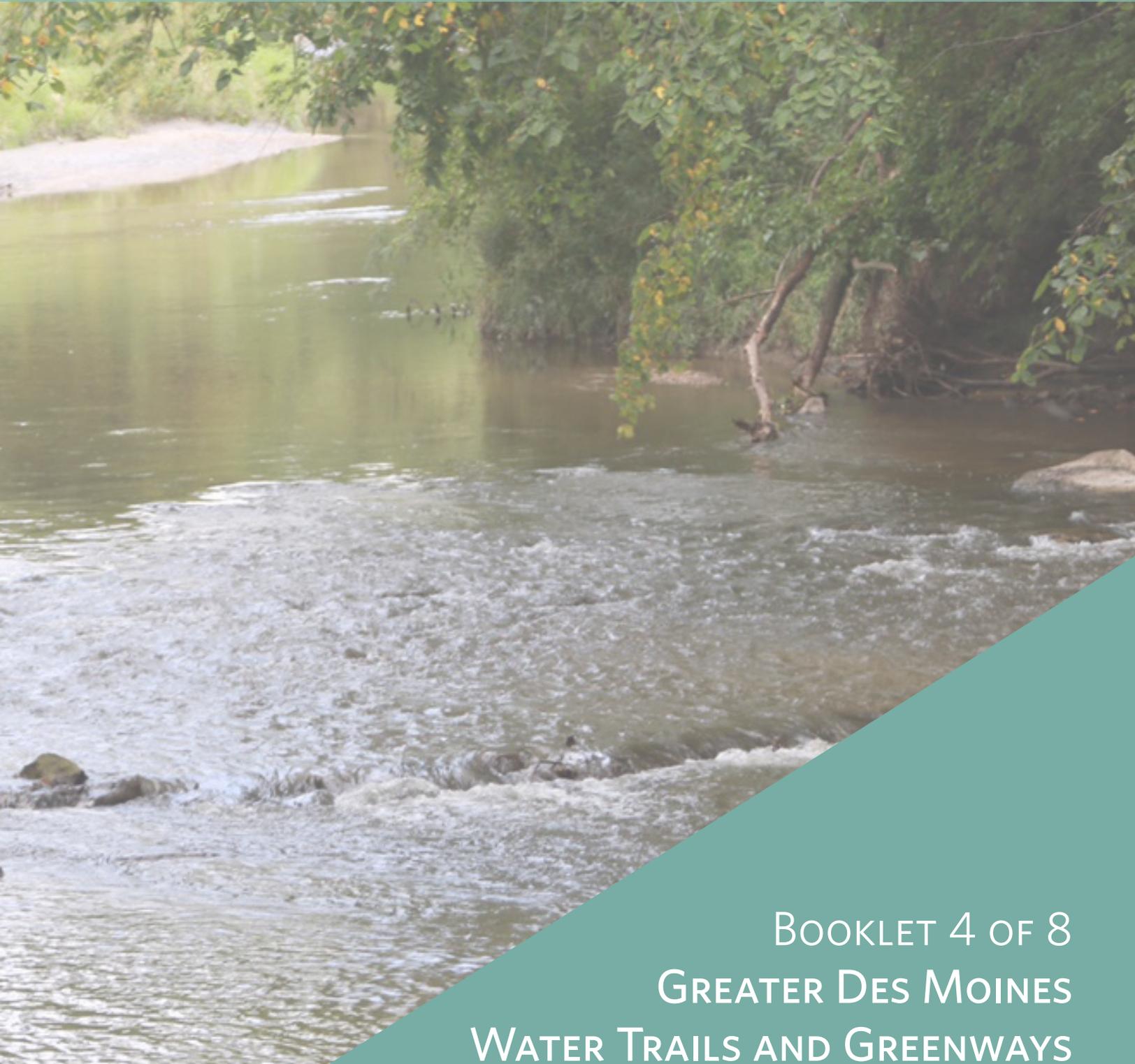




A VISION FOR FOURMILE AND MUD CREEKS



BOOKLET 4 OF 8
GREATER DES MOINES
WATER TRAILS AND GREENWAYS
2016

Photo: DMAMPO
Fourmile Creek

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Booklet 1: Water Trails and Greenways Plan

Booklet 1 provides an overview of the broader *Water Trails and Greenways Plan* including vision, goals, strategies, policies, and implementation considerations. Please read through Booklet 1 to understand the larger framework that will directly impact each individual river and creek.

Booklet 2: Beaver Creek

Booklet 3: Des Moines River

Booklet 4: Fourmile and Mud Creeks

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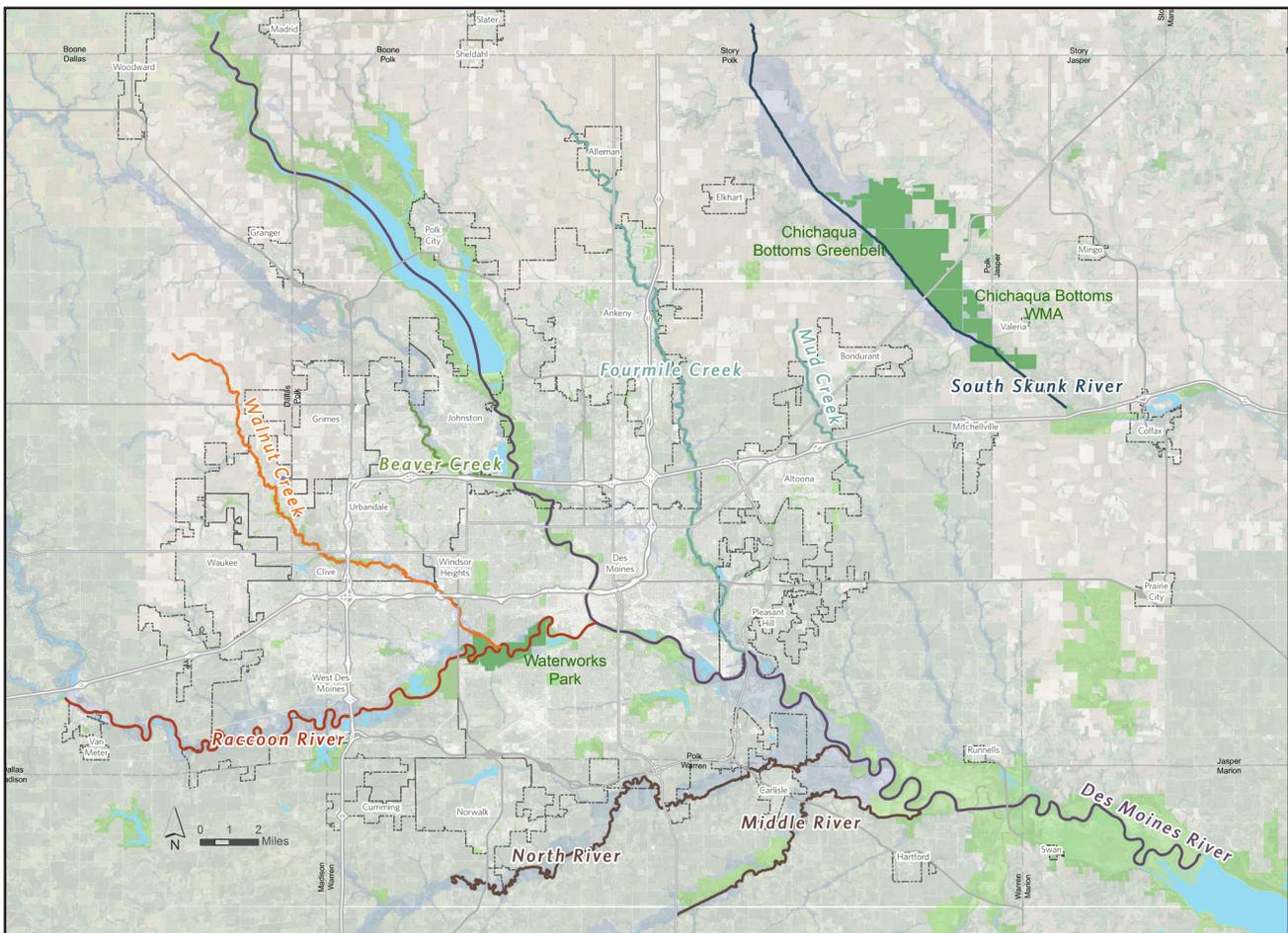
Booklet 8: Walnut Creek

One Vision, Many Communities

The Greater Des Moines Water Trails and Greenways Plan establishes a regional vision for our rivers, creeks, and greenways. Through extensive community engagement, and with the help of a strong steering committee, a clear regional vision emerged.

Regional Vision

The water trails and greenways of Greater Des Moines will be a natural haven, healthy ecosystem, signature recreational destination, economic driver, and community focal point that welcome people of all ages, abilities, interests, incomes, and cultures to connect with their rivers, creeks, and greenways.



Greater Des Moines Water Trails and Greenways planning area

This Booklet

The Greater Des Moines Water Trails and Greenways Plan looks at more than 150 miles of waterways. This booklet provides an overview of Fourmile and Mud Creeks, including recommendations to improve its environmental, recreational, and economic potential for the entire community. There are companion booklets for each waterway, as well as an overall Plan booklet covering common strategies and practices.

Existing Conditions

Fourmile Creek

Miles in study area: 28

Floodplain in public ownership: 36%

Jurisdictions within study area: Polk County, Alleman, Ankeny, Pleasant Hill, Des Moines

Current number of access points: 1 for wading

Primary Water Quality Impairment: None

Fourmile Creek is a scenic greenway on the east side of the region. It offers wonderful birding and greenway opportunities. Ankeny, Des Moines and Pleasant Hill have made trails a priority and their location alongside the creek creates new connections to the waterway. With the recent buyout of flood-prone property, a significant greenway development opportunity exists. Polk County Conservation is leading an effort to develop a greenway plan. It is similar to Walnut Creek as it has the potential to be paddled yet unlike Walnut, the watershed is flashier and results in a multitude of logjams. The watershed plan of the [Fourmile Creek Watershed Management Authority](#) provides short and long-term strategies to stabilize the watershed, improve water quality and mitigate flooding. For more information about the existing conditions of Fourmile Creeks, please refer to the [State of the Rivers](#) report published in February of 2016.

Mud Creek

Miles in study area: 7.3

Floodplain in public ownership: 1%

Jurisdictions within study area: Polk County, Bondurant, Altoona

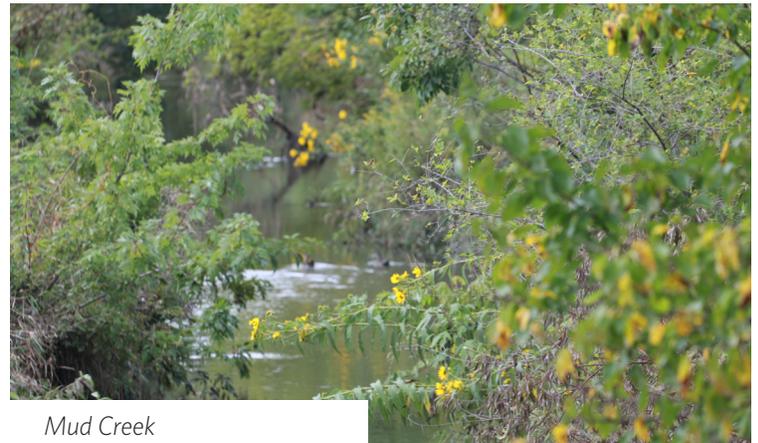
Current number of access points: 0

Primary Water Quality Impairment: none

Mud Creek is a very shallow creek supporting little habitat yet people are known to fish for bait along the bridges over the creek. The creek runs along portions of the Gay Lea Wilson Trail and along the back property of schools in Bondurant. Currently no access points are along the creek to allow citizen interaction with this natural feature. Mud Creek is part of the [Mud, Camp, Spring Creeks Watershed Management Authority](#) that recently completed a watershed plan to improve water quality and decrease flood risk. For more information about the existing conditions of Mud Creek, please refer to the [State of the Rivers](#) report published in February of 2016.



Fourmile Creek



Mud Creek

Recommendations

Access and Connections

While there are fewer opportunities for in-water activity in these creeks compared to other waterways in the area, the trails running adjacent to these creeks offer multiple uses. Currently trail users lack visual connections with the creek. Attention should be paid to creating spaces for trail users to interact with the creek. These connections could include soft trails for birdwatching, safe places for families to enter the creek to wade and play, rock stairs to wade in the water, places to sit and enjoy the view, public art to interpret the ecology of the creeks, and fishing nodes. Maintenance along the trail should focus on opening up the scrubby barrier between the trail and the creek at key points along the way.

Existing and future parkland along the creek offer key locations for the enhanced play and access. Fourmile Creek Community Center is recommended as an activity hub. The play features at the community center could be greatly enhanced if interaction with the creek were integrated.

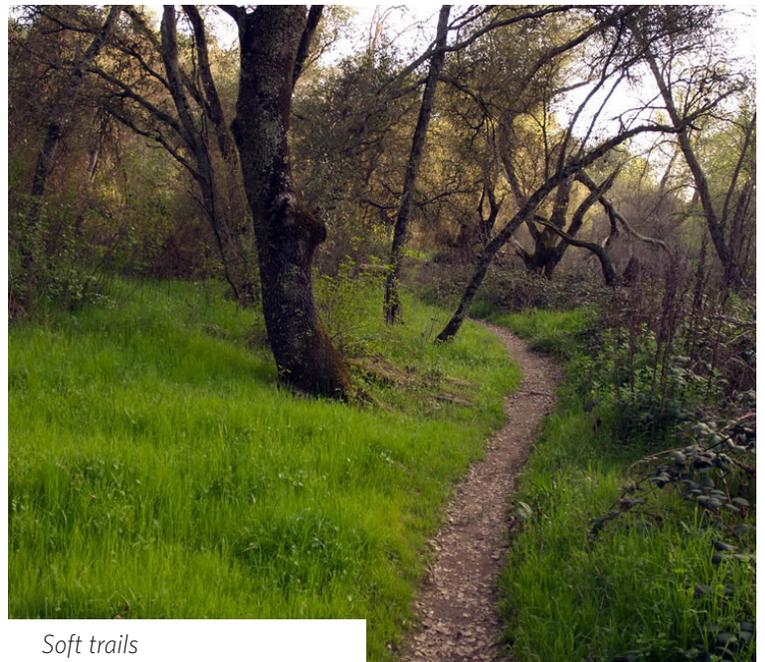
Programming and Conservation

Interpretation of the watershed is highly recommended along the trails running adjacent to the creeks. This would offer a unique opportunity for citizens to learn about the nature of water quality and flooding challenges. Interpretive signage integrated with public art is recommended along the creeks.

Additional stream restoration and watershed improvements should be implemented according to the *Fourmile Creek Watershed Plan* and the *Mud, Camp, Spring Creeks Watershed Plan*. Wherever possible, the 100-year floodplain should be protected and maintained as a habitat corridor. As the floodplain continues to be protected and urban land is converted to greenways, it may provide habitat for neotropical migrants, insectivores, and forest-interior specialist birds that decrease in diversity and abundance as a result of urban and suburban development. Filling the gaps in the greenways and enhancing the existing greenways can improve the quality of habitat for wildlife, as well as provide quality of life improvements for residents. Birding is one recreational activity that could be more heavily promoted along this creek.



Wading access



Soft trails

Key Projects

Fourmile Creek

Project	Location	Jurisdiction	Key Amenities	Considerations
Wading Access	NE 47th and NE 36th St.	Ankeny	<ul style="list-style-type: none"> Areas to relax for trail users Stair-stepped wading access Trash receptacles 	<ul style="list-style-type: none"> Highlight trail and creek connections Signage from road and trail
Activity Hub	Chichaqua Valley Trail	Polk County	<ul style="list-style-type: none"> Wading area Fishing access Trail connections 	<ul style="list-style-type: none"> Make area visible from the trail Small-scale design to connect people to the water
Activity Hub	Fourmile Community Center	Des Moines	<ul style="list-style-type: none"> Wading area Fishing access 	<ul style="list-style-type: none"> Create connections and programming that highlight the community center
Activity Hub	Near Pleasant Hill Boat Ramp	Pleasant Hill	<ul style="list-style-type: none"> Fishing access Wading area Picnic tables Restrooms 	<ul style="list-style-type: none"> Family-friendly gathering and recreational space that interacts with the creek

Mud Creek

Project	Location	Jurisdiction	Key Amenities	Considerations
Economic Hub	Anderson Elementary School	Bondurant	<ul style="list-style-type: none"> Fishing access Wading area Soft trails Trash receptacles Public art, native plantings 	<ul style="list-style-type: none"> Additional locations for opportunity include near Eagle Park, Chichaqua Valley Trail, the American Legion, soccer fields, Gateway Park, the Middle School, and Gay Lea Wilson Trail
Activity Hub	NE of NE 80th St and 9th St NW	Altoona	<ul style="list-style-type: none"> Fishing access Wading area Picnic tables 	<ul style="list-style-type: none"> Capitalize on public lands to create an area of rest and respite
Future Park	NE 80th ST and 9th St NW	Altoona	<ul style="list-style-type: none"> Fishing access Wading area 	<ul style="list-style-type: none"> Orient future park towards the creek to connect amenities and programming to the water

**Additional initiatives can be found in the Water Trails and Greenways Plan: Booklet 1*

Fourmile Creek - Northwest



Potential Water Trail Designation: None at this time

Potential Experience Level: None at this time

Given the extreme volatility of this watershed, there are an extreme amount of logjams that cross the creek. There is future potential for sections of this to be designated as a water trail after stream conditions stabilize and logjams become less frequent. Use for wading, birdwatching and other family-friendly activities is encouraged.

*See appendix regarding more detailed definitions and responsibilities of these designations.

Potential Hubs	Other Icons
Activity Hub	Mile Marker
Amenities	Creeks
Fishing Access	County Boundary
Wading Access	Conservation and Park Land (Public)
Birding	100-year Floodplain
Soft Trails	Bicycle/Pedestrian Facilities
Conservation Area	Existing
	Future

Fourmile Creek - Southeast

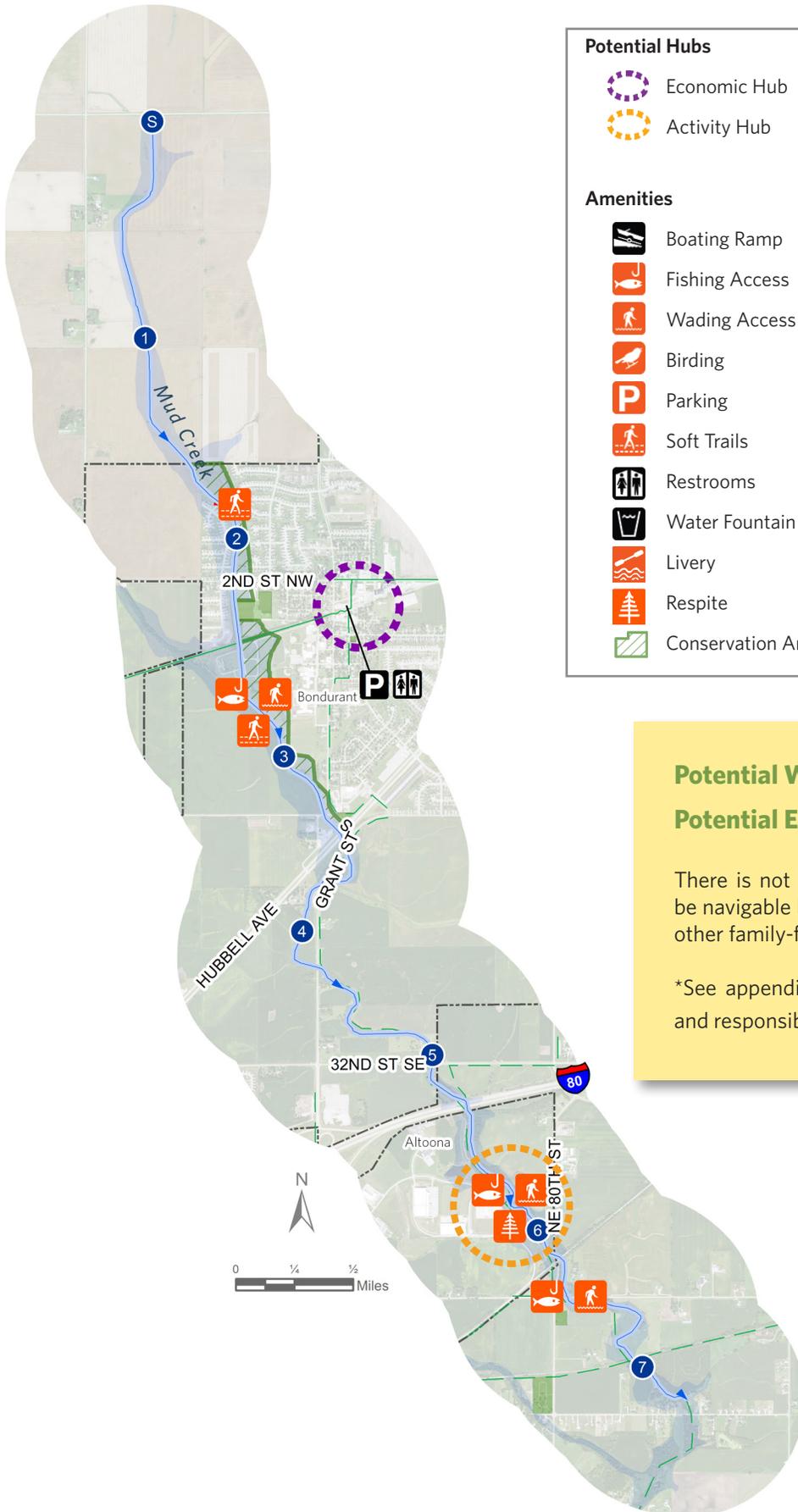


Conservation Improves Recreation

Watershed improvements will lead to more stable shorelines, improved water quality, enhanced habitat and decreased flooding. Therefore a more stable watershed improves the recreational value of the waterway and decreases maintenance through less tree fall, less sedimentation of access points, and a greater sense of safety by users.

See recommendations mentioned in the *Water Trails and Greenways Plan: Booklet 1* for watershed improvements and shoreline restoration.

Mud Creek



Potential Hubs	Other Icons
Economic Hub	Mile Marker
Activity Hub	Creeks
	County Boundary
	Conservation and Park Land (Public)
	100-year Floodplain
Amenities	Bicycle/Pedestrian Facilities
Boating Ramp	Trail Needed
Fishing Access	Existing
Wading Access	Future
Birding	
Parking	Color Codes
Soft Trails	Existing
Restrooms	Potential
Water Fountain	
Livery	
Respite	
Conservation Area	

Potential Water Trail Designation: None

Potential Experience Level: None

There is not enough water depth for this creek to be navigable by kayak or canoe. Use for wading and other family-friendly activities is encouraged.

*See appendix regarding more detailed definitions and responsibilities of these designations.

Symbology Explained

Carry-down Access



Carry-down accesses are for non-motorized paddling such as kayaking, tubing, or canoeing. Site design involves many factors, and should first look at the Iowa DNR's *Developing Water Trails in Iowa* guidelines. Lesser accesses are denoted by the portage symbol, and may not require the same level of infrastructure or amenities.

- Lighting and trash cans
- Parking
- Restrooms
- Launch types
- Watercraft and bicycle lockers
- Interpretive and wayfinding signage



Wading Access



Wading spaces are where we can get our feet wet. They can be designed for mucking among natural vegetation and sandbars or as play spaces with steps and stones. No matter the design, wading areas allow us the opportunity to physically connect to the water and nature.

- All ages access
- Restrooms/showers
- Benches and resting points in view of access



Fishing



Fishing is a popular activity all along the creeks and rivers. Creating access points can provide safe and comfortable areas that support anglers. Rock outcroppings, docks, and other designs offer different experiences. Universal design is critical since fishing is often a multi-generational activity.

- Restrooms
- Lights and trash cans
- Spaces for relaxing
- All-ages/abilities design
- Parking and bicycle parking



Respite



Areas to relax, take in the view, and enjoy the river allow people to find a moment of respite in the metro. These areas can be natural greenspaces or more urban like the Principal Riverwalk depending on the context of the area and desire of the community.

- Benches with a view
- Picnic areas and tables
- Paths and trails along water



Economic Hub



Water trails can play a role in developing economic hubs. These hubs typically represent the convergence of multiple assets, such as a river, trails, residential and economic clustering, and other factors. These are destinations that draw in visitors for multiple reasons. The scale changes for smaller or rural communities, but the economic impacts remain. These hubs are opportunities for supportive development along the rivers.

- Event spaces
- Parking
- Restrooms
- Launch types
- Bicycle parking
- Public art
- Restaurants and shops
- Liveries/outfitters
- Shuttle service



Activity Hub



Activity hubs leverage existing attractions into destinations where multiple activities converge. These hubs take advantage of nearby parks and trails to create spaces for longer visits and multiple activities. Often multi-generational and family-friendly spaces, these hubs should be planned with a diverse audience in mind and combine several different reasons to visit.

- Play spaces
- Educational opportunities
- Areas to eat, relax and play
- Programming
- Restrooms and trash cans
- Lights
- Bicycle parking
- Wayfinding



Conservation Area



A key component to fully enjoying the rivers and creeks is ensuring their natural quality and sustainability over time. Creating connected spaces for habitats, restoring wetlands and reducing flooding, and educating the next generation of river stewards are central pieces to the long-term health of the waterways.

- Educational programming
- Interpretive signage
- Habitat connectivity
- Wetlands restoration
- Floodplain management



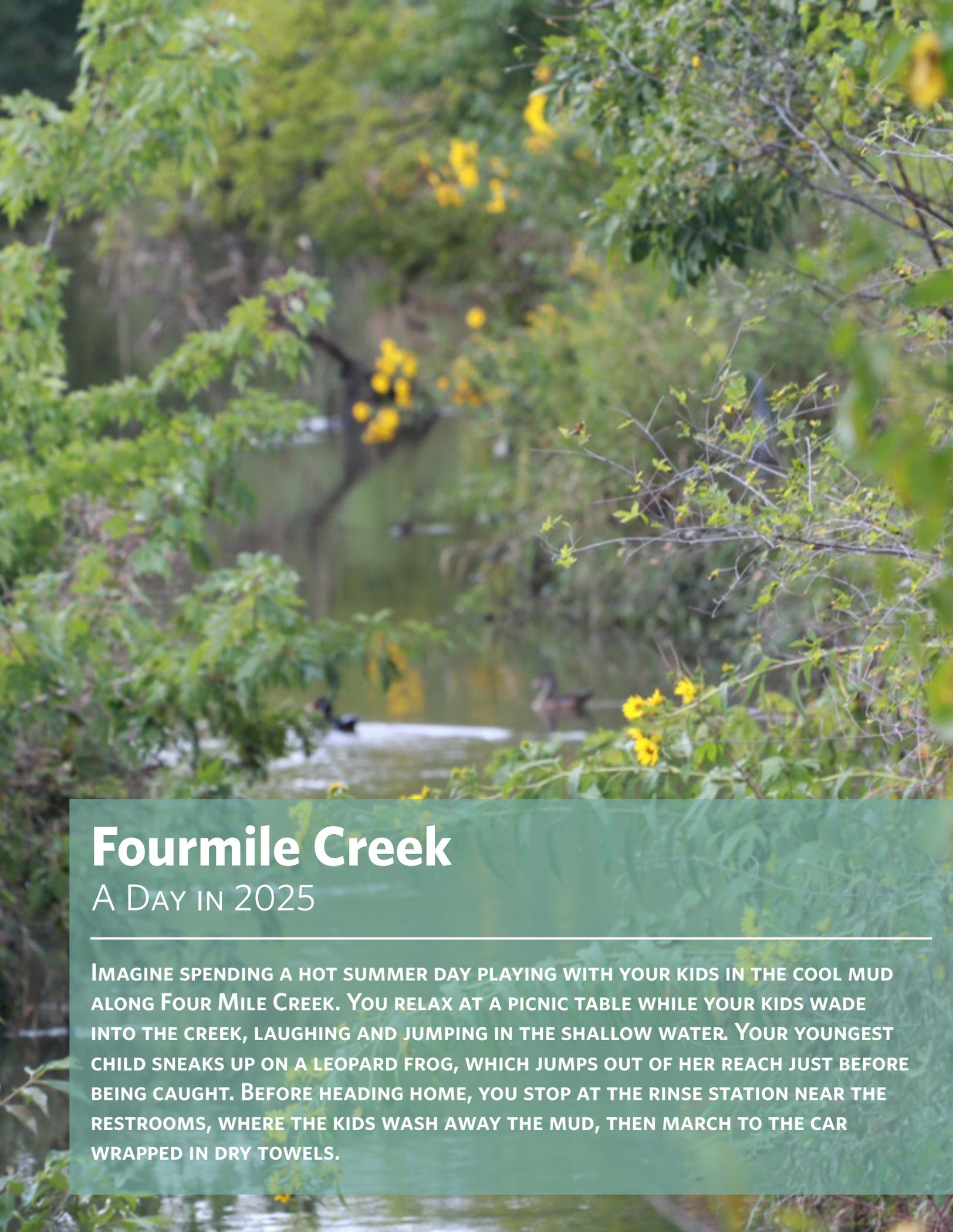
Soft Trails



Unpaved walking, hiking, and birding trails give people access to nature and offer a much different experience than paved trails. They also do not disrupt wildlife connections and can provide the opportunity for education programming.

- Educational programming
- Interpretive signage for history or birding
- Maintenance and conservation





Fourmile Creek

A DAY IN 2025

IMAGINE SPENDING A HOT SUMMER DAY PLAYING WITH YOUR KIDS IN THE COOL MUD ALONG FOUR MILE CREEK. YOU RELAX AT A PICNIC TABLE WHILE YOUR KIDS WADE INTO THE CREEK, LAUGHING AND JUMPING IN THE SHALLOW WATER. YOUR YOUNGEST CHILD SNEAKS UP ON A LEOPARD FROG, WHICH JUMPS OUT OF HER REACH JUST BEFORE BEING CAUGHT. BEFORE HEADING HOME, YOU STOP AT THE RINSE STATION NEAR THE RESTROOMS, WHERE THE KIDS WASH AWAY THE MUD, THEN MARCH TO THE CAR WRAPPED IN DRY TOWELS.