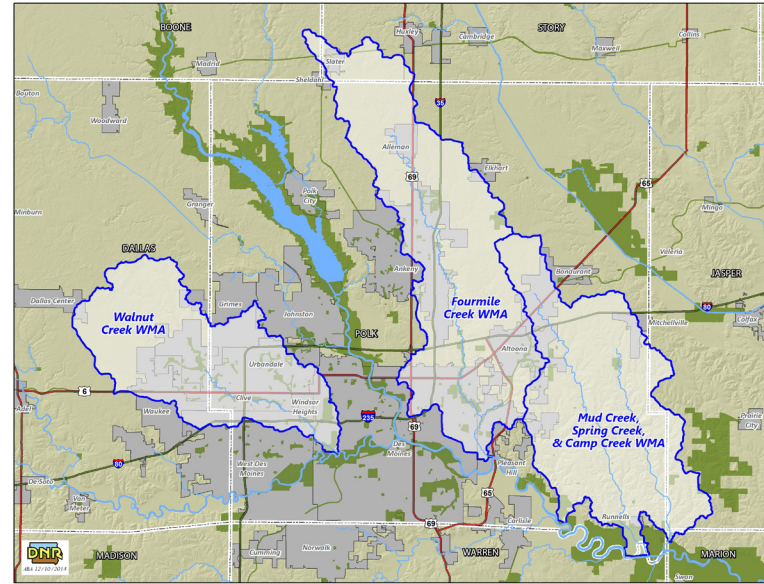


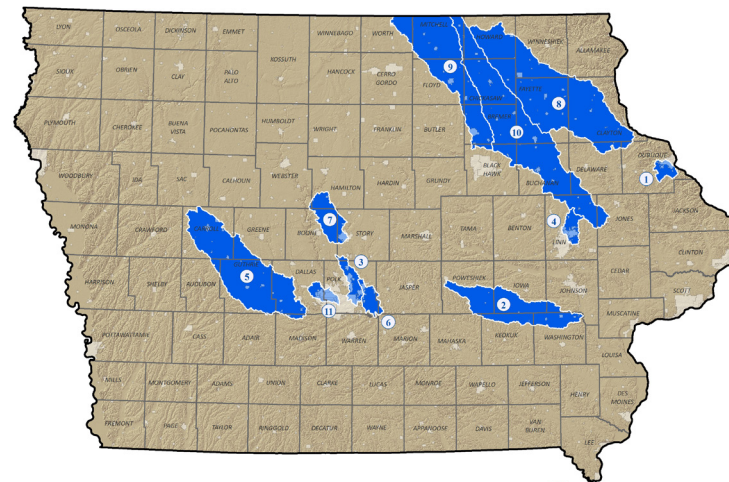
Watershed Management Authorities

Eleven Watershed Management Authorities (WMA's) have organized in Iowa to improve water quality and promote flood control in watersheds across Iowa. WMA's bring together Soil and Water Conservation Districts with local units of governments and other stakeholders.

Funding was initially available through the Iowa Economic Development Authority and DNR to help form the initial WMA's. In the past year, three WMA's were organized in Central Iowa. The Urban Conservationist at Polk SWCD played a key role in helping to organize these WMA's. The Des Moines metro communities have seen the value of working together to develop watershed management plans and unifying policies that will improve and protect water quality in the region. These watershed scale planning efforts have also shown these communities the benefit of working with farmers to make improvements on the agricultural lands. The WMA's are actively developing watershed management plans and working to fund and implement high priority goals. Fourmile Creek WMA is using \$4.3 million SRF sponsored project funding to implement riparian buffers, floodplain buyouts, and stream stabilization projects.



Watershed Management Authorities with 28E Agreements



- | | | |
|-----------------------|---|----------------------------------|
| 1. Catfish Creek WMA | 5. Middle-South Raccoon WMA | 8. Turkey River WMA |
| 2. English River WMA | 6. Mud Creek, Spring Creek & Camp Creek WMA | 9. Upper Cedar River WMA |
| 3. Fourmile Creek WMA | 7. Squaw Creek WMA | 10. Upper Wapsipinicon River WMA |
| 4. Indian Creek WMA | | 11. Walnut Creek WMA |

Catfish Creek Watershed Management Authority (WMA), in Dubuque County, was one of the first to organize and develop a watershed management plan. They are also using SRF sponsored project funding to implement their plan. The City of Dubuque will partner with Catfish Creek WMA to provide an estimated \$1.4 million dollars to install practices that reduce runoff and protect water quality. Dubuque will pilot a new opportunity provided by DNR's State Revolving Fund Watershed Restoration Sponsored Project Program. This pilot project will allow Dubuque to use the Sponsored Project Program on a low interest SRF loan for stormwater infrastructure upgrades in the Bee Branch Watershed. A portion of the interest that would typically be paid back on the loan will be utilized by the WMA to install practices throughout the Catfish Creek Watershed.

Iowa Urban Conservationists



Wayne Petersen
DES MOINES



Amy Bouska
IOWA CITY



Derek Namanny
SPIRIT LAKE



Jennifer Welch
ANKENY

Contact

website
www.iowaagriculture.gov/FieldServices/urbanConservation.asp

email
UrbanCon@iowaAgriculture.gov

phone
515-281-5851



IOWA

URBAN CONSERVATION

2014 Annual Iowa Urban Conservation Program Review

Projects Generating Water Quality Data

The Iowa Department of Agriculture and Land Stewardship Urban Conservation program is involved in a project to research and monitor permeable paver systems in 2015.

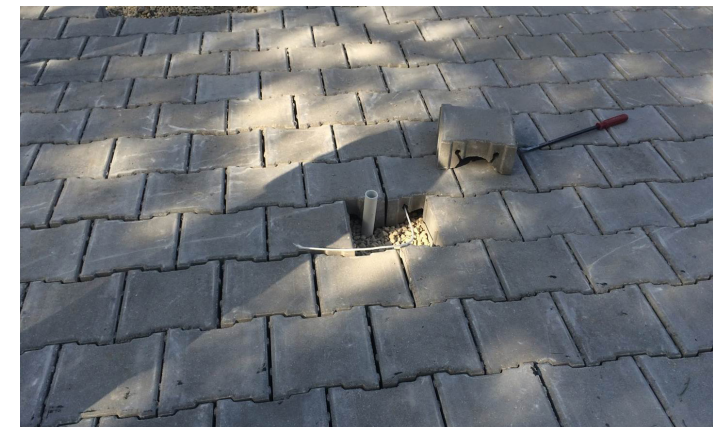
Johnson SWCD is playing the lead role in administering the grant from the State Soil Conservation Committee that funds this research. Dr. Art Bettis from the University of Iowa and Dr. Mary Skopec from DNR are the principal investigators.

Monitoring wells have been installed on research sites located in Davenport, Coralville, West Union, Dubuque, Ankeny, and Iowa City. The wells monitor movement of water in the rock chamber below the pavers. Flow meters monitor water leaving the rock chamber. Groundwater recharge and runoff reduction will be calculated. Water samples will be analyzed to determine the effectiveness of permeable pavers to reduce pollutant loads.

The Dover Court Street project in Davenport utilized the Water Resource Restoration Sponsored Project funding to retrofit and rebuild 500 feet of city street. A permeable pavement system of concrete blocks was installed over a rock base. This block can be installed as an articulated mat system, as it comes cabled together.



Completed installation of Dover Court in Davenport.



Installation of monitoring well on Dover Court.



Coralville Mayor, John Lundell, installed this permeable paver driveway at his home, which serves as a paver research site. Mayor Lundell also helped guide the adoption of a new post construction ordinance that protects water quality and minimizes stream corridor erosion.



Monitoring well for water quality data collection.

Water Resource Restoration Sponsored Projects in Iowa

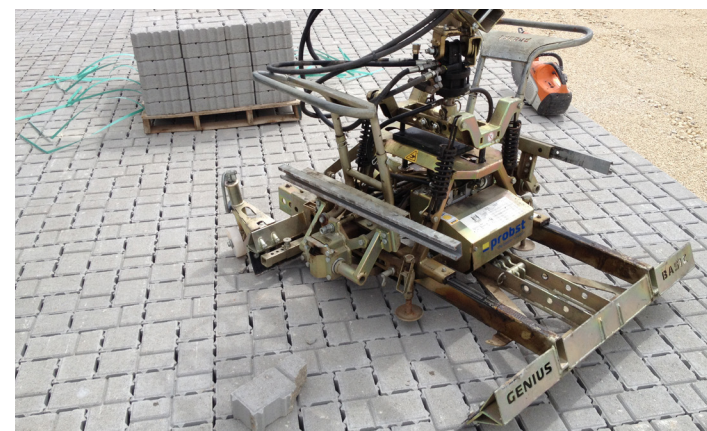
IDALS Urban Conservationists are playing an integral role in implementing a new water quality program. The Water Resource Restoration Sponsored Project program, operated through the Clean Water State Revolving Fund (SRF), has created a new and significant funding source for watershed-based water quality projects.

Cities and wastewater utilities partner with conservation and watershed organizations to conduct watershed assessments and construct practices that will have long-term benefits for Iowa's water quality. Practices can be installed on public or private land, inside corporate limits or outside. Most of the new sponsored projects feature work in urban watersheds, with technical assistance and project review provided by the Urban Conservationists.

The total amount committed to sponsored projects since 2012 is \$32.4 million, with plans to add about \$10 million per year into the future.



Site grading for the permeable paver parking lot.



Machine used to lay pavers for large installations.

Sponsored projects are available to communities and wastewater utilities using Clean Water SRF loans to upgrade their wastewater infrastructure. On a typical CWSRF loan, the utility borrows principal and repays principal plus interest and fees. As shown, on a CWSRF loan with a sponsored project, the utility borrows for both the wastewater improvement project and the sponsored project. However, through an overall interest rate reduction, the utility's ratepayers do not pay any more than they would have for just the wastewater improvements. Instead, two water quality projects are completed for the cost of one.

The Clean Water SRF, jointly operated by the Iowa Department of Natural Resources and the Iowa Finance Authority, is Iowa's largest funding program for water quality. Visit www.iowaSRF.com for more information.

Refer to the map (right) to see other communities currently working on sponsored projects.

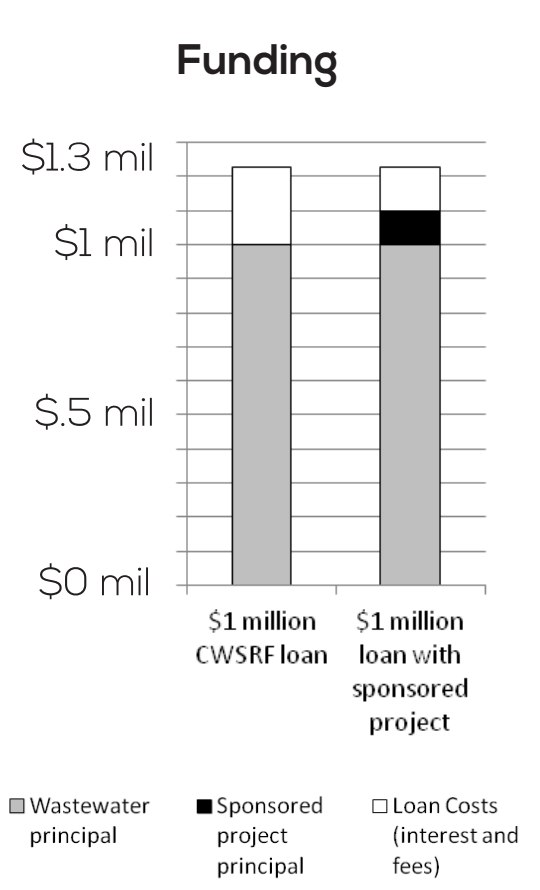
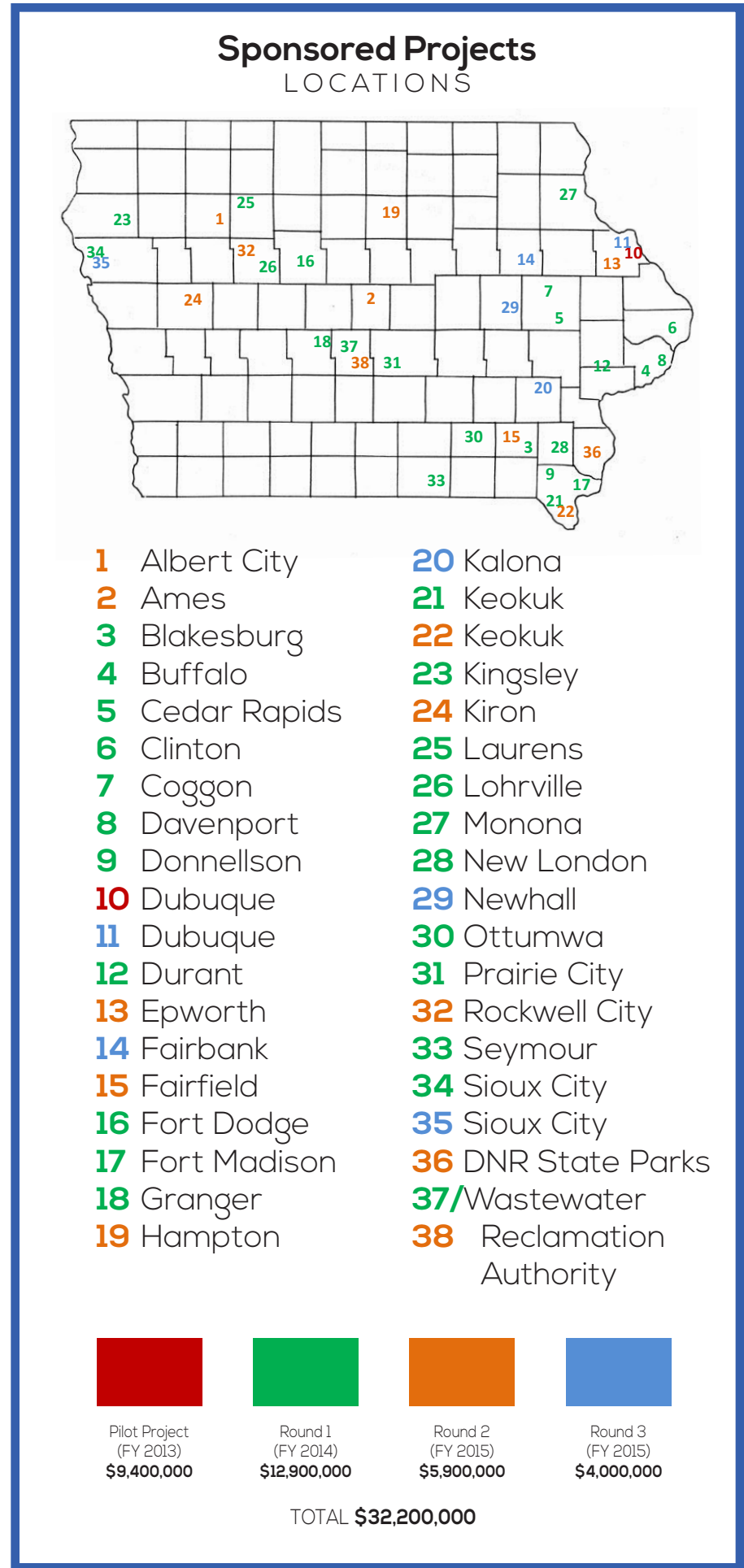
In Monona, this program was used to build a parking lot for the municipal aquatic center. This is the first completed sponsored project in Iowa. Permeable pavers were installed to infiltrate stormwater and reduce or eliminate polluted runoff.



Installing the perforated subdrain in the rock base below the pavers.



Grand opening of the completed parking lot.



- ## Timeline
- ▶ **Spring 2009:** The Iowa Legislature authorized the Water Resource Restoration Sponsored Project funding mechanism.
 - ▶ **Fall 2012:** The first pilot project was conducted with the City of Dubuque, authorizing funding for green alleys using permeable paving to infiltrate storm water.
 - ▶ **Summer 2013:** The program was opened up to other communities with existing and pending Clean Water SRF wastewater loans. Twenty communities were approved for up to \$13 million.
 - ▶ **Spring 2014:** The second round of applications was accepted, adding 10 additional communities with \$5.9 million committed.
 - ▶ **Fall 2014:** During the third round, five more applications were funded, bringing the 2014 total to \$10 million.
 - ▶ **Spring 2015:** The next round of applications is due, with an additional \$10 million set aside.