

IOWA URBAN CONSERVATION

2017 Iowa Urban Conservation Program Newsletter

URBAN CONSERVATION: IOWA'S FORWARD MOMENTUM

The Iowa Department of Agriculture and Land Stewardship (IDALS) Urban Conservation Program comes from humble beginnings when Secretary Bill Northey started the program in early 2008. In the early years, funding was limited to help implement projects, which lead the urban conservation team to focus attention on education and training activities to help promote green infrastructure (GI) practices. Assistance was provided to many homeowners to implement small-scale projects with small amounts of cost share from Resource and Enhancement Protection (REAP) funds.

Since then, the program has started to hit its stride. Currently, the program has evolved from education and small-scale practices to implementing \$12-\$15 million worth of urban conservation projects annually through partnerships with the Iowa Department of Natural Resource's (DNR) Sponsored Projects Program, Iowa Economic Development Authority's (IEDA) Community Development Block Grant Program (CDBG), and IDALS's Urban Water Quality Initiative (WQI) program (see articles inside). In the past three years alone Urban Conservationists have worked with more than 100 communities to help plan, design, and implement urban projects totaling over \$54 million dollars of work.

By incorporating all of these project partners, the future is bright for the program. The Sponsored Project Program continues to grow, the WQI continues to incorporate funding for urban conservation demonstrations into their program, and IEDA has institutionalized the use of GI by requiring urban practices in their projects. Water quality has never been more in the spotlight, and there is no indication that focus will shift in the future.

While GI is still not the standard for urban planning and design, these practices are no longer considered a radical new paradigm many thought they were back in the beginning of urban conservation in Iowa. These practices are becoming more widely accepted, and a number of Iowa communities have already adopted ordinances requiring stormwater practices in new development in order to protect water quality.

THANK YOU, WAYNE!

This newsletter will be the last to feature Wayne Petersen as the State Urban Conservationist for IDALS. After 40 years of dedicated service in one federal and multiple state agencies throughout Iowa, Wayne has decided to retire. Wayne began his career in 1976 with the Natural Resources Conservation Service (NRCS). He has worked in Mitchell, Boone, Polk, Clinton, and Johnson Counties serving rural and urban populations alike.



In 1996, while still with the NRCS, his career began to change when he spearheaded efforts in Iowa to work on water-quality issues on urban lands. It was these changes that lead him to take on the role of the State Urban Conservationist for IDALS in 2008. Since then, Wayne has been instrumental in developing the Iowa urban conservation program.

Wayne guided the Urban Conservation Program from a small program with little funding to a program that currently implements \$12 - \$15 million annually in over 100 communities across the state. Wayne's outstanding ability to work with people has led to partnerships with multiple funding streams including the State Revolving Fund (SRF) Sponsored Project Program, IEDA, WQI, and REAP.

Wayne has worked in every Iowa county, educated hundreds of thousands of people through the years, and has touched many lives both professionally and personally. His dedication of his life's work to watershed protection and improvement of soil and water quality in Iowa will be remembered for many years to come.





CLEANWATERIOWA.ORG

WATER QUALITY INITIATIVE

URBAN PROJECTS: EXPANDING OUR REACH

To kickstart the 2017 construction season, the Iowa Department of Agriculture and Land Stewardship (IDALS) provided cost-share funding for an additional 12 Urban Water Quality Demonstration projects through the Water Quality Initiative (WQI). Over \$820,000 in WQI funds were partnered with over \$2 million in matching dollars to total above \$2.8 million dollars in water-quality work.

The main focus of the new projects will be installing urban stormwater practices proven to reduce stormwater runoff and associated nutrients and sediments in highly visible areas. The WQI urban projects demonstrate a diverse selection of practices such as stormwater wetlands, bioretention cells, bioswales, and permeable pavers. Each project demonstrates stormwater and nutrient reduction in urban settings and features a large component focusing on outreach and education to promote community involvement.

These 12 new projects join 22 existing WQI urban projects funded since 2015, which have been recently completed or are currently being installed across the state. In total, once all of the current and previous projects are implemented, there will be more than \$7 million worth of urban practices installed with WQI contributing \$2.4 million towards the total cost of the projects. To see which communities have taken advantage of this program, reference the map in the middle of the newsletter to find a project near you.

The Iowa Water Quality Initiative was established in 2013 to help implement the Nutrient Reduction Strategy, which is a science and technology based approach to achieving a 45 percent reduction in nitrogen and phosphorus losses to our waters. The strategy brings together point sources, such as municipal wastewater treatment plants and industrial facilities, and nonpoint sources, including farm fields and urban stormwater runoff, to address these issues. The initiative seeks to harness the collective ability of both private and public resources and organizations to deliver a clear and consistent message to stakeholders to reduce nutrient loss and improve water quality. More information on these projects can be found at www.cleanwateriowa.org.



Permeable parking lanes in action at Coe College in Cedar Rapids.



Groundbreaking at the Storm Lake stormwater wetlands project with Secretary Northey and other partners.



Permeable pathway at the Iowa State Fair Discovery Garden.

FOR MORE INFO

Will Myers, WQI Projects Coordinator

will.myers@iowaagriculture.gov

515.725-1037

cleanwateriowa.org



IOWA ECONOMIC DEVELOPMENT AUTHORITY

STORMWATER MANAGEMENT: LOOKING AHEAD

2016 was a progressive year for Iowa's stormwater management efforts and 2017 looks to be even more exciting. In 2016, Iowa Economic Development Authority funded projects resulted in final completion of a dozen urban green infrastructure projects across Iowa and 181 rural flood mitigation and water quality projects across four Iowa watersheds.

These Iowa Watershed projects will serve as model in 2017 for the nearly \$97 million federal Housing and Urban Development National Disaster Resilience Competition Grant Iowa received. Included in this national award is funding to reduce flooding,

improve water quality and improve flood damaged homes in the Bee Branch watershed of Dubuque. In addition, disaster resilience grant funding will support implementation of eight to ten flood mitigation and water quality improvement projects in Storm Lake that were identified in the model Water Community Template developed by the city of Storm Lake in 2015 with funding from the Iowa Economic Development Authority.

Working together with our local government partners; state agency partners Iowa Department of Agriculture and Land Stewardship (IDALS), Department of Natural Resources (DNR), and the Iowa Flood Center; along with engineers, contractors and the Iowa Stormwater Education Partnership, we are seeing more and more quality green infrastructure project designs and installations.

To bring attention to the green infrastructure projects funded across Iowa by IDALS, DNR State Revolving Fund, and the Iowa Economic Development Authority, our three agencies have begun mapping and describing the projects online at bit.ly/IAgreeninfrastructure.



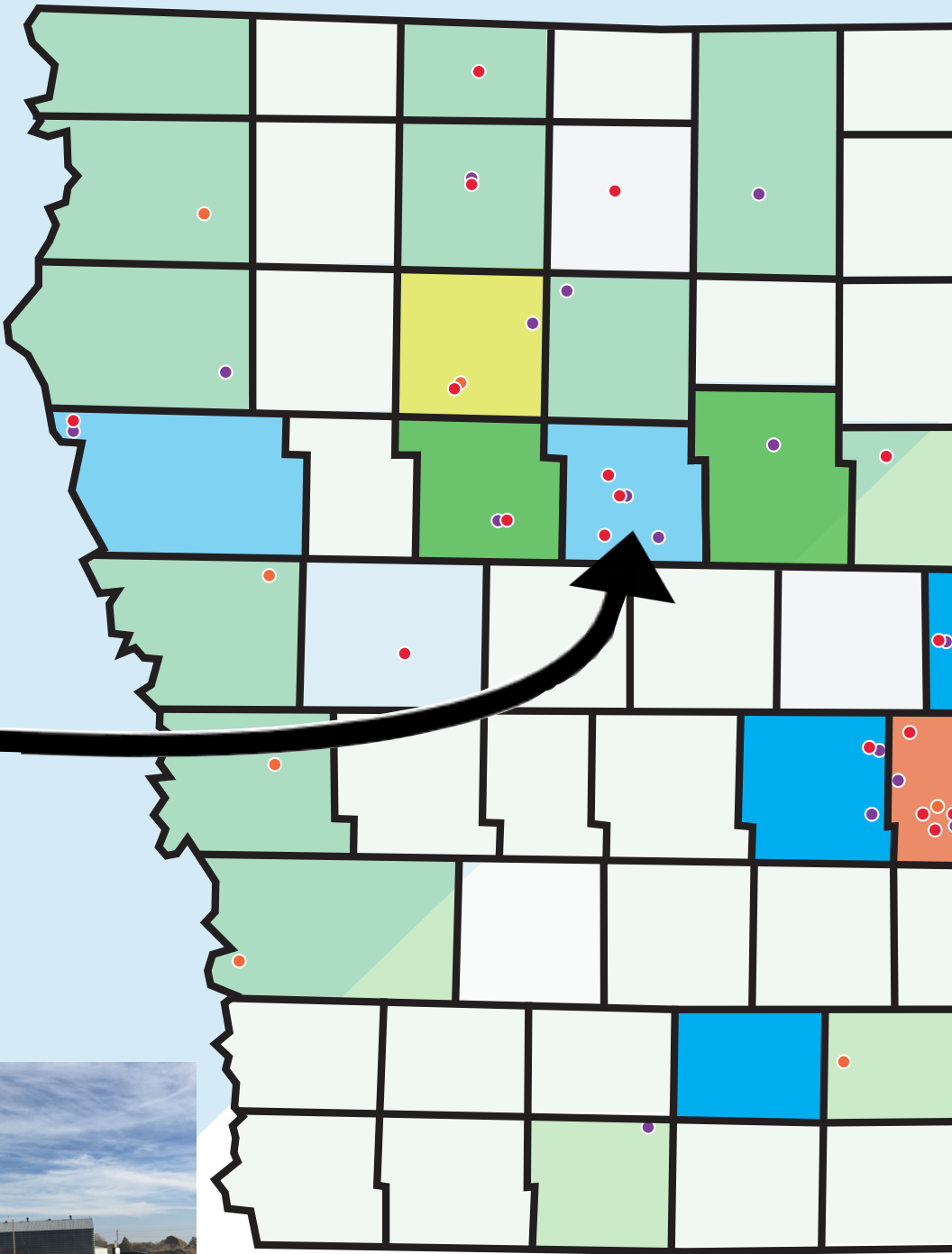
FOR MORE INFO
Jeff Geerts, Special Projects Manager
jeff.geerts@iowaeda.com
515.725.3069
iowaeconomicdevelopment.com



State Revolving Fund
 \$19 million completed or in progress
 \$32 million in planning stages

URBAN CONSERVATION PROJECTS

- | | |
|------------------|--------------------------------------|
| Albert City | North Liberty |
| Algona | Northwood |
| Ames | Ottumwa |
| Blakesburg | Pleasantville |
| Buffalo | Postville |
| Calamus | Readlyn |
| Cedar Rapids | Rockwell City |
| Clinton | Roland |
| Coralville | Seymour |
| Davenport | Sioux City (2) |
| Des Moines | Spencer |
| DNR State Parks | Wastewater Reclamation Authority (4) |
| Donnellson | Waukee |
| Dubuque (2) | |
| Durant | |
| Dyersville | |
| Epworth | |
| Fairbank | |
| Fort Dodge (2) | |
| Fort Madison (2) | |
| Granger | |
| Grimes | |
| Grinnell | |
| Hampton | |
| Kalona | |
| Keokuk (2) | |
| Keota | |
| Kingsley | |
| Lake View | |
| Laurens | |
| Lenox | |
| Lohrville | |
| Monona (2) | |
| Mount Pleasant | |
| Newhall | |



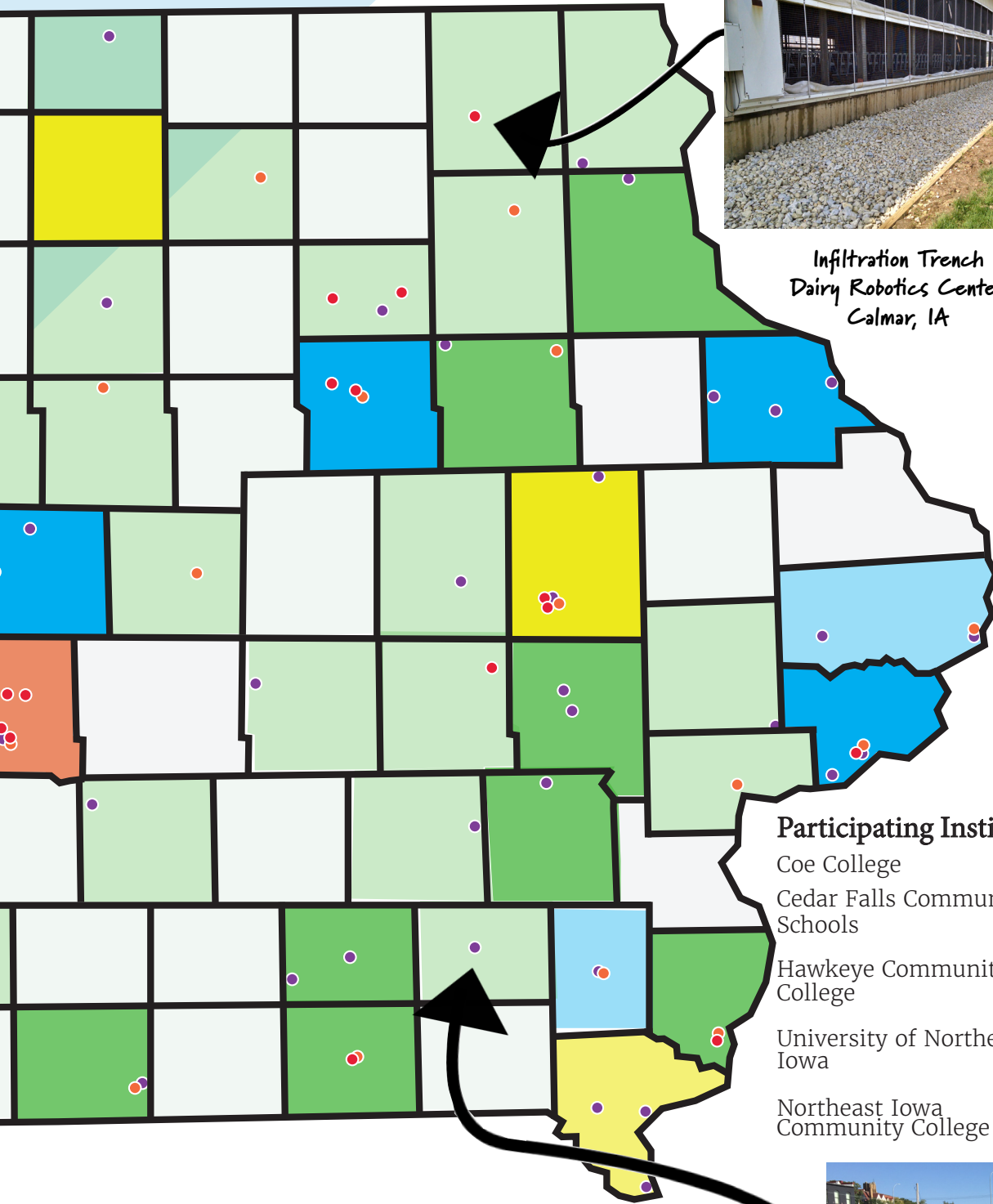
Bioretention Cells
 Landus Cooperative
 Rockwell City, IA

Iowa Economic Development Authority
 \$10 million completed or in progress

- | | | |
|------------------|----------------|----------------|
| Bloomfield | Council Bluffs | Lamont |
| Burlington | Davenport | Marshalltown |
| Cedar Rapids (5) | Des Moines (2) | Mapleton |
| Charles City | Iowa Falls | Muscatine |
| Clinton | Johnston | Mount Pleasant |

PROJECTS ACROSS IOWA

Water Quality Initiative
 \$6.5 million completed or in progress
 \$6.4 million in planning stages



Infiltration Trench
 Dairy Robotics Center
 Calmar, IA

- Amana Colonies
- Ames
- Ankeny (2)
- Arnold's Park
- Bloomfield
- Burlington
- Black Hawk SWCD
- Cedar Falls
- Cedar Rapids (2)
- Clive
- Davenport
- Denison
- Des Moines (4)
- Emmetsburg
- Granger
- Lake City
- Lake View
- Readlyn
- Rockwell City
- Sioux City
- Slater
- Spencer
- Storm Lake (2)
- Twin Lakes
- Urbandale
- Waterloo
- Webster City
- West Des Moines
- Windsor Heights
- Winneshiek SWCD

Participating Institutions

- Coe College
- Cedar Falls Community Schools
- Hawkeye Community College
- University of Northern Iowa
- Northeast Iowa Community College

- Murray
- Orange City
- Seymour
- Storm Lake (2)
- Waterloo
- West Union
- Woodbine

- State Revolving Fund ●
- Water Quality Initiative ●
- Iowa Economic Development Authority ●



Permeable Pavers & Bioretention Cells
 Ottumwa, IA



STATE REVOLVING FUND USING SPONSORED PROJECTS FOR WATERSHED PRIORITIES

Fort Dodge used it to fix severely eroding streambanks. Mount Pleasant, Fairbank, and Keokuk are using it to manage storm water with permeable pavers. Kiron, Epworth, and Spencer are using it to improve water quality and drainage.

What is it?

It's the Water Resource Restoration Sponsored Projects program, a new method of funding water quality and conservation improvements. The sponsored projects program is available to communities that use the Clean Water State Revolving Fund (CWSRF) for their wastewater system upgrades.

On a typical CWSRF loan, the wastewater system borrows principal and repays principal, interest and fees. On a CWSRF loan with a sponsored project, the system borrows for both the wastewater project and the sponsored project. However, through an overall interest rate reduction, the system's ratepayers do not pay any more than they would have for just

the wastewater project. Instead, two water quality projects are completed for the cost of one. Cities and wastewater utilities all over Iowa are working on sponsored projects, as shown on the map. Applications are taken twice per year, March 1 and September 1.

IDALS Urban Conservationists provide the technical support and oversight for this program. They help applicants identify their watershed, assess water quality needs and issues, and develop plans for projects that will protect local water resources. With sponsored project funding and lots of hands-on assistance, communities are able to accomplish many types of watershed-based water quality goals.

The photos show just a few of the projects being implemented around the state, thanks to CWSRF and the IDALS team.

The Clean Water SRF, jointly operated by the Iowa Department of Natural Resources and the Iowa Finance Authority, is one of Iowa's primary funding sources for water quality. Visit **IowaSRF.com** for more information. For more information on sponsored projects, go to: **bit.ly/SRFWater**.

FOR MORE INFO

Patti Cale-Finnegan, SRF Coordinator

patti.cale-finnegan@dnr.iowa.gov

515.725.0498

IowaSRF.com



Permeable paver surface installed on Bulldog Blvd. in Monona



Completed bioretention cell in Lohrville

SEEING PROGRESS IN NORTH LIBERTY

Last May, the City of North Liberty launched what is believed to be Iowa's largest soil quality restoration program when it committed \$300,000 for grants for its residents.

For the launch, the city hosted a soil quality restoration field day — an educational opportunity for members of the community to see the process in action with local SQR contractors demonstrated the technique. Dozens of community members attended to learn about the benefits.

By November, funds were committed to 260 households throughout the city, with another 30 on the waiting list. Each household was eligible for up to \$1,500 to pay 100 percent of a project through an approved contractor. (Since 2009, the city has also offered 50 percent matching grants of up to \$750 for soil quality restoration and other storm water improvement projects.)

These projects will not only improve residential soil quality and produce greener, lusher lawns, but improve local water quality by slowing storm water's path to our streams, rivers, and lakes, keeping pollutants out. Their benefit will be seen not just near North Liberty's older homes, but in its newer residential developments.

The program was funded through a mechanism of the city's nearly \$21 million loan for a waste water treatment plant expansion from the State of Iowa's State Revolving Fund, which allows the city to use interest on the loan to fund water-quality initiatives.

In addition to the soil quality restoration grants, the funds were also earmarked for permeable pavement, native plantings and Iowa's largest bioswale at Centennial Park. Funds remaining after these projects are complete will be released for additional SQR grants this year.

Top: North Liberty lawns after soil quality restoration work.

Middle: Spreading compost at the soil quality restoration field day.

Bottom: Detail of the compost used during the field day.



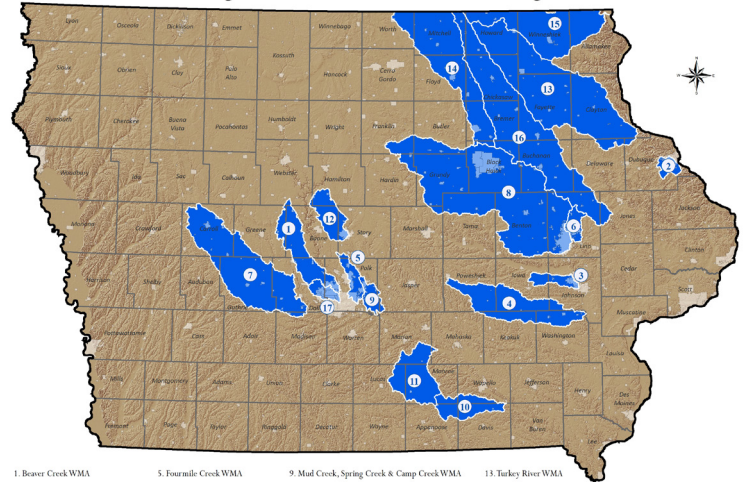
WATERSHED MANAGEMENT AUTHORITIES ENTER IMPLEMENTATION PHASE

In 2010, Iowa lawmakers passed legislation authorizing the creation of Watershed Management Authorities (WMA). A MWA is a mechanism for cities, counties, Soil and Water Conservation Districts (SWCDs) and stakeholders to cooperatively engage in watershed planning and management. Currently, there are seventeen active Watershed Management Authorities (WMAs) in Iowa. Four have formed in the Des Moines metro area- Fourmile Creek, Walnut Creek, Mud/Camp/Spring Creeks, and Beaver Creek.

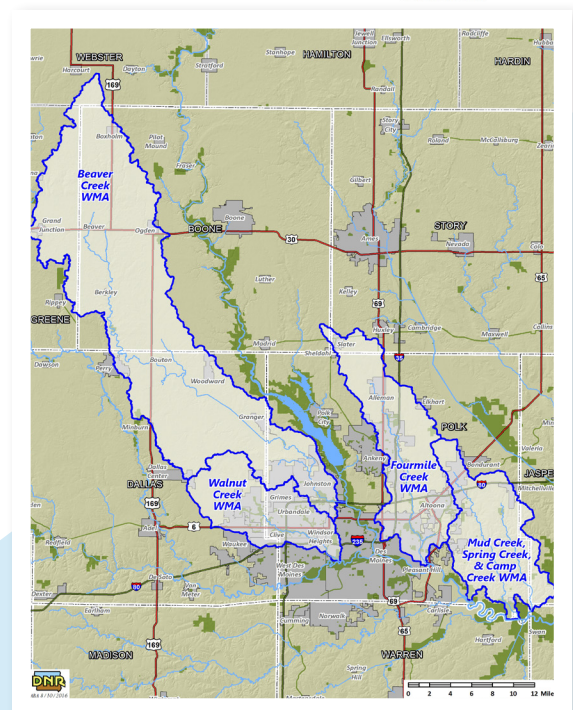
The Des Moines metro communities have seen the value of working together to develop watershed management plans and unifying policies that will improve and protect water quality in the region. During the planning process, high priority goals were set utilizing public and stakeholder input. Specific strategies are found throughout the plans to show what steps the urban and rural stakeholders can take to reach these goals. Strategies range from policy and ordinance changes to conservation practices. These watershed scale planning efforts have also shown these communities the benefit of working with farmers to make improvements on the agricultural lands.

With the plans now complete for three of the metro WMAs (Fourmile Creek, Walnut Creek, Mud/Camp/Spring Creeks) the WMA Boards are proceeding to implement their plans. In order to achieve the lengthy list of goals, the jurisdictions within each of these WMA's pooled their resources to hire a watershed coordinator. The jurisdictions chose to have the Polk Soil & Water Conservation District move forward with WMA coordination. Polk SWCD provided leadership during the formation and throughout the watershed management planning process with the aid of the Urban Conservationist. John Swanson was hired and he and the Polk SWCD staff are working one-on-one with cities, farmers, partners, and others to implement the watershed management plans and improve water quality.

Watershed Management Authorities with 28E Agreements



- | | | | |
|------------------------------------|-----------------------------|---|----------------------------|
| 1. Beaver Creek WMA | 5. Fourmile Creek WMA | 9. Mud Creek, Spring Creek & Camp Creek WMA | 13. Turkey River WMA |
| 2. Catfish Creek WMA | 6. Indian Creek WMA | 10. Soap Creek Watershed Board | 14. Upper Cedar River WMA |
| 3. Clear Creek Watershed Coalition | 7. Middle-South Raccoon WMA | 11. South Central Iowa Cedar Creek WMA | 15. Upper Iowa WMA |
| 4. English River WMA | 8. Middle Cedar WMA | 12. Square Creek WMA | 16. Upper Neosho River WMA |
| | | | 17. Walnut Creek WMA |



Map of Watershed Management Authorities (WMAs) within the Des Moines metro area.

FOR MORE INFO
Jennifer Welch, Urban Conservationist
Jennifer.Welch@ia.nacdnet.net
(515) 964-1883 x3

Meet Our Team!



Amy Bouska – Iowa City
319-354-1074 Ext. 3



Hannah Vorrie – Storm Lake
712-732-1200 Ext. 3



Derek Namanny – Des Moines
515-401-4908



Jennifer Welch – Ankeny
515-964-1883 Ext. 3