



A VISION FOR BEAVER CREEK

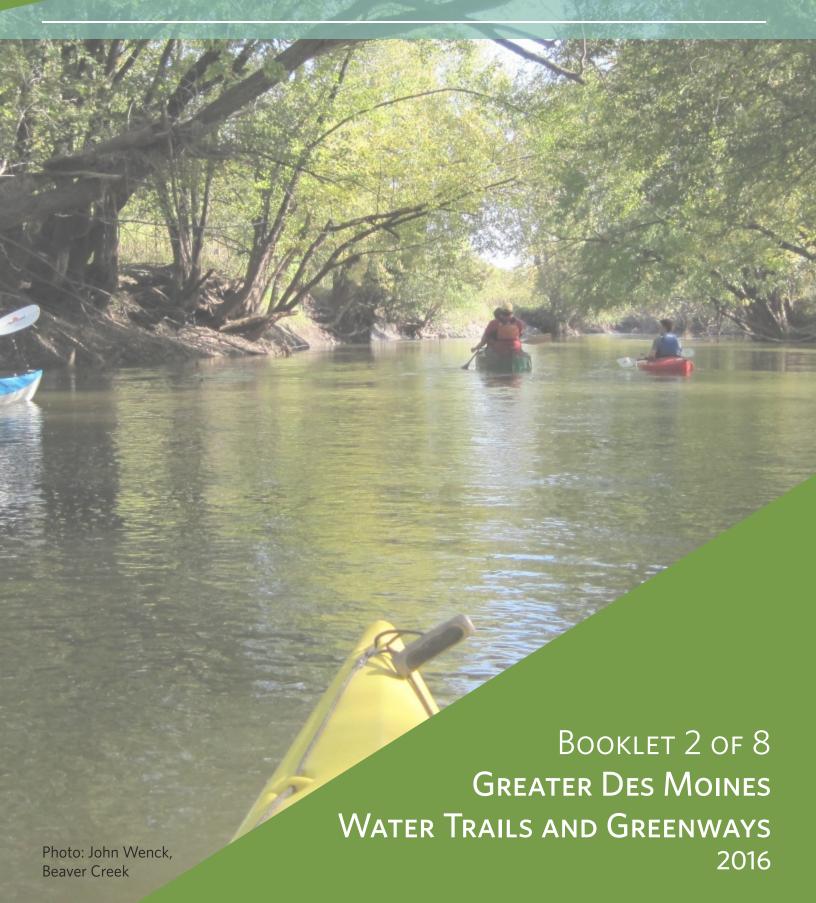


Table of Contents

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

One Vision	3
Existing Conditions	4
Recommendations	5
Key Projects	7
Recommendation Maps	8
Symbology Explained	10

Booklet 3: Des Moines River

Booklet 4: Fourmile and Mud Creeks

Booklet 5: Middle and North Rivers

Booklet 6: Raccoon River

Booklet 7: South Skunk River and Chichaqua Greenbelt

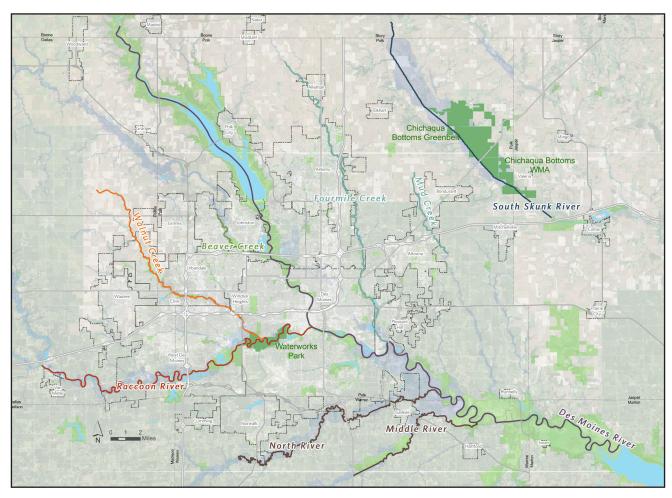
Booklet 8: Walnut Creek

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 Beaver Creek, 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

Miles in study area: 6.4

Floodplain in public ownership: 36%

Jurisdictions within study area: Polk County, Johnston, Urbandale

Current number of access points: 0

Primary Water Quality Impairment: Category 5, Bacteria

Beaver Creek is an urban creek with a diverse, natural character. The contrast between the surrounding urban metro and the natural refuge of the creek and greenways make this corridor a cornerstone of recreational opportunity for residents. It is currently enjoyed by birders and anglers. Anglers lack any dedicated places to access the creek but have well-worn paths especially close to the confluence with the Des Moines River.

While the creek is navigable and is currently paddled by area residents, it lacks any access points and has significant logjams that can require portaging. There are a number of parks, trails and greenspaces along the creek but none have amenities that allow access down to the water.

The City of Johnston has a number of plans for improving areas along the creek including <u>Terra Park Improvement</u> <u>Plan</u>, <u>Johnston Watershed Assessment Stormwater Management and Action Plan</u> and the <u>Merle Hay Road Gateway Redevelopment Area</u>. Additionally, the Beaver Creek Watershed Management Authority was recently formed to address water quality improvements and flood mitigation potential. For more information about the existing conditions of Beaver Creek, please refer to the <u>State of the Rivers</u> report published in February of 2016.





Recommendations

Beaver Creek is especially scenic and natural. There is strong interest in preserving the natural feel to the greenway corridor. The narrow and sinuous nature of the creek compared to the larger river systems offers a more intimate experience suitable for playing or walking along sandbars, fishing, birding, and paddling. There are additional opportunities for greater connections along the waterway.

Access and Connections

Three non-motorized boat accesses are proposed for Beaver Creek. The first access point, near 70th Avenue, would connect with a trail hub, provide interpretive signage, restrooms, and other key amenities for water and paved trail users.

The second, at Terra Lake Park, would create more connection between the park and creek, including soft trails for birding and hiking, carry-down boat access, wading areas, vistas, and fishing spaces. This would capitalize on the existing amenities the park offers.

The final access, at Merle Hay Road, offers a unique opportunity to develop an economic hub near the intersection of several quality of life amenities. Redevelopment that attracts businesses to capitalize on the convergence of the paved and water trails is encouraged as is public art features for a gateway entrance that highlights the scenic creek as a focal point for the community. This area is ripe for restaurants, bars, outdoor recreation retailer, bait and tackle shops, birding stores, and more that celebrate the trails and the various recreational uses they support. A livery could also be supported here to provide rentals and schedule outings.





Merle Hay Road Gateway Redvelopment Area

A major component of the 2030 Comprehensive Plan is the Merle Hay Road Gateway Redevelopment Area. The Gateway Area is on its way to becoming unlike any other area in the Des Moines metro. The Johnston City Council approved a redevelopment plan that is setting the stage for a dramatic transformation to the front door of the City. The vision includes connections between on-water recreation and a thriving business district, luxury rental properties with access to the trail system, a destination community park with unique amenities such as a skate park, BMX track, dog park, and trailhead, and the potential for much more. The Merle Hay Road Gateway Area would be the jumping off point for recreation of all kinds.

Fishing and Birding

Demand for fishing and birding is high, and supporters of both desire designated access points with adjoining amenities such as parking, restrooms, soft trails, and a fish-cleaning station. Fishing amenities added along the creek are highly recommended in the last mile and a half of the creek before it reaches the confluence. Currently anglers park along roadways to access foot paths along the creek. More enhanced places for fishing and parking will be a big attraction and improve safety. Iowa Department of Natural Resources fisheries needs to do sampling in Beaver Creek to determine possible in-stream spawning habitats and structures for game fish.

Conservation and Greenspace

The plan recommends restoring, currently operational, quarries as future recreation and greenspace. Significant opportunities exist to add birding as an amenity in these areas. Additionally, creek and shoreline restoration should be implemented according to the 2009 *Johnston Watershed Assessment Stormwater Management and Action Plan.* Wherever possible, the 100-year floodplain should be protected from development and maintained as a habitat corridor.

Additional recommendations include working with Camp Dodge to expand access to the creek that runs through their property. Currently there is access but only by permit.





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.

Key Projects

Project	Location	Jurisdiction	Key Amenities	Considerations
Carry-down Access and Greenspace Designation	70th Avenue to Pioneer	Johnston	Wayfinding signageSmall-scale parkingPreserve existing greenspace and restore where possible	Low maintenance, minimal design for access and infrastructure
Activity Hub	Terra Lake Park	Johnston	Wayfinding to Terra Lake ParkWading areaCreek-side fishing spaces	 Paved portage path and soft trails The lake can offer different, but complementary experiences Align with park master plan and take advantage of existing amenities
Economic Hub	Merle Hay Road	Johnston	 Livery and shuttles Small business development Public art and focal points Restrooms Water adventure park Public art/gateway 	 Consistent, quality maintenance needed Traffic management Safe walking connections to surrounding businesses and amenities Equipment storage
Remeander Beaver Creek	Mile Marker 6 to the Confluence	Beaver Creek Watershed Management Authority	 Grade stabilization Riparian buffers	 Restore floodplain and return creek to a more natural, resilient flow
Fishing Access	Trestle-to- Trestle Trail to Confluence	Johnston	ParkingRestroomsSoft trails in the Sycamore greenspace	Increase ease and safety of useDesign to minimize litter
Quarry Restoration	NW of the Confluence	Urbandale/ Johnston	Interpretive signageBenches and picnic tablesOff-road recreationScuba park/swimming access	 Quarries can be a suitable area for OHV/ATV/snowmobile/off-road biking Important greenway corridor connection for wildlife

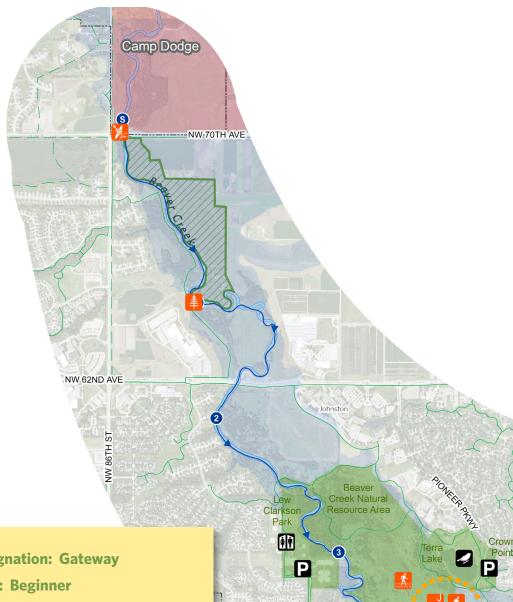
*Additional initiatives can be found in the Water Trails and Greenways Plan: Booklet 1



Water Adventure Park

A water adventure park is an in-water structure that creates a whitewater type experience where paddlers can develop skills. The kayak park would include an entrance and exit point connected via a trail to create a circuit that would allow paddlers to make multiple practice runs without paddling further down the creek. Educational and training opportunities at the park could be offered to assist inexperienced paddlers become comfortable in the water.

Beaver Creek

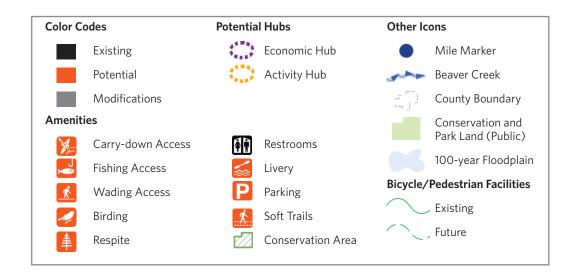


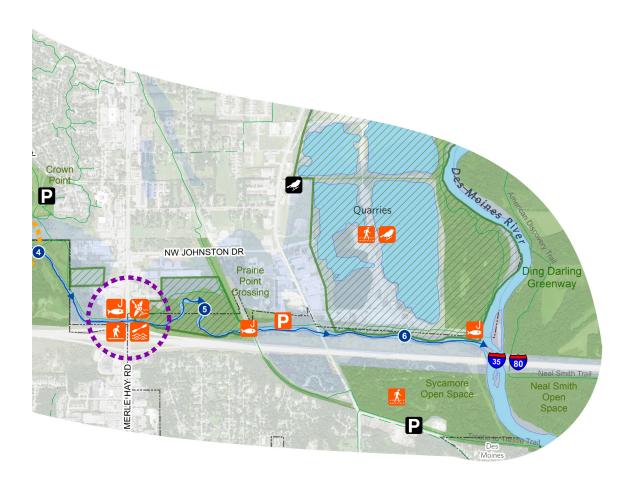
Potential Water Trail Designation: Gateway Potential Experience Level: Beginner

Given its meandering course through a tranquil, wooded setting, lack of dams, parallel surface trails, and urban amenities nearby, this section of Beaver Creek has the potential to be developed as a Gateway Level water trail that will be attractive to new users. In order to obtain this designation, a minimum of two carry-down accesses should be constructed with reduced slopes if not with universal design principals, ensure access to modern restrooms along the water trail, secure adequate parking with appropriate surfacing, promotion of a livery and increase maintenance including cleaning of access points and relocation of creek-wide logjams.

*See appendix regarding more detailed considerations and implications 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 • All ages access 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.

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



Fishing



Fishing is a popular activity all along the creeks • Restrooms and rivers. Creating access points can provide • Lights and trash cans 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.

- 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 • Floodplain to the long-term health of the waterways.

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



