

An aerial photograph of the Lock and Dam on the Chicago River. The lock is a large concrete structure with a ramp leading down to the water. The river flows through the lock, creating a small waterfall at the dam. In the background, the Chicago skyline is visible with various skyscrapers and buildings. The sky is blue with scattered white clouds. A white graphic element, resembling a stylized lock or a vertical bar with a notch, is positioned on the left side of the image.

# TRANSFORMING THE LOCK

A Vision for a National Park Visitor Experience

## APPRECIATION

We are grateful for the ideas and energy of more than 150 people in creating this vision for the future of the Upper St. Anthony Falls Lock.

Our special thanks for the creativity and talent of:

MSR



*These community generated ideas were supported in part by The George Family Foundation and the National Parks Conservation Association Midwest Regional Council.*



CONGRESS OF THE UNITED STATES  
HOUSE OF REPRESENTATIVES

Dear Friends,

As the representative for Minnesota’s Fifth Congressional District, I am pleased to introduce “Transforming the Lock: A vision for a national park visitor experience at the St. Anthony Falls.” Years ago, I led the effort to pass bipartisan legislation that closed the St. Anthony Falls Upper Lock to boat traffic in order to stop the spread of invasive carp into the Mississippi headwaters. This closure opened a unique opportunity for the people who visit, live and work near our riverfront — a chance to create a world-class visitor destination in the center of the Mississippi National River and Recreation Area.

The lock is located in the heart of downtown Minneapolis, an area that welcomes more than two million visitors every year. Since the lock’s closure, the U.S. Army Corps of Engineers and the National Park Service have joined together to provide tours so that people can see the inner workings of the lock and learn about the history of the mighty Mississippi River.

Over the last two years, more than 150 people from the Twin Cities came together to develop ideas for the future of this historic building in the central riverfront. “Transforming the Lock” reflects input from community groups, planning professionals, educational and cultural institutions, business leaders and government agencies. These ideas would help make this part of our downtown more beautiful, more accessible, and more representative of the history and importance of the Mississippi River.

Not many cities have a National Park running right through their heart. Now is the time to transform the Lock into a destination that reflects our relationship with the Mississippi National River and Recreation Area. I look forward to working with fellow Minnesotans to make this vision a reality.

Sincerely,

KEITH ELLISON  
Member of Congress

ADVISORY TEAM

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- Andrea Kajer, *Minnesota Historical Society*
- Anita Tabb, *Minneapolis Park and Recreation Board*
- Ben Shardlow, *Minneapolis Downtown Council*
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- Cara Letofsky, *Metropolitan Council District 8*
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- Elie Farhat, *Office of County Commissioner Marion Greene*
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- Irene Jones, *Friends of the Mississippi River*
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- Michael Rainville, *Meet Minneapolis*
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- Nanette Bischoff, *U.S. Army Corps of Engineers, St. Paul District*
- Nicky Leingang, *Office of Congressman Keith Ellison*
- Pat Nunnally, *University of Minnesota*
- Paul Reyelts, *Friends of the Lock and Dam*
- Peter Gove, *National Parks Conservation Association Council*
- Peter Wagenius, *Office of Minneapolis Mayor Betsy Hodges*
- Sara Barrow, *Xcel Energy*
- Thomas Fisher, *University of Minnesota*
- Tom Evers, *Minneapolis Parks Foundation*
- Vincent James, *VJAA*
- Win Rockwell, *The Great Plains Institute*

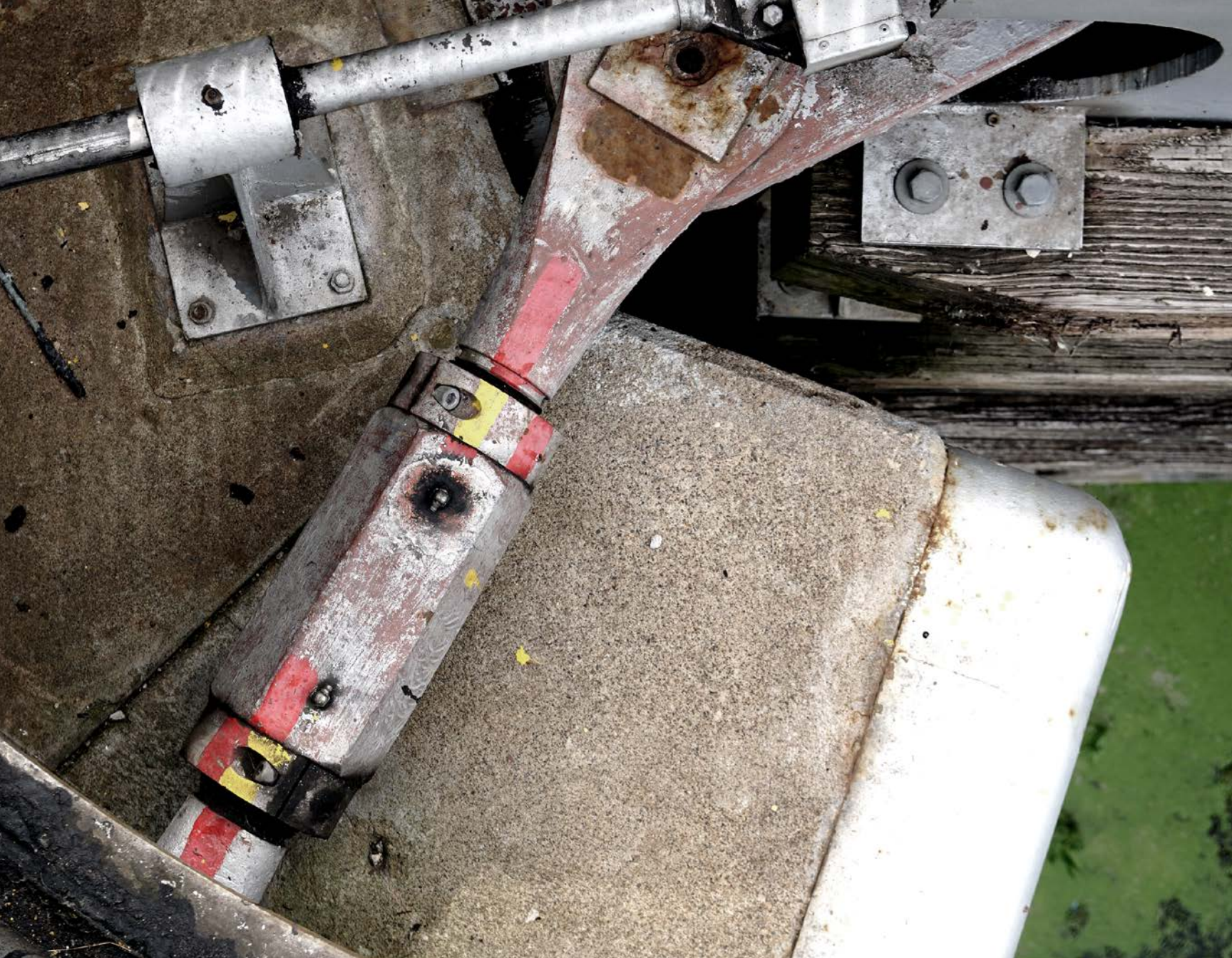
A special thanks to Michael DeRusha from the U.S. Army Corps of Engineers, Andrew Arlt and students from the River’s Edge Academy, and Patrick Lynch and Eric Miller whose photography is featured throughout.



# VISION

Visitors to our national park will experience the river's history, power and majesty at the Upper St. Anthony Falls Lock.

The lock becomes a world class destination with amenities and programs for residents and visitors; safe and accessible streets, trails and transit.



## TABLE OF CONTENTS

12 About the Lock

18 Transforming the Lock

22 Our National Park

36 Park Experience

46 Design & Access

58 Moving Forward



## FROM ADVOCACY TO VISION

On June 10, 2015, the Upper St. Anthony Falls Lock in Minneapolis closed to boat traffic in order to stop invasive Asian carp from continuing their march up the Mississippi River, thereby protecting thousands of lakes and miles of rivers upstream. Closing the lock happened only because of the passion and advocacy by a community determined to protect its way of life and its precious water resources.

With the closure of the lock, located at the mid-point of the 72-mile Mississippi National River and Recreation Area, we have an opportunity to shine a spotlight on this national park and create a world class experience for city residents and visitors alike.

Much like Independence Hall in Philadelphia and the Gateway Arch in St. Louis, our own urban national park boasts significant stories and unique features near a thriving downtown area. This stretch of the river is home to the only major falls on the entire Mississippi. And while it's already a bustling riverfront, most are unaware that they are in a national park.

There is a lot of momentum in the city to develop a strong network of riverfront parks and attractions that will make Minneapolis a premier place to visit and experience the Mississippi River. "Transforming the Lock" is about capturing that momentum and bringing forward a shared vision for the future with one of our greatest assets at the center – the National Park Service.

Closing the lock took passion and dedication toward a shared goal, not to mention an Act of Congress! Working together, we can ensure the lock will become a welcoming place to celebrate our heritage within the national park.

Christine Goepfert  
National Parks Conservation Association



*With more than one million members and supporters, National Parks Conservation Association is America's voice for national parks. Founded in 1919, NPCA is an independent, nonpartisan voice working to strengthen and protect our nation's natural, historical, and cultural heritage.*

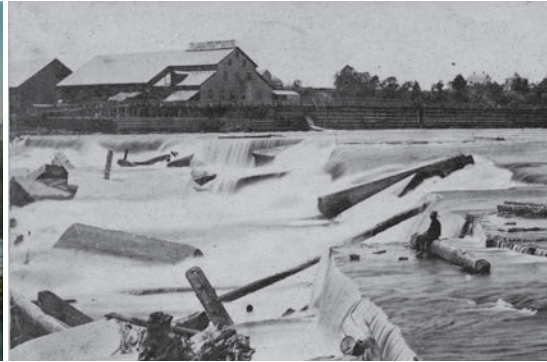


## ABOUT THE LOCK

“The Mississippi River is one of the world’s most renowned rivers. Only one national park unit has a specific reach of the great river as its focus and mission, and that park is the Mississippi National River and Recreation Area.”

National Park Service

1933 ————— Mississippi River Nine Foot Channel Construction Begins  
 1937 ————— Congressional Approval for Upper St. Anthony Lock



1959 ————— Lock Construction Begins

1963 ————— Lock Construction Ends



2015 ————— Lock Closes to Navigation

2016 ————— NPS Begins Lock Tours

*Historic depictions of the river from 1786 to construction of the Upper St. Anthony Falls Lock in 1960. Courtesy of Minnesota Historical Society.*

## HISTORY & SIGNIFICANCE

The City of Minneapolis owes its start to St. Anthony Falls, the only major falls on the entire Mississippi River. The power that the falls generated led to the city's early industrial development, first for sawmilling, then for flour milling.

By 1880, Minneapolis had become the nation's flour milling capital. Rail lines, including the Stone Arch Bridge, soon emerged to connect the wheat fields to the mills in order to feed the nation's demand for flour. The falls provided a critical source of power for industry and enabled drinking water to be pumped to residents across the city.

In the early 1900s, Minneapolis began to lose its dominant position in the flour milling industry. After 1930, the flour mills gradually began to shut down, and by the late-20th century, most of the milling operations ceased.

Despite the fall of the milling industry, city leaders knew the river had other economic uses and pushed for a series of locks and dams that would bring navigation above St. Anthony Falls where the city could build a shipping terminal. In 1963, the Upper St. Anthony Falls Lock and Dam was completed by the U.S. Army Corps of Engineers, allowing barges to move goods upstream above the falls and making Minneapolis the head of navigation on the river.

Long before the rise of the Twin Cities and the building of the lock, St. Anthony Falls was culturally and historically important to the Native American people who lived along the shores of the Mississippi River. The falls provided a place for ceremonies and

even served as a source of special clay for painting by the Dakota, who called the river Ha Ha Wakpa or "River of the Falls."

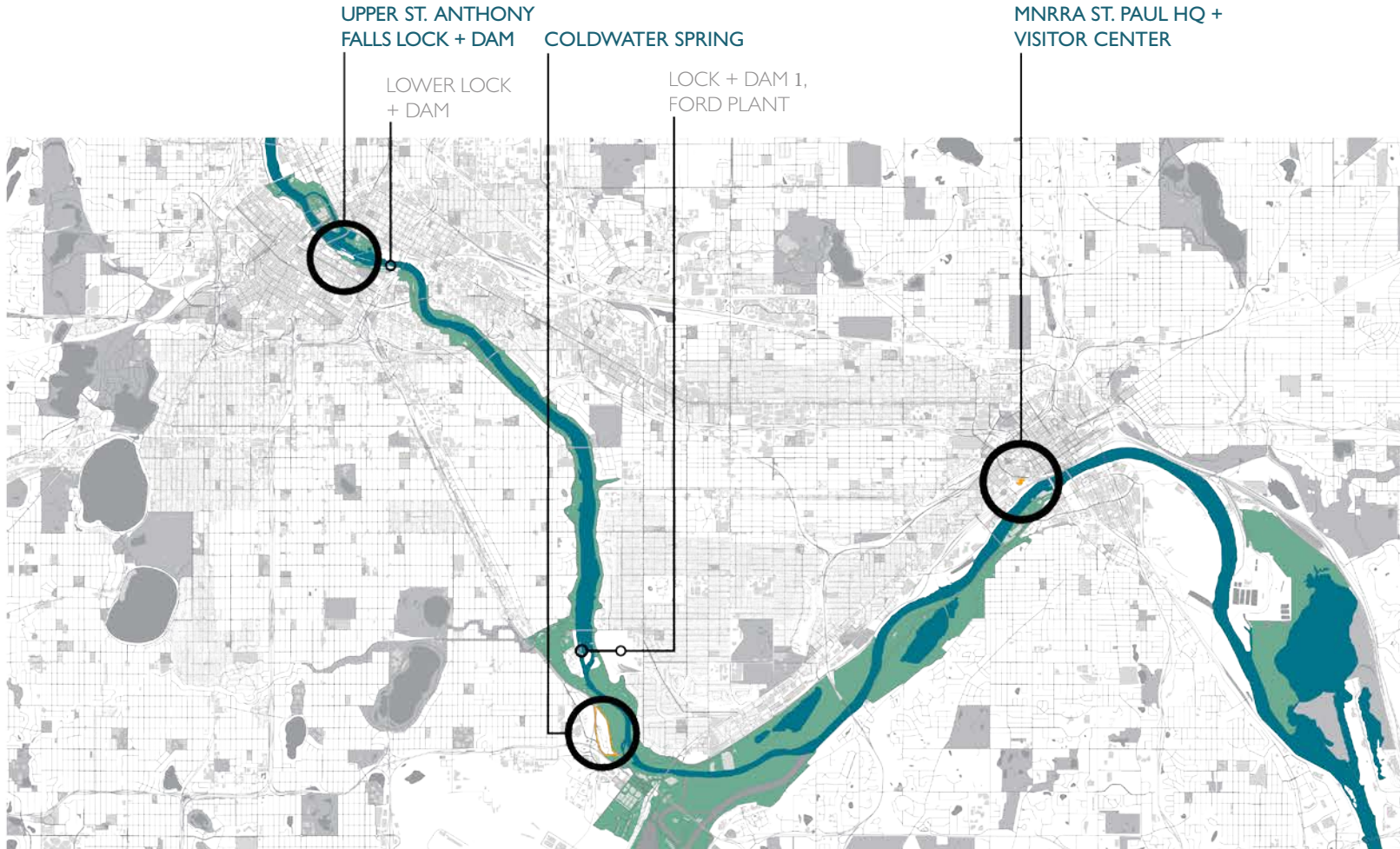
This rich history and the unique American stories that are central to the mighty Mississippi led to Congress designating the Mississippi National River and Recreation Area (MNRRA) in 1988. The national park was designated to "protect, preserve, and enhance the nationally significant historic, cultural, natural, scenic, recreational, scientific and economic resources of the river."

MNRRA is a partnership park in the National Park System because the park service owns very little land along the river, which flows through 25 communities of a major metropolitan area. It is comprised of a 72-mile corridor from Dayton and Ramsey in the north to just below Hastings in the south. Over this stretch, the river's character changes more than anywhere else along its entire 2,350-mile course.

In 2014, another Act of Congress led to the closure of the Upper St. Anthony Falls Lock in 2015 in order to stop the upstream migration of Asian carp. Minneapolis had already closed its shipping terminal north of the lock, recognizing that the land above the falls would be more valuable for businesses, housing and parks.

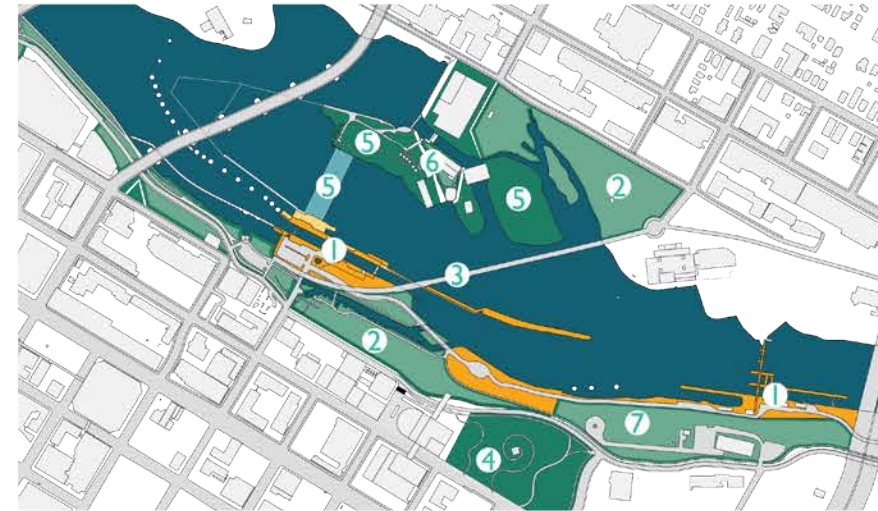
Today, you can still see the physical remnants of history in the mill ruins along the city's Central Riverfront. The mill ruins, the Stone Arch Bridge, and now the lock have all found new uses while preserving the city's heritage.





Land ownership along the Central Riverfront is a patchwork of public and private entities, making coordination and cooperation vital to the success of any new project.

## LAY OF THE LAND



The Upper St. Anthony Falls Lock and Dam is in an area known as the Central Riverfront, within a linear section of the Mississippi in downtown Minneapolis. The dam is owned by Xcel Energy, which operates a hydropower plant on the east side of the river. The lock is owned by the Army Corps of Engineers and is located adjacent to the falls at about the midway point of MNRRAs 72-mile corridor. This area of the riverfront is an epicenter of activity for the City of Minneapolis and the site of significant new growth and development over the last 20 years.

A renovated visitor center for MNRRRA in downtown St. Paul opened in 2016 during the centennial of the National Park Service. New exhibits and programs, housed in the Science Museum of Minnesota, now attract more than 180,000 visitors each year.

Coldwater Spring, a 2010 addition to the national park, features a walking trail popular with birders. The park service is renovating the oak savannah and prairie complex within the site, which was historically an important crossroads for Native Americans and traders using the Mississippi and Minnesota rivers for commerce and travel.

The lock can now provide a third anchor for the National Park Service along the river.

1. US Government (Army Corps of Engineers)
2. Minneapolis Park & Recreation Board (MPRB)
3. Minnesota Department Of Transportation (MnDOT)
4. City Of Minneapolis
5. Xcel Energy
6. University Of Minnesota
7. CenterPoint Energy



## TRANSFORMING THE LOCK

A vision for a new national park visitor experience on the Mississippi River



## CENTRAL RIVERFRONT PLANNING STUDIES

- BOOM ISLAND / BF NELSON RENOVATIONS - 2011
- ST ANTHONY FALLS HISTORIC DISTRICT GUIDELINES - 2012
- XCEL ENERGY WATER POWER PARK REC PLAN - 2010
- OUR CHANGING RELATIONSHIP WITH THE POWER OF THE FALLS - 2013
- EAST FALLS STUDY - 2010
- USACE WHITEWATER PARK PLAN - 2012
- UofM ENERGY PLAN
- LOCK + DAM, 2016
- REGIONAL PARK BOUNDARY - 2014
- POWER OF THE FALLS - 2009
- MILL RUINS PARK - 1991
- WATERWORKS 2012, 2015, 2016
- OUR CHANGING RELATIONSHIP WITH THE POWER OF THE FALLS - 2013



## CREATING THE VISION

Over the past 30 years, many planning studies of the St. Anthony Falls region have been conducted, but few have referenced the lock. It has often been rendered as a void, not because of poor planning, but because the role of the lock and its navigational responsibilities seemed permanent. However, when the Upper St. Anthony Falls Lock closed in 2015, it opened up new opportunities for the riverfront.

150 people who provided their ideas for what they wanted to see, do and experience at the lock. Next an advisory team was formed and included nearly 40 people who were already involved in the riverfront and downtown area. This team provided ideas and feedback and helped to ground the final guiding principles in reality. Finally, students from River's Edge Academy provided their unique perspective on the prospects of the lock.

In response to this opportunity, the National Parks Conservation Association and MSR brought together a wide-ranging group of stakeholders to envision a new future for the lock and our national park. Working with the National Park Service, the Army Corps, Minneapolis Park and Recreation staff and board members, 10 Thousand Design, Exponent, area residents, elected officials, small businesses and local institutions, these organizations started to think about the possibilities of a unique visitor experience on the doorstep of our national park.

The ideas in this book represent the culmination of great teamwork and group thinking to arrive at the vision for this new opportunity in the heart of the Mississippi National River and Recreation Area. Challenges lie ahead, but all great, collaborative ideas involve hard work and dedication to become reality.

Using an integrated approach that focused on research, analysis and community engagement, all the planning studies completed for this part of Minneapolis were first reviewed. Existing conditions and feasible options for this potential national park visitor center were analyzed as well. And given the lock is a community asset in a national park, public engagement was key.

The public was involved in three ways: First, NPCA conducted surveys to understand how aware riverfront visitors are that they are visiting a national park. The public was then invited to a community meeting that was attended by more than





## OUR NATIONAL PARK

“It’s already world class. It’s a national park. It just needs branding as such.”

Jeff Johnson  
*Minneapolis Convention Center*

## GUIDING PRINCIPLES

### Establish the lock as a centerpiece of the Central Riverfront

- Use the national park as a magnet to draw visitors near and far
- Ensure that the design meets new uses while honoring preservation

### Leverage the power of the National Park Service brand

- Use the internationally recognized arrowhead with pride
- Tap into new funding sources to realize the vision

### Invite the community in!

- Build strong, local awareness of the neighborhood national park
- Create amenities to benefit the community as well as visitors

## ENHANCE CONNECTIONS

Since it was established in 1916, the National Park Service has preserved our iconic national treasures and has become the official storyteller of our nation's history. During the first hundred years, the park service protected more than 84 million acres of land and water in all 50 states. But a vast majority of the more than 400 national parks in the system are in out-of-the-way locales.

As national parks enter their second century, growth and innovation will occur in our urban parks – in places like Minneapolis-St. Paul and in parks like Mississippi National River and Recreation Area. Part of the park service mission includes connecting to local communities.

With the renowned Minneapolis Parks and Recreation Board Parks, Stone Arch Bridge, Mill City Museum, Commons Park and U.S. Bank Stadium all nearby, it seems all roads lead to the Central Riverfront and the lock. And with the potential of the National Park Service to act as a magnet for visitors, many possibilities exist to enhance tourism.

It's time to physically and visually connect all pathways to the Central Riverfront and to a national park visitor center at the lock.

*Park Ranger led tour inside the lock north wall*



EAST BANK  
9 MIN WALK

# GUTHRIE THEATER ST. ANTHONY FALLS LOCK

5 MIN WALK

GOLD MEDAL PARK  
7 MIN WALK

MILL RUINS  
MILL CITY MUSUEM  
3 MIN WALK

THE COMMONS  
6 MIN WALK

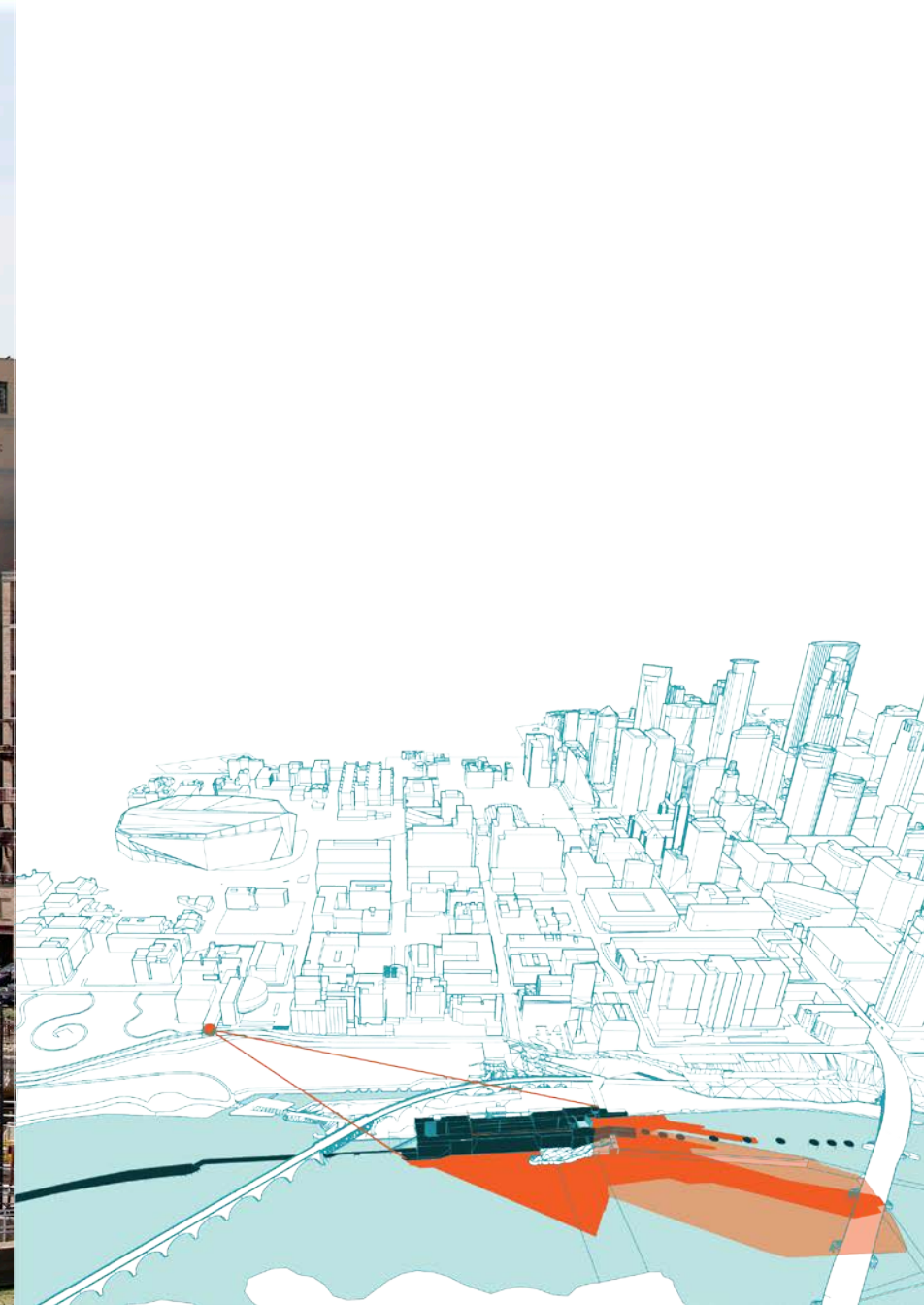
WATER WORKS  
2 MIN WALK

LIGHTRAIL

NICOLLET MALL

GATEWAY PARK  
14 MIN WALK





## HONORING PRESERVATION

With any new or enhanced uses – such as a visitor center – come new demands. National park visitors and local residents will need amenities at the lock that currently don't exist, such as parking, restrooms, small shops and a restaurant.

The lock is on the National Register of Historic Places, a designation awarded by the National Park Service, and any new construction or renovation of the existing structure needs to reinforce the building and site's integrity. The views from the east and west toward the lock, as well as the up- and downstream river views, will need to be maintained to honor the site's history while accommodating modern needs.

The lock keeps company with some very high profile partners: Stone Arch Bridge, Mills Ruins Park, Water Works Park all in the St Anthony Falls Historic District. This historic preservation ethic needs to continue throughout the area.

- Existing view of the river from Guthrie Theater
- Avoid obstruction of river view

*Proposed visitor center should consider surrounding viewsheds of the river and falls. For example, new construction on top of the existing lock structure would increase view obstruction from surrounding landmarks.*



## POWER OF THE ARROWHEAD

In the summer of 2016, NPCA surveyed visitors to the lock during the first year that the National Park Service offered tours of the site. They found that 65 percent of people had no idea they were in a national park despite the fact half of the visitors were from the metro area.

The National Park Service arrowhead is a universally recognized and revered symbol and has been proven to increase tourism. For example, an Ohio congressman introduced a bill in 2015 requiring all highway signs near one of the state's eight national parks also display the arrowhead symbol as an "easy way to boost tourism in Ohio." That same year, a West Virginia tourism council embarked on a massive marketing campaign to "harness the power of the National Park Service branding to drive visitors where there are three national parks nearby."

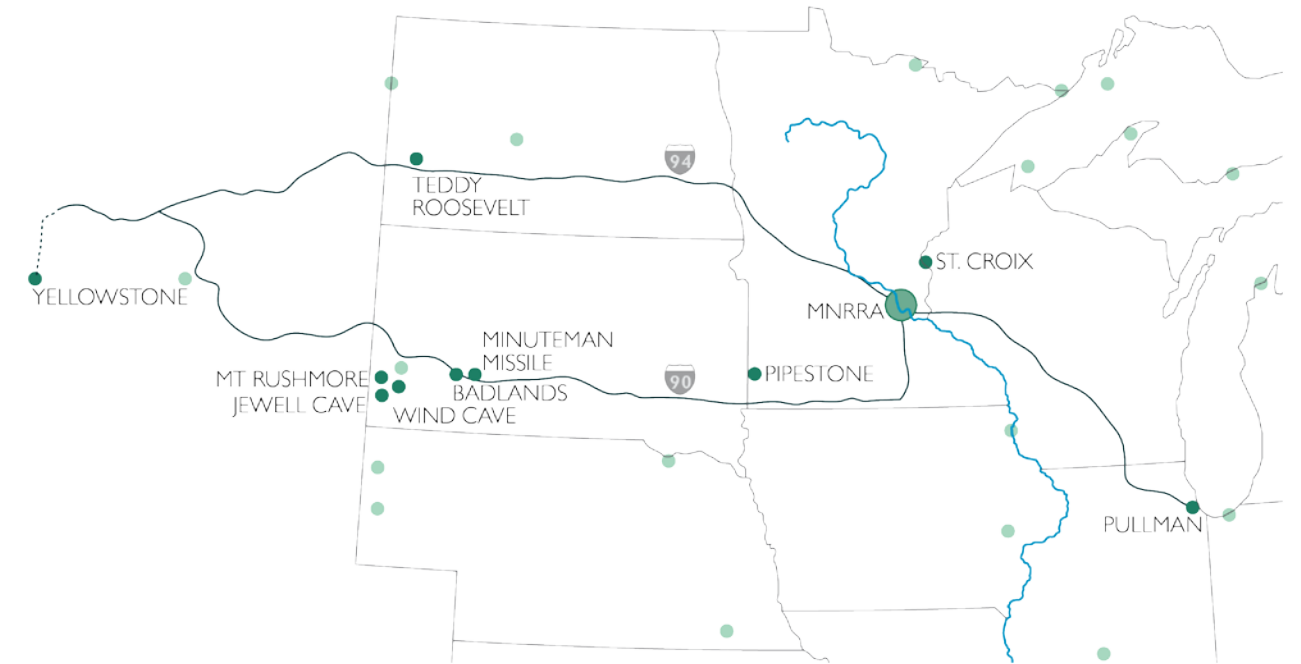
The NPS arrowhead can also attract funding. The park service has access to many sources of funds outside of a park's operational budget that would otherwise be unavailable but for the national park. For example, MNRRA has been successful in leveraging federal transportation funds for a number of projects in the park corridor. These and other funds may be useful in realizing the vision for the lock.

It's time to display the arrowhead proudly and welcome the visitors who are sure to follow.





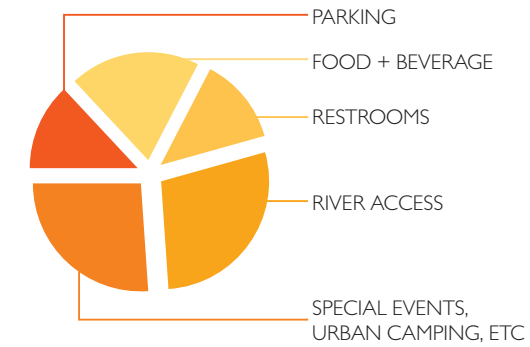
## THE JOURNEY WEST



*Having a visitor center in downtown Minneapolis as well as St. Paul could help our urban national park become a regional destination. NPS and regional tourism entities can easily cross market this national park road trip. As families load up in their SUVs for the summer tour of national parks, Mississippi National River and Recreation Area is a logical stop along the way.*



MNRR partners with many local organizations to deliver experiential and educational programs on the river.



## AWARENESS, COLLABORATION & COMMUNITY BENEFIT

Over time, the lock will need a lot of work and significant funding to create new public spaces on the river. But there is no need to wait until all the funding is in place to make improvements and create greater access.

Cross-marketing tours and programs with nearby institutions and during events will help raise the profile of the lock as a visitor attraction. And capitalizing on the many neighborhood and community networks will help get the word out to residents.

In the short term, collaborative programs will help raise the profile of the lock as a community resource. With many downtown and neighborhood groups nearby, opening the doors to community meetings and small events could provide a service while increasing awareness about the lock.

With greater awareness comes appreciation and support, which will be critical in order to fund long-term improvements.



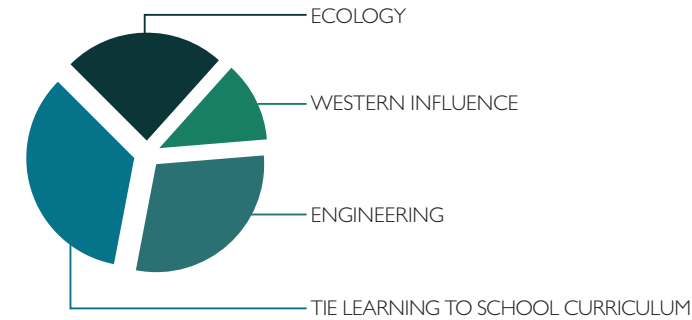
During public meetings, people expressed interest in improved amenities. Access to the riverfront topped the list, followed by new programs and restaurants.



## PARK EXPERIENCE

“My favorite part is the dam control room where we got to try the buttons and sound the horn. It made me interested in actually becoming an operator.”

John “JJ” B.  
*student, River’s Edge Academy*



## GUIDING PRINCIPLES

### Tell the unique historic, cultural and natural stories of the river

- Identify storytelling opportunities not told at nearby parks and museums
- Recognize the river's legacy in navigation with the U.S. Army Corps of Engineers

### Develop new and dynamic ways to tell stories

- Expand the capacity of storytelling through flexible technology
- Provide interpretation both inside and outside the lock

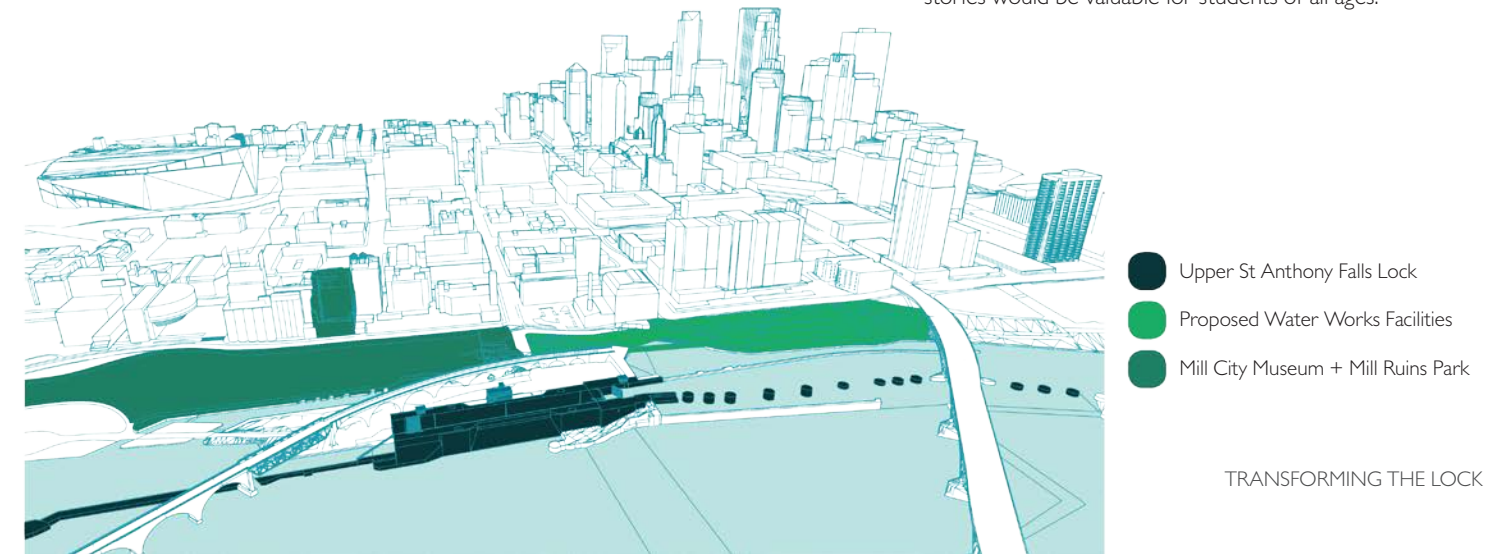
### Develop programs that broaden the site's relevance

- Create public programs and events to reach visitors, residents and nearby workforce
- Increase programs and access during off-peak times and winter

## LEARNING

The riverfront is alive with cultural institutions that tell stories of the past – the Mill City Museum is the most established and interprets the city's milling history. Mill Ruins Park, University of Minnesota, and Guthrie Theater also play an important part in conveying the riverfront's history, as will the proposed Water Works site. Stories that are natural to interpret at the lock include transportation, engineering and commerce, as well as ecology and the environmental importance of clean water.

Most people who participated in public or small group meetings wanted to learn about engineering and navigation and to see how the lock works. They also felt that these stories would be valuable for students of all ages.



“As soon as I saw the control panel, I knew we could make a working model of it for younger kids.

A small-scale model, built into a water table, would allow kids to close and fill the lock, move boats in and out, then drain the lock. It could become part of a ‘Little Lockmasters’ program.

For older kids, we might consider remote control barges and boats in the river that can maneuver into a working 1:50 scale model of the lock. And everything could be linked to a STEM education curriculum in area schools.”

Ed Bennett  
*10 Thousand Design*



## MAKE IT INTERACTIVE

When students from River’s Edge Academy toured the lock, they had an overwhelming desire to push buttons, pull levers and turn the wheels. They wanted to work the lock. The Army Corps of Engineers has owned and operated the Upper St. Anthony Falls Lock since it was built. The Corps still owns the facility and must determine its future use. In the meantime, the Corps and NPS offer visitor tours.

The lock could provide a unique opportunity for students of all ages to learn about engineering on the water. Even the youngest visitor can have an interactive experience through special programming and exhibits.



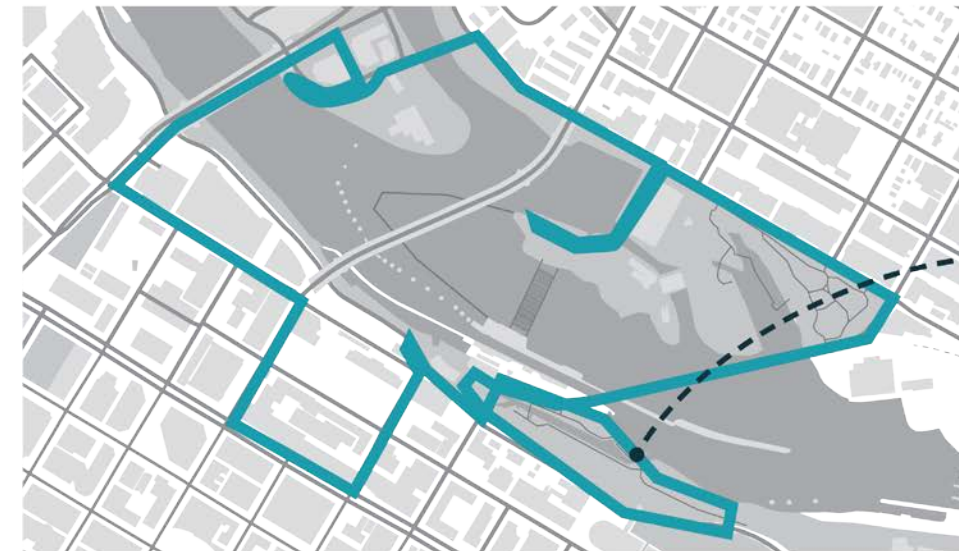
Existing lock buildings can be used as theater space showcasing the history of the falls and region.

above: existing view  
below: theatrical, pre settlement view of falls

## USING TECHNOLOGY

A walking app, coordinated with other groups that have a role in telling the stories along the river, would allow visitors to navigate through downtown, over the bridges and through the St. Anthony neighborhoods to better understand the rich history of the area.

Location-based notifications could alert listeners to 40 points of interest along the walk. Hear the buzz of the sawmills and bells and horns of the boats entering the lock. Listen to conversations of early Minneapolis residents. The narrator could explain the connection to the falls in Native American history and the rise of downtown Minneapolis through the centuries.





GRAPHIC INTERPRETATION

**LOCK CHAMBER SIZE**  
**56 X 400**

**8.21 MILLION GALLONS X 12**  
ONE OLYMPIC SWIMMING POOL 660,000 US GAL

**MAX. LIFT 49.2 FEET**

**THIS IS THE FIRST OF 29 NAVIGATION LOCKS FROM HERE TO ST. LOUIS**

**40,000 CUBIC FEET PER SECOND**

**1935** **1959 - 1963** **2015**

Lorum ipsum dolor set con venter. Lorum ipsum dolor set con venter. Lorum ipsum dolor set con venter.

**400 FEET ABOVE CAIRO, IL** **2320 MILES ITASCA TO NEW ORLEANS** **663 MILES MPLS TO ST. LOUIS, MO**

**1 BARGE = 50 SEMIS TRUCKS**

Using the lock as surfaces for interpretation allows visitors to experience size and scale.

Above is one idea for graphics on the lock walls and left is a rendering with a graphic.



## DESIGN & ACCESS

“I want to feel the power of the river.”

“Hear the sound of the falling water.”

“Walk out over the spilling.”

“Touch the river!”

Voices from the Community



## GUIDING PRINCIPLES

### Design safe and continuous access for visitors

- Establish clear and friendly pedestrian pathways
- Connect the Stone Arch Bridge and Water Works Park to the lock
- Improve adjacent bike trails and provide connections

### Develop new physical features for on-the-river experiences

- Provide access to outdraft barrier
- Open access to lock interior and adjacent falls
- Create access to mooring pylons
- Create large green space for community gathering and events
- Ensure kayak and canoe portages

### Develop a comprehensive Central Riverfront transportation plan

- Ensure consistent and clear signage from major attractions
- Plan for increased visitation with access for tour and school buses
- Improve transit alternatives
- Improve the Portland Avenue / West River Road intersection

## START WITH WHAT'S THERE

Big changes can often provide equally big opportunities, and such is the case with the closing of the Upper St. Anthony Falls Lock.

When the lock was opened in 1963, the milling industry had already greatly declined. Bringing navigation above St. Anthony Falls had potential economic advantages for the city. However, the upper lock failed to entice substantial economic investments above the falls. And with its closure, the lock no longer serves navigation. Now this grand old structure is ready for a new use and offers an incredible base on which to build.

At over 500 feet long, 100 feet wide and 50 feet tall, the lock's scale dwarfs a visitor. The quantity of concrete used to build the lock would never be used in building a new visitor center or park and should be fully maximized. The scale and location offer unique perspectives of the river, and the mooring pylons and outdraft barrier provide access to the river's dramatic elevation change. Any proposed visitor center at the lock should first embrace the unique properties of the lock itself, then take on design elements that enhance the lock's core attributes.

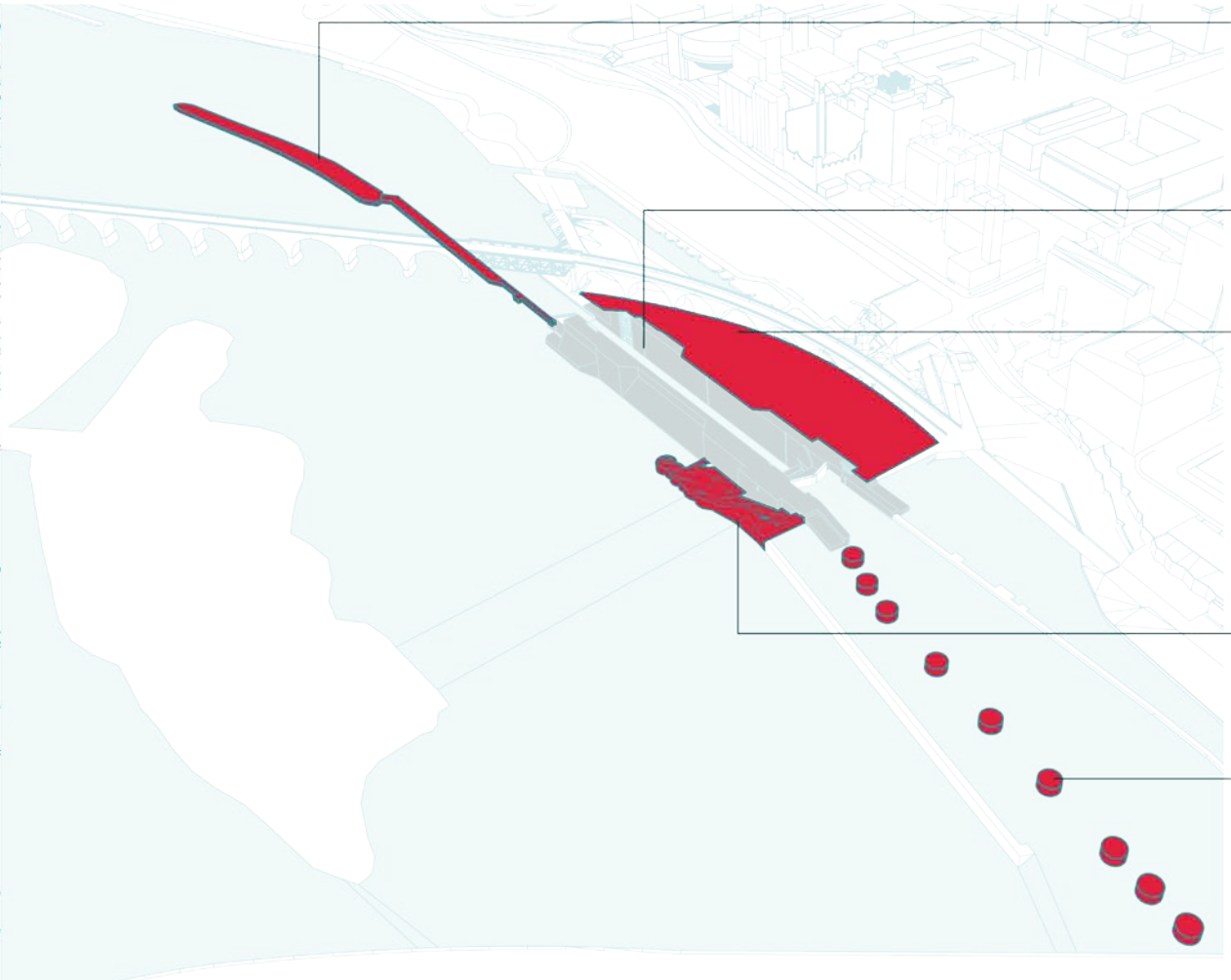
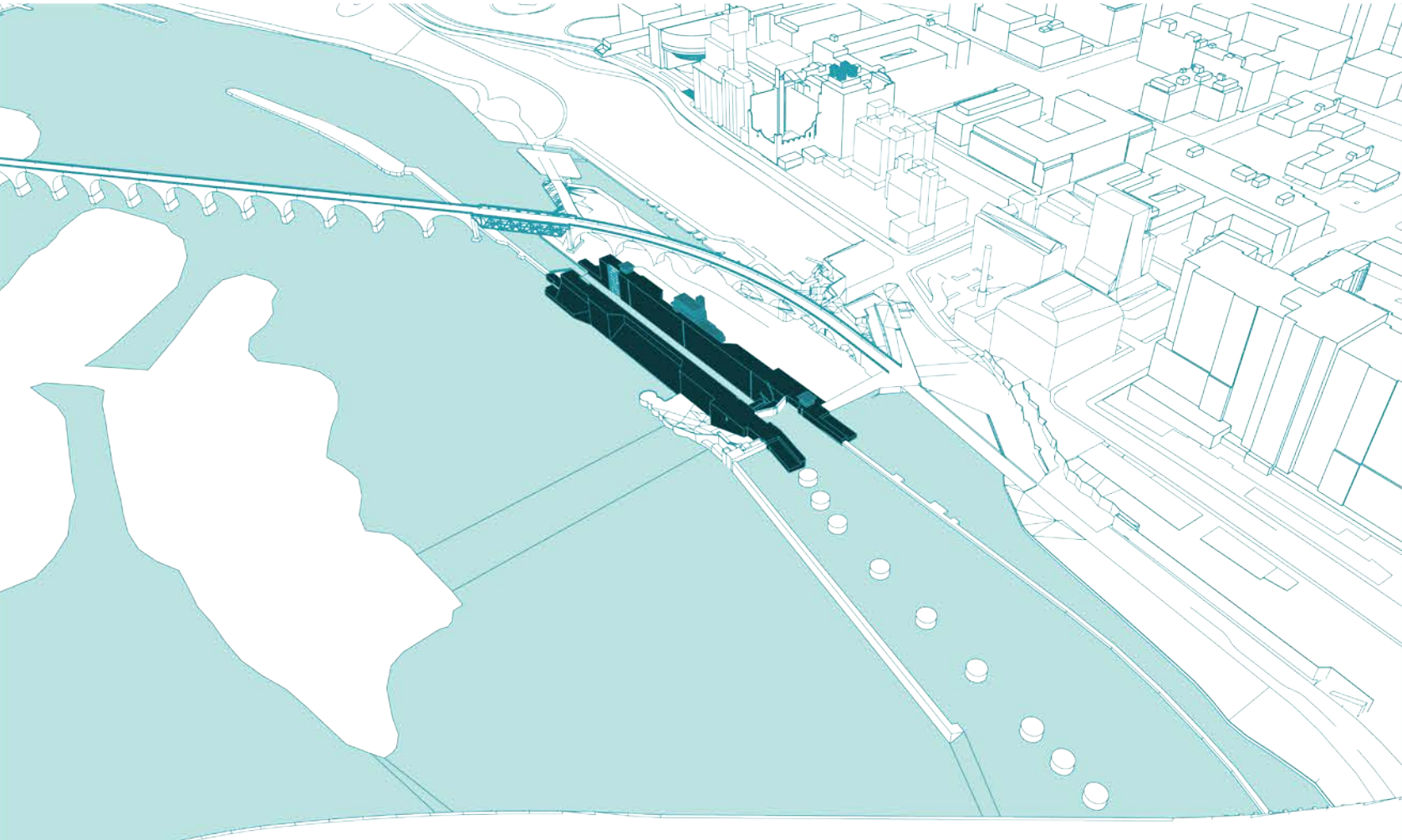
Transforming the lock is one of a long line of great opportunities for creating new public spaces in urban areas. Industrial land in cities was often located near rail corridors, lakes or rivers, and as industry has subsided, these parcels are often developed into public parks. Even as far back as

1876 when a former limestone quarry was converted to a Paris park, former working sites have been turned into public parks. The 1.5-mile Highline in New York City built along a non-working rail corridor is a recent example of these conversions.

The creation of recreational sites in former working urban landscapes allows for construction at scales beyond what would be obtainable for new park projects. The lock provides a great foundation from which to create a new public space and national park visitor experience.



Focus design to provide “on-the-river experiences.”



**OUT DRAFT BARRIER**

Provides access to the water below the falls and below the Stone Arch Bridge.

**LOCK WALLS**

Provide access between lock walls

**OPEN LAND / GREEN SPACE**

This 70,000 square foot area is currently a parking lot and lock accessory building. By converting most of this area to green space, it would become a prime location for visitor center programming and community events.

**LAND REMNANT**

Provides up close access to the power of the falls.

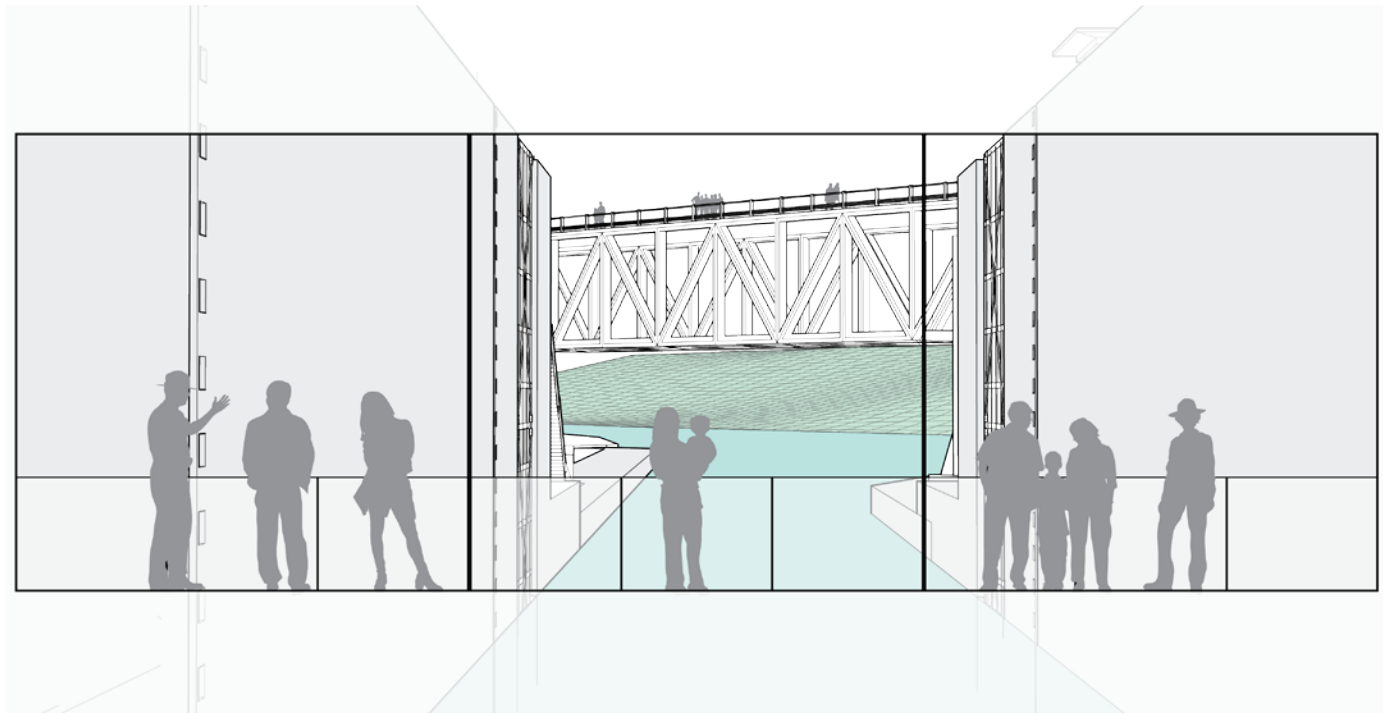
**MOORING PYLONS**

Provides access to the river above the lock.

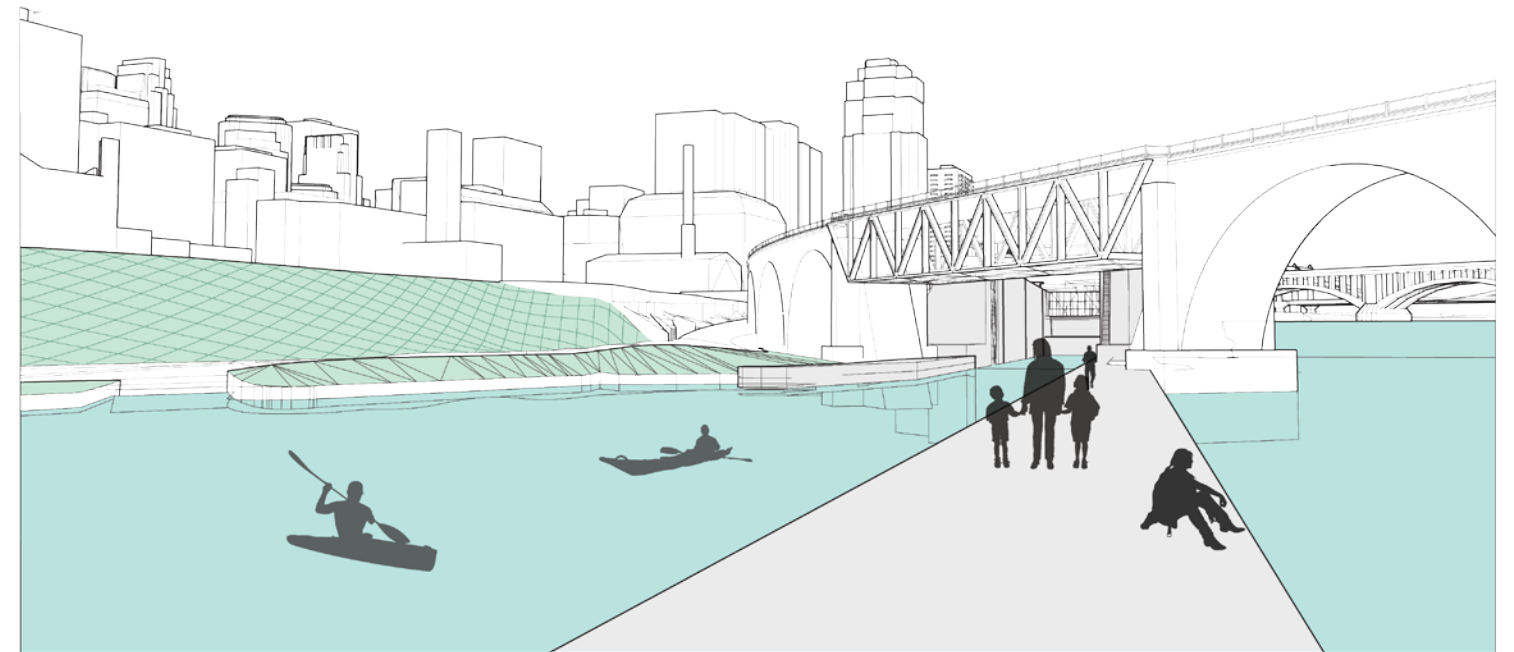


The outdraft barrier sits in the pool between the upper and lower locks and extends beneath the Stone Arch Bridge downstream towards the lower lock. Providing public access to this area will bring unique views for visitors, such as seeing between the lock walls toward the bridge. People could stroll along the barrier close to kayakers and other recreational users.

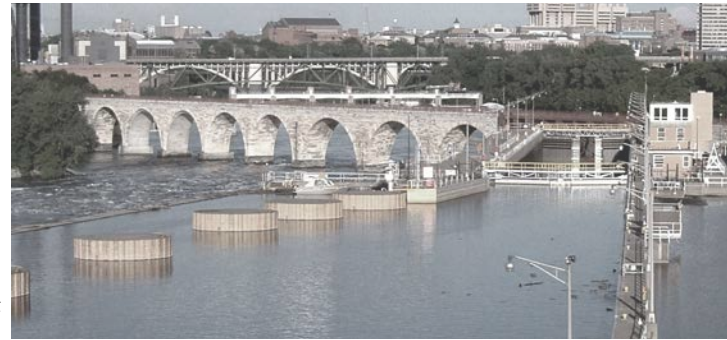
## BETWEEN LOCK WALLS



## OUTDRAFT BARRIER



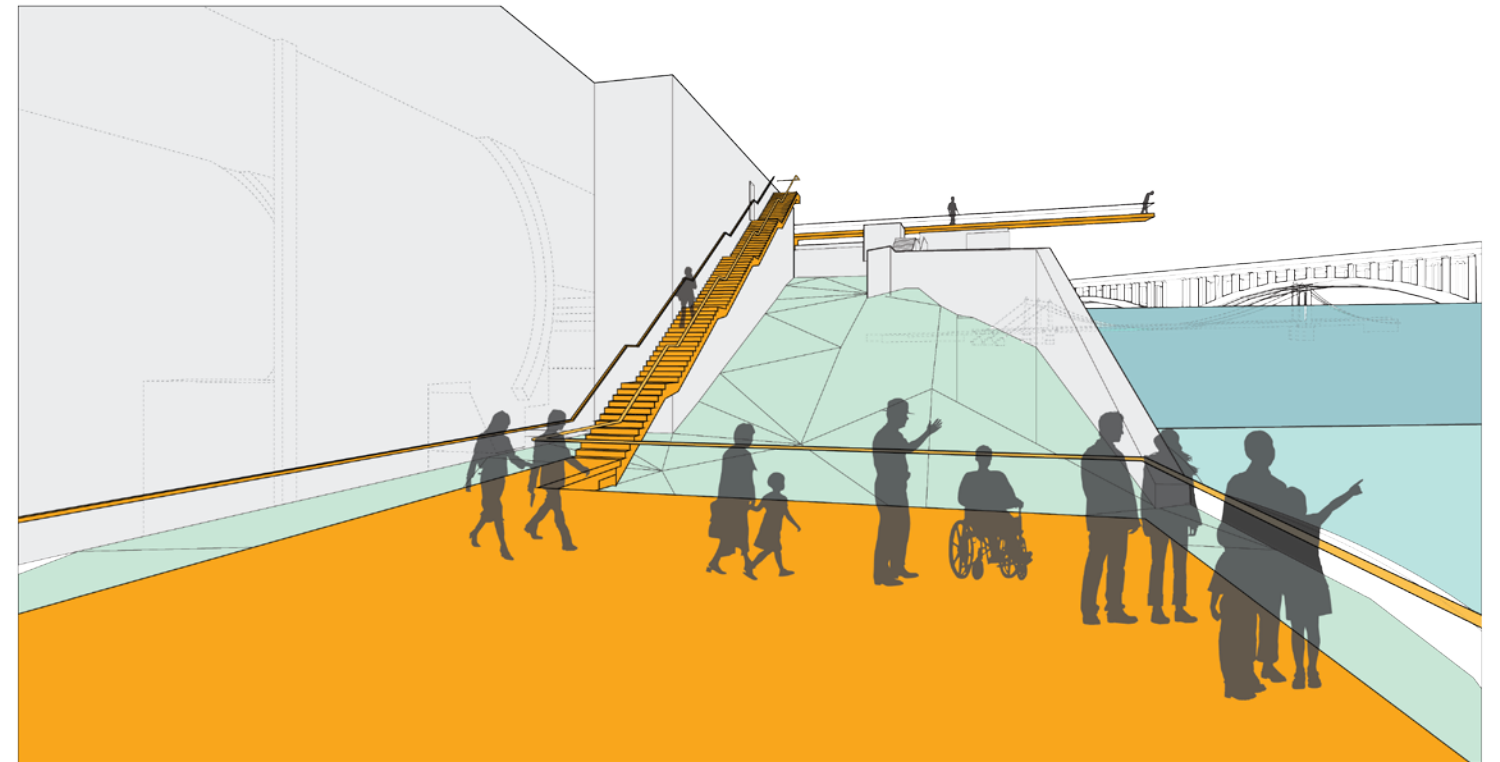
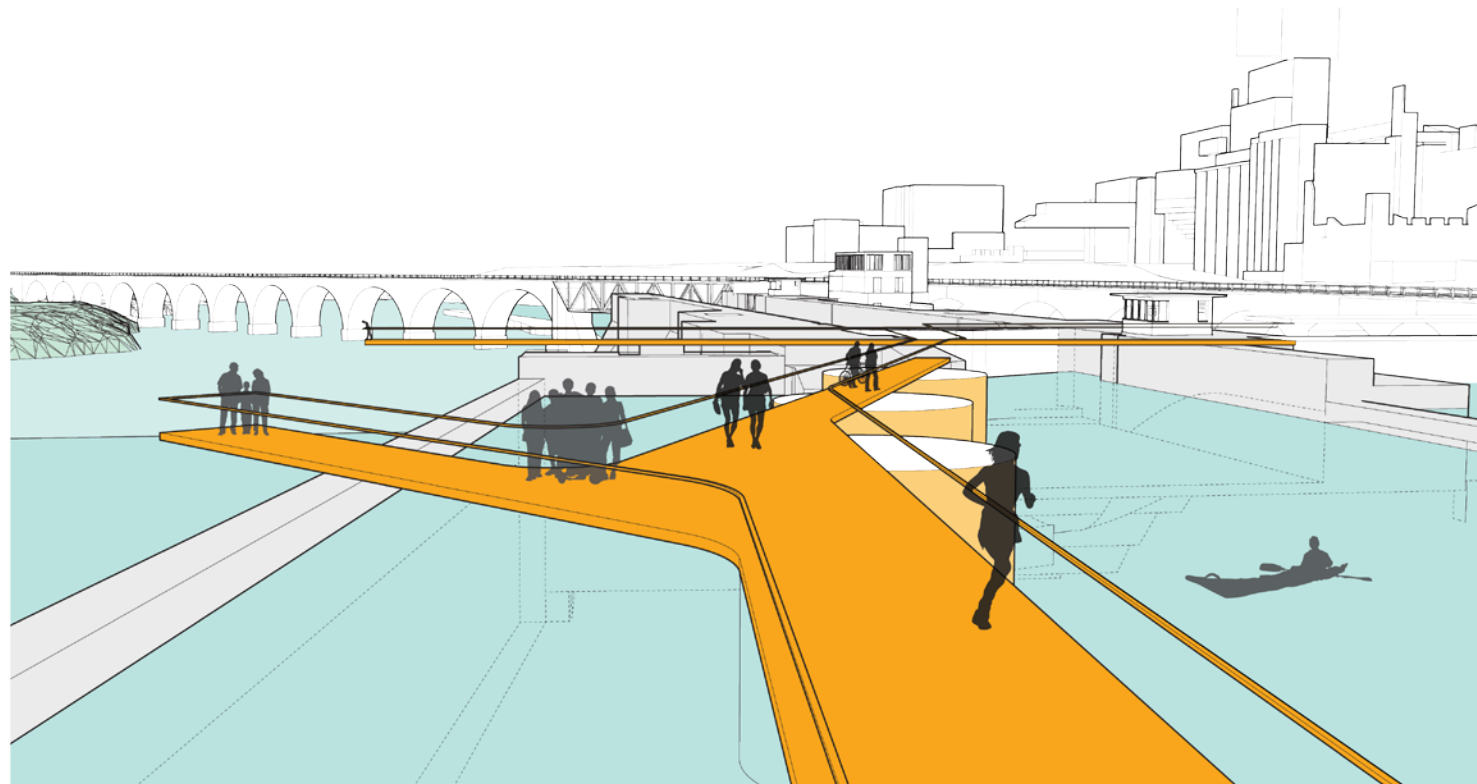
The mooring pylons extend from the lock toward Nicollet Island and could provide structure for a pedestrian bridge.



A small remnant of land to the east of the lock is all that remains of Upton Island. Protected public access can provide up close experiences of the power of the falls.

## MOORING PYLONS

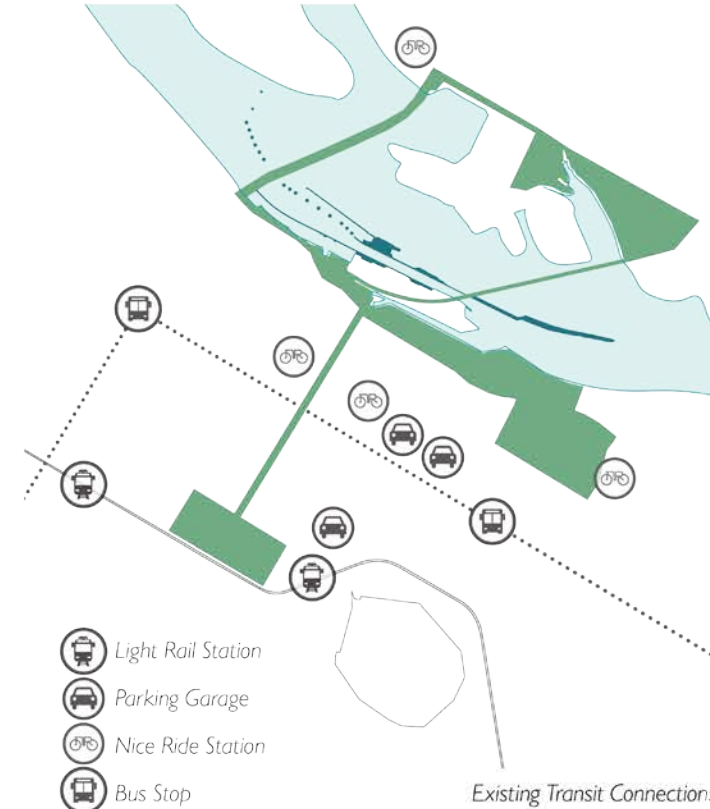
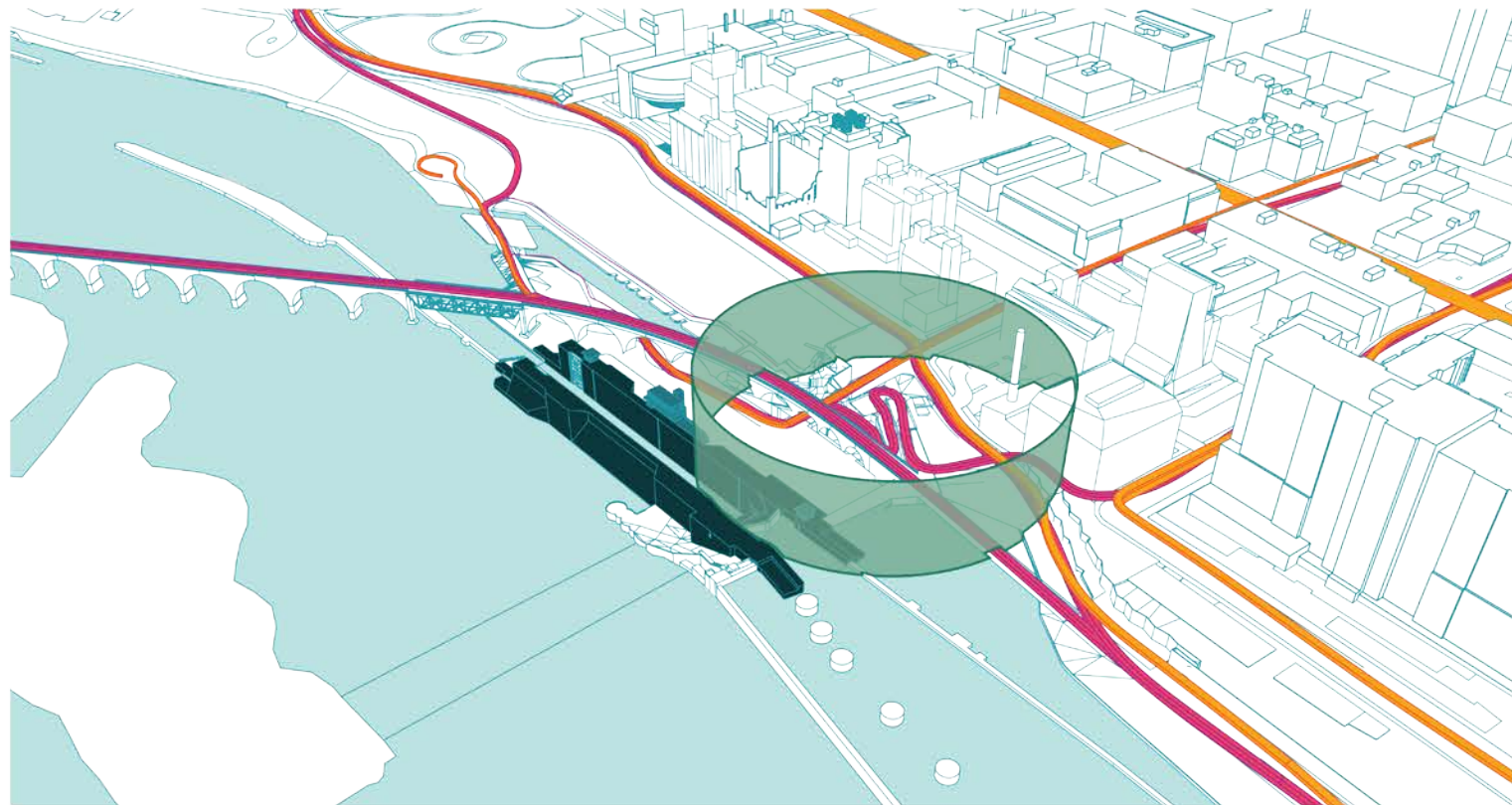
## LAND REMNANT



Paths and intersections near the lock are crowded, congested and potentially unsafe for pedestrians and cyclists.

Many roads and paths converge at the lock making navigation difficult.

- pedestrian
- autos



## TRANSPORTATION

With the heightened interest in the lock, Water Works, RiverFirst and nearby development, it's time to develop a comprehensive Central Riverfront transportation plan. The riverfront is a magnet for residents, downtown workers and visitors. All roads and pathways converge at the lock, but because it was only recently envisioned as a visitor attraction, getting to and from the lock was never included in transportation planning. A comprehensive plan can help remedy these issues and outline projects that benefit the community and the park visitor:

This plan should be done in conjunction with the many interests at play along the river, including the National Park Service. It should take into consideration:

- Clear and consistent signage from major attractions to the river;
- Bicycle and pedestrian safety;
- Transit alternatives and navigation from transit to the river;
- Access for tour and school buses;
- Increased parking needs; and
- Provide access for all.



## MOVING FORWARD

“We should have a base for the National Park Service in our city. They chose St. Paul for the headquarters. It would be great to see them have another home in the City of Minneapolis.”

Barb Johnson  
*Minneapolis City Council President*

The ideas in “Transforming the Lock” are meant to be more visionary and less prescriptive. Some of the ideas will be relatively easy and cost effective to implement, like cross promoting tours to increase awareness and a walking app that gives visitors a comprehensive knowledge of area history and attractions. Some will take collaboration and commitment from government and private sectors, such as a comprehensive Central Riverfront transportation plan. Most ideas will need funding that isn’t in place yet.



image courtesy of Star Tribune

## OWNERSHIP

Fundamental challenges will need to be resolved regarding ownership of the lock, so that new uses and physical changes to the building can occur. The Army Corps of Engineers has owned the lock since it was built, and now that it is closed, they must follow a required process to determine their interest in the lock going forward. The Corps plans to complete a study that will evaluate several options that range from continuing operations as they are now; turning the facilities over to other federal, state or local entities; or removal. The outcome could lead to the lock changing ownership, and it is unclear what entity could step forward to own and maintain this asset. In the meantime, the Corps and the National Park Service have an agreement in place until 2021 allowing for ranger-led tours.

Although it’s critical to identify a path of ownership that enhances the National Park Service at this great asset within park boundaries, it is not essential that they own the lock.

## DEVELOPMENT

The section of the Mississippi within about a half mile of the lock is a highly developed part of the riverfront with more work in planning stages. The projects of RiverFirst and Water Works are well vetted and have tremendous public benefit and support. There is a proposed hydroelectric development, however, that has far less public support and could threaten the vision for the lock and any new on-the-river visitor experiences.

A majority of people who participated in public meetings for “Transforming the Lock” were very concerned about the hydro plant that could be sited adjacent to the lock in order to draw on the power of St. Anthony Falls. The project has been discussed for many years but has been unable to proceed because the project failed to secure the necessary real estate agreements with the Minneapolis Park and Recreation Board. Recently the company that has proposed the plant applied for a license amendment from the Federal Energy Regulatory Commission in order to relocate the project to Corps-owned land at the lock. If a power plant project is permitted and built there, it may preclude many of the proposed activities envisioned for in and around the lock, including kayak and canoe launches and public access to the riverfront.

## PULLING TOGETHER

At the root of this vision is the need for a unified voice from all people with a stake at the riverfront – people who live and work there as well as those who provide for the visitors to Minneapolis and to this national park. Many park partners can help bring these voices together toward achieving the vision. Groups like the Mississippi Park Connection, Wilderness Inquiry, Friends of the Lock and Dam and National Parks Conservation Association all play a critical role. Others such as Meet Minneapolis, Minnesota Historical Society and Mill City Museum contributed to this vision and are in a unique position to draw visitors to the site.

Neighbors of the lock will be critical in moving ideas forward, including St. Anthony Falls Heritage Board and Downtown Minneapolis Neighborhood Association. At the center of making this vision a reality are all government entities and elected officials, including the City of Minneapolis, Minneapolis Park and Recreation Board, the mayor, city council and state representatives. Members of the Minnesota Congressional delegation, led by Senator Amy Klobuchar and Congressman Keith Ellison, paved the way for this opportunity and will be instrumental in making the vision a success.

For every challenge, there is a path toward a solution. The people who worked together to develop this vision must work together in realizing it and making the Upper St. Anthony Lock and Dam a truly world class national park destination.



## FUNDING

The National Park Service is already grappling with underfunding, staff shortages and an \$11 billion repair backlog, despite a 19 percent increase in visitors between 2011 and 2016. MNRRA in particular needs a base budget increase to staff and maintain new assets, such as Coldwater Spring. All national parks have many unmet needs due to chronic underfunding, and it will be challenging to secure additional staff, operating and construction resources at the lock. Despite these challenges, it is clear that there is strong community support for MNRRA to have a presence at the lock as demonstrated through the efforts of volunteers and philanthropic partners who have helped make that happen the last few years.

Federal funding isn't the only funding challenge along the riverfront. There are many active projects along the river and in downtown Minneapolis: RiverFirst, Water Works and The Commons are a few. Each civic project has its own fundraising goal and demand for public dollars. It will be important to tap into new funding sources in realizing the vision at the lock and to respect local philanthropic efforts.

The National Park Service has many sources of funding outside of individual park operations and construction budgets. Mississippi National River and Recreation Area has been successful tapping into some of these funding opportunities in other areas of the park.

PROGRAM	SOURCE	DESCRIPTION
Bus and Bus Facilities Formula Grants (sec.5339)	Federal Transit Administration	Funds can replace, rehabilitate and purchase buses and construct bus-related facilities.
Centennial Challenge	National Park Service	50/50 match program funds projects that improve visitor services, outreach, partnerships and bridge connections to communities.
Clean Cities Initiative	Department of Energy	Funds alternative vehicles, other improvements and transportation projects that educate visitors on cutting petroleum use and vehicle emissions.
Congestion Mitigation Air Quality Program (CMAQ)	Federal Highway Administration	Program provides funding for transportation projects, programs, and operational strategies that reduce vehicle congestion and air pollutants.
Federal Lands Access Program (FLAP)	Federal Highway Administration	Provides funds for projects to improve transportation facilities that provide access to, are adjacent to, or are located within federal lands.
Federal Lands Planning Program (FLPP)	Federal Highway Administration	Funding to implement transportation planning for facilities that are consistent with the Statewide and Metropolitan transportation planning procedures.
Federal Lands Transportation Program (FLTP)	Federal Highway Administration	Funds (in three categories) to improve the transportation infrastructure owned and maintained by Federal Lands Management Agencies, including NPS and Army Corps of Engineers.
Targeted Accessibility Improvement Program (TAIP)	National Park Service	The TAIP provides funds to park units to begin comprehensive physical and programmatic accessibility upgrades of specific sites within those units.
Helium Act	National Park Service	Pays federal funding share of cost-share agreements for deferred maintenance and to correct infrastructure deficiencies (through FY19)
Nationally Significant Federal Lands and Tribal Projects	Federal Highway Administration	Provides funding for the construction, reconstruction, and rehabilitation of nationally-significant projects on Federal or tribal lands.
Repair and Rehabilitation (RARE)	National Park Service	Funding to repair, rehabilitate, maintain and in some cases replace assets that parks have identified as critical to their mission.
Surface Transportation Program	Federal Highway Administration	The program provides grants to States to demonstrate user based alternative revenue mechanisms that utilize a user fee structure to maintain the long-term solvency of the Highway Trust Fund.
Transportation Investment Generating Economic Recovery (TIGER)	U.S. Department of Transportation	Highly competitive grant program supports innovative projects, including multi-modal and multi-jurisdictional projects, which are difficult to fund through traditional federal programs.
Urban Area Formulated Grants (sec. 5307)	Federal Transit Administration	Funding for transit capital and operating assistance, and for planning.
Transportation Alternatives Set-Aside	Federal Highway Administration	Funds the construction and rehabilitation of paved, multi-use trails and historic transportation facilities like bridges.
Recreational Trails Program (RTP)	Federal Highway Administration	Funds the development, maintenance and restoration of recreational trails, including bike trails.
Formula Grants for the Enhanced Mobility of Seniors and Individuals with Disabilities (sec.5310)	Federal Transit Administration	Funding to states for assisting nonprofit groups to meet transportation needs of older adults and people with disabilities.





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