



A VISION FOR DES MOINES RIVER



BOOKLET 3 OF 8
GREATER DES MOINES
WATER TRAILS AND GREENWAYS
2016

Photo: Des Moines Register,
Des Moines River

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

Booklet 3: Des Moines River

One Vision	3
Existing Conditions	4
Recommendations	6
Recommendations by Segment	9
Key Projects	13
Confluence Park Concepts	16
Recommendation Maps	18
Symbology Explained	28

Booklet 4: Fourmile and Mud Creeks

Booklet 5: Middle and North Rivers

Booklet 6: Raccoon River

Booklet 7: South Skunk River and Chichaqua Greenbelt

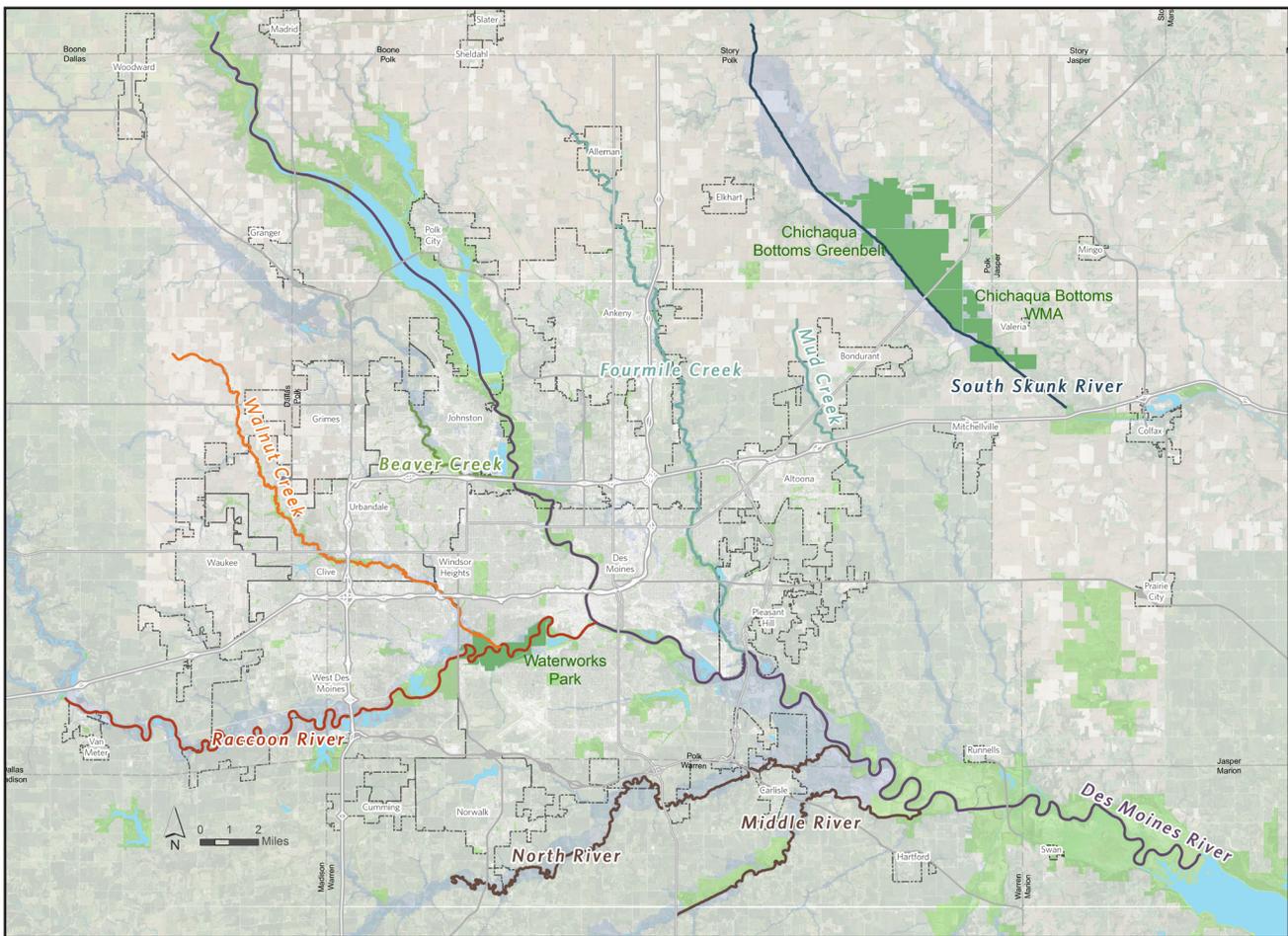
Booklet 8: Walnut Creek

One Vision, Many Communities

The Greater Des Moines Water Trails and Greenways Plan establishes a regional vision for the region's 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 the Des Moines River, 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: 65

Floodplain in public ownership: 41%

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

Current number of access points: 19

Primary Water Quality Impairment: Category 4, Bacteria

The Des Moines River is the longest stretch of any of the river segments studied bookended by two major destinations in Saylorville Lake and Lake Red Rock. This river features the greatest diversity and intensity of current uses from paddling and rowing to motor boats, fishing, hunting, and birding. There is significant public land along this stretch of river, which is already designated a state water trail.

The number of parks and trails under differing management throughout the corridor create a precarious challenge. To alleviate this the section from Sycamore Access on NW 66th Avenue south to Grand Avenue in Des Moines was designated as the Ding Darling Greenway, which increased the environmental focus in the late 1990s. Currently, there is an effort to expand this coordinated area through the establishment of an Urban Wildlife Refuge Partnership between multiple levels of government. This would further the initiative to protect valuable landscapes within urban areas, while assuring public access to the resources. The Des Moines River is also a part of the Des Moines Recreational River and Greenbelt, created in 1985 by the United States Congress. This association has provided Central Iowa with recreational opportunities, streambank stabilization, and municipal enhancements, such as the Des Moines Riverwalk and the Fort Dodge Riverfront. While not currently funded, this line item should be considered in the future.

Saylorville Lake defines much of this river, and dramatically affects the water levels and use of the river itself. The Saylorville Dam is managed by the U.S. Army Corps of Engineers with a primary goal of reducing the threat to life and property from flooding. In addition to the dam at Saylorville, the levees and dams surrounding the Des Moines urban core influence the public's interaction with the river. Beyond flood protection these provide a permanent conservation pool for water storage, low-flow augmentation, fish and wildlife management, and a multitude of recreational opportunities. Conversely, the low-head dams create dangerous conditions as the river flows over the top of the dam, forming a recirculating flow at the downstream side of the dam that can hold a trapped person underwater.



Cottonwood access



Interurban Trail bridge

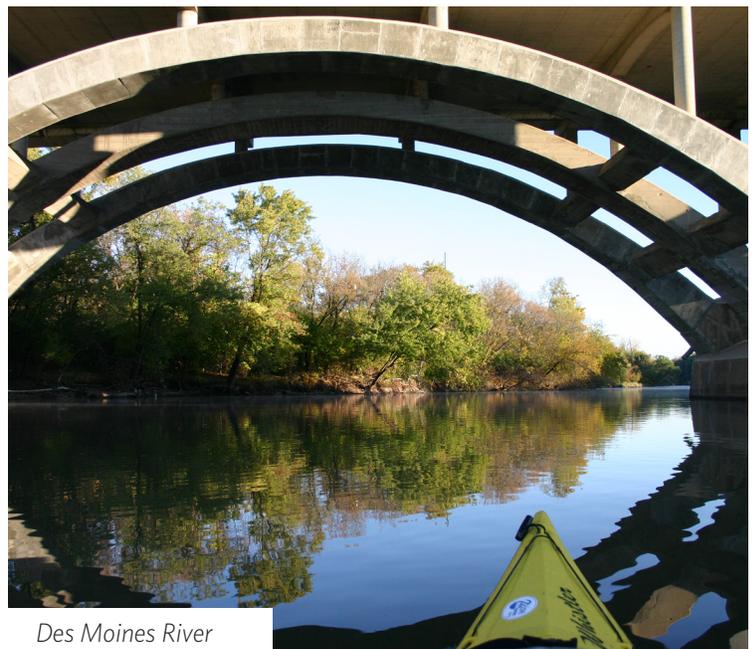
One of the unique aspects of the Des Moines River, particularly north of downtown, is the presence of several established user groups including rowers, power boaters, anglers, and others. These groups have a long history on the Des Moines River and a wealth of knowledge that can be shared with people less experienced with the river. In addition to established groups, anglers have had a long history of fishing in the downtown. In particular, dams and bridges have been utilized to fish the Des Moines River.

The southern section of the Des Moines River offers two distinct paddling experiences. First, from northern accesses, Harriet Street or Pleasant Hill, to the Bennington Access is considered recreational. The river is wide and passes beautiful scenery at Yellow Banks State Park with relatively few hazards, but paddlers should be cautious and mindful as they near Lake Red Rock as the backwater channels do not provide a clear path and can be difficult to navigate.

More information can be found in the 2015 [State of the Rivers Report](#) published by the Des Moines Area MPO.

The Des Moines River Sustainable Rivers Project

The Sustainable Rivers Project is a USACE and The Nature Conservancy partnership. It represents an ongoing, national effort to reoperate USACE dams to achieve more ecologically sustainable flows, while maintaining or enhancing project benefits. The Nature Conservancy in Iowa is leading the project using a process for identifying and refining environmental flow objectives to mimic more natural flow regimes while providing multiple benefits within the area. This includes the potential to reduce nitrate levels, reduce gas bubble trauma, improve conditions for migrating waterfowl and shorebirds, improve habitat conditions for reptiles and amphibians, reduce stream bank erosion, and improve conditions for river recreation. This study is in progress for the Des Moines River. Please contact The Nature Conservancy for updates.



Des Moines River

Recommendations

Ding Darling & Des Moines River Regional Parks

A significant amount of contiguous public land exists along the Des Moines River. There is a great benefit in connecting the individual parks and treating them as an integrated regional park system. While owned and managed by different governments, they are enjoyed by citizens throughout the region regardless of their residency. A connected park system would lead to improved planning of amenities, synergies in management and maintenance, and improved marketing of the various experiences offered within this segment of the water trails, paved trails, and greenways system.

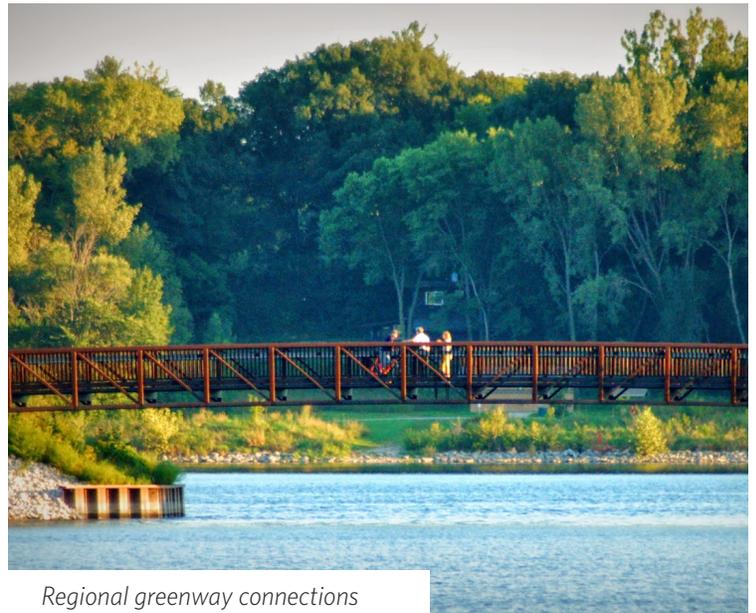
The USACE along with the Iowa DNR, Polk County Conservation and the City of Des Moines held a dedication ceremony on June 23, 1999 to honor “Ding” Darling and his efforts toward conservation. It was from this point forward that the greenway from Saylorville Lake to the Botanical Garden would be known as the “Ding” Darling Greenway. It is recommended that parks along this stretch become the Ding Darling Regional Park with a coordinated approach to planning, maintenance, wayfinding, and marketing. The string of greenspaces and parks downstream of downtown to Lake Red Rock could be referred to simply as the Des Moines River Regional Park. Naming the downtown section could be part of a fundraising strategy, yet consideration should be given to historical names already established on the waterway or descriptive names for the area, such as the Jim Muto Recreation Area or Confluence Park.

Urban Refuge and Urban Partnership Program

The U.S. Fish & Wildlife Service is engaging multiple partners within the metro area to establish the greenway network between Saylorville Lake and Lake Red Rock as an Urban Refuge Partnership. This partnership would enable the Service to engage with urbanites and serve as a catalyst, interfacing with other conservation organizations in order to help define and promote consistent conservation messages, allowing all conservation organizations to be involved more directly with urban communities.



Interpretive signage



Regional greenway connections

Historic Points of Interest

From over 25 Oneota archaeological sites to Woodland Indian Mounds dotting downtown to the 7000-year old “Palace” village, the Des Moines River valley is rich with archeological resources. This creates significant opportunities for interpretation – deepening our sense of connection to Iowa’s human past. Events, educational programs, interpretive elements, and public art should be integrated to honor this history. The immense quantity of sites along the river can also pose a challenge for construction of boat access or other amenities along the waterways.

Water Levels and Habitats

Frequently, the Des Moines River from Saylorville Dam through downtown Des Moines is drained in years when the water is low for maintenance purposes and annually the flows are slowed to allow for the addition of the flashboards. These actions have an effect on the aquatic life in the river. Practices like these need to be discussed in order to decrease and minimize the impacts to the river and aquatic life.



River surfing



Conserving and restoring natural features

Historical Significance of Downtown Des Moines

As plans are made for the future of the river through downtown Des Moines, attention also must be paid to its history and its importance as part of the Civic Center Historic District. This district stretches from the Center Street Dam to the Scott Avenue Dam, and includes both banks. The district was added to the National Register of Historic Places in 1988 in recognition of the City Beautiful Movement of city planning in Des Moines from 1892-1938.

Constructed between 1847 and 1938, the Center Street Dam, the Scott Avenue Bridge and Dam, and the river walls along the river are among the contributing structures to the historic district. Before any modifications can be made to these structures, a thorough analysis must be undertaken to understand the impacts on a variety of issues, including historic preservation. This analysis also will include identifying opportunities to restore historical features along the river, such as locations where the river wall’s balustrades have deteriorated.

Saylorville Lake Master Plan

In 1958, Congress authorized the U. S. Army Corps of Engineers (USACE) to construct Saylorville Lake on the Des Moines River about 11 miles upstream from the City of Des Moines. The principal purpose of the Saylorville Lake Project is to supplement the flood control capacity of the downstream Red Rock Dam and to provide flood protection to the City of Des Moines.

The [Saylorville Lake Master Plan](#) provides direction for project development and use as well as guidance for appropriate uses, development, enhancement, protection, and conservation of the natural, cultural, and man-made resources at the Saylorville Lake. Throughout the Master Plan process, USACE focused on the modernization of current recreation areas and facilities within their existing footprints. No new recreation areas are being proposed at this time, instead enhancement of current facilities are the focus. This is planned to include trail building, fishing piers, wildlife boardwalks, and an archery range.



Saylorville Lake

A key recommendation is the development of an Urban Wildlife Refuge downstream of the Saylorville Lake Dam. These USACE lands represent a significantly sized riparian corridor of high value wildlife habitats. The Master Plan declared this riparian zone as having the highest concentration of sensitive areas on USACE lands. The goal is to successfully nominate and designate these acres as an Urban Wildlife Refuge.

Lake Red Rock Master Plan



Lake Red Rock

The [Lake Red Rock Master Plan](#) provides direction for project development and use, as well as guidance for appropriate uses, development, enhancement, protection, and conservation of the natural, cultural, and man-made resources at Lake Red Rock. It is a vital tool for the responsible stewardship of project resources for the benefit of present and future generations.

The Master Plan balances three different project purposes: flood risk management, fish and wildlife management, and recreation. These three purposes align closely with the stated goals for the Greater Des Moines waterways and highlight the need to find projects and strategies that achieve multiple positive benefits.

The recommendations of the Master Plan address land classification, management for native sustainable resources, fishing and hunting, recreation development, fostering connections to the environment, maintaining wildlife and habitats, and managing public access to public lands.

Recommendations by Segment

Des Moines River Section 1: Highway 210 – Saylorville Lake

This section falls under the heavy influence of the dam at Saylorville Lake. The broad floodplain is nearly treeless, making it entirely open. This section – with the wind, motorboats, and lack of shade – makes for an unpleasant experience for paddlers. There is a high level of pedestrian and bicycling traffic at the High Trestle Bridge with no access to the river. It is recommended to provide an area for respite. Opportunities also exist for the addition of soft trails for birding.



Respite and wading



Soft trails

This plan strongly encourages the implementation of the recommendations in the recently adopted Saylorville Master Plan. It calls for many amenities that would improve the experience of anglers, hunters, paddlers and birders.

There currently is discussion regarding the potential introduction of a hydroelectric plan at Saylorville and a permit has been issued for the Saylorville Dam. This would have a big impact on downstream fishery, recreation and habitat. It is recommended that on-going conversations happen between the USACE and those stakeholders charged with implementation of this plan in order to mitigate the effects of the hydropower project.



Access with signage



Popular rowing stretch

Des Moines River Section 2: Saylorville Dam to Birdland Marina and Lagoon

This section of river is used by anglers, motor boaters, jet skiers, rowers, and paddlers. The plan recommends enhancing the Sycamore boat access by adding amenities, including expanding parking, and decommissioning the paddling access at Cottonwood. Focusing efforts would be more efficient in maintaining amenities such as lighting, parking, restrooms, and signage at one location. Additionally the backwaters of the river up Rock Creek offers a rare intimate experience along this river good for any beginner paddler and is especially family friendly.



Power boating on the river



Multi-use docks

It is recommended to add a carry-down access at Euclid Avenue at the River Point Plaza. Prospect Park could also become a fishing park with unique amenities such as adding a cleaning station. Though Prospect Park already hosts many gatherings, the addition of riverside places to play would make this lesser-known park a regional attraction. Likewise, Birdland Marina and Lagoon should receive upgrades to improve an existing resource and function as a marina for those with or without boat slips. It could host a bar or restaurant if the footprint of existing buildings is maintained.

Regional Park System

A significant amount of contiguous parkland exists along the Des Moines River. There is great benefit in beginning to connect the individual parks – Saylorville Lake, Ding Darling Greenway, Prospect Park, Birdland Marina – and treat them as unique experiences set within an interconnected Des Moines River Regional Park System. While owned and managed by different governments, they are enjoyed by citizens throughout the region regardless of their residency. Beginning to view these parks as a cohesive system would lead to improved planning of amenities, synergies in management and maintenance, and improved marketing of the various experiences offered within this segment of the water trails and greenways system.



Des Moines River

Des Moines River Section 3: Downtown Des Moines

The place in the metro where the river is most visible is in downtown Des Moines. The river benefits from many neighboring public facilities that can support additional programs and activities that draw people to the river. While the Principal Riverwalk has revitalized the area along the river, in-water activities are not supported. The following recommendations encourage development that opens up the river for safe use by residents and tourists alike.

Center Street and Scott Avenue Dams

Through significant public input, there is resounding consensus around dam mitigation. The public and business leaders are interested in seeing the dams mitigated to make the river safe again and to support a variety of recreational activities. If the dams are to be mitigated a number of considerations should be made:

- If the dams are mitigated, a full spectrum of experiences should be included when feasible from whitewater to lazy river experiences, water surfing to swimming.
- The significant historical nature of the dams and balustrades.
- Prior to dam mitigation, hydraulic modeling should be conducted to understand how to maintain the pool of water upstream at a level that matches low-flow pool levels with flash-boards installed. Maintaining the pool is an important factor for both the Birdland Marina and the Water Works intakes.
- Pending the results of the hydraulic modeling, there may be the need for a bladder dam or other type of mechanical control structure to create elevation needed for recreational activities and the desired aesthetic.
- Significant approval process including permitting with the USACE and Iowa DNR.
- Water flow regulation policy of the USACE.
- Levees and floodwalls to allow access to the water.
- Flood controls and “no-rise” impact.
- Sediment accumulation.

A next step could be to look at existing river conditions that would form parameters for potential improvements.



Policy Changes

The City of Des Moines currently has an ordinance (Sec. 130-109) that prohibits fishing from the Principal Riverwalk Multi-Use Trail. This plan recommends removal of that fishing ban. If recommended changes are implemented along the river, there will be access points for anglers that are desirable, safe and attractive, which may decrease conflicts with other trail users.

Access for Paddlers, Anglers, and Families

Fishing is the closest in-water activity currently allowed and is an important activity along the river. Currently anglers have to negotiate steep levees and lack space in downtown that caters to the needs of anglers. Proposed improvements include fishing piers or rock outcroppings to provide safer access by anglers. Rock outcroppings, as well as a naturalized shoreline, should enhance fish habitat and should be designed to allow access to the river that is safe for families.

The historic nature of the balustrades will be a major consideration. Sections may need to be removed to allow safe access to the water, yet the balustrades are a key contributor to the historic designation of the Civic Historic District. The river is also a significant corridor for migratory birds. Additional tree canopy is recommended along the Des Moines and Raccoon rivers to enhance the species migrating through downtown. Additionally, interpretive signage and programming should be added to help people learn about wildlife in and on the water. Throughout the process, there was not a strong interest in providing motorboating through downtown Des Moines.



Family-friendly spaces



Rock outcroppings and steps

Linear Fishing Park - Harriet Street to Pleasant Hill

A fishing park is a park with a focus on providing amenities to support new and advanced anglers. This section of river is good for fishing and is mostly accessed by flat bottom boats due to the shallow nature of the river. This plan recommends a linear fishing park between Harriet Street access and Pleasant Hill with fishing nodes along the river accessed via a new trail. The access points need to be designed in a way so as not to conflict with trail users. The park would offer easy entry for families as well as instructional panels, places to host how-to classes and fish cleaning stations. Much like the beach area of Gray's Lake prior to the renovation of the park, this area currently feels unsafe and activating it with innovative means to help anglers to connect with the river will increase the use of the area therefore increasing the likelihood of a safer feel to the region.



Fishing nodes along linear park

Shoreline Treatment

There is strong interest in naturalizing the shoreline to stabilize the banks and create habitat for aquatic and bird species. The leader for shoreline restoration could be the Botanical Garden. The riverfront could be an extension of their grounds and offer the public a new understanding of the benefits of a naturalized edge of the river. The shoreline treatment must take into consideration the current levee system, and should consider the idea of hosting the floodplain for this section between the levee walls as shoreline implementations progress.



Restored shoreline meandering



Natural shoreline

Des Moines River Section 4: Harriet Street to Yellow Banks Park

In this section the Des Moines River turns from urban area to a more meandering, scenic river. It is recommended that a few less-than-scenic locations of industry - including the sewage treatment facility, power plant, vehicle recycling, etc. - be screened from the river view. This section is popular with anglers in flat-bottom boats which is more paddler friendly. It is recommended that a system of soft trails along the levee be implemented to connect the Harriet Street boat access to Yellow Banks Park. This would require working with MidAmerican Energy to gain permission to pass through their property.

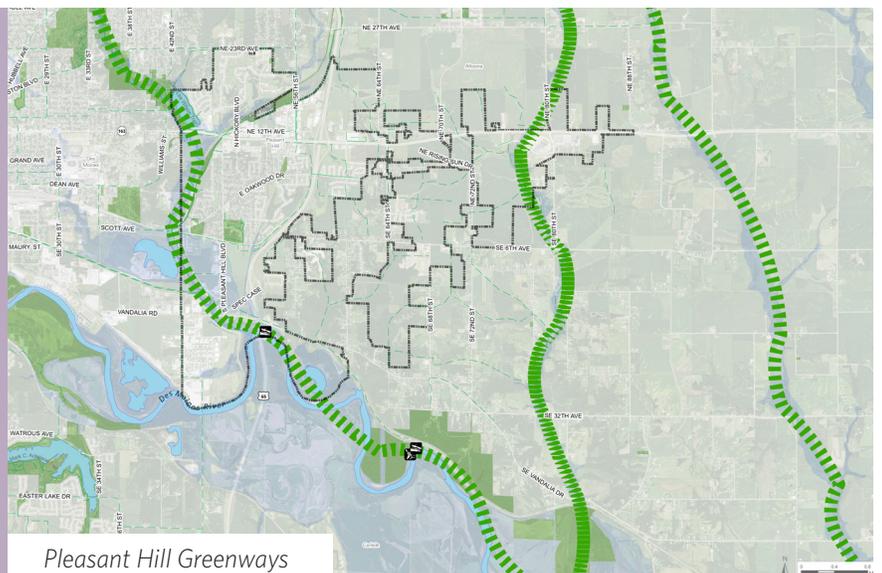
Wildlife is abundant in this stretch and would provide for a unique experience just outside of downtown Des Moines.

Boat Access Enhancements:

- Harriet Street: need to expand the amenities so people feel safer at this location. It is recommended to make this a multi-use site with soft trails, fishing piers, and wading access to diversify the users.
- Pleasant Hill Boat Ramp: it is recommended to pave this parking lot in order to facilitate more efficient removal of sediment after a flood.
- Yellow Banks Boat Ramp: it is recommended to move this boat ramp - see map on page 22.

Pleasant Hill Greenways

Pleasant Hill holds a unique position in the region as a community surrounded by water trails and greenways. With its close proximity to the Des Moines River, and Fourmile and Mud creeks, Pleasant Hill can serve as a local hub of greenway activity from paved trails and birding opportunities to the area's first linear fishing park stretching upriver to Des Moines.



Pleasant Hill Greenways

Des Moines River Section 5: Yellow Banks to Lake Red Rock

This long stretch is dominated by the effects of Lake Red Rock, a U.S. Army Corps of Engineers flood control dam between Knoxville and Pella. The level of water held back by the dam influences this stretch. Paddlers need to be aware that a few feet of difference in water level will mean a drastically different experience including level of currents and access to boat ramps; some disappear in high waters, while others are not accessible in low water. Careful planning is a necessity and future marketing efforts will need to communicate how to judge the potential dangers. Effort should be made to make current access points more dependable and not susceptible to closures due to high water. It is also recommended that public access be negotiated at the Webb's Camping Resort which is currently the only dependable access at the mid-point of this stretch of river at high water levels.

Wayfinding within the river channel is a challenge as at high water levels it can be difficult to follow the flooded river channel. Better signage of existing boat accesses along the river's edge is recommended and other options should be pursued to improve communication of river conditions and wayfinding.

While this section may not be for the beginner paddler, it is full of off-water resources including incredible birding opportunities. Great egrets, white pelicans, eagles, green herons, and double-crested cormorants all call this river home. Significant investment should be made to add soft trails to the greenspaces along the water so that those that do not paddle can enjoy the diversity of birds and other wildlife that can be seen here.



Des Moines River

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

Sections 1 and 2: Highway 210 to Birdland Marina

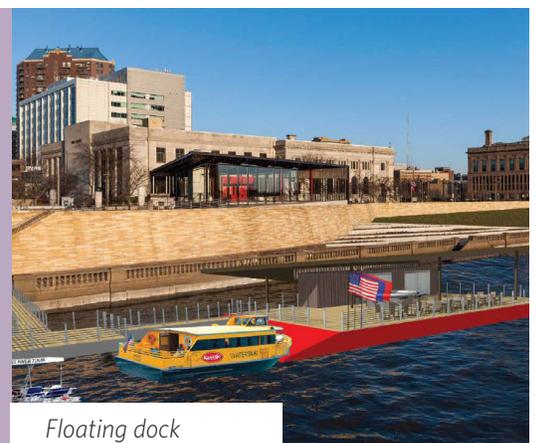
Project	Location	Jurisdiction	Key Amenities	Considerations
Activity Hub	High Trestle Trail Crossing	Boone County Conservation	<ul style="list-style-type: none"> Birding amenities and interpretive signage 	<ul style="list-style-type: none"> Capitalize on the trail traffic and orient people to the water This area is very prone to flooding
Carry-Down Access	Highway 17	Iowa DOT	<ul style="list-style-type: none"> Wayfinding signage Parking Lighting Trash cans 	<ul style="list-style-type: none"> Low maintenance design for access and infrastructure Emphasize security, this will be a remote access with less surrounding activity
Soft Trails	North side of river north of the lake	Iowa DNR	<ul style="list-style-type: none"> Wayfinding and interpretive signage Benches 	<ul style="list-style-type: none"> Keep area wild while adding some public access
Portage	Saylorville Dam	USACE	<ul style="list-style-type: none"> Wayfinding and interpretive signage Minimal access point 	<ul style="list-style-type: none"> Direct, paved connection to the river No vessels allowed within 600' of tower and terrain would make ADA compliance difficult
Activity Hub	Bob Shetler Recreation Area	USACE	<ul style="list-style-type: none"> Fishing pier and cleaning station Wildlife boardwalk Archery range 	<ul style="list-style-type: none"> USACE has master plan for improving the river backwater area Trail connections
Access Modification	Cottonwood Access	USACE	<ul style="list-style-type: none"> Lighting Programming 	<ul style="list-style-type: none"> The carry-down access will be removed as an official access point
Activity Hub	Sycamore Access	Iowa DNR	<ul style="list-style-type: none"> Improve boat access for paddlers Fishing access and cleaning station Restrooms, lighting Expand parking 	<ul style="list-style-type: none"> Wayfinding for both the water trail and connections to the Neal Smith Trail Consider bike and watercraft lockers Pedal to paddle opportunity
Economic Hub	Riverpoint Place	Polk County	<ul style="list-style-type: none"> Livery and shuttle service Signage to surrounding amenities Restrooms, lighting Add carry-down access 	<ul style="list-style-type: none"> Wayfinding to surrounding businesses and transit connections Connect to trails for pedal to paddle opportunity
Activity Hub	Prospect Park	Des Moines	<ul style="list-style-type: none"> Fishing access and cleaning station Benches, picnic areas, scenic views Improved access for paddlers 	<ul style="list-style-type: none"> Regional park connections to the Ding Darling Greenway and Urban Wildlife Refuge through programming Pedal to paddle opportunity
Economic Hub	Birdland Marina and Lagoon	Des Moines	<ul style="list-style-type: none"> Improve marina and fishing access Livery and shuttle service Signage to restaurants, businesses, and amenities Add access for paddlers 	<ul style="list-style-type: none"> Manage use conflicts in a high activity area Restore lagoon for improved habitats

Section 3: Downtown Des Moines

Project	Location	Jurisdiction	Key Amenities	Considerations
Economic Hub	Botanical Center	Des Moines	<ul style="list-style-type: none"> Places for respite Multi-use low docks Rentals and outfitter possible at the Armory Building 	<ul style="list-style-type: none"> Complement and capitalize on Botanical Garden's activities and expertise for programming opportunities Start of the whitewater loop Pedal to paddle opportunity Pilot natural shoreline restoration for community education
Activity Hub	Events Center	Des Moines	<ul style="list-style-type: none"> Sitting/viewing area for whitewater loop Carry-down access Natural vegetation Fishing outcroppings 	<ul style="list-style-type: none"> Make use of current excess parking rather than building new Consider drop-off and park designs Pull-out point for whitewater loop
Activity Hub	Court Avenue	Des Moines	<ul style="list-style-type: none"> Existing amenities at Hub Spot Add carry-down access 	<ul style="list-style-type: none"> Create connections to Court Avenue, the Principal Riverwalk, and the Downtown Farmers Market
Economic Hub	Principal Park	Des Moines	<ul style="list-style-type: none"> Carry-down and emergency access Wading area Restrooms Natural vegetation 	<ul style="list-style-type: none"> Partner with the Iowa Cubs to create mutually beneficial recreation opportunities Make use of current excess parking rather than building new Consider drop-off and park designs
Activity Hub	Scott Avenue	Des Moines	<ul style="list-style-type: none"> Carry-down access Improved parking Fishing outcroppings Activity areas Natural vegetation 	<ul style="list-style-type: none"> Connect with trails for pedal to paddle opportunities Connect across river to Mullet's area and trails

Downtown Small Business Development

There is interest to create a multi-purpose ferry boat terminal and dock at the Riverwalk Hub in downtown Des Moines. Mike LaValle, local culinary entrepreneur, has drafted a plan for creating such a business. Included in his plan is a floating dock (pictured), ferry and excursion boats, all with food components. This project is a prime example of how water trails can increase water business opportunities.



Key Projects

Sections 4 and 5: Harriet St to Lake Red Rock

Project	Location	Jurisdiction	Key Amenities	Considerations
Activity Hub	Harriet Street Access	Des Moines	<ul style="list-style-type: none"> Improve access Fish cleaning station Parking Kids play area 	<ul style="list-style-type: none"> Use programming and signage to connect to downtown activity Needs revisioning as riverside park In-stream habitat improvements
Activity Hub	Pleasant Hill Boat Ramp	Pleasant Hill	<ul style="list-style-type: none"> Fishing and wading access Family amenities Carry-down access Restrooms, lighting Expand and pave parking lot 	<ul style="list-style-type: none"> Improve the current access point with greater amenities and maintenance
Activity Hub	Yellowbanks	State	<ul style="list-style-type: none"> Move access to west end of the park Add fishing and wading amenities 	<ul style="list-style-type: none"> Find ways to make the access more family-friendly
Linear fishing park	Harriet Street to Pleasant Hill	Des Moines/ Pleasant Hill	<ul style="list-style-type: none"> Trail on north side of river Portage point to lakes on north side Birding access Expand conservation areas 	<ul style="list-style-type: none"> Keep space natural Add new parkland Design for new and learning anglers, this is a space for attracting new users Mitigate conflicts with trail users
Economic Hub	Runnels	Runnels	<ul style="list-style-type: none"> Trails connecting to city Parking, lighting Carry-down access 	

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

Pedal to Paddle

Pedal to paddle is the opportunity to combine bicycling and paddling. If a person can leave their vehicle at the river take-out point, he or she can bike up to the put-in point and leave their bike there. This means a person can enjoy paddling without needing multiple cars to make it happen.

Greater Des Moines has more than 600 miles of bike trails. Combining this extensive network with the more than 150 miles of water trails in the metro would allow for extensive pedal to paddle opportunities. There are numerous routes where this type of experience could take place, but the frequency of such trips would be enhanced with more liveries and excursion vendors along these trails for rental or storage of equipment. Multimodal options like this could benefit a variety of sectors in the region, and even open up new ones.

Downtown Des Moines Concepts

Throughout the public engagement process, dam mitigation was repeatedly noted as crucial to unlocking the potential of the Des Moines River. Downtown Des Moines is a massive economic and activity center with numerous destinations including the Botanical Center, Principal Park, Science Center, Hub Spot, Simon Estes Amphitheater, and Brenton Plaza. Downtown enjoys an active waterfront with anglers, bicyclists, families, and businesses, but suffers from an inactive river as there is currently no access on the water between the dams.

The feedback from the public clearly expressed a desire to see what could be done with the downtown dams to allow greater access and activity as long as the pool of water upstream could be maintained at low-flow levels with the flash-boards installed.

Below are two drawings of the river at the Iowa Women of Achievement Bridge and at the confluence with the Raccoon River. At the first location, the in-river conditions allow for both a calm paddling experience, as well as a recreational whitewater channel for paddling and tubing. The river elevation is stair-stepped down to maintain the pool levels upstream.



Iowa Women of Achievement Bridge

The riverbanks mix natural vegetation and environmental restoration practices with recreational spaces. The confluence area provides the calmed river access and passage. As fishing is already one of the most popular activities along the river, both areas provide expanded areas for fishing through rock outcroppings and accesses.

The drawings below were guided by extensive public engagement and are intended as a visionary tool for local and regional partners who wish to expand access to the Des Moines River in downtown Des Moines. These are not fully engineered designs and would require greater technical analysis and public engagement before making a final decision on dam mitigation.

It is recommended that after a feasibility study is completed for the dam mitigation and edge-of-water conditions such as the levees and balustrades. This feasibility study can lead into a downtown waterway master plan for the Des Moines and Raccoon rivers that can further detail access points, docks, rental facilities, restrooms, parking, and other key amenities following a more detailed analysis.



Confluence with the Raccoon River

Section 1: Highway 210



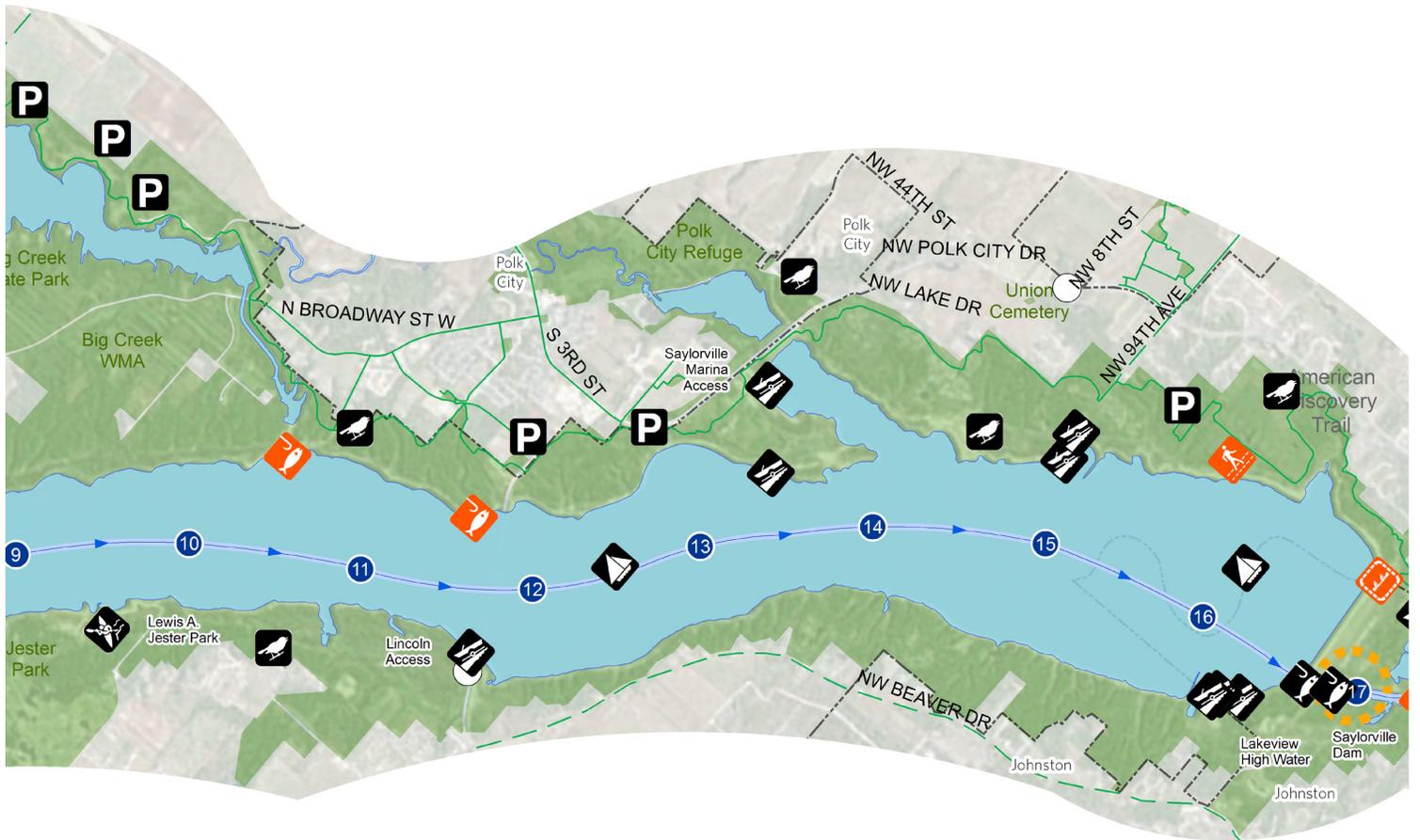
Potential Water Trail Designation: Challenge

Potential Experience Level: Advanced

The Des Moines River is already designated as a water trail yet this happened prior to the DNR's classification system. This section of the river falls under heavy influence of the dam at Saylorville Lake and is nearly entirely open offering little shade and potentially high winds, longer distances between accesses, and few amenities. Upper stretches have frequent areas that paddlers might need to wade in the water, and within the lake there are a considerable number of motorboats to negotiate. This section could likely to be categorized as a Challenge Level water trail that should be used only by advanced paddlers.

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

to Saylorville Lake



Color Codes	Potential Hubs	Other Icons
Existing	Activity Hub	Mile Marker
Potential	Livery	Des Moines River
Amenities	Scenic View	County Boundary
Boat Access	Parking	Conservation and Park Land (Public)
Fishing Access	Soft Trail	Bicycle/Pedestrian Facilities
Wading Access	Sailing	Existing
Birding	Portage	Future

Section 2: Saylorville Dam

A Busy River

The Des Moines River from I-80 to the Center Street Dam is unique in its current use. This stretch of river is very active already with high traffic from power boaters, rowers, and paddlers. Future improvements should consider the current users and the overall capacity of the river.



Potential Water Trail Designation: Recreational

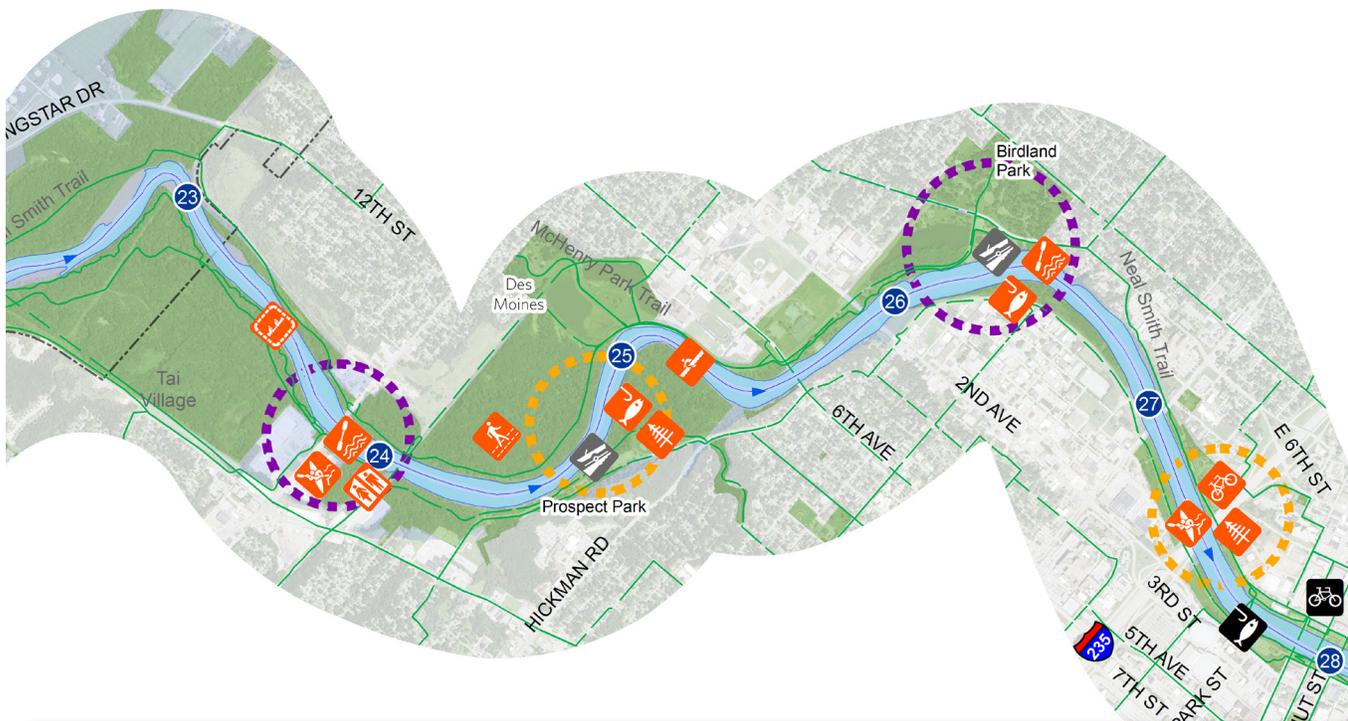
Potential Experience Level: Intermediate

The Des Moines River is already designated as a water trail yet this happened prior to the DNR's classification system. Access points are well developed here with some room for improvement. It is recommended that this river segment be categorized as a Recreational Level water trail offering quality experiences for paddlers with some experience to negotiate the river's heavy use by motor boaters, jet skiers, and rowers.

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

to Birdland Marina

Color Codes	Potential Hubs	Other Icons
Existing	Economic Hub	Mile Marker
Potential	Activity Hub	Des Moines River
Modifications	Conservation Area	County Boundary
Amenities	Restrooms	Conservation and Park Land (Public)
Carry-down Access	Livery	100-year Floodplain
Boat Access	Parking	Bicycle/Pedestrian Facilities
Fishing Access	Rowing Access	Existing
Birding	Soft Trail	Future
Portage	Bicycle Station	
Respite		



Section 2: Rock Creek

Potential Water Trail Designation: Recreational

Potential Experience Level: Beginner

The quiet backwaters of the Des Moines River that connect to Rock Creek offer a unique experience suitable for beginners. There may be less maintenance of this section, but it is near basic amenities and could attract moderate use by families making this section a candidate for Recreational Level water trail.

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

Section 3: Confluence Park

Color Codes

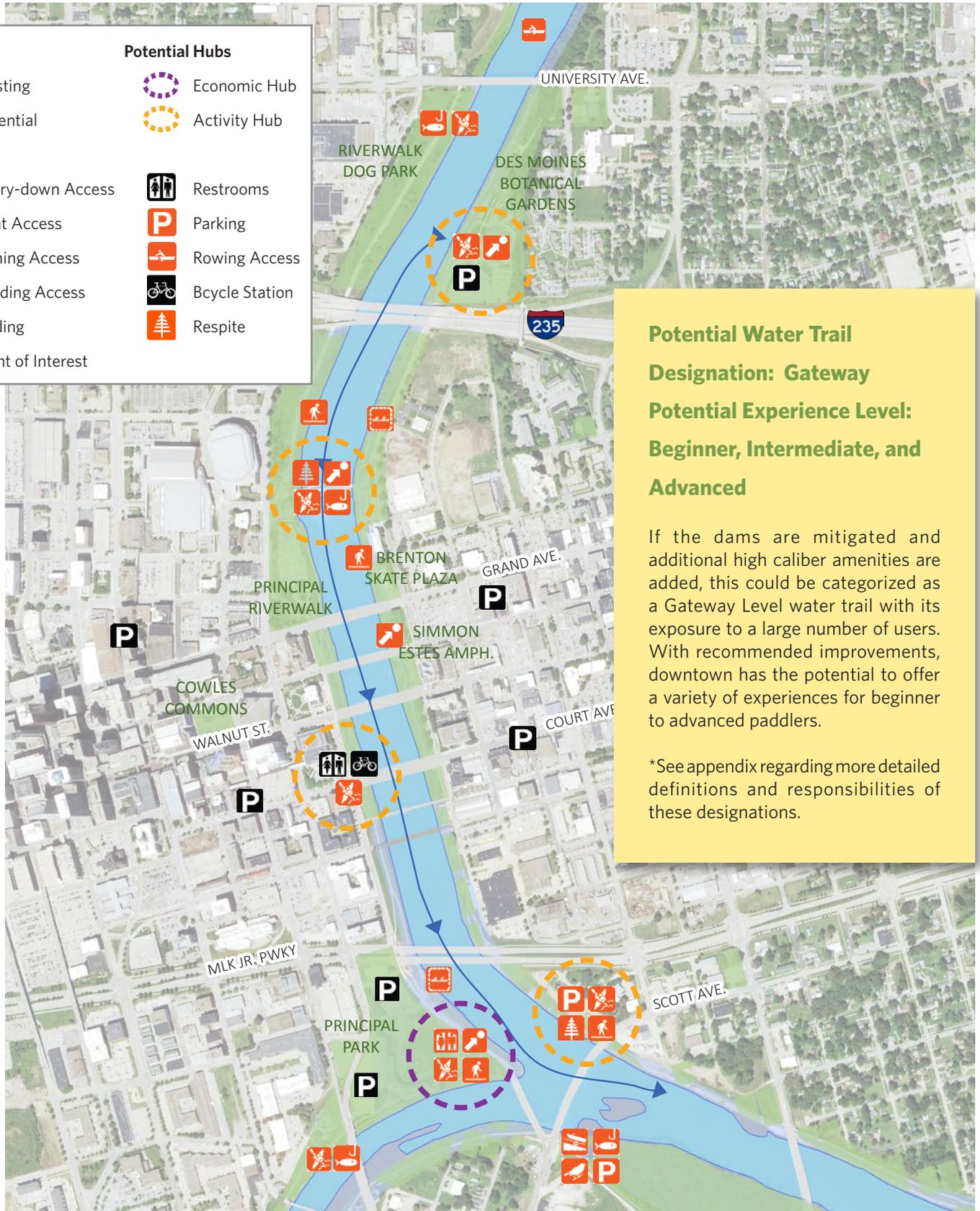
- Existing
- Potential

Amenities

-  Carry-down Access
-  Boat Access
-  Fishing Access
-  Wading Access
-  Birding
-  Point of Interest

Potential Hubs

-  Economic Hub
-  Activity Hub
-  Restrooms
-  Parking
-  Rowing Access
-  Bicycle Station
-  Respite



Potential Water Trail

Designation: Gateway

**Potential Experience Level:
Beginner, Intermediate, and
Advanced**

If the dams are mitigated and additional high caliber amenities are added, this could be categorized as a Gateway Level water trail with its exposure to a large number of users. With recommended improvements, downtown has the potential to offer a variety of experiences for beginner to advanced paddlers.

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



River surfing



Downtown activity hubs



Mixing natural and hardscape



Fishing hot spots

Downtown Destination Development

Central Iowa will expand its attractiveness as a travel destination if or when proposed water trail and greenway recommendations are implement. The recommendations surrounding those in downtown Des Moines including dam mitigation and whitewater course are key drivers for economic development in the region. Given a coordinated development of water-based amenities, programs, services and marketing, the Greater Des Moines area will deliver quality water recreation experiences for visitors and enhance resident well-being. This will have a large impact on the economic well-being of the region.

Section 4: Harriet Street

Potential Water Trail Designation: Gateway

Potential Experience Level: Beginner

The Des Moines River is already designated as a water trail yet this happened prior to the DNR's classification system. Access points are adequate along this stretch with room for improvement especially the access at Yellow Banks Park. The proximity to downtown Des Moines, existing accesses, part to full-day trip opportunities, lack of portages and few hazards to navigate makes this stretch eligible for Gateway Level categorization if amenities are well-maintained. Beginners, including families, could navigate this stretch with ease.

*See appendix regarding more detailed considerations and implications of these designations.



to Yellowbanks Park

Color Codes	Potential Hubs	Other Icons
Existing	Economic Hub	Mile Marker
Potential	Activity Hub	Des Moines River
Modifications		County Boundary
Amenities		Conservation and Park Land (Public)
Carry-down Access	Conservation Area	100-year Floodplain
Boat Access	Restrooms	Bicycle/Pedestrian Facilities
Fishing Access	Water Fountain	Trail Needed
Wading Access	Scenic View	Existing
Birding	Parking	Future
Portage	Rowing Access	
Dam Mitigation	Soft Trail	
Point of Interest	Bicycle Station	



Section 5: Yellowbanks Park



Potential Water Trail Designation: Challenge

Potential Experience Level: Advanced

The Des Moines River is already designated as a water trail yet this happened prior to the DNR's classification system. This long stretch of river is dominated by the effects of Lake Red Rock and the flood control of the U.S. Army Corps of Engineers. The water levels fluctuate greatly at times causing some accesses to disappear and for the channel to become difficult to find. A few feet of difference in water level will mean drastically different currents and possible vulnerability to wind. This stretch is suitable for advanced paddlers only. Due to the limited number of amenities, hazards, open water and low-impact access development and minimal maintenance, this section is best to be categorized as Challenge level.

*See appendix regarding more detailed considerations and implications of these designations.

to Lake Red Rock

Color Codes	Potential Hubs	Other Icons	
Existing	Economic Hub	Mile Marker	
Potential	Activity Hub	Des Moines River	
Modifications		County Boundary	
Amenities			
Carry-down Access	Livery	Conservation and Park Land (Public)	
Boat Access	Scenic View	100-year Floodplain	
Fishing Access	Parking	Existing Water Trail	
Wading Access	Vineyard	Bicycle/Pedestrian Facilities	
Birding	Soft Trail	Existing	Future
Portage	Camping		



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





Des Moines River

A DAY IN 2025

IMAGINE AN AFTERNOON PLAYING ON A WHITEWATER COURSE IN DOWNTOWN DES MOINES. YOU RENT RIVER TUBES FROM BRENTON PLAZA, JUMP IN THE WATER, AND FLOAT DOWN BEGINNER'S SIDE OF THE RIVER, OVER SOFT RIFFLES WHERE THE CENTER STREET DAM USED TO BE. YOU GET OUT NEAR COURT AVENUE, WALK BACK TO THE BEGINNING, AND JUMP BACK IN FOR ANOTHER LAP. YOUR FAMILY RELAXES ON A VIEWING DECK ON THE BANK UNTIL IT'S TIME FOR LUNCH AT A NEARBY RESTAURANT. FEELING BRAVE, YOU TRADE IN THE RIVER TUBE FOR A KAYAK AND SIGN UP FOR LESSONS ON THE ADVENTURE COURSE ON THE MORE CHALLENGING WHITEWATER SIDE OF THE RIVER.