the first drainage water recycling projects in north central Iowa. Drainage water recycling involves capturing excess water from cropland, storing it in an adjacent reservoir to assimilate nutrients, and using the stored water to irrigate crops as needed through dry periods of the growing season.

In an effort to expand the opportunities for water quality wetland implementation in Iowa, the Department and several partners continue to identify and install alternative wetland designs in various landscapes across Iowa. One example, supported by one of the EPA Farmer to Farmer projects, is the implementation of a "tile-zone" wetland project in the North Raccoon Watershed. This project involves restoring targeted wetlands in locations that maximize nutrient reduction by utilizing existing topography and landscape features. These wetlands provide a variety of benefits including nitrogen reduction, carbon sequestration and wildlife habitat.

These are just a few examples of projects supported by the EPA-GOM Farmer to Farmer projects providing cleaner drinking water to Iowans and reducing nutrient loading downstream to the Gulf of Mexico.

