



# LAKE REBECCA PARK

## MASTER PLAN

*City of Hastings, Minnesota*

**JUNE 14, 2024**





# CONTENTS

<b>01 INTRODUCTION &amp; BACKGROUND</b>	<b>5</b>
Introduction	5
Project Background	6
Ownership & Project Partners	10
<b>02 SITE INVENTORY &amp; ANALYSIS</b>	<b>13</b>
Site Inventory Overview	13
Existing Conditions	13
Site Observations	16
Existing Land cover	18
Topography	20
Wetland and Wildlife Sensitivity	22
Completed Management Projects	24
Community Engagement Summary	26
<b>03 DEVELOPMENT PLAN</b>	<b>31</b>
Introduction	31
Recreation Projects Plan	32
Concept Plan	34
<b>04 NATURAL RESOURCES RESTORATION &amp; MANAGEMENT PLAN</b>	<b>39</b>
Introduction	39
Target Land Cover	40
Planned Management Projects	42
<b>05 IMPLEMENTATION &amp; PHASING</b>	<b>47</b>
Proposed Project Phasing	47



# ACKNOWLEDGEMENTS

## PROJECT MANAGER

Chris Jenkins, City of Hastings Parks and Recreation Director

*THANK YOU TO MEMBERS OF THE PUBLIC WHO PROVIDED RESPONSES TO THE SURVEY AND COMMENTS ON THE SOCIAL PINPOINT MAP.*

## STAKEHOLDERS


Thank you to the following stakeholder organizations, who provided valuable input during the development of this master plan.

Friends of the Mississippi River  
United States Army Corps of Engineers (USACE) Forestry & Real Estate  
Dakota County Office of Planning  
Minnesota Department of Natural Resources Parks & Trails  
Minnesota Department of Natural Resources Hydrology  
Minnesota Department of Natural Resources Fisheries  
Vermillion River Watershed Joint Powers Organization (VRWJPO)  
Hastings Environmental Protectors  
Minnesota State Historic Preservation Office  
National Park Service

## PROJECT CONSULTANTS



Funding for this project was provided by the Minnesota Environment and Natural Resources Trust Fund as recommended by the Legislative-Citizen Commission on Minnesota Resources (LCCMR).



*We recognize that the Dakota people continue to live and thrive in Minnesota, including the Prairie Island Indian Community. We honor with gratitude the land and acknowledge the history that brought us to reside on these territories.*



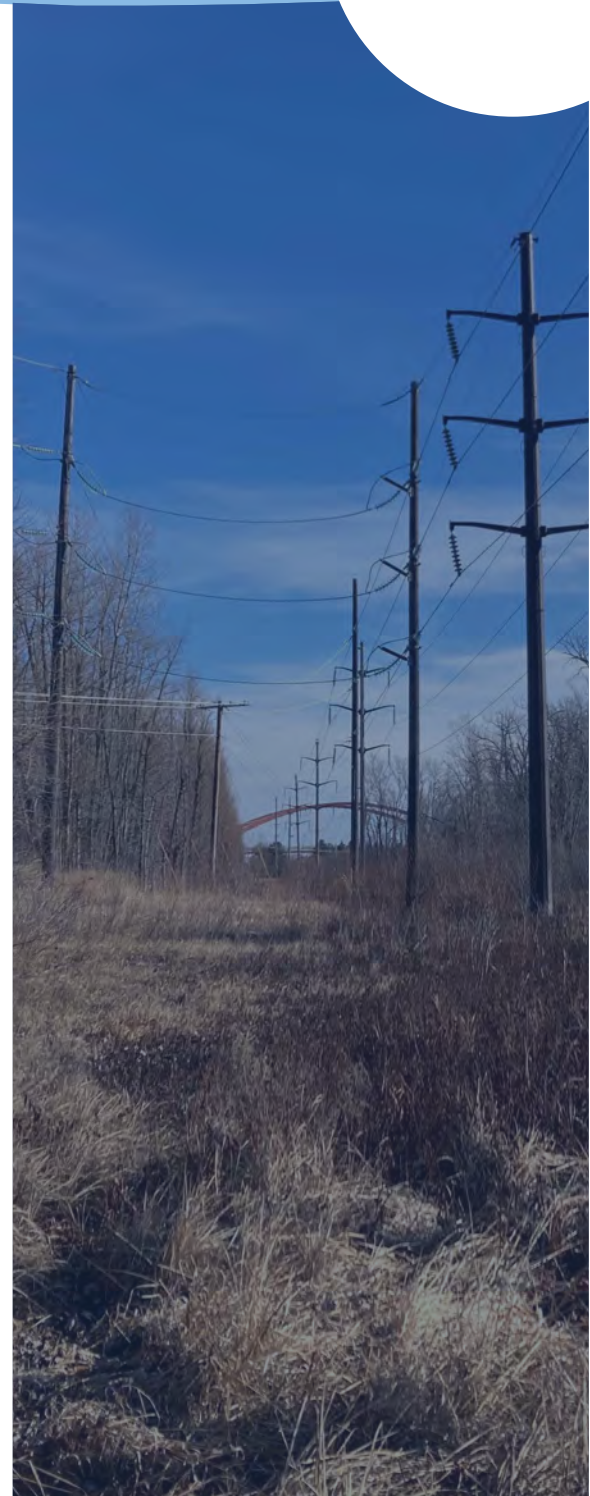


# INTRODUCTION & BACKGROUND

## INTRODUCTION PROJECT PURPOSE

The purpose of this master plan is to develop an ecological-based vision, rooted in stakeholder input, that will enhance the wildlife habitat and natural resources in the park. The process prioritizes stakeholder engagement in order to avoid duplication of restoration efforts and determine the best path forward for Lake Rebecca Park.

Multiple stakeholders have knowledge of and history with the site and contribute valuable information to the development of the master plan. This master planning effort is funded by a grant from the Environment and Natural Resources Trust Fund through the LCCMR.



# PROJECT SCHEDULE

The master planning process began in the fall of 2023 with site analysis and stakeholder engagement. A draft master plan was developed in early 2024 with a final plan completed in the spring of 2024.

TASK		2023			2024				
		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY
PROJECT PHASE	Site Analysis and Inventory								
	Stakeholder Engagement								
	Public Engagement								
	Prepare Draft Master Plan								
	Prepare Final Master Plan								

## EXISTING SITE PHOTOS



## PROJECT BACKGROUND

The city of Hastings maintains a 50-year lease on 146 acres of Lake Rebecca Park from the U.S. Army Corps of Engineers. The lease expires in March of 2032, and the park has been managed by the city of Hastings Parks Department since 1982. A swimming beach, bathhouse, and picnic area were located on the shores of Lake Rebecca until \_\_\_\_\_. Frequent flooding and water quality issues led to the removal of these facilities.

Current use include year-round fishing in Lake Rebecca. Electric trolling motors and non-motorized watercraft access the lake at the southern end from a paved boat launch. Shoreline fishing occurs from fishing piers at the boat launch and near the island. Ice fishing houses are a common site on the lake during the winter months.

Climate change and periods of drought and flooding have impacted the quality of the recreation facilities and recreation opportunities over the past few decades.

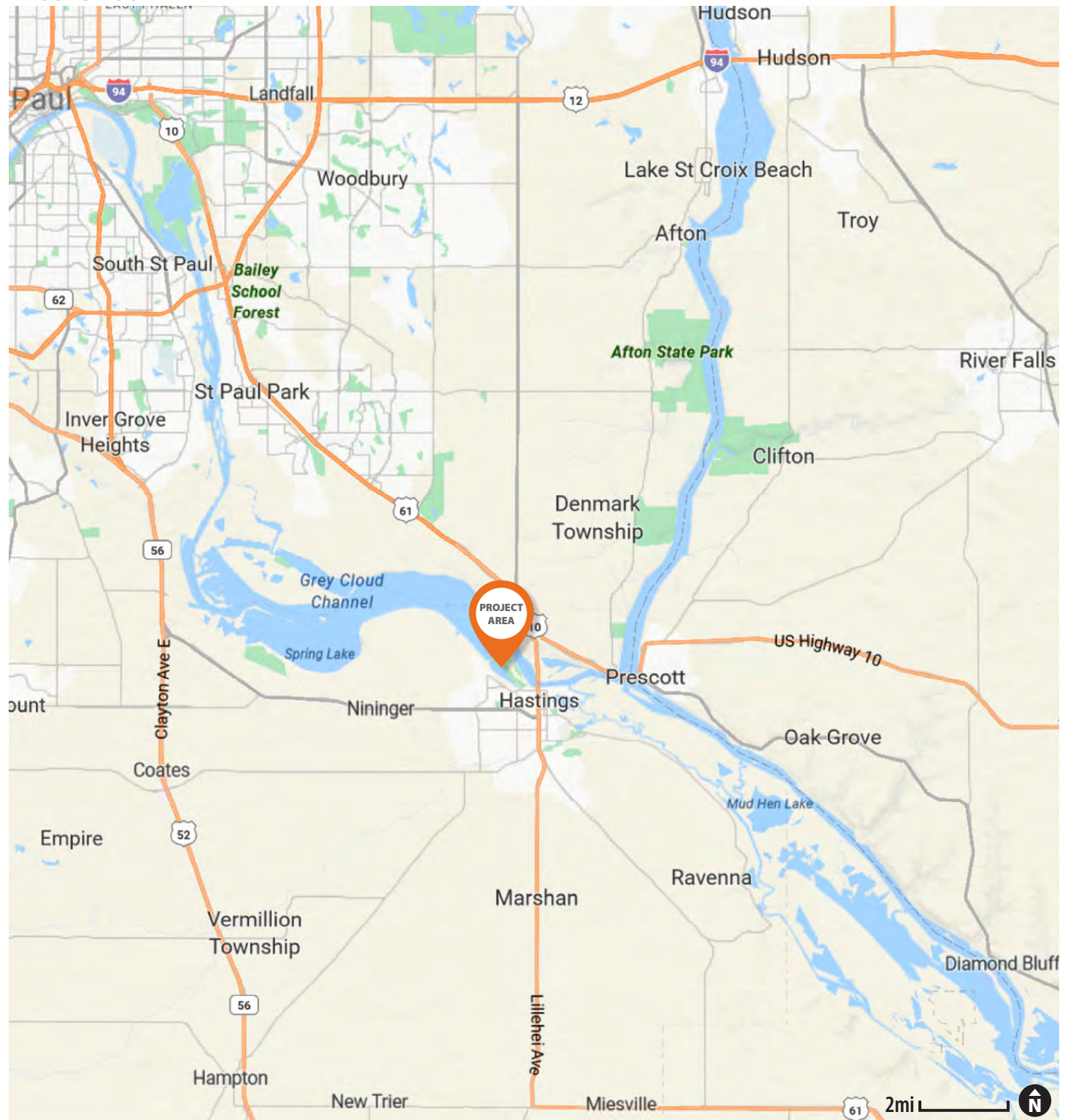
The city owns and operates two additional city parks in the floodplain area: River Flats Park and Jaycee Park. River Flats Park consists of prairie restoration areas and the Mississippi River Greenway trail corridor (Dakota County). Jaycee Park includes a DNR managed boat launch that provides access to the Mississippi River and interpretation signage.



## SITE LOCATION AND CONTEXT

Lake Rebecca Park is located in the city of Hastings, Dakota County, state of Minnesota. The park is entirely within the Mississippi River corridor, adjacent to the U.S. Army Corps of Engineers Lock and Dam No. 2. The park consists of over 160 acres of river floodplain landscape, including wetlands, prairie, floodplain forest, and recreation facilities. The existing facilities include a boat launch, trails, parking lots, and picnic areas.

### PROJECT CONTEXT MAP





# TIMELINE

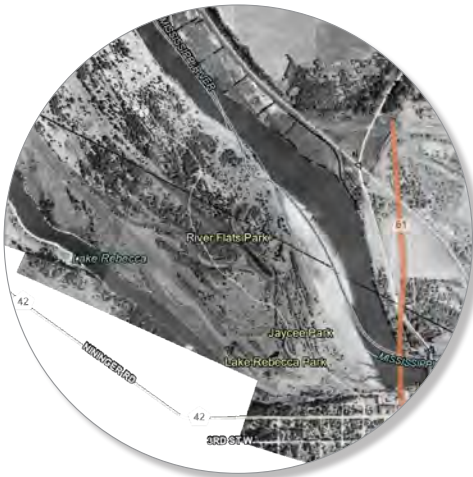
Construction of Lock and Dam No. 2  
finishes on November 30th **1930**

Construction of Lock and Dam  
No. 2 begins on October 16th **1928**

**1948** Reconstruction of  
Lock and Dam No. 2

**1900**

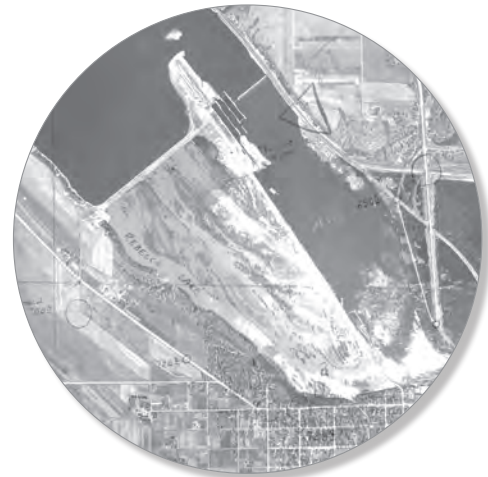
HISTORICAL IMAGERY



**1927**

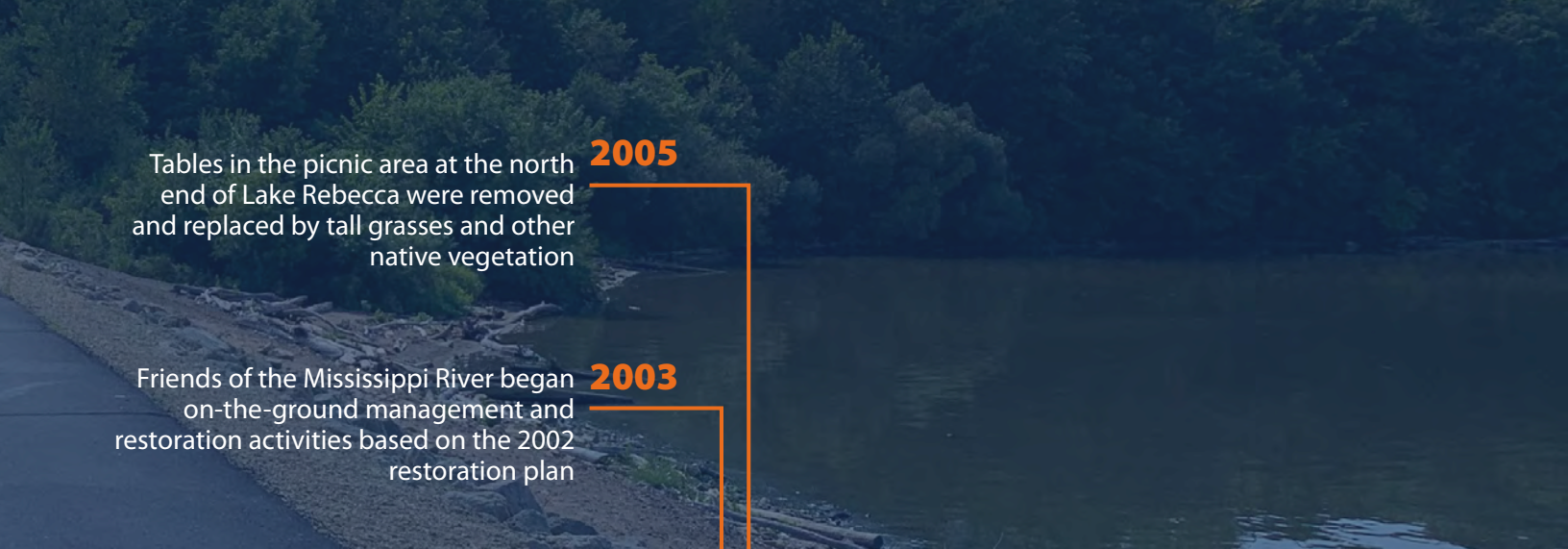


**1937**



**1947**





Tables in the picnic area at the north end of Lake Rebecca were removed and replaced by tall grasses and other native vegetation

**2005**

Friends of the Mississippi River began on-the-ground management and restoration activities based on the 2002 restoration plan

**2003**

Friends of the Mississippi River prepared a management and restoration plan for Hastings River Flats Park

**2002**

Petroleum tanks from the former Koch Industries (now Flint Hills) barge fueling tank farm were removed and the property was donated to the city

**1995**

**1987 - 1995**

**2014**

Large flood took out most of the shoreline plantings in the southern area of the park

**2017**

Buckthorn Treatment & Dakota County Natural Resource Management System Plan

**2021**

Buckthorn Treatment & Woody invasive treatment and tree planting

**2000**



**1957**



**1964**



**1997**

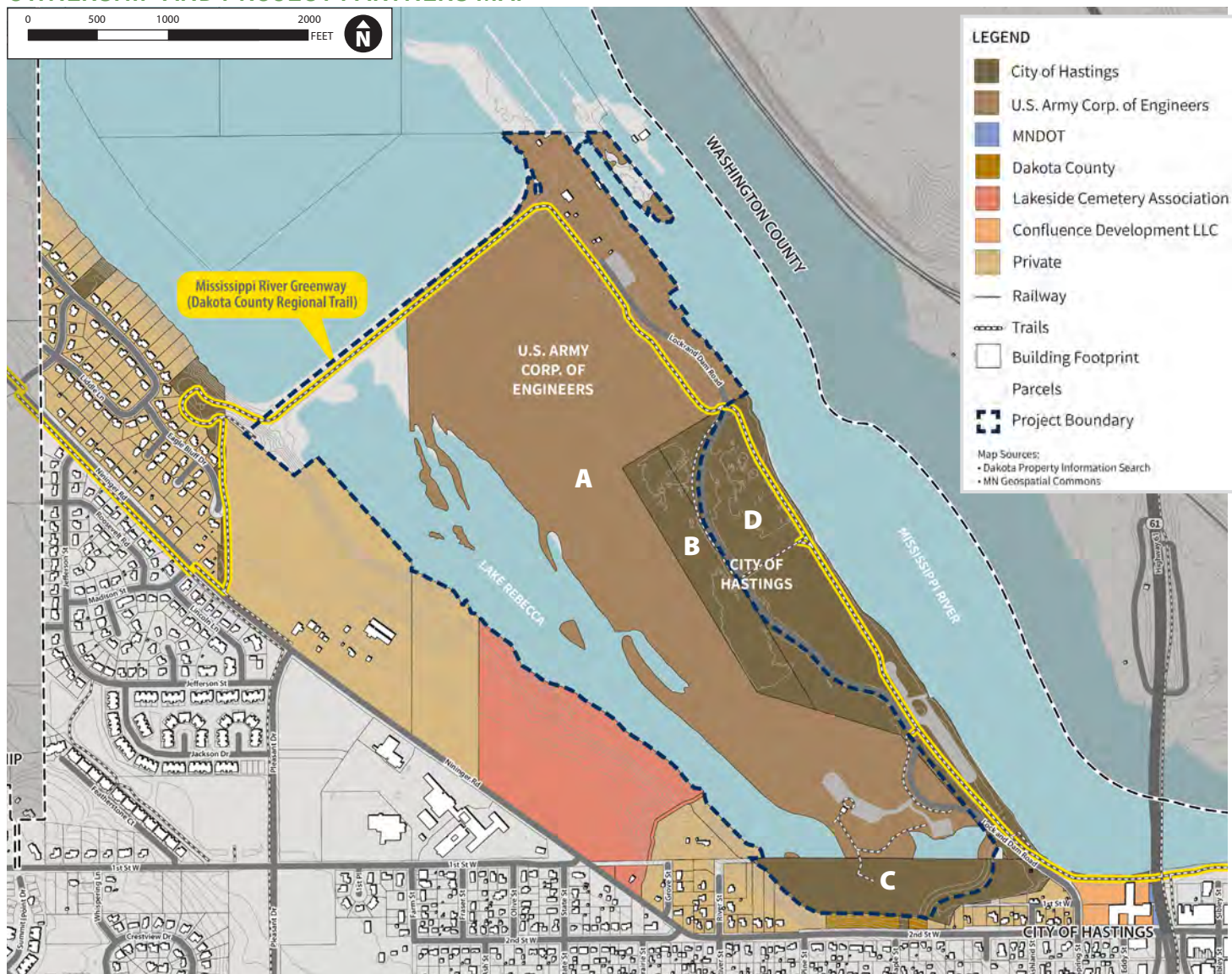


## OWNERSHIP & PROJECT PARTNERS

For the purpose of this master plan, the area considered part of Lake Rebecca Park consists of two entire parcels of land with portions of other parcels as listed in the table below. Land on the levee at the northwest part of the lake and the water surface area of Lake Rebecca are also considered as part of the master plan boundary, although these areas are not listed in the table below.

ID	Owner	Acres	Notes
A (entire)	U.S. Army Corps of Engineers (USACE)	146.44	Lock and Dam No. 2 is located in the northeastern part of the parcel—this portion of the property is operated and managed by USACE staff and is not part of the park. Xcel has a utility easement with the USACE which allows for a 75' width along the route – so 37.5' from the center, either direction.
B (entire)	City of Hastings	14.13	Formerly Flint Hills Resources land
C (partial)	City of Hastings	15.89	Includes the island in Lake Rebecca and most of the berm/earthen dam on the southern end of the lake
D (partial)	City of Hastings	47.22	Includes the land west of Lock and Dam Road that is contiguous with parcels A and B

### OWNERSHIP AND PROJECT PARTNERS MAP





## HASTINGS LAKE REBECCA MASTER PLAN STAKEHOLDERS

Individual meetings and phone calls were held with the following stakeholder organizations and representatives over the course of November 2023 through February 2024.

STAKEHOLDER INTEREST AND PURPOSE	ORGANIZATION	CONTACT NAME	HIGHLIGHTS OF INPUT
Primary Stakeholder—grant requirements and Master Plan approval	Legislative-Citizen Commission on Minnesota Resources (LCCMR)	Mike Campana	<ul style="list-style-type: none"> <li>LCCMR needs to review and approve the master plan document before implementation work can begin</li> <li>LCCMR and ENRTF logos need to be included on all public documents related to this project</li> </ul>
Primary Stakeholder—obtain information regarding past, future, and ongoing restoration work and data	Friends of the Mississippi River (FMR)	Alex Roth	<ul style="list-style-type: none"> <li>FMR completed the Hastings River Flats Natural Resource Management Plan in Dec. 2002</li> <li>FMR has managed and completed several projects on site over the past two decades: invasives removal and management, shoreline restoration</li> </ul>
Primary Stakeholder—obtain information regarding past, future, and ongoing restoration work and data	U.S. Army Corps of Engineers (USACE) Forestry	Andy Meier	<ul style="list-style-type: none"> <li>Participates in annual management projects and record-keeping of the natural resources on the site</li> </ul>
Primary Stakeholder—obtain information regarding city's lease on the property and what is permitted	U.S. Army Corps of Engineers (USACE) Real Estate	Ray Marinan	<ul style="list-style-type: none"> <li>Hold records related to lease agreement and utilities</li> <li>Monitors the management plans for leased properties</li> </ul>
Secondary Stakeholder—obtain information regarding data (wetlands, trails, plans, etc.)	Dakota County Planning and Greenways	John Mertens; Tony Wotzka	<ul style="list-style-type: none"> <li>Manages planning and implementation of the Mississippi River Greenway regional trail and the corridor it sits in, including natural resource improvements</li> </ul>
Secondary Stakeholder—discuss potential partnership projects and base data	Dakota County Soil and Water Conservation District (SWCD)		<ul style="list-style-type: none"> <li>Provides and manages MLCCS data</li> <li>Has limited funding and resources for natural resource projects</li> </ul>
Secondary Stakeholder—coordinate with existing DNR facilities in the area	MN Department of Natural Resources (DNR) Parks and Trails	Rachel Henzen	<ul style="list-style-type: none"> <li>Promotes use of water recreation and trails through partnership projects with cities</li> </ul>
Secondary Stakeholder—coordinate regarding water quality and wildlife impacts	MN DNR Fisheries	TJ Debates	<ul style="list-style-type: none"> <li>Interested in water and wildlife habitat enhancements including along the Lake Rebecca shoreline</li> <li>Promotes fishing through provision of fishing piers at the lake</li> </ul>
Secondary Stakeholder—coordinate regarding permits for construction and restoration work	MN DNR Hydrology	Taylor Huinker	<ul style="list-style-type: none"> <li>Upholds the state rules that no development shall occur below the OHWL of Lake Rebecca</li> <li>Interested in promoting water quality efforts</li> </ul>
Secondary Stakeholder—project and programming partnerships	National Park Service (NPS)	Forest Eidbo	<ul style="list-style-type: none"> <li>Interested in promoting the Mississippi River National Water Trail with support amenities and facilities</li> </ul>
Secondary Stakeholder—project permitting	State Historic Preservation Office (SHPO)	Kelly Gragg Johnson	<ul style="list-style-type: none"> <li>Encourages cultural resources research and analysis</li> <li>A Phase 1 Archeological Study may be needed</li> </ul>
Tertiary Stakeholder—seek input	Hastings Environmental Protectors (HEP)	Kevin Smith	<ul style="list-style-type: none"> <li>Interested in volunteer tasks in the park</li> <li>Proposed recreation enhancements including a portage route through Lake Rebecca</li> </ul>
Tertiary Stakeholder—seek input	Tribal - Prairie Island Indian Community (PIIC)	Noah White; Franky Jackson	<ul style="list-style-type: none"> <li>Promotes cultural sensitivity and land acknowledgement</li> <li>Interested in assisting with interpretation in the park</li> </ul>
Tertiary Stakeholder—seek input	Vermillion River Watershed Joint Powers Organization (VRWJPO)	Travis Thiel	<ul style="list-style-type: none"> <li>As the park is at the bottom of the watershed and projects would have little to no impact on water quality in the watershed, VRWJPO has limited interest in partnership projects or funding.</li> </ul>







# SITE INVENTORY & ANALYSIS



## SITE INVENTORY OVERVIEW

This chapter includes several maps, images, and descriptions of the existing conditions of the site, the agencies and organizations that have been involved with managing and restoring the site, and a summary of the projects that have been completed. Meetings with project stakeholders contributed to the development of the site analysis maps and narrative in this chapter:

- Existing Conditions map
- Site Observations map
- Existing Land Cover map
- Topography map
- Wetland and Wildlife Sensitivity map
- Completed Management Projects map

At the end of the chapter, a summary of public input is included to provide context to the way the site is used today and how users perceive the park.

## EXISTING CONDITIONS

For the purpose of this master plan, Lake Rebecca Park includes the area bounded by the U.S. Army Corps of Engineers (USACE) levee and trail on the northwest, Dam #2 operations area at the north, River Flats Park and Jaycee Park on the east, and Lake Rebecca Park up to the river bluffs on the south and west. The south and west sides of the park are adjacent to Lake Rebecca and are frequently inundated with flood waters. The higher points of the park are on the north and east sides along Lock and Dam Road. Most of the park is natural woodland and wetland, while the south end of the park consists of passive recreational amenities: boat launch, fishing pier, parking lots, trails, and picnic area.





## EXISTING SITE PHOTOS



*Boat launch and fishing pier*



*Picnic area with view of Hwy 61 bridge in background*



*Walking bridge connection to island*



*Fishing dock*



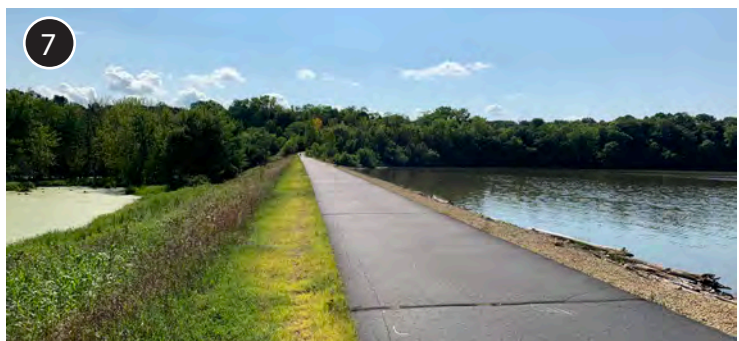
*Walking trail through picnic area*



## EXISTING CONDITIONS MAP



View from berm on south edge of Lake Rebecca looking west



Mississippi River Greenway regional trail on levee



# SITE OBSERVATIONS

Site visits were conducted during the fall of 2023 and during the early part of 2024. The park is expansive and consists of very little topography variation. The park offers many views of water, both Lake Rebecca and the Mississippi River, especially from the trail along the top of the levee on the north side of the park, and in the southern area where the boat launch, parking, and picnic areas are located. Areas of native vegetation and invasive vegetation were seen throughout the park, as well as evidence of wildlife nesting and habitat areas.

## SITE OBSERVATIONS KEY

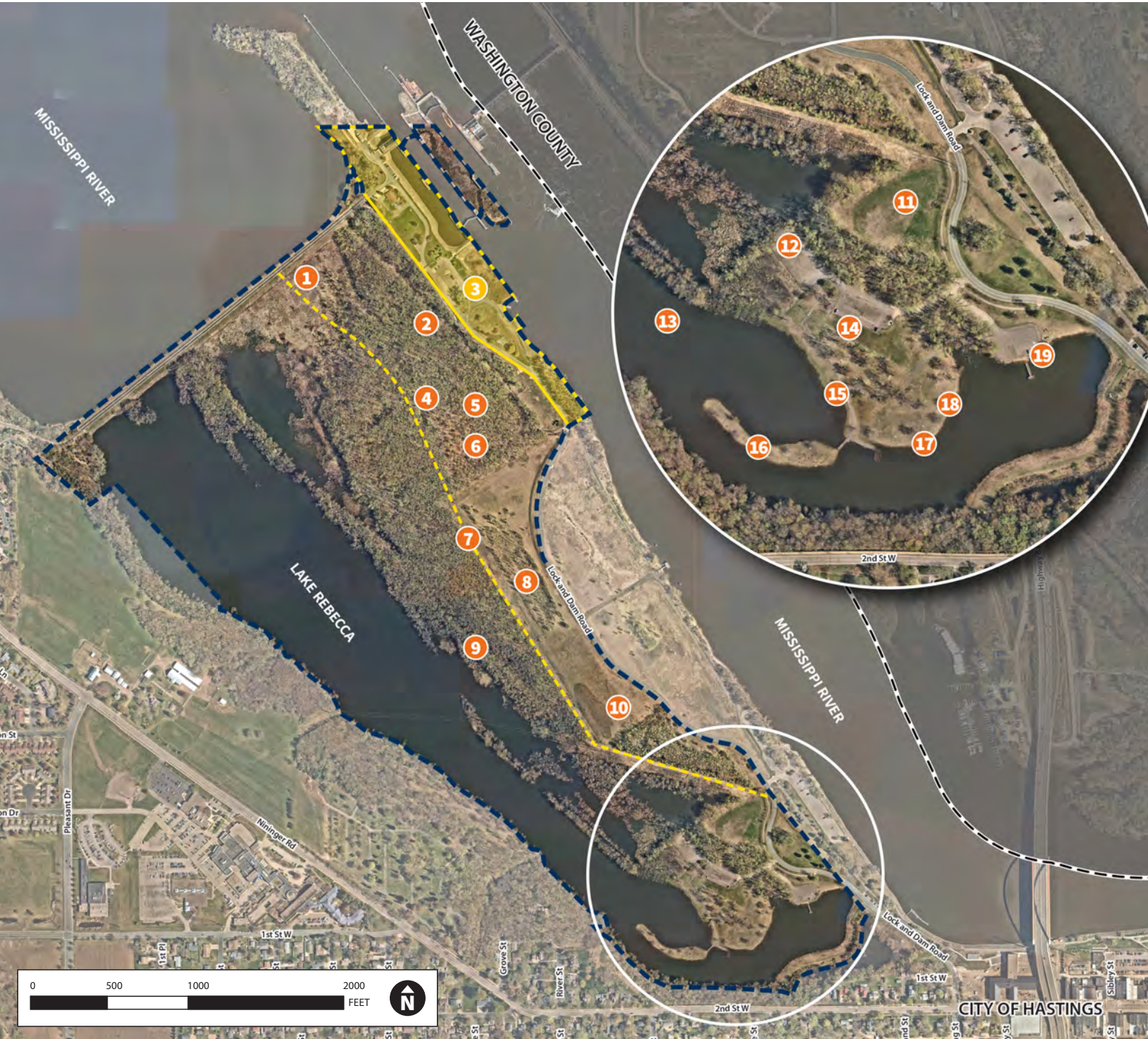
- 1** Dominated by native emergent vegetation but with stands of invasive cattail throughout and abundant purple loosestrife near dike.
- 2** UMN Plots - No buckthorn but garlic mustard more frequent.
- 3** USACE operations - no touch.
- 4** Abundant regrowth of buckthorn in higher elevation areas.
- 5** Garlic mustard present but infrequent.
- 6** Historical dredge spoils location.
- 7** General line between inundated and non-inundated areas.
- 8** Young cottonwood stand with low understory diversity; restored species present in openings.
- 9** Open understory with good native herbaceous diversity and little buckthorn.
- 10** Restored prairie dominated by natives. Invasive pasture grasses common, but rarely monotypic except at edges. Tree/shrub invasion at southeastern edge.
- 11** Snow storage area.
- 12** Northern parking not used and in poor condition.
- 13** Lake is popular with anglers year-round, for trolling motor fishing and ice fishing.
- 14** High presence of geese in grassy areas. Small picnic area near parking lot.
- 15** High water, frequent flooding of trails, fishing pier and picnic area.
- 16** Island is accessible by a trail bridge.
- 17** Perennial shoreline buffers are narrow, but remnants of shoreline plant restoration remain. Shore fishing presence.
- 18** Ash trees infested with emerald ash borer.
- 19** Boat access and dock frequently unusable due to high water.

## EXISTING SITE PHOTOS





SITE OBSERVATIONS MAP





# EXISTING LAND COVER

Existing land cover represents a mosaic of habitats and was mapped based on the DNR Native Plant Community classification scheme. The majority of the park consists of floodplain/terrace forest and marsh communities. Two altered woodlands occupy historically disturbed areas from dam-related operations and maintenance. A restored prairie is present in place of a former tank farm along Lock and Dam Road. Remaining areas of the park are dedicated to dam infrastructure and park recreation, and vegetation primarily consists of turfgrass and landscaped parkland.

## ALTERED WOODLAND

This area appears to occupy an area of historical dredge spoils. Cottonwood dominates the canopy with a subcanopy of northern red oak and eastern red cedar. Although woody invasive shrubs have been managed, regrowth of common buckthorn dominates the understory. A separate, isolated altered woodland is located in the northwest corner of the project area where the berm ties into shoreline; condition of this area is unknown.

## RESTORED PRAIRIE

This area consists of recently restored prairie (10-20 years) and was historically used as a tank farm by Flint Hills Resources. Native prairie vegetation is generally well established and similar to the composition of restored prairie to the northeast of Lock and Dam Road (River Flats Park). Stands of young cottonwood are present. The invasive Kentucky bluegrass is common, along with smooth brome along the edges of the prairie and beneath the cottonwood stands.

## TERRACE FOREST (FFS59)

Cottonwood dominates this plant community, with minor species primarily in the subcanopy including basswood, hackberry, bitternut hickory, box elder, and ironwood. Although woody invasive shrubs have been managed, regrowth of common buckthorn dominates the understory. The U of MN established buckthorn research plots within a portion of the forest and buckthorn is sparse within the plots. Several areas were planted with native trees and shrubs by USACE.

## FLOODPLAIN FOREST (FFS68)

Large diameter cottonwood dominates the canopy, with silver maple also dominant in the intermediate canopy. American elm and hackberry are common in the subcanopy. Small areas dominated by buckthorn are present, but both invasive and native shrubs are generally absent. Ground cover appears in good condition with variable cover of native sedges and grasses. Several areas were planted with native trees and shrubs by USACE.

## FLOODPLAIN FOREST/MARSH COMPLEX (FFS68/MRN93)

This area is a complex of floodplain forest and marsh along the shoreline and islands of Lake Rebecca. Open water is interspersed. Floodplain forest is low-lying (FFs68) and

dominated by cottonwood, silver maple, and black willow. Shrub and ground cover is similar to other areas of FFs68. USACE managed common buckthorn in the north portion of this area. Marsh varies from Deep Marsh to Shallow Marsh (both MRn93) and is dominated by river bulrush with areas of invasive hybrid cattail.

## SHALLOW MARSH (MRN93)

Emergent vegetation (river bulrush) dominates this area, along with other native rushes, sedges, grasses, and forbs. Invasive wetland plants purple loosestrife and hybrid cattail are frequent, but rarely dominant. Purple loosestrife is most common immediately adjacent to the dike, with cover of 25-50%.

## UTILITY LINE - WET MEADOW/HRB CARR/MARSH (WMN82/MRN93)

A complex of Wet Meadow, Shrub Carr and Shallow Marsh (WMn82/MRn93) dominated by invasive hybrid cattail, shrub willows, reed canary grass, and native emergent vegetation.

## INFRASTRUCTURE/PARKLAND

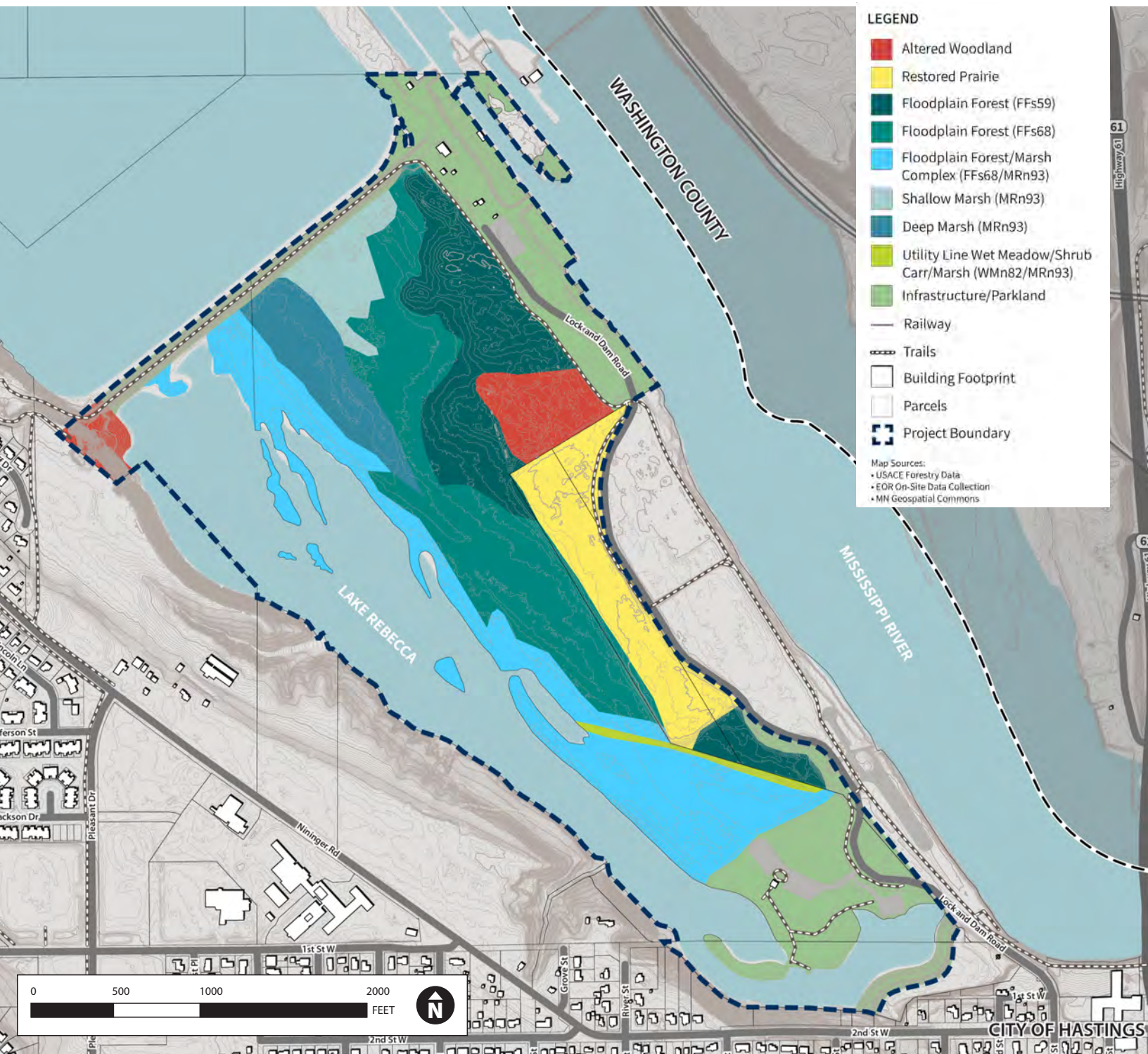
Mix of turfgrass, parking lots, roads, and paved trails. Portions of turf grass in the north area of the parkland include a snow storage area used by the city. Mowed wetland vegetation occupies the shoreline of Lake Rebecca, and a pocket of floodplain forest occupies a low area. A formerly restored prairie is present adjacent to the west parking lot but is overgrown with dense saplings. Green ash is the most common tree among turfgrass areas and on the island, and most appear to be infested with emerald ash borer.

## DEEP MARSH (MRN93)

Open water and emergent native vegetation (river bulrush) dominate this area, along with other native rushes, sedges, grasses, and forbs. Invasive wetland plants purple loosestrife and hybrid cattail are frequent, but rarely dominant.



## EXISTING LAND COVER MAP



Floodplain Forest (FFs59)



Floodplain Forest/Marsh Complex



Parkland Infrastructure



# TOPOGRAPHY

The land that constitutes Lake Rebecca Park and the adjacent parks and dam area is part of the Mississippi River floodplain and is therefore generally flat with minimal changes in elevation across the park. Contours across the park range in elevation of less than ten feet across the park, from about 682 feet to 690 feet above sea level. The top of the levee trail on the north end of the park is a high point and sits at approximately 696 feet above sea level.

The water elevation of Lake Rebecca is held one to two feet higher than the Mississippi River water elevation by a weir structure at the southern end of the lake. The water travels through the weir into a holding pond and then into the river under Lock and Dam Road. The city maintains and operates the water levels. The Ordinary High Water Level of Lake Rebecca is 682 feet.

## AERIAL PHOTOS (2018-2023)



*April 2018*



*October 2019*



*October 2020*



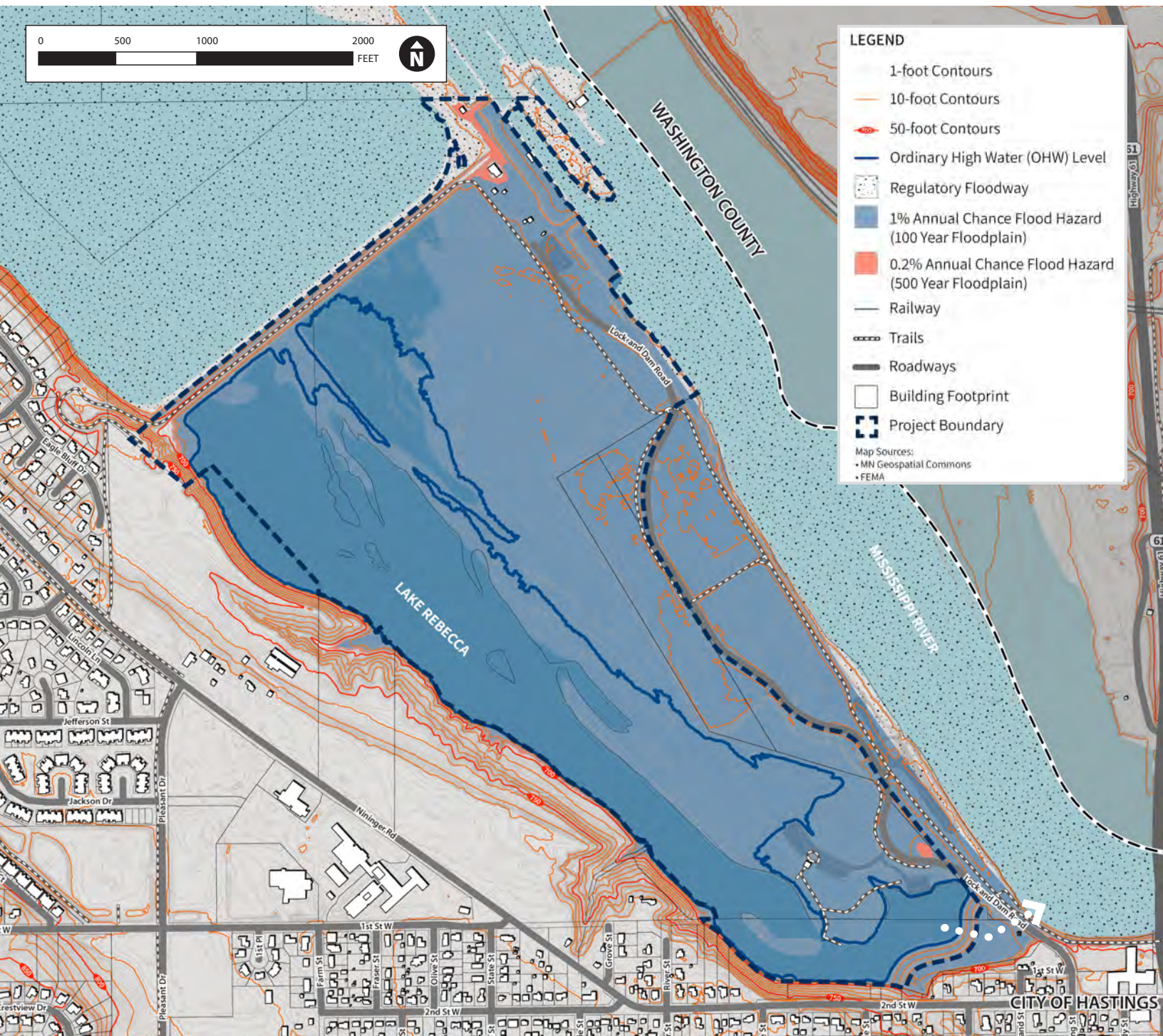
*June 2022*



*May 2023*



# TOPOGRAPHY MAP



Boat Launch - May 2022



Bridge Pier - May 2022



Lake Rebecca Park - May 2022



## EXISTING SITE PHOTOS



# WETLAND AND WILDLIFE SENSITIVITY

## WETLANDS

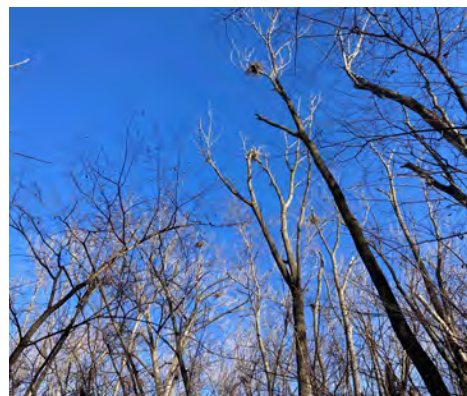
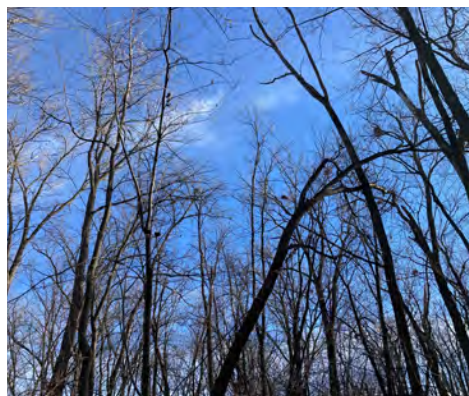
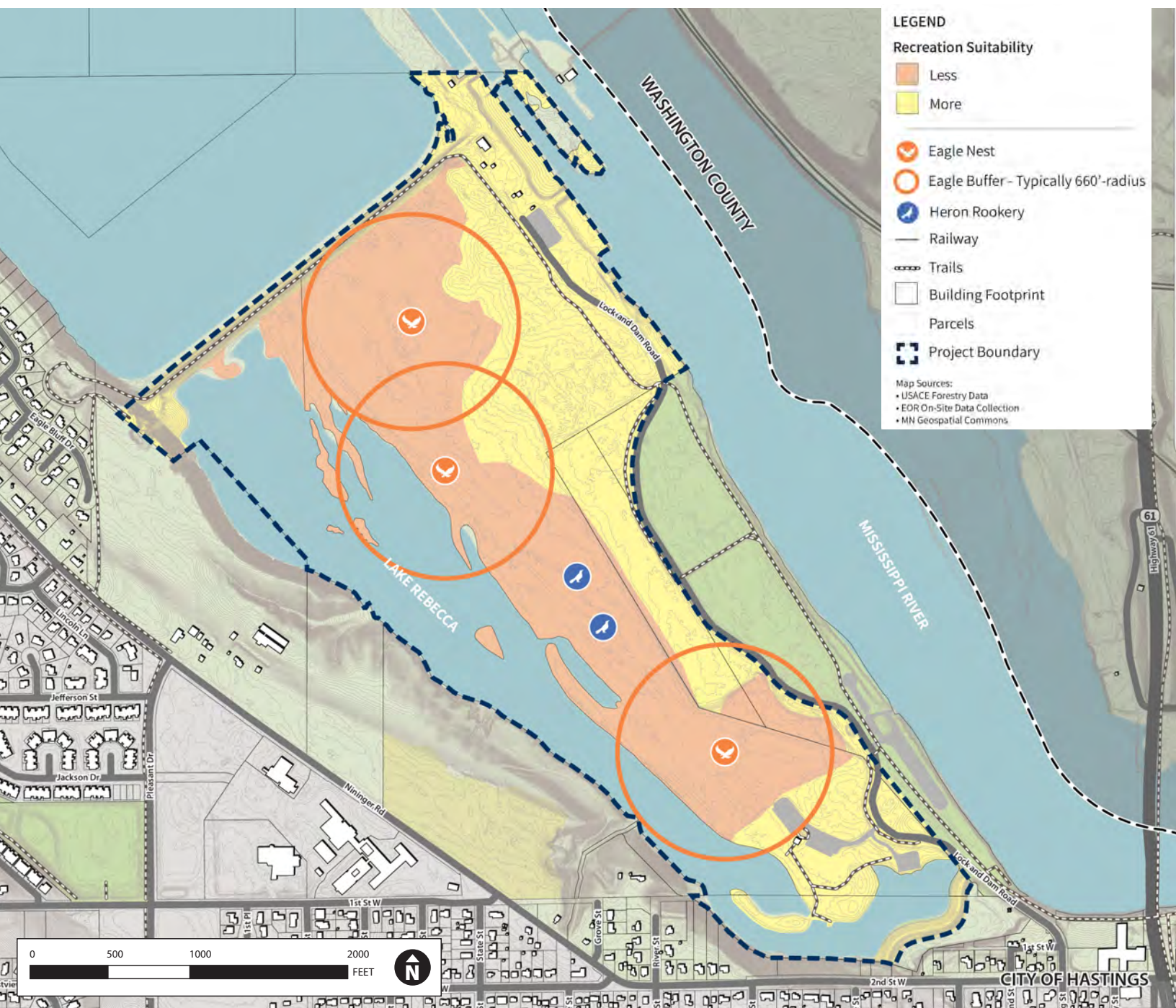
Much of the park consist of low-lying wetland forest and marsh. Wetlands provide immense value to fish and wildlife, attenuate floodwaters, and help maintain and improve water quality. Wetlands are not ideally suited for intensive recreation, although some passive recreation activities are appropriate. The master plan strives to balance protection of these resources with appreciation for their aesthetics and habitat value.

## WILDLIFE

The undeveloped character, mosaic of habitats, and position along the Mississippi migration corridor make the park a valuable asset to a host of wildlife. Migratory birds use the varied cover heavily during spring and fall migration as stopover habitat. At least three bald eagle nests are present, although it is unknown if they are active. A great blue heron rookery is present within floodplain forest and consists of at least 20 nests. Other animal species observed at the park include white-tailed deer, beaver, red fox, fox squirrel, gray squirrel, painted turtle, snapping turtle, garter snake, green frog, in addition to two rare vertebrate species. The park undoubtedly hosts additional wildlife species not documented by prior records. Wildlife may be sensitive to certain recreation activities and the master plan will account for their presence proximal to proposed activities.



## WETLAND AND WILDLIFE SENSITIVITY MAP



Nests observed in the park





## COMPLETED MANAGEMENT PROJECTS

The USACE, FMR, and City manage the park via existing management plans. USACE has completed several projects and implements ongoing management within forested and emergent wetland areas. The City and FMR manage the restored prairie and parkland/shoreline areas. The USACE

### FLOODPLAIN FOREST MANAGEMENT

In 2017, USACE began buckthorn and other invasive shrub removal throughout most forested areas of the park and has continued follow up treatments through present. In partnership with the University of Minnesota, buckthorn removal research plots were also established in the northeast portion of the park. USACE underplanted native trees and shrubs in areas of floodplain forest where buckthorn was absent or adequately controlled.

### OAK SAVANNA/WOODLAND RESTORATION

Within the Altered Woodland in the northeast portion of the park, USACE implemented woody invasive control (primarily buckthorn) that continues at present.

### PRAIRIE RESTORATION

Following completion of the River Flats Natural Resource Management Plan in 2002, the former Flint Hills Resources parcel was restored to native prairie by FMR. Minimal management has been completed within the restored prairie since initial establishment.

### SHORELINE RESTORATION

Following completion of the River Flats Natural Resource Management Plan in 2002, shoreline vegetation and prairie restoration was completed in the parkland area by FMR. Initial establishment was reportedly successful. Flooding and lack of ongoing management has led to declining plant diversity along the shoreline and succession to dense floodplain forest saplings in areas of prairie restoration. Several pockets of shoreline remain dominated by native wetland vegetation, but appear to be isolated.

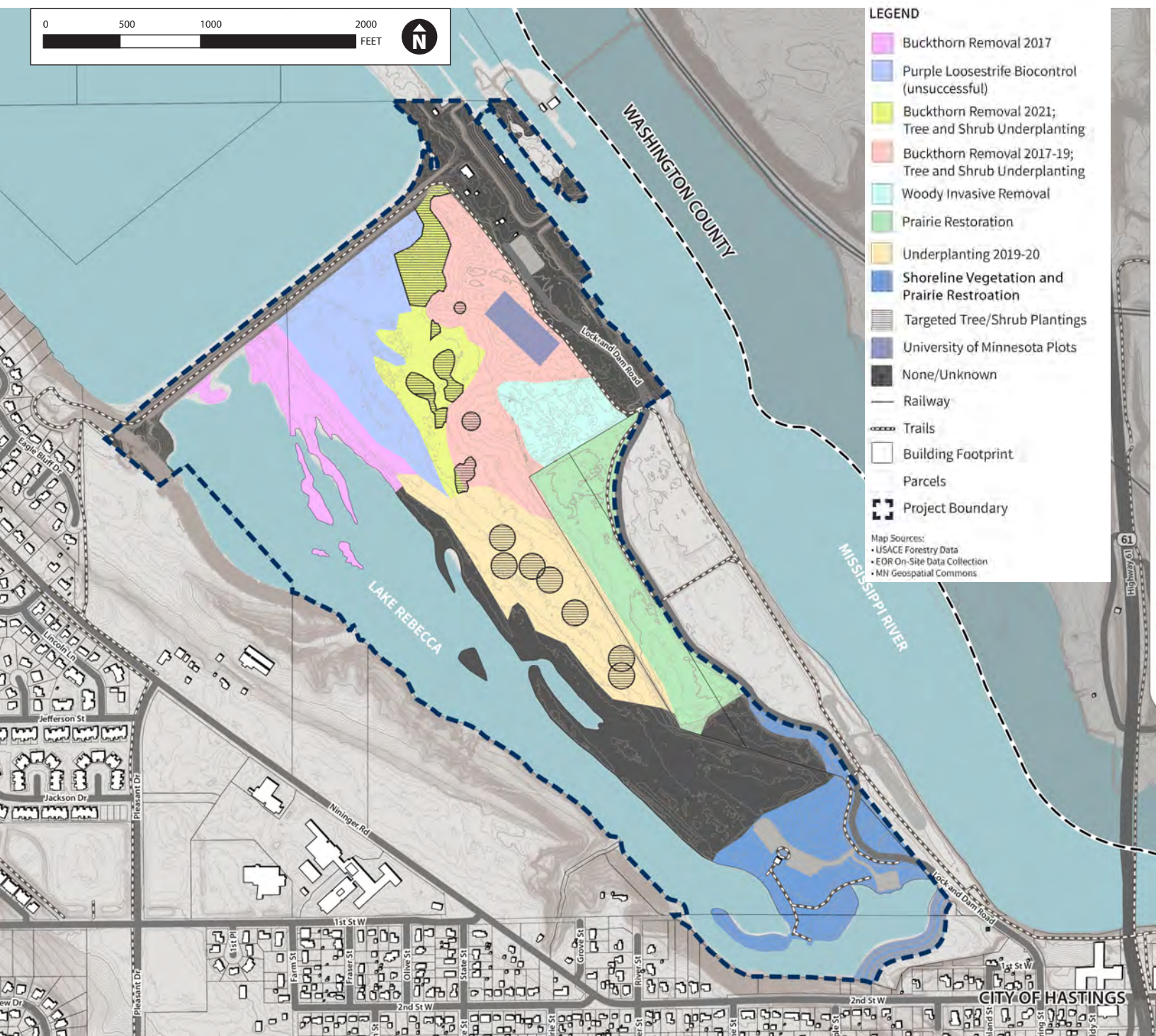
### PURPLE LOOSESTRIFE BIOCONTROL

The USACE released loosestrife beetles for biocontrol in emergent wetland areas. The release appeared to have minimal impact on existing purple loosestrife populations.





# COMPLETED MANAGEMENT PROJECTS DIAGRAM

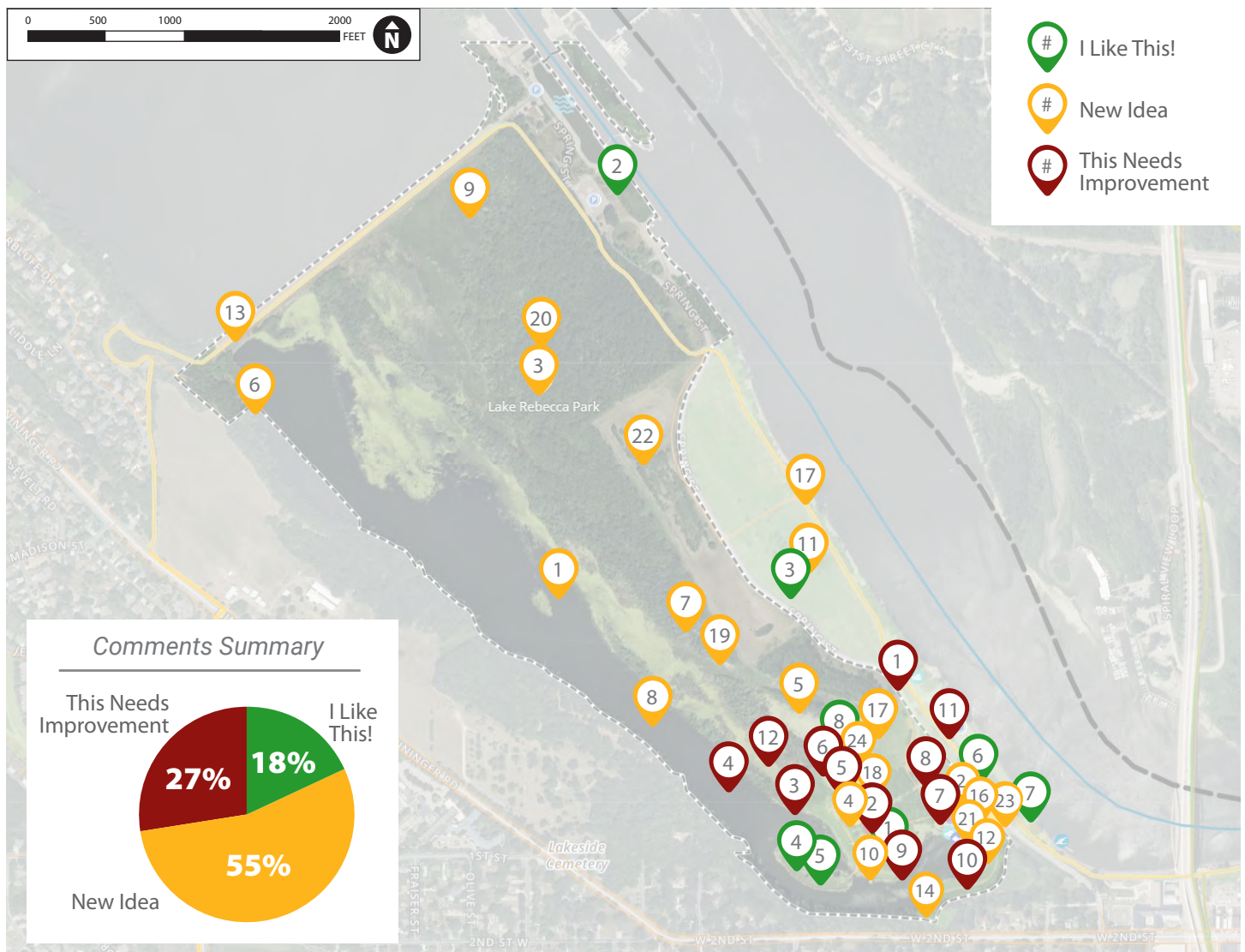




# COMMUNITY ENGAGEMENT SUMMARY

## SOCIAL PINPOINT MAP

An interactive engagement tool was used to solicit comments from the general public about the future of Lake Rebecca Park. The site included a map and survey questions and was promoted to city of Hastings residents and open to the general public on the city's website, through social media, and a press release for input from March 8th to March 29th, 2024.



I Like This			
#	+	-	Comment
1	6	-	A great field for picnic shelters and reservable event spaces, similar to Spring Lake Park, modeled after Hiawatha Falls Park.
2	3	-	I am glad the Army Corps allow people to fish here, thank them for me.
3	1	-	Playground, picnic tables, benches like Bay Point park in redwing.
4	2	1	Having an island is such a great feature - it would make a great picnic shelter area for events/parties.
5	-	-	Alot of great Ideas are being generated in this survey, I truly hope that they can become reality.
6	-	-	Once again I totally agree with this person's idea!!! We as a city need to be more welcoming as other cities as far as amenities go for the public to use.
7	-	3	I totally agree with this person's idea!! I have often thought the same thing for over 25 years, The marina could be city owned and operated as a revenue generator, and it would give boaters a chance to stop and see the beautiful downtown that city has worked so hard on over the years, With the trail system they could have a short walk to get lunch or dinner at one of many restaurants and bars. I wish I had more character space for more ideas to be shared!
8	-	6	Another awesome idea! like the Dakota County Campground in Apple Valley off of Johnny Cake Ridge Road.



# 146

Total Site Visits

# 99

Unique Users  
(Individual people who engaged with the site)

# 44

Map Comments

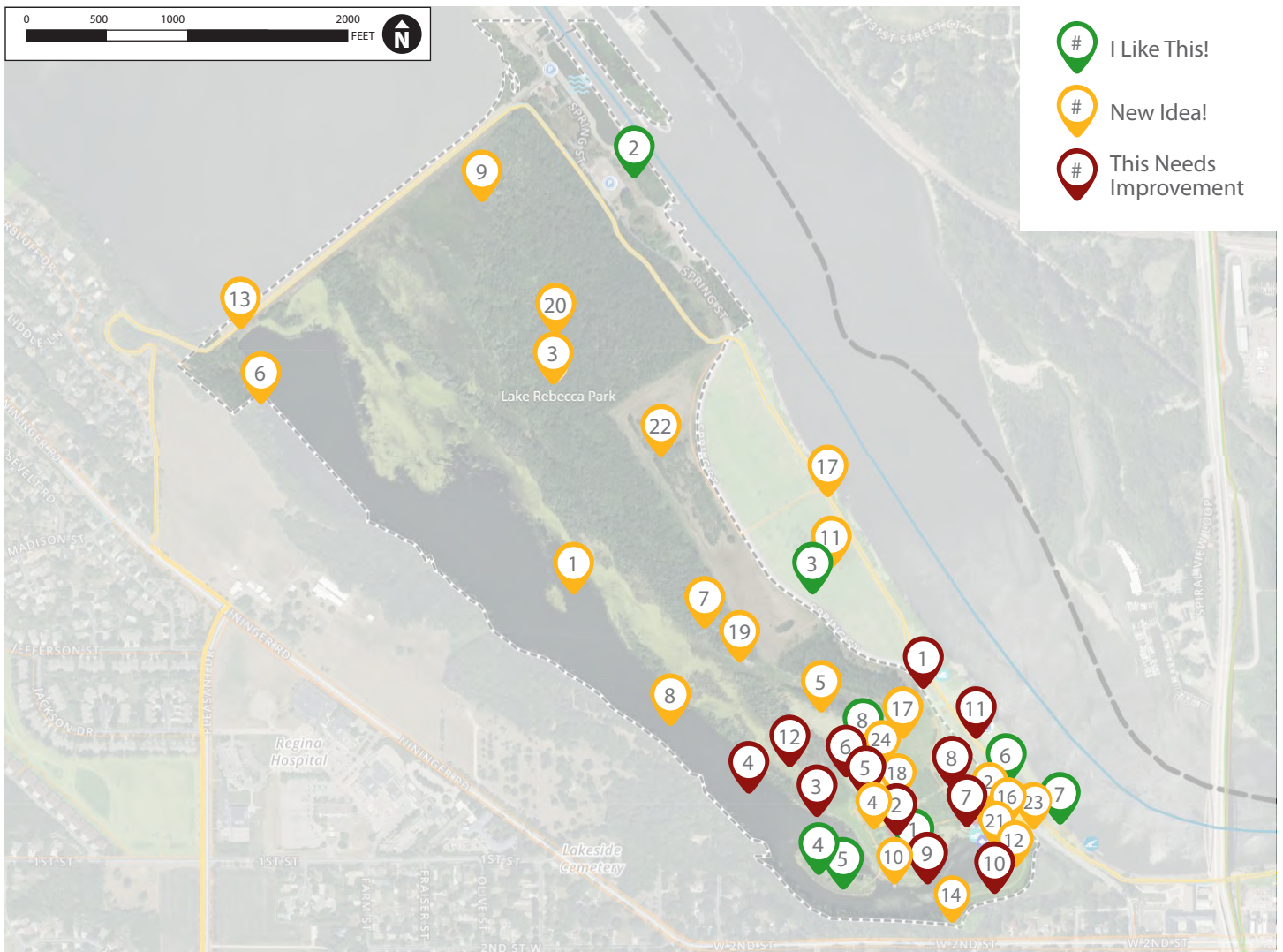
# 25

Survey Participants

## New Idea

#	+	-	Comment
1	30	-	There is a lot of wildlife living in these woods; deer, geese, ducks and more. This area needs to be preserved for wildlife.
2	19	2	Add recreational equipment rental / borrow opportunity here. Could be canoes, rowboats, paddle boats, etc.
3	12	-	Keep trails out of this area. having trails running though this small nature reserve would scare away wildlife and attract more trash to the area. to keep wildlife around and lively, wildlife should have a place to stay and know where they are safe. creating trails running though this forest would eliminate that. animals should be watched from a distance, we should do our best to make sure wildlife stays in the area.
4	12	-	Picnic tables/ seating.
5	7	-	Add an "outdoor" classroom (several rows of benches in a semicircle) for field trips for school, scouts, HEP, etc.
6	5	-	Another good spot for a family fishing dock.
7	6	2	Trails should have interpretive signage about the local nature and habitat as well as importance of the area for indigenous peoples.
8	3	-	I'd like to see another put-in place for easier kayaking. This small area would be excellent for teaching beginners to paddle.
9	2	-	I know this end isn't Lake Rebecca, but could there be stairway down to the water's edge so kayaks can be put in here?
10	2	-	Improving this pier would be wonderful. It is actually a great fishing spot. But a floating style dock would be important with the fluctuations in water levels, especially after spring thaw. This pier hasn't been improved in years.
11	2	-	Playground.
12	2	-	Another good spot for a fishing dock.
13	1	-	Fishing dock for SURE. Birding too. So many sights missed over here that are beautiful.
14	1	-	Is all land south of the lake private property? If not, small unobtrusive trail around the lake would be nice. If yes, just focus on park at this south end and leave the forest alone for the wildlife.
15	1	-	How about a kayak rental "locker" like on Grey Cloud Island? Kayak, life jacket and paddle in locked locker. Reservations and payment are all handled on line.
16	5	4	The remaining arch of the old bridge could be placed over the path, near one of the historical markers about the old bridge.
17	-	-	I just wanted to mention that this whole area is subject to flooding, with that being said I still hope that there is a way that we can work around that problem and still accomplish a lot of these good ideas.
18	-	1	New parking lot and walking/ biking trails!!
29	6	10	Add trails through floodplain area.
20	2	8	Woodland interpretive trail in here.
21	7	18	Make this a public run marina and increase business to the downtown area.
22	-	11	Possibility of mountain bike trails, through prairie & woods areas, as well as the potential for the south facing hillside and bluff areas (not sure what is private property vs potential usable space?).
23	1	12	Build a channel to river with a bridge to drive over, then have a public marina, also could have peddle escorts from Marina to downtown.
24	2	20	Make a campground. Gravel pads for rv's less than 40 feet and could add some primitive spots in woods. Attracts people close to town but still in quiet area and would bring in revenue.





- # I Like This!
- # New Idea!
- # This Needs Improvement

### This Needs Improvement

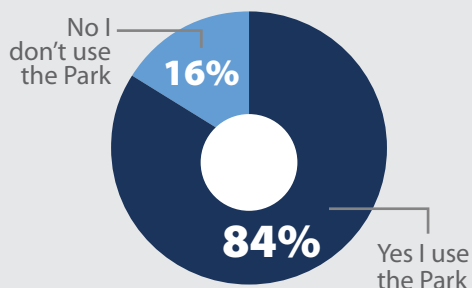
#	+	-	Comment
1	20	-	Adding a dock to get in and out of boats after being launched, close to the actual launch would be incredibly helpful!
2	18	-	At a minimum, trails need to be repaved or turned to rock base.
3	16	3	Add another dock for fishing opportunity.
4	11	-	Implement ecosystem restoration solutions to return clarity to the lake water, like Peru's El Cascajo Lake. For being spring-fed, it's awfully murky. The quality of the water would definitely attract more visitors.
5	11	1	This space needs to be cleared out, or the back parking lot removed/repurposed - the lack of visibility in the back lot affects a higher rate of criminal activity.
6	10	-	Bad idea to create a campground here. I think it will cause issues, ask the county to put one at Sharrs bluff, not in town.
7	6	-	Parking lot needs to be repaved.
8	4	-	Increase pedestrian/bicycle accessibility across road to connecting paths.
9	1	2	Shore up the ... shore to minimize flooding erosion, increase usability of the park during spring thaw/flooding, protect improvement investments.
10	-	-	Back in the 80's and 90's, this hill was so much more accessible. Not sure if this is prairie grass? But when the city used to mow this point between Rebecca and the backwater pond, it was always being utilized.
11	-	-	Trailhead building like Dakota County Parks Dept. has and operates. The 2 That I can think of for reference are both located in the City of Inver Grove Hts. One is off of 111th St. E and the other is off of 66th St. E.
12	-	2	Can the level of the park be filled in so most of it is not under flood waters so long in the spring or even when the river would rise during the summer months. A lot of times the park is too muddy to enjoy for most of the summer months.

## SURVEY QUESTIONS

The engagement site included four survey questions that asked for input on park use, level of support for restoration efforts, and general comments.

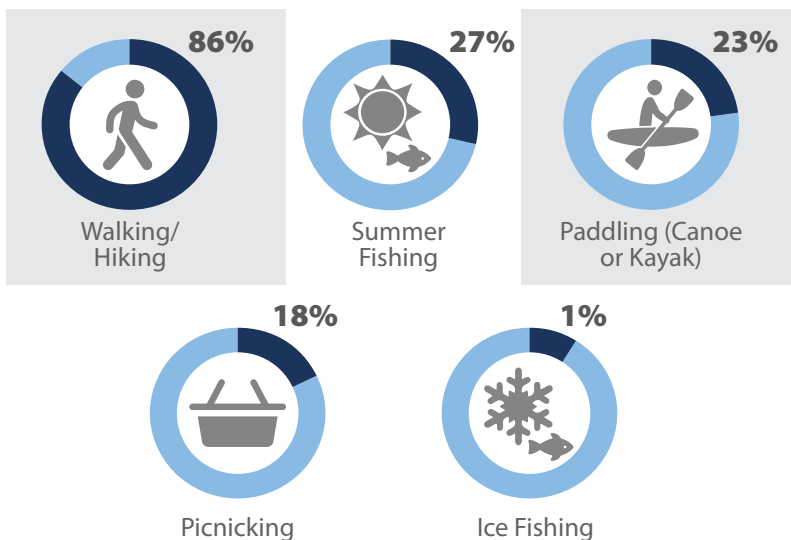
1

Do you use Lake Rebecca Park today? (25 Responses)



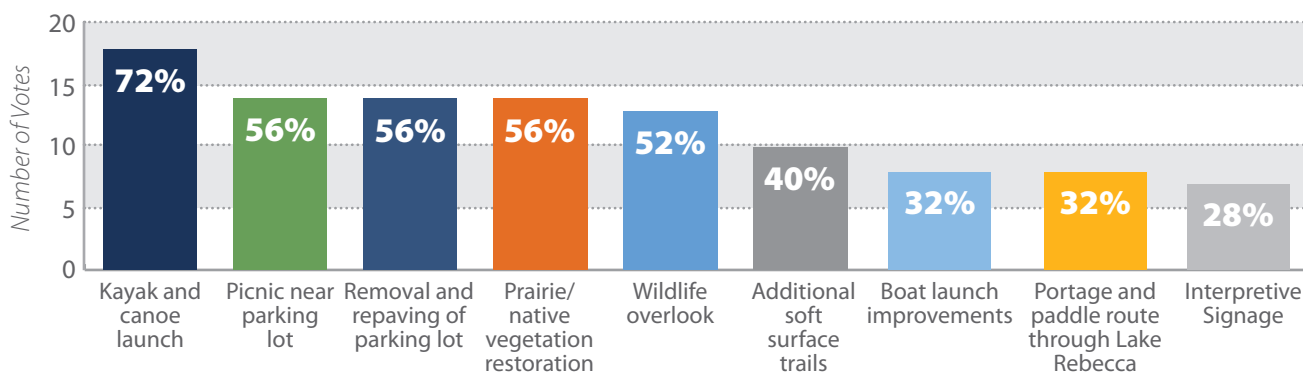
2

If you use Lake Rebecca Park today, how do you use it? (22 Responses)



3

In addition to habitat enhancements and natural resources restoration efforts, this Master Plan recommends potential recreation Improvements. Please list the items you would support: (25 Responses)



4

Do you have any other comments or suggestions? (10 Responses are organized here by theme)

### CAMPSITES

"Camping spots would be awesome"

### FISHING

"Fishing improvements so it is safe to eat fish out of the lake."

### MAINTENANCE

"Cut and maintain the grass and weeds around island and east side of the lake (left of boat ramp) so people can fish and have picnic in this area like it was in the old days."

"Expanded aeration of lake to reduce algae. Higher ground trail through low lying picnic area and out to bridge to island."

### RECREATION

"Lake Rebecca Park is a heavily used park. I believe the area near the boat launch could be improved to appeal to families and others by adding a playground along with pavilion(s) for picnics. The trails used for walking and biking could be improved through better signage such as: informational signage on vegetation and wildlife native to the area, biking maps with distances such as to Spring Lake Park Reserve."

"More Minnehaha Falls design ideas; reservable outdoor event space/shelters, etc."

"Please keep it mowed on a regular basis. Makes it so much more enjoyable. Even if that's the only improvement, I'd be so happy."

### PRESERVATION

"I grew up here and continue to enjoy Lake Rebecca from my kayak and with my camera. The draw to this area is that it is rather untouched with minimal to no development. I fully support improving the water quality and surrounding habitat to support its natural inhabitants. I do not support any clearing or efforts to make additional trails which would likely drive out the wildlife that flourish in the area. When the road was closed last year, it was amazing to see how much wildlife showed up - beavers, sand cranes, owls and more... once reopened, wildlife retreated. It is reasonable to expect more wildlife departures if the area is developed/commercialized further. Please preserve the area and visitor continue to allow person-powered water recreation and walking on current trail system. Thank you - we need to protect what we have - it's special."

"Lake Rebecca is a gem and should be preserved more than developed. Let people appreciate the wildlife and natural foliage right in the middle of an urban area. We are so lucky. Like going on vacation only a couple of minutes from home. Keep the campgrounds, etc. At Schaars Bluff."

"Preserving as much wildlife habitat as possible should be a priority."









# DEVELOPMENT PLAN



## INTRODUCTION

Development improvements for Lake Rebecca Park are recommended at two scales:

1. **Recreation Projects Plan**, which includes high level trail upgrades, additions, and park-wide improvements.
2. **Recreation Area Plan**, which includes a detailed concept plan for the intensive recreation area of the park at the southern end of Lake Rebecca





# RECREATION PROJECTS PLAN

## ZONES APPROACH

This master plan identifies four use zones within Lake Rebecca Park. Each zone has a set of development and restoration recommendations that align with its use and context.

**Habitat Restoration Zone:** This area comprises the largest land area of the park with approximately 123 acres of wetland, floodplain forest, and prairie restoration areas. This zone has the least intense level of recreation and highest habitat value. Projects in this zone consist primarily of habitat enhancement and restoration. Near the northern edge of this zone, one or two soft surface trail loops and low impact interpretive signage are recommended in order to provide immersive access and viewing of the forested areas of the park.



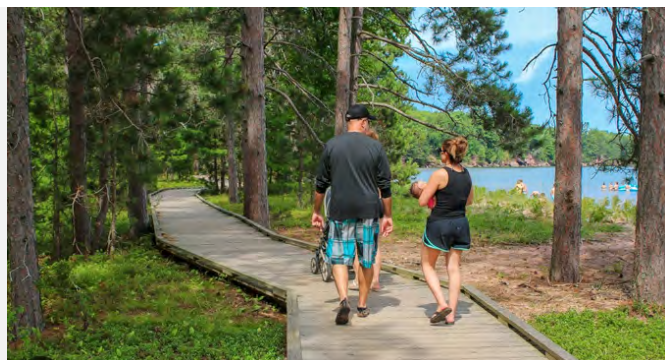
**Linear Recreation Zone:** This zone is a 15 to 20-foot wide multi-use trail corridor that runs along the northern and eastern boundary of Lake Rebecca Park. Approximately 4,500 feet of this corridor is within the Lake Rebecca Park boundary, while another 3,500 feet of the trail corridor runs through River Flats Park and Jaycee Park. This primary purpose of this zone is linear recreation on the Mississippi River Greenway, a Dakota County regional trail with shared operational and maintenance duties between the county and the city of Hastings.



**Water Access Zone:** Located on the south end of the park, this 15-acre area is the most intensely developed area on the site. In the past a swimming beach and changing room building were located here. Today, there are parking lots, a boat launch, two fishing piers, paved trails, a foot bridge to an island, and an open lawn / picnic area. It is recommended that this zone be improved and restored to provide more natural landscapes and habitat enhancement with sensitively-designed, low impact recreation amenities integrated into the natural landscape.



**Water Recreation Zone:** Lake Rebecca is backwater lake within the Mississippi River corridor. The lake edges consist of a man-made levee on the north end, floodplain forest land of Lake Rebecca Park on the east, Lock and Dam road and bermed land on the south, and the river bluffs on the west. The lake's surface area is listed as 81.58 acres on the MN DNR Lake Finder web page, and its maximum depth is 15 feet. The lake is used frequently for summer boat and shoreline fishing, and winter ice fishing.





## RECREATION PROJECTS PLAN DIAGRAM



### PROJECT RECOMMENDATIONS

- |  |   |
|--|---|
| <b>1</b> Add interpretive signage around the parking lot | <b>6</b> Parking lot removal and repaving of western parking lot        |
| <b>2</b> Add wildlife overlook                           | <b>7</b> Turf to prairie/native vegetation restoration                  |
| <b>3</b> Add kayak canoe launch (NPS)                    | <b>8</b> Boat launch improvements                                       |
| <b>4</b> Small picnic area near parking lot              | <b>9</b> Portage and Paddle route through Lake Rebecca to avoid the dam |
| <b>5</b> Add interpretation and soft surface trails      |   |



# RECREATION AREA SHORT-TERM CONCEPT PLAN

The short-term concept plan for the recreation area at the southern end of Lake Rebecca Park recommends an overall reduction of pavement and turf grass and several habitat and natural resource enhancements. The projects are described below starting with the northern parking lot removal, moving around the site.

## NORTHERN PARKING LOT REMOVAL / GRAVEL SNOW STORAGE AREA

- Remove northern-most parking lot and convert to gravel snow storage area.

## FLOODPLAIN FOREST ENHANCEMENT

- Invasive species management efforts and ongoing control
- Accelerated forest succession

## CENTRAL PARKING LOT IMPROVEMENT

- The existing central parking lot will be repaved and reshaped to have a smaller footprint and facilitate vehicles with trailers.

## BOAT LAUNCH

- Reduce the paving area footprint of the current boat launch in order to provide a 20-30' wide shoreline vegetation between the parking area and the water's edge.
- Relocate the pier and launch/ramp to be accessed at a higher elevation above the Ordinary High Water Level.
- Add boat trailer parking spots in the launch parking lot.
- Add light posts, bollards, or similar with depth indicated akin to what they do in tidal flats, locate along the eastern edge of the boat ramp. Under flood conditions the intent would be provide users a demarcation for where to launch and pavement edge as well as indicated depth of water to launch efficiently/safely.

## SHORELINE RESTORATION

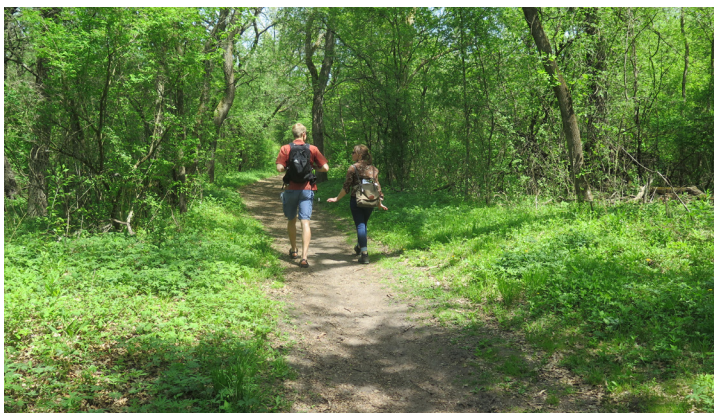
Shoreline restoration will include native vegetation interspersed with recreation amenities.

- Several shore fishing areas will be located near the fish habitat structures. These areas may be cleared soft surface spaces along the water, or they may include flat boulders or stepping stones from which to cast into the water.
- Add several areas of "Fish Sticks" along the shoreline. Fish sticks are bundled whole trees that are placed in the water to serve as fish habitat. (Sources: <https://dnr.wisconsin.gov/topic/Fishing/outreach/FishSticks.html>; <https://erc.cals.wisc.edu/healthylakesgrants/files/2020/06/FishSticks-HealthyLakeFactSheetSeries2020.pdf>)
  - Restore woody habitat in lakes by adding trees to the near-shore area, trees to be sourced from emerald ash borer or other tree removals.
  - They are large woody habitat structures that use either single trees or trees grouped. Overall, ten or more tree bundles could be added in this area of the park.

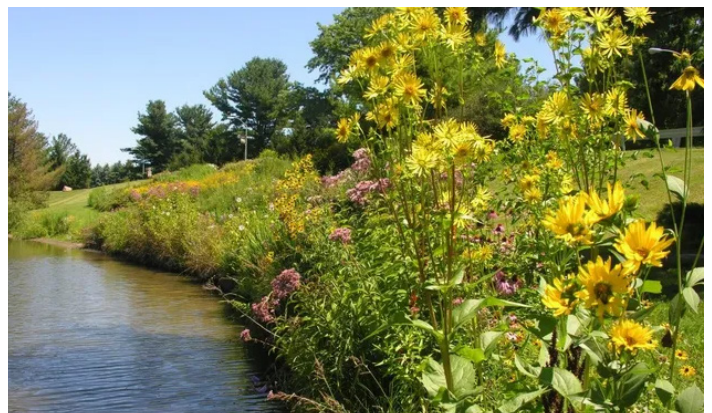
## PRAIRIE RESTORATION

- Restore the existing lawn, turf grass/park grass, to a wet prairie with typical native Minnesota vegetation.
  - Provide natural habitat, reduced need for park maintenance/mowing, and manage geese in the park.
  - Provide ADA natural surface trails throughout prairie to connect to different picnic areas.

## PRECEDENT IMAGERY



Natural Surface Trail



Shoreline Restoration



## SHORT TERM PREFERRED CONCEPT



Shoreline Fishing Access Point



'Fish sticks' habitat restoration  
Source: [dnr.wisconsin.gov](http://dnr.wisconsin.gov)



Boat launch and parking area



# RECREATION AREA LONG-TERM CONCEPT PLAN

The long-term concept plan for the recreation area at the southern end of Lake Rebecca Park recommends additional ecological and habitat improvements that may need more planning and funding than short-term projects. The long-term projects are described below and shown on the concept graphic on the following page.

## SNOW STORAGE AREA

The existing snow storage area's landform will be adjusted to capture runoff and associated sediment and salts from snowmelt to limit direct discharge to adjacent wetlands.

- Alter the landform to create a shallow bowl.
- Convert this entire area from turf grass to no mow grasses or lower diverse prairie comprised of more salt tolerant species.

## CENTRAL PARKING LOT IMPROVEMENT AND PADDLE LAUNCH

The existing central parking lot will be repaved and reshaped to have a smaller footprint and facilitate vehicles with trailers.

- A new ADA accessible kayak launch will provide a dedicated place for launch canoes and kayaks away from the fishing boat launch and parking area.
  - This site may be use for ice fishing access in the winter months.

## NORTHERN PARKING LOT REMOVAL / VERNAL POOL

- Remove northern-most parking lot and reshape the landscape to create vernal pools.
  - The optimal habitat and interest is likely multiple (approximately three) separate depressions of varying size and depth.
  - The intent is to route stormwater from the adjacent parking lot to the south to this 'stormwater' facility.
  - Add an elevated overlook to provide views of wetlands, wildlife, and Lake Rebecca.
  - Clear saplings and restore the floodplain forest west of vernal pool to reset succession trajectory and to provide a better overlook.
  - Resource: <https://www.nyfoa.org/application/files/3514/7948/6007/GuidetoCreateVernPonds.pdf>



## LONG TERM PREFERRED CONCEPT



## PRECEDENT IMAGERY



ADA Accessible Kayak Launch



Wildlife Overlook



Boardwalk







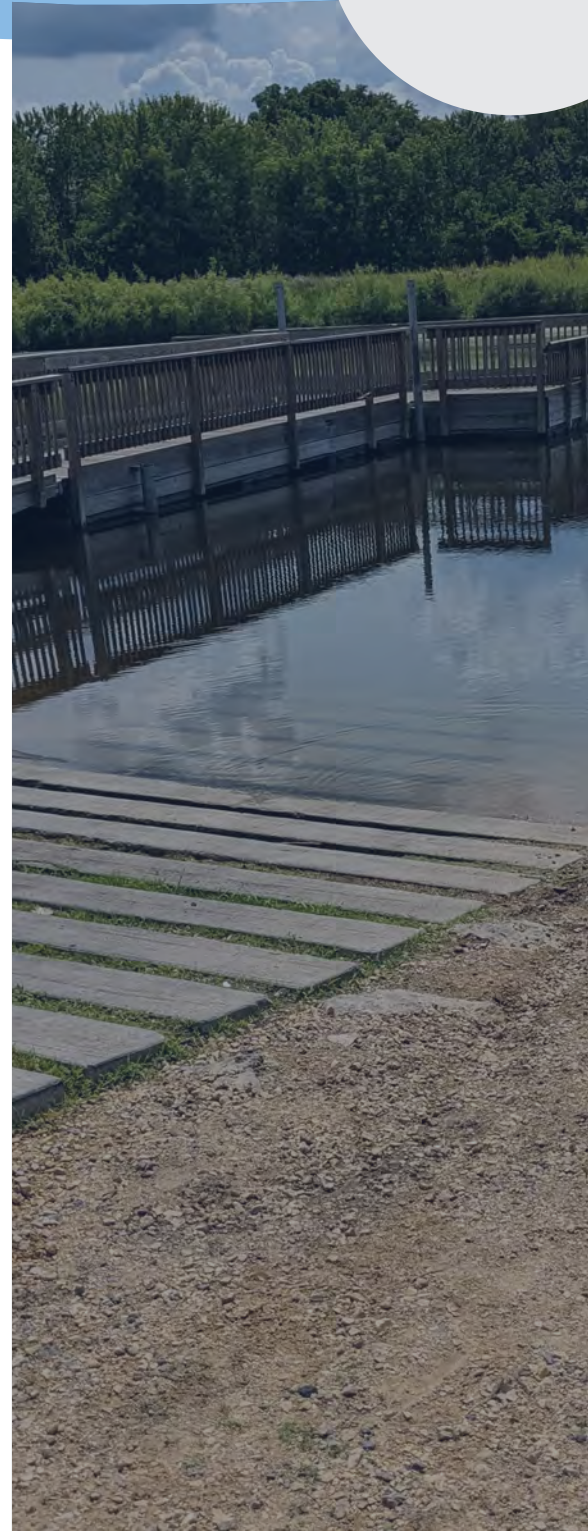


# NATURAL RESOURCES RESTORATION & MANAGEMENT PLAN



## INTRODUCTION

The Natural Resources Management Plan (the NRMP) sets targets for each land cover type within the park and outlines specific projects necessary to meet targets. The park boasts a diversity of native plant communities that the City and partners manage cooperatively. The NRMP endeavors to build upon existing partnerships and ongoing projects along with new enhancements to maximize the ecological condition of the park.





# TARGET LAND COVER

Target Land Cover for each Existing Land Cover type was established based on the DNR's Native Plant Community Classification system along with understanding of existing conditions. In most natural areas, targets focus on reducing invasive species cover, enhancing native plant diversity, setting communities on trajectories that match target cover age classes and structure, and/or providing additional wildlife habitat.

## LAND COVER CATEGORIES

### RESTORED PRAIRIE

Target cover could maintain and enhance the restored prairie by removing cottonwood, implementing a prescribed burn regimen, overseeding to enhance diversity. Suitable DNR Native Plant Community classes are Mesic Prairie (UPs23) and Mesic Savanna (UPs24). Bur oaks could be planted in the northern portion to blend with savanna/woodland restoration of Altered Forest. Alternatively, pre-settlement conditions were likely Floodplain Forest, and managed succession (including tree plantings/cottonwood thinning) could be an alternative option depending on stakeholder goals.

### RED OAK-SUGAR MAPLE-BASSWOOD-(BITTERNUT HICKORY) FOREST (MHS38C)

The USACE management plan currently targets savanna/woodland. Suitable DNR Native Plant Community Classes include Mesic Savanna (UPs24) and Southern Dry-Mesic Oak Woodland (FDs37). A suitable target for the northwest Altered Woodland is likely Red Oak-Sugar Maple-Basswood-(Bitternut Hickory) Forest (MHS38c) based on the mapped presence of this cover type in the vicinity.

### INFRASTRUCTURE/PARKLAND

Target cover should increase the amount of cover types dominated by native vegetation, such as converting turf to prairie and the western parking lot to a natural area resembling a native plant community.

### UTILITY LINE - WET MEADOW/HRB CARR/MARSH (WMN82/MRN93)

Target cover should maintain the same plant communities, with goals for reduced invasive species cover.

### FLOODPLAIN FOREST (FFS68)

The USACE management plan currently targets floodplain forest. Suitable DNR Native Plant Community classes are Southern Floodplain Forest (FFs68) for the majority of the area, with high topographic areas targeted for Southern Terrace Forest (FFs59). Planned management by USACE includes canopy and crown thinning to enhance forest diversity and development of cavity trees for wildlife benefit.

### FLOODPLAIN FOREST (FFS59)

The USACE management plan currently targets floodplain forest. Suitable DNR Native Plant Community classes are Southern Terrace Forest (FFs59) for the majority of the area, with low topographic areas targeted for Southern Floodplain Forest (FFs68).

### SHALLOW MARSH (MRN93)

Target cover should maintain the same plant community, with goals for reduced invasive species cover.

### FLOODPLAIN FOREST/MARSH COMPLEX (FFS68/MRN93)

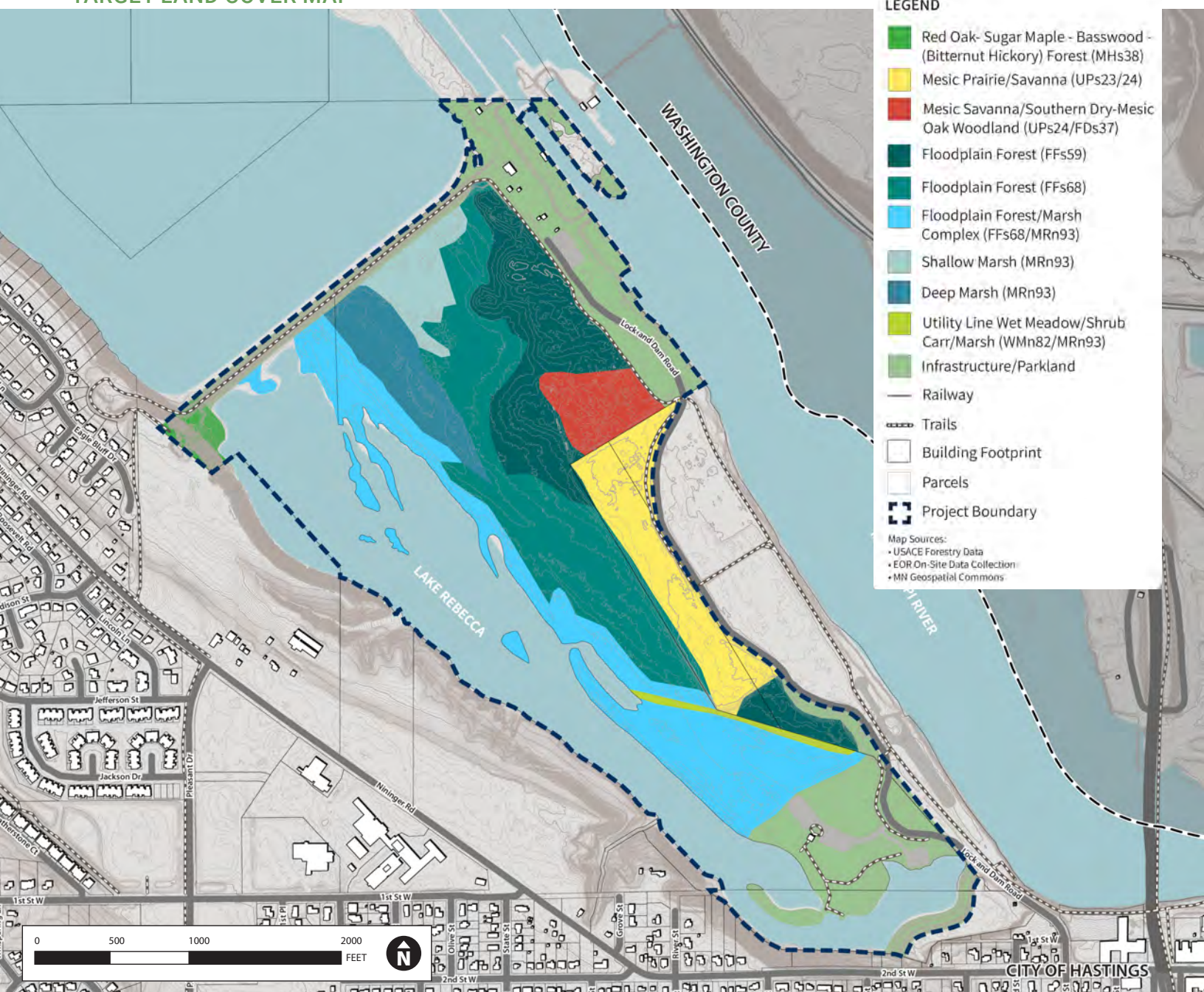
Target cover should maintain the same plant community, with goals for reduced invasive species cover.

### DEEP MARSH (MRN93)

Target cover should maintain the same plant community, with goals for reduced invasive species cover.



## TARGET LAND COVER MAP



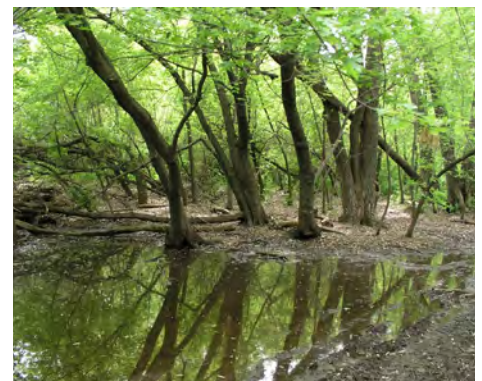
## PRECEDENT IMAGERY



Prairie Restoration



Shoreline Restoration



Floodplain Forest Restoration

# PLANNED MANAGEMENT PROJECTS

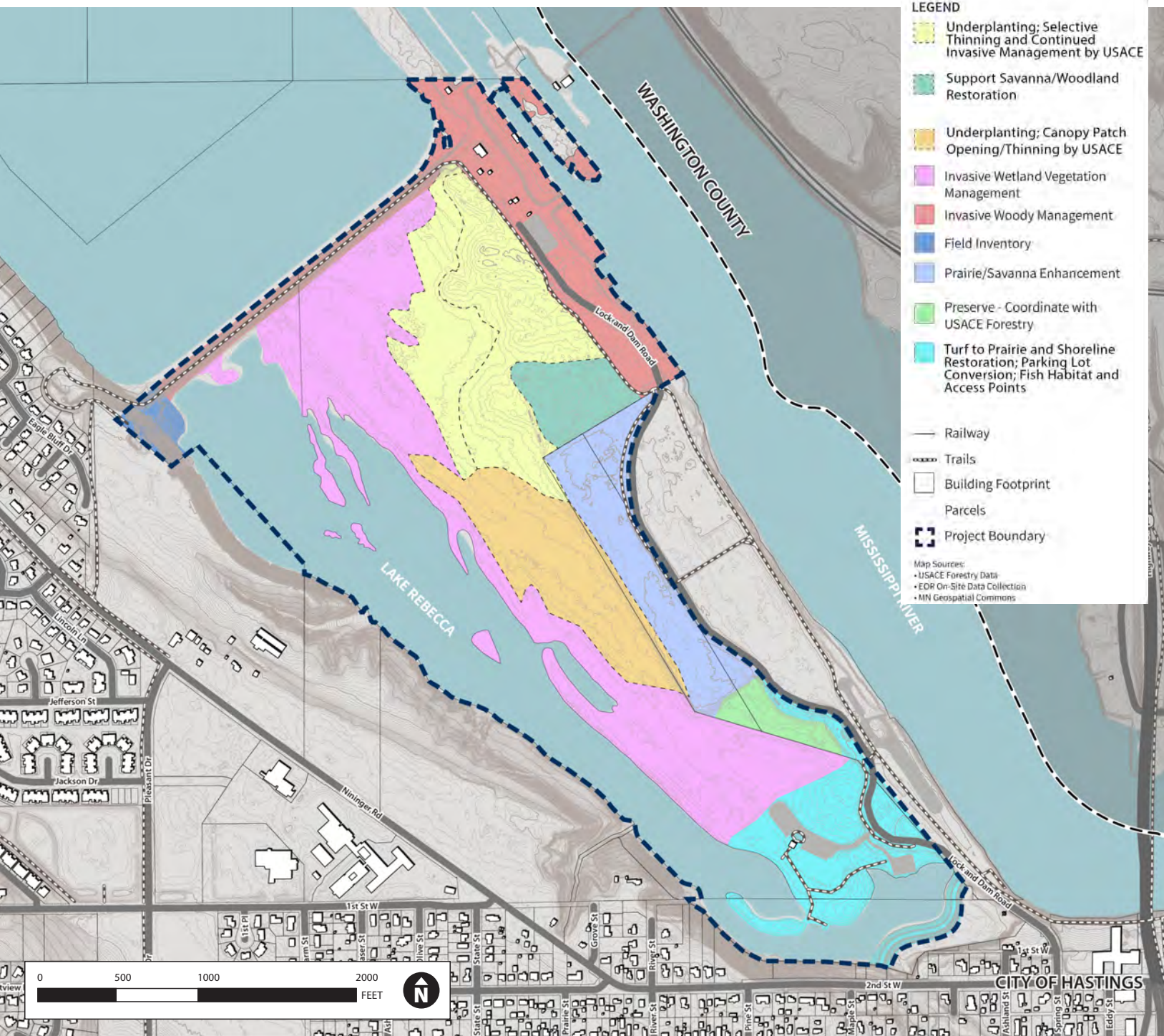
Proposed natural resource projects are focused on prairie enhancement, supporting the USACE's ongoing savanna/woodland restoration and floodplain forest enhancements, recreation area enhancements. Invasive herbaceous vegetation assessment/management and additional assessment of unsurveyed areas are also included as medium/low priority projects.

In addition to the proposed projects of the Master Plan, USACE will continue to enact their existing management plan in floodplain forest areas. These activities may include canopy patch opening, selective thinning, and follow up management of Master Plan activities on USACE-owned lands where appropriate.

LOCATION	DESCRIPTION	ESTIMATED COST	ACRES	NOTES
<b>Prairie/Savanna Enhancement</b>				
Restored Prairie	Remove cottonwoods/encroaching woody species to restore prairie structure. Manage dense patches of invasive grasses. Implement prescribed burn regimen to prevent woody succession. Overseed for forb/cool-season diversity to enhance pollinator habitat and improve resilience to invasive grasses. Plant oaks on north end to blend with adjacent savanna/woodland restoration and minimize hard edge habitat.	\$52,500	16	Long-term management requires prescribed burn regimen on schedule of 4-8 years.
<b>Support USACE Savanna/Woodland Restoration</b>				
Altered Woodland	Remove non-oak/hickory tree species. Forestry mow buckthorn. As master plan timeline allows, conduct follow-up foliar buckthorn treatments if necessary. Implement a prescribed burn regimen and overseed with a buckthorn recovery seed mix to improve fuel load, improve diversity, and enhance resilience to buckthorn reinvasion.	\$38,500	7	USACE will partner for ongoing management.
<b>Support USACE Terrace Forest Restoration</b>				
Floodplain Forest (FFs59); Floodplain Forest (FFs68)	Foliage spray buckthorn	\$20,000	20	USACE will partner for ongoing management.
<b>Recreation Area Enhancements</b>				
Parkland/ Infrastructure	Turf to prairie and shoreline vegetation restoration to enhance native plant diversity. Remove diseased/dying ash trees and preserve snags for wildlife habitat as able. Design snow storage runoff treatment area with no mow/ low diversity natives comprised of salt tolerant species. Manage buckthorn within small areas of floodplain forest. Clear saplings within overgrown restored prairie to reset succession trajectory. Convert west parking lot to a vernal pool landscape to blend with adjacent large tracts of floodplain forest, provide wildlife habitat, and scenic views. Add "fish sticks" along shoreline using ash tree removals that provide woody debris fish habitat. Add concentrated fishing access points to minimize disturbance of restored shoreline vegetation.	\$327,500	7	Long-term management of turf to prairie restoration requires prescribed burn regimen on schedule of 4-8 years. Vernal pool conversion may be subject to additional O&M based on final design.
<b>Medium/Low Priority Assessments and Management</b>				
Parkwide	Inventory garlic mustard to quantify presence and potential management effectiveness. Manage garlic mustard if necessary/feasible based on assessment results. Treat purple loosestrife and invasive cattail with herbicide to reduce invasive species cover in emergent wetlands. Assess the northwest corner (Altered Woodland) that was not originally part of project area for restoration/enhancement opportunities.	\$5,200	Parkwide	Estimated costs do not include garlic mustard treatments and any recommended management from assessments.



# PLANNED MANAGEMENT PROJECTS MAP







## GOOSE MANAGEMENT BEST PRACTICES GUIDELINES

Geese prefer areas near water and low vegetation (e.g. turf grass or lawn). In order to reduce the amount of geese in a park setting, the following non-lethal practices may be employed that discourage use of areas by geese:

- Plant tall vegetation, such as native prairie grasses, tall shrubs, forbs.
- Reduce large areas of turf grass.
- Plant tall shoreline vegetation that blocks the view of water bodies from turf grass areas and/or trails.
- Maintain shoreline vegetation with concentrated access points and low/no mow management so that the buffer is maintained as a barrier to geese.
- Plant a variety of shade and evergreen trees in an open area to break up large areas of turf or low vegetation.



*Shoreline vegetation*



*Prairie restoration*



*Oak savanna*



## ONGOING PARTNER RESPONSIBILITIES

Installation, operation, and long-term maintenance of the development and natural resource enhancement projects in the plan will be the responsibility of a number of partner organizations. The table below highlights some of the resources and responsibilities available to make the Lake Rebecca Park Master Plan a success.

ORGANIZATION	RESPONSIBILITY	PROJECT AREAS	PLANNING RESOURCES	FUNDING RESOURCES	CONTACT NAME
City of Hastings	Park operator Holds a 50-year lease over the major park parcel	Recreation area-boat launch, parking, fishing dock, lake activities		Administrating LCCMR grant to develop park master plan City operational funding	Chris Jenkins
Friends of the Mississippi River (FMR)	City partner and 'gap-filler' to assist the city in implementation of projects Advisor to the city	FMR works on projects along the 72-mile+ corridor of the National Park of the Mississippi River	Past restoration work Previous Lake Rebecca Park Master Plan	Nonprofit funding Grant writing and implementation	Alex Roth
USACE Forestry	Manage natural resources	Floodplain restoration	GIS data	\$50K per year for restoration efforts	Andy Meier
USACE Real Estate	Owns the major parcel of the park Operates the dam Holds the lease with the City of Hastings		Section 106 planning Permits certain uses on the property		Ray Marinan
Dakota County Planning and Greenways		Regional Trail Wayfinding signage Interpretive signage	Greenway trail plan County Natural Resources planning	Cost-share for the 300' wide regional trail corridor	John Mertens; Tony Wotzka
Dakota County SWCD			MLCCS data		
MN DNR Parks and Trails		Boat launch Parking area Signage		DNR Get Out More program funding Boat launch upgrades funding	Rachel Henzen
MN DNR Fisheries		Fishing dock Wildlife habitat Water quality			TJ Debates
MN DNR Hydrology	Upholds state statutes related to work below the OHWL		Permitting related to the OHWL		Taylor Huinker
VRWJPO		Upstream water quality projects			Travis Thiel
National Park Service (NPS)	National Water Trail (Mississippi River) Interpretive sign panels	Boating Kayaking/canoeing Portaging through Lake Rebecca		Grant for kayak/canoe launch Provide kayak rental station	Forest Eidbo
State Historic Preservation Office (SHPO)	Uphold state statutes related to cultural resources		Review Phase 1 Archaeology Study	n/a	
HEP (Hastings Environmental Protectors)	Boots on the ground restoration projects	Volunteer-led group		Volunteer labor	Kevin Smith
Tribal - Prairie Island Indian Community	Provide input related to land acknowledgment and interpretation				Noah White; Franky Jackson







# IMPLEMENTATION & PHASING

## PROJECT PHASING

This plan recommends projects that will enhance the ecological habitat in Lake Rebecca Park and will provide improvements to passive recreation facilities and amenities. The ideas and recommendations in this master plan must be implemented in phases in order to align with existing and potential future funding resources. The following table identifies a proposed phasing plan for projects to be implemented in 2024 and 2025.

Phase / Timeline	Projects Description	Approximate Cost
Fall 2024	Natural Resource projects	~\$150K (timing dependent on USACE approvals)
Fall 2024	Removals and rough grading in the Recreation Area	~\$300K (dependent on USACE approvals)
Spring 2025	Boat ramp, parking lot, trails, wet prairie and shoreline restoration in Recreation Area (depending on budget)	~\$300K
2024-2025	Ecological and recreational improvements total to align with LCCMR grant funding	~\$750K
<i>All other projects are long-term, to be implemented as funding allows.</i>		

### LONG-TERM / VISIONARY PROJECTS

The projects are not included in the cost estimates. These projects will be implemented as funding and resources allow.

- The portage from the Mississippi River to the south end of Lake Rebecca, through Lake Rebecca, out the north end of the lake back to the river. Should this remain a high level, long-term project in the master plan?
- A proposed soft surface trail loop in the northern part of the park will connect to the Mississippi River Greenway Regional Trail and provide an immersive experience into the floodplain forest.



# IMPLEMENTATION FUNDING & FUNDING SOURCES

## FUNDING OPTIONS AND SOURCES

A number of federal, state, and local agencies and organization have committed funding to implementation of improvements of Lake Rebecca Park. Other opportunities exist for further funding. The funding options and sources are listed below according to the source.

### LCCMR / ENRTF

In September 2022, the city of Hastings received a grant from the LCCMR for the Hastings Lake Rebecca Park Area, in the amount of \$1,000,000, granted from the Environment and Natural Resources Trust Fund to the commissioner of natural resources (DNR) for an agreement with the city of Hastings to develop an ecological-based master plan for Lake Rebecca Park and to enhance habitat quality and construct passive recreational facilities consistent with the master plan. The grant agreement states that no funds for implementation may be spent until the master plan is complete. The grant expires on June 30, 2025, when all funds must be spent on the master plan and implementation projects.

Of the total \$1,000,000 grant funding:

- Master planning and design fees are approximately \$250,000
- The remaining amount, approximately \$750,000, will be used to implement and construct projects identified in this master plan.

### MN DEPARTMENT OF NATURAL RESOURCES (DNR)

The DNR Parks and Trails Division provides funding opportunities to improve public access to outdoor recreation, such as fishing and boating.

- The DNR program 'Get Out More' has funding that may be applied for to improve public fishing access.
- The DNR could enter into an agreement to help provide the planks for the boat access—concrete planks for the boat ramp.
- The DNR may be able to provide fishing pier upgrades to the two existing fishing piers at Lake Rebecca.

### NATIONAL PARK SERVICE (NPS)

The Nation Park Service partners with its non-profit partner, the Mississippi Park Connection, to provide funding for park improvements. Currently, through this partner, the NPS is providing \$15,500 for an ADA accessible paddle launch at Lake Rebecca. This funding needs to be spent by 2025.

The NPS has an additional \$15,000 available to supplement the cost of the ADA accessible paddle launch, which brings the total cost assistance to \$30,500. This funding must be used for a dedicated paddle launch, separate from the motorized boat launch in the park.



# PLANNED PROJECTS & COST ESTIMATES

## PLANNED NEAR-TERM NATURAL RESOURCE MANAGEMENT PROJECTS

Project	Task	Schedule	Schedule Notes
Prairie Enhancement	Cottonwood removal	Winter 2024	
	Prescribed burn	Spring 2025	
	Herbicide cool season grasses	Spring 2025	Would be ideal to stage in Fall 2025
	Purchase seed	Spring 2025	Would be ideal for December 2025
	Pocket plant forbs/sedges/cool season grasses	Spring 2025	Would be ideal in Spring 2026
	Plant bur oaks	Spring 2025	
Support Savanna Restoration	Non oak/hickory removal	Winter 2024	
	Forestry mow buckthorn	Winter 2024	
	Prescribed burn	Spring 2025	
	Purchase seed	Spring 2025	
	Integrate follow up buckthorn treatment/seeding into USACE management plan	Winter 2024	
Support Terrace Forest Reforestation	Foliage spray buckthorn	Fall 2024	
Recreation Area Enhancements	Turf to prairie restoration	Fall/Spring 2024/25	
	Shoreline restoration improved goose buffers, veg diversity, and pollinator habitat.	Fall/Spring 2024/25	
	Overgrown sapling to prairie restoration	Winter 2024	
	Fish sticks	Winter 2024	
	Ash tree removals/snag preservation	Winter 2024	
	Floodplain forest enhancement	Fall 2024	
	Snow storage runoff management/veg enhancement	Winter/Spring 2024/25	
	Parking lot removal and restoration to forested vernal pools	Winter/Spring 2024/25	
	Additional fishing access points	Spring 2025	
<b>Low Priority / Long-term Projects</b>			
Garlic Mustard Assessment and Management	Inventory	Spring 2025	
	Treatment (if necessary)	Spring 2025	
Emergent Invasive Management	Treat invasive cattail and purple loosestrife	Fall 2024	
NW Woodland Inventory/ Management	Assess northwest corner that was not originally part of project area	Spring 2025	

## NATURAL AREAS IMPROVEMENTS COST ESTIMATE

The following cost estimate includes specific projects and costs to implement the near-term natural resources improvements and management projects as listed on page 49. The total estimated cost of near-term natural resource projects is \$164,539. These projects are anticipated to be completed partly through the City of Hastings' LCCMR grant for Lake Rebecca Park enhancement as well as partnership projects through the USACE Forestry.

PRAIRIE ENHANCEMENT					
ITEM	QTY	UNITS	UNIT COST	TOTAL	COMMENTS
COTTONWOOD REMOVAL	4	AC	\$3,000	\$12,000	
PRESCRIBED BURN	16	AC	\$1,000	\$16,000	
HERBICIDE COOL SEASON GRASSES	5	AC	\$2,000	\$10,000	
PURCHASE SEED	16	AC	\$750	\$12,000	Purchase only - timing likely will not allow for seeding. USACE has storage capabilities.
FINE GRADING	5	EA	\$500	\$2,500	2" caliper
<b>SUBTOTAL</b>				<b>\$52,500</b>	
SUPPORT SAVANNA RESTORATION IN PARTNERSHIP WITH USACE					
ITEM	QTY	UNITS	UNIT COST	TOTAL	COMMENTS
NON-OAK/HICKORY REMOVAL	7	AC	\$3,000	\$21,000	
FORESTRY MOW BUCKTHORN	7	AC	\$1,500	\$10,500	
PRESCRIBED BURN	7	AC	\$500.00	\$3,500	Buckthorn may require follow up foliar spray - timeline may not allow for burn
PURCHASE SEED	7	AC	\$500.00	\$3,500	Purchase only - timing likely will not allow for seeding. USACE has storage capabilities.
INTEGRATE FOLLOW UP MANAGEMENT/SEEDING WITH USACE PLAN	7	NA	NA	NA	
<b>SUBTOTAL</b>				<b>\$38,500</b>	
SUPPORT TERRACE FOREST RESTORATION IN PARTNERSHIP WITH USACE					
ITEM	QTY	UNITS	UNIT COST	TOTAL	COMMENTS
FOLIAR SPRAY BUCKTHORN	20	AC	\$1,000	\$20,000	
<b>SUBTOTAL</b>				<b>\$20,000</b>	
GARLIC MUSTARD ASSESSMENT AND MANAGEMENT					
ITEM	QTY	UNITS	UNIT COST	TOTAL	COMMENTS
GARLIC MUSTARD INVENTORY	1	LS	\$2,000	\$2,000	Medium priority - likely not a major issue
GARLIC MUSTARD TREATMENT	UNKNOWN	LS	NA	NA	Only treat if long-term commitment and partnerships in place
<b>SUBTOTAL</b>				<b>\$2,000</b>	
EMERGENT INVASIVE MANAGEMENT					
ITEM	QTY	UNITS	UNIT COST	TOTAL	COMMENTS
HERBICIDE TREATMENT OF PURPLE LOOSESTRIPE AND HYBRID CATTAIL	2	EA	\$1,600	\$3,200	Medium priority. Only treat if long-term commitment and partnerships in place
<b>SUBTOTAL</b>				<b>\$3,200</b>	
NORTHWEST WOODLAND INVENTORY/MANAGEMENT					

Cost estimate continued on following page



ITEM	QTY	UNITS	UNIT COST	TOTAL	COMMENTS
ASSESS NORTHWEST CORNER THAT WAS NOT ORIGINALLY PART OF PROJECT AREA	NA	NA	NA	NA	Low priority, but could be assessed concurrently with garlic mustard and recommendations put into master plan/addendum
SUBTOTAL				NA	
BASE PROJECT TOTAL				\$116,200	
20% DESIGN AND CONSTRUCTION CONTINGENCY				\$23,240	
PROJECT CONSTRUCTION TOTAL				\$164,539	
DESIGN, ENGINEERING, CA, SURVEY, GEOTECH				\$25,099	

## RECREATION AREA PROJECTS COST ESTIMATE

The following cost estimates include items and costs to implement both recreation facilities and natural resource management projects shown and described on pages 34-37 in this master plan document. The total estimated cost to construct near-term projects is \$1,009,992, which includes a 20% contingency. Available funding through the City of Hastings' LCCMR grant for implementation in 2024-2025, is approximately \$760,000. As the project is designed further, it is anticipated that some of the projects may be identified as alternate items in order to keep near-term implementation within the available funding budget.

### NEAR-TERM (2025) PROJECTS COST ESTIMATE

GENERAL EATHWORKS AND SITE PREP					
ITEM	QTY	UNITS	UNIT COST	TOTAL	COMMENTS
CLEARING AND GRUBBING	1	LS	\$40,000	\$40,000	
PAVEMENT REMOVALS	1	LS	\$125,000	\$125,000	Includes existing trails, picnic concrete pads
ROUGH SITE GRADING	1	LS	\$40,000	\$40,000	
FINE GRADING	1	LS	\$30,000	\$30,000	
<b>SUBTOTAL</b>				<b>\$235,000</b>	
SURFACES					
ITEM	QTY	UNITS	UNIT COST	TOTAL	COMMENTS
NATURAL SURFACE TRAIL	2780	LF	\$30	\$83,400	Aggregate path with binder to stabilize
BITUMINOUS TRAIL	980	LF	\$50	\$49,000	ADA
BITUMINOUS PARKING LOT	42,300	SF	\$4.00	\$169,200	Includes new drive access and two new parking areas (boat launch + western parking lot)
BOAT RAMP	820	SF	\$8.00	\$6,560	20' wide
<b>SUBTOTAL</b>				<b>\$308,160</b>	
SIGNAGE					
ITEM	QTY	UNITS	UNIT COST	TOTAL	COMMENTS
INTERPRETIVE SIGNS (NATURAL AREAS)	2	EA	\$500	\$1,000	Describing the purpose and process of natural area restoration
<b>SUBTOTAL</b>				<b>\$1,000</b>	
LANDSCAPE / NATURAL RESOURCES					
ITEM	QTY	UNITS	UNIT COST	TOTAL	COMMENTS
TREE ALLOWANCE	20	LS	\$750.00	\$15,000	Diseased tree removals and new plantings
WET PRAIRIE RESTORATION	6	ACRE	\$35,000.00	\$210,000	Turf to prairie. Herbicide treatment, seeding, select interplanting, erosion control and goose enclosure
SNOW STORAGE AREA RUNOFF MANAGEMENT	1	LS	\$30,000.00	\$30,000	Turf grass conversion to no mow grasses or lower diverse prairie comprised of more salt tolerant species. Grading, erosion control and seeding
FLOODPLAIN FOREST ENHANCEMENT	4	ACRE	\$5,000.00	\$20,000	For invasive control and accelerated forest succession
SAPLING CLEARING	0.5	ACRE	\$15,000.00	\$7,500	To reset succession trajectory. Selective thinning and later succession tree planting
SHORELINE FISHING ACCESS POINTS	5	EA	\$5,000.00	\$25,000	
FISH STICKS	10	EA	\$2,000.00	\$20,000	
<b>SUBTOTAL</b>				<b>\$297,500</b>	
<b>BASE PROJECT TOTAL</b>				<b>\$841,660</b>	
<b>20% DESIGN AND CONSTRUCTION CONTINGENCY</b>				<b>\$168,332</b>	
<b>2024-2025 PROJECT TOTAL</b>				<b>\$1,009,992</b>	
<b>DESIGN, ENGINEERING, CA, SURVEY, GEOTECH (18%)</b>				<b>\$181,799</b>	



## LONG-TERM PROJECTS COST ESTIMATE

GENERAL EATHWORKS AND SITE PREP					
ITEM	QTY	UNITS	UNIT COST	TOTAL	COMMENTS
FINE GRADING	1	LS	\$30,000	\$30,000	
<b>SUBTOTAL</b>				<b>\$30,000</b>	
SURFACES					
ITEM	QTY	UNITS	UNIT COST	TOTAL	COMMENTS
CONCRETE PAD PICNIC AREA	1980	SF	\$24	\$47,520	
BOARDWALK	113	LF	\$600	\$67,800	near wildlife overlook, 6 ft wide
<b>SUBTOTAL</b>				<b>\$115,320</b>	
STORMWATER TREATMENT					
ITEM	QTY	UNITS	UNIT COST	TOTAL	COMMENTS
VERNAL POOLS "STORMWATER FACILITY"	1	LS	\$150,000	\$150,000	Removals, grading, soil import, seeding and select interplanting
<b>SUBTOTAL</b>				<b>\$150,000</b>	
PARK IMPROVEMENTS					
ITEM	QTY	UNITS	UNIT COST	TOTAL	COMMENTS
EXISTING DOCK REPLACEMENT		potential partnership			400 SF, potentially DNR?
ADA ACCESSIBLE WATERCRAFT LAUNCH	1	LS	\$50,000	\$50,000	NPS funding partnership
WILDLIFE OVERLOOK DECK	1	LS	\$120,000	\$120,000	Timber deck construction (260 SF) and steel railing (45 LF)
<b>SUBTOTAL</b>				<b>\$170,000</b>	
SIGNAGE					
ITEM	QTY	UNITS	UNIT COST	TOTAL	COMMENTS
WAYFINDING	3	EA	\$2,500	\$7,500	At key intersections
INTERPRETIVE	1	EA	\$5,000	\$5,000	At wildlife overlook
KIOSK	1	EA	\$15,000	\$15,000	At picnic shelter area
<b>SUBTOTAL</b>				<b>\$27,500</b>	
SITE FURNISHINGS					
ITEM	QTY	UNITS	UNIT COST	TOTAL	COMMENTS
PICNIC SHELTER	1	LS	\$75,000	\$75,000	15'x15' pre-fab shelter
BENCHES	1	EA	provided by city		
PICNIC TABLES	4	EA			
BOULDERS AT PARKING LOT	TBD	EA	\$1,500	TBD	
LIGHTING - PEDESTRIAN LIGHTS	5	EA	\$2,500	\$12,500	would need to be solar
WASTE RECEPTACLES		EA	provided by city		trash and recycling
<b>SUBTOTAL</b>				<b>\$87,500</b>	
LANDSCAPE / NATURAL RESOURCES					
ITEM	QTY	UNITS	UNIT COST	TOTAL	COMMENTS
SNOW STORAGE AREA RUNOFF MANAGEMENT	1	LS	\$30,000.00	\$30,000	Turf grass conversion to no mow grasses or lower diverse prairie comprised of more salt tolerant species. Grading, erosion control and seeding
<b>SUBTOTAL</b>				<b>\$30,000</b>	
<b>BASE PROJECT TOTAL</b>				<b>\$610,320</b>	
<b>20% DESIGN AND CONSTRUCTION CONTINGENCY</b>				<b>\$122,064</b>	
<b>LONG-TERM PROJECT TOTAL</b>				<b>\$732,384</b>	
<b>DESIGN, ENGINEERING, CA, SURVEY, GEOTECH (18%)</b>				<b>\$131,829</b>	



