

# Iowa Award — HUD Disaster Resilience Grant: Reducing Flooding and Advancing Water Quality

**Iowa Grant Award: \$96,787,177**



## Program Description — The Iowa Watershed Approach (IWA)

Through the Iowa Watershed Approach, Iowans will work together to address factors that contribute to floods and nutrient flows. Iowans will enjoy improvements in quality of life and health resulting from upstream watershed investments tied to community resilience activities. This adaptive model, supported by U.S. Housing & Urban Development dollars, will leverage the principles of Iowa's innovative Nutrient Reduction Strategy to make our communities more resilient to flooding and help improve water quality.

The IWA will accomplish six specific goals:

- 1) reduce flood risk;
- 2) improve water quality;
- 3) increase resilience;
- 4) engage stakeholders through collaboration and outreach/education;
- 5) improve quality of life and health, especially for vulnerable populations; and
- 6) develop a program that is scalable and replicable throughout the Midwest and the United States.

Nine distinct watersheds across Iowa will serve as project sites for the IWA. These are: Bee Branch Creek in Dubuque, Upper Iowa River, Upper Wapsipinicon River, Middle Cedar River, Clear Creek, English River, North Raccoon River, West Nishnabotna River, and East Nishnabotna River. Each will leverage a watershed management authority, develop a hydrologic assessment and watershed plan, and implement projects to reduce the magnitude of downstream flooding and to improve water quality during and after flood events. These projects will range from construction of farm ponds, wetlands, and storm water detention basins; restoration of floodplains and oxbows; and implementation of perennial cover and buffer strips.

The IWA includes a community resiliency program to help communities prepare for, respond to, recover from, and adapt to floods. IWA activities will include assessing resilience in the targeted watersheds, engaging communities in discussions about their unique resilience needs, and helping communities formulate and begin to act on resilience action plans.

The IWA represents a vision for Iowa's future that voluntarily engages stakeholders throughout the watershed to achieve common goals, while moving toward a more resilient state. It is a replicable model for other communities to improve the landscape's natural resilience to floods and retaining vital nutrients important to feeding and fueling the world. Although the IWA targets watersheds impacted by floods from 2011–2013, the impacts will ripple downstream from Iowa to the Mississippi River to the Gulf of Mexico. This program is not only about Iowans helping Iowans, but also about demonstrating Iowans' commitment to agricultural stewardship, to the environment, to their neighbors, and to the future.



## Program Stakeholders

The IWA program is a collaboration of numerous agencies, universities, non-profits, and municipalities. Partners include: Iowa Economic Development Authority, Iowa Homeland Security & Emergency Management, University of Iowa/Iowa Flood Center, Iowa State University, University of Northern Iowa, Iowa Department of Agriculture & Land Stewardship, Iowa Department of Natural Resources, National Resources Conservation Service, County Soil & Water Conservation Districts, The Nature Conservancy, Iowa Natural Heritage Foundation, Iowa Soybean Association, Iowa Corn Growers Association, Iowa Farm Bureau, Iowa Agricultural Water Alliance, local Resource Conservation & Development offices, Iowa Department of Transportation, Iowa Association of Counties, Silver Jackets Flood Risk Management Team, and many more.

The City of Dubuque is also a key partner in the IWA and will implement an urban watershed initiative in an area impacted by devastating floods. Dubuque's IWA program includes infrastructure projects and the Bee Branch Healthy Homes Resiliency Program to repair flood damaged homes and make them more resilient to floods. The cities of Coralville and Storm Lake will also receive significant resources for water infrastructure projects.

## Background

From 2011–2013, Iowa suffered eight Presidential Disaster Declarations, encompassing 73 counties and more than 70 percent of the state. In July 2011, more than 200 homes in Dubuque's Bee Branch neighborhood sustained severe flood damage. In 2013, hundreds of Storm Lake homes flooded, causing dangerous untreated sewage to back up into homes and the nearby lake. In June 2013, two heavy rain events washed out roads across Benton County, reducing residents' access to emergency services and causing \$5 million in infrastructure damage.

Devastating as these events were, 2011–2013 do not represent Iowa's worst flood years. Long-term data show that heavy precipitation and flooding events are increasing in frequency across the Midwest. Under these circumstances, a new paradigm for flood resilience is needed—one that decreases flood risk, improves water quality, and increases community resilience.

This approach is consistent with other statewide programs in Iowa. For example, the IWA will complement the Iowa Nutrient Reduction Strategy, as the hundreds of built projects will help to improve Iowa's water quality. These projects will also complement the Iowa Flood Mitigation Program by reducing downstream flooding. All projects will be voluntary, with landowners receiving 75 percent cost-share assistance on constructed practices.



## Contacts

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