

COUNCIL ACTION FORM

AGENDA ITEM: Discussion and Appropriate Follow up on Submitting Department of Agriculture Water Quality Grant Pre-Application and Supporting Matching Funds

HISTORY:

One of the goals approved by Council on March 21, 2016, is to Prepare a Capital and Infrastructure Improvement Plan, which includes streets, including base, sub-base, storm water, sanitary, and water, Community Center building enhancements, GIS asset mapping, Sidewalks, including new and maintenance of existing, and Storm water management.

The Watershed Management Authority Coordinator for Walnut Creek Watershed from the Polk Soil & Water Conservation District approached staff because they were intrigued by the idea of doing a water quality demonstration at Colby Park. They thought it aligns very well with a community who is interested in doing their part to improve water quality and the Walnut Creek Watershed Coalition. A similar park was completed in Ankeny in 2009 and was well received by the community and has served as a great help to our efforts in the Fourmile Creek Watershed. A park like this can be a great step to guiding a local movement to improve water quality with residents.

Staff and the Coalition members took a little time to walk around Colby Park and gather some ideas that could be put into the Water Quality grant.

On November 21, the City Council approved the Walnut Creek Watershed Master Plan, which includes reducing storm runoff projects shown in the attached handouts. Staff is interested in three particular projects, namely:

Demonstration	Cost	City Share (50%)
Rain Gardens	\$9,000	\$7,000, in-kind equipment and labor
Native Prairie	\$3,000	\$1,500, Stormwater fund
Soil Quality Restoration	\$2,000	\$1,000, Stormwater fund
Signage	\$3,000	
Total	\$17,000	\$9,500

These series of practices could easily be installed in the park at a relatively low cost. We think this is also a great opportunity to get the community involved as part of the installation and do a soil quality restoration demo as part of the coalitions annual event.

Attached is a completed copy of the Request for Pre-Application for Funding Assistance from the Iowa Department of Agriculture and Land Stewardship. Staff recommends submitting the application by the December 9, 2016 deadline, including the commitment of fifty percent (50%) funding match valued at \$9,500.

If our pre-application is approved, we will be asked to do a full proposal which is due on February 10, 2017. For that application, staff will ask for Council Consideration to formally approve the application. The project must be completion by the end of 2017.

OPTIONS:

1. Motion to approve the submittal of the pre-application for the listed projects and commitment of matching funds valued at \$9,500 by December 9, 2016.
2. Approve another project for which grant funding will require a match.
3. Do nothing at this time and direct staff to consider other alternatives for next year.

STAFF RECOMMENDATION:

Staff reviewed and discussed the application with the Watershed Coalition and believes it fits with the intent of the City Council when the goal was established to consider innovations and sustainability. Staff also required these additions to require little to no maintenance.

Therefore, it is the recommendation of the City Administrator that Council approves Option #1, approval of submitting the pre-application for the listed projects and commitment of matching funds valued at \$9,500 by December 9, 2016.

Colby Water Quality Demonstration Park

Applicant Entity: City of Windsor Heights

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This project will be located within the City of Windsor Heights within the Walnut Creek watershed. Walnut Creek is on the DNR Impaired Water Bodies list, has a watershed that is experiencing vast urban growth, and drains to the Raccoon River within one mile from the Des Moines Water Works intake for public water supply serving nearly one-half million users.

Project Partners: City of Windsor Heights, Walnut Creek Watershed Management Authority, Polk Soil & Water Conservation District, Walnut Creek Watershed Coalition

	IDALS Request	Applicant Contributions	Partner Contributions	Total Budget
April 1, 2017 – June 30, 2017	\$6,500	\$8,500	\$0	\$15,000
July 1, 2017 – June 30, 2018	\$1,000	\$1,000	\$0	\$2,000
Overall	\$7,500	\$9,500	\$0	\$17,000

Project Overview

The City of Windsor Heights is applying for this Urban Water Quality Initiative Grant for the creation of a water quality demonstration park within the city owned Colby Park. This park is situated along Walnut Creek where it serves the community as a gathering location for a range of activities including: sports games, public events, an onsite rental facility, and a hub for cyclists using local trails. As a small community sitting within the stream corridor nearly all residents of Windsor Heights are familiar with their local watershed and have close ties to Walnut Creek.

Since the creation of the Walnut Creek Watershed Management Authority, Windsor Heights has been involved in the regional effort to improve water quality and reduce flooding. For this application the city has worked with their local Urban Conservationist and WMA Project Coordinator to devise the creation of this water quality demonstration park. The main goal of this project is for residents of Windsor Heights and other Des Moines Metro communities to have a realistic learning experience as they walk around Colby Park. The real message the city is trying to send home with the visitors to the park is the answer to the question on many minds, "What can I do to help my local Watershed?"

Throughout the community this question has been reiterated at public meetings and presentations; not just within Windsor Heights but throughout the Walnut Creek Watershed. This demonstration park also aligns with the goals of the Watershed Management Plan that was completed in 2016. This plan calls for a strong focus on education and demonstration as the WMA moves into an implementation phase. As cities are changing how they manage water and as coordinators work with farmers in the upland areas, Windsor Heights wants to be sure they are giving local residents and other visitors the opportunity to make changes on their own property.

Demonstration Park Overview

Colby Park truly provides the perfect location for a water quality themed park. It sits directly on the main branch of Walnut Creek features recent park upgrades that include a community events center with installed rain barrels and a new parking lot with installed bioretention cells. For this grant we propose the installation of two rain gardens, a soil quality restoration, and a native prairie area. Educational signage will be placed at all new and existing practices to help educate park users on a regular basis.

Rain Gardens- Two rain gardens will manage runoff from half of the on-site building as well as a grassed swale area. These sites were specifically chosen because they will be of a size that can be recreated by homeowners on their own properties to manage roof water or street water. Many Windsor Heights residents are blessed with sandy soils, ideal for low cost installation of rain gardens with the most infiltration benefits. A similar neighborhood effort was completed in Minnesota where a study found a reduction in over 90% of runoff from strategically placed rain gardens in residential neighborhoods.

Soil Quality Restoration- A 1,200 sq. ft. soil quality restoration is planned as part of a demonstration event within Colby Park. Several areas have been chosen that are very visible by trail and park users to demonstrate a practice used to improve disturbed urban soils. Soil quality restorations have a short window of visibility, so Windsor Heights plans on working with Polk SWCD and the Walnut Creek Watershed Coalition to host a demonstration event. At this event interested metro residents will be able to come learn about how they can improve urban soils using soil quality restoration. Similar events

Practice #1: Rain Garden- Two rain gardens will be installed managing runoff from roof and turf runoff. This infiltration practice will capture runoff before entering a storm sewer.	IDALS: \$2,000
	TOTAL: \$9,000
Practice Details: These will be located within Colby Park directly adjacent to the Community and Events Center. Preliminary site evaluation has been completed by Polk SWCD staff. No permits will be required for installation and design will be completed by Polk SWCD staff.	
Practice #2: Native Landscaping- A portion of Colby Park along the baseball fields will be converted to native prairie. This area is currently maintained as mowed turf grass.	IDALS: \$1,500
	TOTAL: \$3,000
Practice Details: No permits will be required for this area. Size is roughly 1 acres and site is directly adjacent to Walnut Creek. Location will serve as a filter strip to Walnut Creek, with surface drainage flows into Walnut Creek.	
Practice #3: Soil Quality Restoration	IDALS: \$1,000
	TOTAL: \$2,000
Practice Details: The soil quality restoration will be completed as part of a demonstration event. Several turf areas will have SQR completed. At total area of 1,200 sq. ft. is planned for the demonstration.	
Signage: Educational signage is planned for rain gardens, native landscaping, and existing practices such as bioretention cells.	IDALS: \$3,000
	Total: \$3,000
Practice Details: 6 total signs- Overview, Rain Garden (2), Bioretention Cell, Native Landscaping, Rain Barrel	

have been completed as part of the Easter Lake Watershed Project and have proven well attended, resulting in implementation on private properties. This event in Colby Park will be paired with the Walnut Creek Festival that is celebrated yearly in September. This event gathers several hundred local residents and will provide the perfect gathering to demonstrate the soil quality restoration.

Native Landscaping Area- Native prairie plants play a key role in urban water quality work. The planned native planting area will have multiple benefits including teaching residents specific native plants, educating them on the multi-year establishment phase, and education to city staff about prairie maintenance.

Education and Outreach

The whole basis of this water quality initiative project is around educating every person who comes through Colby Park and trail users along Walnut Creek. The installation of 5 educational signs along with the existing water quality monitoring kiosk will serve as the initial educational efforts. Initial conversations are also underway with Iowa State University about the installation of real time stream monitoring device and public art. This park will also serve as a great demonstrational resource to the Watershed Management Authority and the Central Iowa WMA WQI Demonstration Project led by Amanda Brown. This park will also serve as an ideal site for future Watershed Management Authority meetings, public events, and watershed tours.

This watershed is also unique in that it is quickly converting from rural to urban. In these developing parts of the watershed farmers and developers who are being asked to install conservation practices regularly ask what works is being completed with existing developed areas. This park will serve as a leading demonstration for the efforts underway to make improvements on developed areas.

The Walnut Creek Watershed Coalition provides a unique partner in working with local residents to improve water quality. This grass roots watershed effort is composed of local residents who have hosted events such as stream clean-ups and water monitoring workshops. With implementation of the Walnut Creek management plan beginning in 2016, this group will be a vital partner in working with local residents. The members of the coalition is excited to be a part of this demonstration park, specifically in utilizing it to promote conservation practices in the local community.

Timeline

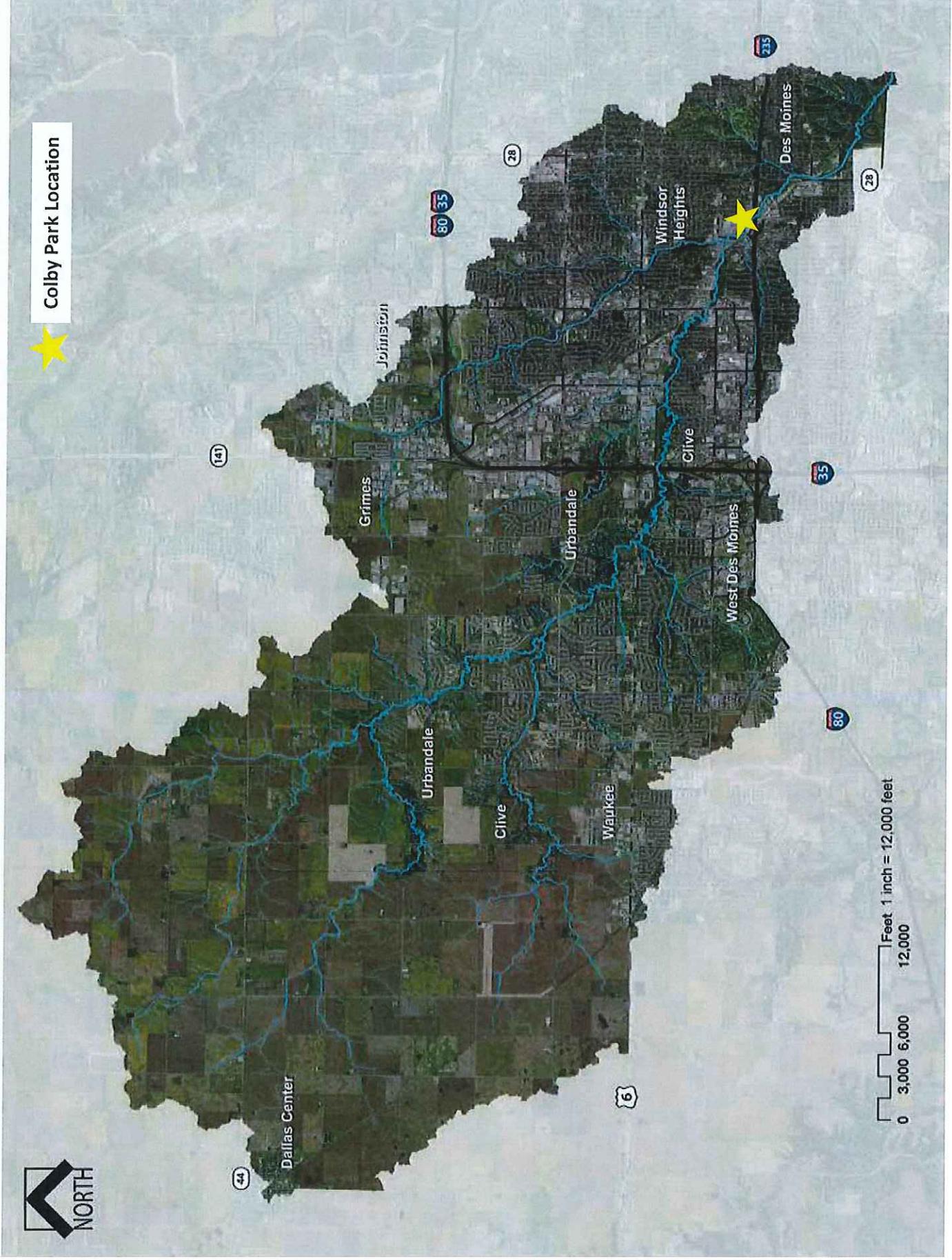
If funded, rain gardens will be constructed in spring 2017 by public works staff. Prairie establishment will also be started in spring 2017 and soil quality restoration will be implemented in fall 2017, both by local contractors.

Evaluation

Several means of evaluation are proposed for the Colby Park Demonstration Project. This includes the active education of at least 500 attendees by SWCD and city staff at events. Soil testing will also be completed by Iowa State and Polk SWCD to determine soil benefits following soil quality restoration completion. These results will be used as a part of future educational efforts.



Colby Park Location



0 3,000 6,000 12,000
Feet 1 inch = 12,000 feet

**Colby Park
Windsor Heights, IA**

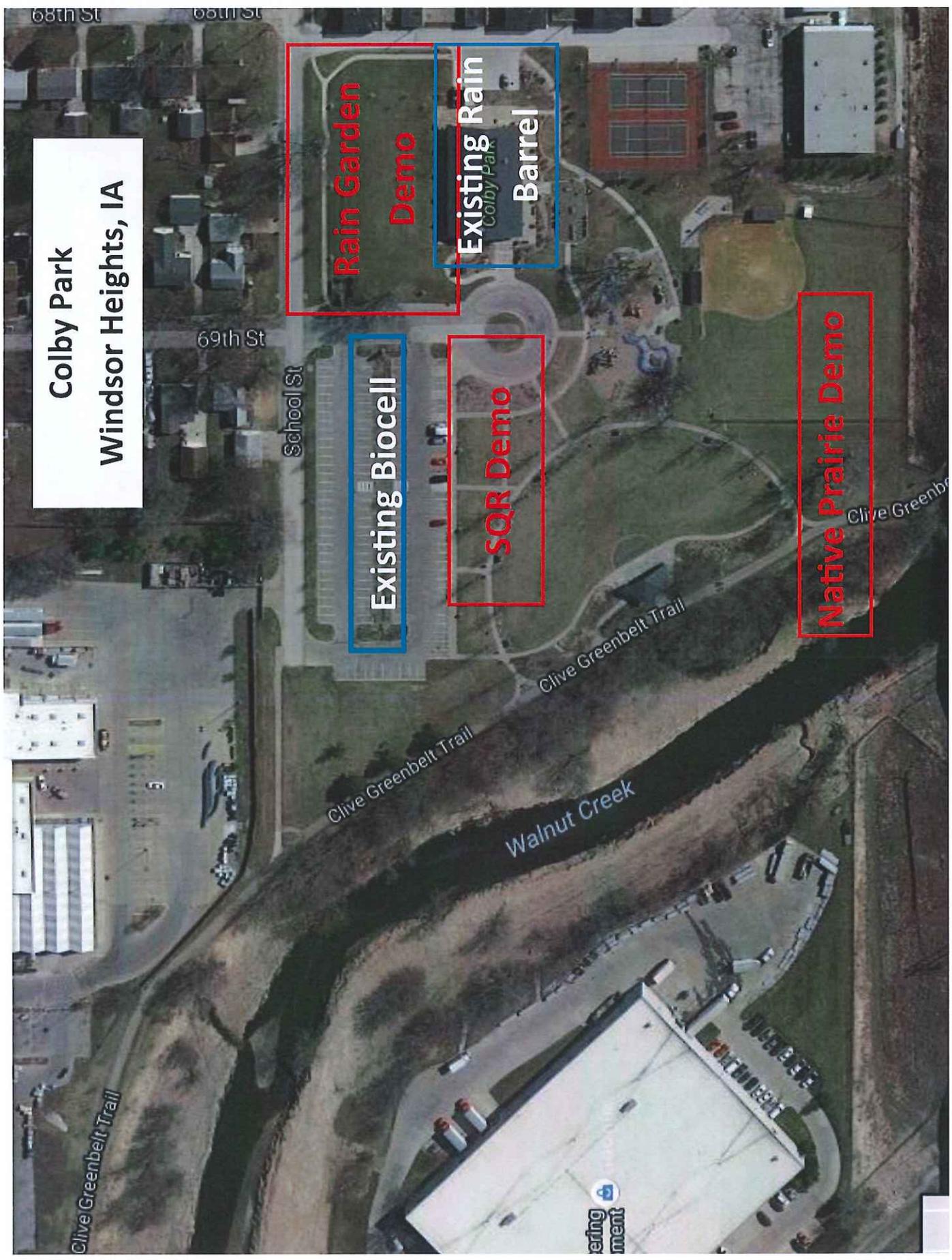
**Rain Garden
Demo**

**Existing Rain
Barrel**

Existing Biocell

SQR Demo

Native Prairie Demo



**Rain Garden
Demo**



Native Prairie Demo



Soil Quality Restoration (SQR)

Demo



