

# GREAT RIVER PASSAGE

more natural . more urban . more connected

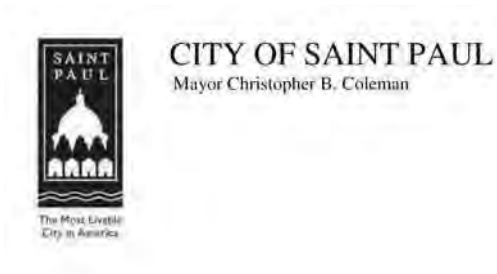
A Master Plan for Saint Paul's 17 Miles of  
Mississippi River Parklands





Adopted by the Saint Paul City Council, April 10, 2013 - Resolution # 13-62





July 2012

The Mississippi River has shaped my life. I grew up on the bluffs carved by its waters, learning the importance of nature and the fun of outdoor recreation. I've raised my family on these same bluffs and have shared with them the values the River taught me - take care of what you have, take part in all it offers, and share it with others.

Saint Paul has been blessed with more riverfront park land than any other major city along the Mississippi River. This rich legacy will be carried into the future with the establishment of the *Great River Passage Master Plan*.

Over the past two years, this master plan has been shaped by one of the most comprehensive community processes Saint Paul has undertaken. Through the creativity and dedication of the City Council members, neighborhood groups, river users, environmental organizations, concerned citizens, city staff and national experts; a vision has been created that will transform Saint Paul in profound ways.

The Master Plan's guiding principles - to be More Natural, More Urban and More Connected - represent a grand vision for unifying the entire length of Saint Paul's riverfront. This plan sets the stage for natural spaces, recreation areas, ecological restoration and economic vitality while connecting the City and its people to Saint Paul's unique Mississippi River resources. It is up to all of us - elected officials, business leaders, the philanthropic community, neighborhood groups and more - to ensure this plan becomes a reality.

Please join me in support of this exciting vision for Saint Paul's riverfront,

Sincerely,

A handwritten signature in black ink, reading "Christopher B. Coleman". The signature is fluid and cursive, with a long horizontal stroke at the end.

Christopher B. Coleman  
Mayor, City of Saint Paul



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## Great River Passage Master Plan

Saint Paul’s 17 mile stretch of the Mississippi River has natural, recreational, scenic, and spiritual qualities that have drawn people to the area for thousands of years. The area’s rich resources have sustained the lives of American Indians, including the Dakota people, who first recognized the corridor’s spiritual values. Early European settlers used the river as a trading route which led to widespread settlement. Rapid industrialization of the upper Midwest and the development of the Mississippi as a transportation and industrial corridor brought successive waves of immigrants from around the world, creating a thriving economy and the rich ethnic mix that makes Saint Paul the vibrant community that it is today. The decline of industry has provided an opportunity to rediscover the river corridor’s natural, recreational, scenic, and spiritual qualities, and has prompted a discussion about new ways of living, working, and playing along the river’s edge.

The Great River Passage Master Plan (or master plan) presents recommendations for orienting the City toward the river and integrating new and enhanced parks and natural areas along all 17 miles of the Mississippi River through Saint Paul. Previous planning efforts described a broad vision for the river corridor. The Saint Paul on the Mississippi Development Framework (1997) featured guiding principles to shape the city into the next century, the Mississippi River Corridor Plan (2001) developed four key strategies, and the Great River Park Chapter of the *Saint Paul on the Mississippi Development Framework* (2007) offered a vision and principles to guide development of the river corridor. Recognizing the breadth of the planning area and cultural history of the river corridor, the Great River Park in 2011 was renamed the Great River Passage (GRP).

The 2-year long process of developing the Great River Passage Master Plan included several well-attended public meetings and a series of community task force and planning workshops that elicited constructive input from community and stakeholders. The project team , consisting of planners, landscape architects, ecologists, transportation and cultural resource specialists, artists, and economic advisors, synthesized community input into a vision plan for the Great River Passage.

Begun in 2010 and completed in 2012, the Great River Passage master plan uses the vision and the guiding principles established in prior plans as a framework to develop specific goals and recommendations that will provide direction for future land uses and development in the river corridor. The master plan’s vision for the corridor represents complex inter-relationships of urban and natural systems, new types of parks, and innovative means by which the natural qualities of the river corridor can be protected and enjoyed.

Master plan strategies are based on the goals and objectives identified by the City of Saint Paul, the design team, and the community during the planning process. Recommendations address improvements for each reach within the corridor and street improvements to provide better neighborhood connections to the River. They describe ways in which an improved Great River Passage can both add value to and be an impetus to new development, and how better connections can be established between new development and the River. The plan also recommends sustainable strategies and management and financing strategies for long-term implementation of improvements within the corridor.

Full implementation of these recommendations will require a comprehensive re-evaluation of ownership and management of the public resources within the river corridor. It also will require the involvement of multiple City, County, State and Federal agencies, cooperation with other public entities, and partnerships with private and not-for-profit organizations. The Great River Passage Master Plan is primarily a parks plan, but it also incorporates community driven goals for neighborhood areas adjacent to the park. These areas are critical to the desired balance of natural areas protection, access to recreation and continued economic development and sustainability. As the area plans are developed they will consider the recommendations of this plan.

Extensive information has been gathered as part of developing the master plan. The Appendix includes documents related to research and community participation, such as the Great River Park Inventory and Assessment Report (2011), which contains an inventory and compilation of existing conditions within the river corridor and a summary of information gathered during the planning process.

The Plan is intended to be a community-based vision with a corridor-wide perspective. It identifies transformative recreation and leisure opportunities along the river and balances them with protection and restoration of natural resources, adding value to adjacent land uses while respecting community and neighborhood desires for better access to the river. It represents an evolution and a refinement of previous efforts, with the addition of specific recommendations that will help Saint Paul work toward enhancing the natural environment and the recreational qualities of the river, as well as the livability and economic vitality of the city.

The Great River Passage Master Plan will be the starting point for further planning of the areas within the corridor and a mechanism for managing and funding its recommendations. All concept and vision plans included in this document are conceptual in nature, and subject to further planning, design, and public input as funding becomes available. Until such time as the City purchases any of the sites or areas, or enters into a development agreement for the sites or areas, covered in the vision/concept plans, private property owners may use their properties for any legal use permitted under the current zoning classification, provided that the proposed use meets all applicable conditions and/or standards.







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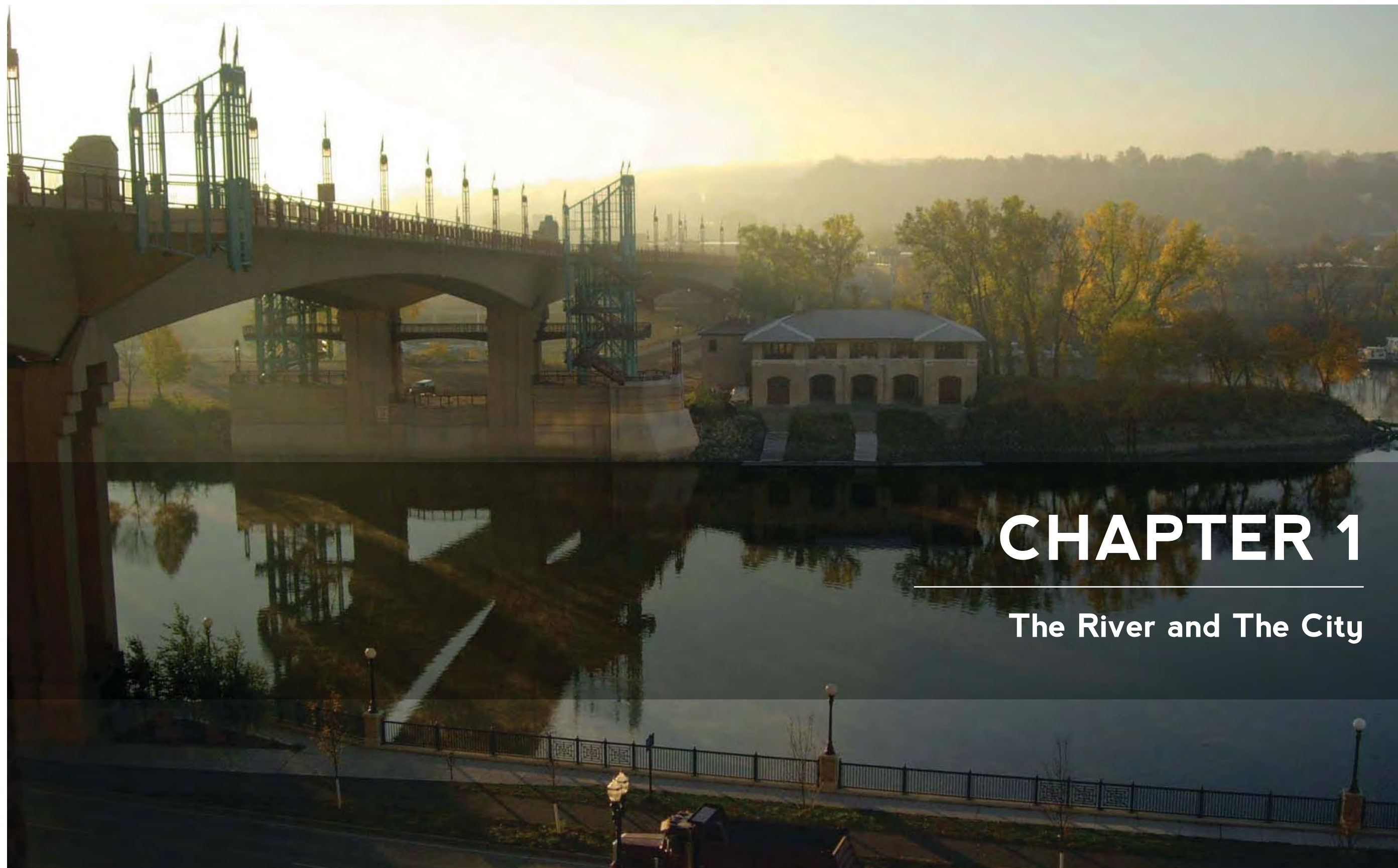
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## The River and The City

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The Mississippi River—our Great River—is the lifeblood of Saint Paul, connecting and sustaining communities across cultures and generations. From the time of the first inhabitants to today, the river has been a constant source of life and livelihood as a working waterway, food supplier, and destination for recreation and adventure. The 17-mile stretch of the Great River in Saint Paul weaves through many neighborhoods, connecting diverse communities and cultures. We carry this rich legacy into the future with the establishment of a vision for the Great River Passage that seeks to develop the river corridor as a series of places that are *More Natural, More Urban, and More Connected*.



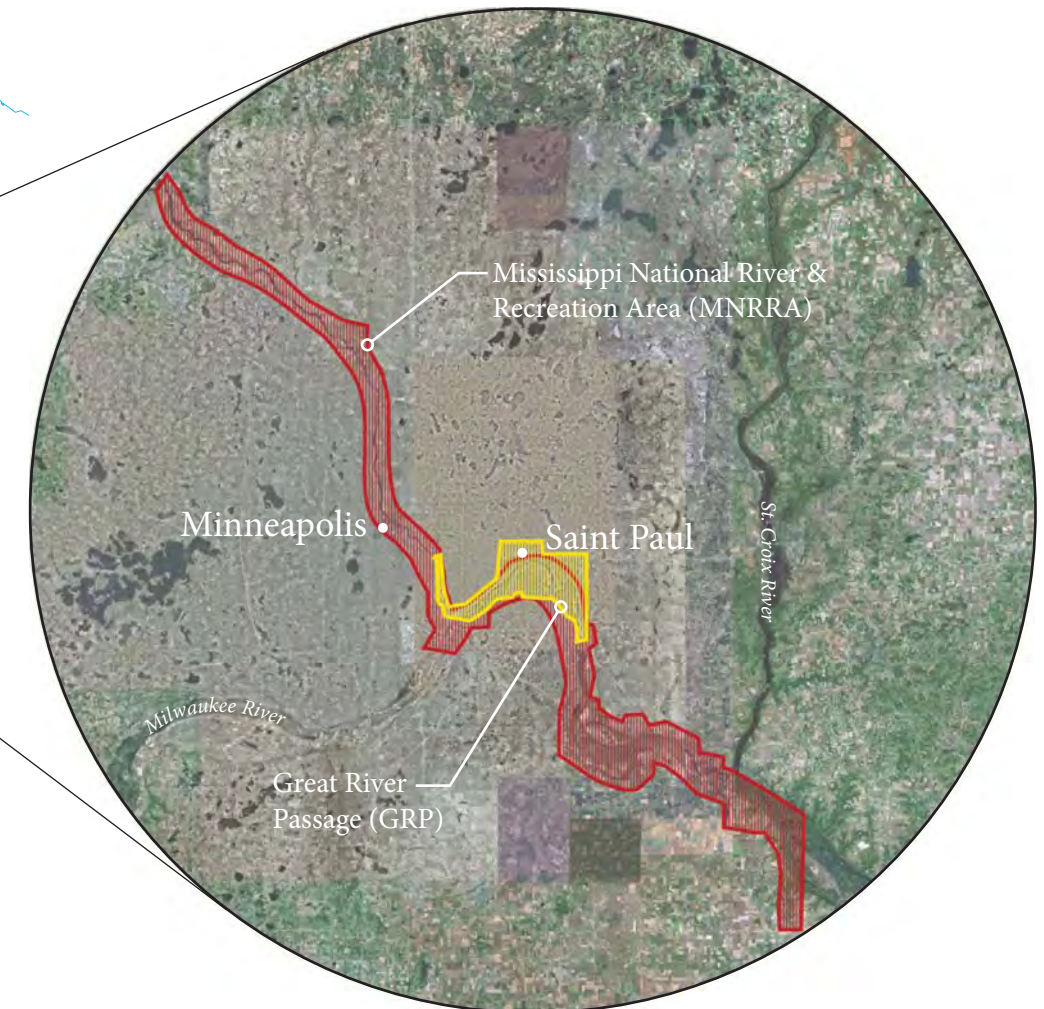
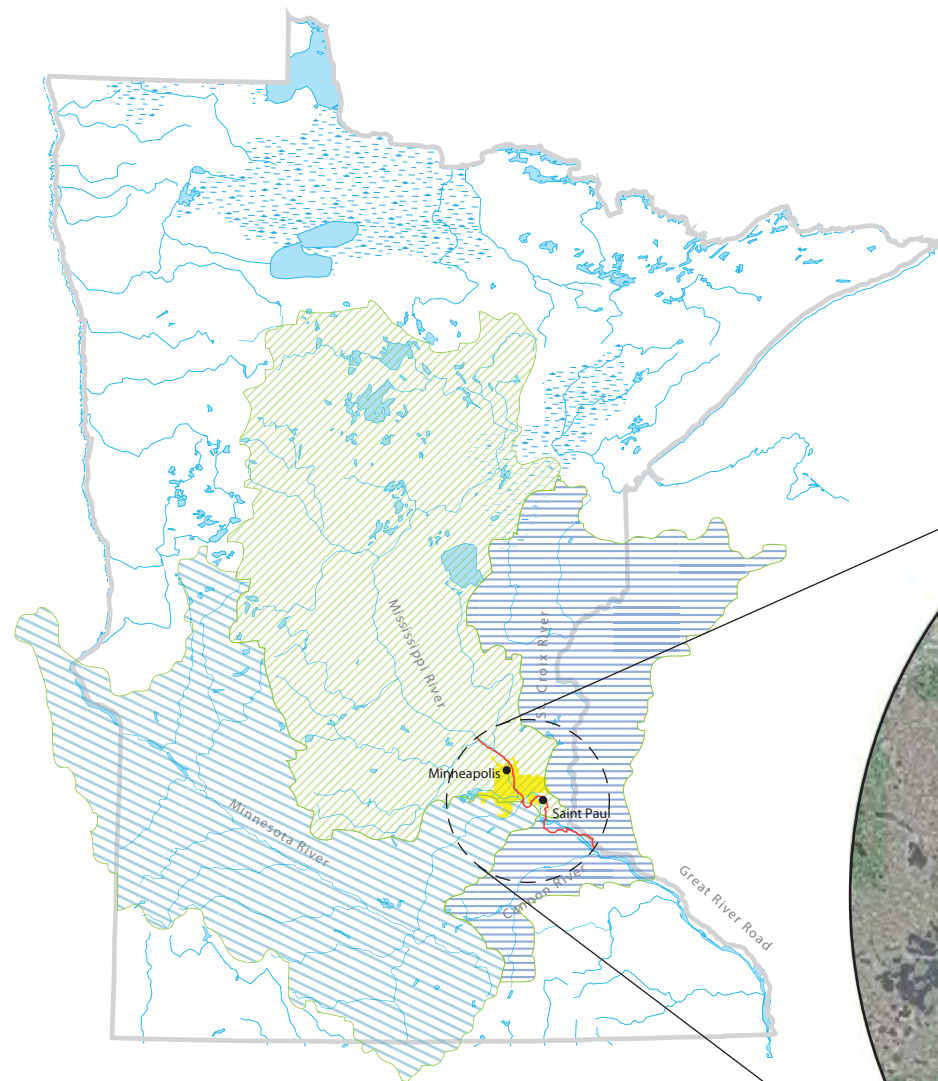
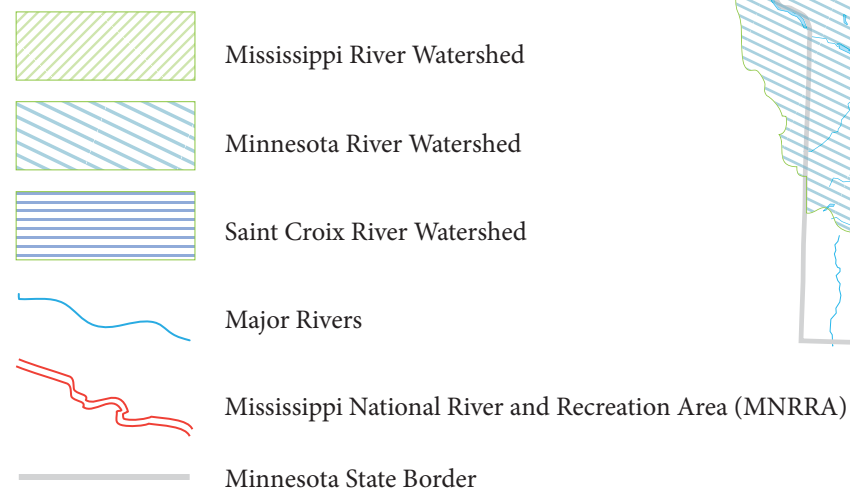
# CHAPTER 1

## The River and The City



Saint Paul is located at the point where the Mississippi River passes from the uplands of northern Minnesota to the broad agricultural plains to the south. The limestone bluffs that give Saint Paul its distinctive character historically define the upper reach of commercial river traffic and give form to four distinctly different types of landscapes along the river as it passes through the city.

The Mississippi River is recognized the world over as one of America's defining features. It has been called the life blood of the nation, America's fourth coast. People come from across the country and world to look at and touch the Mississippi River. Saint Paul sits within a national park--the Mississippi National River and Recreation Area (MNRRA)--with nationally significant cultural, natural, recreational, economic, scenic, and ecological resources. Federal legislation, enabling creation of the MNRRA in 1988, identified a 72-mile corridor that encompasses landscapes of rich diversity and distinctive character. The Great River Passage recognizes the importance of the river corridor through Saint Paul as a natural, economic, and cultural crossroads worthy of national significance. This master plan presents an important part of the regional vision for this significant national landscape.



*The Mississippi National River Recreation Area occupies an important place in the region, where diverse landscapes, rivers and people come together. The Great River Passage lies at the heart of this, a city in nature.*



St. Paul and the River have always been inextricably linked. A succession of cultures have depended on the River for their livelihood for thousands of years, with each culture capitalizing in different ways on the unique resources the River has to offer. The River has been the home, and the sacred ground, of the Dakota People for many generations. The Valley, uplands and the River itself were a rich resource of food. Dakota villages lined the River through the Valley, linking them to the larger world.

European explorers realized the potential of the area, and successive waves of immigrants from around the world came and settled, benefiting from the River’s bountiful resources.

Saint Paul grew dramatically late in the 19th century capitalizing on the region’s resources and the potential for industrial development in the upper Midwest. The River itself was a catalyst for growth, connecting the heart of the continent to global markets. The Valley was transformed to a vital industrial and commercial corridor that brought prosperity to the city, but compromised the natural qualities of the River and the richness and diversity of its natural systems.

Changes in industrial activity during the past century have allowed the City to renew its relationship to the River in ways that support enhanced livability and economic vitality, as well as public appreciation of the natural realm. Land uses along the river’s edge are changing, from primarily industrial to a mix of uses. The “receding industrial glacier” is allowing for a more diverse economy along the river. The City continues to support the retention and expansion of the industrial job base in Saint Paul.

The Great River Passage Plan recognizes the environmental benefits of the river as an environmentally friendly alternative to other modes of transportation. River shipping consumes less fuel, reduces highway congestion, and saves wear and tear on streets and highways. An important economic benefit is the improvement of transportation economics for shippers of Minnesota commodities that move into and out of this Port of Saint Paul.

With 17 miles of running river and 26 miles of river frontage, St. Paul has more miles of Mississippi River than any other municipality along the entire length of the River. The river valley includes bluffs, lakes, woodlands and wetlands, as well as active commercial sites and neighborhoods. In total, the Great River Passage has over 3,500 acres of parkland for outdoor recreation, enjoyment of scenic views, wildlife habitat, and special events. Until recently, these incredible assets have been viewed as individual parks and pieces.

A central goal of this plan is to strike a balance between the protection and enhancement of the corridor’s natural qualities and urban development. One of the outcomes of the master planning process is to transform this valuable collection of parks, natural resources, cultural amenities, neighborhoods and development sites into a single Great River Passage. By managing the Great River Passage as a single entity, the City of Saint Paul can celebrate the Mississippi as the key to its identity as a River City.

***This plan has been developed looking at the corridor as a system. Recommendations are based on this greater context.***



View of Downtown from Cherokee Park



# Developing the Great River Passage Master Plan

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The Great River Passage is unique among city park systems. Its grand scale—over 3,500 acres in land area—and the quality of its scenic, natural, cultural and historic resources in an urban setting, are the result of more than 100 years of visionary planning. Through diligent implementation and management, the Great River Passage vision will become a model for natural-resource-based urban parks in the 21st century. To lay the groundwork, the Master Plan identifies community needs, gaps in the system and global trends to determine a planning approach and guiding principles.





# CHAPTER 2

## Developing the Master Plan



# PLANNING SAINT PAUL'S RIVERFRONT

1880

VISION



## HWS CLEVELAND:

Nationally recognized landscape architect HWS Cleveland addresses city officials: "We have here a possession that is unique in its character, comprising such elements of grandeur and beauty as no other city can rival and no wealth can create, and so situated with reference to the business and residence portions of both cities that if they but unite in preservation and development, it will constitute for all time the distinguishing feature by which the great city will be known to the world."

MINNESOTA HISTORICAL SOCIETY

VISION

OPEN SPACE ACQUISITION

## Metro Council:

The Metropolitan Council is established to help merge planning and implementation efforts of local communities throughout the region.



## Early Park Acquisition:

Dr. Justus Ohage the City's Commissioner of Public Health purchases and donates Harriet Island to the City for public health purposes. The Island becomes the City's gathering place and a center for its advocacy for public health and well being. The City acquires Indian Mounds, Cherokee, Hidden Falls & Mississippi River Bluff for preservation and public use.

MINNESOTA HISTORICAL SOCIETY



1899 ST. PAUL PARK SYSTEM MAP



## Great River Passage

more natural • more urban • more connected

PLANNING &amp; DESIGN



## Revisoning the Riverfront:

Saint Paul native Ben Thompson develops an updated vision to transform the downtown riverfront. The vision captures the timeless quality of a City in a Park expressed over 100 years earlier by Cleveland and captivates the imagination of the entire community.

MINNESOTA HISTORICAL SOCIETY



## Mississippi River Corridor:

The Governor declares a Mississippi River Corridor Critical Area that requires Saint Paul to prepare the St Paul River Corridor Plan.



## MNRRA:

Congress establishes the Mississippi National River Recreation Area (MNRRA) within the designated Critical Area. MNRRA is one of only a handful in the country reflecting the quality of prior planning efforts.

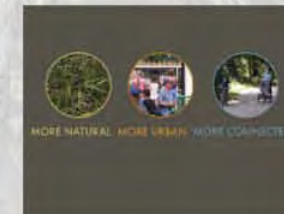
IMPLEMENTATION

2040



## Framework Chapter:

The National Great River Park – Framework Chapter completes the framework plan and establishes a vision of "The City in a Park, a Park in the City" and the foundation for the Great River Park Master Plan.



## Great River Park:

The City of Saint Paul is beginning the Great River Park Master Plan. Based on the Guiding principles of the Framework Chapter, it will describe a vision that, when implemented, will transform Saint Paul in profound ways.



## YOU Decide:

You are critical to the success of planning efforts and are encouraged to participate in the evolution of the Great River Park and the regeneration of Saint Paul's riverfront.



## Framework Plan:

The St. Paul on the Mississippi Development Framework outlines principles and goals by which the downtown Riverfront vision would be implemented.

More than 100 years of visionary planning has resulted in this amazing resource - The Great River Passage - bringing nature into the city, adding significant value to the environment, the culture, the economy and to the daily lives of the people of Saint Paul.



Two previous planning studies, the *Saint Paul on the Mississippi Development Framework*, prepared in 1997 to guide the development of the Downtown area riverfront, and the Great River Park Chapter of the *Saint Paul on the Mississippi Development Framework*, prepared in 2007 that identified the guiding principles More Natural, More Urban and More Connected are the basis of this plan. Together these studies provide the foundation for this Great River Passage Master Plan, and inform its emphasis on the balance between nature and the city.

Prior Plans Guide This Plan

The City of Saint Paul is proud of its long history of visionary planning for parks. In the last quarter of the 19th century, noted American landscape architect Horace William Shaler (HWS) Cleveland developed a visionary plan for the rapidly growing city of Saint Paul. The plan recommended the development of a comprehensive and linked system of parks and parkways, a system which has been developed to include the Grand Round, Como Park, and multiple large and small parks that have become defining elements of the city. Today Como Park is one of the most visited attractions in the state with 3.5 million visitors annually. The implementation of Cleveland’s plan demonstrates the value of long-range visionary planning. A central goal of the current planning efforts has been to build on Saint Paul’s planning tradition and to develop the next generation of visionary plans which will further define and enhance the city.

Guidance Documents

The current planning efforts are guided by two documents. The first is the 1997 *Saint Paul on the Mississippi Development Framework*. As the City began implementing the 10 principles contained in the *Saint Paul on the Mississippi Development Framework*, City officials agreed that a more specific vision for the Mississippi River corridor was needed. As a result, the City in 2007 created the Great River Park Chapter of the *Saint Paul on the Mississippi Development Framework* to provide more specific guidance for the river corridor.

Saint Paul Comprehensive Plan

The master plan is aligned with the Saint Paul Comprehensive Plan, which guides decisions regarding the City’s economic and development future. The Comprehensive Plan includes the following recommendations related to the river corridor:

- Maintain the working river.
- Create jobs and foster economic development.
- Increase the tax base via reuse of underused, vacant, or brownfield industrial sites.
- Balance natural area preservation with urban development.
- Pursue sustainability initiatives such as compact community development, multimodal transportation alternatives, energy districts, natural systems integration, and brownfield remediation.
- Design for compact, context-sensitive development.
- Provide improved river access.
- Activate the riverfront in key locations.
- Extend neighborhoods towards the river.
- Encourage the protection and restoration of river corridor cultural resources, including historic structures, culturally significant landscapes, and archaeological and ethnographic resources.

Guiding Principles

The Great River Park Chapter of the *Saint Paul on the Mississippi Development Framework* recognized the important links between the river and the city. It advised that the relationship of the river and the City should go beyond the development of parks and the enhancement of the river’s ecology to bring nature into the city, and to make the river a part of the community’s daily life. The plan described “a new paradigm - the city in a park, a park in the city. It is the fusion of Saint Paul’s unique natural systems and recreational resources on the Mississippi River with community and economic development and adjacent neighborhoods.”

The Great River Park Chapter of the *Saint Paul on the Mississippi Development Framework* offered three guiding principles for the Great River Park:

1. More Natural  
*The Great River Park is first and foremost a place of great natural beauty and value. Every action should respect, protect, and enhance the ecology of the river corridor and valley.*
2. More Urban  
*With such high “place value,” the Great River Park is an area of great economic/ real estate value. New urban development in the National Great River Park should be high quality, sustainable, and strategically located to enhance the natural environment.*
3. More Connected  
*Being connected to the Mississippi River and making the river a part of everyday life are fundamental values in Saint Paul. More physical and visual connections should be created to bring more people to the river, respecting the need to balance increased public access with environmental preservation.*



The year-long planning process, led by the City of Saint Paul Parks and Recreation Department, was guided by a Steering Committee consisting of City department leaders and the Riverfront Corporation. A Community Task Force, that included community leaders, public agencies and key interest groups, guided the development of master plan recommendations through a series of focused work sessions.

Stakeholders and the general public participated in public meetings and community design forums, held to discuss the issues and opportunities of interest to the wide variety of communities within the City.



*Public meetings were focused on issues and opportunities*



*The Community Task Force developed solutions and priorities*



*Community Design Forums facilitated the generation of ideas*

### The Planning Process

A wide range of public and private planning partners participated in developing the Great River Passage Master Plan, which by its comprehensive nature, required broad community participation and development of approaches that can be implemented over a long period of time.

Beginning in May, 2010, the City launched a year-long collaborative planning process, inviting the participation of City departments, special districts, national park, state and county agencies, civic and environmental organizations, community leaders and key stakeholders.

The Saint Paul Parks and Recreation Department created a Steering Committee comprised of representatives of key City departments and the Saint Paul Riverfront Corporation. A Leadership Group of directors from each department represented on the Steering Committee monitored the planning process.

The Community Task Force and the Technical Resource Group included more than 60 community leaders, representing business and property owners, neighborhood organizations, public and nonprofit agencies, council and special districts, and environment and arts organizations. The Community Task Force met regularly to work with the Steering Committee and the consultant team to review proposals and develop recommendations.

The first step in the community outreach process was conducting a CulturalAudit®, which consisted of on site interviews with a variety of community residents and visitors to the riverfront. The CulturalAudit® outreach identified people that would not normally attend public meetings, especially those with diverse ethnic backgrounds. The results of the CulturalAudit® can be found at the following website link: [www.greatriverpassage.org](http://www.greatriverpassage.org).

In August, 2010 more than 300 people attended the first of many public meetings and workshops. At the plan rollout in June, 2011, over 1,000 people celebrated its completion. Before each public meeting, the Steering Committee and the Community Task Force provided feedback on plan recommendations to ensure that they accurately represented the input of the community and its constituents.

The consultant team facilitated a series of community design forums, hosted by the Parks and Recreation Department, that encouraged open discussion of key issues and opportunities with stakeholders and to explore the breadth of ideas for potential river corridor projects. The forums covered a broad range of topics, including water quality and stream restoration, public art, outdoor recreation, development and redevelopment, and access to parks and to the river.

The project team organized a series of focus group meetings with representatives of environmental organizations, local watershed districts, river oriented industries, recreation and adventure sports organizations, artists and experts in specific fields, to brainstorm opportunities and critique plan proposals. City representatives and the consultant team met at key points in the planning process with individual stakeholders, community members, and agency officials to discuss and further develop issues and opportunities. Meeting notes and public comments are included in the Appendix.



## Identifying Key Issues

Initial planning for the Great River Passage plan included inventory and assessment of existing conditions, resulting in a gap analysis that identified key issues, opportunities and needs related to natural resources, parks, economic development, sustainability, access and art, history and culture. Presented at the first public meeting, this analysis allowed the planning team and the community to begin to understand the critical needs to be addressed by the plan.

## Gap Analysis Findings

The gap analysis identified issues for each of the four reaches, focusing on opportunities to create a “more natural”, “more urban”, and “more connected” river corridor. Needs identified finding park areas for expanding and changing recreational uses, providing a more robust trail system that allows better access for people to interact with their environment, and protecting and restoring healthy ecosystems. Other needs identified include creating a continuous recreational experience along the river corridor, and developing vibrant informal places - places for gathering and for leisure activities - so that the riverfront becomes an important part of daily life in Saint Paul.

*The following Gap Analysis exhibits were prepared for public meetings during the information and analysis stage of the planning process.*



*Wilderness Inquiry conducts a canoe trip for urban youth on the Mississippi River. The plan addresses unmet recreation needs and the multitude of opportunities to allow more Saint Paul residents and visitors to take advantage of the river for recreation and leisure.*





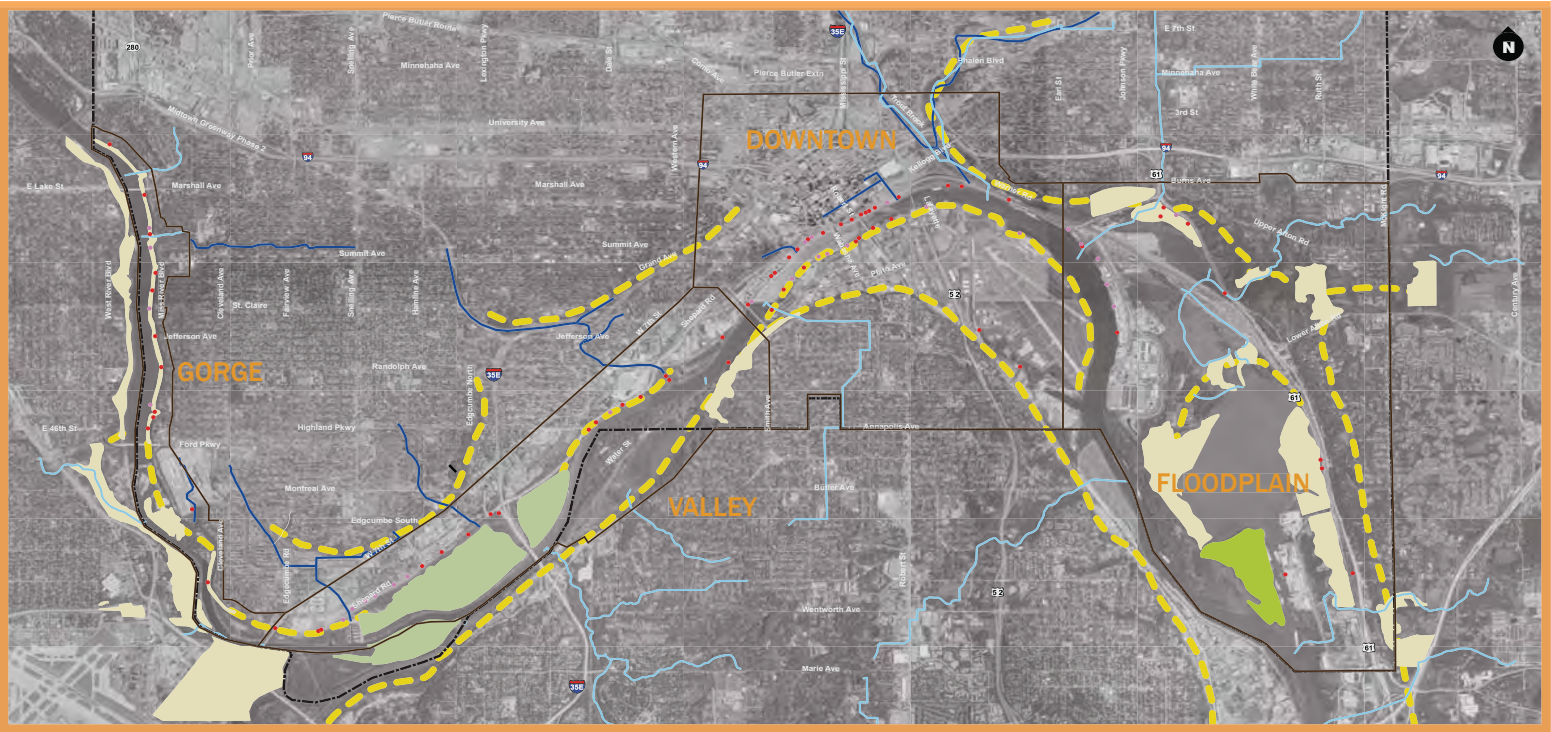
Key Issues by Reach

- GORGE**
- Identify ways to control and repair informal trails that have caused significant erosion on the bluffs and encroach on, and damage fragile habitats.
  - Identify appropriate levels of use, locations of trail access, and provide destination points to natural areas of the bluffs and to the river's edge to reduce impacts to other areas.
  - Identify potential streams to be daylighted, and determine available water sources for base flows and controls needed for small storms and flood event management.
  - Improve water quality provides opportunities for aquatic species restoration – both plants and animals.

- VALLEY**
- Types and levels of recreational access and use vary greatly, and bear little relationship to existing and potential wildlife habitat areas.
  - Significant portions of the reach contain monocultures of invasive species and plant communities which threaten diversity.
  - Sedimentation resulting from infrequent major flood events has caused significant damage to park facilities.
  - The Minnesota River and several other tributary streams provide significant opportunities to link River corridor and upland habitats.

- DOWNTOWN**
- Fully urbanized river edges break the continuity of natural habitat areas.
  - A concentration of storm sewer outfalls in the downtown area outfall significant amounts of polluted storm water into the river.
  - The Phalen Creek corridor provides the opportunity to make a significant open space connection to upland habitats.
  - The eastern bluffs provide opportunities to provide connectivity between the Valley, the Floodplain and Bluffland neighborhoods.

- FLOODPLAIN**
- The floodplain is isolated from urbanized areas by major roadways and rail lines, industrial development, and the river itself.
  - The unique landscape qualities of the lake, extensive wetlands and riparian areas, and naturalized River edge provide a broad range of opportunities for habitat protection, enhancement and interpretation.
  - Battle Creek and other secondary streams entering the reach provide opportunities for upstream regional water quality treatment.



enhancement of natural systems in the Great River Park should focus on connecting, integrating, improving, and managing hydrologic and ecologic systems.

**Habitat**

- Outstanding
- High
- Moderate

**River Tributaries**

- Existing streams
- Stream daylighting opportunities
- Storm water outfalls

Opportunities for becoming... More Natural

Reconnect and Enhance Corridor Habitats

- >> Create **habitat corridors** to link existing habitat areas within the river corridor using existing and daylighted stream corridors.
- >> Plan and design parks to establish a **hierarchy of recreational use and access** to protect and enhance existing habitat areas.
- >> Develop **specific management strategies and programs** tailored to meet the varied needs of specific plant communities.

Reestablish Pre-Settlement Vegetation Patterns

- >> Develop a hierarchy of management and design strategies to **reestablish plant communities**. Target initial management activities in areas of high ecological quality, moving outward into areas of lower quality over time; Management techniques such as burning, selective clearing, reintroduction of native species, and public education should be part of a comprehensive palette of methods.
- >> Identify institutional requirements to develop and manage natural areas; identify partnerships with other entities within the corridor to **promote continuity** across ownership and political boundaries.
- >> Identify level of effort and **funding needs** for long-term restoration and management efforts.

Enhance the Habitat Potential of Ponds, Lakes and the River's Edge.

- >> Improve habitat conditions of Pig's Eye Lake and Pickerel Lake by **increasing water depth diversity** and increase coverage of emergent and submergent vegetation.
- >> Advocate for **improved water quality** in the Minnesota River.
- >> Install **shoreline structures** that reduce wave erosion and slow current velocities to increase biological diversity.

Improve Urban Streams and Small Tributary Watersheds

- >> **Daylight small urban streams** buried as part of the city's development, without compromising urban design and community development goals.
- >> Reestablish the **ecological diversity** of daylighted tributary streams.
- >> Integrate **local storm water treatment** into parks, parkways, and green streets; direct treated stormwater to natural habitats to promote greater ecological diversity and expanded recreational opportunities.
- >> The proximity of riverfront parks to tributary stream corridors provides the opportunity for significant upstream water quality treatment allowing for **improvements in lake water quality**.





### Key Issues by Reach

#### GORGE

- Lacks 'Third Places'-gathering spaces for people
- There is a continuous public riverfront/park, but formal “touch the river” access outside Hidden Falls and Meeker Dam is lacking
- Ford Lock and Dam is underutilized as an experience
- Completion of the Midtown Greenway-Saint Paul extension will provide a cross-the-river greenway experience that does not exist now
- Erosion from informal use-walking, mountain biking, etc.-should be mitigated to prevent further slope damage

#### VALLEY

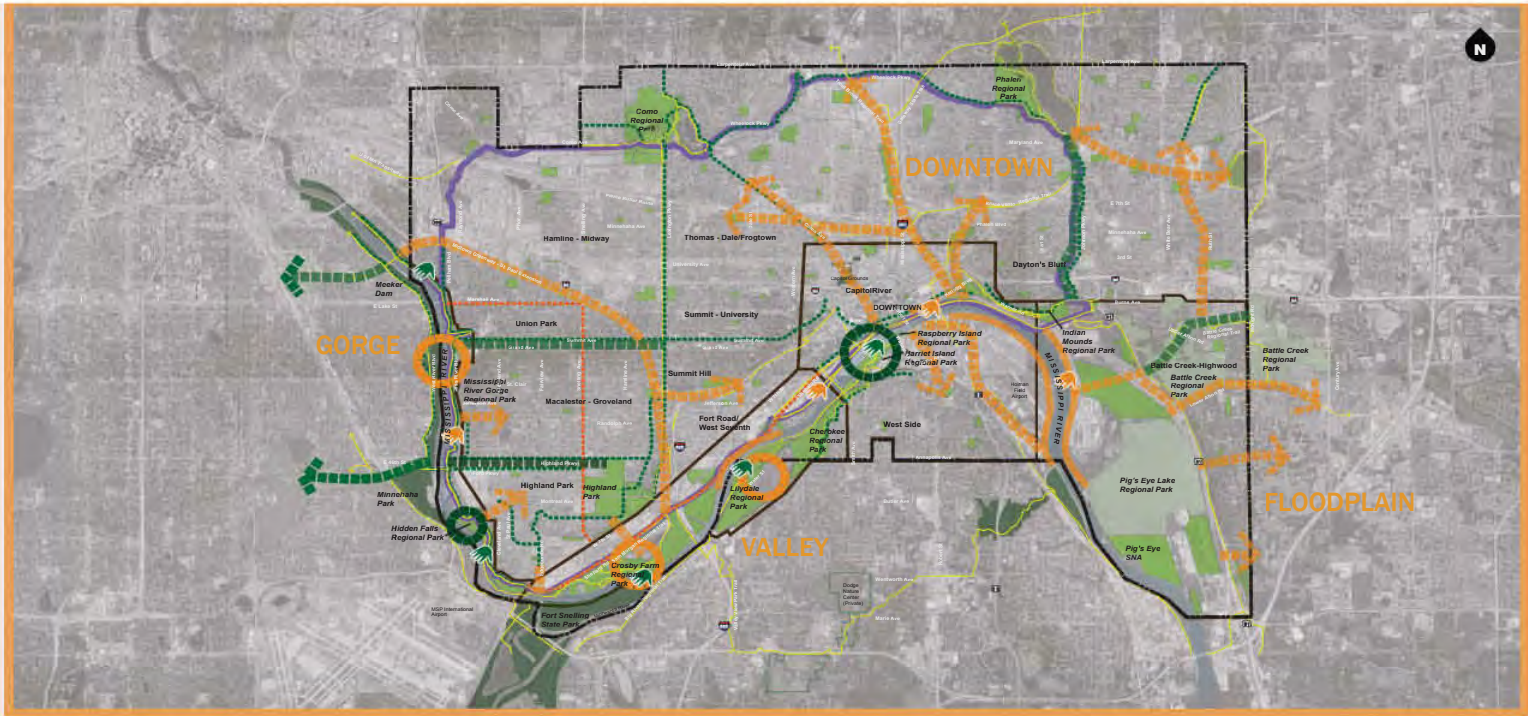
- Shepard Road lacks park/greenway experience and it creates a barrier between the river and the West 7th St. neighborhood
- Lilydale and Crosby Farm Parks are currently underutilized as natural park experiences and lack clear access/entry/wayfinding, lighting, safety, trash receptacles, bike parking, etc.
- The Valley Reach has the best potential for river access and recreation but is underutilized and not promoted (Lilydale, Crosby Farm, Cherokee)
- Island Station is an unrealized opportunity
- The bluff creates a barrier between the neighborhoods and the river valley
- Valley open space does not feel safe--lacking lighting, people, signage, communication (emergency lights), shelters, etc.

#### DOWNTOWN

- Poor experiential and visual connections to the river from downtown
- Lack of awareness/identity of river when in downtown
- Lack of river programming
- Undefined role of public art in downtown realm
- Lack of daily attractions/destinations focusing on the river for all users/ residents
- Barriers: Warner Road, power lines, bluff, rail lines, development

#### FLOODPLAIN

- No access to river or Pig's Eye Lake from east neighborhoods
- Existing uses (industrial) create challenges for recreation and park access
- Contamination may limit recreational use of Pig's Eye Lake
- Viewsheds provide opportunities for gathering spaces/'Third Place'
- How to mingle industrial uses with habitat and recreational uses -- models?
- Potential for recreational access and uses in the Blufflands as well as around Pig's Eye Lake are higher than in any other within the study area.



parks and open space improvements in the Great River Park should be focused on creating Third Places for Saint Paul residents, making connections to neighborhoods and commercial districts, and developing continuous natural areas.

#### Parks and Open Space Gaps

- Meaningful Third Places
- Connections into neighborhoods
- Access to “touch” the river
- Gaps in Riverfront Access
- Gaps in Parkway

#### Parks and Open Space Existing Features

- Meaningful Third Places
- Connections into neighborhoods
- Access to “touch” the river
- City Parks
- Other Parks
- Trails
- Reach Boundaries
- City Boundary

## Opportunities for becoming... More Urban, More Natural and More Connected

### Make the Great River Park Saint Paul’s greatest “third place”

- >> Create **vibrant, informal people places** along the riverfront that combine the chance to recreate, people-watch, eat, surf the web and just hang out all at once.
- >> Create more **“signature” riverfront attractions** such as dog parks, playgrounds and restaurants
- >> Provide key **visitor services** such as shelters, drinking water, food and restrooms at appropriate intervals along the river
- >> Enhance **riverfront security** by encouraging more people to recreate along the riverfront

### Create a continuous recreational experience along the river corridor

- >> Establish **continuous public riverfront** circulation and recreational experience
- >> Provide more opportunities for the public to safely interact with the river... **“touch the water”**
- >> Create a coherent and distinctive riverfront experience for river corridor travelers
- >> Explore innovative approaches to **integrating industrial riverfront** uses with public access
- >> Diversify and intensify **recreational programming** at the river

### Seamlessly integrate art and interpretation into the Great River Park

- >> Use **experiential art** to enhance visitor's appreciation for and understanding of the river and cultural interactions with it
- >> Incorporate performance art, interpretive routes, educational programming and other forms of **cultural interactions**
- >> Make **art and interpretation** inherent to the design of park spaces and facilities

### Weave the Great River Park into the fabric of Saint Paul

- >> Better **integrate neighborhood edges** into the Great River Park
- >> Create **multi-functional greenways** extending from the river corridor into neighborhoods
- >> Celebrate the city's **ecology and geology** (streams, valleys, caves, bluffs) by using them as a framework for river access and recreation
- >> Create more and better-designed **riverfront access locations**

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## Key Issues by Reach

### GORGE

- Redevelop the Ford Motor Plant site as a mixed-use center.
- Integrate public transit in the redevelopment of the Ford plant site.
- Integrate renewable energy from the Ford hydroelectric power plant to the energy grid.

### VALLEY

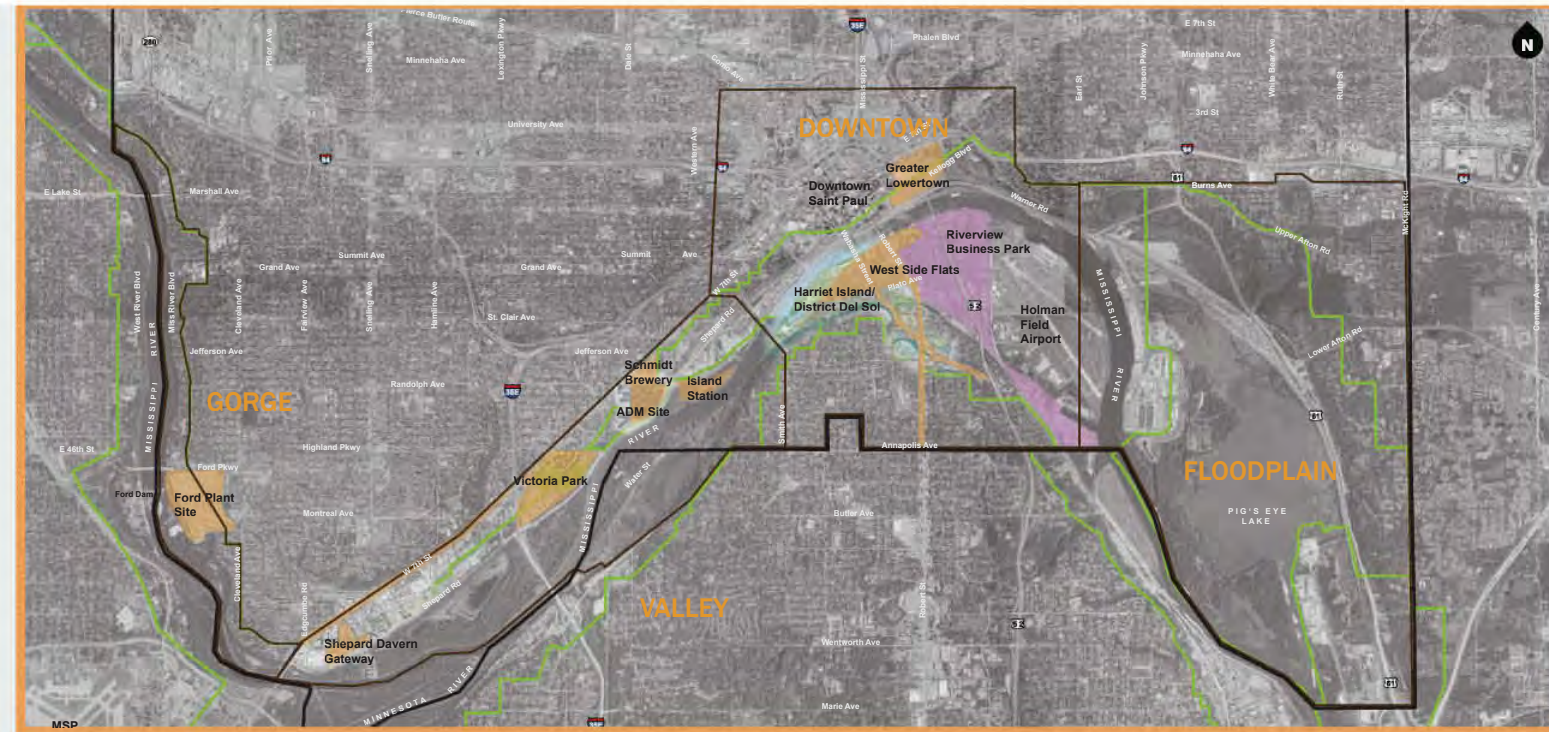
- Redevelop Archer Daniels Midland Company site.
- Reuse and redevelop the Schmidt Brewery.
- Reinvest in Island Station as a mixed-use development.
- Complete the development plan proposed for Victoria Park.
- Redevelop the Shepard/Davern area consistent with the Shepard Davern Gateway Small Area Plan.

### DOWNTOWN

- Continue commercial and industrial uses of river corridor land and water, consistent with the Saint Paul Comprehensive Plan.
- Implement the West Side Flats Master Plan.
- Secure funding for infrastructure development in the West Side Flats.
- Redevelop the Diamond Products site.
- Complete the master plan for the Greater Lowertown Area.
- Enhance houseboat community.
- Redevelop Union Depot as a multi-modal transit facility.
- Capitalize on the potential economic benefits from the redevelopment of Union Depot – housing, retail and employment opportunities.
- Reuse the City House.
- Redevelop/reuse the post office building.
- Implement the Harriet Island/District del Sol Master Plan.

### FLOODPLAIN

- Continue commercial and industrial uses of river corridor land and water, consistent with the Saint Paul Comprehensive Plan.
- Pursue cleanup and reclamation of polluted sites.
- Upgrade the Metropolitan Wastewater Treatment Plant.
- Maintain river-related industry along Childs Road.
- Evaluate parcels for acquisition and development along the east bank.
- Investigate recreation opportunities in Pig's Eye Lake.



*economic development, community investment and redevelopment areas in the Great River Park should be focused on creating a series of mixed use villages along the river corridor.*

### Economic Development Focus Areas

- Potential Redevelopment Sites
- Potential Industrial Intensification Sites
- Critical Area Boundary
- Reach Boundaries
- City Boundary

## Opportunities for becoming... More Urban

### Create a series of mixed-use villages along the river corridor.

- >> Preserve buildings, landscapes and monuments of **architectural, cultural and historic merit**.
- >> Design new buildings and neighborhoods **compatible with the surrounding context**.
- >> Support new housing, office and retail **development in the river corridor**.
- >> Focus each **urban village** on high quality public spaces.

### Promote high-quality sustainable urban development, both along the river's edge and in adjacent neighborhoods.

- >> **Balance environmental needs** with the built environment.
- >> The design of new buildings should reflect the river corridor's natural character, respond to topography and drainage flows.
- >> New development should be designed to **conserve energy and natural resources**.
- >> Promote compact, mixed-use development.
- >> Maximize opportunities for better connectivity and **multiple modes of transportation**.

### Preserve visual and physical access to the river.

- >> Identify, preserve and **enhance critical views** and panoramas along the riverfront.
- >> Development of new streets, blocks and neighborhoods in the river corridor should continuously **reinforce connections** with the river corridor.

### Sustain the economic resources of the working river.

- >> Continue commercial and **industrial uses** of river corridor land and water.
- >> Support the **continued operation** of commercial navigation facilities.

### Identify opportunity sites for future development consistent with the Saint Paul Comprehensive Plan.

- >> Work with City Staff to identify existing and potentially new opportunity sites.
- >> Develop strategies for the **integration of new development** with the Great River Park system.
- >> Identify **potential acquisition sites** for future parks and/or development.





Key Issues by Reach

GORGE

- Develop high density, mixed use district at Ford Plant site.
- Connect new district to transit, pedestrian and bike routes.
- Establish combined heating and energy district.
- Establish district waste and stormwater district
- Include opportunities for local food production.

VALLEY

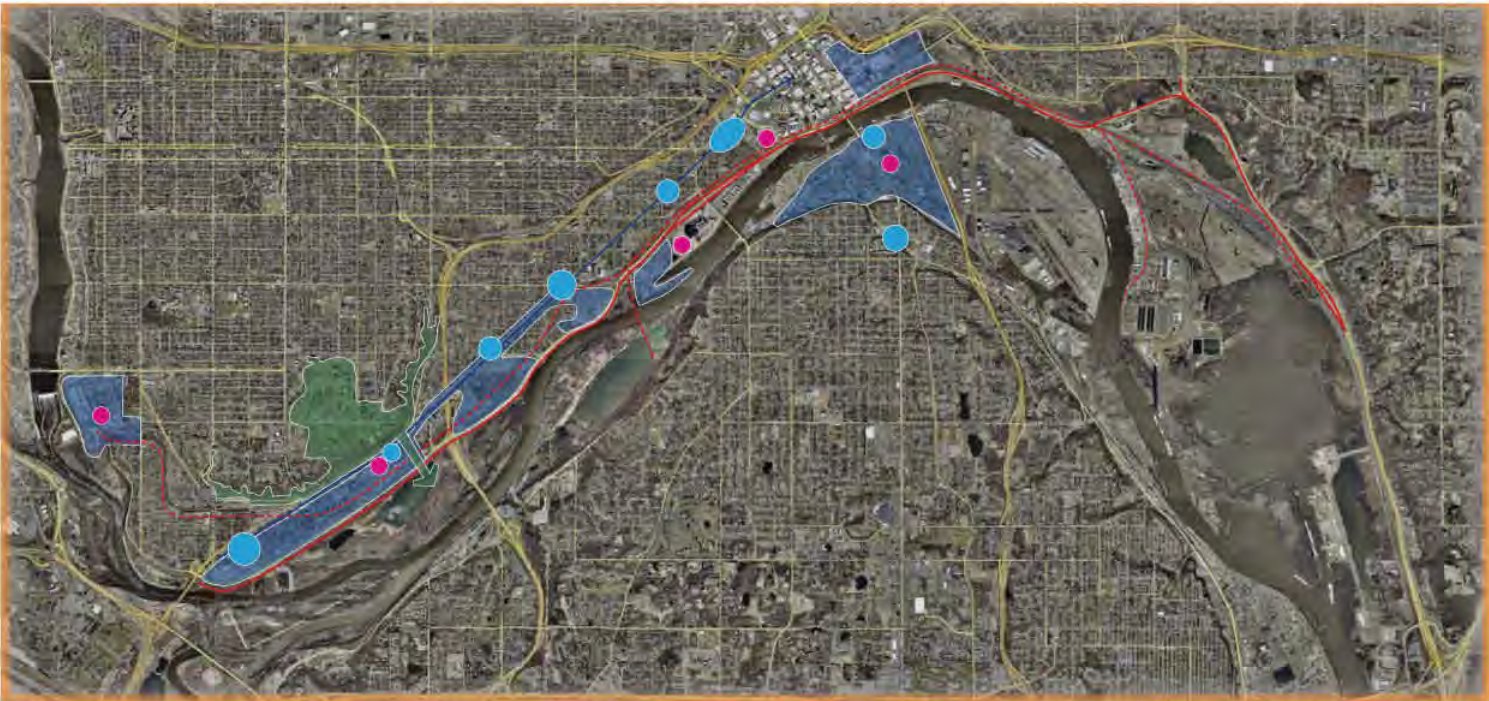
- Establish higher density mixed use neighborhood centers along 7th Street/Fort Road and connect them to the river.
- Reduce barrier of Shepard Road and railroads to neighborhoods and wildlife corridors.
- Investigate extending the downtown district heating system or establish new ones.
- Develop district waste treatment and storm water management including runoff from Shepard.
- Include opportunities for local food production.
- Integration of existing industrial uses.

DOWNTOWN

- Plan for high density mixed use development in Lowertown and the West Side
- Overcome barriers to riverfront access
- Extend district heating and cooling
- Develop Stormwater management and treatment strategy
- Provide significant public space opportunities

FLOODPLAIN

- Avoid costs of extending infrastructure to serve uses.
- Develop renewable energy strategy for facilities located in this area.
- Treat all waste water locally.
- Treat all stormwater locally in terms of quality and quantity.
- Develop strategies to enhance sustainability of existing industrial uses.



Enhancement of sustainability in the Great River Park corridor should focus on reducing carbon footprint, reducing potable water consumption, reducing excess runoff, improving water quality and enhancing natural systems vitality.

- Rail Barrier/Transit Opportunity
- Road Barrier
- 7th Street Corridor
- Combined District Energy & Heat / Water Strategies
- Neighborhood Centers
- Mixed Use
- Habitat Corridor

Opportunities for becoming... More Urban and Sustainable

1. Focus on reducing carbon footprint

- >> **Reduce vehicle miles travelled** by enhanced pedestrian, bike and transit options in combination with higher densities.
- >> Extend **district scale combined energy and hot water systems** and district cooling where appropriate.
- >> Develop new neighborhoods that **optimize passive energy savings** through orientation.
- >> Apply aggressive **energy reduction** standards to new development and encourage energy conservation retrofits in existing building stock.
- >> Investigate **renewable energy** supply (solar, wind and waste to energy)

2. Develop an efficient water strategy

- >> **Minimize potable water use** by applying aggressive goals for building and landscape uses.
- >> Improve **district storm water management** systems for buildings and public spaces that enhance water quality and decrease excess runoff.
- >> Develop site and district **rainwater harvesting** strategies for non-potable uses.
- >> Develop **native planting** strategies

3. Reduce and use waste for energy.

- >> Investigate alternative **district waste management** systems
- >> Assess **waste to energy production** for district heating and power.
- >> Investigate **district biological waste water treatment**.

4. Enhance and extend wildlife habitat

- >> Enhance opportunities for **native plantings**.
- >> Enhance opportunities for **access to nature** both within the neighborhood and the park.

5. Promote healthy lifestyles

- >> Promote walking and biking for both recreation and commuting.
- >> Identify opportunities for local food production at a district and individual scale.





Key Issues by Reach

GORGE

- An existing neighborhood street grid provides multiple travel options to access Mississippi River Blvd and trail.
- Completing proposed bicycle improvements on Marshall Ave and Highland Parkway will create three designated east/west bicycling corridors.
- Conversion of the BNSF Soo Line into the Midtown Greenway–Saint Paul Extension will provide an off-road alternative and additional crossing of the Mississippi River into Minneapolis.

VALLEY

- Land use, topography and traffic combine to cut off this section of the river corridor and Sam Morgan Regional Trail from neighborhoods north of W. Seventh Street.
- Two streets create barriers to connectivity: Shepard Road has moderate traffic volumes and high speeds, while Seventh Street carries high volumes of traffic traveling at slower speeds.
- Land use, setbacks and building orientation add to the auto-dominated feel of Shepard Road.
- Existing pedestrian crossings lack visibility and connecting street corridors have poor quality walking environments.
- Designated bicycling connections need to be made up to Edgumbe and Jefferson Ave to connect into the citywide bicycle system.

DOWNTOWN

- The combination of topography, railroads, parking lots and roadways severely limits access from Downtown Saint Paul to the river corridor.
- New pedestrian infrastructure and wayfinding is desired to shorten walking distances and make more direct connections from Downtown.
- Existing bridges provide access across the river, but often do not connect down to facilities along the river.
- With multi-agency coordination, new roadway and transit infrastructure projects offer opportunities to make new non-motorized connections.
- On the south side of the river, topography and limited access routes separate bluff top neighborhoods from lands comprising the Great River Park.
- The West Side neighborhood also lacks a connection to the southeast to access both the river and the Dakota County greenway system.

FLOODPLAIN

- Highway 10/61 and multiple railroad lines create a significant barrier for residents living on the Eastside of Saint Paul to access the Great River Park.
- Access to and around Pigs Eye Lake is limited.
- Suburban and rural development patterns further lengthen trip distances for persons on foot or bike.



bicycling and walking access to the Great River Park corridor needs to focus on enhancing urban environments and overcoming barriers in strategic locations

- Bicycle/Trail System**
- Existing trails, routes, shoulders, bike lanes
  - Priority projects for implementation
  - Areas with critical gaps in system
- Major Barriers**
- Railroads
  - Principal arterials
  - Bluff topography

Opportunities for becoming... More Connected

Focus on Completing Saint Paul’s Bicycle Network

- >> Form an integrated bicycling **system** by seamlessly connecting off-road trails and on-street bicycle facilities.
- >> Complete key **missing links**. Disconnected individual projects do not provide network travel options. Focus on linking river trails with existing bikeways and corridors slated for short-term implementation.
- >> Prioritize segments that will complete primary bicycling corridors **at least 2.5 miles long** – which is the national average bicycle trip length. Secondary corridors and neighborhood connections can be added over time to create a finer grain to the network.
- >> Implement bicycling improvements as part of multimodal, **complete streets** projects.

Enhance Saint Paul’s Pedestrian Environments

- >> Implement key projects to **overcome barriers**. Prioritize big ticket items such as stairs, bridges, walkways and/or elevators in select locations to shorten trip distances.
- >> **Plant street trees** and add pedestrian supportive landscaping to enhance the urban environment and separate sidewalks from vehicular traffic. The presence of green streets will help extend the Great River Park into the community.
- >> Implement **widened sidewalks** within select multimodal corridors in conjunction with implementing bicycle accommodations.
- >> **Slow traffic** to move at speeds appropriate for urban settings where pedestrians are present.
- >> Create neighborhood gateways and enhance **pedestrian crossings** of major streets.

Link Non-Motorized Modes with Transit

- >> Holistically address **land use** and urban form to create pedestrian-supportive transit corridors.
- >> Prioritize multimodal improvements within corridors that connect to **LRT stations**.
- >> Enhance routes and use **wayfinding** to direct bicyclists and pedestrians to the river corridor from transit stops.
- >> Examine the potential for transit circulators and water taxis to serve **riverfront destinations**.

Preserve Vehicular Access and Circulation

- >> Accommodate **vehicular flow** – but at appropriate speeds – throughout the study area. Pedestrian-friendly environments can exist along corridors carrying large numbers of automobiles at moderate to slow speeds.
- >> Enhance the city’s parkways and implement the vision for the **Grand Round** parkway system.
- >> Enhance circulation and access for all modes by extending streets to create a **smaller street grid** where possible.
- >> Provide adequate **parking** at trailheads and overlook areas while preserving natural environments.
- >> Explore options for **green infrastructure** leading to the Great River Passage.



### Key Issues by Reach

#### GORGE

- Providing art experiences at key sites along the bluffs as well as along the river's edge will increase community engagement.
- Improving the capacity of destinations, such as Hidden Falls Park, to accommodate performance events and temporary installations will increase artists' engagement.
- Engaging artists in creating interpretive and wayfinding amenities, seating and trail enhancements will increase their effective and usability.
- Identifying critical nodes, such as end of Summit Ave. for fixed public art projects will help punctuate landmarks.
- Involving artists in creative bridge lighting schemes for Marshall and Ford Parkway will lend a bold and dramatic statement to existing infrastructure.
- Neighborhood-based arts activities that celebrate and raise awareness of the river environment serve as an effective educational strategy.

#### VALLEY

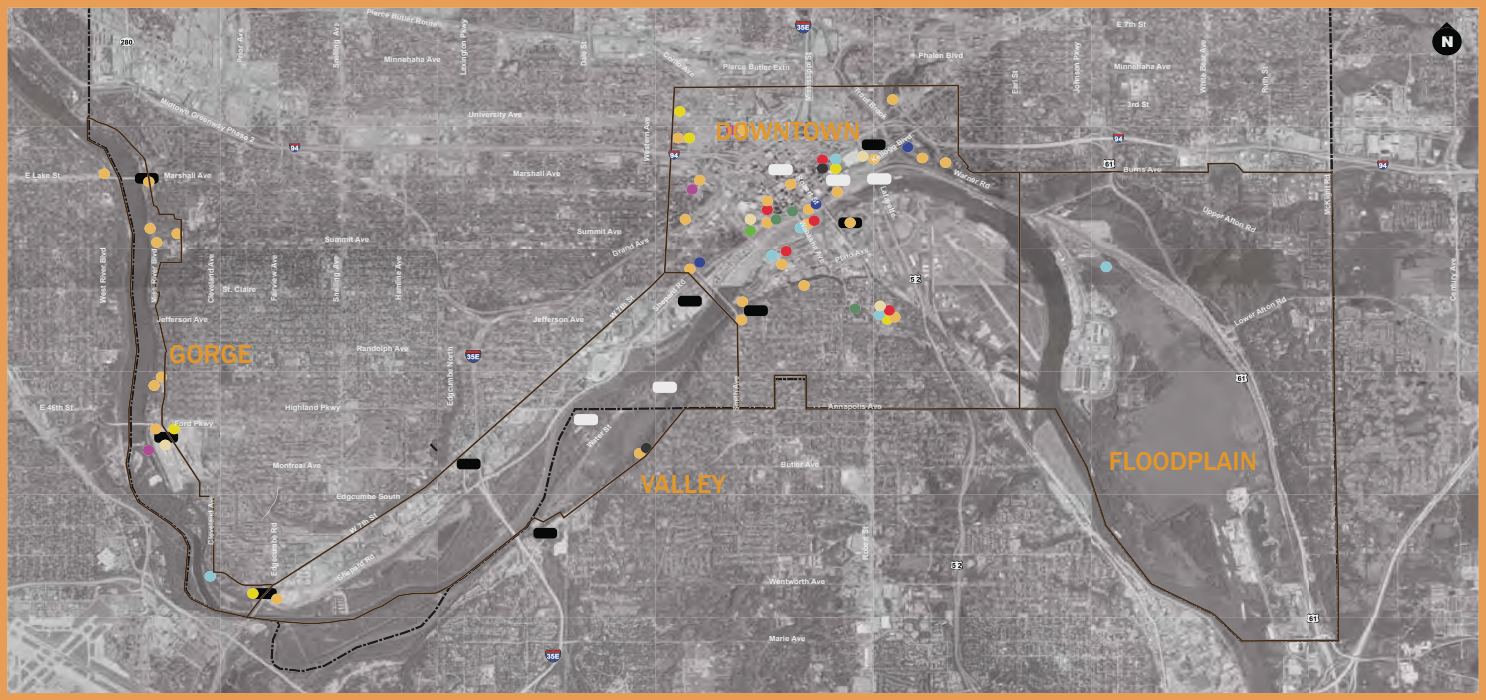
- The redevelopment of Ford Plant site provides excellent opportunities for engaging a variety of artists and designers in planning and programming.
- Identifying critical nodes, such as end of South Prior Ave. and the cloverleaf at Hwy 5 at 7th St. will help mark these important junctures and transition points.
- Engaging artists in creating interpretive and wayfinding amenities, seating and trail enhancements will increase their effective and usability.
- Involving artists in creative bridge lighting schemes for Hwy 5, and Hwy 35E, Smith Ave High Bridge, will lend a bold and dramatic statement to existing infrastructure.
- Marinas and park settings (Pike Island Park, Fort Snelling State Park, Crosby Lake Regional Park, Lilydale Regional Park) offer ideal venues for a variety of public art activities.
- Neighborhood-based arts activities that celebrate and raise awareness of the river environment serve as an effective educational strategy.

#### DOWNTOWN

- Build on Harriet Island's identity as a venue for diverse forms of public art, including events, festivals and temporary installations, concerts and fireworks.
- Utilize Kellogg Mall, Raspberry Island, and other accessible open spaces as venues for changing outdoor sculpture exhibitions, performance events, and community-oriented activities.
- Involving artists in the new Lafayette Bridge project, the renovation of the Depot, and future pedestrian bridge projects can transform traditional infrastructure into artistic landmarks.
- Addressing limitations of flooding and its impacts on artwork.

#### FLOODPLAIN

- Increasing public access to river's edge and create more gathering places necessitates involving artists in the planning and development stages.
- Connecting public artists with public and private development projects offers opportunities to make meaningful new destinations.
- Addressing limitations of flooding and its impacts on artwork.



Artists, arts organizations and cultural organizations in the region need to participate with riverfront communities to focus on enhancing urban environments at strategic locations and increasing appreciation and value of the river as a major asset.

#### Types of Public Art

- Fixed - sculpture, murals, mosaics and environmental
- Ephemeral - temporary, performance and outdoor events
- Decorative - custom insets and sand blasted patterns
- Interactive - climbable, moveable and motion sensing
- Functional - seating, railing, wayfinding and lighting
- Participatory - engage, story telling and adventure
- Community - tourism and economic development
- Civic - monuments and commemorative statuary
- Place Making - plazas, gathering spaces and parks
- Platform - programmable systems, projections and other high-tech
- Planned Art
- Gaps

### Opportunities for becoming... Engaged in Art

#### Importance of aesthetic and social values

- >> Connect a **diversity of artists** with appropriate opportunities.
- >> Involve artists at the earliest stages of **conceptual planning of public and private developments** and continue through project design and implementation,
- >> **Educate and inform neighborhood design advisory committees** for district councils engaged in riverfront planning about public art possibilities, issues, and benefits so they may be effective participants in the selection of artists.
- >> Describe ways public art can **add value** to public and private developments.
- >> Enhance high visibility environments and **pedestrian experiences**.
- >> Provide guidelines and recommendations to **spark and inspire partnerships** and funding for the next phase of arts and cultural development in the city.
- >> Educate CIB committee and district councils to **improve and understand** the evolving field of public art.

#### Increase public art accommodations

- >> **Identify sites and redevelopment areas** where public art might add value.
- >> Increase access to river's edge and **create more public gathering places**.
- >> Insure a mix of artists participate in **programming along the riverfront**, including temporary events, performances, installations, and interactive new media projects.
- >> Identify concepts for systems of **engaging community members** in neighborhoods adjacent to the river.

- >> Provide **incentives for artists** and arts organizations to pay attention to riverfront sites for their programming and creativity.

#### Provide sufficient resources to sustain an innovative arts program

- >> Insure **adequate policies and procedures** are developed to support the creation and implementation of a comprehensive, citywide public art plan to inform and guide small area planning along the river.
- >> **Address security, long-term maintenance and conservation issues**, including existing artworks in public and private collections.
- >> Use a percent of funds from the **city's long-range capital improvement** budget where appropriate to leverage private investment in public art.
- >> Artists should serve on design teams, function as artists-in-residence, and pursue other **methods of engagement**.
- >> Recruit **champions for public art** to insure integration in all types of situations and opportunities.
- >> Establish transparent governance system and **methods of finding and selecting artists** to commission.
- >> Develop **multiple funding mechanisms** to foster participation by stakeholders.
- >> Increase capacity and professional development of City staff in charge of **public art management**.
- >> Increase use of **artists-in-residence in City departments** involved in riverfront development and maintenance.



# Changing Recreation Needs

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The Cultural Audit(tm) and Gap Analyses, along with substantial community participation in public meetings and design forums, clearly indicated that the recreation needs of Saint Paul’s residents and visitors are changing. Existing recreation facilities along the river need to be adapted to changes brought about by a new focus on healthy living, active lifestyles and new types of recreational pursuits.



### Nature-Based Recreation

Recreation interests in Saint Paul are shifting from numerous small recreation centers to fewer higher quality community centers with programs expanded beyond youth athletics. An increasing interest in outdoor adventure, experiential activities, exploration and environmental education, strongly suggests that the concept of “nature-based recreation” will be an important way to meet community recreation needs well into the future. An extensive network of walking, bicycling and boating trails, that provide access for all ages and abilities, integrating a careful balance of access to and protection of valuable natural resources, will encourage healthy lifestyles and community with nature.



*How people spend their leisure time is evolving in response to broader changes in society. Changing community needs can be fulfilled by adopting new types of recreation & leisure activities that build upon the natural qualities of the river valley.*





What people seek in their communities and the forces impacting lifestyle and investment decisions are constantly evolving. As a consequence recreation is constantly evolving. New or resurrected forms of recreation and new technologies as well as evolving cultural preferences bring altered facility and program needs. Park systems must keep pace with these changing needs or become obsolete. By building flexibility into park and recreation facilities, communities can better adapt to changing demands.

As a basis for exploring a cutting-edge and relevant future for Saint Paul's Mississippi River corridor, it is important to understand key lifestyle and demographic trends. Following is an overview of the trends that will help shape an informed approach to the Great River Passage Master Plan.



**QUALITY vs. QUANTITY**  
People are increasingly willing to travel for high quality recreational experiences vs. using lesser facilities close to home.



**THE THIRD PLACE**  
The "third place" (coffee shops, pubs, cafes, public spaces) has become an increasingly important form of socialization and recreation. Proximity to desirable third places is increasingly a factor in real estate values, housing and employment choices and people's perception of livability.



**ENVIRONMENTALLY AWARE**  
Increased awareness of environmental issues and the benefits of a healthy ecosystem have people demanding more from public open space. In addition to high quality recreational experiences, people seek outdoor education or interpretive programs and recognize the importance of natural habitat. In response, communities are finding a new balance between environment and recreation and better combining the two.



**FOCUS ON RIVERS**  
Around the world, urban riverfronts are transforming from forgotten backwaters to centers of community life. Riverfronts are becoming the venue of choice for community gathering, linear recreation, habitat restoration and all forms of redevelopment.



**REDEFINING FAMILY**  
Only twelve percent of new households over the next twenty years will have children. The traditional family occupies roughly one quarter of households today and that number is shrinking. As a result, people are seeking family and social experiences outside the household much more than ever before. Also, children will make up a much smaller segment of the population than any other point in American history.



**ACTIVE LIVING**  
Exploding public health concerns in conjunction with an increasingly sedentary lifestyle has placed a bright light on the links between regular physical activity and lifelong health. Communities are responding with altered infrastructure and programming that offers healthy foods, walkable neighborhoods and greater recreational choices that integrate active living into everyday life.





**COMPACT NEIGHBORHOODS**

A growing segment of the population seeks out walkable, mixed-use districts for their work, living and leisure environments. High-quality public open space is a baseline expectation for those seeking compact neighborhoods.



**LINEAR RECREATION**

For people of all ages and abilities, trails are the top recreational demand. Interest ranges from nature-based hiking, birding and interpretive trails to paved trails for cycling, walking and running. The most desired trails are those along natural amenities like rivers and lakes and those that provide loops.



**URBAN AGRICULTURE**

Interest in healthy local foods is causing a surging interest in growing food within urban environments. Community gardens are increasing in popularity, especially with immigrant populations as private yards become more scarce in emerging housing patterns.



**FISCALLY CHALLENGED**

Rising health care costs, anti-tax sentiments, increasing fuel and material costs, and limited funding are reducing the resources available for public parks and recreation. Public/private partnerships, creative funding, right-sizing and a renewed focus on quality spaces and programming is becoming the recipe for success.



**INCREASINGLY DIVERSE**

The U.S. is the only major industrial nation with an expanding population fueled primarily by immigrants. One of the results of cultural richness is an expanded array of recreational demands based on ethnic customs and sports. Our diverse population is calling for greater community and family gathering spaces, additional un-programmed field spaces and facilities for sports with exploding popularity such as soccer. A diverse population also brings a divergence in response to natural areas – some view natural lands as threatening while other cultures find them inviting.



**GOING TO THE DOGS**

As pets increasingly become integral parts of households, the demand for controlled, off-leash dog parks are exploding in popularity.



**CRAVING CULTURE**

Cultural tourism is the fastest growing form of tourism and visitors tend to spend more and stay longer than other tourists. Cultural tourists demand multi-dimensional experiences and greater intellectual depth of experience in the places they visit.



**CHANGING CLIMATE**

The warm winters and variable precipitation rates of the past decade have negatively affected winter sports like ice skating, hockey, and cross country skiing; causing a reconsideration of certain park uses. They have also increased people's interest in environmental sustainability and energy efficiency. Rising energy costs will put a greater emphasis on recreation options. Wise use of water, energy, and natural resources will be critical.



New River Gathering Places

A series of gathering places in Mississippi River Parks, and within existing and proposed neighborhoods, can bring the community to the Mississippi River to relax and socialize in a natural setting. The transformation of existing and proposed parks is an opportunity to provide for nature-based recreation for all ages and levels of ability. Places for community and civic gatherings, events, celebrations and leisure activities, bring a new sense of community that is enhanced by its common bond with the Mississippi River. Active sports, such as mountain biking, climbing, and better access for non-motorized boating, can attract more adventure-oriented recreational users. Opportunities to connect with nature and provide access to age-appropriate activities can enhance the vitality and livability of the City for residents and visitors alike. A unique universally-accessible play area will help an underserved segment of the population begin to enjoy the many benefits of outdoor recreation within a Mississippi Riverfront setting.

Nature-based Recreation

The wealth of natural resources along the Mississippi River provides an opportunity to create new recreation resources of regional and national significance. In addition there is great potential to make the Mississippi River a more important part of the daily lives of the City’s residents, bringing the abundance of natural and cultural resources into the heart of the City, and providing new kinds of recreation and leisure that are not currently available in neighborhood parks and recreation centers. Activities such as canoe and kayak adventures, mountain biking and interpretive trails and riverfront leisure, provide reasons for people to come to the river, enjoy its majesty and make sure that it is cared for. Improved connections between neighborhoods and the river make this environment relevant to the community again, as it has been throughout history. Improved access, combined with expanded recreation opportunities on the river, will help promote healthy lifestyles and encourage new generations of land stewards.

Expanded Landscape Stewardship

This Plan describes unique opportunities to increase the natural resource and aesthetic values associated with preserving, expanding, and enhancing the river valley’s ecosystems. For example, the valley’s populations of eagles and herons are recognized across the region and the nation and draw many people to the river to see them. Area residents and visitors have expressed great interest in expanding nature-based activities such as wildlife observation, environmental education and interpretation, sport fishing, and just enjoying quiet places in nature. The Plan recommends expanding programs for landscape resource management, habitat enhancement and protection, and environmental education to protect natural

resources and encourage broader support for long-term stewardship.

New Approaches for Operations and Management

New Great River Passage operations and management approaches, centered around resource stewardship, will be necessary to fully realize its natural resource potential. Plans for the Passage include adding recreational uses only in redeveloped or previously impacted areas so that sensitive ecologies are not impacted.

Restoration of damaged and ecologically sensitive areas that support the expansion of natural areas will require operating and maintenance strategies that mitigate, restore and interpret resources. Staffing of expanded and enhanced facilities will likely require additional planning, training, staff and funding resources.

Collaborations and Partnerships

The City’s limited funding resources, the investment required to recognize the proposed opportunities, indicates that new collaborative models for developing and managing Great River Passage amenities and services should be explored and developed. Innovative public and private partnerships are one way to develop new facilities, such as a kayak course or mountain-biking trail. Recreation facilities can be supported with private vendors and program facilitators, and integrated into public use areas on privately owned sites.

A number of potential partners have been identified, including nonprofit organizations, to protect and interpret important natural, historic, cultural and archaeological sites. Partnerships with other public entities, including the Mississippi National River Recreation Area (MNRRA), the State (DNR and MnDOT), Saint Paul Public Works (SPPW), Planning and Economic Development (PED), watershed districts, and neighboring counties and cities, will be vitally important to address environmental and recreation needs and to better connect the Great River Passage to the larger metropolitan area and the region.

Community Driven Planning

The Great River Passage serves both the city and the region, but importantly, it provides local neighborhood amenities and has local impacts. It adds value by providing access to nature, opportunities for exercise and recreation. It provides environmental benefits that make Saint Paul a more livable city. The Plan has been developed by the community and must continue to reflect community needs and desires through ongoing community involvement. The Plan is a long term vision that should be flexible enough to adapt to changing community needs.



Gathering places allows more people to experience the river.



Nature based recreation means playing and learning at the same time.



Outdoor education creates the next generation of stewards.





*Outdated industrial sites and changing land uses along the river present unique opportunities to bring in new recreation and leisure uses that support greater economic vitality in Saint Paul.*

### Revitalizing the City’s Economy

The master plan recognizes the transformative potential of parks and riverfront amenities as economic assets for Saint Paul. Numerous U.S. cities have discovered that urban waterfront redevelopment has revitalized their local economies. For example, the Wilmington Riverfront generated nearly \$67 million in fiscal revenues for the city, county, and state from 1996 to 2006, according to an economic impact study by the Riverfront Development Corporation (RDC) of Delaware. RDC noted that public investment was leveraged to attract significant private investment, establishing the riverfront as an economic engine for job growth and tax revenue.

### Connections to the Community

Creating better connections between the city’s neighborhoods, downtown and the river by developing new parks and public spaces will benefit Saint Paul’s economy by attracting private development of housing, restaurants, shops, and commercial office space. The development potential of land areas along the boulevards and parkways that parallel the river, are greatly enhanced by having a “riverfront address.” Their physical and visual proximity to the river adds significant value, further generating economic development. Better streets, with improved walking and bicycling opportunities, will provide the community with additional transportation choices and access to a wider range of recreation options.

### Unique Identity

Saint Paul’s identity as a river city will be enhanced by new urban spaces and gathering places on the riverfront. Development and redevelopment should support the river as its focus. New development should be oriented toward the river, preserving access and views while respecting neighborhood scale and protecting natural resources. Greater use of the river corridor for nature-based recreation will further enhance the city’s image as a river-oriented community.

### Regional Destination

Building upon its location near the highest navigable shipping port on the Mississippi River, and its wealth of natural amenities and recreation opportunities, the Great River Passage will attract both residents and visitors to Saint Paul’s riverfront. Activities supported by festival parks, nature based recreation, institutions for art, education, and culture, natural areas, restaurants, and other leisure-oriented businesses, will help transform the City’s riverfront into a destination, supporting community and neighborhood vitality.



# A New Era for Open Space

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The grand scale of the Great River Passage vision - to integrate 17 miles of enhanced parks and natural areas along the Mississippi River into the City’s existing park system - coupled with diminishing city funding sources, provides an exciting opportunity to rethink the role of parks in Saint Paul, and to re-evaluate how the City provides services to its residents and visitors.

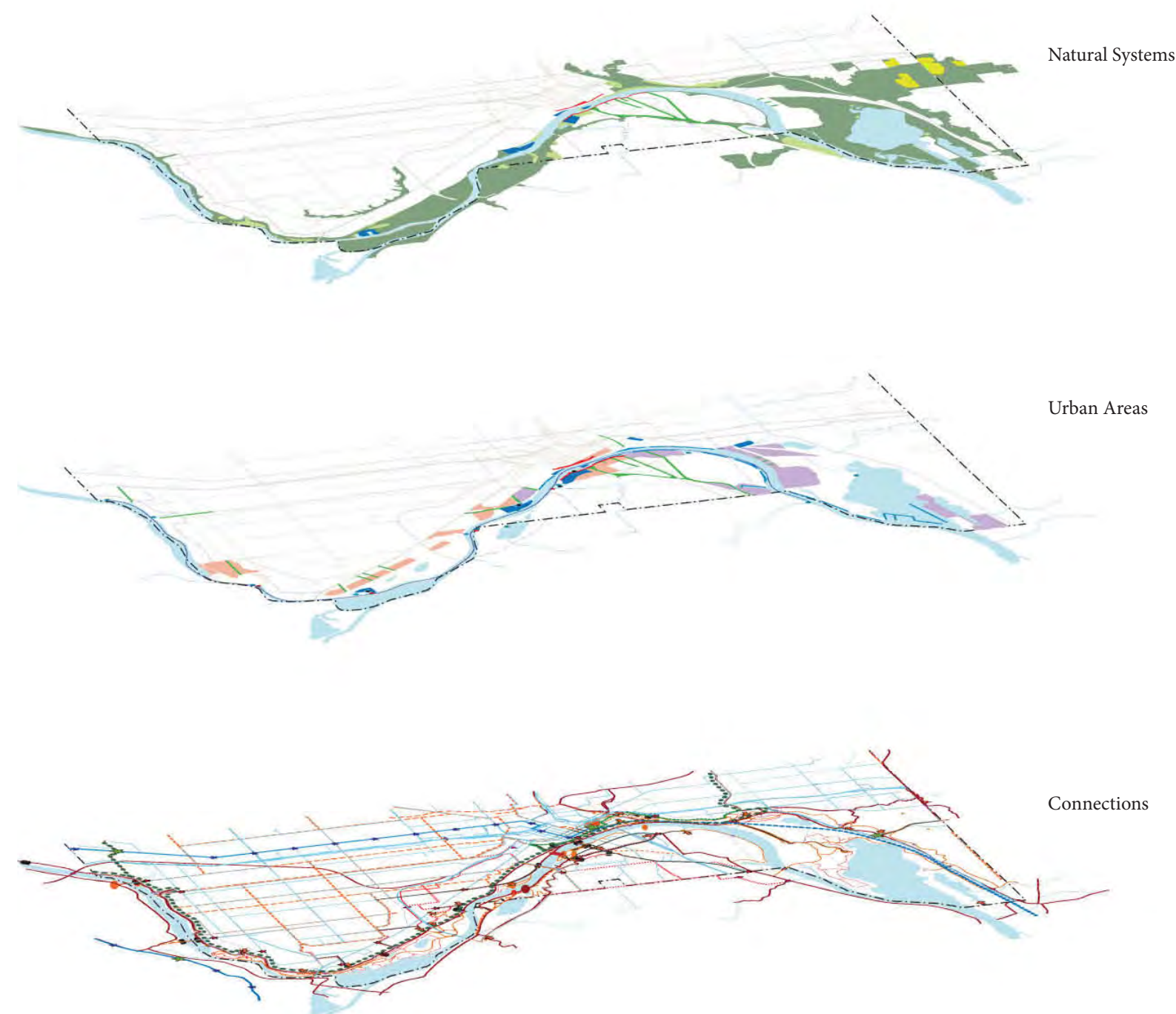
Characteristics identified for the next era of Saint Paul’s parks emerged during the planning process. They will feature places for leisure and nature-based recreation in sites that celebrate the river corridor and its natural resources. These new parks will:

- Promote ecological health and environmental responsibility
- Focus on the river
- Feature new gathering places for recreation and leisure
- Provide trails, dog parks, and park areas for active living
- Offer opportunities for culture and learning
- Be managed through creative partnerships and funding sources



The diagram below illustrates how the recommendations of the Great River Passage Master Plan can be described as a series of three layers, following the principal goals of making the river corridor more natural, more urban and more connected.

The following is a brief summary of elements that will be implemented to illustrate the More Natural, More Urban, and More Connected principles of the plan.



Individual chapters of this report describe in greater detail the following principles:

## Principle 1: More Natural

Healthy natural systems, including diverse and thriving native plant and animal communities and clean air and water, are critical to the long-term livability and economic vitality of Saint Paul and the region. This diversity is reflected in the management of natural areas and the location and design of parks. With this in mind, the master plan seeks to accomplish three goals:

- Protect and manage natural resources
- Restore streams and improve urban stormwater quality.
- Preserve and enhance natural areas.
- Expand nature-based recreation uses along the river.

## Principle 2: More Urban

Long-term stewardship and preservation of natural areas is possible only if the city maintains a healthy economy and continues to be a desirable place to live and visit. The master plan seeks to:

- Develop the economic potential of the Great River Passage by creating gathering places on the river.
- Expand opportunities for tourism and river-oriented recreation.
- Promote redevelopment that enhances neighborhood livability and the image and accessibility of the river.
- Maintain the “working river” and balance it with the environmental and recreation needs of the community.

## Principle 3: More Connected

Long-term implementation of the master plan with greater use of the river corridor will be possible only if the river is linked strongly to the city. The master plan seeks to:

- Link the citywide network of parkways and boulevards to the river.
- Improve local river access.
- Expand opportunities for park access.
- Integrate history, culture and art into all aspects of the Great River Passage.



## Principle 1: More Natural

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Healthy natural systems, including diverse and thriving native plant and animal communities and clean air and water, are critical to the long-term livability and economic vitality of Saint Paul and the region. This diversity is reflected in the management of natural areas and the location and design of parks. This Chapter establishes goals that make the Great River Passage more natural.

Industrialization has left significant traces of disturbance to the unique natural and water resources of the river corridor. During the last forty years significant progress has been made toward restoring natural systems and water quality to their historic conditions. This plan recommends steps that will greatly advance those efforts to make the corridor “More Natural.”





# CHAPTER 3

Corridor Wide Recommendations : MORE NATURAL



## Enhanced Environmental and Aesthetic Value

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Humans have lived along and benefitted from the River for thousands of years. Community goals to become better stewards of the natural environment are inextricably linked to better accommodating human use along the River. The following section describes in detail the Goals and Objectives for preserving and restoring the natural qualities of the River ecosystem while accommodating expanded recreational uses.



**Preserve and Enhance Natural Areas**



**Restore Streams and Improve Urban Stormwater Quality**



**Expand Nature-based Recreation Uses Along the River**





## Protect and Manage Natural Resources

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Limited resources make it imperative that natural resources management efforts within the Great River Passage be focused, with the primary efforts being:

- preventing further degradation of existing resources
- managing the existing high quality resources through monitoring and active management aimed at protecting existing ecological function
- applying wise planning to all development activities that might impact resources.



\*Susceptibility Matrix

| Outstanding Community Types:                               | Highly Susceptible Community Types: | Moderately Susceptible Types:    | Least Susceptible Community Types:               |
|------------------------------------------------------------|-------------------------------------|----------------------------------|--------------------------------------------------|
| Natural Preserves                                          | Natural Areas                       | Active Nature Based Recreation   | Gathering Places/ Urban Areas                    |
| Sedge Meadows                                              | Shrub-carrs <sup>a</sup>            | Deciduous Forest <sup>f</sup>    | Mono-culture Hybrid Cattail Marshes <sup>a</sup> |
| Coniferous Bogs                                            | Alder Thickets <sup>b</sup>         | Fresh (Wet) Meadows <sup>b</sup> | Dredged Material/ Fill Material Disposal Sites   |
| Calcareous Fens                                            | Fresh (Wet) Meadows <sup>c,e</sup>  | Dry Prairies <sup>f</sup>        | Mowed Turf Grass                                 |
| Lowland Hardwood Swamps and Floodplain Forest <sup>a</sup> | Savannas and Woodlands <sup>f</sup> | Shallow Marshes <sup>d,c</sup>   | Cultivated Soils                                 |
| Seasonally Flooded Wetlands                                | Streams                             | Deep Marshes <sup>d,c</sup>      | Horticultural Plantings                          |
| Mussel Beds                                                | Steep Bluffs                        |                                  | Stormwater BMPs                                  |

Planning for development that might impact natural resources should apply an evaluation sequence that stresses the avoidance of impacts, designs that minimize impact when avoidance is impossible, and mitigation of impacts when resource disturbance is unavoidable.

A key part of the impact evaluation sequence is recognition of the varying degree of susceptibility of these resources to degradation and the associated need for protection. The following susceptibility matrix provides a starting point for the sequencing evaluation process. Special consideration must be given to avoid altering the outstanding community types and preserves, and in all cases inundation of wetlands beyond the normal range of water levels should be avoided.

\*Footnotes For Susceptibility Matrix

Outstanding Communities:  
All scientific and natural areas and pristine wetlands should be considered in this category regardless of wetland type. Water chemistry changes due to alteration by stormwater impacts can also cause adverse impacts.

Wetlands:  
<sup>a,b,c</sup> These wetlands can tolerate inundation from 6 inches to 12 inches for short periods of time. Some may be completely dry in drought or late summer conditions. <sup>a</sup> These wetlands can tolerate annual inundation of 1 to 6 feet or more, possibly more than once/year. <sup>b</sup> Fresh meadows that are dominated by reed canary grass. <sup>c</sup> Shallow marshes dominated by reed canary grass, cattail, giant reed, or purple loosestrife. <sup>d</sup> Some marshes can tolerate +12 inches inundation, but are adversely impacted by sediment and/or nutrient loading and prolonged high water levels. <sup>e</sup> Some exceptions.

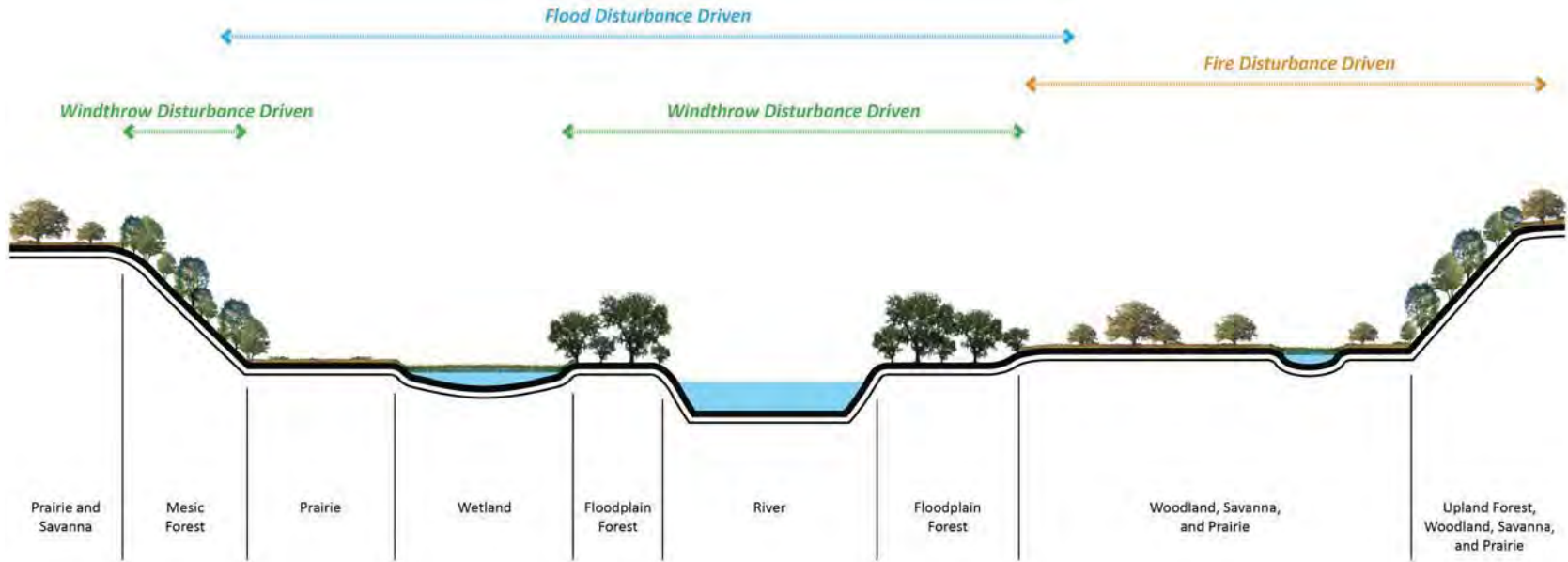
Least Susceptible Communities:  
These wetlands are usually so degraded that input of urban storm water may not have adverse impacts on them.

Prairie to Forest Canopy Continuum:  
<sup>f</sup> These communities are defined by number of trees per acre: prairie = < 2 trees/acre; savanna = 2 – 20 trees/acre; woodlands = >20 – 50 trees/acre; forests = >50 trees/acre. Natural disturbance regimes should be re-established and used for

management where ever possible; Burn disturbance regimes are critical to stability of prairies, savannas and woodlands.

Windthrow:  
Windthrow is an important ecological disturbance process, especially for shallow rooted floodplain tree species. Many tree species are somewhat tolerant of understory conditions, as juveniles, and may persist as small tree understory trees for some time. These species are able to take advantage of openings in the canopy that occur through either small-scale disturbances such as death of a tree and the removal of groups of trees due to windthrow. These smaller juveniles grow rapidly to fill the opening and create new canopy.

The level of protection based upon susceptibility to degradation applies to all natural areas. Within the identified natural areas in the Great River Passage, a series of management efforts were developed. These categories of management – preserve areas, management areas, and enhancement areas – provide direction for the minimum level of management effort and direction, and provide a scale for prioritization of efforts. The activities and goals for these management levels should be considered a minimum. As funding and resources increase, each category should be progressively managed to a higher level, with the ultimate goal being restoration to the next highest level. As natural disturbance regimes are often the most sustainable approach, they should be re-established and used for management where ever possible.



Great River Passage - Primary Natural Disturbance Regions



Preserve Areas

These areas contain outstanding ecological quality communities, or aggregations of plant or animal species of concern. Preserve areas require frequent monitoring and rapid response to the appearance of invasive species or initial degradation impacts. Preserve areas are to be afforded careful preservation and protection. Planned management of the resource is required to prevent any destruction or degradation.

Manage to maintain outstanding plant/animal communities and existing ecological functions, values and habitat. There always exists a need for active management to protect unique features in some areas. These areas should be buffered from new development. Re-establishment of a natural disturbance regime is critical. Apply strict avoidance standards. Buffer areas and connectivity corridors should be a management priority for additional levels of protection activities.

Management Areas

Management areas provide buffers to Preserve areas and have plant communities of higher quality that may be impacted by invasive species. Management of the plant community without degrading existing functions, values and wildlife habitat is the primary goal. Re-establishment of a natural disturbance regime is a key approach to restoring ecological functions and values.

As these areas provide buffer areas and connectivity corridors for Preserve Areas, they should also be a management priority. These high quality areas should be actively monitored and managed for invasive species. Natural disturbance regimes appropriate to the plant community should be implemented and a sequencing process for any development activity (avoidance, minimization, and mitigation) applied. Active management is required to prevent degradation, preserve ecological function and promote ecological diversity.

Enhancement Areas

These areas have a lower ecological quality that have the potential to be brought back into a former or original ecological condition. As management capacity becomes available, these sites should be restored to native plant communities based upon historic soil conditions and vegetation patterns.

Management activities should maintain the community footprint. Restoration efforts should improve biological and plant community diversity/integrity or enhance other functions if possible. Apply an impact sequencing process. Consider restoration or enhancement activities only as funding allows for long-term maintenance.

Natural Resource Management Approaches

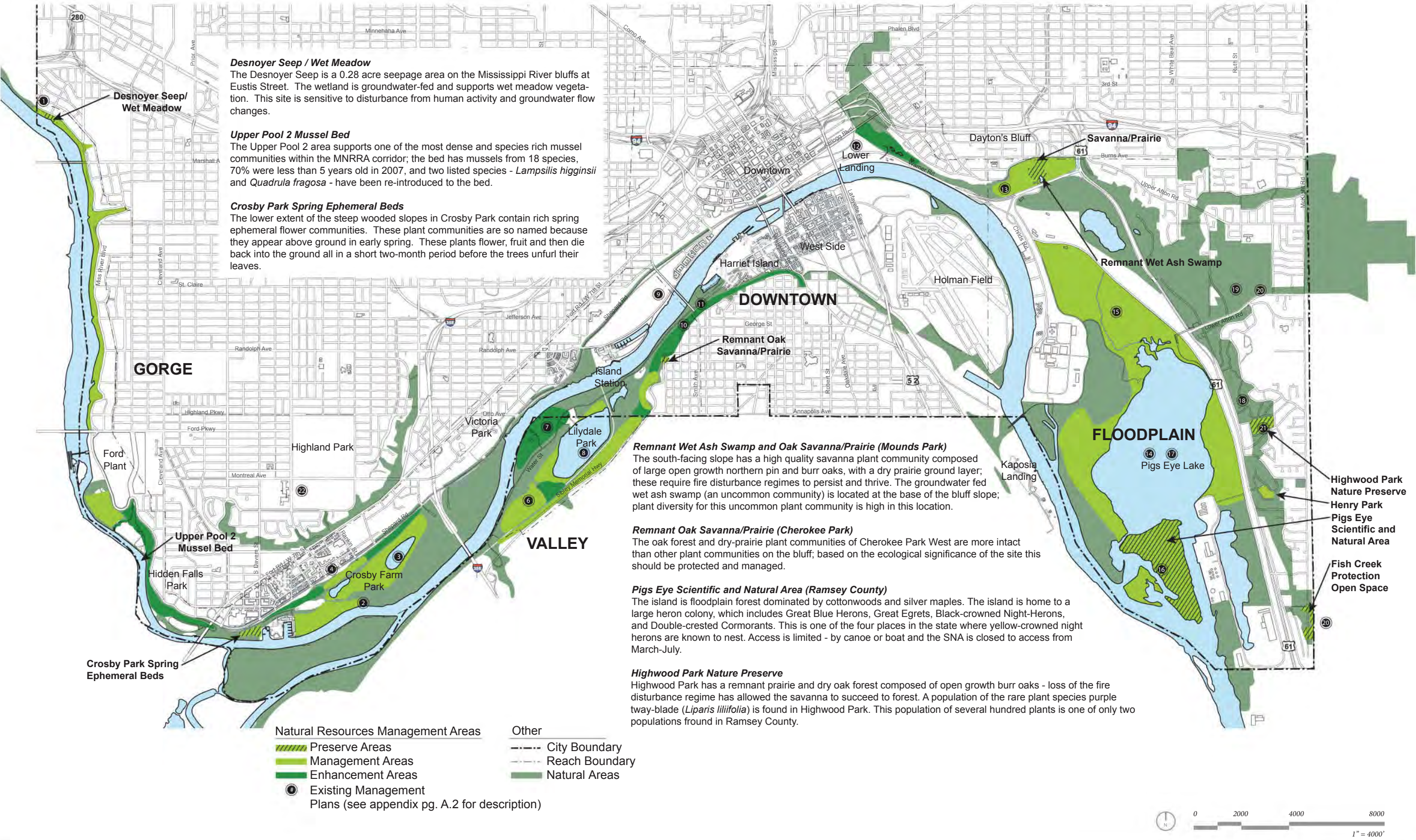
There are two complementary approaches for management of natural resources within the Great River Passage: pattern-oriented and process/species-oriented strategies. The pattern-oriented management approach targets landscape patterns. This approach does not attempt to manage every species nor every ecological process. Landscape pattern management provides benefits to many species by targeting the negative aspects of development and landscape changes. The process/species-oriented management approach targets individual species and ecological process. These strategies have greatest impact on particular species of concern and missing or degraded ecological process.

The two approaches work hand-in-hand to repair damaged ecosystems and protect important species. The following are nine strategies, including pertinent ecological considerations for each, as they relate to the river corridor. There are also possible actions that can be applied across the three management areas, as well as to other areas within the Great River Passage.

1. Maintain and/or restore large and structurally complex patches of native vegetation (Pattern-oriented)
  - Ecological Considerations: Vegetation structure is of fundamental importance; protect areas with multiple intact vegetation layers; consider vegetation structure when making restoration decisions.
  - Potential Actions: Prioritize protection and restoration of the large high quality, intact plant communities
2. Maintain and/or restore a matrix that is structurally similar to native vegetation (Pattern-oriented)
  - Ecological Considerations: Reduce edge effects by creating vegetation transitions that will maintain structural similarities and reduce the impact due to transitions from natural to developed areas.
  - Potential Actions: Consider management easements to both public and private lands to provide a transition between native plant communities and developed areas
3. Maintain and/or restore buffers around sensitive areas (Pattern-oriented)
  - Ecological Considerations: Maintaining core habitats (preserve areas) is a key component of all protection and restoration efforts; the larger the buffer the greater the benefits; consider a layered buffer with greater ecological complexity transitioning to a less complex setting over 300 feet or more.
  - Potential Actions: Provide buffers to all aquatic systems - both streams and wetlands.
4. Maintain and/or restore corridors and stepping stones (Pattern-oriented)
  - Ecological Considerations: To connect functional ecosystem areas use both corridors and stepping stones that allow mobile species to move greater distances and across wider areas of the landscape.
  - Potential Actions: Restore slightly degraded, sometimes smaller areas along the corridor such as stormwater wetlands

5. Maintain and/or restore landscape heterogeneity and capture environmental gradients (Pattern-oriented)
  - Ecological Considerations: Maintain patches of native communities with a variety of sizes and shapes, and degrees of isolation
  - Potential Actions: Protect degraded small areas along the corridor such as stormwater ponds and “wild” areas of adjoining neighborhood parks
6. Maintain key species interactions and functional diversity (Process- and species-oriented)
  - Ecological Considerations: Include keystone species, as well as threatened and endangered species in restoration and protection plans
  - Potential Actions: Provide protection for amphibians in wetland setting; Provide protection for birds and reptiles in prairie and woodland setting
7. Apply or maintain appropriate disturbance regimes (Process- and species-oriented)
  - Ecological Considerations: Restore historical disturbance patterns when maintaining and restoring sites
  - Potential Actions: Reintroduce fire to prairie and savanna ecosystems
8. Control aggressive, overabundant, and invasive species (Process- and species-oriented)
  - Ecological Considerations: Restoration and management plans should address species that lead to the loss of other species
  - Potential Actions: Remove buckthorn with replacement of the native shrub layer
9. Minimize ecosystem-specific threatening processes (Process- and species-oriented)
  - Ecological Considerations: Control potential threats and changes beyond the landscape changes that have impacted many of the native species
  - Potential Actions: Reduce stormwater runoff alterations of hydrology, prevent changes to groundwater flows and avoid stream temperature changes











## Restore Streams and Improve Urban Stormwater Quality

The water resources of the Great River Passage are considered at both local and regional scales. At the regional scale is the vast watershed of the Mississippi River itself, extending from northern and western Minnesota, encompassing much of the state, and extending to the Gulf of Mexico. At the local scale is a series of smaller ravines, creeks and streams in highly urbanized catchment areas, many of which have been diverted into storm sewers and are now entirely underground. Dozens of these local streams and urban watersheds are directly tributary to the Mississippi River within the Great River Passage. Because of the size of the Mississippi River watershed, the river's flow volume, and ongoing use by commercial river traffic, only limited improvements to improve the habitat value of the river shoreline are recommended in this Plan. More significant improvements to the smaller watersheds flowing into the Mississippi should be completed, consistent with the following objectives.

**Objective 1: Restore the Natural Qualities and Ecological Functions of Urban Lakes and Streams.**

- Daylight larger urban streams in collaboration with watershed districts' policies.
- Daylight base flows and small storm events in local drainage areas.
- Improve water quality in lakes by reducing suspended sediments and nutrient loads.

**Objective 2: Mimic Historic Hydrology in Small Tributary Watersheds.**

- Require new development in the Great River Passage to restore historic hydrology to the extent feasible.
- Disconnect storm sewers wherever possible and encourage infiltration to replenish groundwater flow and enhance seeps on valley slopes and bluffs.

**Objective 3: Improve the Quality of Urban Stormwater Runoff.**

- Manage all stormwater runoff that is generated within the parks to mimic historic hydrology.
- Expand wetlands and natural areas that treat polluted runoff to maintain a high level of water quality in rivers, streams, lakes and ponds.
- Identify potential areas for treatment of off-site stormwater within parks where they do not interfere with potential recreation activities.

**Objective 4: Improve River Shoreline Habitat.**

- Restore the banks of the Mississippi River to promote healthier and more diverse river's edge habitats.
- Provide urban shoreline treatments in developed areas that re-establish vegetation and permit river access.



*Using rock vanes to restore and stabilize the shoreline enhances riparian habitat.*



*Stormwater treatment areas also provide recreation benefits for the community.*

**Urban Stream Rehabilitation**

Existing partnerships with regional watershed districts should be utilized to daylight piped, buried and channelized streams to improve water quality, habitat value and aesthetics of existing streams. Within the river valley many historic urbanized streams have the potential for rehabilitation that will provide multiple benefits by contributing to the ecological health and recreational value of the Great River Passage. The Water Resources Chapter of the Comprehensive Plan outlines Low Impact Development strategies that should be implemented within the Great River Passage.

**Historic Hydrology**

Daylighting of local storm sewers and small streams to minimize erosion on river valley bluffs and hillsides have the potential to contribute to the restoration of the rich hillside and bluff ecology that once existed around seeps on valley slopes. Stormwater systems yet to be constructed within redevelopment areas should incorporate surface systems that mimic historic streams and catchment areas that promote cleansing and replenishment of surface and groundwater regimes.

**Storm Runoff and Water Quality**

Expand partnerships with regional watershed districts to manage stormwater runoff generated in urban areas such as streets and redevelopment sites. Where watershed districts do not exist, such as at Lilydale, work with neighboring municipalities to establish and implement best management practices, and appropriate standards of care and maintenance in order to meet EPA water quality standards. In targeted areas, storm sewer discharges should be managed in such a way that innovative techniques, as well as consolidated water quality treatment areas, are created in conjunction with the needs of developers and other city agencies. Managing and treating stormwater close to its source not only improves the quality of water resources but also protects natural areas and expands ecological richness and diversity.

**Parks and Stormwater Treatment**

Stormwater generated within park facilities will be managed to mimic the original hydrology of the area, and to enhance the natural and recreational potentials of the corridor. Where ever possible, riparian edge vegetation will be established on the banks of restored streams and the Mississippi River to enhance the rivers ecological diversity, habitat value and reduce erosion.

**Wetlands Restoration**

Wetlands provide natural water treatment and erosion control functions and should be protected and restored wherever they are encountered. Work with the regional watershed districts and the DNR to prioritize restoration of degraded wetland areas that serve essential stormwater mitigation functions.



*Stream restoration increases safe recreational access to the water.*



*A high quality riparian habitat supports wildlife diversity.*



Stream Restoration

Stream restoration (rehabilitation) and stream daylighting, while closely connected, have slightly divergent purposes. Stream restoration addresses ecological and geomorphic disturbances to streams due typically to altered hydrologic regimes, especially due to increased urban runoff. Restoration implies returning an ecosystem to a state that prevailed prior to human disturbance, while rehabilitation attempts to achieve a healthy and sustainable stream system within the existing conditions. In the landscape context of this plan, all stream restoration efforts would be stream rehabilitations. Stream daylighting generally involves reconstruction of urban streams that have been placed in pipes, or in other ways altered by burial, to a more natural flow condition. In all stream rehabilitation efforts, improvement of ecological function should be the primary goal.

Stream rehabilitation should address the geomorphic changes to channel patterns, altered sediment transport regimes, and riparian vegetation changes. In the Great River Passage streams, altered watershed hydrology and stream bank erosion are the two most pressing issues; stream rehabilitation design should be based upon a thorough understanding of both the stream and the watershed. All stream designs should include measures that stabilize stream banks, reduce sediment supply, improve visual values, improve fish habitat and biological diversity, and create a natural stable stream. The altered watershed hydrology across a broader landscape scale limits the number of streams suitable for rehabilitation.

Stream daylighting efforts should recreate a stream that improves its visual value, fish habitat and biological diversity and, most importantly, creates a naturally stable stream. In many cases the highly altered watershed hydrology will require that only part of the watershed flows be channeled through the daylighted portion of the stream. It is critical that daylighting decisions be contingent upon the availability of a base flow in order to create a stream that has reasonable ecological function and aesthetics. Stream daylighting can be expensive, and in many cases will involve contaminated soil clean up that may further increase costs.

Stream Restoration Projects

Hidden Falls Creek, below the bluff top and on the river floodplain, provides a good opportunity for rehabilitation especially if redevelopment of the Ford Plant site can provide a base flow in addition to current bluff seepage. The highly eroded and incised channel can be stabilized and re-vegetated. The use of infiltration in all of the bluff top watershed areas would benefit not only Hidden Falls, but likely Shadow Falls as well. The low permeability Hidden Falls member of the Platteville Limestone formation acts as a flow plane, moving subsurface flows to the bluff face. Infiltration of stormwater across the watershed would increase flow in springs and seeps all along the river bluffs.

Stream rehabilitation efforts within the Mississippi River floodplain should move forward on both Fish and Battle Creeks, both owned and managed by Ramsey County; and Ogden Creek, if approved for rehabilitation by Ramsey Washington Metro Watershed District. Work should include channel rehabilitation downstream of the railroad corridor and wetland restoration efforts along the channel to improve ecological function and water quality benefits. The Lower Afton Road drainage

could also be modified to provide improved visual values, improved biological diversity, and a more natural, stable stream channel. Large parts of this system were reconstructed in ~1998. The lower portion, downhill from Battle Creek Road and along Hwy 61, is in a concrete flume and could likely be redesigned as a stepped pool stream.

Ivy Falls Creek is in reasonably good shape on top of the bluffs above Lilydale Park. Development of stormwater treatment at the base of the bluffs and upstream of Pickerel Lake improves ecological function and water quality benefits. This system would need a new channel constructed at the base of the bluff to prevent erosion issues.

Portions of Trout Brook have the possibility for daylighting, and for using an approach that constructs a green infrastructure system similar to the Trillium site. Other historic streams such as Phalen and Cascade Creeks have had their watershed hydrology altered so dramatically and buried so deeply that daylighting is no longer a viable option.

Redevelopment Treatment

Local storm sewer systems and small streams should be daylighted to cleanse stormwater runoff as much as possible. Promote infiltration in appropriate areas to re-establish groundwater regimes, which will promote the re-establishment of plant communities along the valley slope and bluffs.

As sites and districts within local catchments redevelop, especially projects with internal open space systems, the City should require, as part of its stormwater management regulations, that stormwater discharge rates be established at predevelopment levels for hydrology (or the movement, distribution, and quality of water).

Bluff Runoff Management

Significant erosion of sensitive hillsides on the steep valley slopes has occurred as a result of stormwater discharges from adjacent city neighborhoods. Many of the stormwater outfalls, typically 24 inches in diameter or less, discharge near the top of the bluff, which damages hillside vegetation, deepens ravines, and causes chronic maintenance problems.

The City should pursue two approaches. The first applies to publicly owned lands at the edge of the valley. Where there is sufficient landscape, disconnect storm sewers in adjacent roadways and divert storm flows through a series of surface swales and porous landscape detention areas to outfalls at historic low points, where small intermittent stream courses originally discharged over the valley edge.

The second approach applies to those areas, especially along Mississippi River Boulevard, where there is insufficient landscape area to convey, infiltrate, and discharge storm flows. In areas of significant bluff erosion, parking lanes on Mississippi River Boulevard and other roadways should be replaced with porous-paving detention areas to reduce stormwater runoff damage.

Park Treatment

Stormwater generated by park facilities should be managed to restore the hydrology to a more natural state. Stormwater facilities in parks, required because of discharges from upstream watersheds, should be managed to enhance the natural and recreational potentials of the corridor.

Selected areas within parks adjacent to existing urban stormwater discharge points, and at elevations above regular river flood levels, have been identified where additional stormwater treatment should occur. These areas typically have limited ecological value, and have sufficient land to develop consolidated treatment facilities, which, properly designed, could enhance the park and become an asset.

Wetland Restoration

In the recent past, areas within Crosby Farm and Lilydale Parks have been identified as Wetland Restoration Areas by watershed districts in the region. Polluted stormwater that discharges into lakes and ponds within the parks have damaged aquatic and riparian habitats. Pretreatment wetlands should be constructed to treat polluted runoff before storm flows discharge into natural lakes and ponds. In selected areas where off-site stormwater discharges into existing or proposed park areas, establish consolidated water-quality treatment areas in collaboration with other City agencies and regional watershed districts to treat urban runoff. Require a thorough review of alternatives for recreational use, and require the establishment of treatment areas with ecological value and habitat benefits.

River Shoreline Restoration

Few alternatives exist for engineered riverbank treatments on the mainstream river because of large fluctuations in the water level, high-energy flows, and lack of a littoral (or shore) zone. A soft approach for riverbanks on this large river system would be difficult, if not impossible, because of the volume and velocity of the river flow. High turbidity and low light levels, as well as current velocities and depth are limiting factors that prevent aquatic plant growth within most of the Great River Passage stretch of river. Interference with navigation is another concern, especially given the narrow channel width through the Downtown reach.

Stone vanes that can redirect river currents away from the shoreline are ideally suited to narrower and more urbanized reaches of the river. The vanes deflect erosive secondary currents away from the toe of the bank, allow for sediment deposition, and the establishment of rooted aquatic vegetation. Woody vegetation plantings within riprap and along other banks can be used to soften the look and increase plant diversity. Trees can be a problem on levees and as such should be avoided.

These practices can reduce erosive forces on the shore due to wave action, river currents, or ice action during floods; provide floodplain habitat, and provide a visual barrier between areas that typically get human disturbance (i.e. boats and tows) and the floodplain. Best practices for the natural restoration of the river shoreline should be used only where feasible and cognizant of these restrictions.







GOALS & OBJECTIVES

Preserve And Enhance Natural Areas

Protection and enhancement of the Mississippi River corridor’s native plant and animal communities is one of the master plan’s highest priorities. It is imperative that, with limited resources, management of natural resources within the river corridor focus on three priorities: preventing further degradation of resources, managing existing high-quality resources by monitoring and actively protecting and managing ecological functions, and careful planning of all development activities that might impact resources. All development planning should consider the significance of potential impacts, present a minimal-impact design, and include mitigation measures when resource disturbances are unavoidable. Protocols for developments within park areas are described in more detail in the Sustainable Practices chapter of this document.

The following objectives and strategies describe the means by which existing natural areas can be managed to enhance habitat and ecological diversity, and to accommodate appropriate levels of recreation activity.

- Objective 1: Acquire or Otherwise Protect Existing Natural Areas to Create a Continuously Connected Network.**
- Acquire selected properties to protect the valley edge and bluffs.
  - Promote the integrated management of natural areas, and the development of recreation and scenic resources.
  - Pursue environmental cleanup and restoration of known Brownfield sites on Parks property consistent with EPA and DNR requirements.
- Objective 2: Establish a Landscape Management Program to Protect and Enhance Natural Systems.**
- Establish a series of Natural Preserve Areas to protect the most sensitive natural resources.
  - Establish resource enhancement areas within natural areas.
  - Establish management protocols for Other Natural Areas.
- Objective 3: Limit Recreation Access and Use to Preserve Significant Habitats.**
- Complete detailed ecological assessments during final planning and design.
  - Establish appropriate maintenance and management protocols for recreation improvements before implementing master plan actions.
- Objective 4: Create New Open Space Connections in Urban Areas.**
- Require green connections as part of redevelopment and green infrastructure as means to establish natural corridors.

Natural Preserves

A series of Natural Preserves will protect the most valuable ecological resources in the corridor. These areas, some of which already are protected by State or other agency restrictions, will allow control of public access in order to allow wildlife, habitat and other resources to remain undisturbed. Access may be permitted when visitors are accompanied by a trained naturalist or park ranger. Adjacent and nearby park areas should provide amenities for rustic trails, boardwalks, overlooks and viewing blinds so that the preserves can be experienced from an appropriate distance.

Natural Areas

Natural Areas form the foundation of the park system. They preserve and enhance the natural environment and wildlife corridors and bring nature into the heart of the City. Recreational activities and improvements will be limited in these areas, and access will be limited to non-motorized trails with interpretive and directional signage. Day-use improvements will be limited to more rustic elements such as trails, benches, small picnic areas, fishing docks, and wildlife-viewing areas. Maintenance will include vegetation management strategies that restore and enhance ecological diversity. Invasive plant species will be managed to improve habitat, visibility along trails, and the health of the urban forest.



Elevated Viewing Platforms allow remote access and minimize disturbance to the most sensitive habitats.



Rustic Trails reduce impact on habitats that can tolerate passive recreational uses .

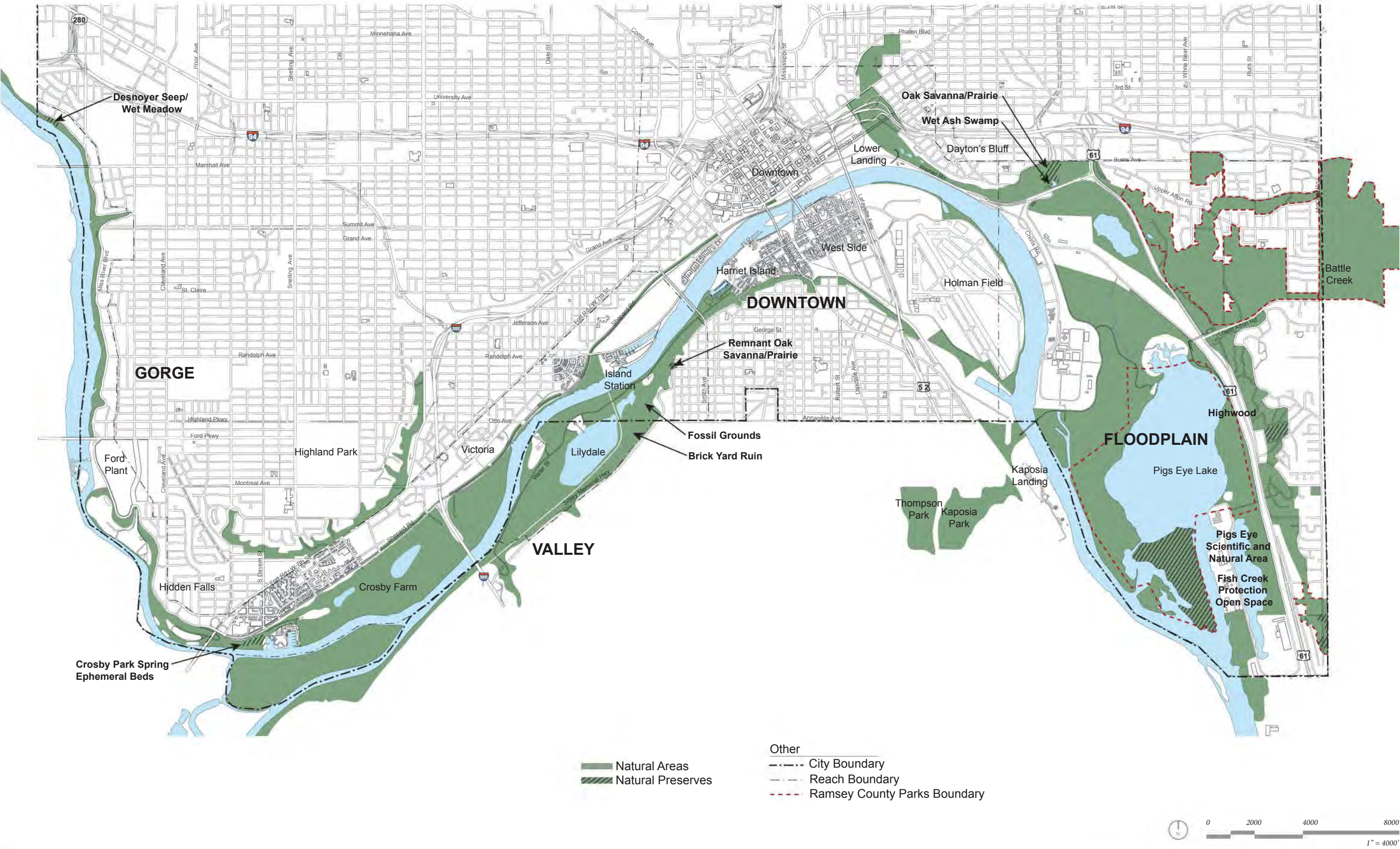


Boardwalks allow access to wetland and other sensitive environments for interpretation & education.



Controlled Burning reduces invasive vegetation to help maintain a healthy diverse ecology.







GOALS & OBJECTIVES

Expand Nature-based Recreation Uses Along the River

The master plan strikes a balance between preservation and enhancement of natural areas, and the expansion of access and recreation use in the river corridor. To preserve the natural qualities of the corridor, the expansion of recreation uses and activities has been limited to areas where impacts on natural qualities will be limited. Proposed uses are limited to nature-based recreation activities and improvements, better access to an expanded trail network, and access to more traditional types of parks in developed areas along the corridor.

The following objectives and strategies describe the means by which existing natural areas can be managed to expand nature-based recreation.

Objective 1: Expand the Opportunity for Nature-Based and River-Oriented Recreation Uses.

- Limit new uses primarily to existing and previously impacted park areas.
- Expand recreation uses for all age groups and levels of ability.
- Provide more opportunities for river access, and provide facilities and improvements that encourage recreational use of the river.
- Protect and interpret ecologically and culturally sensitive resources.
- Build upon the intrinsic and natural qualities of the river corridor to create recreation amenities and experiences that are unique to the river valley.

Objective 2: Expand Opportunities to Meet Neighborhood and Community-Wide Recreation Needs Without Compromising the Natural Qualities of the River Corridor.

- Incorporate considerations for green connections, habitat linkages, scenic overlooks, and trail connections into all Great River Passage park master plans.
- Consider the potential impacts of park uses on the scenic and natural qualities of the river corridor.

Objective 3: Enhance Scenic Qualities by Clearing Vistas at Appropriate Entries and Overlooks.

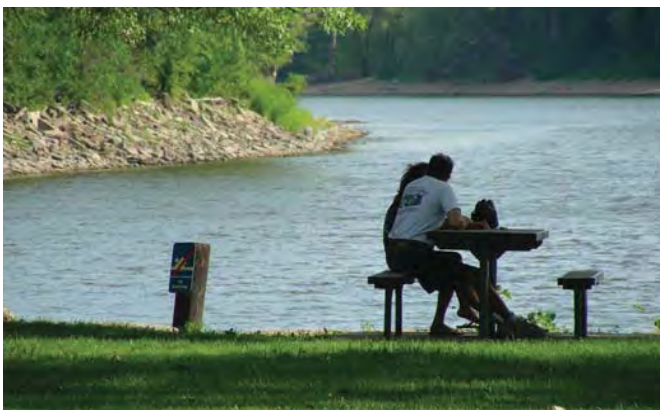
- Selectively manage vegetation on valley slopes and bluffs to open viewing opportunities along the river.
- Selectively manage vegetation along adjacent roadways and at key Great River Passage entry points.
- Design roads, trails and recreation amenities to take advantage of view opportunities.
- Coordinate with natural areas maintenance personnel to control invasive plant understory.



Selective clearing improves visual access to the river



A variety of fishing opportunities encourage outdoor recreation.



Picnicking is among the most popular uses of the river valley.



Group Tent Camping allows urban youth to experience nature close to home.

Nature-based Recreation Areas

Nature-based Recreation areas are places that can support active recreation and leisure activities within the Great River Passage. These are areas where existing park facilities are located and those that have been previously disturbed by human activity. They are provided to improve access to the river and accommodate both passive and active recreation activities for all age groups. Nature-based Recreation areas accommodate a wide range of uses that respect and celebrate their natural setting. Park improvements will accommodate hiking, nature walks, mountain biking, adventure play for children and adults, a variety of picnicking opportunities, fishing, rustic dog parks and more convenient places to store and launch canoes and kayaks. An expanded network of trails will serve these uses, providing better access to natural areas along the river and encouraging a variety of recreation experiences for visitors.

Environmental Education

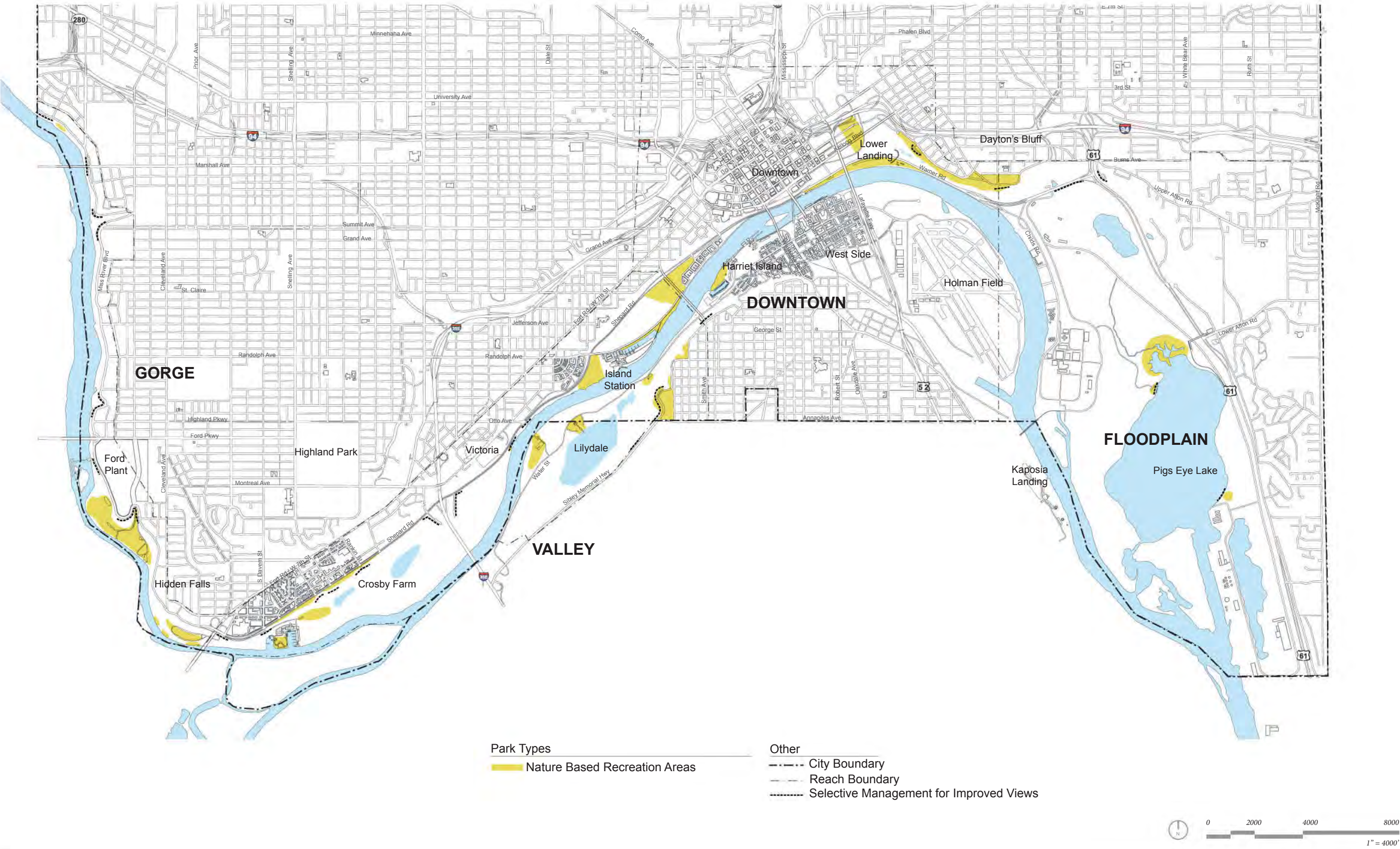
Providing access to outdoor learning opportunities in the Great River Passage will provide the basis for developing future generations of resource stewards. By working with partners such as the National Park Service, DNR, Ramsey County, the Science Museum and others, environmental education centers will provide a starting point for learning and access to the river’s natural areas to experience its dynamic ecosystem.

Visual Connections And Overlooks

Use landscape management strategies to selectively open and maintain viewing opportunities at key vistas and entries to the Great River Passage entry points, including Highway 61 and Warner Road intersection, at key overlook locations along Mississippi River Boulevard and along the top of the bluffs on both sides of the River, and at vehicular bridge crossings.

Identify special viewpoints along the river that frame attractive or unique views and screen objectionable views. Open views from and maintain only those overlooks that can accommodate people with an accessible path, and not be in conflict with vehicular, bicycle or pedestrian traffic. Accommodate multiple uses at overlook areas to provide interpretation of views and an attractive, quiet space for passive recreational use. Remote overlooks, such as observation towers and blinds, provide visual access for education, interpretation and recreational bird watching and photography, without encroaching on natural areas or preserves.







## Principle 2: More Urban

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Long-term stewardship and preservation of natural areas is possible only if the city maintains a healthy economy and continues to be a desirable place to live, work and visit.

Saint Paul and the river are and always will be inextricably linked. The river provides livelihood, identity and a sense of place to the City, and with the unique resources it has to offer, provides unparalleled outdoor experiences. Changes in industrial activity along the corridor now allow the City to renew its relationship to the river, remaking it in ways that support livability and economic vitality of the community, while still expanding and enhancing the natural realm.





# CHAPTER 4

Corridor Wide Recommendations : MORE URBAN



## High Quality Urban Revitalization

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The River has sustained human cultures for thousands of years. Continued commerce and economic vitality that supports leisure uses on the River are an essential part of the master plan recommendations. There is enhanced value for the urbanized areas along the river because of their natural setting, and as a natural and recreational amenity, the Great River Passage will be an impetus to high quality urban development adjacent to the River.

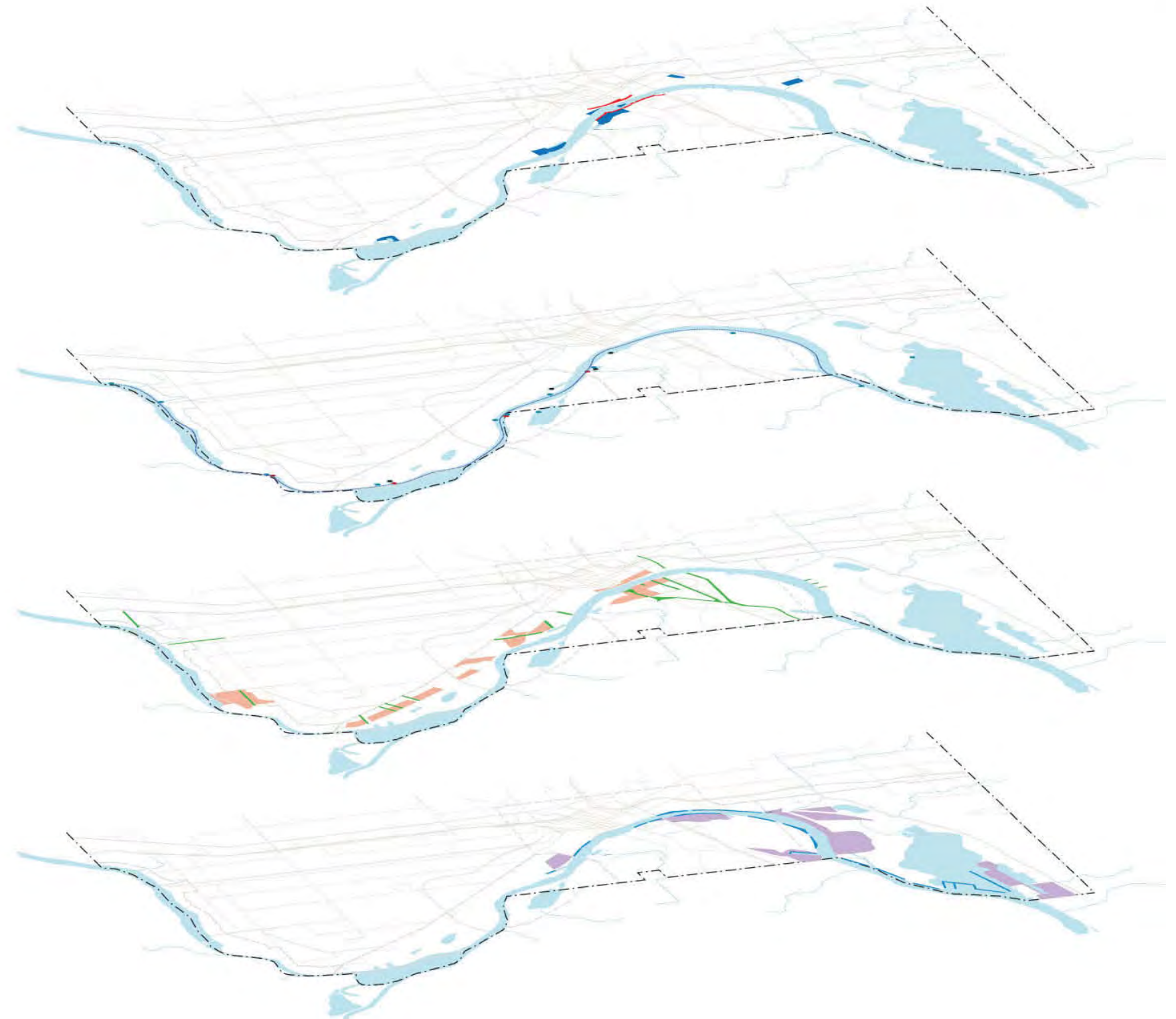


**Develop the Economic Potential of the Great River Passage by Creating Gathering Places on the River**

**Expand Opportunities For River-oriented Recreation and Tourism**

**Promote Redevelopment that Enhances Neighborhood Livability and the Image and Accessibility of the River**

**Maintain the Working River and Balance it with the Environmental and Recreation Needs of the Community**





GOALS & OBJECTIVES

Develop the Economic Potential of the Great River Passage by Creating Gathering Places on the River

For the first half of the 20th century, Saint Paul turned its back on the River and sited heavy industrial, polluting uses along its banks. However, since the 1970s, the City has invested billions of dollars in removing noxious uses and converting contaminated sites to award-winning parks, housing, clean industry, commerce and entertainment. With key redevelopment sites still in play along the river corridor, opportunities abound to continue to transform the river’s edge and bring new vitality to the city.

Objective 1: Develop a Series of Gathering Places to Bring People to the River.

- Transform vacant river-oriented facilities and sites to promote more leisure activities on the river.
- Develop new uses for underutilized sites and facilities that encourage higher levels of river use.
- Provide for the return of commercial cruise ships to Lambert’s Landing.
- Encourage the development of a commercial water taxi to accommodate commuter and tourist activities.

Objective 2: Create an Urban Promenade to Bring the Heart of the City to the River.

- Build on the unique character and opportunities of the Downtown and the West Side to enhance the development potential of each area by linking development to the River.
- Link existing and future development projects along the Downtown and the West Side edges to create a continuous public edge.

Objective 3: Activate Existing Parks in the Downtown.

- Locate youth-oriented regional recreation facilities in underused Downtown parks to meet citywide and regional recreational needs.

Gathering Places

Gathering places are regional destinations; public outdoor spaces where people go to socialize, be entertained, or relax. Gathering places include entertainment venues, marinas, cafe’s, year-round and seasonal recreation destinations, and places where people can feel comfortable just “hanging out.” These are highly social places that are immersed in the natural landscape of the river.

Improving underutilized areas and creating highly active parks, promenades and places along the river, can bring greater economic vitality while meeting regional recreation needs, and providing key locations for activities that are desirable and compatible with neighboring communities. A number of existing parks that currently have limited recreational use, have the capacity to support more programming to meet city-wide needs. These areas should be evaluated to determine appropriate design and program opportunities that permit increased levels of public access and use, and draw impacts away from less developed natural areas.

Urban Promenade

An urban promenade, comprised of continuous broad public walkways that parallel the river on both sides, will be a key feature of targeted redevelopment sites in Downtown and the West Side. The promenade will bring the city to the edge of the river, and create new opportunities for development along the river. New uses will activate existing city parks in Downtown and bring new energy and vitality to these underused resources.

The West Side Levee Riverwalk will encourage mixed-use buildings to front on the levee, providing a direct connection to the river’s edge. Design alternatives to rip-rap protection on the levee will allow pedestrians to approach the water and will stabilize the river banks with naturalized plantings. A continuous River Balcony linking redevelopment sites, including the former detention center and other Ramsey County buildings, will create a dramatic public riverfront edge that extends from Lowertown, through Kellogg Park, to the Science Museum. Along the downtown edge, the physical and visual connections to the river will be enhanced by public passageways through new buildings proposed along the bluffs. With panoramic views from a series of “outdoor rooms,” the River Balcony will be a great place to have lunch or to relax with friends after a downtown concert, shopping trip or sporting event.

Critical Area

The Mississippi River Critical Area was established in 1976 by Executive Order of the Governor of Minnesota. It runs 72 miles from Ramsey to Hastings, and includes much of the Great River Passage in Saint Paul. As required by State law, Saint Paul adopted a comprehensive plan for the Mississippi River Critical Area in 1981 and River Corridor overlay zoning districts in 1982. There are currently four River Corridor overlay districts: RC1 Floodway, RC2 Flood Fringe, RC3 Urban Open and RC4 Urban Diversified. In addition, the Zoning Code contains standards and criteria that all new development within the Critical Area overlay districts must meet.



As with the Highline in New York City, innovative redevelopment can help bring Downtown to the river’s edge.



The Riverfront Promenade provides places for leisure on the river.

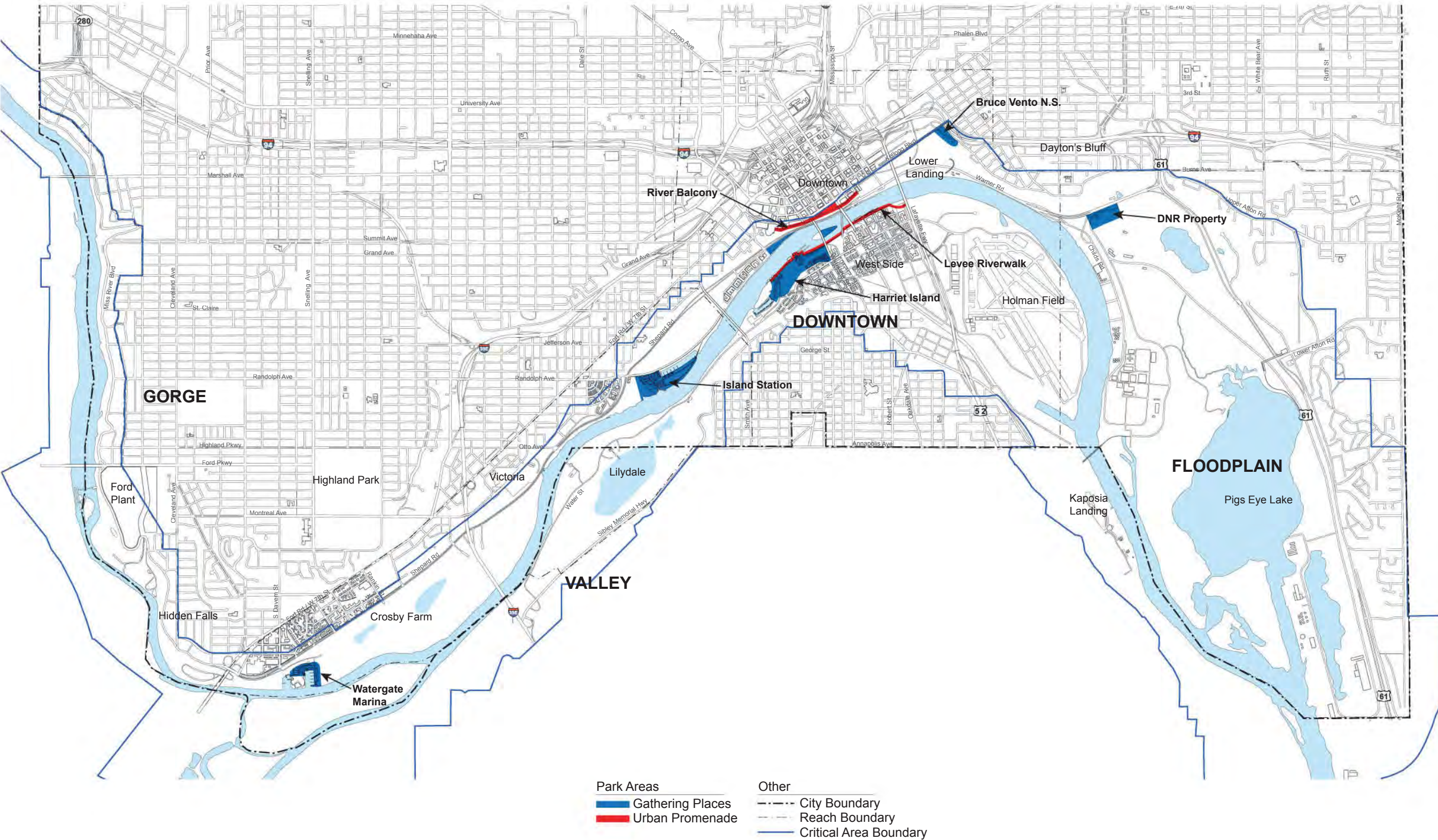


An accessible edge allows people to touch the water.



Interactive water features attract people of all ages and provide a safe alternative to swimming in the river.







GOALS & OBJECTIVES

Expand Opportunities for Tourism and River-Oriented Recreation

The wealth of natural, historic, and cultural resources in the Great River Passage are of regional and national significance. Focusing development and programming on these attributes can attract a significant number of visitors to the city. The river itself has unrealized recreational potential that can support river-oriented businesses, such as those that support fishing, canoeing, kayaking, and tour boats.

Higher levels and more diverse types of recreational use on the river, combined with existing commercial river traffic, will require ongoing coordination to maintain adequate levels of safety, to provide for positive experience for recreational boaters, and accommodate ongoing commercial river operations. The following objectives and strategies describe the means by which resources along the river can be used to bring expanded tourism and river-oriented recreation to the City.

Objective 1: Promote Interpretation of the River Corridor’s History, Culture, and Natural Resources.

- Develop interpretative programs and historical/cultural events that celebrate the area’s history, culture, and natural resources.
- Link history and culture programs to existing and proposed natural-area interpretation and environmental education programs.
- Partner with other public and nonprofit entities to develop comprehensive and integrated educational and interpretive programs.

Objective 2: Expand River-Oriented Recreation and Leisure Activities that Support Local Businesses.

- Increase opportunities for non-motorized boating and recreation tourism.
- Provide more options for day-use destinations, such as restaurants, shops and cultural sites located on the river.
- Develop a recreational boating and commercial River traffic management plan to accommodate and integrate all types of surface water river activities.
- Develop a river trail for canoes and kayaks with regular stops along the river.

Objective 3: Bring downtown to the edge of the river

- Establish stronger links between the river and commercial, cultural, and entertainment venues as part of ongoing redevelopment activities.
- Explore the development of a water taxi to link Gathering Places, commuter origins and destinations and to provide for cross river linkages between cultural and entertainment venues.
- Reestablish commercial cruise boat docking at Lambert’s Landing.

Historical Interpretation and Tourism

Interpretation of the rich history of the river corridor has great potential to enhance levels of tourism in the city and provides an opportunity for Saint Paul residents to gain a greater appreciation for the corridor’s history. Reduce duplication in staffing, administration, and facilities by integrating natural area and cultural/historical interpretive programs; jointly interpret the natural and cultural histories of the corridor to describe the essential link between nature and culture. Partner with and build on the capabilities and expertise of other public institutions, nonprofit organizations, and community advocacy groups to interpret all aspects of the corridor.

Canoe & Kayak Trail

Promote non-motorized boating for all skill levels by providing multiple points of access, storage and support facilities, with materials that promote a broader range of recreational boating opportunities on the river. Partner with private developers and local businesses to provide a higher level of visitor support facilities on the river.

The River’s Edge

The Downtown edge includes areas for redevelopment along the bluff between the Science Museum and Union Depot. Its urban density, high-rise buildings, and the distinctive location of the Downtown high above the river on the bluffs, provide a distinct contrast to the lower scale neighborhoods proposed along the levee on the West Side. Repurposed vacant commercial buildings have great potential to redevelop, bringing new vitality, along with business and leisure occupants, to the river’s edge.

Kellogg Boulevard will be transformed into a more pedestrian-friendly streetscape. Calmed traffic and an attractive urban landscape will encourage lunchtime users to frequent Kellogg Park, enhanced to be better connected to downtown. In the short term, seasonal outdoor cafés, restaurant trucks and entertainment programming, will draw office workers, downtown residents and visitors to the park.

Encouraging the redevelopment of vacant and underutilized properties on the West Side, will build upon the ongoing transformation of the riverfront and further enhance the identity of Saint Paul as a river city. The potential to create mixed-use areas of retail, office, and residential development along the River offers the unique opportunity to build on the momentum of the ongoing revitalization of Downtown, to support a high quality urban environment on the West Side.



River’s edge retail supports river-oriented activities.



Leisure activities that include eating and drinking will activate public spaces and businesses along the river.

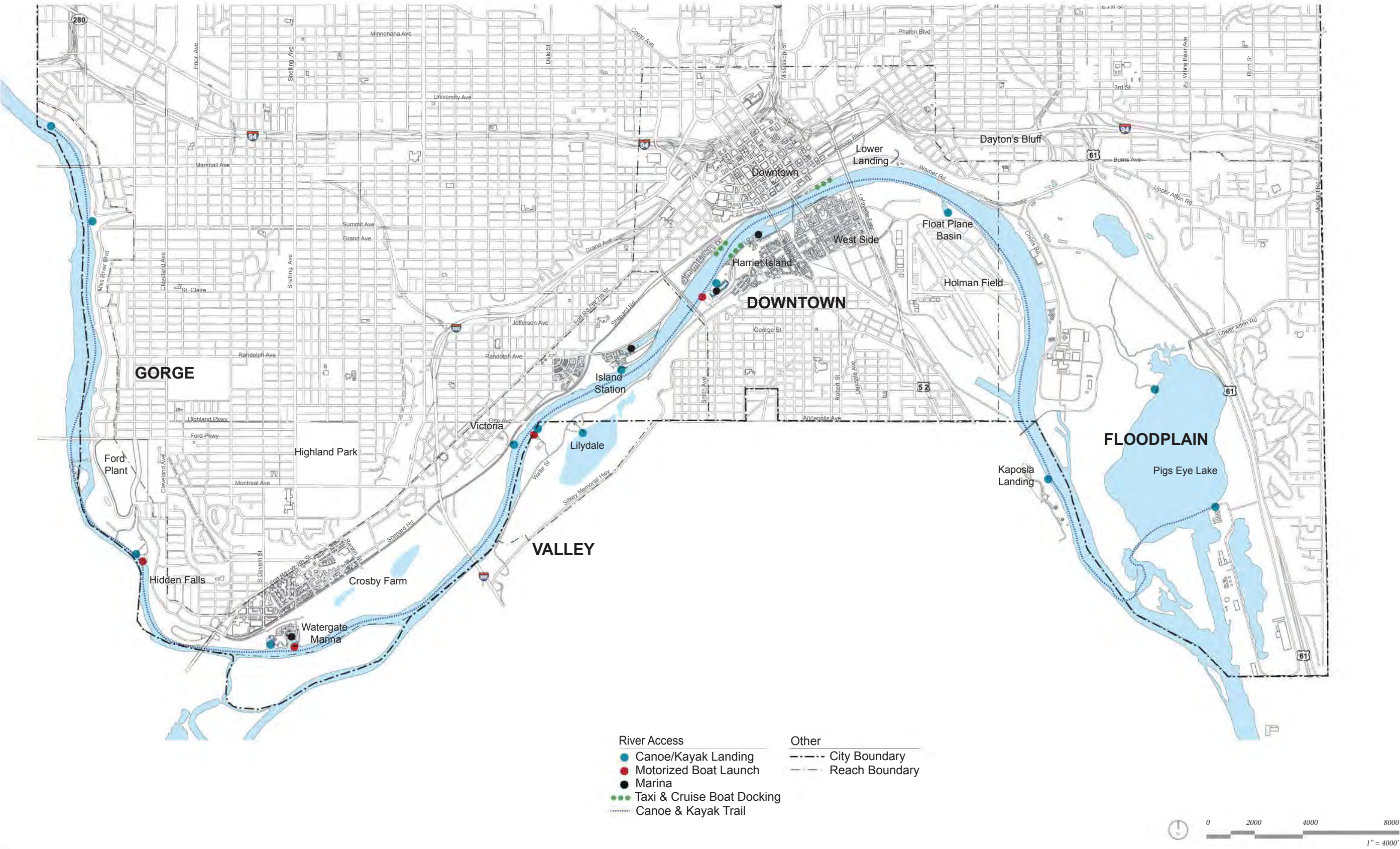


Canoeing and kayaking are increasingly popular ways to experience the river.



Visitors are attracted to the river’s edge, and drawn to opportunities for recreation and leisure there.







GOALS & OBJECTIVES

Promote Redevelopment that Enhances Neighborhoods Livability and the Image and Accessibility of the River

The industrial past of much of the river valley has left a legacy of relic sites, and has limited access to the river in many locations. Coordinated public and private efforts can transform the image of the corridor and enhance the redevelopment potential of vacant and brownfield sites. Redevelopment efforts should enhance the quality of life of City neighborhoods by providing improved access to natural areas and recreation opportunities along the river.

Objective 1: Transform the Image and Character of Existing Roadways Paralleling the River.

- Improve image and aesthetics of the roadway to promote higher value private development.
- Improve safety and accessibility for pedestrians and cyclists.

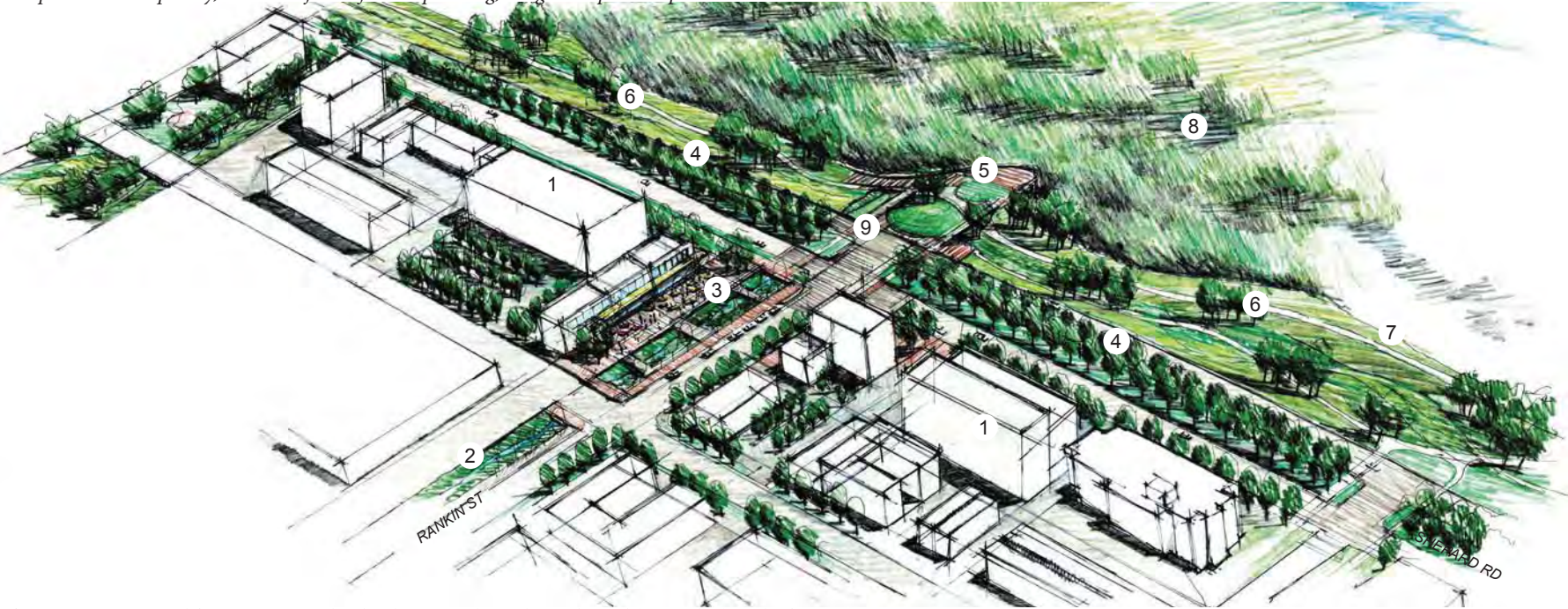
Objective 2: Make the Great River Passage More Visible and Connected to the City.

- Establish a series of green connections linking the river corridor to existing neighborhoods.
- Integrate green connections into all large redevelopment projects.
- Orient new development to the river.

Objective 3: Redevelop Major Sites in the River Corridor in a Way that Maximizes the Value of their Proximity to the River and Better Connects Neighborhoods to the River.

- Evaluate existing Area Plans to promote river-oriented redevelopment.
- Collaborate with public agencies and private landowners to maintain and improve continuous public access to the river’s edge, and provide direct connections between the river and new development.
- Establish zoning and design guidelines that emphasize the land’s relationship to the river, and its potential impact on the visual character and ecology of the river’s edge.

*This plan is a concept only, and is subject to further planning, design and public input.*



*There is great potential for river-oriented redevelopment along Shepard Road (at Rankin) in the future. This plan is a concept only, and is subject to further planning, design and public input.*

River-oriented Redevelopment Areas

River-oriented redevelopment opportunities exist in areas that are linked either physically or visually to the Great River Passage. Targeted redevelopment sites along Shepard Road, West 7th St., Downtown and the West Side have significant River-oriented Redevelopment Opportunities because of their proximity to the City’s most identifiable resource. The value of private land development and the potential repurposing of underutilized commercial land is greatly enhanced by having a riverfront address. When Shepard Road is transformed and current uses eventually yield to new forms of development, the river corridor will become a highly valued location within the City. Generous green linkages connecting the neighborhoods to the river will further enhance development potential.

Creative development approaches, such as orienting buildings toward the river, developing appropriate building scale and mass, and building “green” buildings and sites, will greatly enhance real estate values in the area. Appropriate building densities that support walkable communities and pedestrian scaled streets will improve walking and bicycling access to the river, further positioning it as a special place to live and work.

Green Connections

Green Connections provide connective tissue between neighborhoods and the river. Green Connections are continuous quasi-public linear greenways, implemented with redevelopment, that provide physical and visual access between the riverfront and neighborhoods. They can provide stormwater treatment, as well as parks and trails, for the neighborhood while adding valuable open space. Green Connections are directly related to private redevelopment, but can be either publicly or privately managed.

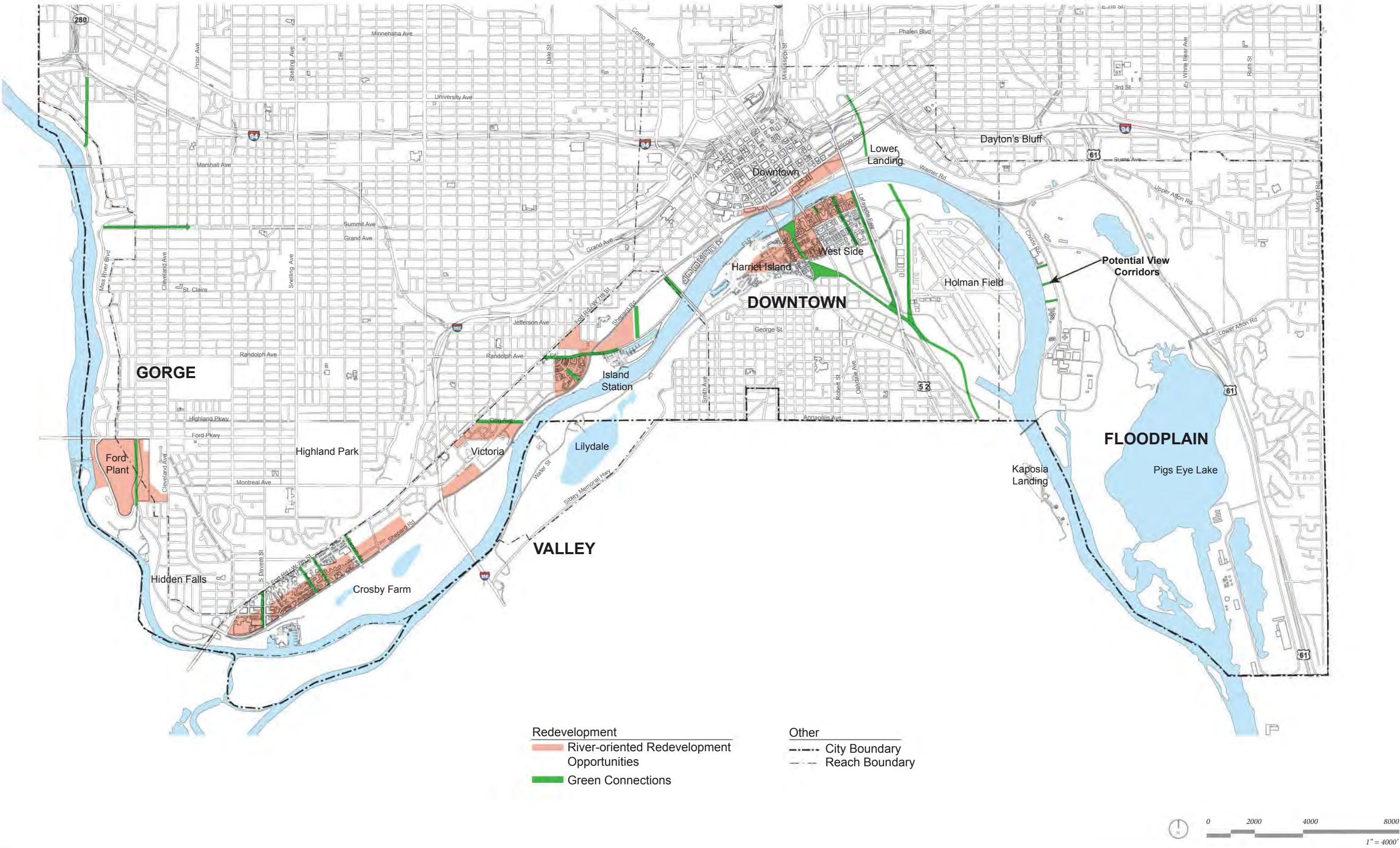
Shepard Road

- |                                            |                                        |
|--------------------------------------------|----------------------------------------|
| 1. Potential Redevelopment                 | 6. Stormwater Treatment Meadows / Park |
| 2. Green Connection / Stormwater Treatment | Trails / Top of Bluff                  |
| 3. Green Connection / Cafe / Plaza         | 7. Samuel Morgan Regional Trail        |
| 4. Shepard Road (Parkway Treatment)        | 8. Crosby Farm Park                    |
| 5. River Outlook                           | 9. Pedestrian-Oriented Intersection    |



*Shepard Road at Rankin current condition.*







GOALS & OBJECTIVES

Maintain the Working River and Balance it with the Environmental and Recreation Needs of the Community

Industrial and commercial land uses will continue to be an important part of the City’s economic base. Chapter 5 of the City’s Comprehensive Plan emphasizes the importance of the Working River to Saint Paul’s economic health and vibrancy. Continued accommodation of industrial uses, and the operational requirements of commercial river traffic, have been integrated into the Plan’s goals and recommendations for both recreational uses of the river and redevelopment along it.

Objective 1: Support and Accommodate the Operating Requirements for Commercial River Transportation.

- Recognize Saint Paul Harbor as a regional, national and international shipping port.
- Integrate the needs of commercial shipping, barge operations and fleeting, and river-related industry as part of developing river edge recreation opportunities.

Objective 2: Support River-related Industrial and Commercial Uses.

- Consider safety, access and maintenance requirements necessary to support river-related industrial uses within the 300 foot Working River area described in Chapter 5 of the Comprehensive Plan.
- Whenever industrial uses are no longer viable in riverfront locations, evaluate the potential for recreation access and natural area restoration.

Objective 3: Encourage Best Practices that Support Master Plan Goals as Part of Ongoing Operations and Maintenance of Industrial and Commercial Sites.

- Support natural areas restoration, water quality enhancement, and sustainable design and management practices.
- Improve the aesthetic qualities of industrial and commercial sites that are adjacent to the river or recreation areas.
- Develop interpretive overlooks and displays that describe industrial activities and their significance.

Recreation and River-related Industrial Areas

Plan for improved and safe recreational access near industrial areas, especially in the Floodplain Reach, respecting and maintaining required access and operational requirements for existing uses. Review existing City ordinances and evaluate the need to establish new ordinances that will result in the removal of non-essential, non-river related facilities, materials and equipment that are incompatible with the goals and recommendations of the Great River Passage. As leases expire, evaluate opportunities to better integrate safe recreation and leisure river access with barge fleeting operations.

Barge Fleeting River Operations and Environmental Best Practices

To the degree possible, and without reducing the operational requirements of shipping and industrial activities, restore the river’s edge, manage and treat stormwater on-site, and otherwise adhere to sustainable practices required under recommendations of the master plan, and other city policies.

Interpreting the Working River

Incorporate overlooks and interpretive and informational signage into the recreational trail network to describe industrial processes, and their relationship to the history and culture of the corridor. Partner with private businesses to develop interpretation programs for the Working River and integrate them into other interpretive programs for the Great River Passage.

Maintaining Recreational Access to the River

Work with river users both commercial and recreational , to develop a management plan for improving and maintaining river access by restoring shorelines, removing sediment, and educating river users.



River cruises attract visitors for unique dinner, entertainment and sightseeing opportunities

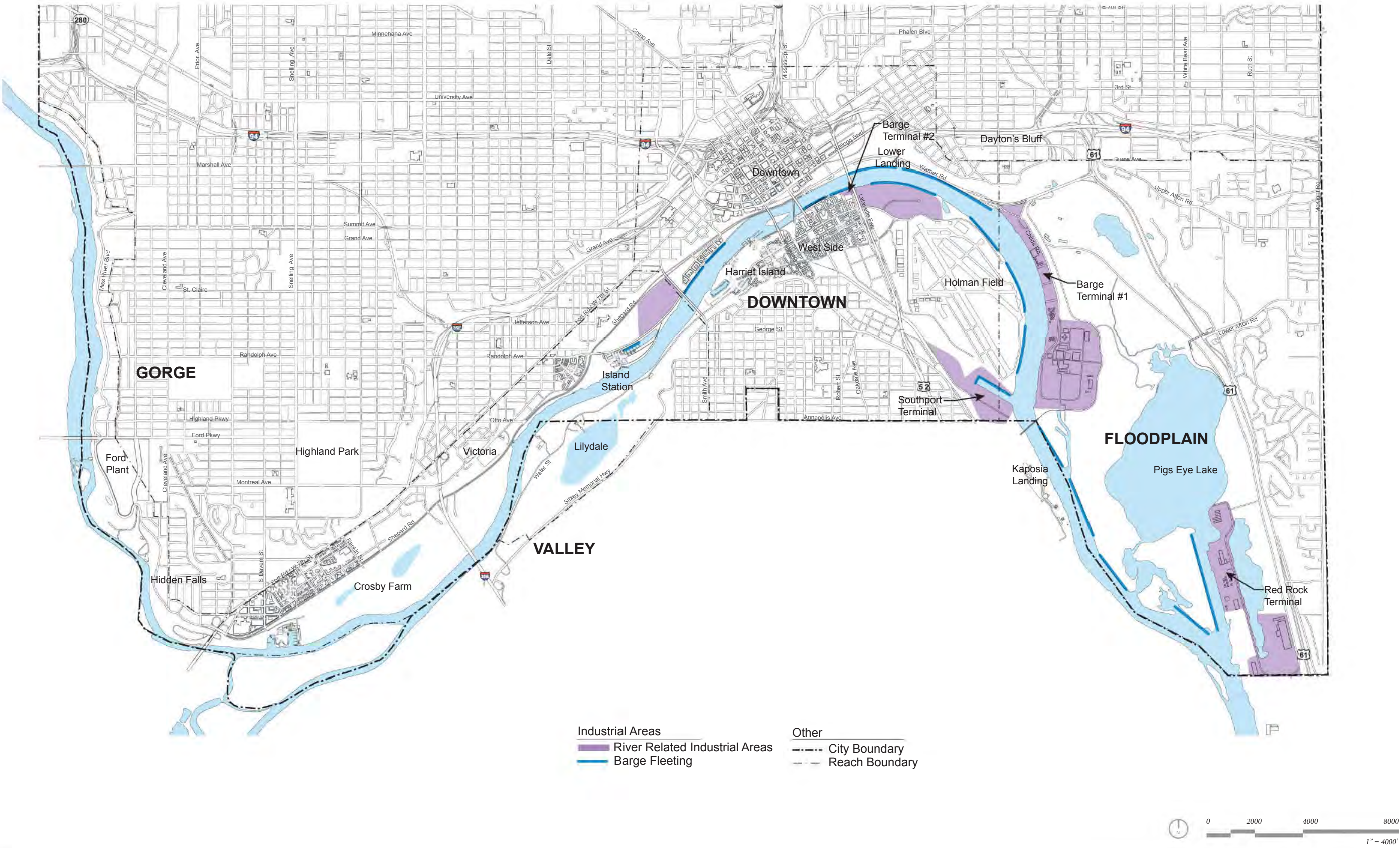


River taxis connect popular locations along the river



Commercial river operations are an essential part of the river economy







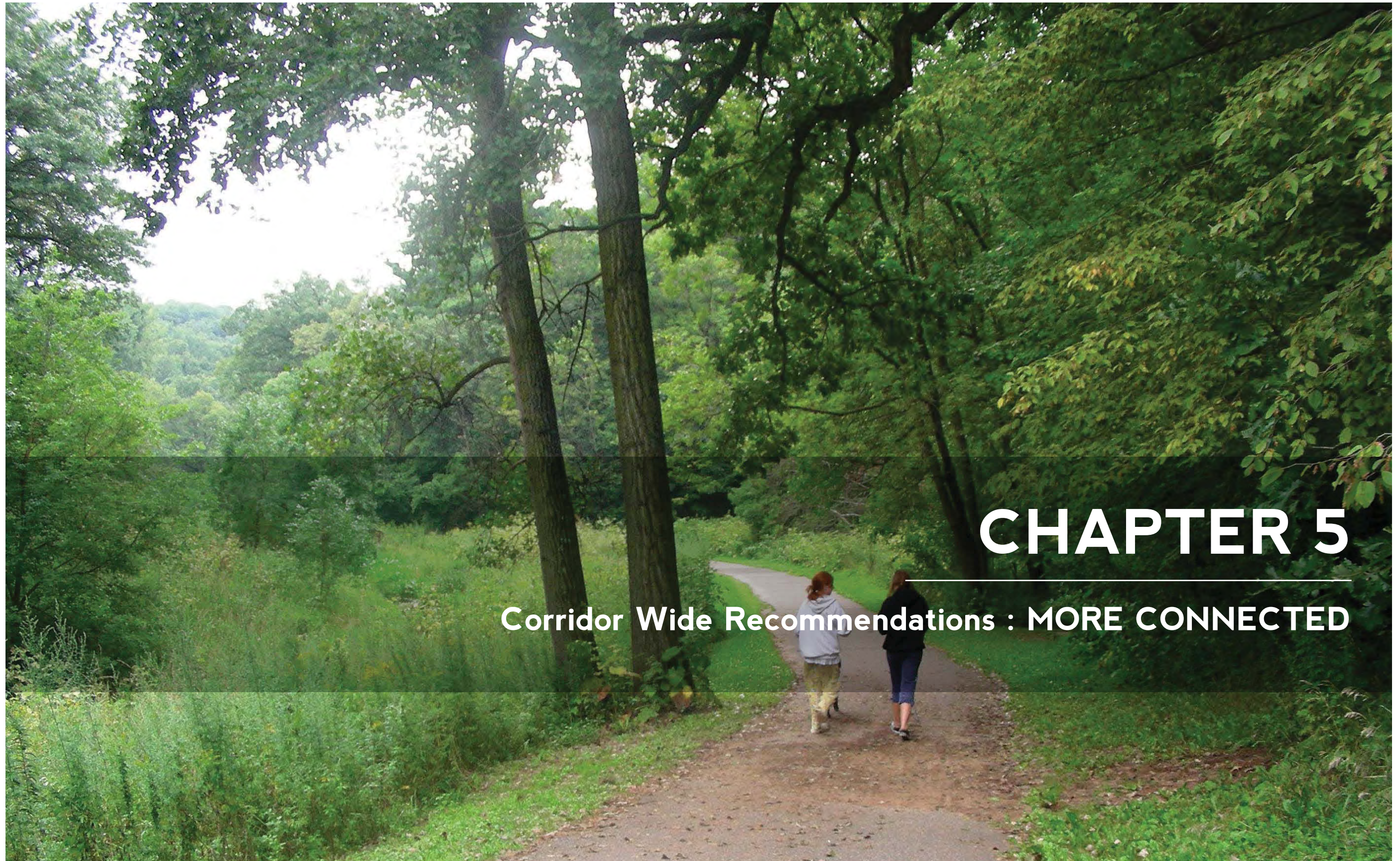
## Principle 3: More Connected

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Long-term implementation of the Master Plan, and greater recreational use of the river corridor, will only be possible if the River is linked strongly to the City.

New patterns of development along the River are opportunities for the City to strengthen existing connections and explore new ways of connecting neighborhoods to the River. Expanding trails and leveraging new development to provide new connections can improve livability and increase value. A deeper connection to the River is possible by understanding the River through art, and its role in the history and culture of Saint Paul.





# CHAPTER 5

Corridor Wide Recommendations : MORE CONNECTED



## Connecting People to the River

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Changing land uses and improved transportation choices provide a variety of opportunities to strengthen connections to the River.

Enhanced parkways, multi-modal streets, transit and trails provide choices for people to move about the Great River Passage.

Improved connections add value to neighborhoods, to parks, and to the urban environment. A new focus on transportation choice, universal accessibility, and ways to engage the River by enhancing viewing opportunities, will greatly expand the availability of the natural and cultural resources of the River to the people of Saint Paul.



**Link the Citywide Network of  
Parkways and Boulevards to The River**



**Improve Local River Access to the  
Great River Passage**



**Expand Opportunities for Park Access  
within the Great River Passage**



**Integrate History, Culture and Art  
into all Aspects of the Great River  
Passage**









## Link The Citywide Network Of Parkways And Boulevards To The River

The City’s street network will become an integral part of the River Corridor, expanding and strengthening the historic Grand Round Parkway system, and providing better connections between the community and the River. Streets and roadways both parallel and leading to the River, will continue to serve their existing transportation function of moving cars and trucks, but will simultaneously enhance the quality of public urban space through corridor greening and provision of bicycle and pedestrian accommodations. Key components include:

**Objective 1: Improve and Expand the Grand Round.**

- Improve the pedestrian and aesthetic qualities of Shepard Road.
- Improve the pedestrian and aesthetic qualities of Warner Road.
- Extend and connect the Grand Round through Downtown.

**Objective 2: Enhance Parkway and Boulevard River Connections.**

- Modify parkways and boulevards to provide safe access for a variety of modes, including pedestrians, bicyclists, and vehicles.
- Continue to improve parkway amenities, landscaping, wayfinding and signage.

**Objective 3: Improve Access to Parks.**

- Identify Park access routes for multimodal access and signage and wayfinding improvements.
- Implement Complete Streets to support multimodal design.
- Provide shared-use parking and shuttles to accommodate activities and special events.

**Objective 4: Plan for New Modes of Access.**

- Work with the National Park Service to implement the MNRRA Alternative Transportation Plan (ATP).
- Evaluate potential for transit shuttle and pedicab service to activity centers.
- Evaluate opportunities for up-river and cross-river transportation by boat or shuttle.

**Objective 5: Improve Links to Transit.**

- Promote the use of existing and new Metro Transit routes to access the park.
- Anticipate future transit improvements on the Central corridor.



Link the river corridor to transit, including light rail and commuter rail.

The Central Corridor Light Rail System, with its hub at Downtown’s Union Depot, will create alternative choices for visitors to parks along the river. The potential introduction of commuter rail will provide additional options for visitor access. New bus routes, shuttles, and other means of public transportation also will expand access to the river corridor.



Link the parkway and boulevard network to the river corridor.

Parkways and boulevards provide visual and physical connections to the river and accommodate all modes of travel, including walking and bicycling. They are the primary streets that provide access from adjacent neighborhoods to parks within the river corridor.

*Expand Transit Options*



Pedicabs: Short distance trips may be made by commercial bicycle taxis.



Water Taxi: Future transportation across the river by water craft offers potential for private sector entrepreneurs.



Transit Stops: Unique design, branding and marketing of the river-transit interface is recommended.



GOALS & OBJECTIVES

The Grand Round

The Grand Round is a historic part of HWS Cleveland 1890’s vision for Saint Paul. The recreational greenway was envisioned to add to the City’s quality of life by providing neighborhood access to the vast amount of open space along the river. The Great River Passage plan will implement the final piece of this vision by completing the scenic river segment and integrating access to the history of the region with the daily life of its residents.

Modify and enhance Shepard and Warner Roads over time as part of completing the Grand Round vision. Provide better non-motorized linkages from adjacent neighborhoods to the Great River Passage while maintaining its role as truck route and arterial street.

Enhanced landscape amenities, such as lighting, signage and planting, support the Grand Round’s proposed role as a recreational greenway. Reduced traffic speeds provide for more frequent and safer pedestrian crossings. Modifying street alignments, typical cross sections and providing pedestrian friendly intersection improvements, will enhance the safety and aesthetic quality of the Great River Passage.

The Grand Round Extension

Strengthen the Grand Round parkway and trail system by providing a link through downtown parks, including Kellogg Park, Lowertown, Bruce Vento Nature Sanctuary and Indian Mounds Park.

Parkways and Boulevards

Parkways and Boulevards are extensions of the Great River Passage into the City. These tree-lined streets provide visual connections and physical cues to the river and allow for various modes of travel, including walking and biking, along them. These are the primary streets that provide access from adjacent neighborhoods to parks within the Corridor.

Modify street design to comply with adopted Complete Street policies, providing equal access by car, bicycle and pedestrian.

Employ human-scale design to extend the parkway network from the River Corridor into the neighborhoods. Develop an enhanced wayfinding system to help visitors to the Corridor locate access and parking.

In the future, create key transit connections that encourage non-motorized access to the Great River Passage.

Multimodal Park Access Routes

Multimodal Park Access Routes are the main streets, other than Parkways or Boulevards, that provide vehicular, pedestrian and bicycle access to the Great River Passage. These routes generally align with primary park entrance locations, and connect to the City’s current and proposed bicycle grid. They form the primary routes for residents to access the Corridor from the neighborhoods.

Reintroduce pedestrian-scaled design that slows traffic, provides improved sidewalks, intersections and crosswalks, and includes either bike lanes, shared vehicle/bicycle lanes, and/or off street bike trails.

Encourage slow to moderate vehicular speeds and employ traffic calming measures including the use of on-street parking.

Introduction of the Central Corridor Light Rail Transit system, with its hub at Union Depot in downtown, will create alternative choices for people to visit the parks along the River. The potential future introduction of commuter rail will have an added impact on visitor access. Bus routes, shuttles and other means of public transportation will provide access to the corridor for people of all communities and abilities.

Transit Access

Promote the use of existing Metro Transit bus routes to access the Great River Passage. Enhance Great River Passage transit stops by developing and incorporating unique branding, wayfinding, and shelter design.

Complete continuous bicycle and pedestrian routes that connect transit stops to Great River Passage access points.

Develop bicycle and pedestrian accommodations that link regional trail systems and the River with key Great River Passage transit stations to be provided at Union Depot, Central Corridor LRT at Raymond Avenue, and proposed Red Rock Commuter Train at Lower Afton Road.

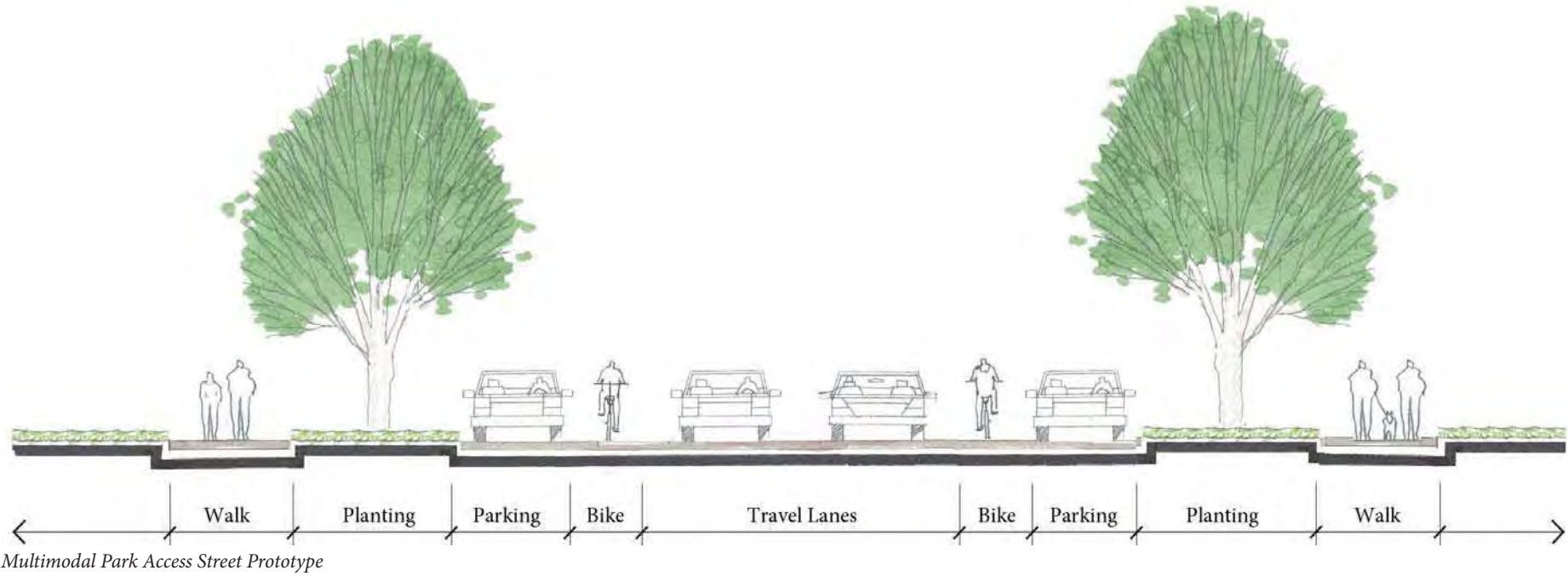
New Types of Connectivity

Evaluate using pedicab and/or shuttle service as precursors to enhanced public transit service to Great River Passage sites. Explore offering van tours to gain access into the sensitive Pig’s Eye Lake area as an interim measure prior to completing major infrastructure access improvements.

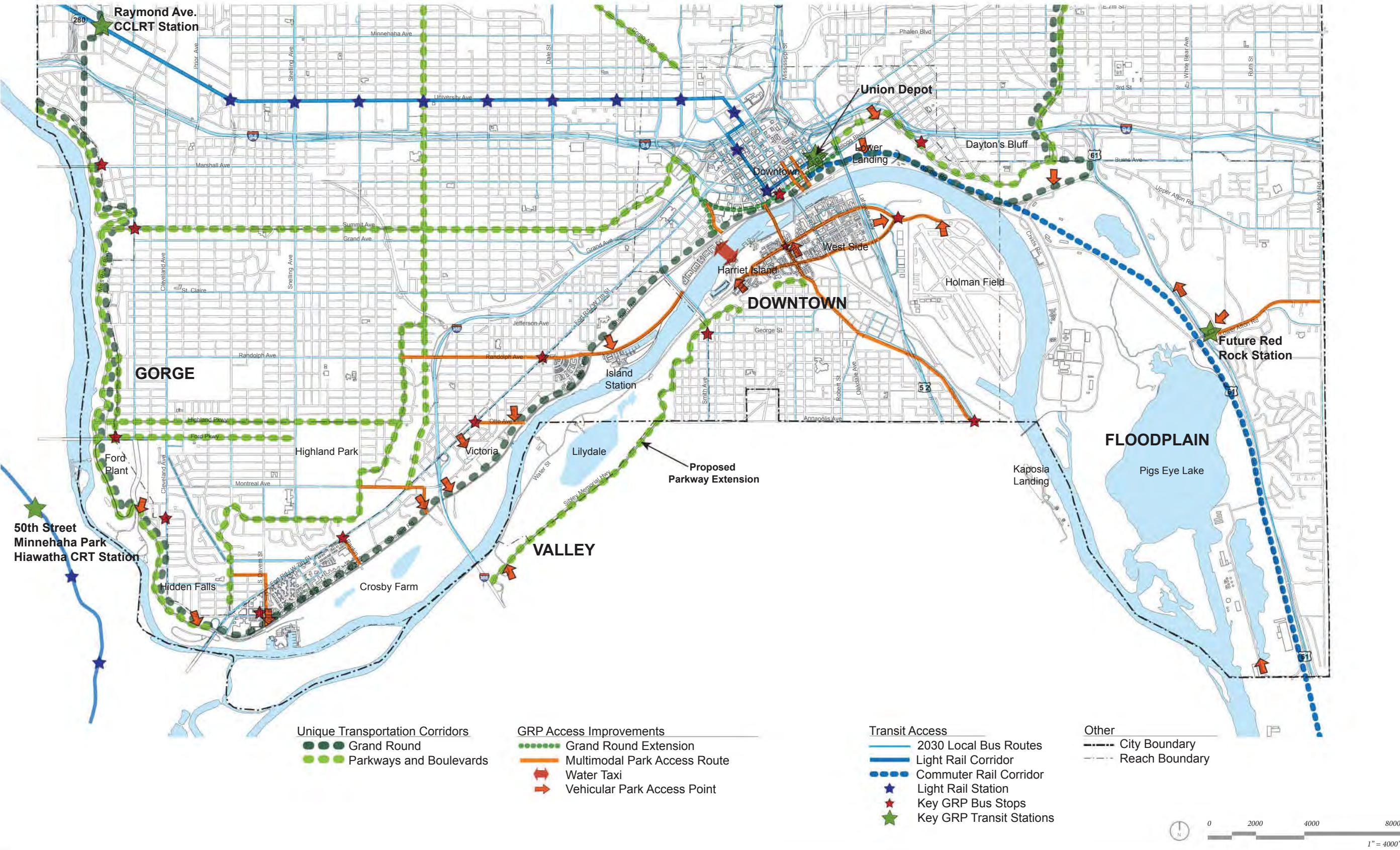
Utilize shared parking with neighborhood businesses and run extra transit shuttles during special events.

Further evaluate opportunities for transport across the river by small water craft; such as taxis or ferries at key locations.

Evaluate the feasibility of providing readily available ride sharing services and motorized and non-motorized vehicle rentals for access to the river.













Improve Local River Access

Much of the City of Saint Paul is within walking or bicycling distance of the Mississippi River, yet few people know how to access this community resource, explore its history, and enjoy its scenic beauty. Connecting the system and providing designated walking and bicycling facilities within connecting corridors, will seamlessly link the Great River Passage with the City and to surrounding communities.

Objective 1: Improve Neighborhood Pedestrian Access and Circulation.

- Complete missing street and sidewalk links.
- Provide enhanced streetscapes with continuous, lighted sidewalks on at least one side of all connecting streets.
- Use accepted traffic-calming techniques to provide streets that are safe for pedestrians.
- Encourage pedestrian scale building patterns and streetscape amenities.

Objective 2: Prioritize Completing Bikeway Segments.

- Link existing facilities in the citywide bicycle system.
- Identify new bicycle/pedestrian access structures.

Objective 3: Improve Access for Bicycles Using Bike Lanes, Shared Vehicle/Bicycle Lanes, and/or Off-Street Bike Trails.

- Provide for and promote sharing the road.
- Integrate a variety of design treatments to complete the bicycle route system.

Objective 4: Provide Bicycling Support Facilities.

- Provide bicycle stations at the confluence of major trails and at intermodal centers such as Union Depot.
- Install secure and convenient bicycle parking facilities in all parks.

Objective 5: Integrate Pedestrian and Bicycle Connections and Accommodations with Transit.

- Complete connections for bicycles and pedestrians from transit stops to park access points.
- Develop and improve bicycle and pedestrian accommodations downtown and other locations.

A Walkable and Bikeable Community

Short distance trips from neighborhoods to the river corridor may be accomplished by walking or bicycling if the connecting routes are safe, convenient, and aesthetically pleasing. Enhancements address the pedestrian realm (sidewalks and pedestrian amenities), the roadway corridor (bicycle facilities, on street parking, traffic speeds and crossing treatments), and adjacent development (how buildings relate to streets).



Context Sensitive Design: Mixed use areas with first-floor commercial uses require urban sidewalk design treatments.



Grade-Separated Crossings: Structures are reserved for roadways with high traffic volumes and speeds, where crossing at a signal is not practical.



Bicycle Lanes: Striped lanes on both sides of streets encourage increased levels of bicycling.



Bicycle Boulevards: Cars and bikes can share lanes when traffic volumes and speeds are low.



Multi-Use Trails: Parkways and Boulevards may have bike lanes and/or parallel trails.



Support Facilities: Secure and convenient parking allows cyclists to enjoy park destinations.



### GOALS & OBJECTIVES

#### Extend The City To The River

Gaps in the street grid currently prevent easy access to the river. Where existing parkways, boulevards and other streets link to the park, improve them to provide sidewalks with pedestrian and bicycle friendly amenities. Redevelopment and road improvement projects should complement and extend the street grid to the river wherever possible.

#### Complete The Streets

Make improvements to designated corridors along the riverfront to implement the adopted City of Saint Paul's "Complete Streets" policy.

Recognize that bicycles and cars can safely share roadway space when traffic speeds and volumes are low. Within major street corridors, designated bicycle facilities are desired to separate motorized and non-motorized users traveling at different speeds.

Seamlessly integrate a variety of facility design treatments to complete the bikeway system – these include striped on-street bicycle lanes, signed and traffic-calmed bicycle boulevards, parallel off-road multi-use paths, and intersection crossing improvements. The exact treatment to be implemented within each street corridor will be determined based upon context sensitive traffic and right-of-way considerations.

#### Connect To Regional Trail Systems

Continue to work with multiple jurisdictions to complete an interconnected regional plan for the Mississippi National River and Recreation Area (MNRRA), Mississippi River Trail (MRT), and Ramsey and Dakota County greenway systems.

#### Provide Bicycling Support Facilities

Include secure and convenient bicycle parking racks within all parks. Rack designs should allow a cyclist to securely lock both bicycle frame and wheel. All bicycle parking should be placed in highly-visible locations, on paved surfaces, and out of conflict with through traffic on adjacent trails.

Provide bicycle stations at major trail and intermodal centers. At a minimum include bicycle parking, lockers, showers, distribution of bicycle literature, refreshments, supplies, and repair services.

#### Prioritize Missing Links

Place priority on completing bikeway segments that link to existing facilities in the citywide bicycle system, as well as projects that are programmed for near-term improvements in the Transportation Chapter of the Comprehensive Plan and the Bike Walk Central Corridor Action Plan.

Adopt a goal to complete continuous corridors of travel that are at least 2.5 miles in length – the national average bike commuter trip distance. Focusing on completing projects that contribute to a primary system of longer continuous corridors will serve multiple neighborhoods and contribute to an overall increase in levels of biking citywide.

#### Provide Facilities Along Corridors

Complete missing links to provide continuous sidewalks along both sides of all Multimodal Park Access Streets. Provide multiuse trails or sidewalks along the Parkway and Boulevard system.

In areas of residential land use, include a buffer planting strip between street

and sidewalk, plant street trees, meet all Americans with Disabilities (ADA) clearance and curb ramp standards, and encourage on-street parking.

In commercial and mixed use areas, provide wider sidewalks, extend paved width to back-of-curb, provide street trees planted in tree wells, meet ADA standards, and provide on-street parking.

#### Provide Facilities Across Barriers

Calm vehicular traffic and implement high-visibility at-grade crossings where Multimodal Park Access Streets intersect with major roadways. Add signals where warranted. Ensure all crossings meet ADA requirements.

Construct new bicycle/pedestrian overpasses and underpasses in key locations to provide connectivity to neighborhoods and address gaps in the trail and bikeway system. Utilize pedestrian and bicycle overpass and underpass structures when necessary to overcome major access barriers such as railroad lines, high-speed roadways, and vertical grade change from bluff top to river corridor. Utilize stair connections where there is a high demand, historic connection and capability to provide an alternative accessible route.

#### Encourage Pedestrian Supportive Development Patterns

Infill targeted redevelopment areas with mixed uses and short block lengths to encourage walkable neighborhoods.

Construct new buildings that face and embrace streets. Provide building setbacks and facades that are pedestrian-scale and interesting to walk by.

Implement clear and consistent signage and wayfinding systems directing people to and from the Great River Passage.



Provide bicycle access from City to River

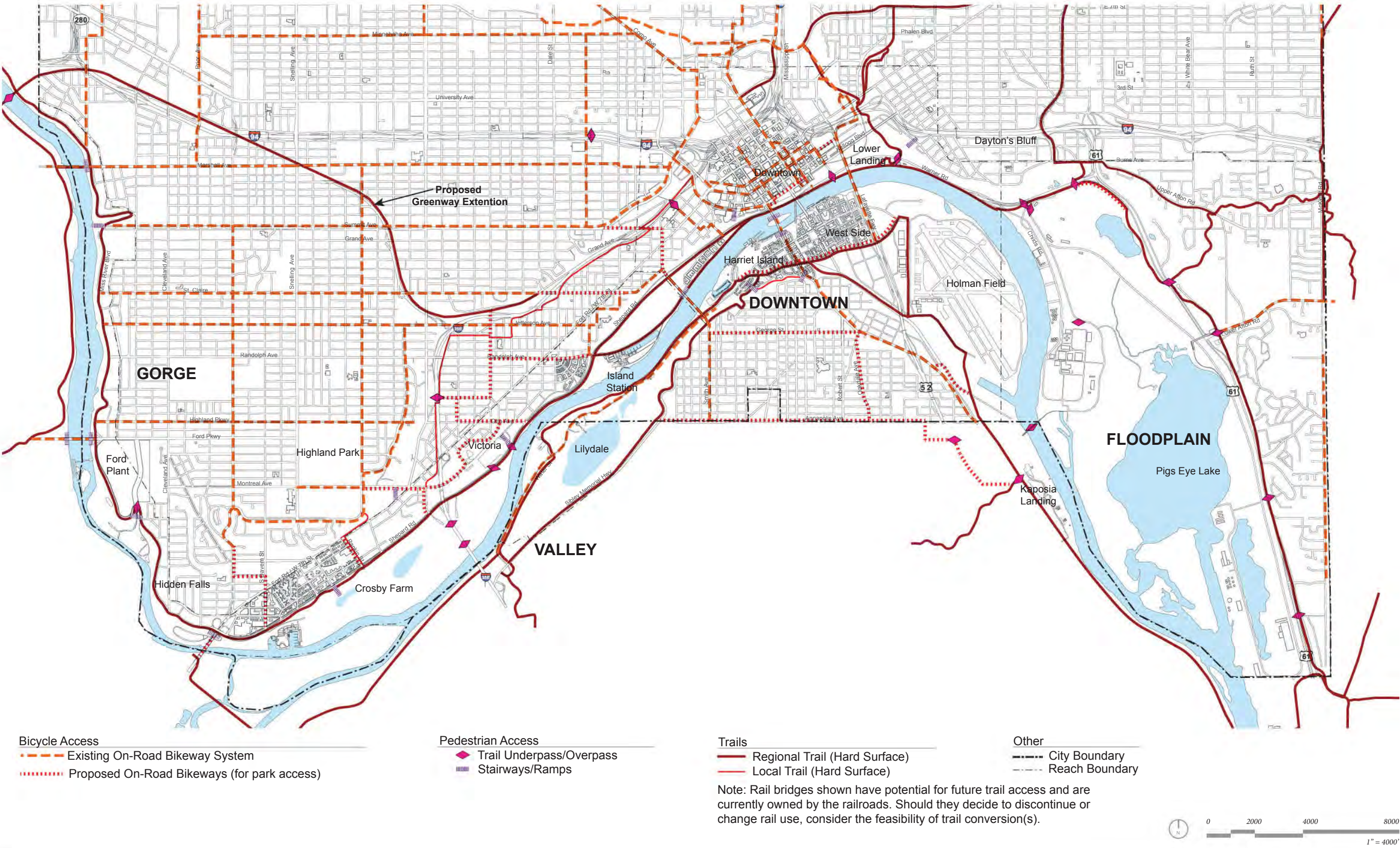


Develop safe and comfortable access from the neighborhoods

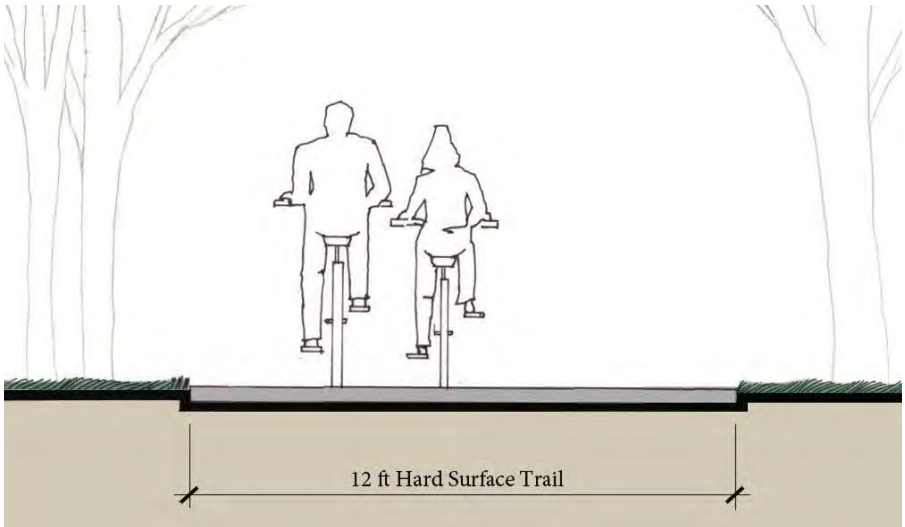


Accommodate transfer of bicyclists to other modes of transit.



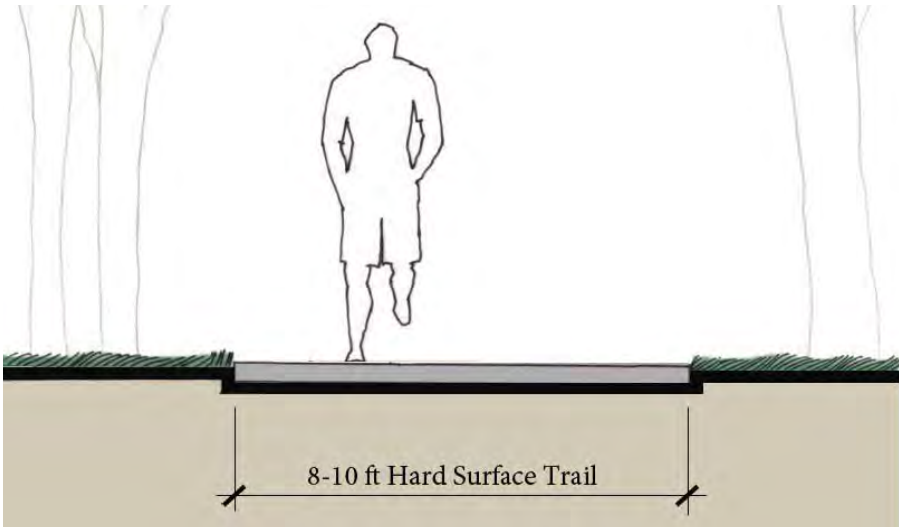






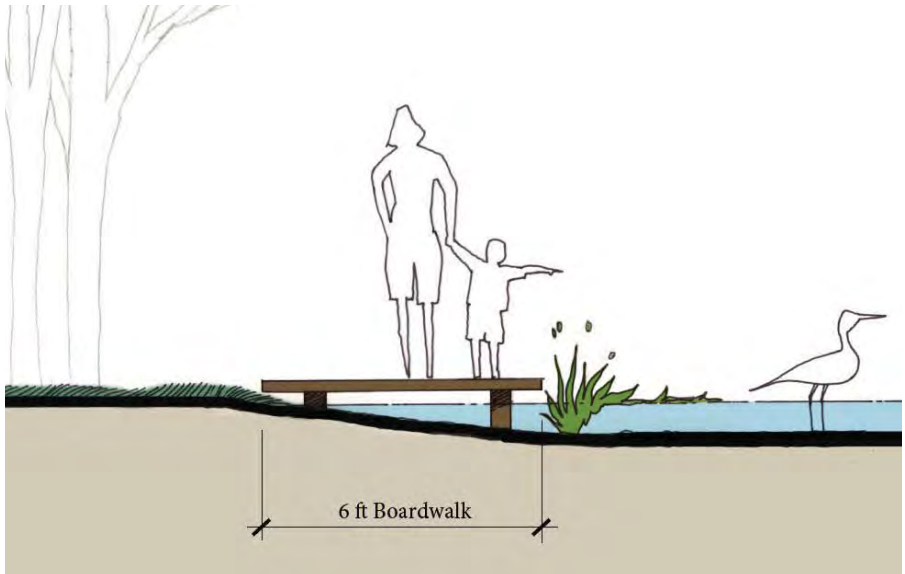
Regional Trails

Regional Trails serve both the recreation and non-motorized transportation needs of the City, connecting it to the larger State and regional trail systems. Regional Trails accommodate a broad range of users, including recreational cyclists, commuters, walkers, joggers, in-line skaters, skiers and tour participants. Pedestrians should be separated from bicyclists whenever possible.



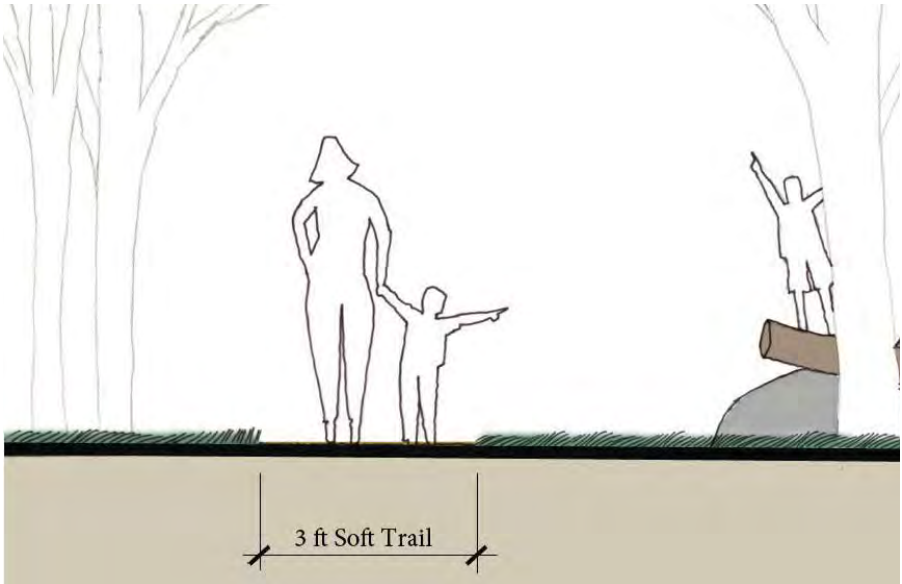
Park and Local Trails

Park Trails are multi-use paved trails that provide local access to parks and connect to the regional trail system. Park Trails are intended to be accessed easily from park roads and parking areas. They are looped to provide varied recreational experiences within each park and access for picnicking, park amenities, and park visitors of all abilities.



Boardwalks

Boardwalks are either park or rustic trails that are used to cross environmentally sensitive environments and access wetland interpretive areas and wildlife viewing areas.



Rustic Trails

Rustic Trails are narrow soft-surface paths that allow for hiking and adventure recreation uses. Rustic Trails have a low impact on the natural environment, allowing access to more remote sections of the parks for most park users. They provide for separated uses for hiking, cross-country skiing, and mountain biking.



Expand Opportunities For Park Access

The River and its parks are both a destination and a corridor, serving recreation and transportation needs of the community. Improving park entrances, signage, access roads, parking, trails and river access will accommodate a wide range of users and give them a wider choice of better ways to get to the River. Trails serve both recreation and transportation needs, connecting State and regional trail systems to parks and neighborhoods in the City. Trails accommodate a wide range of users, of all ages and abilities and in all seasons of the year.

Objective 1: Improve Access Within Parks.

- Accommodate access for pedestrians and bicyclists at all primary park vehicular entries.
- Provide additional points of access for pedestrians and bicyclists where constraints are present on park entrance roads.
- Right size parking areas in parks and natural areas.

Objective 2: Create a Hierarchy of Trail Types and Lengths to Provide a Variety of Recreational Challenges and Experiences for all Users.

- Develop a variety of trails appropriate to the type and level of use and users in each park.
- Provide continuous accessible trail loops.
- Protect sensitive ecological areas by using appropriate soft trail treatments, boardwalks and decks.

Objective 3: Complete and Connect to Regional Trail Systems.

- Work with multiple jurisdictions to complete an interconnected regional system.
- Improve connectivity and complete gaps in existing system.

Objective 4: Develop Multiple River Access Points to Support Recreational Boating uses on the River.

- Create a Canoe/Kayak River Trail with landings at key locations along the River.
- Provide signage, access to support facilities and boat storage at canoe/kayak landings.

Objective 5: Create Overlooks to Preserve Scenic Views into the Corridor.

- Coordinate streetscape and trail improvements for neighborhood access.
- Provide pedestrian amenities to provide shade and comfort.
- Provide signage interpreting views and historic significance where appropriate.



Regional Trails serve a variety of users



Rustic Trails allow the experience of nature in the city



Park Trails provide local access



Boardwalks span sensitive environments



GOALS & OBJECTIVES

Improve Access to the River

Provide improved access to public facilities and recreation programs by adding sidewalks and bicycle markings to park roads wherever possible. Where road widths are constrained, supplement park access by restoring historic stairways and identifying park roads as shared use zones. Improve circulation to eliminate dead ends, complete loops to open visibility into remote parking areas, and provide parking facilities that accommodate a wide range of park users. Accommodate overflow parking needs by use of on-street, or shared parking at local businesses, schools, community centers and other institutions.

Create Access Within Parks for All Users

Vehicular access within the parks is essential to accommodate park users of all ages and physical abilities, and to allow for convenient access for a broad range of recreational uses and activities. Park access roads connect the public streets to trailheads, parking areas and boat ramps, allowing a wide variety of users to get to the parks and to the river. Through appropriate design, slower-speed internal park roads will allow for vehicle use within the park, providing a safe environment for visitors and access for maintenance and emergency vehicles, as well as an aesthetic park experience.

Balance Park Access With Protection of Resources

Reduce pavement footprints and design access roads and parking areas to reduce their impact on sensitive natural and cultural resource areas. Avoid impacting bluffs, sensitive vegetation and habitat areas wetlands and scenic resources in the valley. Utilize pervious surfaces where possible to reduce storm runoff and use appropriate local materials for park road and trail construction.

Regional Trails

Regional trails serve both recreation and transportation needs of the city connecting it to the larger state and regional trail systems. Complete the network by providing a continuous off-road trail on both sides of the river that connects Minneapolis and Saint Paul. Regional trails accommodate a broad range of users, including recreational and commuter bicyclists, walkers, joggers, in-line skaters, cross-country skiers and race tour participants.

Park and Local Trails

Park and local trails are multi-use paved trails that provide local access to parks, neighborhoods and to the regional trail system. Park and local trails are intended to be easily accessed from parking areas and trailheads. They are often looped to provide a variety of recreational experiences and convenient access to parks, picnic areas and park facilities for visitors of all ages and abilities.

Rustic Trails

Rustic trails are narrow soft surface paths that allow for hiking and adventure recreation uses. Rustic trails have a low impact on the natural environment, allowing access to more remote sections of the parks for most park users. They accommodate separated uses for hiking, cross-country skiing and mountain biking.

Boardwalks

Boardwalks provide access to river, lake and wetland areas with a minimal impact on natural areas.

Canoe and Kayak Trail

The Mississippi River Canoe and Kayak Trail will provide a series of destinations for boaters to take advantage of improved river landings and access. Each destination will allow paddlers to experience a unique part of Saint Paul's natural, urban and cultural history and environment. Parking and boat storage and rental will be provided at key locations. Maps, wayfinding and interpretive signs at landing locations will be part of the programs available to support river exploration. MNRRA, river outfitters and other river-oriented businesses can be suitable partners for building and maintaining shoreline landing improvements, rental, transport and boat storage facilities at key locations along the river.



Outdoor organizations such as Wilderness Inquiry introduce city youth to the river.

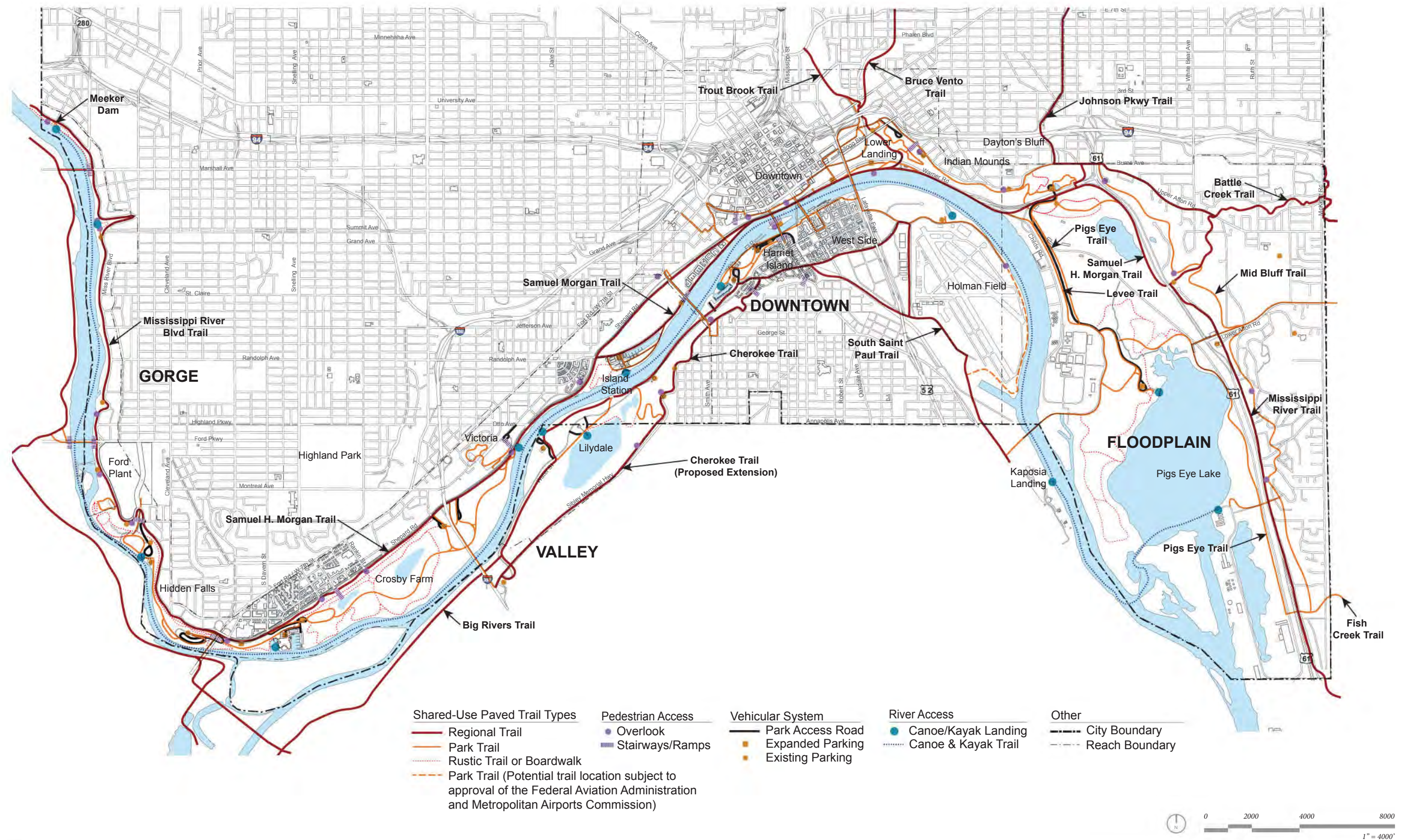


Several river landings support the Canoe/Kayak Trail



Provide universal access within parks along the river







## Life Along The River

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The River is the birthplace of Saint Paul. Native Americans, traders, trappers, Civil War soldiers, blacksmiths, brewers, coopers, and other early residents have lived here. European, Latin, Asian and African-Americans, now live in a diverse community contributing to the ongoing legacy of the valley. From its earliest settlements at Hidden Falls, through the industrialization of the 19th and 20th centuries, to today's thriving, modern city, life in Saint Paul has always been associated with, and made better by the presence of the Great River. Our rich historical legacy provides an incredible opportunity to weave meaning and history into each enhancement made within the Great River Passage. By introducing public art into the design of interpretive elements, we can help tell the stories of the Great River in ways that will set Saint Paul apart.



# LIFE ALONG THE RIVER IN SAINT PAUL

800 bc



**Indian Mounds Regional Park**

Native Americans have lived along the river and regarded the bluffland as ceremonial if not sacred as evidenced by the burial mounds dating as far back as 200-400 B. C.

MINNESOTA HISTORICAL SOCIETY



**Wakan Tipi (Carver's Cave):**

Many places along the river were, and still are considered sacred to indigenous peoples.

MINNESOTA HISTORICAL SOCIETY



**Dakota Village of Kaposia:**

This Dakota Village was at the modern location of the City's current wastewater treatment plant. After the Treaty of 1837 it was moved to the South St. Paul area.

MINNESOTA HISTORICAL SOCIETY

PRE-EUROPEAN | EARLY NATIVE AMERICAN SETTLEMENT

Life along the river pre-dates the arrival of Euro-Americans by thousands of years.

Oral traditions among the Mdewakanton Dakota describe the river and many of the islands within it as sacred sites and gathering places for their own people and with the Ojibwe and Winnebago.

From the earliest times of human occupation, 12,000 years ago, through to the arrival of Europeans in the 17th and 18th centuries, Native Americans used the river for **transport, fishing and plant resources**, and established villages where they developed agricultural systems, gathered food, and hunted bison.

1650



**Harriet Island:**

Harriet Island was the City's first riverfront park. In 1900 the city's Health Officer, Dr. Justus Ohage, purchased, developed and donated the park in order that the health benefits of recreation were accessible to all.

MINNESOTA HISTORICAL SOCIETY



RIVERFRONT CORPORATION

Pre-dating 1900, development patterns along the river included residential (Upper Landing, Lilydale and Crosby Farm, etc), transportation, (railroads and commercial boat landings) and commercialization (railroads, warehouses, breweries and stone cutting yards, etc)

EUROPEAN SETTLEMENT

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Oral traditions among the Mdewakanton Dakota describe the river and many of the islands within it as sacred sites and gathering places for their own people and with the Ojibwe and Winnebago.

From the earliest times of human occupation, 12,000 years ago, through to the arrival of Europeans in the 17th and 18th centuries, Native Americans used the river for **transport, fishing and plant resources**, and established villages where they developed agricultural systems, gathered food, and hunted bison.

1850



**Farmer's Union Association Grain Terminal and Elevator**

As a bridge between land and water, the grain terminal connected St. Paul to the world.

St. Paul has been part of the global economy for over 100 years.

MINNESOTA HISTORICAL SOCIETY

INDUSTRIALIZATION

Post-1900 came grain elevators, scrap yards, heavy industry (Amhoist, oil storage/refineries and scrap yards, etc). These land uses show development patterns – and some of the challenges facing the River with respect to land uses, access, restoration of natural systems and park development.

- 1870: The Minnesota Boat Club (rowing club) is the oldest athletic organization in the State.
- 1900 to 1967: River pollution caused the closing of Harriet Island Park, moving recreation activities to inland neighborhood parks. Use of river wetlands for dumps (Pigs Eye and Lamprey Lake/Holman Field) indicated disregard for the River as a place for healthy natural systems and public recreational activities.
- 1912: St. Paul Yacht Club formed; important because boating is an important part of our River corridor's scenery and recreation.
- 1938: Pigs Eye sewage treatment plant opens; first major step in cleaning the river, giving the River and adjacent properties a chance at revival
- 1950s: Continued Transportation uses and Commercialization of river shoreline; Shepard Road in particular separated downtown/neighborhoods from the river
- 1990s: separation of sanitary and storm sewers greatly improved Mississippi River water quality in St Paul

1950



**Lock & Dam No. 1:**

Constructing the lock and dam system enables the U.S. Army Corp of Engineers to better **manage flood control and improve navigation.**

MINNESOTA HISTORICAL SOCIETY

2010

The timeline illustrates key dates in the settlement and civilization of Saint Paul along the Mississippi River.



GOALS & OBJECTIVES

Integrate History and Culture into all Aspects of Great River Passage Development.

The River corridor is rich in archaeological and historic resources, adding to the value of the expansive natural resources that largely define the character of the Valley. Many resources have been lost or compromised over time because their value as part of the historical record has been unappreciated or ignored.

The Mississippi River, as it passes through Saint Paul, has been home to a succession of cultures that date back thousands of years. Each culture has left its mark on the landscape, creating a rich layering of history, which when preserved and interpreted, can enhance the lives of visitors and residents and strengthen their bond to the river as a meaningful part of their daily lives.

- Objective 1: Identify, evaluate, designate, preserve, and protect the historic resources within the Great River Passage.**
- Implement recommendations of the City’s Preservation Chapter of the Comprehensive Plan.
  - Complete a corridor-wide inventory and assessment of cultural and historical resources within the River corridor.
  - Incorporate historic elements into improvements recommended under the master plan.
  - Prepare a baseline inventory of all historic resources, including sites and districts already designated, in the Great River Passage.
- Objective 2: Develop a comprehensive interpretive plan and specific strategies for implementation.**
- Develop Interpretive themes.
  - Develop nontraditional strategies for interpretation and storytelling.
  - Protect and interpret historic and cultural resources.
- Objective 3: Promote interpretation of the corridor’s history, culture, and unique resources.**
- Develop partnerships to protect and interpret unique resources within the corridor.
  - Link historical and cultural interpretive programs with the city’s existing environmental education program.



Island Station 1924 - Interpreting Historic Industrial Sites



Grain Terminal 1985



Now part of Today’s River Promenade

Develop Interpretive Themes

Understanding the general extent and nature of existing resources within the corridor is an essential first step in evaluating opportunities for their protection, adaptive reuse and interpretation.

Complete a cultural landscape context study for Saint Paul parks, parkways and cultural landscapes within and adjacent to the River corridor. Inventory resources prior to implementing recommendations of the Master Plan to develop a comprehensive understanding of the Valley’s history, and to complement preparation of an interpretive master plan that will define more specifically recommendations for interpretation of historical themes.

Pursue preservation and repurposing of historic elements and industrial artifacts as a preferred strategy in proposed public and private redevelopment plans.

Tell Stories About The River

A comprehensive strategy for interpretation of the corridor’s cultural and historic resources has tremendous potential to educate city residents and visitors about resources within the corridor. A comprehensive strategy suggests interpreting the history and culture of the corridor through multiple forms of media, and partnerships with specialized interest groups to interpret unique resources, such as the caves. Through collaborations with institutions, the city’s environmental education program, and multiple environmental organizations the link between nature and culture can be described as part of an even broader strategy for interpretation of the corridor’s resources.

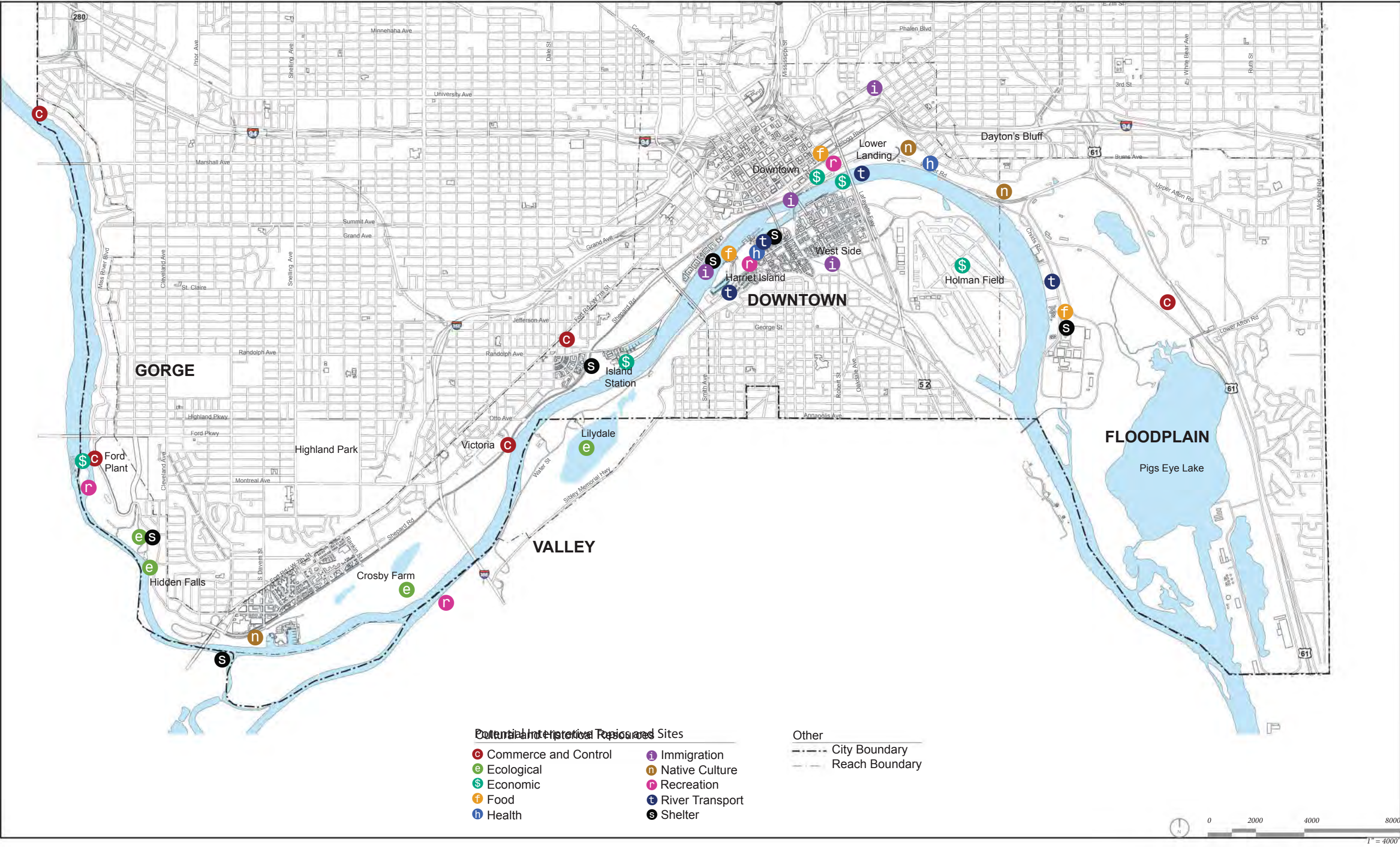
The diversity of resources, illustrated by the multiple interpretive themes identified, can best be preserved and interpreted through the establishment of multiple partnerships with specialized interest groups, and other public agencies and nonprofit organizations to supplement city resources and technical expertise. Promote the most cost effective and broadly based interpretive programs possible. Integrate existing and proposed environmental education programs and facilities, and staff into a larger strategy for interpretation of all natural, cultural, and historic resources.

A comprehensive interpretive plan will describe specific interpretive messages and means for interpretation at key locations throughout the river corridor. The plan would also begin to identify partners for implementation of the plan. Key themes will be developed from the following concepts:

- Food - The Mississippi has nourished people throughout history.
- River Transport-The Mississippi has served as a major transportation route throughout history.
- Home and Shelter-The Mississippi has defined and shaped our communities and neighborhoods.
- Recreation-Residents enjoy the river as a place of rest and relaxation.
- Commerce and Control-For more than a century man has tried to control and harness the Mississippi as a working river.
- Economy-The Mississippi has been the basis for economic opportunity throughout history.
- Natural Resources-The Mississippi sustains life.
- Health-The river has contributed to the health of area inhabitants throughout history.
- Native Cultures-The river has supported indigenous communities for 12,000 years.
- Immigrant Communities-Many immigrant communities have come to the valley over time.

Guided tours, annual festivals, artists installations, seasonal events and digital media are examples of nontraditional means of storytelling in interpreting the corridor’s resources. They support related goals of activating the parks through staging events into the parks, and bringing a broader segment of the public to the corridor.





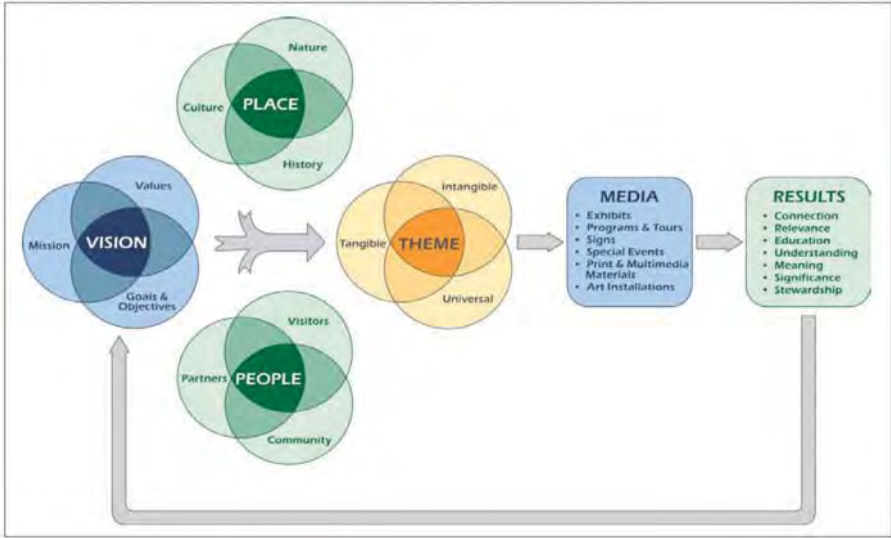


Overview

The purpose of this portion of the plan is to establish the overall direction for interpretive recommendations for the Great River Passage and to generate consensus on the direction for future interpretive planning in the Park. In addition, the plan provides an overview of federal and state laws that govern the treatment of historic, archaeological, and cultural resources in the Park, and some direction on procedures for historic preservation.

Interpretive Planning

Good interpretation forges emotional and intellectual connections between the interests of the audience and the meanings inherent in a resource and place. Interpretive planning designs educational experiences that support a community’s vision and mission. The planning process considers the place-specific historical, cultural, and natural resources to be interpreted and the demographics of the people who use the site in order to develop relevant messages and media in support of an organization’s mission. There are many organizations and agencies with interest in, and jurisdiction over the park. Therefore, the focus of the interpretive work was to develop a process for a cohesive future decision making and evolution of interpretive plans, exhibits, and programs.



Cultural Resources Inventory

There are many resources available to help understand the cultural history of places within the Great River Passage. The City of Saint Paul Heritage Preservation Commission maintains an inventory of historic resources and continues to identify and pursue designation of historic resources. Additionally, the Minnesota State Historic Preservation Office (SHPO) is charged through the National Historic Preservation Act to maintain a statewide inventory of cultural resources. The Minnesota Historical Society also manages collections of historical documents and imagery.

Collecting baseline data will provide a starting point for planning and informed decision-making. It can help determine the relative significance of sites based on themes and context, bring authenticity to the interpretive process, and help reveal important stories about the heritage of the Great River Passage.

The Park has not been inventoried specifically for this project, but will be pursued by the City as a future planning effort. A multitude of historic resources have already been identified within the Great River Passage. As plans develop to create neighborhood connections and interpretive elements, historic resources should be considered to ensure authentically interpreted places.

Mission and Principles

An interpretive plan should be built on a mission and principles. The mission of the Great River Passage is:

**The Great River Passage strives to be a regional asset of national significance that is more natural, more urban, and more connected**

Principles define a set of basic, foundational assumptions that will guide interpretation within the Passage. Thus, these principles are the foundation on which the interpretive plan is built and should inform all future development related to interpretation at the site. The principles have been developed based on input from the stakeholder workshops, and the original framework plan.

Interpretation within the Great River Passage will:

- Convey factual information and authentic stories
- Convey different perspectives on the history of places and resources
- Foster preservation and restoration of historic resources through education and understanding
- Foster partnerships among the many local, regional and national agencies, organizations, and stakeholders
- Create a cohesive visitor experience linked to the Passage’s theme and subthemes
- Complement additional interpretation and visitor experiences in Saint Paul
- Be accessible to the greatest extent possible (e.g., ADA compliant)
- Ensure interpretation is not intrusive to the unique sense of place
- Inform site development and visitor orientation and wayfinding
- Foster discovery and contemplation (i.e., encourage visitors to accurately understand the sites while also asking questions and provoking visitors to draw their own conclusions)
- Encourage visitors to learn more from the many resources available beyond the places visited

Goals and Objectives

Goals and objectives are essential for a community to reach a desired end-point. Setting goals involves establishing specific, measurable, attainable, realistic, and time-targeted objectives. Goals and objectives are an effective tool for establishing a target, identifying the necessary steps to be taken, and measuring progress toward achieving the goals.

Goals and Objectives: Interpretation within the Great River Passage will:

- Educate visitors about the history and heritage of the Great River Passage
- Provide visitors with engaging and relevant experiences
- Provide opportunities for people of diverse perspectives and backgrounds to

- appreciate the site and its history
- Attract local, regional and, national heritage tourists to the Great River Passage
- Establish consistent interpretive messages
- Build a cohesive group of partners and stakeholders who can effectively preserve, manage, and interpret the site
- Improve visitor orientation and wayfinding
- Develop and enhance the landscape
- Develop guided and self-guided tours
- Connect visitors to other themes-related resources beyond the Passage
- Provide opportunities for visitors to engage in stewardship
- Evaluate and report progress toward objectives
- Ensure the interpretive experience is not intrusive on the natural environment

Interpretive Theme and Subthemes

A theme is the central or key message of all interpretation at a site. It may or may not appear in writing, exhibits, and programming, but all interpretive efforts should fall within the scope of the interpretive theme. A theme provides organizational structure and clarity to the main message that visitors encounter when they visit a site. After experiencing a site, visitors should be able to summarize the main point of interpretation in one sentence; this is the interpretive theme.

A theme should:

- Be stated as a short, simple, complete sentence
- Contain only one main idea, if possible
- Reveal the overall purpose of the site
- Be specific
- Connect tangible resources to universally understood concepts

One overarching theme or message has been developed that reflects our relationship to the river through time. **“The Mississippi has influenced the development and sustained cultures of Saint Paul throughout time.”**

A topic is a broad general category, such as the Mississippi River, immigration, or boating. A theme should answer the question, “So what?” It should tell visitors why a specific topic is important. There are multiple potential topics and associated stories (or sub-themes) identified that will relate to specific places; suggested locations are identified that should be considered the optimum place to tell a specific story. In addition, there are already existing interpretive markers, or ones that are proposed and awaiting final review and installation that should be reviewed prior to implementing any new interpretive messages.

Stories that Connect People to Places

Topics and stories that connect people to places include the following.

Topic: Food

Sub-theme: The Mississippi has nourished people throughout history

Examples of Places to Tell the Story:

- Farmers Market, e.g. new foods from recent immigrants, ancient foods such as wild rice – place of cultural immersion in foodstuffs
- Produce Exchange, Lowertown



- Restored wild rice beds near historic Kaposia
- Grain Terminal
- Fishing pier/location
- Crosby Farm, e.g. history of agriculture along the river
- Sources of drinking water, e.g. natural springs, Coldwater Springs, Schmidt Brewery
- Harvesting plants for food and medicine, e.g. Lilydale
- Ice cream store by the Fort Snelling Hotel
- West Side Flats caves for mushroom growing

Topic: River Transport

Sub-theme: The Mississippi has served as the major transportation highway throughout history

Examples of Places to Tell the Story:

- Viewing point for tow boats and barges, the port of Saint Paul, e.g., Lower Landing
- The Mississippi Americas fourth coast, e.g. Grain Terminal
- 100% point for planes, trains, automobiles and boats, e.g. overlook at Broadway and railroad tracks, Warner Road overlook
- Bridging the river, e.g., Wabasha Bridge
- Types and uses of river craft, e.g., voyageurs canoes, etc.
- Railroads, e.g. Union Depot, Big River Trail interpretation along former Soo Line

Topic: Shelter

Sub-theme: The Mississippi has defined and shaped our neighborhoods

Examples of Places to Tell the Story:

- Kaposia Dakota Village (at site of current Metropolitan Wastewater Treatment Plant)
- Caves and caverns
- Lilydale
- House boats at Harriet Island
- Upper Landing/Little Italy and effects of floods
- Swede Hollow along Lower Phalen Creek/Bruce Vento Nature Trail
- West Side Flats and effects of floods
- Fort Snelling – military housing
- Sibley House, Mendota

Topic: Recreation

Sub-theme: Enjoying the river

Examples of Places to Tell the Story:

- Voyageur canoes
- Harriet Island: The city’s gathering place
- Marinas and boating culture
- Biking and hiking trails
- Picnic areas
- Nature education
- Lower Landing
- Upper Landing

Topic: Commerce and Control

Sub-theme: For more than a century man has tried to control and harness the

Mississippi to be a working river

Examples of Places to Tell the Story:

- Locks
- Dams
- Hydroelectric power at Ford Plant
- Island Station
- Grain Terminal
- Caves and caverns (role in settlement, how used, etc.)
- Breweries: Schmidt off 7th Street; North Star Brewery at Bruce Vento Nature Sanctuary
- Mining sandstone for glass at Watergate Marina
- St. Paul Airport/Holman Field
- Lower Landing
- Upper Landing
- Railroads and bridges
- Science Museum of Minnesota: River Gallery

Topic: Economic

Sub-theme: What are the many opportunities that the river has provided throughout history?

Examples of Places to Tell the Story:

- Mining – Lilydale Brick Quarry
- Agriculture – Crosby Farm
- Transporting goods and people – steamboats, barges, Union Depot, etc.
- Air travel - Holman Field
- Power generation – Ford Dam
- Feeding the world – lock and dam
- Industry – power plant

Topic: Ecological

Sub-theme: The river sustains life

Examples of Places to Tell the Story:

- Environmental stewardship (East River Boulevard, Crosby Farm and Highwood). At East River Boulevard, Crosby Farm and Highwood, the removal of buckthorn has helped regenerate the oak savannas previously found here
- The natural river (below the Ford dam). The river below the Ford dam and extending to downtown St. Paul, while now somewhat narrowed, still maintains the feel and flow of the natural river that existed when Fort Snelling was first built.
- The resilience of nature (Lilydale). The village of Lilydale once sat on the Mississippi River floodplain, but repeated flooding eventually led to the town’s relocation; a semblance of floodplain forest has since re-established in the village’s place
- Sewer separation (any large storm sewer outlet to the river). The City of St. Paul’s \$217 million sewer separation project was accomplished in 10 years and separated about 190 miles of combined sewer, stopping raw sewage from flowing into the river during large storms.
- Floods and the power of the river (upstream end of Hidden Falls Park). As you walk the through the cottonwoods the topography around you is that of

a river bottom; prior to the Ford dam the river floods flowed through and shaped this area

- Sewage (view from Mounds Park). When the Pig’s Eye wastewater treatment plant was completed in 1938 it was the first wastewater treatment plant located on the Mississippi River in a major city and brought about large improvements in water quality; today it is among the largest in the U.S.
- The flyway (anywhere in the floodplain and valley sections of GRP). The Mississippi flyway provides a migration corridor for all types of bird life; the flyway extends from the Gulf of Mexico to central Canada and the Arctic Ocean
- Watersheds and water quality - Two Rivers overlook. The water quality difference between the Minnesota and Mississippi River watersheds is quite evident from this overlook – the land use differences of the watersheds colors the water of each river.

Topic: Health

Sub-theme: How has the river contributed to the health of the people throughout history?

Examples of Places to Tell the Story:

- Carver’s Cave petroglyphs and symbols of healing
- Medicinal plants and natural medicines
- Recreational release
- Metropolitan Wastewater Treatment Plan, Pig’s Eye
- Harriet Island baths and the Dr. Justus Ohage story

Topic: People – Native Culture

Sub-theme: What has been and is the experience along the river for the past 12,000 years?

Examples of Places to Tell the Story:

- Mounds Park
- Fort Snelling State Park and Mdote
- Pilot’s Knob, Mendota
- Bruce Vento Nature Sanctuary and Carver’s Cave/Wakan Tiki
- Many places along the river with Dakota place names
- Other locations to be determined in consultation with Native people
- Two rivers overlook (existing interpretive area)

Topic: People – Immigration

Sub-theme: The immigration experience and the role of the river in that experience

Examples of Places to Tell the Story:

- Harriet Bishop (The first school teacher)
- Pigs Eye Settlement and Pigs Eye Parrant
- JJ Hill Environmental and cultural resource stewardship
- Father Lucien Galtier Monument, Kellogg Boulevard Mall
- Swede Hollow
- Little Italy/Lower Landing
- West St. Paul and West Side Flats
- Dred Scott
- Basil Gervais



Strategies for Interpretation: Media

Planning for interpretation allows us to deliver messages through the creation of experiences. Some of these experiences may include interaction with interpretive media, which can include a vast range of possibilities, such as signage, public art, programming, design of the landscape, audio tours, and so much more.

Agencies or organizations that choose to embark on interpretive exhibit or program within the Park should work within this interpretive framework.

| Media Type                                                   | Advantages                                                                                                                                                                                                                                              | Challenges                                                                                                                                                                                                                                                |
|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Natural Environment                                          | <ul style="list-style-type: none"><li>• Makes a powerful statement without resorting to explicit means</li><li>• Engages multiple senses</li><li>• Low cost</li><li>• Ultimate authentic experience</li><li>• The landscape speaks for itself</li></ul> | <ul style="list-style-type: none"><li>• Requires protection</li><li>• Many factors can be beyond institutional control</li><li>• A balance must be met between visitors want to “un-plug” and use of mobile devices which alter the environment</li></ul> |
| Designed Indoor and/or Outdoor Space                         | <ul style="list-style-type: none"><li>• Makes a powerful statement without resorting to explicit means</li><li>• Provides supportive context to other interpretive media</li><li>• Engages multiple senses</li></ul>                                    | <ul style="list-style-type: none"><li>• Can be expensive</li><li>• Many factors can be beyond institutional control</li><li>• A balance must be met between visitors want to “un-plug” and use of mobile devices which alter the environment</li></ul>    |
| Objects<br>Artifacts, buildings, play-ground equipment, etc. | <ul style="list-style-type: none"><li>• Provides supportive infrastructure to other interpretive media</li><li>• Can carry a variety of meanings</li><li>• Can provide an authentic experience</li><li>• Can carry a variety of meanings</li></ul>      | <ul style="list-style-type: none"><li>• Can be expensive</li><li>• Can carry a variety of meanings</li><li>• Authentic artifacts are vulnerable to theft</li></ul>                                                                                        |
| Printed Signs                                                | <ul style="list-style-type: none"><li>• Generally cost-effective</li><li>• Can provide consistent interpretive message and branding</li><li>• Can be used at visitors’ own pace</li><li>• Can last many years with minimal maintenance</li></ul>        | <ul style="list-style-type: none"><li>• Relatively inflexible</li><li>• Appeals to limited learning styles</li><li>• Can impinge on the environment</li></ul>                                                                                             |

| Media Type                                                                     | Advantages                                                                                                                                                                                                                                                                                                                          | Challenges                                                                                                                                                                                                                                                                         |
|--------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Printed Publications                                                           | <ul style="list-style-type: none"><li>• Generally self-explanatory</li><li>• Generally portable</li><li>• Can provide consistent interpretive message and branding</li><li>• Requires comparatively little space in comparison to information contained</li></ul>                                                                   | <ul style="list-style-type: none"><li>• Potentially require frequent updating</li><li>• Appeals to limited learning styles</li><li>• Requires distribution system</li><li>• Uses paper</li><li>• May result in litter</li></ul>                                                    |
| Mechanical Interactives<br>Lift and drop doors, cranks, spinners, levers, etc. | <ul style="list-style-type: none"><li>• Provides a source of participation</li><li>• Can provide a sense of discovery</li><li>• Appeals to active learners</li></ul>                                                                                                                                                                | <ul style="list-style-type: none"><li>• Requires maintenance</li><li>• Can impinge on the environment</li><li>• Message can get lost in the activity</li></ul>                                                                                                                     |
| Generative Art<br>Poem writing, post-it notes, magnetic poetry, etc.           | <ul style="list-style-type: none"><li>• Provides a source of participation</li><li>• Provides a sense of discovery</li><li>• Appeals to active and visual learners</li><li>• Provides freedom to create</li><li>• Lets visitors leave their personal mark</li></ul>                                                                 | <ul style="list-style-type: none"><li>• Staff editorial process may limit free expression</li><li>• Institutional message and control can get lost in multiple visitors’ voices</li></ul>                                                                                          |
| Audio                                                                          | <ul style="list-style-type: none"><li>• Appeals to auditory learners</li><li>• Can help contextualize a place</li><li>• Can provide a means to reach multiple audience groups</li><li>• Vocal inflections of the voice can convey subtle messages</li><li>• Allows visitors to adjust sound levels to their comfort level</li></ul> | <ul style="list-style-type: none"><li>• Difficult for hearing-impaired visitors</li><li>• Requires maintenance</li><li>• Can be a source of sound pollution unless used with headphones</li><li>• Can isolate visitors into headphones</li><li>• Requires a power source</li></ul> |

| Media Type                                                    | Advantages                                                                                                                                                                                                                                           | Challenges                                                                                                                                                                                                                                                          |
|---------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cell phone audio tours                                        | <ul style="list-style-type: none"><li>• Minimal impact top physical space</li><li>• Appeals to auditory learners</li><li>• Minimal device support required</li><li>• Can be used at visitors’ own pace</li></ul>                                     | <ul style="list-style-type: none"><li>• Difficult for hearing-impaired visitors</li><li>• Requires mobile phone and carrier signal</li><li>• Not all visitors own/bring phones</li><li>• Not all visitors are willing to use minutes for interpretation</li></ul>   |
| Film/Video                                                    | <ul style="list-style-type: none"><li>• Appeals to visual and auditory learners</li><li>• Ability to compress time and space</li><li>• Can show motion</li><li>• Animating 2D pics for cost-effective results (aka “The Ken Burns Effect”)</li></ul> | <ul style="list-style-type: none"><li>• Expensive to produce</li><li>• Can require seating and</li><li>• Dedicated space</li><li>• Requires maintenance</li><li>• Requires a power source</li></ul>                                                                 |
| Electronic Interactives<br>Push buttons, light switches, etc. | <ul style="list-style-type: none"><li>• Provides a source of participation</li><li>• Provides a sense of discovery</li><li>• Appeals to active learners</li></ul>                                                                                    | <ul style="list-style-type: none"><li>• Requires maintenance</li><li>• Can impinge on the environment</li><li>• Message can get lost in the activity</li><li>• Requires a power source</li></ul>                                                                    |
| Computer Interactives                                         | <ul style="list-style-type: none"><li>• Updatable content</li><li>• Provides a source of participation</li><li>• Large multi-touch installations for multiple users can foster dialog</li></ul>                                                      | <ul style="list-style-type: none"><li>• Expensive to produce</li><li>• Requires maintenance</li><li>• Can impinge on the environment</li><li>• Message can get lost in the activity</li><li>• Requires more prototyping</li><li>• Requires a power source</li></ul> |



Strategies for Interpretation: Next Steps

The Mississippi River, as it passes through Saint Paul, has been home to a succession of cultures that date back thousands of years. Each culture has left its mark on the landscape, creating a rich layering of history, that when preserved and interpreted, can enhance the lives of visitors and residents, and strengthen their bond to the river is a meaningful part of their daily lives. Four specific strategies are proposed for the next step in implementation.

Protect and Interpret Historic, Cultural and Natural Resources

The River Corridor is rich in archaeological and historic resources, adding to the value of the expanse of natural resources that largely define the character of the valley. Many resources have been lost or been compromised over time, because their value as part of the historical record has been unappreciated or ignored. The city’s preservation plan chapter of the comprehensive plan calls for a Saint Paul Parks, Parkways, and Cultural Landscape Context Study. Completion of such a study would greatly contribute towards ongoing preservation efforts within the Park. Implementation of this plan should be constantly mindful of the broader recommendations in the city’s preservation plan. This plan identifies a series of themes and sub themes that are important to the history, culture, and ecology of the corridor, and describes an approach to preservation and interpretation of the resources.

Develop a Comprehensive Interpretive Plan and Specific Strategies for Interpretation

Themes and sub themes form the basis for the preparation of a Comprehensive Interpretive Plan. The Plan will describe specific interpretive messages and means for interpretation at key locations throughout the Park. The Plan will also begin to identify partners for implementation of the plan. Refine procedures for Parks to partner with communities and stakeholders in implementation process

Develop Partnerships to Protect and Interpret Unique Resources within the Corridor

Most of the resources within the Park can only be preserved and interpreted through partnerships that supplement city resources and capabilities. Parks needs to develop a policy for working with partners and implementing recommendations from this concept interpretive plan.

Develop Nontraditional Strategies for Interpretation and Storytelling

Repurposing of industrial artifacts as multiple use Park elements, guided tours as part of public-private partnerships, and multiple other techniques discussed above can supplement more traditional interpretive signage to bring history to life, and make parks and natural areas within the corridor unique in time and place.

Once a group/entity/agency chooses to take on leadership for a specific interpretive program or exhibit the following provides steps that need to be followed in the planning and implementation process.

Stage I: Develop Scope/Work Program

- Mission statement
- Identify partners and strategy for public engagement
- Explain how this fulfill the goals and objectives of the GRP Interpretive Concept Plan
- Propose timeline
- Identify existing and anticipated funding sources and estimated budget
- Submit to Parks for review
- Draft cooperation agreement between Parks and agency/group that addresses:
- Maintenance
- Budget
- Planning process
- Responsibility for production, fabrication , and/or installation

Stage II: Concept Development

- Review existing planning and research materials including draft text, graphics from old panels and signs, historical research materials, GRP Master Plan recommendations
- Review existing media within GRP that tell this story
- Conduct a site visit to assess current trail conditions focusing particularly on existing interpretive media and to assess visitor demographics and trail user needs
- Review existing design guidelines for interpretive displays, signs, and audio tour
- Understand the staffs’ and stakeholders’ visions for trail interpretation and orientation
- Facilitate stakeholder input through a workshop session, or other appropriate means to obtain public input and review
- Refine interpretive themes already developed by the DNR and further develop the trail’s key stories
- Identify the locations for all interpretive media
- Develop recommendations for the method of communication for each message (e.g., signs, kiosks, audio tour, print publications)
- Establish the look and feel of interpretive and orientation media through design typicals (e.g., colors, fonts, logos, graphic layouts)
- Produce schematic sketches for orientation signs, interpretive kiosks, and interpretive signs along the trail
- Refine budget for production, delivery, and installation of all interpretive and orientation media

Stage III: Design Development 50%

- Design development must always implement the goals and objectives of the GRP Concept Interpretive Plan
- Submit to Parks for review

Stage IV: Design Development 100%

- Design development must always implement the goals and objectives of the GRP Concept Interpretive Plan
- Submit to Parks for review

| Media Type                                                                                                                                  | Advantages                                                                                                                                                                                                                                                                                                                                                                                   | Challenges                                                                                                                                                                                                                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Personal Mobile Devices<br>iPhone applications, An-<br>droid applications, other<br>smartphones,<br>QR Codes, Personal GPS<br>devices, etc. | <ul style="list-style-type: none"><li>• Provides mobility, especially outdoors</li><li>• Can be used at visitors’ own pace</li><li>• Provides a source of participation</li><li>• Provides a sense of discovery</li><li>• Appeals to active learners</li><li>• Minimal device support required</li><li>• The world is moving more mobile</li></ul>                                           | <ul style="list-style-type: none"><li>• Requires smartphone phone and carrier signal with internet access</li><li>• Not all visitors own/ bring smartphones</li><li>• Not all visitors are willing to use data plan for interpretation</li><li>• May require providing internet access for asset/application downloading</li></ul> |
| Rented or sold mobile devices<br>Audio players, GPS units, Location aware media players, video players, etc.                                | <ul style="list-style-type: none"><li>• Provides mobility, especially outdoors</li><li>• Can be used at visitors’ own pace</li><li>• Provides a source of participation</li><li>• Provides a sense of discovery</li><li>• Appeals to active learners</li><li>• Does not necessarily require internet access for device to function</li><li>• Can provide a potential income source</li></ul> | <ul style="list-style-type: none"><li>• Device support required</li><li>• Check-in/check-out requires staff</li><li>• Potential for lost/ stolen/damaged devices</li><li>• Requires maintenance</li><li>• Requires a power source</li></ul>                                                                                        |
| Virtual Interactives<br>Websites, social media, immersive online portals, etc.                                                              | <ul style="list-style-type: none"><li>• Dialogue can continue well after the initial experience</li><li>• Can reach a larger audience than just those that come to your site</li><li>• Provides a source of participation</li></ul>                                                                                                                                                          | <ul style="list-style-type: none"><li>• Divorced from place</li><li>• Requires significant investment of staff resources</li><li>• Raises questions of institutional authority and “correct” message</li><li>• Requires maintenance</li></ul>                                                                                      |



Integrate Public Art and Community Events into the Great River Passage.

Public art and community events in Saint Paul are important assets that help tell stories, celebrate civic pride, make meaningful places, preserve history and improve the city’s quality of life. Public art and community events will enhance Saint Paul’s economic vitality by attracting visitors and adding value to public and private development sites. This “value-added” can be used to promote partnerships and sustainable funding for developing and presenting art and events in the city. The community’s connection to the river will be enhanced through public art and community events.

Public art and cultural activities along the river builds on existing city ordinances. In accordance with the City’s public art ordinance, adopted in July 2009, it is important to stress the aesthetic and social values inherent in the city’s vision for the future.

Among the intentions of the ordinance are:

- Involve artists at the earliest stages of conceptual planning of public and private developments and continue through project design and implementation;
- Sufficient resources should be committed to sustain an innovative public art and design program that is distinguished by its high quality; and
- Policies and procedures should be administratively developed which will facilitate and support creation and implementation of a public art plan.

Objective 1: Promote Permanent Displays of Art.

- Incorporate functional amenities into Park improvements.
- Support long-term maintenance and conservation of art works.

Objective 2: Encourage More Performances and Participatory Events.

- Work with arts organizations that would potentially use parks to identify facilities needed to stage performances and events.
- Develop a “playbook“ for staging temporary events and performances.

Objective 3: Support and Embrace Sustained Arts Programming.

- Develop partnerships with entities outside of the arts community, such as environmental organizations or funders, to promote multiple benefits for the arts and the environment, and to link art initiatives to long-term funding streams.
- Develop multiple funding mechanisms to foster participation by more local artists.

Objective 4: Pursue New Ideas for Partnerships and Artist Involvement in Ongoing River Corridor Initiatives.

- Partner with the River’s Edge Academy, and other public and nonprofit institutions on multiple initiatives.
- Develop new initiatives to encourage artists participation and projects in the River corridor.

Enhance Public Art

Increase the quantity and quality of locations for sculptures, plazas, monuments, and interpretive installations. Develop a vision statement and concept book for public art.

Identify sites in areas where public art will increase access and opportunities for public gatherings and accommodate arts programming. Create incentives for a mix of artists and arts organizations to focus on the river corridor to identify programs and projects that celebrate the river. The Appendix includes more information on opportunities for identifying strategic locations for art installations and activities as well as potential projects and events for individual parks along the corridor.

Fund the development of an arts master plan that meshes with the goals of the Master Plan and the Comprehensive Plan that supports the broader goals and objectives of the Master Plan. Include individual artists, arts organizations, curators and producers to explore the broadest possible range of opportunities for incorporating art and events into the corridor. Collaborate with individuals and organizations involved in natural area management, history and cultural interpretation, and recreational uses of the corridor to explore potential partnerships.

Incorporate seating, lighting, railings, and interpretive elements designed by artists as a way of identifying and celebrating the unique environment of the River.

Collaborate and develop partnerships with city agencies, and other public and private entities involved in the management and design of facilities and resources in the Valley to incorporate, and take long-term ownership of artwork to assure ongoing maintenance.

Artist-initiated performances and events will draw a broader mix of residents and visitors to the river and riverfront businesses. Musical and theater performances, temporary installations, storytelling, pageants, and interactive new media projects will greatly expand the type of events and activities that currently occur on Harriet Island and at other events-oriented venues. Encourage new types of events and performances in venues not currently used in that manner.

Engage Public Artists

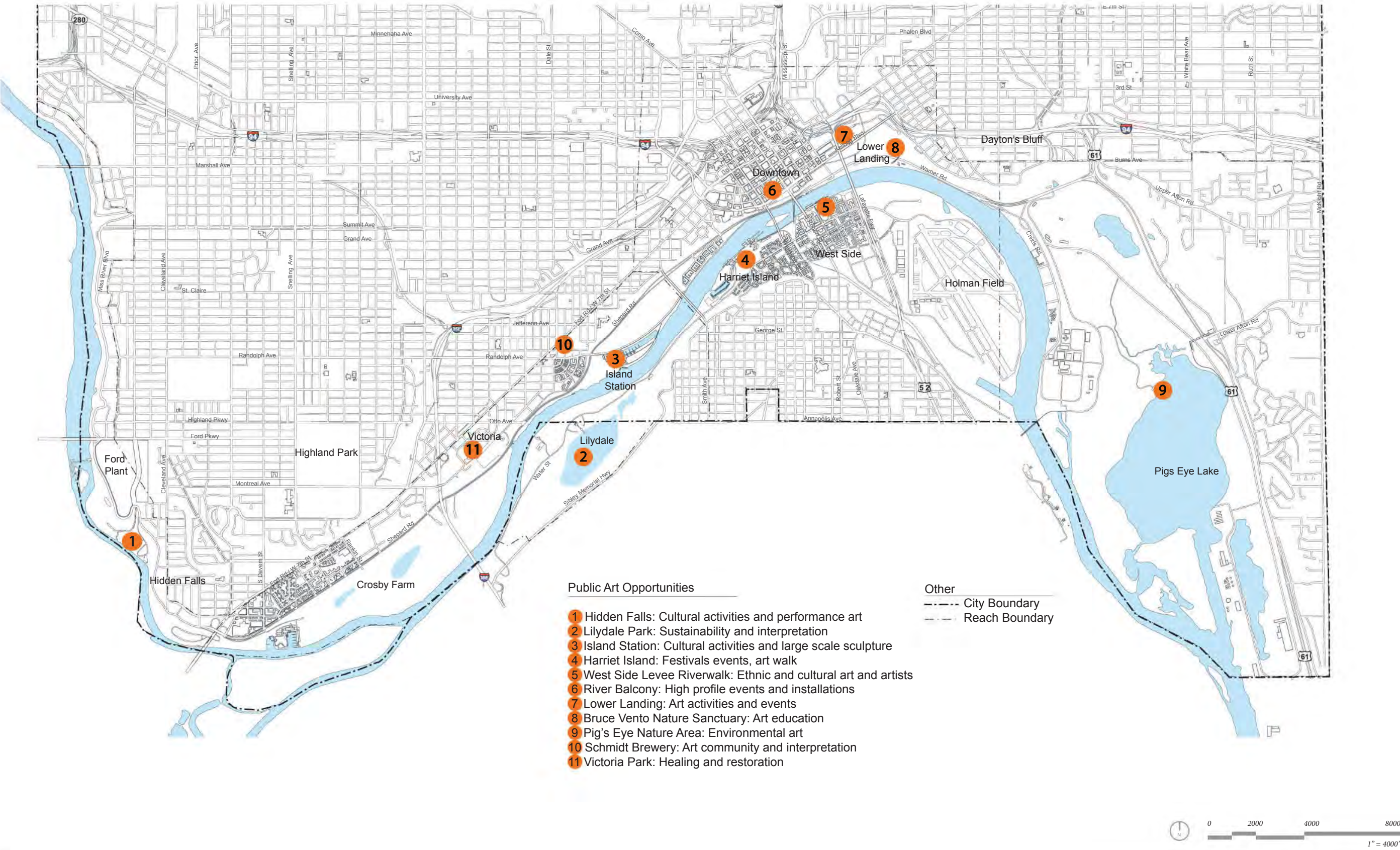
Develop a manual for use by performing arts organizations, artists, and events planners that describe city permitting and approvals processes, rules and regulations and critical contacts to hold events and construct temporary facilities and installations. Sustained support and enthusiasm for the arts depends on a broad educational effort to demonstrate to residents in neighborhoods the value of arts in the community. These educational efforts should extend to city officials policy makers and civic leaders and sources of public and private funding for the arts.

Develop strategic partnerships that support the arts as well as benefit environmental, recreational, cultural or other goals of the GRP. Establish micro-grants for artists and art organizations, integrate temporary and permanent art installations into public works, landscape management, historic and cultural interpretation, and other initiatives related to the implementation of the Master Plan.

Build enthusiasm for incorporating the arts through multiple initiatives that promote partnerships, build on existing programs and funding mechanisms, and that encourage artists to pursue projects in the corridor.

Create an environmentally themed artist-in- residency program, encourage River-themed school curricula using art. Establish a transparent system for selecting artists and artworks. Encourage temporary installations, including floating works, projects using natural materials and found objects, and projects associated with construction or maintenance and management activities.







Overview

Artists, arts organizations and cultural organizations in the region need to participate with riverfront communities to focus on enhancing urban environments at strategic locations and increasing appreciation and value of the river as a major asset.

Objectives

- Consistent with the City’s public art ordinance, stress the importance of aesthetic and social values inherent in the city’s vision of the future.
- Connect a diversity of artists with appropriate opportunities.
  - Involve artists at the earliest stages of conceptual planning.
  - Educate and inform neighborhood design process/people.
  - Demonstrate ways public art adds value to public and private landscapes.
  - Enhance high visibility environments and pedestrian experience.
  - Provide guidelines and recommendations to spark and inspire partnerships and funding.
  - Educate funders, policy-makers and civic leaders.

- Increase the quantity and quality of locations for public art and gathering places that accommodate arts programming.
- Identify sites and areas where public art will add value.
  - Increase access and create more public gathering places.
  - Insure a mix of artists participate in programming.
  - Identify concepts and potential systems for engaging community members in neighborhoods adjacent to the river.
  - Provide incentives for artists and arts organizations to focus on riverfront sites for their programming and creativity.

- Provide sufficient resources to sustain an innovative public art and design program.
- Establish adequate policies and procedures to support the creation and implementation of citywide public art plan.
  - Support long-term maintenance and conservation of existing and planned public artworks.
  - Use public funds and policies to leverage private investment in public art.
  - Support and train artists to serve on design teams, engage in residencies and pursue other methods of engagement.
  - Develop a vision statement for public art that meshes with the goals of the City’s master plan and the GRP plan.
  - Recruit champions for public art from public and private sectors.
  - Establish transparent system for selecting artists.
  - Develop multiple funding mechanisms to foster participation.
  - Secure buy-in from developers and neighborhood groups.
  - Build capacity and professional development of City staff.
  - Continue artists-in-residence within City departments.
  - Develop the City’s governance and management of public art program.
  - Clarify relationships with non-profit partners (short-term and long-term).

Public Art Options and Considerations

- Strategic Locations and conditions that would benefit from public art:
- High visibility areas (major entry points, vistas, high traffic event venues, large blank walls, etc.)
  - Areas slated for redevelopment or major public improvements (mixed use, new parks, bridges and roadways, public/private projects, etc.)
  - Adding or replacing functional amenities (benches, shelters, interpretive markers, wayfinding, environmental graphics, etc.)
  - Activity and learning centers (community, sports, recreation and educational facilities—indoor and outdoor)
  - Areas needing enhanced pedestrian experiences (trails, river walks along bluffs, intimate or secluded areas for delight or contemplation)
  - Areas that would benefit from programming (such as performances, storytelling, pageants, temporary installations, etc.)
  - Green streets (enhance areas for storm-water day-lighting, way-finding and branding of grates—provide unique identity and character to different streets, reinforcing their connection to the river.)
  - “Problem” areas (areas that lack physical access, or are considered eyesores — providing strong visual experiences, even if temporary, such as using construction fences)

Permanent Options

- Integrated in infrastructure (artist-designed pedestrian bridges, transit corridors, bus shelters, pavement insets, etc.)
- Artist/architect collaborations (bring artists in early on to maximize potential, integrate in budget)
- Functional elements (seating, railings, light fixtures, art glass windscreens, etc.)
- Interpretive markers (sculptural landmarks, possibly incorporating Native history or terminology)

Program Options

- Sculpture gardens. Depending on the site and objectives, consider fixed and changing artworks by national and local artists. (Consider successful models in other cities, such as Olympic Sculpture Park, Franconia Sculpture Park, Tryon Creek Park, etc.)
- Art installations along trails. Modest-scaled artworks to enhance trail experience in appropriate zones. (Could involve local artists and recycle materials pulled from wooded areas to make sculptures along trails.)
- Biannual invitational. International artists creating major temporary works throughout the St. Paul (and Minneapolis?) riverfront or making river related projects throughout the city.
- Virtual platform. Commission interpretive programming for smart phones using geolocational data. Could feature famous homegrown voices (real or fictional). Imagine the “Garrison Keillor Trail”, Don Shelby’s self-guided tour, “Dylan Overlook,” or Native storytellers (and voices from different cultures using multiple translations).

Idea Development

Concept Book: Invite 20 diverse, acclaimed artists (think Maya Lin, Ned Kahn, Mel Chin, Andy Goldsworthy) to visit St. Paul, review plan documents and produce a sketch and a statement describing bold, compelling, and wondrous ideas that address the corridor as a whole, or particular sites of interest to them. This may involve local collaborators, partners or potential sponsors.

River Art School Curriculum: Find ways to bring different aspects of—or concerns about—river life and how it affects our lives into K-12 schools in the city. This could involve field trips, independent art projects in the neighborhoods, audio/video programming, oral histories, etc.

Artists-in-Residence: Engage artists of all stripes to remind audiences throughout city of the river and its role in city making, community building, etc. Offer free studio space to artists in exchange for community activities that result in temporary or permanent projects. This could involve playwrights, songwriters, composers, filmmakers, dancers, etc. with public performance outcomes.

Micro-grants for artists and organizations: Provide incentives for creative teams to work throughout St. Paul addressing ideas or themes relevant to the river.

Strategic locations that present opportunities for public art include:

- High visibility areas and gateways
- Areas slated for redevelopment
- Adding or replacing functional amenities
- Activity and learning centers
- Areas needing enhanced pedestrian experiences
- Area that would benefit from programming
- Pedestrian and Park access streets
- Challenged areas

Priority opportunities for public art:

Numerous sites throughout the corridor would benefit from public art in one form or another. Each of these sites has a character or identity (or potential to develop one) that public art can reinforce or respond to. In each instance, the context of the site should inform the content of the art. Seven priority precincts present unique opportunities for public art due to their potential public use and for on-going investment:

Hidden Falls Regional Park

- Intent:
- Encourage the site’s use for festivals, pageants and performances, by improving parking, site and performance lighting, and plumbing facilities.
  - Enhance the natural character of the falls and its surroundings.
- Opportunities:
- Increase event programming, such as Barebones’ Halloween extravaganza.
  - Involve an artist in daylighting the creek and in the design of gathering places.
  - Feature artist-designed interpretive signs and seating elements, and other functional amenities.



Lilydale Regional Park

- Intent:
- Emphasize sustainable approaches and environmental stewardship.
  - Respond to the context of Lilydale’s past, present and future.
- Opportunities:
- Involve artists in design of interpretive signage, picnic shelters, fire circle, bird-watching structures.
  - Encourage temporary installations, including floating works and other projects using natural materials and found objects.
  - Institute an environmentally themed artist residency, involving River’s Edge Academy.

Island Station

- Intent:
- Revitalize this site as a destination, gathering place, and cultural facility as a multi-faceted venue for artists and organizations.
- Opportunities:
- Install fixed and temporary outdoor sculptures, custom amenities, and performance venues.
  - Recognize and restore the iconic building
  - Develop partnerships with local arts organizations to program this venue.

Harriet Island/Raspberry Island Regional Park

- Intent:
- Promote Harriet and Raspberry Islands as the main event and festival venues on the river.
- Opportunities:
- Make art a part of functional amenities, such as seating, trash receptacles, lighting fixtures, banners, etc.
  - Involve more diverse groups, larger cultural institutions and national/ international showcases in park programs.
  - Program temporary sculptures and pageants, barge cinema, and events like Wishes for the Sky (Earth Day event).

West Side/District del Sol

- Intent:
- Build upon the district’s rich tradition of public art installations and activities.
  - Recommend partnership with REDA and Youth Farm Market, Neighborhood House and West Side artists.
  - Continue the tradition of murals, artist-designed bus shelters, community events, parades, and movies in the park.
  - Create an art walk along the West Side Levee Riverwalk

Lowertown/Lower Landing Regional Park

- Intent:
- Reflect the neighborhood’s vibrant arts community as a defining element of its character in its on-going planning and development.
- Opportunities:
- Include artists— especially those living/working in Lowertown— in planning of the physical access points to the River and for place-making opportunities.
  - Include the park in the creation of an art district
  - Involve artists in the design of the built environment and functional amenities.
  - Heighten the use of Mears Park for performances and arts events.

Downtown and Kellogg Park

- Intent:
- Enhance Kellogg Park and the River Balcony and its role in the interface of Downtown and the River.
- Opportunities:
- Commission high quality temporary public art events and installations.
  - Promote the commissioning of significant permanent installations celebrating the City’s past.
  - Activate the Mall with structures that invite gathering and gazing at its striking vistas.

Other locations where public art can contribute to the human experience of the Great River Passage:

Bruce Vento Nature Sanctuary— continue environmental interventions as well as educational and community engagement efforts, building upon Christine Bauemler’s on-going work.

Pig’s Eye— enhance the wetlands and encourage stewardship, bird watching, and environmental remediation, such as Mel Chin’s Revival Field from 1991.

Ford Plant— involve artists in planning and development as new public private partnerships evolve and the site is revitalized as part of the community.

Schmidt Brewery— envision artist-centric approach to gathering places and activities as part of the brewery’s redevelopment.

High Bridge entry on West Side— take advantage of this dramatic vista and a small empty lot for a work of art that is a gathering place to enjoy the vista and take pride in the larger river community.

Bridge entries in City— celebrate Saint Paul’s river crossings and entrance gateways as artistic expressions.

Potential Public Art Partners and Programs:

The plan is long-term, in terms of vision, goals and objectives. Some opportunities are more immediate than others, driven by funding and need (such as redevelopment of the Ford Plant, which will trigger ordinance funding and artists’ engagement). Others will take more time, or require private partners to trigger implementation. Programming of temporary art activities and short-term installations have been welcomed by the city for several decades, and now Saint Paul Parks and Recreation has a reputation as an arts-friendly agency.

There are many potential partners, some that have participated in arts activities along the river corridor in the past, and many that would if invited to do so. Some are likely to partner based on the location, and some based on the potential for the site to serve their programming mission (or a combination of the two).

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Science Museum of Minnesota</i><br><i>Minnesota Museum of American Art</i><br><i>Public Art Saint Paul</i><br><i>Forecast Public Art</i><br><i>COMPAS Community Art</i><br><i>Ordway Center for the Performing Arts</i><br><i>St. Paul Chamber Orchestra</i><br><i>History Theatre</i><br><i>Barebones Productions</i><br><i>Artscraps</i><br><i>St. Paul Arts Collective</i><br><i>WSCO (West Side Community Organization)</i><br><i>NEDA (Neighborhood Development Agency)</i><br><i>REDA (Riverview Economic Development Association)</i><br><i>CapitolRiver Council</i><br><i>Youth Farm Project</i><br><i>Neighborhood House</i><br><i>Skewed Vision</i><br><i>Juxtaposition Arts</i><br><i>Minnesota Society of Sculptors</i><br><i>Northern Lights</i><br><i>Minnesota Public Radio</i><br><i>Penumbra Theatre</i><br><i>Great River Greening</i><br><i>River’s Edge Academy</i><br><i>Festivals (Cinco de Mayo, Winter Carnival, Wishes for the Sky, Children’s Festival, Flugtag, etc.)</i> | <i>Historic Fort Snelling</i><br><i>College and University art program</i><br><i>St. Paul Public Schools</i><br><i>Minnesota Children’s Museum</i><br><i>Minnesota History Center</i><br><i>Shubert Club</i><br><i>DNR’s Adopt-a-River Program (and sculpture project)</i><br><i>West End Arts (and West 7th Fort Road Federation)</i><br><i>Springboard for the Arts</i><br><i>Works Progress</i><br><i>American Composers Forum</i><br><i>Kulture Klub Collaborative</i><br><i>Intermedia Arts</i><br><i>MacNally Smith College of Music</i><br><i>College of Visual Arts</i><br><i>mnartists.org</i><br><i>TPT Public Television</i><br><i>MAW (Art on Wheels)</i><br><i>St. Paul Public Library</i><br><i>All My Relations</i><br><i>Body Cartography Project</i> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



## Strategies and Projects

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This chapter builds on the corridor-wide recommendations established in Chapters 3, 4 and 5 with specific strategies for each of the four reaches that make up the river corridor. It details improvements for different types of landscapes and infrastructure found in the river corridor, including resource management, park enhancements , improved river access and trails, and leisure opportunities that support economic development. It discusses issues that affect the entire city as well as the river corridor, such as promoting economic vitality, managing and enhancing the landscape and redeveloping river corridor sites.





# CHAPTER 6

## Plan Recommendations



## Chapter Organization

Chapter 6 is a comprehensive guide to allow the City of Saint of Saint Paul to pursue both short and long term objectives for the Great River Passage. It outlines goals, strategies and potential projects that have been developed with community input, and it serves as a point of departure for further development and discussion of specific implementation manifestations and priorities.

Organized from upstream to downstream, by reach and by park area, the document describes the community’s vision, along with priority objectives supported by illustrative plans, sketches and images. Following the vision concepts, specific recommendations include potential projects, partners, costs and phasing, supported by a facilities and program diagram.

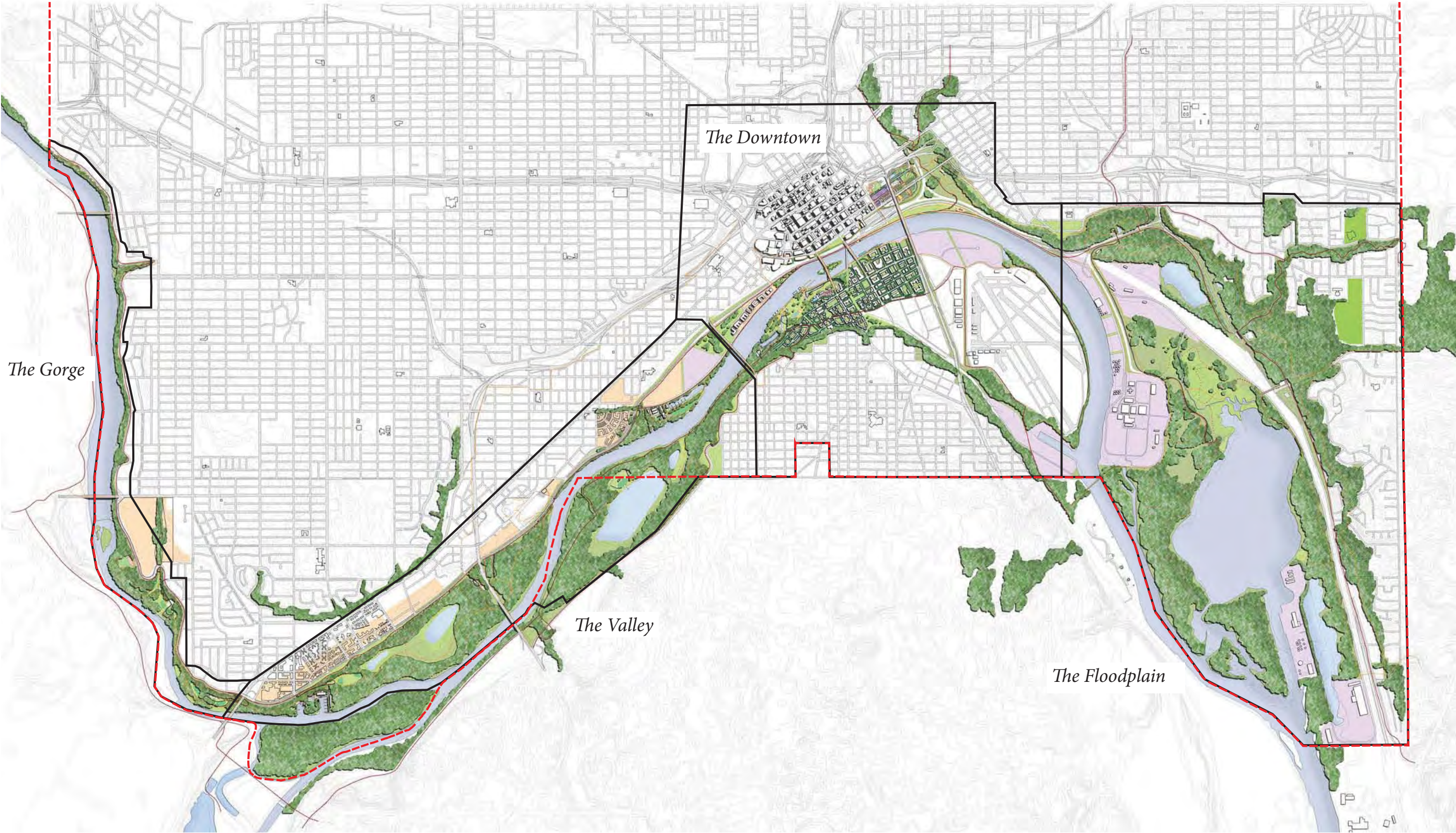
This chapter will be used by the City and its agency partners to identify management strategies, funding sources, project priorities and potential partners that will help transform the Great River Passage into a community valued and nationally recognized resource.

## The Four Reaches

The physical character of the river valley changes dramatically as it passes through Saint Paul. Current and historic land uses have affected its condition to varying degrees. The Great River Passage is divided into four subareas, or reaches, formed in response to the physical character and inherent qualities of each. The following recommendations for protection, restoration, development, enhancement and management of Great River Passage assets, are adapted to the unique constraints and potentials of each area. The vision plans that follow for each regional park within the Great River Passage are a starting point for further public discussion. Concepts in each vision plan will be further refined and developed, with additional community involvement, as funding becomes available.



*This plan is a concept only, and is subject to further planning, design and public input.*



*The Great River Passage is divided into four reaches that reflect the varied landscape character of the river valley and the city.*





Prioritization Criteria

Development of a master plan for the Great River Passage establishes a vision for enhancement of all 17 miles of Saint Paul’s Mississippi River Corridor. This Plan will help leverage funding and partnerships throughout the Great River Passage as opportunities for various projects develop. Determining priorities from the many potential initiatives and projects outlined in the Plan is not part of the scope of this planning effort. However, having the ability to be adaptable and flexible to respond quickly as projects come forward is critical. For example, a developer for a key redevelopment parcel may be unknown today, yet tomorrow someone might come forward with a proposal that changes conditions immediately. The Plan will be available to address those situations.

This plan represents a vision for the next generation of Saint Paul’s riverfront parks. The matrix identifies project phasing that is dependent on priorities and available funding. For the purposes of this plan phasing is anticipated as follows:

- short term = less than 10 years
- medium term = less than 20 years
- long term = more than 20 years

Although specific project priorities have not been developed, established City procedures for determining and allocating project budgets through Saint Paul City Council action will be adhered to. In addition, the following criteria will be utilized to evaluate which projects the City will pursue:

- o broad community consensus
- o City owned/controlled land or willing developer
- o catalyst for further development
- o leverages partnerships
- o funding options and availability

Agency/Partners Key

|        |                                                |
|--------|------------------------------------------------|
| CRWD   | Capital Region Watershed District              |
| DNR    | Minnesota Department of Natural Resources      |
| GRG    | Great River Greening                           |
| MAC    | Metropolitan Airport Commission                |
| Metro  | Metro Transit                                  |
| MNRRRA | Mississippi National River and Recreation Area |
| MORC   | Minnesota Off Road Cyclist Association         |
| MnDOT  | Minnesota Department of Transportation         |
| PA     | Saint Paul Port Authority                      |
| PASP   | Public Art Saint Paul                          |
| RR     | Railroad                                       |
| SPPED  | Saint Paul Planning and Economic Development   |
| SPPW   | Saint Paul Public Works Department             |
| SPYC   | Saint Paul Yacht Club                          |
| USACE  | United States Army Corps of Engineers          |
| RCPR   | Ramsay County Parks and Recreation             |
| RCRRA  | Ramsay County Regional Rail Authority          |
| RWMWD  | Ramsey Washington Metro Watershed District     |

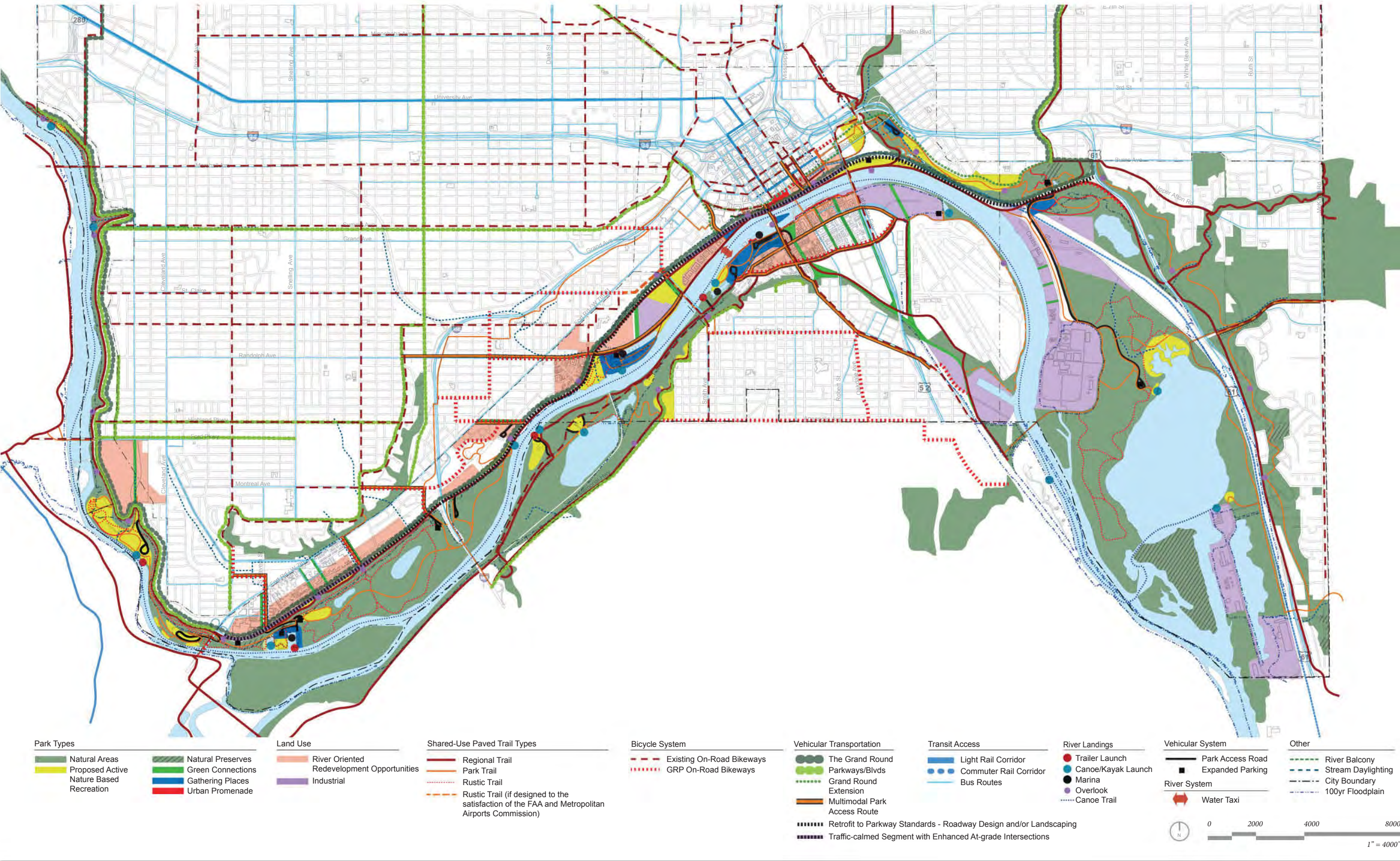
Composite Plan Diagram

By combining the three principle layers - More Natural, More Urban and More Connected - the Plan’s recommendations form a comprehensive and integrated corridor-wide set of goals and strategies that satisfy the community’s vision for planned improvements. These recommendations are intended to affect the complex interrelationships between the natural and built environments in Saint Paul.

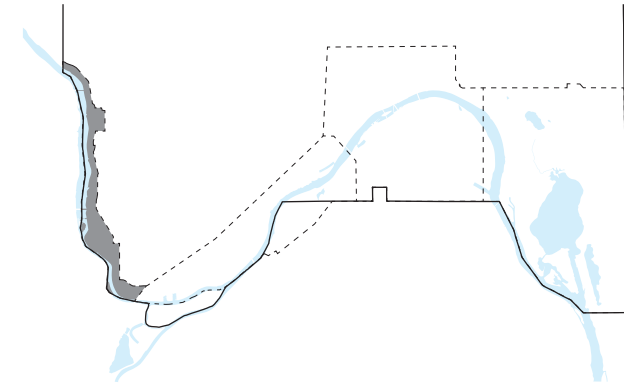
Several strategies transcend specific project areas and apply to the overall Great River Passage itself. Corridor-wide systems primarily consist of two types. The first are those that are in Saint Paul Parks and Recreation’s jurisdiction, suggesting that they are the lead agency for project development. The other type are those that are not parks, where recommendations of this plan are intended to affect the outcomes of projects that are led by other agencies, such as Public Works, Planning and Economic Development and the Port Authority. The following projects are early actions that will strengthen partnerships and begin to develop the basis of the Great River Passage.

| Strategies and Projects                                                                                  | Agency/Partners                              | Est. Cost  | Phasing |
|----------------------------------------------------------------------------------------------------------|----------------------------------------------|------------|---------|
| Corridor-wide                                                                                            |                                              |            |         |
| Planning and Management                                                                                  |                                              |            |         |
| Identify the need for and update Natural Areas survey of the Great River Passage                         | MNNRA, DNR, GRG                              | n/a        | short   |
| Continue to work with regional watershed authorities to reduce peak flows and improve water quality      | CRWD, Ramsey Co., Dakota Co., Washington Co. | n/a        | short   |
| Develop a plan for river edge and wetland management and restoration with the US Army Corps of Engineers | USACE, PA                                    | n/a        | short   |
| Amend area plans for redevelopment to be consistent with the Great River Passage master plan             | SPPED                                        | n/a        | short   |
| Continue and strengthen working partnerships to manage river access for recreational boating             | DNR, PA, MNNRA, Ramsey Co.                   | n/a        | short   |
| Include public art and artists in planning and design per city ordinances                                | PASP, Forecast                               | n/a        | short   |
| Historic and Cultural Resources master plan                                                              |                                              | \$ 200,000 | short   |
| Signage and Wayfinding citywide location plan                                                            | MNRRRA, County                               | \$ 200,000 | short   |
|                                                                                                          |                                              |            |         |









## The Gorge

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The Gorge is a deep river valley located west of downtown that is defined by steep limestone cliffs and heavily wooded slopes that come right to the river's edge. The Gorge Reach extends from the Minneapolis city limits at the upstream end near the historic Meeker Dam, to Fort Road (7th Street West) to the south. With the exception of the Ford Lock and Dam #1, and the occasional bridge crossing high above, river travelers are completely separated from the city that comes right to the top of the bluffs above them. This is a place of great scenic beauty, ecological richness and diversity.

Recommendations for the Gorge Reach focus on protecting natural and cultural resources, providing opportunities for nature-based recreation and improving access to the river.



Preserve and enhance the river experience in the Gorge

Limiting access to the river, restoring and managing natural bluff and shoreline areas and providing interpretation of significant natural and cultural resources along the river, will support this unique opportunity to experience nature in the city, for neighbors, visitors, boaters and other outdoor enthusiasts.

Provide active nature-based recreation at Hidden Falls Regional Park

The types of recreation and levels of activity supported will be expanded in the existing active nature-based recreation areas at Hidden Falls. By expanding programs and improving park access and facilities, these river valley areas will be available to a broader range of the city’s population and better able to serve the recreation needs of the community.

Nature based recreation includes a variety of outdoor recreation opportunities for people of all ages and ability levels. Activities include better trail and river edge access and natural areas that are accessible for outdoor experiences. Recreational uses will only be located outside of sensitive ecological areas.

Improve connections along Mississippi River Boulevard.

Regional trail improvements, better connections from the neighborhoods and better visual access to the river at scenic overlooks will provide a greatly enhanced recreation experience along the top of the bluff. Selective clearing of invasive and overgrown vegetation will allow improved vistas of the river valley and a stronger connection between the city and the river.



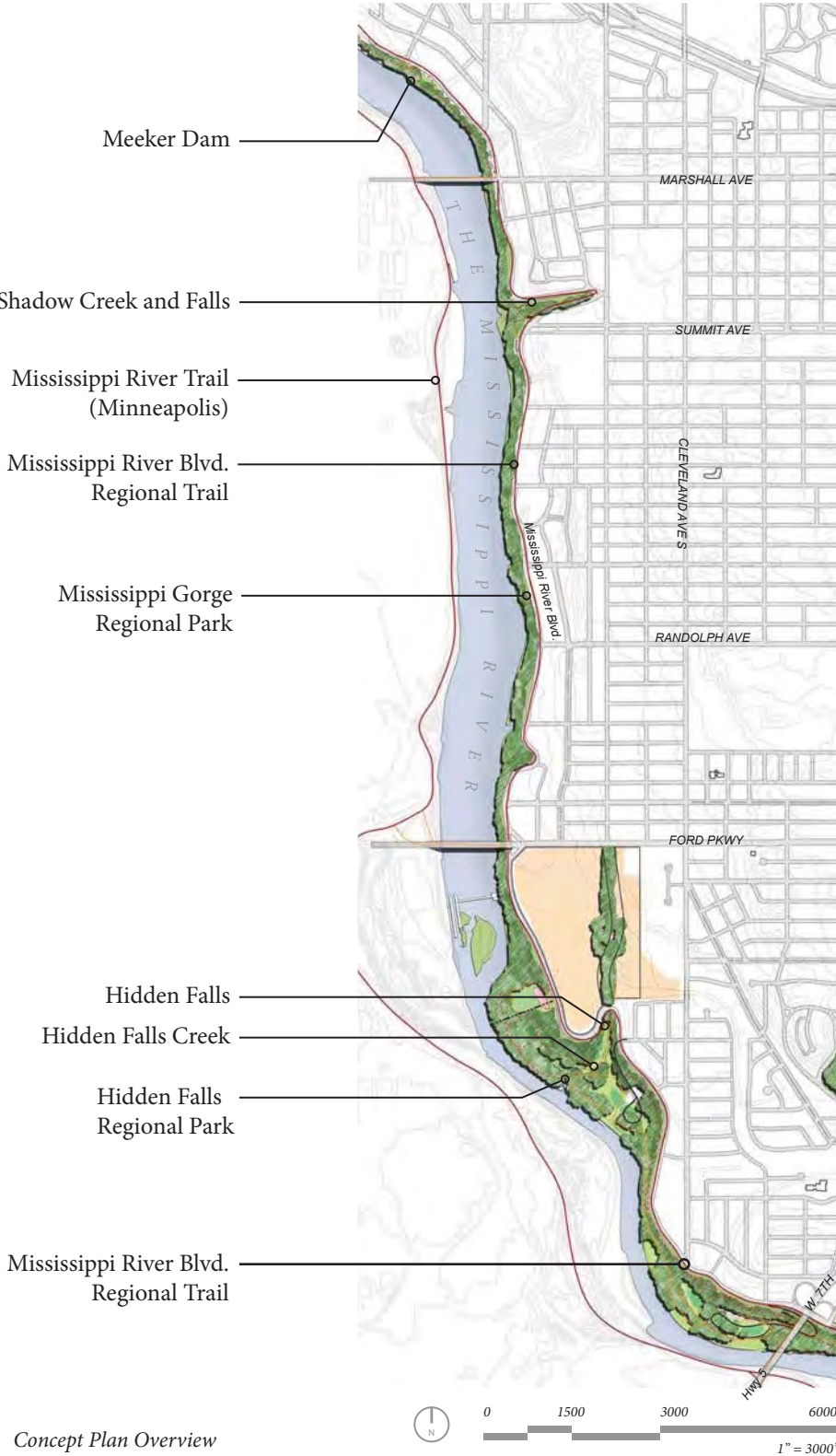
Mississippi River Boulevard extends the Grand Round into Saint Paul



Hidden Falls is an important scenic resource that attracts visitors to the Gorge



Visitors experience the Gorge as nature in the city



This plan is a concept only, and is subject to further planning, design and public input.





*The Gorge at the overlook at the end of Summit Avenue. Visitors experience nature in the city.*



This plan is a concept only, and is subject to further planning, design and public input.



Concept Plan - North



Concept Plan - South

Restore Shadow Falls Creek

Diversion of daily stream flows from the existing storm-sewer system to the historic stream channel will greatly enhance the valley’s scenic and ecological value. When restored, Shadow Falls Creek and other similar tributary streams in the Gorge, have the potential to become valuable recreational and ecological assets.

Improve access while protecting natural areas in the River Gorge

Closing and restoring damaged natural areas, caused by unauthorized and unplanned use, will reduce erosion and stabilize the bluff. Providing appropriate river access through a system of managed trails will allow safe access from the bluff to the river, allowing new generations of visitors and recreational users to experience the natural beauty of the Gorge.

Connect the City to the Gorge by restoring streams and trail connections

The potential restoration of several historic stream corridors and ravines that empty into the Mississippi, are opportunities to improve ecological connections, expand open space and provide trails that provide access to riverfront trails.

Connect to the Minneapolis river edge trail

Develop a new accessible trail from the existing bluff-top regional trail along Mississippi River Boulevard connecting to the east side Minneapolis river edge trail at the city line near Meeker Dam.

LEGEND

- 1. Historic Meeker Dam
- 2. River Edge Trail
- 3. Mississippi River Boulevard Regional Trail
- 4. Shadow Falls Creek
- 5. River Overlook
- 6. Ford Lock & Dam





| Strategies and Projects                                                                                       | Agency/Partners   | Est. Cost    | Phasing |
|---------------------------------------------------------------------------------------------------------------|-------------------|--------------|---------|
| River Gorge Management                                                                                        |                   |              |         |
| Develop a Master Plan for the Gorge Regional Park that is consistent with the Great River Passage master plan | Minneapolis Parks | \$ 50,000    | short   |
| Provide interpretive program at Meeker Dam and river overlooks                                                |                   | n/a          |         |
| Explore feasibility of acquiring parts of the former Ford Site bluff area for open space purposes             |                   | n/a          |         |
| Design and Construction                                                                                       |                   |              |         |
| Roads and Trails                                                                                              |                   |              |         |
| Add porous paving BMPs in Boulevard parallel parking areas                                                    | CRWD              | \$ 1,500,000 | med     |
| Provide accessible park trail between the Minneapolis Trail and the Marshall Avenue Bridge                    |                   | \$ 165,000   | short   |
| Reconstruct (4) historic stairs at Marshall Ave and Ford Parkway bridges where feasible                       |                   | \$ 800,000   | med     |
| Structures and Related Improvements                                                                           |                   |              |         |
| Implement park identity and way-finding signage                                                               |                   | \$ 50,000    | short   |
| Divert and treat local stream flows in historic stream corridors                                              | CRWD              | n/a          | long    |
| Add stairs and provide river access at Summit Blvd. overlook                                                  |                   | \$ 500,000   | med     |
| Recreation Improvements/Use Areas                                                                             |                   |              |         |
| Restore (5) scenic overlooks                                                                                  |                   | \$ 250,000   | short   |
| Restore shoreline to provide hiking and fishing access                                                        |                   | \$ 150,000   | short   |
| Landscape improvements                                                                                        |                   |              |         |
| Remove existing social trails and limit access to bluffs and steep slopes                                     |                   | \$ 30,000    | short   |
| Remove invasive vegetation, restore native plants and manage overlook view opportunities                      |                   | \$ 30,000    | short   |
|                                                                                                               |                   |              |         |

Summary Plan Recommendations

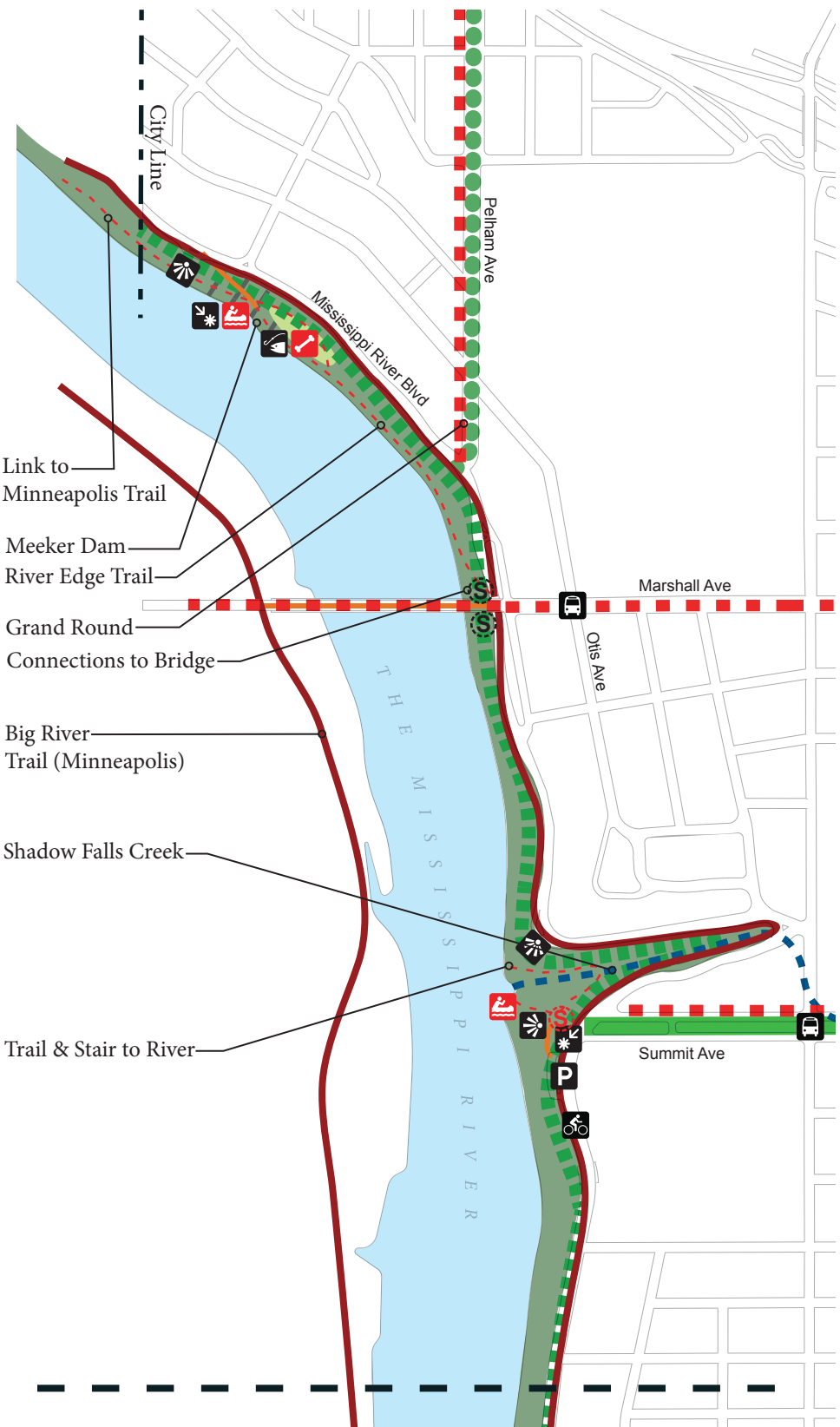
Gorge Regional Park

Modifications to bluff edge parks in the River Gorge will generally be limited to trail improvements, wayfinding, interpretation and natural areas management.

Projects include improving the regional trail and bike lanes along Mississippi River Boulevard, adding rustic trails that provide access to the River’s edge, improving access to existing bridges that cross the river, and improving scenic overlooks. Natural areas management will enhance ecological diversity through selective thinning of invasive plants, closure and landscape restoration of social trails, and stormwater management along the top of the bluff to reduce erosion.

- Selectively manage vegetation at key view opportunities
- Discourage access to eroded areas and social trails on the bluff, and restore native vegetation
- Manage and treat local stormwater runoff
- Restore Shadow Falls Creek and other tributaries weher possible
- Improve the trail connection to Meeker Dam and extend a river’s edge trail from Minneapolis to Shadow Falls Creek
- Improve the Mississippi River Blvd. regional multi-use trail for pedestrians and bicyclists and improve street crossings from the neighborhoods





Program Diagram - North



Program Diagram - South



key map

- |                                |                            |
|--------------------------------|----------------------------|
| <b>Water Resources</b>         | <b>Roads &amp; Trails</b>  |
| Wetland Restoration            | Regional Trail             |
| Redevelopment Treatment Area   | Park or Local Trail        |
| Park Treatment Area            | Rustic Trail at Airport    |
| Bluff Treatment Area           | Rustic Trail               |
| Creek Restoration Opportunity  | On-Road Bikeway            |
| Shoreline Restoration          | Multimodal Park Access St. |
| <b>Park Types</b>              | Park Access Road           |
| Gathering Place                | <b>Special Features</b>    |
| Active Nature Based Recreation | River Balcony / Riverwalk  |
| Natural Areas                  | Grand Round Extension      |
| Natural Preserves              | Green Connection           |
| <b>Land Use</b>                | Commuter Rail Corridor     |
| Existing Industrial            | Light Rail Corridor        |
| Mixed-Use                      | County Owned Park Land     |

- |                        |                       |
|------------------------|-----------------------|
| Camping                | Dog Park              |
| Picnic                 | Refreshments          |
| Wildlife Viewing       | Restrooms             |
| Scenic Overlook        | Marina                |
| Point of Interest      | Information           |
| Fishing Access         | Pedestrian Underpass  |
| Canoe/Kayak Landing    | Pedestrian Overpass   |
| Motorized Boat Launch  | Vehicle Parking       |
| Swimming Area          | Transit Station       |
| Mountain Biking Trail  | Bus Stop              |
| Multi-Use Trail        | Stairway or Ramp      |
| Hiking Trail           | Vehicular Park Access |
| Nature-based Play Area |                       |

\* Red icons represent proposed items.





# Hidden Falls Regional Park Vision

Integration of the scenic and natural qualities of Hidden Falls with nature based recreation will draw a wider variety of people to the river. A focus for expanding the recreation potential of Hidden Falls Park will be to restore and celebrate the park’s existing natural qualities. Hidden Falls Creek will be restored and stabilized, and trail access to it improved, so that it becomes a premier destination in the park. The Ford Plant site redevelopment will create a direct ecological and pedestrian link between the river corridor and the neighborhood.



Weddings, group picnics and other community events are held in the park’s meadows



The restored Hidden Falls Creek is complemented by a new Mississippi River Boulevard Bridge



The restored Creek allows visitors to “touch” the water

*This plan is a concept only, and is subject to further planning, design and public input.*





This plan is a concept only, and is subject to further planning, design and public input.

### Expand nature-based recreation

A variety of outdoor, river oriented recreational uses and activities will be expanded in River Park areas. Improved access and parking will allow users of all ages to visit the park. Improved access for non-motorized boats, hikers and mountain bikes will attract a wide variety of recreational users. Enhanced natural areas will support nature-based recreation in the river valley.

Through subtle changes in landscape design and management, a variety of intimate areas for passive recreation use and river access would be created. River Parks are created in areas of lower habitat value allowing for a broader range of recreational uses compatible with the area's natural qualities.

### Explore restoration of Hidden Falls Creek

Explore the restoration of the historic WPA-era construction of Hidden Falls, the creek, and its associated trails, while developing an open space connection as part of the proposed Ford Plant redevelopment. Hidden Falls' historic stonework should be restored and the existing culvert replaced with a bridge that complements it. Restoration also provides a regional attraction for such lifetime events as weddings, reunions and holiday, art and cultural activities. The restored creek will invite the public to enjoy the added passive recreation opportunities in the Valley.

Stormwater treatment on the Ford site will improve water quality and stabilize flows in the Creek. Improved water quality will provide more safe opportunities for interaction between people and the water.

### Explore acquisition of part of the Ford Property

Expand Hidden Falls Regional Park by investigating the acquisition of a part of the Ford site west of Mississippi River Boulevard. Park expansion will allow for additional recreation use areas along the river while protecting the bluff ecosystem.

Over the decades the Ford Plant was in operation, waste and other debris was buried on this parcel, forming a large area of fill. A thorough investigation of the contents of this dump site should be carried-out to determine the potential risk of contamination of groundwater and the Mississippi River. The costs and environmental impacts of remediating this site should be estimated so that, if it is determined that some type of action is necessary to protect environmental and public health, a feasible solution is pursued and the parcel improved for potential park use.



| Strategies and Projects                                                                                                                                                             | Agency/Partners | Est. Cost    | Phasing |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------|---------|
| Hidden Falls Regional Park                                                                                                                                                          |                 |              |         |
| Management                                                                                                                                                                          |                 |              |         |
| Update Hidden Falls Regional Park Master Plan that is consistent with the Great River Passage master plan                                                                           |                 | \$ 100,000   | short   |
| Develop a master plan for the Ford Plant site redevelopment that includes neighborhood parks, natural areas with restored creek and enhanced connections to the Great River Passage | Developer, PED  | n/a          |         |
| Explore acquisition of a portion of the former Ford Plant site below the Lock for open space expansion                                                                              |                 | n/a          |         |
| Establish partnerships with mountain bike organizations to design, maintain and manage trails                                                                                       |                 | n/a          |         |
| Work with Dakota to provide interpretive signage and native language place names                                                                                                    | Dakota Tribe    | n/a          |         |
| Continue to program cultural events such as "Barebones"                                                                                                                             |                 | n/a          |         |
| Design and Construction                                                                                                                                                             |                 |              |         |
| Roads and Trails                                                                                                                                                                    |                 |              |         |
| Replace culvert at Hidden Falls Creek with bridge for grade separated street crossing                                                                                               | Developer       | \$ 2,000,000 |         |
| Add porous paving BMPs in Boulevard parallel parking areas                                                                                                                          | CRWD            | \$ 700,000   | med     |
| Improve trail connection from Fort Road bridge to MRT by replacing stair with accessible trail connection                                                                           | SPPW            | \$ 75,000    | short   |
| Renovate existing park access roads to accommodate bicycles and pedestrians                                                                                                         |                 | \$ 350,000   | short   |
| Add parking at Ford site expansion area                                                                                                                                             |                 | \$ 100,000   | med     |
| Create a driveway loop and improve parking areas                                                                                                                                    |                 | \$ 500,000   | short   |
| Improve and extend Park trails                                                                                                                                                      |                 | \$ 600,000   | short   |
| Add Rustic trails with access to the shoreline                                                                                                                                      |                 | \$ 180,000   | short   |
| Develop managed mountain bike trail loops utilizing IMBC best practices                                                                                                             | MORC            | \$ 180,000   | short   |
| Reconstruct (1) existing bluff stair                                                                                                                                                |                 | \$ 100,000   | short   |
| Structures and Related Improvements                                                                                                                                                 |                 |              |         |
| Reconstruct (6) large and small picnic shelters                                                                                                                                     |                 | \$ 1,100,000 | short   |
| Renovate (2) existing restroom structures                                                                                                                                           |                 | \$ 300,000   | short   |
| Construct (2) small boat storage areas                                                                                                                                              |                 | \$ 100,000   | short   |
| Recreation Improvements/Use Areas                                                                                                                                                   |                 |              |         |
| Restore (2) scenic overlooks                                                                                                                                                        |                 | \$ 150,000   | short   |
| Construct nature based recreation areas with wooded and open glades for passive and programmed activities                                                                           |                 | \$ 1,000,000 | med     |
| Construct (1) large and (1) small nature-based children's adventure play area                                                                                                       |                 | \$ 650,000   | short   |
| Restore meadows to improve passive recreation and picnic areas for large and small group events                                                                                     |                 | \$ 1,000,000 | short   |
| Restore shoreline to provide hiking and fishing access                                                                                                                              |                 | \$ 400,000   | short   |
| Improve boat ramp and trailer parking                                                                                                                                               |                 | \$ 100,000   | short   |
| Add (2) canoe/kayak landing areas                                                                                                                                                   |                 | \$ 50,000    | short   |
| Add dog park at Ford site expansion area                                                                                                                                            |                 | \$ 200,000   | med     |
| Landscape improvements                                                                                                                                                              |                 |              |         |
| Restore Hidden Falls Creek to incorporate water quality treatment and habitat enhancement                                                                                           |                 | \$ 1,000,000 | med     |
| Selectively manage floodplain understory vegetation of invasive species in passive activity areas                                                                                   |                 | \$ 200,000   | short   |
| Remove invasive vegetation, restore native plants and clear overlook sight lines                                                                                                    |                 | \$ 45,000    | short   |
|                                                                                                                                                                                     |                 |              |         |

Summary Plan Recommendations:

Hidden Falls Regional Park

Hidden Falls Park will be a destination for river-oriented, passive day use recreation. Nature-based active recreational uses will be added and expanded, and a variety of trails improved and extended in areas that have lower habitat value. Hidden Falls and Hidden Falls Creek will be restored, and the park will be expanded into the Ford site along the river, and into the redevelopment site.

Lower Hidden Falls will be scaled for smaller groups, with more rustic facilities and improvements. The River would be made more accessible by minor expansion of the road network, and non-motorized boat and fishing access expanded in close proximity to the River.

- Protect, enhance and manage natural areas
- Restore Hidden Falls and Hidden Falls Creek
- Expand overall park area by adding connections to the Ford plant site
- Expand picnic areas for a variety of individuals and groups near the river
- Enhance nature-based recreation opportunities
- Improve recreation use areas to accommodate children and seniors
- Provide river-oriented children's play areas
- Improve park roads to provide alternatives for river access
- Improve parking and fishing access
- Develop non-motorized boat landings and boat storage
- Create a hierarchy of trails that appeals to a broad range of recreation users
- Create trail links to the Gorge and Crosby Farm Regional Parks
- Expand the park by acquiring portions of the Ford property



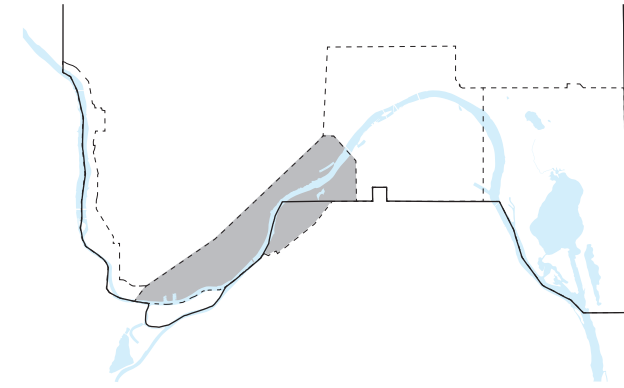


- Water Resources
- Wetland Restoration
  - Redevelopment Treatment Area
  - Park Treatment Area
  - Bluff Treatment Area
  - Creek Restoration Opportunity
  - Shoreline Restoration
- Park Types
- Gathering Place
  - Active Nature Based Recreation
  - Natural Areas
  - Natural Preserves
- Land Use
- Existing Industrial
  - Mixed-Use
- Roads & Trails
- Regional Trail
  - Park or Local Trail
  - Rustic Trail at Airport
  - Rustic Trail
  - On-Road Bikeway
  - Multimodal Park Access St.
  - Park Access Road
- Special Features
- River Balcony / Riverwalk
  - Grand Round Extension
  - Green Connection
  - Commuter Rail Corridor
  - Light Rail Corridor
  - County Owned Park Land

- Camping
- Picnic
- Wildlife Viewing
- Scenic Overlook
- Point of Interest
- Fishing Access
- Canoe/Kayak Landing
- Motorized Boat Launch
- Swimming Area
- Mountain Biking Trail
- Multi-Use Trail
- Hiking Trail
- Nature-based Play Area
- Dog Park
- Refreshments
- Restrooms
- Marina
- Information
- Pedestrian Underpass
- Pedestrian Overpass
- Vehicle Parking
- Transit Station
- Bus Stop
- Stairway or Ramp
- Vehicular Park Access

\* Red icons represent proposed items.





## The Valley

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The vertical bluffs of the Gorge give way to the steeply wooded slopes of the Valley at the confluence of the Mississippi and Minnesota Rivers. The Valley Reach extends from the Fort Road Bridge to Downtown. The Valley is a broad floodplain of expansive swamp forests, wetlands, ponds, and lakes. Its features were formed by dynamic natural processes and frequent flood events that inundate much of the area. The Valley is a place of constant change, and most areas within this reach are undeveloped, except for widely scattered high points at the valley's edges.

Recommendations for the Valley Reach focus on protecting and enhancing natural areas, creating gathering places, and improving access by transforming Shepard Road.



Preserve and enhance the natural qualities of the Valley

Preservation of the valley edge natural areas will include developing a systematic approach to natural areas management by clearing invasive plants and opening vistas to the river, by restoring historic streams, improving water quality and providing stormwater treatment areas that reduce polluted runoff to the River. Environmentally and culturally significant sites will be identified and protected by establishing Natural Areas and Preserves. Natural Areas and Preserves provide new ways to protect and interpret the area’s natural, agricultural, and industrial legacy.

Create gathering places by expanding and repurposing existing iconic places

As part of a public-private partnership, transform the vacant Island Station power plant into a gathering place that is a magnet for non-profits and environmental organizations, artists, adventure sports enthusiasts, entrepreneurs and nature-based commercial ventures.

Redevelop Watergate Marina to create a gathering place that improves public river access and an environmental education center for the City. The improved marina will include facilities for community recreation, all types of boaters, marina and fishing support shops, and a cafe-type restaurant.

Transform Shepard Road to become a key part of Saint Paul’s parkway and boulevard network

By improving Shepard Road to give it a parkway-like character - by limiting traffic speeds, improving landscape, lighting, signage, and making access to the river safer and more convenient for pedestrians and bicyclists - Shepard Road will become an integral part of the historic Grand Round. It will also become an essential part of the larger interconnected parkway and boulevard system that links the City to the River.

Develop a hierarchy of pedestrian trails and trailhead access points

Improved access to parks and trails will be provided through new and improved park access roads, parking areas and trail heads. The improved network of trails along the bluff and in the valley will vastly improve connections between the neighborhoods and the river parks. A new hierarchy of trail types, with boardwalks and wildlife viewing areas in more sensitive areas, will provide for community recreation needs and improve access to bluff top overlooks with river vistas.



Saint Paul is known for its historic caves



Boardwalks provide access to sensitive ecologies



A bike trail provides access to natural areas in the valley



GOALS & OBJECTIVES



Enhanced crossings, plantings, and river edge overlook along Shepard Road.

GRP Master Plan: Recommended Roadway Improvements

- Retrofit with parkway - like enhancements - roadway design and/or landscaping
- Traffic-calmed segment with enhanced at-grade intersections
- Gateway/speed zone transition feature
- Proposed Grand Round alternative
- Multimodal Park Access Street

Unique Transportation Corridors

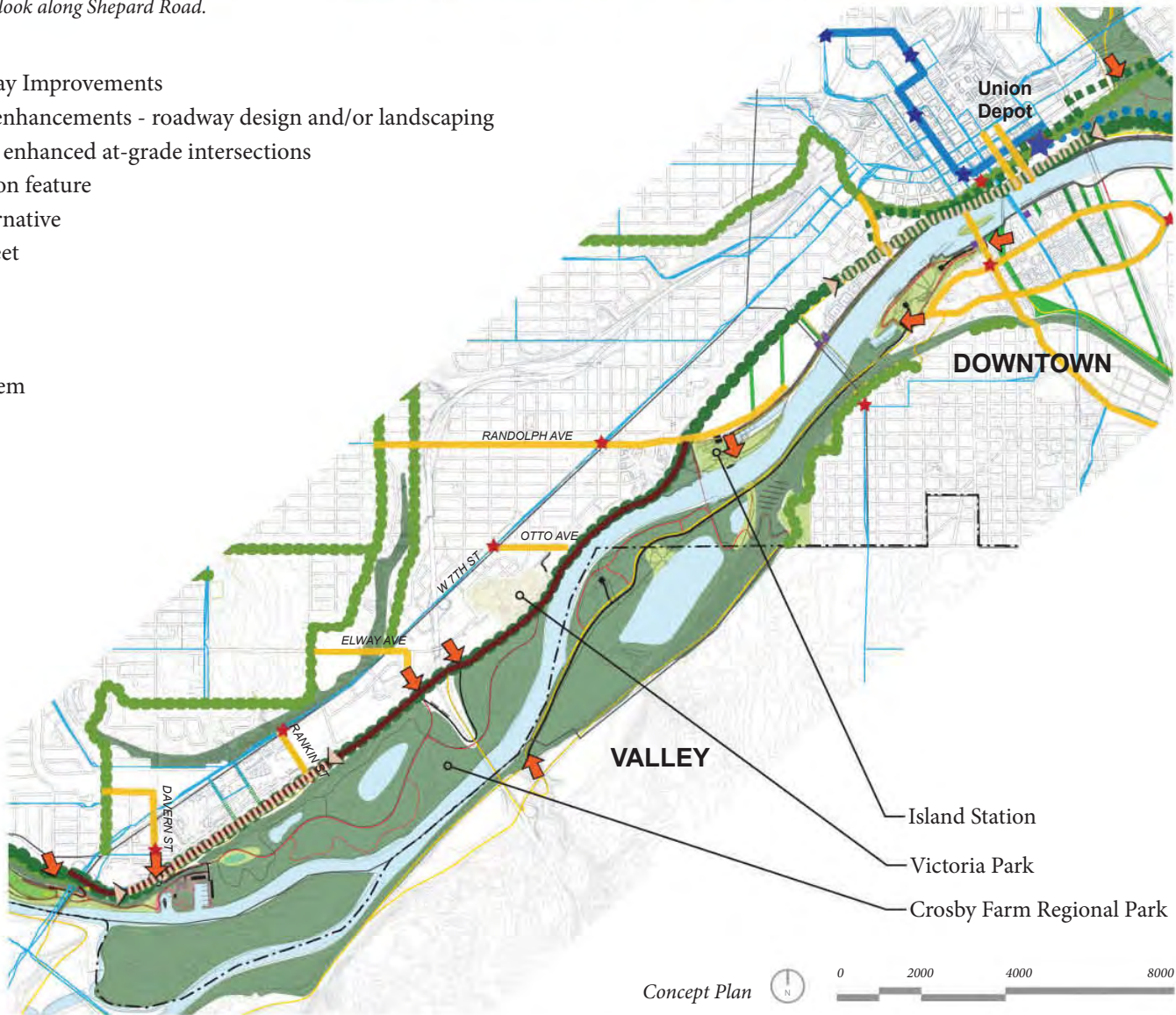
- The Grand Round
- Parkway and Boulevard System

GRP Vehicular Access

- Internal Park Roads
- Park Entrances

Transit Access

- 2030 Local Bus Routes
- Light Rail Corridor
- Commuter Rail Corridor
- Key GRP Bus Stops
- Key GRP Transit Stations
- Transit Stations



Enhance the parkway-like qualities of Shepard Road

By adding parkway improvements, such as enhanced landscaping, lighting, signs, guard rails, pedestrian walkways and bike lanes, Shepard Road can become the main gateway into Saint Paul, allowing visitors to experience the extraordinary views of the Mississippi River as they approach the City. As part of the historic Grand Round, Shepard Road can continue to support necessary levels of vehicle and commercial traffic, while accommodating transportation alternatives, such as walking and bicycling.

The City's goal is to balance traffic volumes – allowing for potential reductions on West 7th Street and increases on Shepard Road - and keep speeds compatible with surrounding land uses in both corridors.

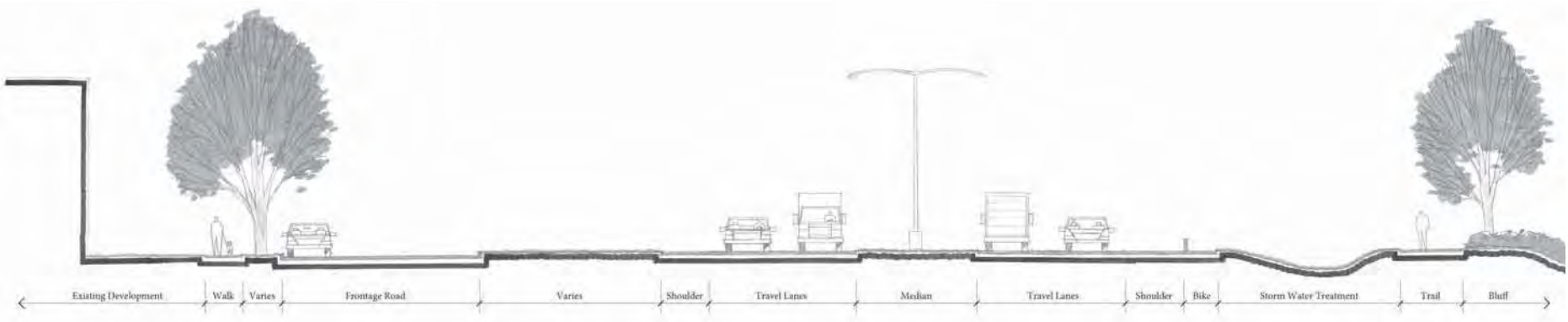
Vary the design of Shepard Road, through context-sensitive design, to respond to opportunities

A variety of roadway edge conditions, including differing land uses and levels of connectivity with adjacent neighborhoods, require a variety of design responses in different areas of the corridor. Barriers are created by rail lines, steep slopes and a wide road cross-section. Recommendations recognize unique opportunities in each section of Shepard Road, while providing continuity through unified Parkway elements. Enhancements include improved pedestrian and bicycle access, visual and physical links to the River and parkway type landscape amenities. The following pages describe the range of characteristics of an improved Shepard Road corridor.

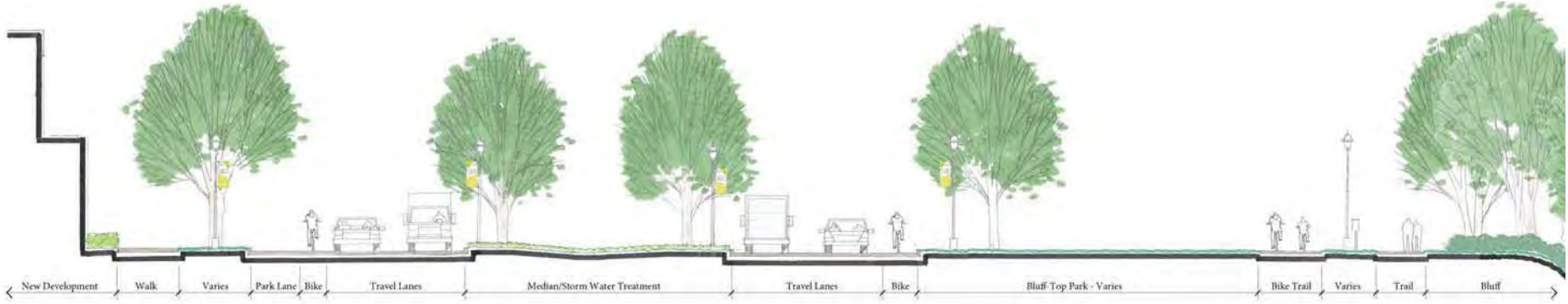


Open up river vistas at key overlooks, streets along the river, and entries to the City.



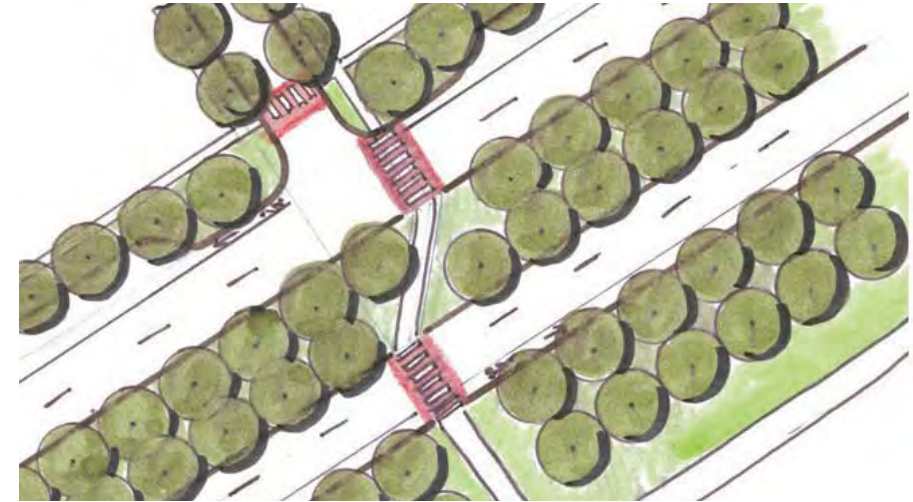


Existing Condition - 50 mph



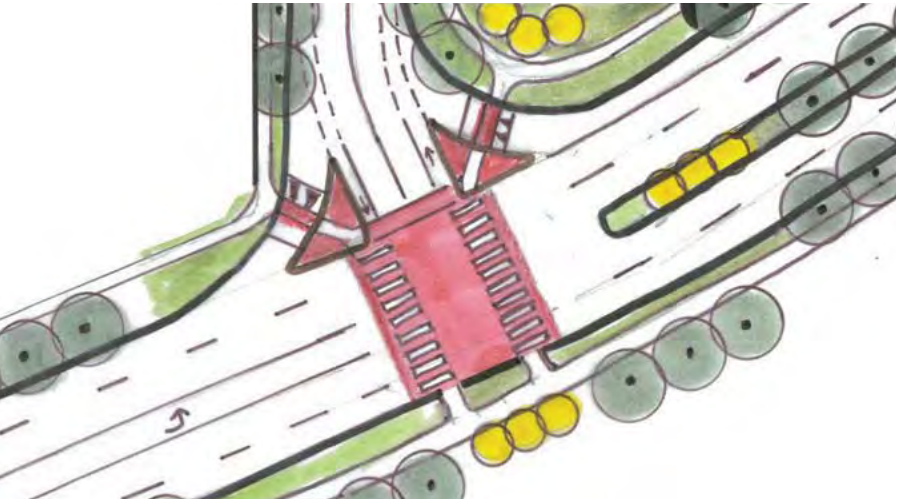
Proposed Condition - 35 mph

Shepard Road Pedestrian Crossing Prototypes



Limited access, non-signalized intersection prototype

Provide pedestrian crosswalks where the roadway median allows for a pedestrian refuge. At pedestrian crossings provide clear pedestrian zones with crosswalk pavement markings, median refuges, guard rail breaks, contrasting pavement types and/or raised traffic tables.



Full access, signalized intersection prototype

Raised colored speed tables, pedestrian refuge islands, smaller turning radii and high visibility crosswalks protect pedestrians and cyclists, and slow traffic to improve safety at crosswalks. Provide appropriate signs, signal timing with user activation for pedestrians and bicycles at all pedestrian crossings.



Key Map - Fort Rd. to Homer St.

Redesign streets to improve park access and enhance private development potential

The alignment and cross-section of Shepard Road in this area has significant potential to be modified because of the pending redevelopment projected for the areas to the west.

As part of planning and design of adjacent redevelopment sites, evaluate alternative Shepard Road alignments that remove the existing frontage road, expand potential development and increase park area along the bluff edge. Alternative roadway designs should minimize required roadway width, improve intersections, enhance park aesthetics, expand park land and integrate improved local storm water treatment strategies.

Integrate bluff edge park enhancements

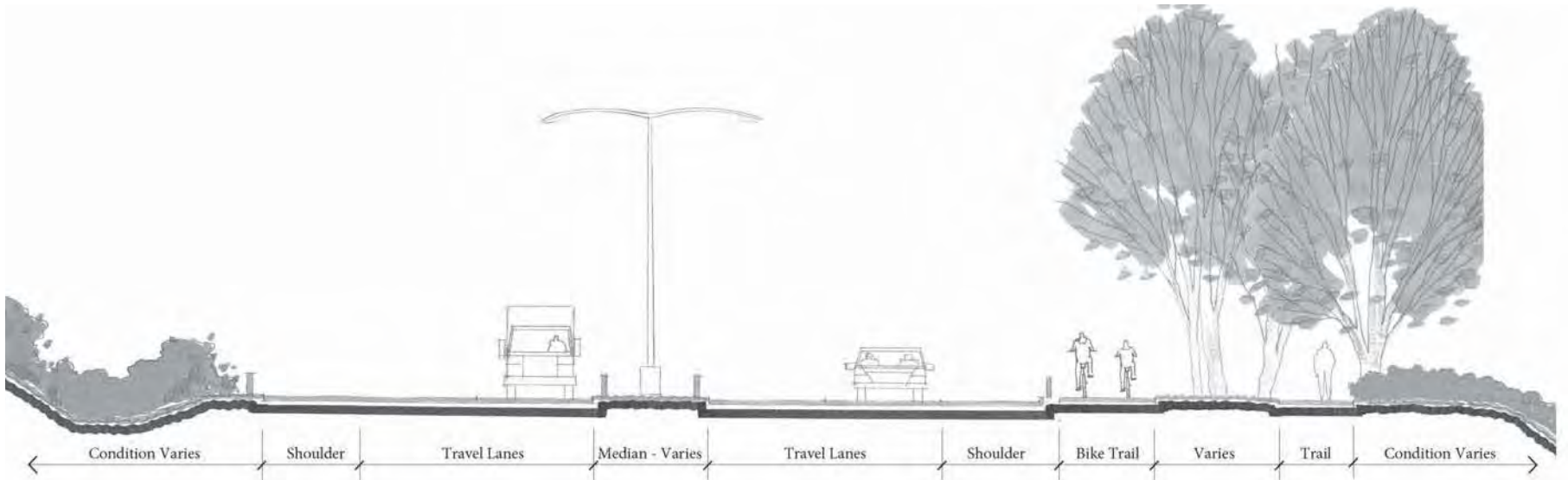
When Shepard Road is realigned, integrate added bluff edge park to support multimodal transportation as well as recreation needs of the corridor. Provide for continuous and connected bicycle and pedestrian systems on both sides of Shepard Road. Integrate local stormwater treatment with landscape enhancements in medians and swales where space allows. Clear overlooks and provide enhanced river vistas from the road and the trails.

Reduce traffic speeds

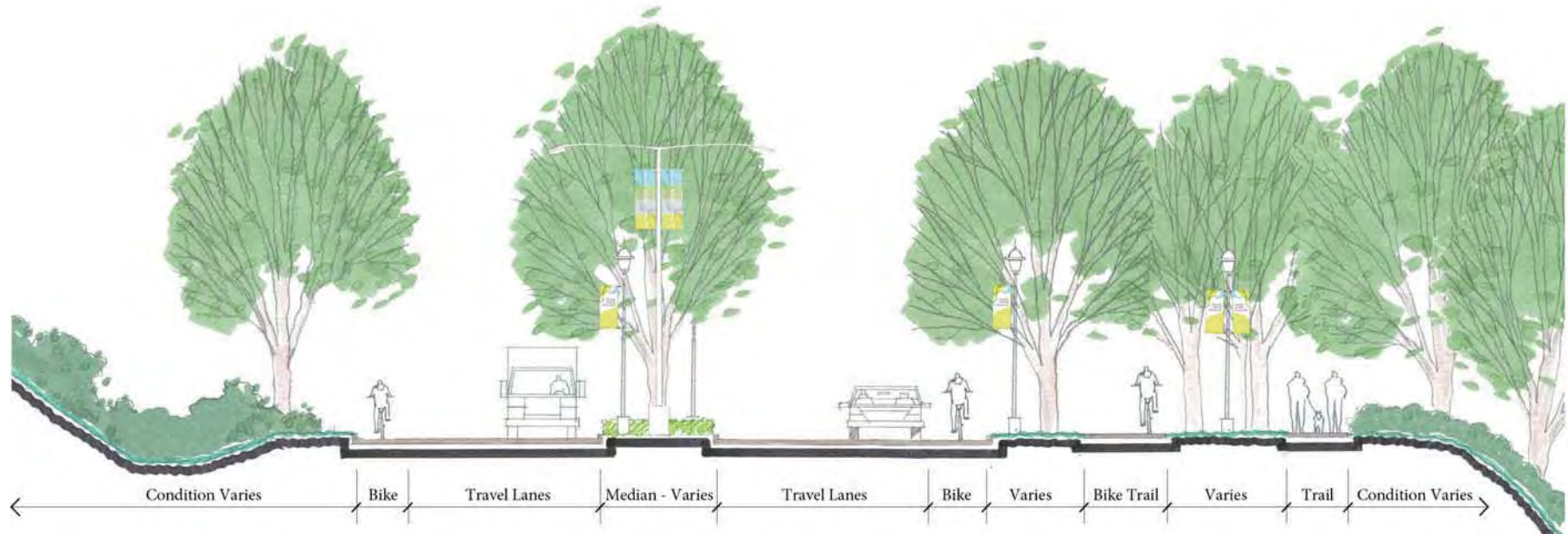
Reduced roadway speeds will provide a safer environment for pedestrians and bicyclists while accommodating projected volumes of all traffic types including commercial vehicles.



GOALS & OBJECTIVES



Cross section of Shepard Road: Speed Limit = 35-50 mph.



Parkway treatment of Shepard Road: Speed Limit = 35 mph.



Key Map - Homer St. to Eagle Pkwy..

Provide access across barriers

This portion of Shepard Road extends past existing neighborhoods, industrial sites in transition, and along steep bluffs and railroads that limit access from the city to the river. Where at grade crossings are not feasible, work with the neighborhoods and public agencies to provide grade separated crossings at key locations across bluffs, railroad lines, bridges and other barriers. Where ever possible utilize existing bridges and tunnel crossings. Support the efforts of individual neighborhoods to provide localized access to the park and improve links from neighborhoods to the river.

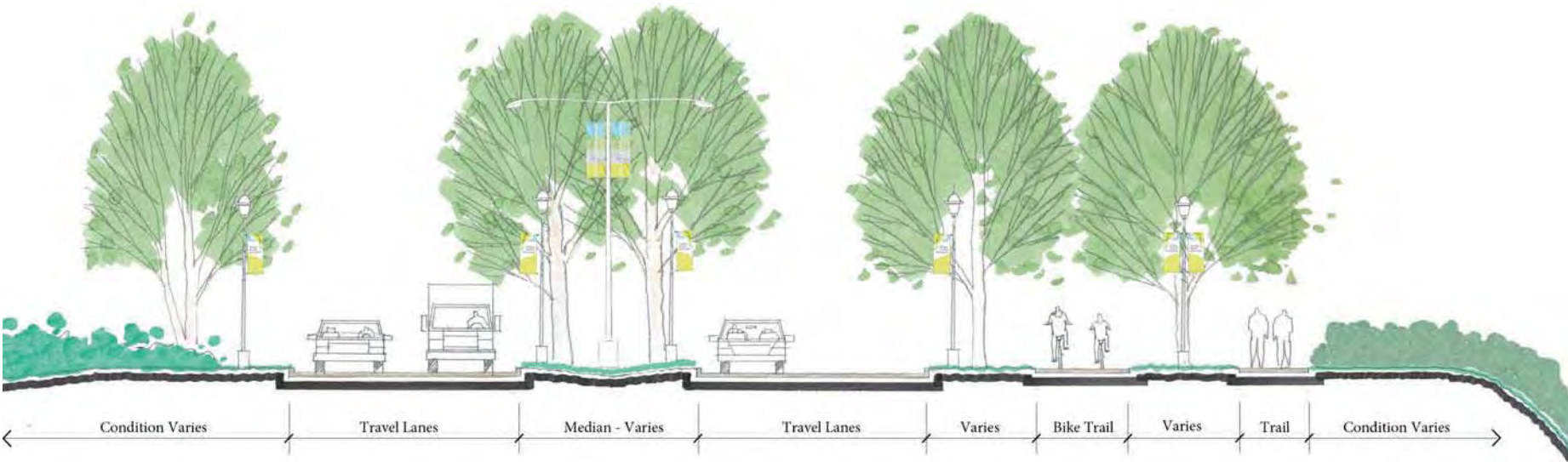
Promote pedestrian and bicycle access from adjacent neighborhoods

Support Public Works and PED implementation of Multimodal Park Access Streets that will improve neighborhood access to the parks. Complete accessible sidewalks, crosswalks, wayfinding signs and landscape amenities that allow safer and more convenient pedestrian and bicycle access to and across Shepard Road and other existing barriers.

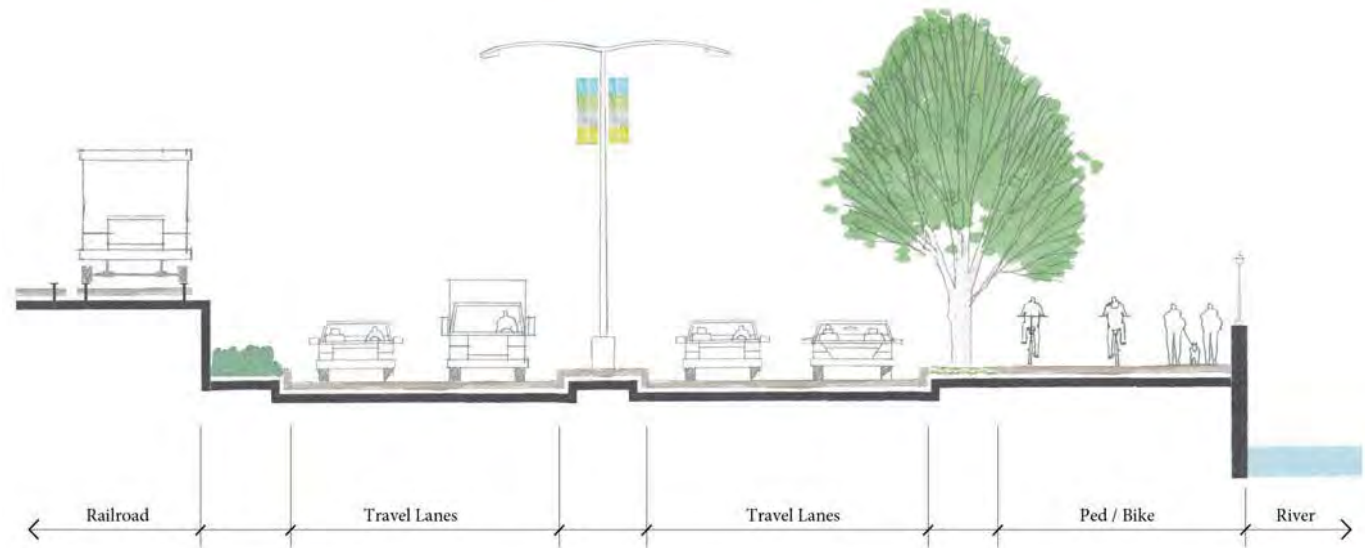
Enhance trail users' experience to promote commuting alternatives

Provide on-street bicycle lanes on Shepard Road to encourage bicycle commuting. Improve regional trails to separate pedestrian and bicycles, and provide a sufficient buffer from Shepard Road in order to enhance the trail user's experience and safety, while accommodating varied speeds.

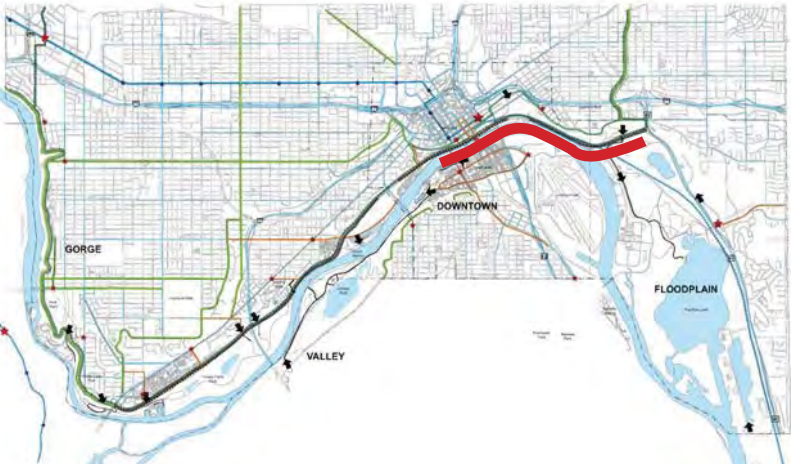




Warner Road Prototype: Speed Limit = 35-50 mph.



Downtown Section - 35 mph



Key Map - Downtown to Warner Rd.

### Develop a unified parkway-like design to improve landscape aesthetics

Establish continuous plantings of street trees, shrubs, lawns and natural areas consistent with city parkway standards and regional best practices. Include parkway type lighting, guard rails, wayfinding and identity signs, markers and park amenities that help beautify Shepard Road and Warner Road as gateways to Saint Paul.

### Provide improved pedestrian and bicycle access

Improve at-grade pedestrian and bicycle crossings at all park access streets. Where at grade crossings are not feasible, provide grade separated bridges and underpasses, utilizing existing structures where possible, combined with stream restoration, trail improvements, bridge repurposing and other related infrastructure projects.

### Encourage river-oriented redevelopment

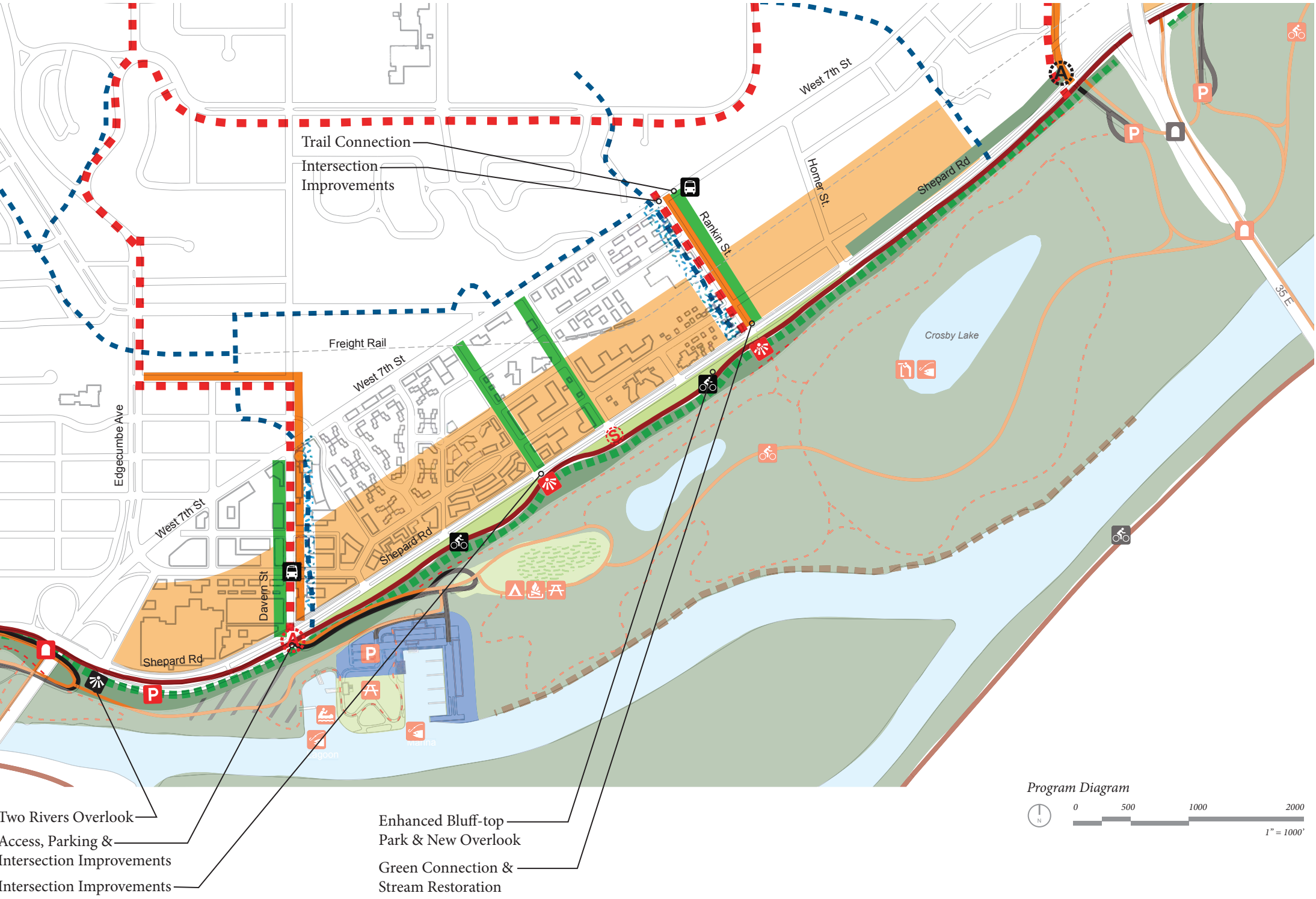
A riverfront address is highly sought after. Proximity to views and recreation opportunities adds value to private land in the corridor. Development of denser neighborhoods with pedestrian and bicycle friendly streets and green connections to the river will help pay for improved access and desired park improvements.



| Strategies and Projects                                                                                                                                                                                                                                                                                                                                    | Agency/Partners             | Est. Cost      | Phasing |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|----------------|---------|
| Shepard Road                                                                                                                                                                                                                                                                                                                                               |                             |                |         |
| Convert Shepard Road to an urban parkway-like roadway, with 35 mph design speed                                                                                                                                                                                                                                                                            |                             |                |         |
| Recommended design includes two lanes in each direction, consideration for on-street parking and bike lanes, regular intersections with pedestrian crossings and guard rail breaks, enhanced landscape in median and shoulders, detached sidewalks and/or multi-use trails and parkway-like amenities and lighting                                         | SPPW                        | \$ 16,500,000  | long    |
| Balance the volume and speed of traffic on Shepard Road with that on Fort Road/ West Seventh Street, striving to improve the pedestrian friendliness of both corridors. Retain unique role of each street - Fort Road/West Seventh shall remain more mixed use, compact and retail oriented, while Shepard Road will become an urban parkway-like roadway. | Mn/DOT, SPPW                |                | long    |
| Apply context sensitive design approach for two identified activity zones:                                                                                                                                                                                                                                                                                 |                             |                |         |
| - The Shepard/Davern Gateway neighborhood (between Fort Road and Rankin Street)                                                                                                                                                                                                                                                                            | SPPW                        |                | med     |
| - Adjacent to Downtown (from Eagle/Old Chestnut to Trout Brook Parkway)                                                                                                                                                                                                                                                                                    | Ramsey County, SPPW         |                | long    |
| Enhance intersection design treatments to provide frequently spaced crossings:                                                                                                                                                                                                                                                                             |                             |                |         |
| - Gannon Road, Davern Street, Norfolk, Snelling Place, Alton Street, S. Rankin Street                                                                                                                                                                                                                                                                      | SPPW                        | \$ 750,000     | med     |
| - Elway Street, Otto Avenue, Randolph Avenue                                                                                                                                                                                                                                                                                                               | Ramsey County, SPPW         | \$ 375,000     |         |
| - Chestnut/Eagle Pkwy, Ontario St, Jackson St, Sibley St, Broadway St                                                                                                                                                                                                                                                                                      | Ramsey County, SPPW         | \$ 700,000     |         |
| Add signals at key bike/pedestrian crossings while maintaining vehicular traffic flow                                                                                                                                                                                                                                                                      |                             |                |         |
| Implement in conjunction with adjacent land development and user needs                                                                                                                                                                                                                                                                                     | SPPW                        | \$100,000 each | long    |
| From Davern to Rankin - evaluate removing parallel frontage road (Youngman Ave)                                                                                                                                                                                                                                                                            |                             |                |         |
| Introduce a more curvilinear road alignment, add parkway-like landscaping, enhance local access, shorten pedestrian crossing distances, add bicycle lanes and potential on-street parking, and increase development potential close to the parkway                                                                                                         | SPPW                        |                |         |
| Use public art or other gateway treatments to mark speed transition zones                                                                                                                                                                                                                                                                                  | Ramsey County, SPPW         |                | med     |
| From Homer to Randolph - reduce width of existing highway shoulders                                                                                                                                                                                                                                                                                        |                             |                |         |
| Retain four travel lanes, narrow shoulders to bike lane standards, add parkway-like landscaping, use high visibility crossing treatments at all signalized intersections.                                                                                                                                                                                  | SPPW                        |                |         |
| From Randolph to Sibley - manage speeds and improve crossings                                                                                                                                                                                                                                                                                              |                             |                |         |
| Posted speed limits are currently higher than desired design speed - consider lowering speed limit as levels of multimodal river access increase                                                                                                                                                                                                           | Mn/DOT, Ramsey County, SPPW |                | med     |
| Use public art, change in landscaping or other gateway treatments to mark a speed transition zone prior to approaching the Eagle Parkway/Chestnut Street intersection                                                                                                                                                                                      | Ramsey County, SPPW         |                | med     |
| Between Jackson and Sibley, enhance the intersection designs, landscape treatments, and public art features to signify an urban activity node at Lamberts/ Lower Landing. Enhance aesthetics of blank walls and implement a potential arcade treatment north of the railroad tracks on the back side of the parking structure                              | Ramsey County, SPPW         |                | med     |
| Improve the riverfront promenade by looking for opportunities to provide added width and separation from the roadway                                                                                                                                                                                                                                       |                             |                | long    |
|                                                                                                                                                                                                                                                                                                                                                            |                             |                |         |
| I-35E / Shepard Road Interchange                                                                                                                                                                                                                                                                                                                           |                             |                |         |
| Ensure that the feasibility study for developing a full interchange addresses the needs of people on foot and bike as well as the desire to move traffic efficiently                                                                                                                                                                                       |                             |                |         |
| Limit use of acceleration and deceleration lanes on Shepard Road and ensure that design speed of the interchange ramps is consistent with the desired 35 mph speed                                                                                                                                                                                         | Mn/DOT, SPPW                |                | long    |
| Provide a continuous regional trail along Shepard under I-35E that is built to trail standards to provide a more direct route of travel for Samuel H. Morgan Trail users                                                                                                                                                                                   | Mn/DOT, SPPW                | \$ 2,500,000   | long    |
|                                                                                                                                                                                                                                                                                                                                                            |                             |                |         |
| Shepard Road and West 7th Redevelopment areas (including Shepard Davern Gateway, Victoria Park and ADM/Schmidt Brewery sites)                                                                                                                                                                                                                              |                             |                |         |
| Amend existing Area Plans to include the following relative to the Great River Passage:                                                                                                                                                                                                                                                                    |                             |                |         |
| Complete a connected street network that provides controlled grade level intersection crossings of Shepard Road at specific locations between the Fort Road bridge and 35E                                                                                                                                                                                 | SPPW                        |                | short   |
| Realign, redesign and reduce the width of Shepard Road to become more parkway-like                                                                                                                                                                                                                                                                         | SPPW                        |                | short   |
| Adopt building forms that reinforce Shepard Road as an urban parkway and that are oriented toward the river.                                                                                                                                                                                                                                               | Port Authority, PED         |                | short   |
| Extend continuous public "green fingers" connecting redevelopment areas from West 7th Street to the Riverfront and study parking impacts along the West 7th Street Corridor.                                                                                                                                                                               | PED, District Councils      |                | short   |
| Preserve and enhance views and trail connections from West 7th Street through new development to the River                                                                                                                                                                                                                                                 |                             |                | short   |
| Daylight and restore historic streams - from Highland Golf Course along Rankin, and Cascade Creek in the Island Station area                                                                                                                                                                                                                               | SPPW                        |                | short   |
|                                                                                                                                                                                                                                                                                                                                                            |                             |                |         |
| Great River Passage                                                                                                                                                                                                                                                                                                                                        |                             |                |         |
| Amend existing Area Plans to include the following relative to the Great River Passage:                                                                                                                                                                                                                                                                    |                             |                |         |
| Complete a connected street network that provides controlled grade level intersection crossings of Shepard Road at specific locations between the Fort Road bridge and 35E                                                                                                                                                                                 | District Councils           |                | short   |
| Realign, redesign and reduce the width of Shepard Road to become more parkway-like                                                                                                                                                                                                                                                                         | SPPW                        |                | short   |

Note: The Strategies and Projects matrix for Shepard Road is included as an initial outline of potential projects anticipated. Since much of the indicated work is dependent on and related to private redevelopment and large scale public works projects that are not currently fully identified, the list is not complete in terms of potential project partners, estimated costs or phasing.





key map

- |                                |                            |
|--------------------------------|----------------------------|
| <b>Water Resources</b>         | <b>Roads &amp; Trails</b>  |
| Wetland Restoration            | Regional Trail             |
| Redevelopment Treatment Area   | Park or Local Trail        |
| Park Treatment Area            | Rustic Trail at Airport    |
| Bluff Treatment Area           | Rustic Trail               |
| Creek Restoration Opportunity  | On-Road Bikeway            |
| Shoreline Restoration          | Multimodal Park Access St. |
| <b>Park Types</b>              | Park Access Road           |
| Gathering Place                | <b>Special Features</b>    |
| Active Nature Based Recreation | River Balcony / Riverwalk  |
| Natural Areas                  | Grand Round Extension      |
| Natural Preserves              | Green Connection           |
| <b>Land Use</b>                | Commuter Rail Corridor     |
| Existing Industrial            | Light Rail Corridor        |
| Mixed-Use                      | County Owned Park Land     |

- |                        |                       |
|------------------------|-----------------------|
| Camping                | Dog Park              |
| Picnic                 | Refreshments          |
| Wildlife Viewing       | Restrooms             |
| Scenic Overlook        | Marina                |
| Point of Interest      | Information           |
| Fishing Access         | Pedestrian Underpass  |
| Canoe/Kayak Landing    | Pedestrian Overpass   |
| Motorized Boat Launch  | Vehicle Parking       |
| Swimming Area          | Transit Station       |
| Mountain Biking Trail  | Bus Stop              |
| Multi-Use Trail        | Stairway or Ramp      |
| Hiking Trail           | Vehicular Park Access |
| Nature-based Play Area |                       |

\* Red icons represent proposed items.



# Watergate Marina Vision

Watergate Marina will be a great place to meet on the river and learn about the natural world. It will be the primary location for the City’s Environmental Education programs, and will be expanded to provide access for various types of recreational boating. It will be a great place to spend the day picnicking, boating, fishing, or hiking the trails in nearby natural areas.



*This plan is a concept only, and is subject to further planning, design and public input.*



LEGEND

- 1. Environmental Education Center
- 2. Marina Shop and Outfitter
- 3. Cafe
- 4. Natural Area
- 5. Marina Boat Storage
- 6. Restored Lagoon
- 7. Picnicking / Day Use
- 8. Trail Connection to Hidden Falls
- 9. Restored Watergate Marina
- 10. Trail Connection to Crosby Farm
- 11. Improved Fishing Access
- 12. Parking
- 13. Relocated Park Access - (if feasible)



Redevelop Watergate Marina as a key river gateway, gathering place and environmental education center

Watergate Marina will be transformed to accommodate not only its current use as a river marina, but to become the center of Saint Paul’s environmental and outdoor education programs. By restoring the environmentally degraded marina site and the abandoned lagoon area, the marina will become a hub for paddle sports and river oriented community recreation and a starting point for nature walks into Crosby Farm and Hidden Falls Regional Parks. The design and construction of the new facility will be in keeping with the concept of a natural resource based park and environmental education center. A marina and bait shop, rental facilities for bicycles, skis, and kayaks, and a signature café similar to Sea Salt in Minneapolis’ Minnehaha Park, will make it a year-round activity center for all ages. The redeveloped marina and associated structures and facilities will be sensitively designed and scaled to minimize intrusion on the natural characteristics of the park and river.

Improve access to the Great River Passage

The transformation of Watergate Marina will allow significant improvements to park access at Crosby Farm Regional Park. If feasible, the relocation of the Shepard Road park access to a signalized intersection at Davern Street, would dramatically improve access from the neighborhood. The park access road would be improved to better accommodate pedestrians and bicycles and give park visitors a choice of ways to get to the river.



The Watergate Lagoon will be a major access point for canoes and kayaks and a trailhead for the River Trail.



Community recreation includes picnicking along the river's edge.

This plan is a concept only, and is subject to further planning, design and public input.



| Strategies and Projects                                                                                                           | Agency/Partners | Est. Cost    | Phasing |
|-----------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------|---------|
| Watergate Marina                                                                                                                  |                 |              |         |
| Management                                                                                                                        |                 |              |         |
| Create a master plan redesign and construction documents for Watergate Marina consistent with the Great River Passage master plan |                 | \$ 200,000   | short   |
| Identify not-for-profit or public-private partnership to build, operate and maintain the marina center                            |                 | n/a          | short   |
| Implement programs for environmental education in conjunction with Watergate center                                               | MNRRRA          | n/a          | med     |
| Work with Dakota people to provide interpretive signage and native language place names                                           | Dakota Tribe    | n/a          |         |
|                                                                                                                                   |                 |              |         |
| Design and Construction                                                                                                           |                 |              |         |
| Roads and Trails                                                                                                                  |                 |              |         |
| Redesign and improve the Shepard Road Park entrance to improve pedestrian and bicycle access and crossing at Shepard Road.        |                 | \$ 500,000   | short   |
| Renovate existing park access road to accommodate bicycles and pedestrians                                                        |                 | \$ 100,000   | short   |
| Adapt the existing access road to provide parking for the Fort Road overlook                                                      |                 | \$ 150,000   | short   |
| Rebuild and expand parking for the multiple use marina/environmental education center and lagoon access                           |                 | \$ 350,000   | short   |
| Provide Park Trail loops and links to Hidden Falls and Crosby Farm trails                                                         |                 | \$ 250,000   | short   |
|                                                                                                                                   |                 |              |         |
| Structures and Related Improvements                                                                                               |                 |              |         |
| Construct a new multi-use marina/café/restaurant/environmental education center                                                   | Marina          | \$ 7,500,000 | short   |
| Include public restrooms in the lagoon day use area                                                                               |                 | \$ 300,000   | short   |
| Construct covered marina boat storage facility                                                                                    | Marina          | \$ 2,500,000 | med     |
| Rehabilitate existing marina docks, slips and support facilities                                                                  | Marina          | \$ 1,500,000 | med     |
| Provide access to lagoon and river edge with accessible fishing/overlook piers                                                    |                 | \$ 300,000   | short   |
| Implement signage and wayfinding systems                                                                                          |                 | \$ 40,000    | short   |
|                                                                                                                                   |                 |              |         |
| Recreation Improvements/Use Areas                                                                                                 |                 |              |         |
| Provide day use recreation area including picnic and activity lawn areas                                                          |                 | \$ 850,000   | short   |
| Provide small boat landing at lagoon area with vehicular access ramp and small boat storage                                       |                 | \$ 75,000    | short   |
|                                                                                                                                   |                 |              |         |
| Landscape/Site Improvements                                                                                                       |                 |              |         |
| Remove debris, regrade and restore native vegetation in lagoon area as part of improving river access                             |                 | \$ 1,000,000 | short   |
| Identify and protect sensitive ecologies such as wetlands, spring ephemerals, mussel beds                                         |                 | \$ 50,000    | short   |

Summary Plan Recommendations:

Watergate Marina

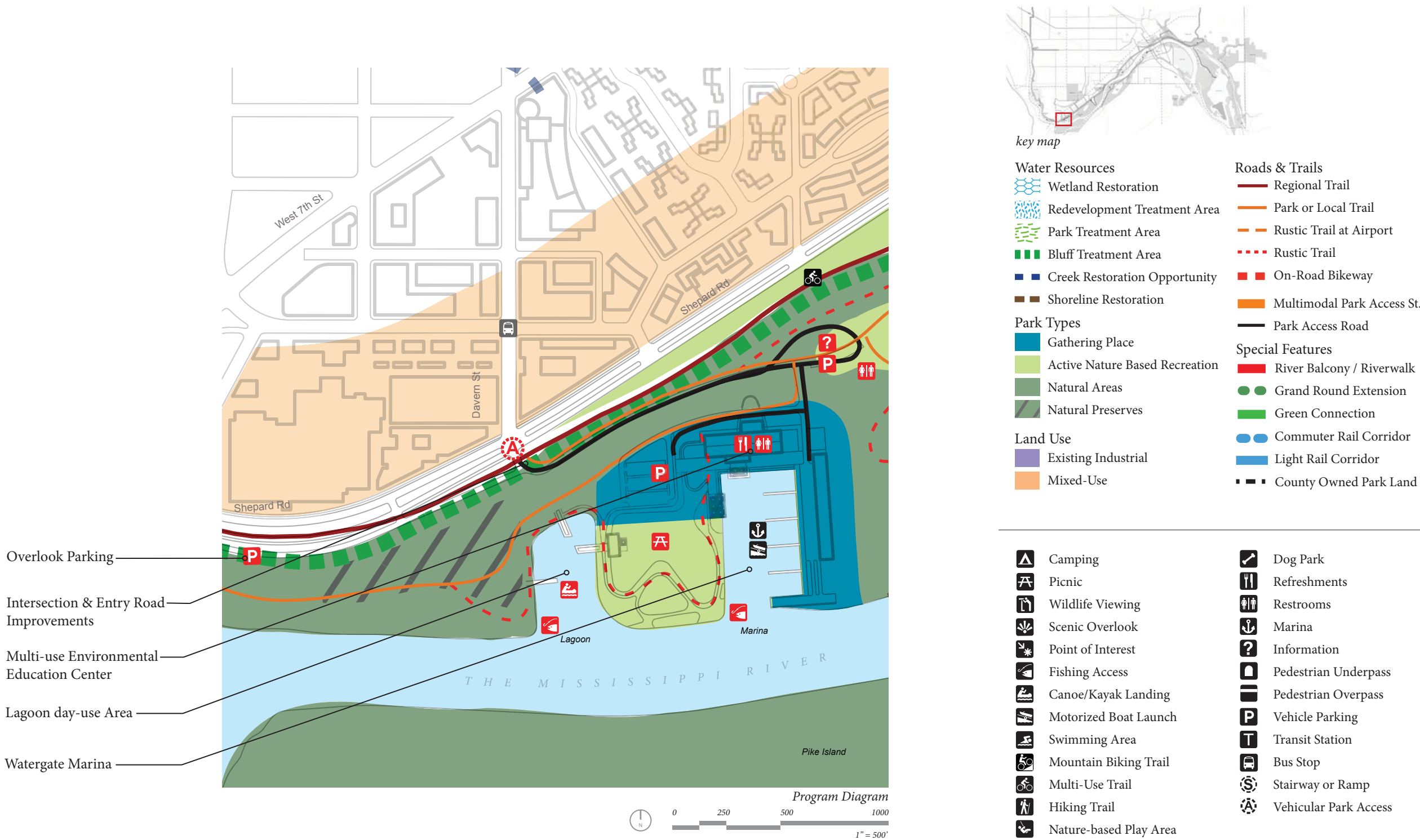
The Watergate Marina will be redeveloped to accommodate river-oriented uses and activities in a more environmentally friendly manor. The lagoon area will be re-stored removing debris and restoring the shoreline. A new environmental and river oriented recreation center will be developed with participation from public and private entities. Facilities will include motorized and non-motorized boat launch, storage and repair, recreational equipment rentals, park support facilities and a seasonal or year round café. It will have facilities to support environmental education and community events.

Redevelop the marina to maintain current uses and expand to include:

- Natural resource interpretive and education center
- Café or small restaurant
- Canoe and kayak access and storage
- Outdoor recreation sales, rentals and repair for bicycling, skiing and boating equipment
- Improved vehicular, bicycle and pedestrian access for day use of adjacent park areas

Connect environmental education facilities to trails at Crosby Farm and Hidden Falls Regional Parks and provide improved access to the river’s edge.





\* Red icons represent proposed items.



# Crosby Farm Regional Park Vision

Crosby Farm Regional Park will be a place to learn about the ecology and wildlife of the river valley through programs that will be offered at the new Watergate Environmental Education Center. The ecological diversity and scenic qualities of the park are of great value to the community and to the river ecosystem. The natural resources of these areas will be preserved and enhanced, while limited recreational uses are accommodated.



*This plan is a concept only, and is subject to further planning, design and public input.*

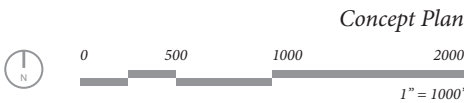


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**LEGEND**

- |                                                          |                                 |
|----------------------------------------------------------|---------------------------------|
| 1. Restored Meadow / Picnic Areas / Camping              | 6. Main Park Trail              |
| 2. Expanded Bluff-top Park (w/ Shepard Road Realignment) | 7. Rustic Hiking Trails         |
| 3. Managed Natural Areas                                 | 8. Fishing Access               |
| 4. Bluff Protection Area                                 | 9. Restored Shelter & Restrooms |
| 5. Improved Access and Parking                           | 10. Scenic Overlook             |
|                                                          | 11. Potential Trail/Stair       |



**Create a Natural Resource Park that showcases the valley ecology**

Preservation and enhancement of the valley edge’s natural areas will require establishing protocols to protect and manage ecological value and diversity. Improved natural areas offer opportunities to interpret the area’s natural, cultural and agricultural legacy.

Crosby Farm Regional Park could become a botanic garden for natural resources; identifying and encouraging better understanding of native flora, fauna, hydrology and cultural resources in the valley. The park could also include provisions for group camping for Scouts or other urban youth in conjunction with the city’s environmental and outdoor programming.

**Develop a hierarchy of park access and trails**

A hierarchy of park access points and trails will provide better connections between city neighborhoods, Crosby Farm Regional Park, Victoria Park and Hidden Falls Regional Park. Trail improvements include the development of a network of rustic trails, boardwalks, fishing platforms, overlooks, and parking and trailhead improvements at existing and proposed park access points.

**Improve connections between the bluffs and the valley bottom**

Improve park access roads to better accommodate vehicles, bicycles, and pedestrians. Provide frequent, safe crossings of Shepard Road at key neighborhood and park entrances that connect with regional and park trails. Restore the mid-bluff trail below Shepard Road in Crosby Farm Regional Park and, where feasible, restore historic park stairways along the bluff.

*Limit recreation improvements to trails, interpretive areas and rustic facilities that support environmental education and interpretation.*



*Boardwalks have a light environmental footprint.*



*Organized group camping supports city-wide recreation programs.*



| Strategies and Projects                                                                                                | Agency/Partners        | Est. Cost    | Phasing |
|------------------------------------------------------------------------------------------------------------------------|------------------------|--------------|---------|
| Crosby Farm Regional Park                                                                                              |                        |              |         |
| Management                                                                                                             |                        |              |         |
| Update Crosby Farm Regional Park Master Plan to be consistent with the Great River Passage master plan                 |                        | \$ 100,000   | short   |
| Develop Natural Areas Management plan that includes shoreline and wetland restoration and stormwater management        | FMR, USACE             | n/a          |         |
| Implement programs for environmental education in conjunction with Watergate center                                    | MNRRRA                 | n/a          |         |
| Work with Dakota to provide interpretive signage and native language place names                                       | Dakota Tribe           | n/a          |         |
|                                                                                                                        |                        |              |         |
| Design and Construction                                                                                                |                        |              |         |
| Roads and Trails                                                                                                       |                        |              |         |
| Redesign main park entry to align with Davern (if feasible - study with Shepard Road redesign)                         |                        | n/a          |         |
| Redesign Park entry and add paved parking loop at Shepard Road west side of 35-E                                       | completed              |              |         |
| Remove and relocate main parking areas, adding park across road loop closer to park entrance                           | completed in fall 2012 |              |         |
| Improve and extend Park trails from Watergate to Lower Crosby Farm and connecting to new parking areas                 |                        | \$ 500,000   | med     |
| Add local trail loops to provide accessible routes to natural areas                                                    |                        | \$ 250,000   | med     |
| Add looped rustic nature trails that provide a variety of opportunities for nature hikes including the mid-bluff trail |                        | \$ 250,000   | med     |
| Add boardwalk trails at wetland areas around Crosby and Upper Lakes                                                    |                        | \$ 300,000   | med     |
| Evaluate the feasibility of adding (1) bluff stair near Rankin green connection                                        |                        | \$ 50,000    | med     |
|                                                                                                                        |                        |              |         |
| Structures and Related Improvements                                                                                    |                        |              |         |
| Restore existing picnic shelter and restroom                                                                           |                        | \$ 250,000   | med     |
| Provide fishing dock, boardwalk, wildlife observation decks and blinds near lake                                       | MNRRRA                 | \$ 200,000   | short   |
| Implement signage and wayfinding systems                                                                               |                        | \$ 50,000    | short   |
|                                                                                                                        |                        |              |         |
| Recreation Improvements/Use Areas                                                                                      |                        |              |         |
| Develop rustic group tent camping area                                                                                 | MNRRRA                 | \$ 300,000   | med     |
| Provide a variety of different size group and individual picnic sites                                                  |                        | \$ 300,000   | med     |
| Improve fishing access at lakes' and river's edge                                                                      |                        | \$ 500,000   | short   |
|                                                                                                                        |                        |              |         |
| Landscape/Site Improvements                                                                                            |                        |              |         |
| Selectively manage understory of invasive vegetation species in passive activity areas                                 |                        | \$ 250,000   | short   |
| Restore native floodplain meadows to include water quality treatment in appropriate areas                              | CRWD                   | \$ 1,000,000 | med     |
| Restore wetland areas around lake and near storm outfalls                                                              | DNR                    | \$ 2,000,000 | long    |
| Provide stormwater treatment at top of bluff and in non-sensitive areas                                                | CRWD                   | \$ 150,000   | short   |
|                                                                                                                        |                        |              |         |

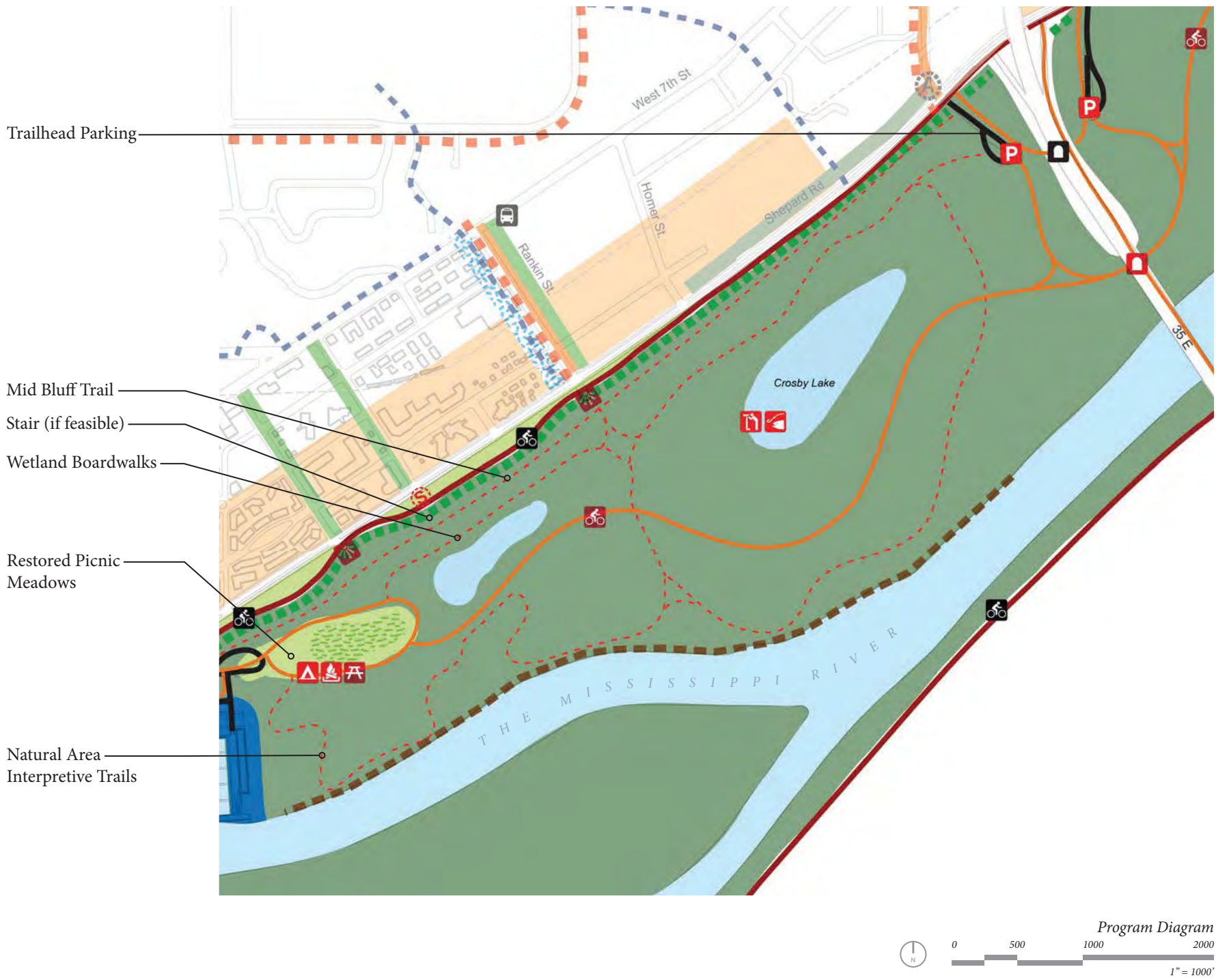
Summary Plan Recommendations:

Crosby Farm Regional Park

Crosby Farm Regional Park will remain primarily a natural area park. The existing network of trails will be improved and expanded, and a more distinct hierarchy of accessible and more challenging walking trails will be created to serve a wide range of user abilities. Wildlife viewing, fishing, natural and interpretive areas will be created to support environmental education and recreational photography while protecting sensitive environments. The existing park access roads, parking areas and park facilities will be renovated to improve recreational user access and experience.

- Improve nature based recreation areas to support a variety of group and individual picnicking and supervised group camping opportunities.
- Improve and manage access to lake and river shorelines for hiking, fishing and environmental observation.
- Expand trail network, fishing and wildlife viewing opportunities.
- Improve access road and trailhead parking at both ends of the park.
- Renovate the existing restrooms and group picnic shelters.
- Provide increased management of natural areas.





key map

- |                                |                            |
|--------------------------------|----------------------------|
| <b>Water Resources</b>         | <b>Roads &amp; Trails</b>  |
| Wetland Restoration            | Regional Trail             |
| Redevelopment Treatment Area   | Park or Local Trail        |
| Park Treatment Area            | Rustic Trail at Airport    |
| Bluff Treatment Area           | Rustic Trail               |
| Creek Restoration Opportunity  | On-Road Bikeway            |
| Shoreline Restoration          | Multimodal Park Access St. |
| <b>Park Types</b>              | Park Access Road           |
| Gathering Place                | <b>Special Features</b>    |
| Active Nature Based Recreation | River Balcony / Riverwalk  |
| Natural Areas                  | Grand Round Extension      |
| Natural Preserves              | Green Connection           |
| <b>Land Use</b>                | Commuter Rail Corridor     |
| Existing Industrial            | Light Rail Corridor        |
| Mixed-Use                      | County Owned Park Land     |

- |                        |                       |
|------------------------|-----------------------|
| Camping                | Dog Park              |
| Picnic                 | Refreshments          |
| Wildlife Viewing       | Restrooms             |
| Scenic Overlook        | Marina                |
| Point of Interest      | Information           |
| Fishing Access         | Pedestrian Underpass  |
| Canoe/Kayak Landing    | Pedestrian Overpass   |
| Motorized Boat Launch  | Vehicle Parking       |
| Swimming Area          | Transit Station       |
| Mountain Biking Trail  | Bus Stop              |
| Multi-Use Trail        | Stairway or Ramp      |
| Hiking Trail           | Vehicular Park Access |
| Nature-based Play Area |                       |

\* Red icons represent proposed items.



# Victoria Park & Lower Crosby Farm Regional Park Vision

Victoria Park and Crosby Farm Regional Park are two disconnected park areas that straddle the bluffs and provide recreation opportunities for the community. Victoria Landing provides a new point of access for river recreation and an opportunity to experience and interpret the site's industrial heritage.



*This plan is a concept only, and is subject to further planning, design and public input.*





Concept Plan

0 500 1000 2000  
1" = 1000'

LEGEND

- 1. Managed Natural Areas
- 2. Bluff Protection Area
- 3. Improved Access and Parking
- 4. Main Park Trail
- 5. Canoe/Kayak Landing
- 6. Fishing Access
- 7. Victoria Park
- 8. Victoria Overlook
- 9. River Access

Integrate neighborhood park and river access improvements

Victoria Park's location at the edge of the river valley is an opportunity to develop a community park that serves the recreation needs of the adjacent neighborhoods and provides a centrally located place with access to the river. At the edge of Victoria Park, a proposed overlook will enjoy panoramic views of the river valley, the confluence of the Mississippi and Minnesota Rivers and the downtown skyline. A rustic trail and stairway built alongside relics of past industrial uses at the site, will provide access to the river's edge with a small boat landing that will become part of the River Trail.

Improve trail and river connections while preserving sensitive ecological areas

Add new trail connections between Crosby Farm Regional Park and Victoria Park, and provide access to the new overlook and to the river's edge. Victoria Park improvements, currently being planned through a separate process, should protect and restore sensitive bluff areas. Provide access for carry in non-motorized boats, shoreline fishing, and interpretive areas at Victoria Landing below Shepard Road.

Interpret the legacy of Victoria Landing

Abandoned barge docking and fuel off loading facilities along the edge of the river can be preserved, interpreted and repurposed as artful park amenities that are integrated into river's edge improvements. These industrial relics could remain as a legacy of the City's Working River, while providing a unique way to experience the river and an opportunity to engage artists in interpreting the river's rich history.



Small boat storage for river access



Existing abandoned barge docking facility



With artists' help the large docking structures can be repurposed as a park amenity at Victoria Landing

This plan is a concept only, and is subject to further planning, design and public input.



| Strategies and Projects                                                                                                          | Agency/Partners    | Est. Cost    | Phasing |
|----------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------|---------|
| Lower Crosby Farm Regional Park                                                                                                  |                    |              |         |
| Management                                                                                                                       |                    |              |         |
| Include area in update of Crosby Farm Regional Park Master Plan                                                                  |                    | n/a          |         |
| Design and Construction                                                                                                          |                    |              |         |
| Road and trails                                                                                                                  |                    |              |         |
| Add new Park entry and paved parking loop at Shepard Road and east side of 35-E                                                  |                    | \$ 300,000   | med     |
| Extend Park trail from Crosby Farm to Victoria Park and connect to new parking area                                              |                    | \$ 150,000   | med     |
| Improve existing grade separated connection from Crosby Farm to Victoria Park                                                    |                    | \$ 150,000   | med     |
| Structures and Related Improvements                                                                                              |                    |              |         |
| Implement signage and wayfinding systems                                                                                         |                    | \$ 50,000    | short   |
| Landscape and Site Improvements                                                                                                  |                    |              |         |
| Restore wetland areas                                                                                                            | DNR                | \$ 1,000,000 | med     |
| Provide stormwater treatment on top of bluff and in non-sensitive areas                                                          | CRWD               | \$ 1,000,000 | med     |
| Remove invasive vegetation, restore native plants and clear overlook sight lines                                                 |                    | \$ 50,000    | short   |
| Victoria Park                                                                                                                    |                    |              |         |
| Management                                                                                                                       |                    |              |         |
| Complete and implement the Victoria Park master plan                                                                             |                    | \$ 5,000,000 | short   |
| Acquire privately owned riverfront land for natural areas and a park. Protect open space at bluff and overlook with an easement  |                    | n/a          | short   |
| Develop an interpretive program for Victoria Landing                                                                             |                    | n/a          | med     |
| Design and Construction                                                                                                          |                    |              |         |
| Road and trails                                                                                                                  |                    |              |         |
| Add park access road and parking at Otto Avenue                                                                                  |                    | \$ 250,000   | short   |
| Provide rustic trail for carry-in boat access to Victoria Landing, overlook and connection to Victoria Park                      |                    | \$ 250,000   | short   |
| Retrofit existing pipe to provide a new grade separated pedestrian and bicycle crossing at Shepard Road between 35E and Randolph | SPPW               | \$ 800,000   | med     |
| Structures and Related Improvements                                                                                              |                    |              |         |
| Provide boat storage for small non-motorized boats                                                                               |                    | \$ 50,000    | short   |
| Implement signage and wayfinding systems                                                                                         |                    | \$ 25,000    | short   |
| Repurpose industrial river structures for park use                                                                               |                    | n/a          | long    |
| Recreation Improvements/Use areas                                                                                                |                    |              |         |
| Improve the canoe/kayak landing area at Victoria Landing                                                                         | MNRRA              | \$ 100,000   | short   |
| Add new scenic overlook with seating and interpretive signs                                                                      |                    | \$ 300,000   | short   |
| Landscape and Site Improvements                                                                                                  |                    |              |         |
| Restore shoreline area                                                                                                           | DNR/Port Authority | \$ 250,000   | short   |
| Create stormwater treatment areas between Shepard Road and Victoria Park                                                         | CRWD               | \$ 200,000   | med     |

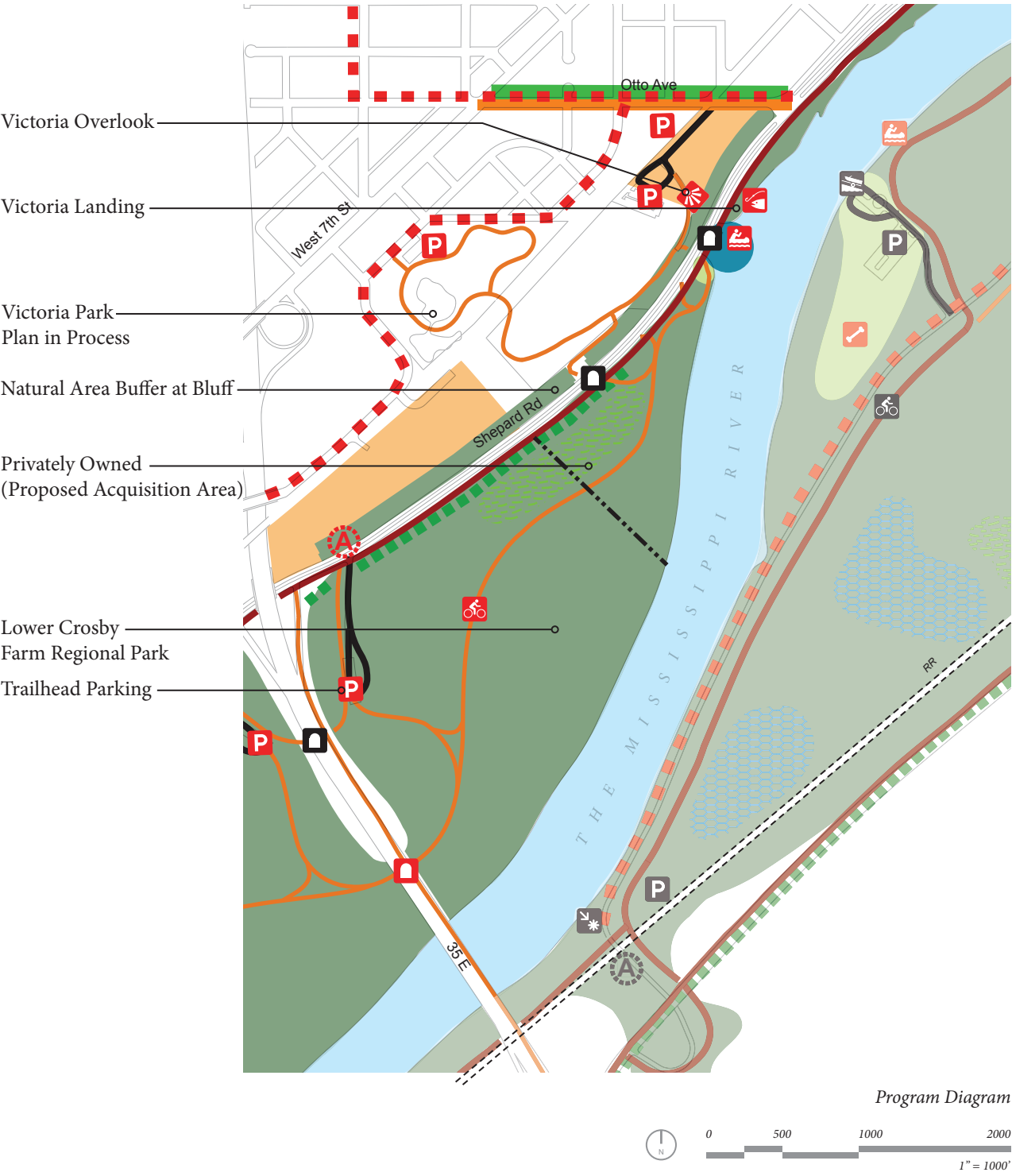
Summary Plan Recommendations:

Victoria Park and Lower Crosby Farm Regional Park

Victoria Park is a new city park, located at an abandoned industrial site, that provides community recreation facilities and a new point of access to the river. A separate master plan for Victoria Park is currently being developed with input from the community. The portion of the park that is along the river will include added parking, trail improvements and a carry-in canoe and kayak landing area with storage. A new river overlook, protection and restoration of the bluff landscape, and a grade separated trail crossing of Shepard Road will allow a transition from natural areas at the river’s edge to Victoria Park.

- Develop and implement a master plan for Victoria Park that includes a river overlook and river access to Victoria Landing and Crosby Farm.
- Interpret the industrial legacy of the site by repurposing river structures to improve river access, including artists in the process.
- Provide parking, trail and non-motorized boat access at Victoria Landing.
- Add trailhead access and parking at Shepard Road east of 35-E.
- Widen and improve the Samuel Morgan regional trail as it crosses below 35-E and include a more direct grade-separated crossing along Shepard when interchange is redesigned.
- Loop a new Park trail under 35-E between the upper and lower sections of Crosby Farm Regional Park to connect it to Victoria Park and Landing.
- Upgrade the existing maintenance access tunnel as a grade separated trail crossing of Shepard Road.





- Water Resources
- Wetland Restoration
  - Redevelopment Treatment Area
  - Park Treatment Area
  - Bluff Treatment Area
  - Creek Restoration Opportunity
  - Shoreline Restoration
- Park Types
- Gathering Place
  - Active Nature Based Recreation
  - Natural Areas
  - Natural Preserves
- Land Use
- Existing Industrial
  - Mixed-Use
- Roads & Trails
- Regional Trail
  - Park or Local Trail
  - Rustic Trail at Airport
  - Rustic Trail
  - On-Road Bikeway
  - Multimodal Park Access St.
  - Park Access Road
- Special Features
- River Balcony / Riverwalk
  - Grand Round Extension
  - Green Connection
  - Commuter Rail Corridor
  - Light Rail Corridor
  - County Owned Park Land

- Camping
- Picnic
- Wildlife Viewing
- Scenic Overlook
- Point of Interest
- Fishing Access
- Canoe/Kayak Landing
- Motorized Boat Launch
- Swimming Area
- Mountain Biking Trail
- Multi-Use Trail
- Hiking Trail
- Nature-based Play Area
- Dog Park
- Refreshments
- Restrooms
- Marina
- Information
- Pedestrian Underpass
- Pedestrian Overpass
- Vehicle Parking
- Transit Station
- Bus Stop
- Stairway or Ramp
- Vehicular Park Access

\* Red icons represent proposed items.







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**Implement the Lilydale Master Plan**

Implement the community driven master plan that includes road and trail improvements, upgraded parking and boat launch facilities, environmental restoration and areas for passive recreation around Pickerel Lake.

**Connect the park by improving trails**

Improve existing regional trail connections from the Big River Trail to the west to Harriet Island, and better connect Cherokee and Lilydale Parks with an improved trail connection from the neighborhoods at the top of the bluff. Add a boardwalk along the lake that provides access while protecting sensitive natural resources.

**Protect sensitive ecological and cultural resources**

Establish a partnership or conservancy that is responsible to protect, provide access to and interpret the fossil beds, the brick yard and other elements of the site's former uses. Develop interpretive programs that reflect Lilydale's legacy. Focus efforts on improving the water quality at Pickerel Lake by treating storm runoff from nearby developed areas.



*Control access to the fossil beds area to limit the removal of fossils and interpret the site as one of the more unique resources in the corridor.*



*Wetlands provide water quality treatment and opportunities for education.*



| Strategies and Projects                                                                                                                            | Agency/Partners         | Est. Cost    | Phasing |
|----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|---------|
| Lilydale Park                                                                                                                                      |                         |              |         |
| Management                                                                                                                                         |                         |              |         |
| Partner with Mendota Heights to develop a stormwater management approach for Pickerel Lake                                                         | MPLA & Mendota Heights  | n/a          |         |
| Study feasibility to protect and enhance natural resources including fossil beds and perched wetlands and cultural resource of historic brickyards | Private Partner         | n/a          |         |
| Work with Dakota people to provide interpretive signage and native language place names                                                            |                         | n/a          |         |
|                                                                                                                                                    |                         |              |         |
| Design and Construction                                                                                                                            |                         |              |         |
| Road and Trails                                                                                                                                    |                         |              |         |
| Provide improved trail connection from Lilydale to Cherokee Park through Brick Yard                                                                |                         | \$ 350,000   | short   |
| Add trail spur including boardwalk connecting gathering area at Pickerel Lake to the Brick Yard and Fossil Grounds                                 |                         | \$ 200,000   | med     |
| Improve the off-road regional trail through Lilydale Park to the Big River Trail                                                                   |                         | \$ 500,000   | med     |
|                                                                                                                                                    |                         |              |         |
| Structures and Related Improvements                                                                                                                |                         |              |         |
| Implement signage and wayfinding systems                                                                                                           |                         | \$ 40,000    | short   |
|                                                                                                                                                    |                         |              |         |
| Recreation Improvements/Use areas                                                                                                                  |                         |              |         |
| Improve the canoe/kayak landing area as part of river trail                                                                                        |                         | \$ 25,000    | short   |
| Provide fishing pier at Pickerel Lake                                                                                                              |                         | \$ 50,000    | short   |
|                                                                                                                                                    |                         |              |         |
| Landscape and Site Improvements                                                                                                                    |                         |              |         |
| Provide selective vegetation management to remove invasives, restore native plants and provide viewing opportunities                               |                         | \$ 60,000    | short   |
| Provide stormwater treatment at top of bluff at Ivy Creek                                                                                          | Mendota Heights         | \$ 500,000   | med     |
| Restore wetland areas and utilize for stormwater treatment in non-sensitive areas around Pickerel Lake                                             | Mendota Heights         | \$ 2,000,000 | med     |
|                                                                                                                                                    |                         |              |         |
| Cherokee Park                                                                                                                                      |                         |              |         |
| Design and Construction                                                                                                                            |                         |              |         |
| Road and Trails                                                                                                                                    |                         |              |         |
| Extend the bluff top regional trail from city limits to Big Rivers Trail                                                                           | MnDOT & Mendota Heights | \$ 400,000   | short   |
|                                                                                                                                                    |                         |              |         |
| Structures and Related Improvements                                                                                                                |                         |              |         |
| Renovate existing restrooms, picnic and playground structures                                                                                      |                         | \$ 500,000   | med     |
| Implement signage and wayfinding systems                                                                                                           |                         | \$ 40,000    | med     |
|                                                                                                                                                    |                         |              |         |
| Recreation Improvements/Use areas                                                                                                                  |                         |              |         |
| Restore scenic overlooks with seating and interpretive signs                                                                                       |                         | \$ 75,000    | short   |
|                                                                                                                                                    |                         |              |         |
| Landscape and Site Improvements                                                                                                                    |                         |              |         |
| Provide stormwater treatment on top of bluff and in non-sensitive habitat areas in the Park                                                        | Watershed District      | \$ 500,000   | med     |
| Remove invasive species of vegetation and utilize selective vegetation management to enhance overlook viewing opportunities                        |                         | \$ 50,000    | short   |
|                                                                                                                                                    |                         |              |         |

Summary Plan Recommendations:

Lilydale Regional Park

The approved master plan for Lilydale Regional Park provides details for park development, including enhancement of natural areas, development of a more robust trail network and better neighborhood connections. The plan includes a park access road and parking improvements, an upgraded motorized boat launch area, and day use areas for nature-based recreation such as picnicking and an off-leash dog park.

Master plan recommendations are supplemented by providing for protection and interpretation of the fossil beds and preservation of the historic Brick Yard ruin, along with an improved trail connection to Cherokee Park.

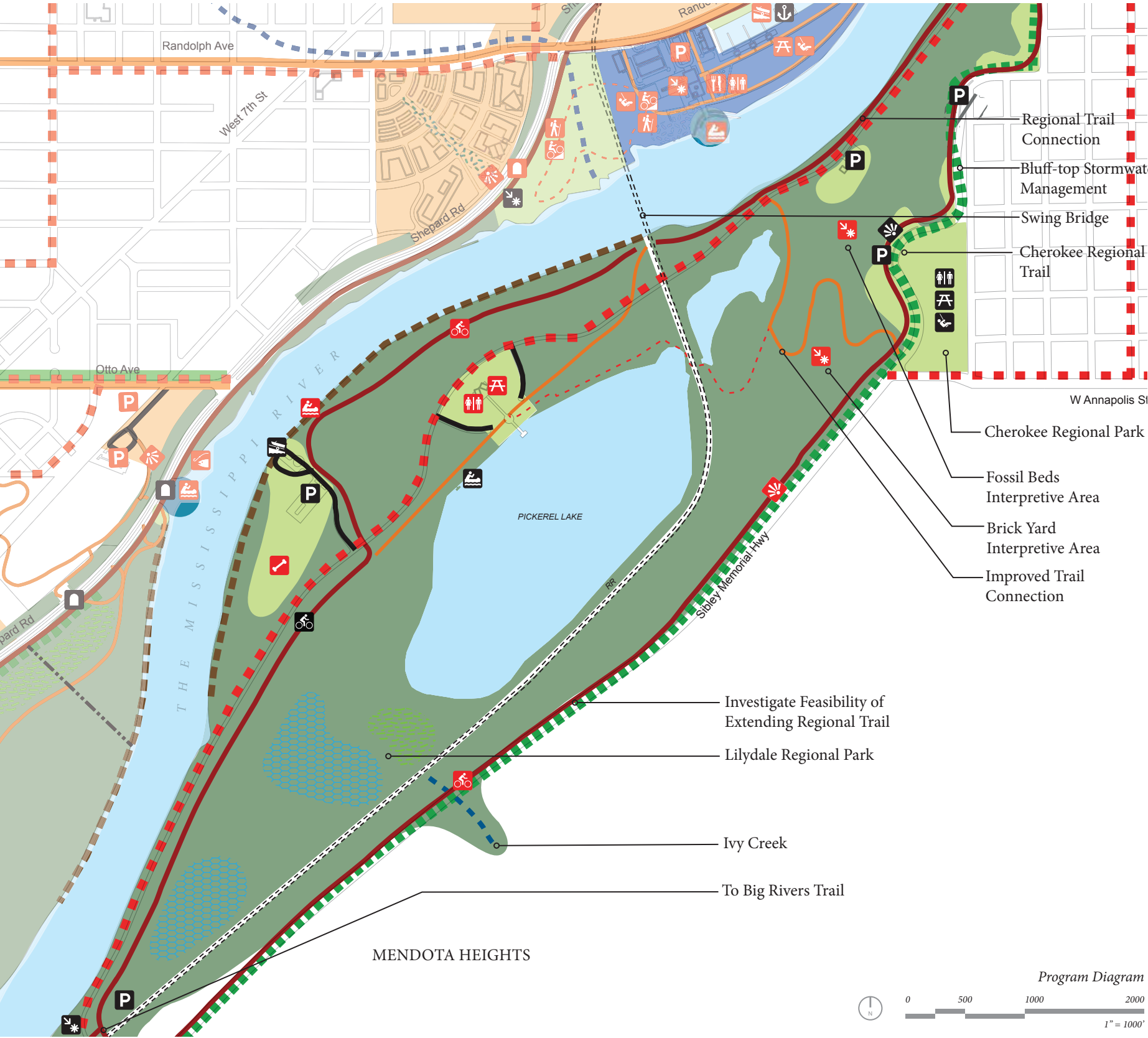
- Protect the fossil beds and related geologic and cultural resources. Develop a trail or boardwalk that allows limited access and interpretation without damaging the resource.
- Utilize a partnership, nonprofit or other entity to provide programming that protects and interprets the fossil beds, brick yard and provide ongoing stewardship as part of that program.
- Establish an improved trail link from Lilydale to Cherokee Park. Review options for additional trailhead parking in both parks and an accessible route connecting them.
- Improve water quality in Pickerel Lake by evaluating the potential for restoration of Ivy Creek, with improved conveyance and treatment of local storm water flows from historic bluff top discharge points, and wetland restoration and additional stormwater treatment areas around the lake.

Cherokee Regional Park

Cherokee Regional Park provides for neighborhood recreational use.

- Manage vegetation to open view opportunities of downtown and the Valley from the top of the bluff in Cherokee Park.
- Evaluate the current levels of recreational use in landscaped islands and in small difficult to maintain turf areas. Naturalize areas receiving little recreational use.



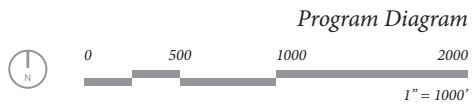


key map

- |                                |                            |
|--------------------------------|----------------------------|
| <b>Water Resources</b>         | <b>Roads &amp; Trails</b>  |
| Wetland Restoration            | Regional Trail             |
| Redevelopment Treatment Area   | Park or Local Trail        |
| Park Treatment Area            | Rustic Trail at Airport    |
| Bluff Treatment Area           | Rustic Trail               |
| Creek Restoration Opportunity  | On-Road Bikeway            |
| Shoreline Restoration          | Multimodal Park Access St. |
| <b>Park Types</b>              | Park Access Road           |
| Gathering Place                | <b>Special Features</b>    |
| Active Nature Based Recreation | River Balcony / Riverwalk  |
| Natural Areas                  | Grand Round Extension      |
| Natural Preserves              | Green Connection           |
| <b>Land Use</b>                | Commuter Rail Corridor     |
| Existing Industrial            | Light Rail Corridor        |
| Mixed-Use                      | County Owned Park Land     |

- |                        |                       |
|------------------------|-----------------------|
| Camping                | Dog Park              |
| Picnic                 | Refreshments          |
| Wildlife Viewing       | Restrooms             |
| Scenic Overlook        | Marina                |
| Point of Interest      | Information           |
| Fishing Access         | Pedestrian Underpass  |
| Canoe/Kayak Landing    | Pedestrian Overpass   |
| Motorized Boat Launch  | Vehicle Parking       |
| Swimming Area          | Transit Station       |
| Mountain Biking Trail  | Bus Stop              |
| Multi-Use Trail        | Stairway or Ramp      |
| Hiking Trail           | Vehicular Park Access |
| Nature-based Play Area |                       |

\* Red icons represent proposed items.



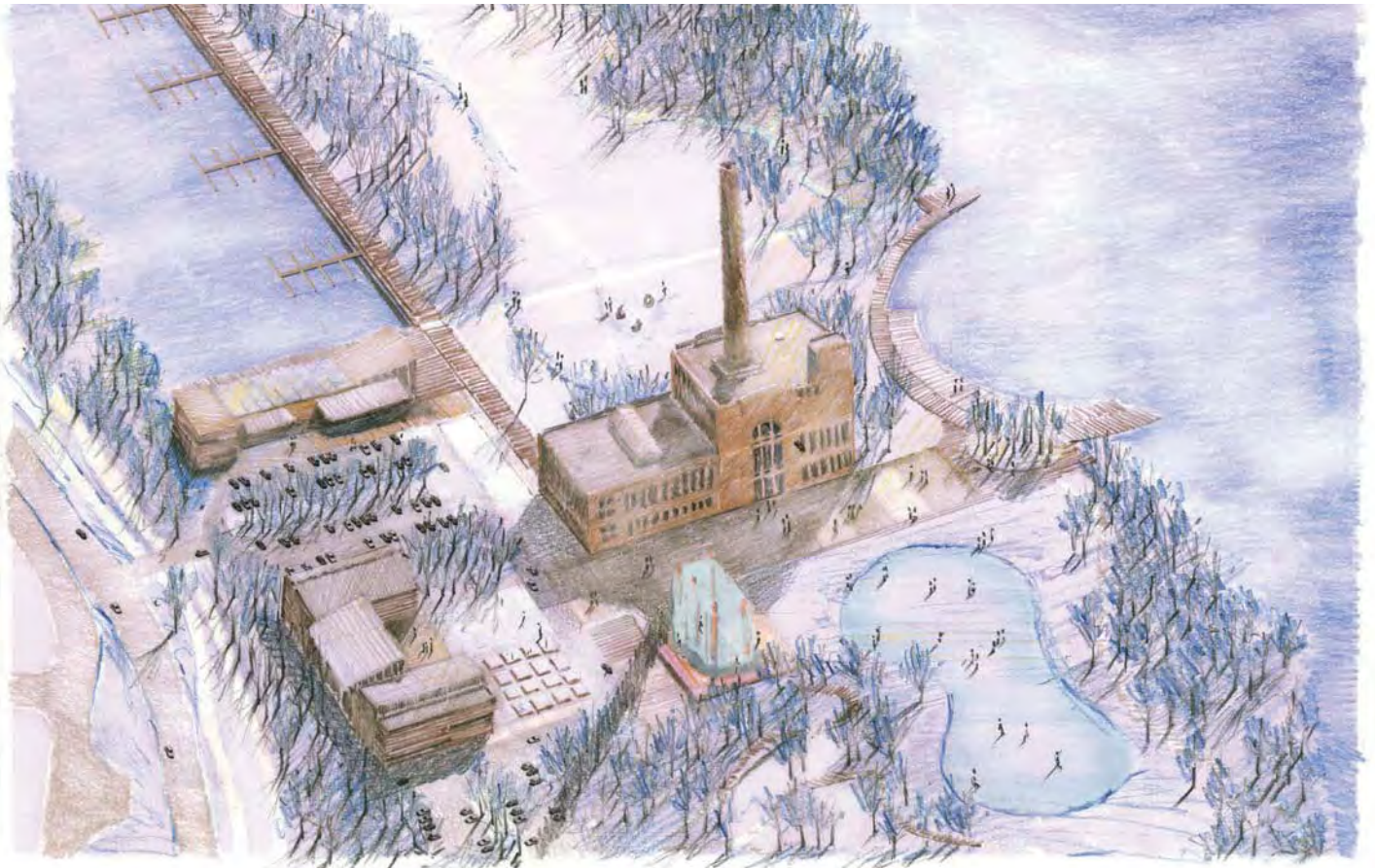


# Island Station Vision

Island Station will become a year-round active use destination. The historic, iconic and vacant power plant will be repurposed to bring the arts, environmental and recreation communities together, supported by commercial and residential uses developed by public and private partners. Upon its transformation, Island Station will become an activity center that links neighborhoods to the river and establishes Randolph Avenue as a key connection from the West 7th neighborhood and the larger community of Saint Paul.



Summer activities include festivals and outdoor art exhibits connected with studios in the renovated building. An outdoor café overlooks a climbing wall, mountain-bike skills course and a performance lawn.



Winter activities include cross country skiing, pond skating and ice climbing.

*This plan is a concept only, and is subject to further planning, design and public input.*



LEGEND

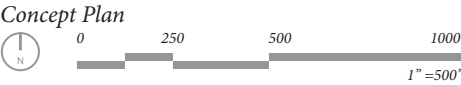
- |                                                     |                                        |
|-----------------------------------------------------|----------------------------------------|
| 1. Marina                                           | 9. Rustic & Mountain Bike Trails       |
| 2. Peninsula Festival Lawn                          | 10. Potential Pedestrian / Bike Bridge |
| 3. Infill Development                               | 11. Fishing Access                     |
| 4. Canoe / Kayak Launch / Small Craft Dock          | 12. Fountain Cave Investigation        |
| 5. Renovated Island Station Building / Outdoor Cafe | 13. Randolph Station Area              |
| 6. Climbing Wall / Ice Wall                         | 14. Samuel H. Morgan Regional Trail    |
| 7. Performance Lawn / Pond Hockey                   | 15. Shepard Road Regional Trail        |
| 8. Mountain Bike Skills Course                      |                                        |



Inset Plan - High Bridge Park



This plan is a concept only, and is subject to further planning, design and public input.



Redevelop Island Station to become a center for river-oriented arts and leisure activities

The peninsula on which the old Island Station power plant is located will be transformed, through a public-private partnership, into a mixed-use center for adventure, recreation, visitor services, residences, offices, and a community park with public access to the River. The repurposed building can become a center for not-for-profit environmental and art organizations, including the National Park Service regional offices, hotel, restaurants, shops and cafés. Offices can occupy upper floors, while industrial-scale artist’s studios, river-oriented cottage industries and adventure sports activities can occupy the lower and ground levels , attracting people year round.

Utilize redevelopment to link the West 7th Street corridor to the river

Redevelopment of Island Station and the ADM site will provide a major missing piece to provide public access to and along the river between downtown and the Valley reach. Green connections between the peninsula and Shepard Road extend to the neighborhoods and to the West 7th Street business district. Enhanced streetscapes support redevelopment opportunities and pedestrian friendly neighborhood expansion along Randolph Avenue.



Ice Climbing attracts outdoor enthusiasts in the winter.



Outdoor Cafés support economic development and provide a desirable leisure activity.



Ropes Courses are one type of adventure sport that appeals to all ages.



Mountain Bike Skills Courses reduce environmental impact by educating riders



| Strategies and Projects                                                                                                                                                           | Agency/Partners | Est. Cost     | Phasing |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|---------------|---------|
| Island Station Area                                                                                                                                                               |                 |               |         |
| Management                                                                                                                                                                        |                 |               |         |
| Create a master plan for public/private redevelopment of the Island Station site                                                                                                  | Developer       | \$ 200,000    | med     |
| Support public/private redevelopment that provides public amenities and opens the river and adjacent park land to public access                                                   | Developer       | n/a           |         |
| Modify Area Plans for adjacent redevelopment areas to create "green connections" during redevelopment                                                                             | PED             | n/a           |         |
| Acquire private land for river shoreline park expansion west of Island Station as part of site redevelopment                                                                      | ADM             | n/a           |         |
| Work with Port Authority to relocate fleeting areas when feasible                                                                                                                 |                 | n/a           |         |
| Work with Dakota to provide interpretive signage and native language place names                                                                                                  | Dakota Tribe    | n/a           |         |
| Program annual community events such as art shows, outdoor theater and holiday celebrations                                                                                       |                 | n/a           |         |
| Explore the feasibility of developing an interpretive program at Fountain Cave                                                                                                    | Private Partner | n/a           |         |
|                                                                                                                                                                                   |                 |               |         |
| Design and Construction                                                                                                                                                           |                 |               |         |
| Road and Trails                                                                                                                                                                   |                 |               |         |
| Improve entrance road and provide parking for public waterfront use                                                                                                               | Developer       | \$ 500,000    | med     |
| Provide a grade separated pedestrian/bicycle connection from High Bridge Park to the Samuel Morgan Trail                                                                          |                 | \$ 2,500,000  | med     |
| Improve the Samuel Morgan Regional Trail by separating bicycle and pedestrian paths where possible                                                                                |                 | \$ 300,000    | short   |
| Complete Park trail connections between Shepard Road, along Randolph to the High Bridge                                                                                           |                 | \$ 300,000    | long    |
| Create local loop and rustic trails throughout the site with access to the river's edge                                                                                           |                 | \$ 150,000    | short   |
| Develop a mountain bike loop trail and skills course                                                                                                                              |                 | \$ 100,000    | med     |
|                                                                                                                                                                                   |                 |               |         |
| Structures and Related Improvements                                                                                                                                               |                 |               |         |
| Restore Island Station building, provide mixed use and marina support building(s) with redevelopment (Option 1)                                                                   | Developer       | \$ 22,500,000 | long    |
| Demolish all or a portion of the Island Station building and construct new building(s) to house river-oriented arts, leisure, educational and institutional activities (Option 2) | Developer       | \$ 22,500,000 | long    |
| Include marina, support buildings, boat launch facility and pedestrian bridge with redevelopment                                                                                  | Developer       | \$ 10,000,000 | long    |
| Provide covered boat storage for small boats at canoe/kayak landing                                                                                                               |                 | \$ 50,000     | med     |
| Implement Signage and wayfinding systems                                                                                                                                          |                 | \$ 50,000     | med     |
| Include large scale sculpture park as part of redevelopment                                                                                                                       | Developer       | \$ 300,000    | long    |
|                                                                                                                                                                                   |                 |               |         |
| Recreation Improvements/Use areas                                                                                                                                                 |                 |               |         |
| Provide a large public activity area supporting local and regional events                                                                                                         | Developer       | \$ 1,200,000  | med     |
| Add outdoor adventure and recreation facilities such as climbing and climbing wall, skating rink and adventure course                                                             | Developer       | \$ 500,000    | long    |
| Add a Canoe/Kayak landing area                                                                                                                                                    | MNRRRA          | \$ 50,000     | med     |
|                                                                                                                                                                                   |                 |               |         |
| Landscape and Site Improvements                                                                                                                                                   |                 |               |         |
| Restore and revegetate shoreline areas                                                                                                                                            |                 | \$ 1,500,000  | med     |
| Restore stormwater infiltration and mitigate landfill conditions at west side of site                                                                                             |                 | \$ 2,000,000  | med     |
| Provide public park amenities including seating, shade and open lawn activity areas                                                                                               |                 | \$ 850,000    | med     |
| Restore the scenic overlook and bluff landscape along Cliff Street and High Bridge Park                                                                                           |                 | \$ 100,000    | short   |
| Provide access to and interptet the Fountain Cave near Shepard Road and the ADM site                                                                                              |                 |               | med     |

Summary Plan Recommendations:

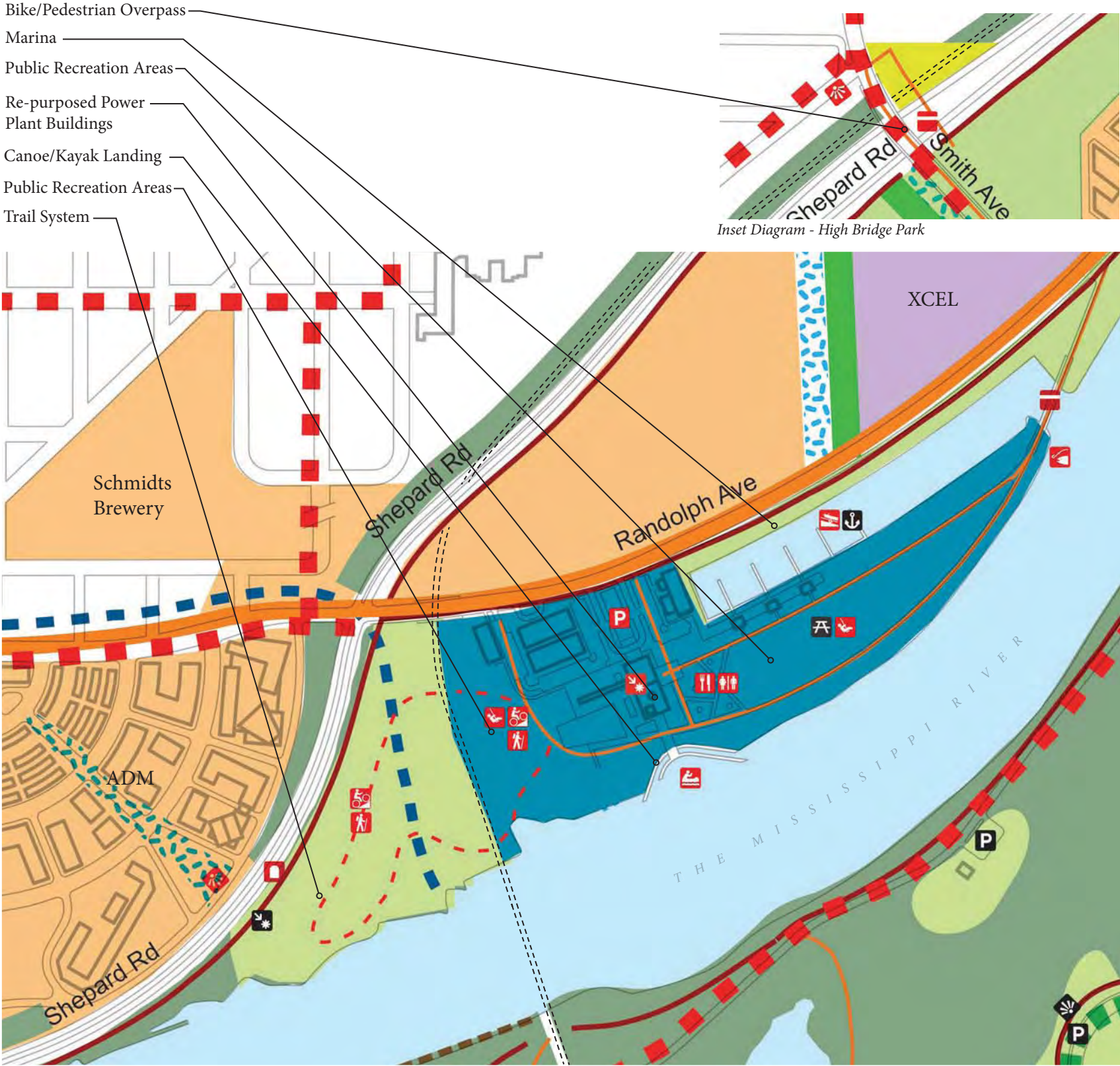
Island Station

Redevelopment of the iconic and vacant Island Station power plant, as well as the peninsula land it occupies, will require cooperation of the private entities that currently own it. A public-private partnership could allow this area to become a mixed-use destination for outdoor river oriented recreation, art and environmental organizations. As a regional office for the National Park Service it would be a primary point of entry for visitors to experience the Great River Passage. Recommended facilities include river park improvements, river boat building, industrial scale art galleries and landscape art, marina and boat launch, and mixed use infill development.

The community park would occupy much of the Peninsula. Small festivals, passive recreational day uses, and access for carry-in boating and fishing along the river's edge, support community wide activities and the needs of nearby neighborhoods.

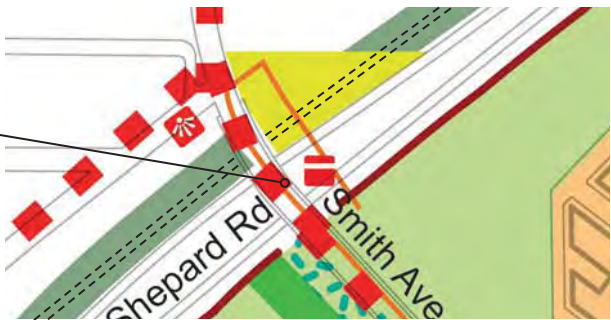
- Transform the site to become a center for river-orientated arts and leisure activities, either through adaptive reuse of all or a portion of the existing vacant power plant building or new construction on-site.
- Integrate public and private uses into the area around the building with outdoor areas for river-oriented active recreation and adventure sports
- Infill with mixed use development on site and along Randolph Avenue
- Develop a Community Park that can host smaller cultural activities and community events
- Provide river edge trail connections from 7th Street West and downtown to the valley and an alternative loop to the Samuel Morgan Trail.
- Provide access to and interpret the Fountain Cave near Shepard road and the ADM site





Program Diagram

0 250 500 1000  
1" = 500'



Inset Diagram - High Bridge Park



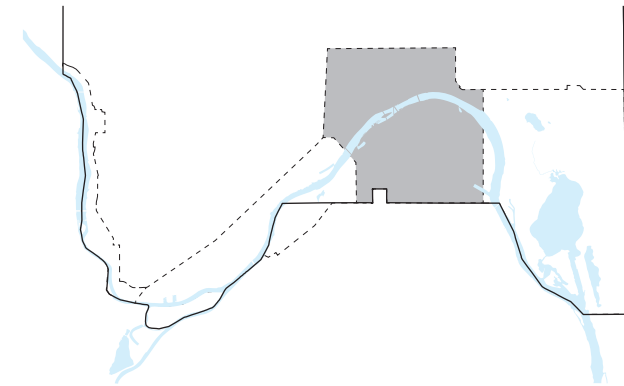
key map

- |                                |                            |
|--------------------------------|----------------------------|
| <b>Water Resources</b>         | <b>Roads &amp; Trails</b>  |
| Wetland Restoration            | Regional Trail             |
| Redevelopment Treatment Area   | Park or Local Trail        |
| Park Treatment Area            | Rustic Trail at Airport    |
| Bluff Treatment Area           | Rustic Trail               |
| Creek Restoration Opportunity  | On-Road Bikeway            |
| Shoreline Restoration          | Multimodal Park Access St. |
| <b>Park Types</b>              | Park Access Road           |
| Gathering Place                | <b>Special Features</b>    |
| Active Nature Based Recreation | River Balcony / Riverwalk  |
| Natural Areas                  | Grand Round Extension      |
| Natural Preserves              | Green Connection           |
| <b>Land Use</b>                | Commuter Rail Corridor     |
| Existing Industrial            | Light Rail Corridor        |
| Mixed-Use                      | County Owned Park Land     |

- |                        |                       |
|------------------------|-----------------------|
| Camping                | Dog Park              |
| Picnic                 | Refreshments          |
| Wildlife Viewing       | Restrooms             |
| Scenic Overlook        | Marina                |
| Point of Interest      | Information           |
| Fishing Access         | Pedestrian Underpass  |
| Canoe/Kayak Landing    | Pedestrian Overpass   |
| Motorized Boat Launch  | Vehicle Parking       |
| Swimming Area          | Transit Station       |
| Mountain Biking Trail  | Bus Stop              |
| Multi-Use Trail        | Stairway or Ramp      |
| Hiking Trail           | Vehicular Park Access |
| Nature-based Play Area |                       |

\* Red icons represent proposed items.





## The Downtown

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The more natural landscapes of the Gorge and the Valley give way to dramatic urban forms of Downtown on the bluffs and the structured river edges on the east bank. On the west side, the geometric lines and engineered flood control levees, along with marinas and smaller-scale commercial buildings bisected by bridges, presents a very different urban river edge character.

Recommendations for the Downtown Reach focus on bringing downtown and the West Side close to the river's edge, creating an urban promenade - a River Balcony and a Levee Riverwalk - that will activate the riverfront and link it to the redeveloping neighborhoods in the river corridor.



**Bring Downtown and the West Side to the river’s edge.**

A continuous publicly accessible edge, on both sides of the river, will be established as part of the anticipated redevelopment of key downtown and West Side properties. Each edge of the river will have a distinctly different character that reinforces the identity of each district, and is supported by complementary mixed-use development. Connections between the river, adjacent neighborhoods and business districts will provide a variety of options for walking, jogging and bicycling circuits along the riverfront.

**Enhance Harriet Island Regional Park, Kellogg, Upper and Lower Landing parks as destinations for regional and neighborhood recreation and leisure.**

Expanding youth-oriented recreation and leisure attractions at Harriet Island will activate the park daily and year-round, while providing much needed regional recreation facilities.

Kellogg Park will be programmed to encourage greater lunch time and early evening activities that take advantage of its dramatic views of the River.

Lower Landing Park will be enhanced to meet the needs of a growing Lowertown neighborhood. A signature bridge connection, linking Bruce Vento Nature Sanctuary to Lower Landing, will form a gateway into the Downtown from Warner Road and connect regional trails from Trout Brook and Phalen Valley to the river.

Extending the Grand Round into downtown, from Dayton’s Bluff, along 4th Street to Kellogg Boulevard, by improving streetscape and signage, will allow this iconic and historic feature to be more connected, visible and integrated into the City’s Park and Parkway system.

*This plan is a concept only, and is subject to further planning, design and public input.*



*Major bridge crossings are an essential part of the City’s identity.*



*The river’s edge is always a popular gathering place.*



*The river’s edge must balance commerce, transportation and redevelopment with recreation and open space.*



*Saint Paul’s urban riverfront is an important hub for both commercial and recreational boating.*



# Harriet Island Regional Park Vision

Harriet Island will be the primary gathering place for Downtown. Providing a riverfront experience that is unique to Saint Paul, this regional park will be expanded to provide year round activities for all ages. At the beginning of the public Levee Riverwalk, with its riverboat restaurants, entertainment venues and marinas, an interactive fountain water feature allows people to touch the water while relaxing or participating in community activities against the dramatic backdrop of the downtown skyline.



A fountain splash pool will help activate Harriet Island Regional Park throughout the summer. The fountain will accommodate large crowds during festivals and events.

*This plan is a concept only, and is subject to further planning, design and public input.*



*This plan is a concept only, and is subject to further planning, design and public input.*

**LEGEND**

- |                                        |                                        |
|----------------------------------------|----------------------------------------|
| 1. Trail Connection to Lilydale        | 14. Levee Trail                        |
| 2. Upper Harbor Marina                 | 15. Wabasha Park Entry                 |
| 3. Fountain Splash Park                | 16. Raspberry Island Event Center      |
| 4. Existing Play Area                  | 17. Ice Rinks / Court Games            |
| 5. Picnicking / Nature-based Play Area | 18. Skate Park / Destination Play Area |
| 6. Event Lawn & Stage                  | 19. City Headhouse                     |
| 7. Canoe / Kayak Loading               |                                        |
| 8. Buff Open Space Connection          |                                        |
| 9. Infill Development                  |                                        |
| 10. Levee Riverwalk Promenade          |                                        |
| 11. Marina/ Shop/ Café/ Public Dock    |                                        |
| 12. Lower Harbor Marina                |                                        |
| 13. Improved Parking                   |                                        |



**Activate Harriet Island Regional Park by integrating youth-oriented regional recreation facilities.**

As a Gathering Place, Harriet Island Regional Park will remain one of the City’s premier locations for year-round recreation, events and access to the River. The addition of the Urban Promenade and a softer river edge, will enhance public access by providing cafés and places where residents and visitors can go to socialize, be entertained, or just “hang out”.

The park’s current use as a venue for large festivals will be supplemented to encourage more daily use for youth and family-oriented activities. A fountain and splash pool near the existing playground will become a major destination for families to cool off in the summer. An expansion of the park will provide a stronger connection to Wabasha Street and an area to develop a regional skateboard and court sports facility. Other youth-oriented activities might include all-season tournament rinks for ice and roller hockey, and facilities for other sports activities.



*The fountain and splash pool connects people to the river*



*Ice skating activates the park in the winter*



*Natural quantities can be an integral part of the promenade edge.*



| Strategies and Projects                                                                                                  | Agency/Partners      | Est. Cost    | Phasing |
|--------------------------------------------------------------------------------------------------------------------------|----------------------|--------------|---------|
| Harriet Island, Raspberry Island and Upper Landing                                                                       |                      |              |         |
| Management                                                                                                               |                      |              |         |
| Determine potential for not-for profit or public/private organization(s) to manage regional active recreation programs   |                      | n/a          | med     |
| Acquire adjacent land to expand Harriet Island for regional active recreation uses                                       |                      | n/a          |         |
| Prepare a parking study to determine needs and solutions for proposed program increases with neighborhood input          |                      | \$ 50,000    |         |
| Expand civic, recreation, leisure, art, event and entertainment programming in parks along the river                     |                      | n/a          |         |
| Develop ongoing agreements to provide support for recreational boating services and facilities along the Levee Riverwalk | SPYC, Port Authority | n/a          |         |
| Integrate public art into all design and programming                                                                     | Arts                 | n/a          |         |
| Work with Dakota to provide interpretive signage and native language place names                                         | Dakota Tribe         | n/a          |         |
|                                                                                                                          |                      |              |         |
| Design and Construction                                                                                                  |                      |              |         |
| Road and Trails                                                                                                          |                      |              |         |
| Enhance pedestrian and bike connections from Wabasha to Levee Riverwalk                                                  |                      | \$ 75,000    | short   |
| Provide additional parking at Harriet Island to support added programming                                                |                      | \$ 350,000   | short   |
| Improve Park trails along the levee and Water Street between Wabasha and Lilydale Regional Park                          |                      | \$ 150,000   | short   |
|                                                                                                                          |                      |              |         |
| Structures and Related Improvements                                                                                      |                      |              |         |
| Provide small boat storage facilities for non-motorized boats                                                            |                      | \$ 50,000    | short   |
| Implement signage and wayfinding systems and improve park visibility from Wabasha Bridge and downtown                    |                      | \$ 75,000    | short   |
|                                                                                                                          |                      |              |         |
| Recreation Improvements/Use areas                                                                                        |                      |              |         |
| Add a regional destination water activity fountain park                                                                  |                      | \$ 750,000   | short   |
| Add regional destination active use facilities such as a skate park and skating rinks                                    |                      | \$ 1,500,000 | med     |
| Improve canoe landing near the upper harbor to serve the Canoe Trail                                                     |                      | \$ 50,000    | short   |
| Improve marinas to accommodate public use, riverboat cafes and restaurants on the Promenade                              |                      | \$ 500,000   | med     |
|                                                                                                                          |                      |              |         |
| Landscape and Site Improvements                                                                                          |                      |              |         |
| Where possible redesign river shoreline to increase revegetation                                                         | DNR                  | \$ 250,000   | med     |
| Remove invasive vegetation, restore native plants and manage vegetation at overlook view opportunities                   |                      | \$ 50,000    | short   |
| Improve shoreline conditions and river access for recreational boating                                                   | SPYC, Port Authority | \$ 200,000   | med     |
|                                                                                                                          |                      |              |         |

Summary Plan Recommendations:

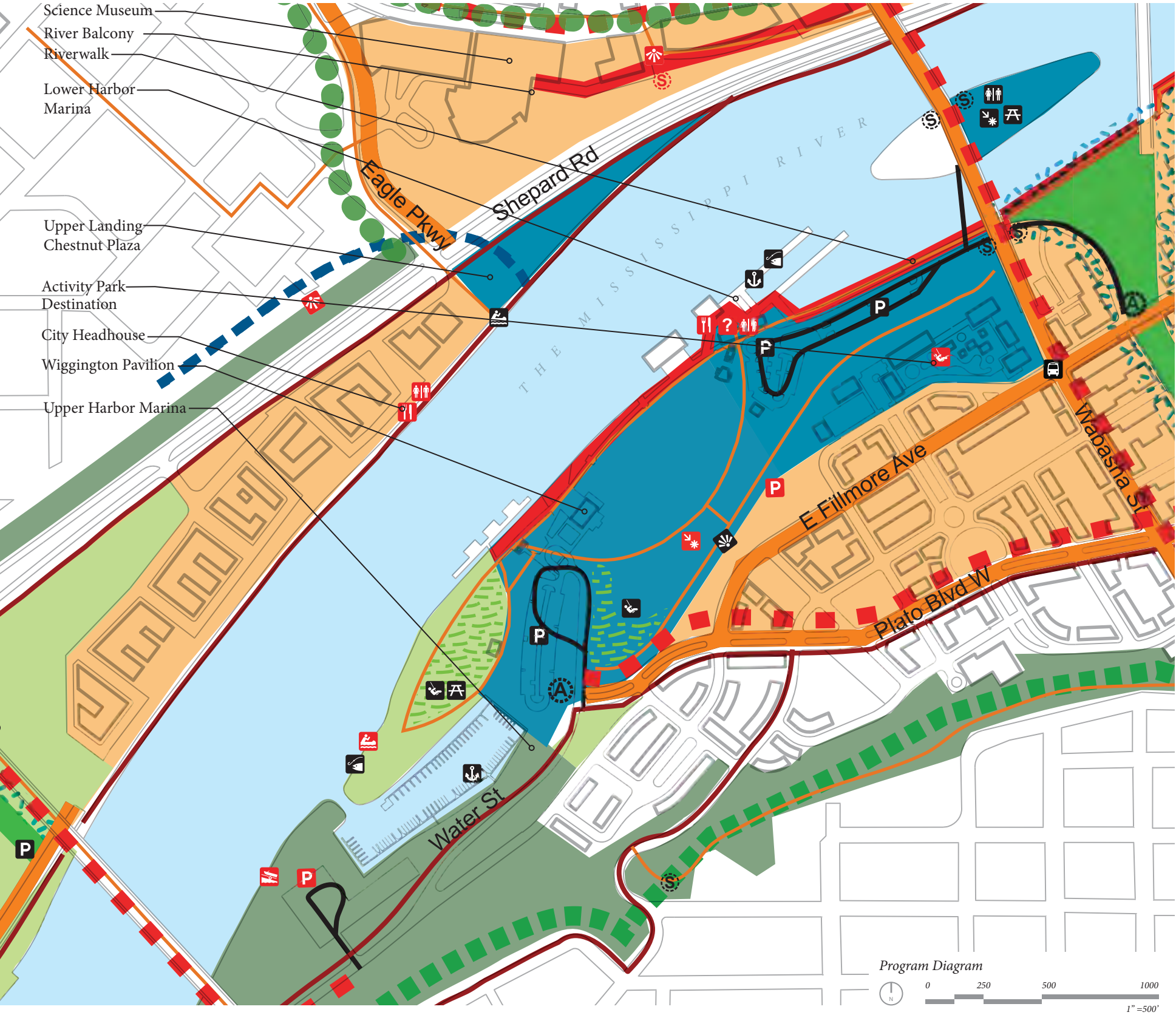
Harriet Island

The current use of Harriet Island Regional Park as a venue for large festivals will be expanded with the addition of active, youth-oriented recreation destinations that attract people from throughout the City on a more regular basis.

To accommodate the expansion of facilities, and to make the park more visible to visitors, land area between the Wabasha Street bridge and the park could be acquired, and some of the more underutilized areas of the park can be developed to include additional family and youth-oriented programs.

- Investigate the feasibility of acquiring land south of the existing levee for the development of a regional recreational facility that includes a skateboard park, roller hockey, court games, and other youth-oriented recreation activities.
- Develop a zero depth fountain and splash park along the levee, near the existing playground.
- Enhance and expand public and private visitor facilities at the marina.
- Identify, review and mitigate potential neighborhood impacts of proposed new programs at the park. .





key map

- Water Resources**
- Wetland Restoration
  - Redevelopment Treatment Area
  - Park Treatment Area
  - Bluff Treatment Area
  - Creek Restoration Opportunity
  - Shoreline Restoration
- Park Types**
- Gathering Place
  - Active Nature Based Recreation
  - Natural Areas
  - Natural Preserves
- Land Use**
- Existing Industrial
  - Mixed-Use
- Roads & Trails**
- Regional Trail
  - Park or Local Trail
  - Rustic Trail at Airport
  - Rustic Trail
  - On-Road Bikeway
  - Multimodal Park Access St.
  - Park Access Road
- Special Features**
- River Balcony / Riverwalk
  - Grand Round Extension
  - Green Connection
  - Commuter Rail Corridor
  - Light Rail Corridor
  - County Owned Park Land

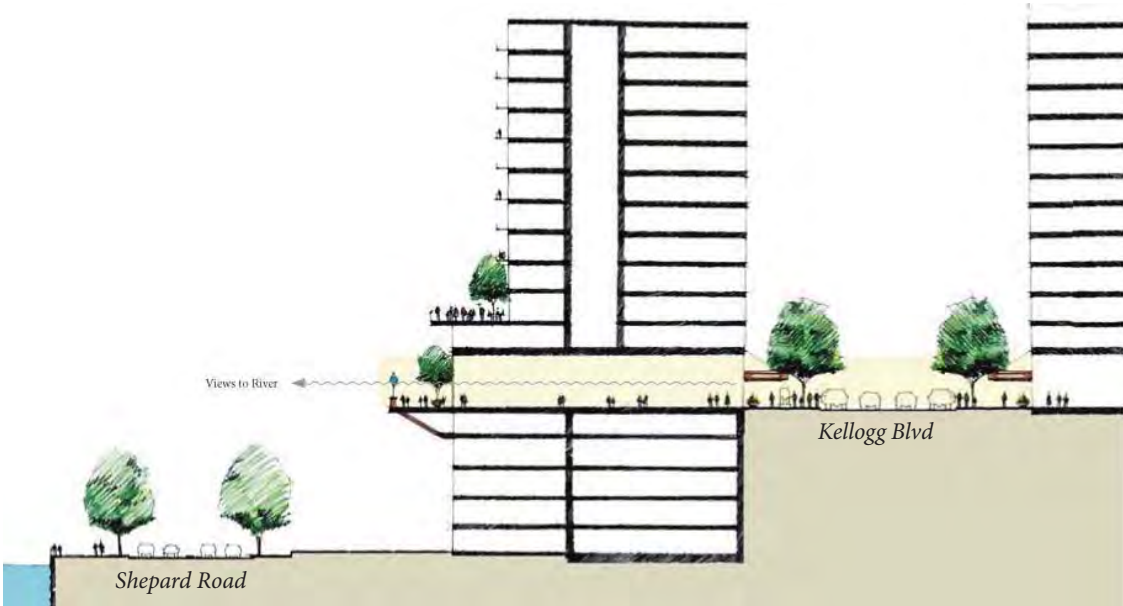
- Camping
- Picnic
- Wildlife Viewing
- Scenic Overlook
- Point of Interest
- Fishing Access
- Canoe/Kayak Landing
- Motorized Boat Launch
- Swimming Area
- Mountain Biking Trail
- Multi-Use Trail
- Hiking Trail
- Nature-based Play Area
- Dog Park
- Refreshments
- Restrooms
- Marina
- Information
- Pedestrian Underpass
- Pedestrian Overpass
- Vehicle Parking
- Transit Station
- Bus Stop
- Stairway or Ramp
- Vehicular Park Access

\* Red icons represent proposed items.



# Downtown and Kellogg Boulevard Vision

Downtown Saint Paul’s proximity to the river provides a unique opportunity to create a strong link between the City and the River. The River Balcony will contribute to the economic vitality of Downtown and extend community life to the edge of the River. It will be comprised of a series of parks, linked by continuous broad pedestrian walkways that bring the City to the top of the bluff and the edge of the River.



Section View - Downtown River Balcony along the Kellogg bluff west of St. Peter Street.

*This plan is a concept only, and is subject to further planning, design and public input.*

*The River Balcony, proposed as a condition of the redevelopment of buildings along the bluff between the Science Museum and Union Depot, will create a dramatic public promenade linking key Downtown destinations. The balcony’s restaurants, offices, shops, and gathering places will overlook the river.*



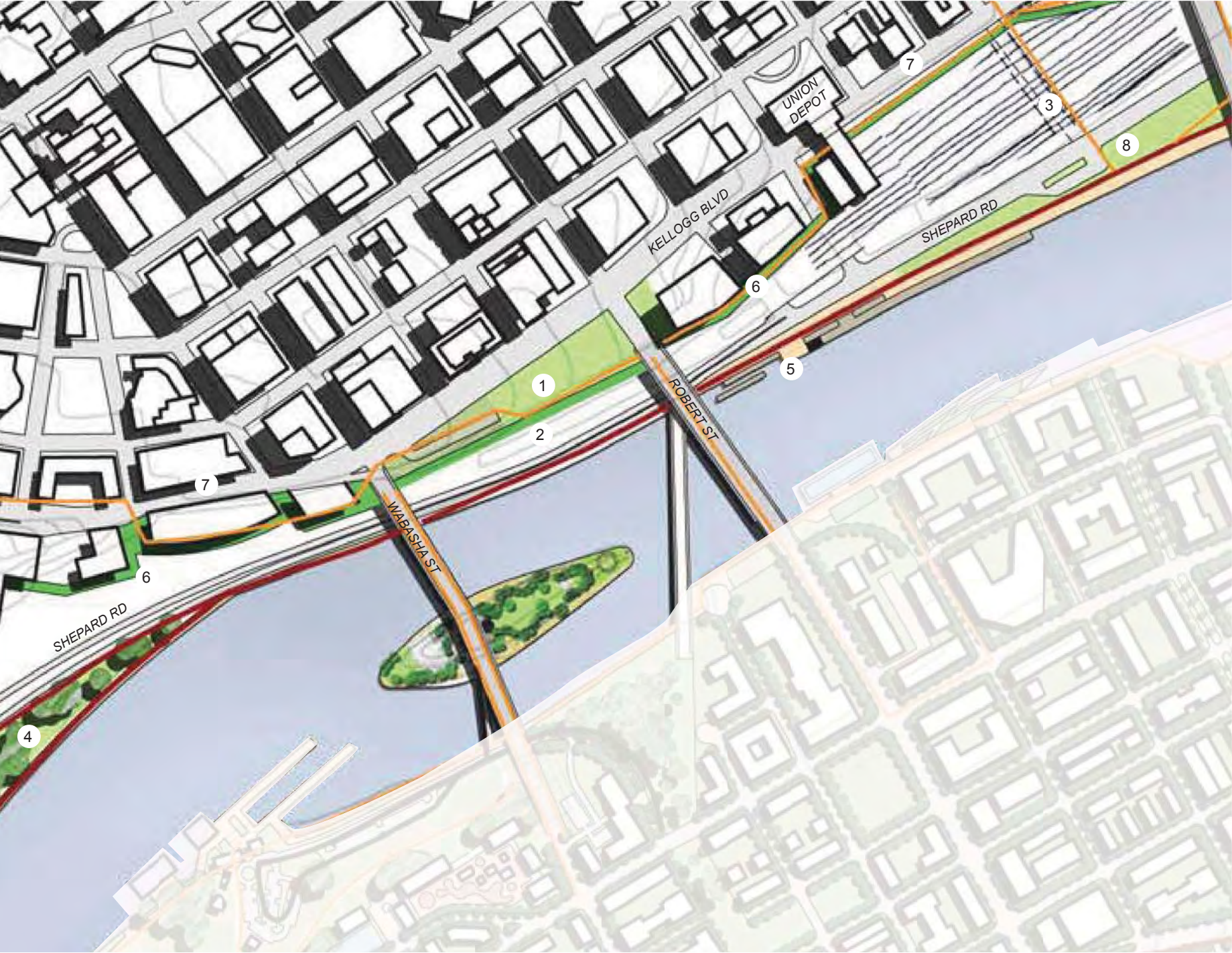
*East side River edge at upper landing now: Rip rap banks provide necessary armoring against flooding and commercial River traffic.*



*East side River edge in the future: Over time, replace riprap as part of ongoing maintenance operations with terraced stone or large concrete blocks to allow River access and infill plantings protected from River scour.*



*This plan is a concept only, and is subject to further planning, design and public input.*



**LEGEND**

- |                                |                      |                              |
|--------------------------------|----------------------|------------------------------|
| 1. Kellogg Mall Park           | 4. Upper Landing     | 7. The Grand Round Extension |
| 2. Balcony Overlook            | 5. Lambert's Landing | 8. Lower Landing             |
| 3. Broadway / Lowertown Access | 6. River Balcony     |                              |

**Create a River Balcony along the Downtown edge**

Downtown, the urban promenade takes the form of a continuous River Balcony that links bluffsides redevelopment sites between West 7th Street and Lowertown. Redevelopment of vacant and underutilized buildings, such as the former County Detention Center and County buildings, will allow for the creation of a dramatic public riverfront edge with Kellogg Mall Park at its center. Along the edge of Downtown, physical and visual connections to the river will be dramatically improved by incorporating overlooks, and public stairs and elevators at buildings and bridges along the bluff. With panoramic views from a series of “outdoor rooms,” the River Balcony will provide a great year-round destination for shopping, lunch or to relax with friends after a concert or sporting event.

**Improve Kellogg Boulevard and Kellogg Mall Park to provide stronger connections to Downtown.**

Improving the urban design of Kellogg Boulevard as an extension of the Grand Round, will support access to Kellogg Mall Park and the River Balcony. By improving the streetscape and intersections to be more pedestrian and bicycle friendly, Kellogg Boulevard will allow safer and easier access from Downtown, and attract weekday workers as well as visitors and tourists to the river overlooks. Seasonal outdoor cafés, such as restaurant trucks, and lunchtime and evening entertainment, will draw people to the park on a daily basis and year round.



*Kellogg Boulevard currently forms a barrier between the river and Downtown.*



*Paving and crosswalks similar to the pedestrian zone at Rice Park can enhance Kellogg's streetscape.*



| Strategies and Projects                                                                                                    | Agency/Partners      | Est. Cost    | Phasing |
|----------------------------------------------------------------------------------------------------------------------------|----------------------|--------------|---------|
| Downtown Riverfront and Kellogg Mall Park                                                                                  |                      |              |         |
| Management                                                                                                                 |                      |              |         |
| Create a master plan for the Downtown riverfront including the River Balcony, Kellogg Boulevard and Shepard Road           | PED, PW, Design Ctr. | \$ 250,000   | short   |
| Provide a continuous bluff top River Balcony with connections to the riverfront between Union Depot and the Science Museum | Developers           | n/a          | long    |
| Expand civic, recreation, leisure, art, event and entertainment programming in parks along the river                       | Non-profit           | n/a          | short   |
| Support mobile/seasonal food and beverage vendors at Kellogg Mall Park                                                     |                      | n/a          | short   |
|                                                                                                                            |                      |              |         |
| Design and Construction                                                                                                    |                      |              |         |
| Road and Trails                                                                                                            |                      |              |         |
| As part of an extended Grand Round, enhance Kellogg Boulevard streetscape to make it more pedestrian and bicycle friendly  | SPPW                 | \$ 3,000,000 | med     |
| Improve pedestrian and bicycle access to the river at Jackson, Sibley, Union Depot and Broadway                            | SPPW/Metro           | n/a          | short   |
| Improve the connections from Wabasha and Robert Street Bridges to the River Balcony                                        | SPPW                 | n/a          | long    |
| Widen the riverfront trail system to accommodate separate bicycle and pedestrian trails where possible                     |                      | \$ 500,000   | short   |
| Preserve options for making future connection across the river by water taxi or passenger ferry                            | Port Authority       | n/a          | long    |
|                                                                                                                            |                      |              |         |
| Structures and Related Improvements                                                                                        |                      |              |         |
| Implement signage and wayfinding systems                                                                                   |                      | \$ 75,000    | short   |
| As part of the River Balcony include accessible connections to the river at Market St, Wabasha, Robert St and Union Depot  |                      | n/a          | long    |
|                                                                                                                            |                      |              |         |
| Recreation Improvements/Use areas                                                                                          |                      |              |         |
| Improve the riverfront at Lambert's Landing to interpret its history and accommodate riverboat access                      | Port Authority       | \$ 500,000   | med     |
| Provide scenic overlooks at (3) locations along the top of bluff                                                           |                      | \$ 150,000   | med     |
|                                                                                                                            |                      |              |         |
| Landscape and Site Improvements                                                                                            |                      |              |         |
| Add streetscape and landscape improvements along Shepard and Warner Roads and the river front trail                        |                      | \$ 500,000   | med     |
|                                                                                                                            |                      |              |         |

Summary of key plan recommendations:

The Downtown Edge and the River Balcony

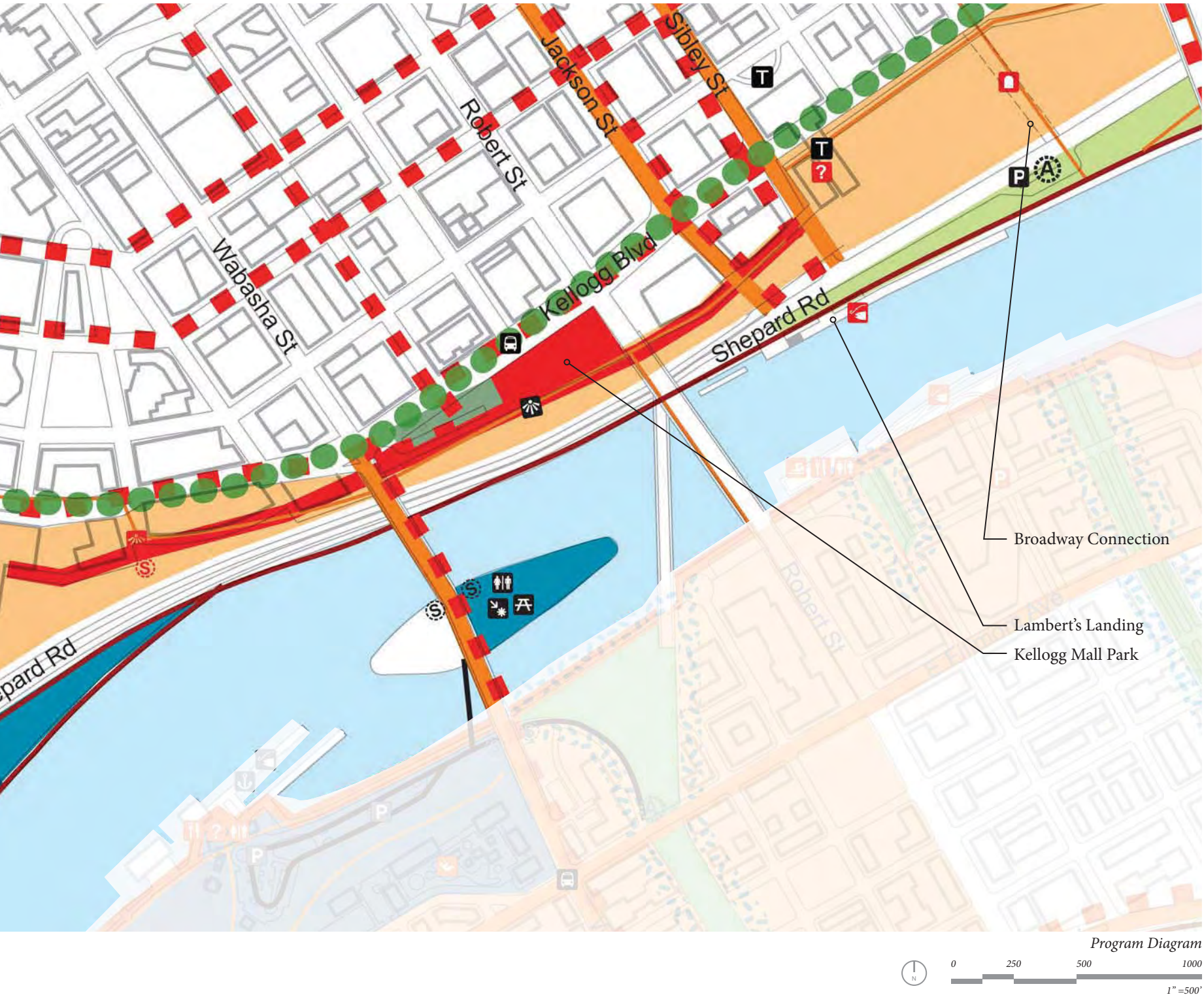
A continuous Urban Promenade on the Downtown edge follows the top of the bluff that links Union Depot to the Kellogg Boulevard and West 7th Street business area. The River Balcony will create a continuous connection from the proposed public edge in Lowertown, connecting through Union Depot to Kellogg Mall Park and on to the Science Museum, completing the extension of the Grand Round through Downtown.

Kellogg Mall Park

Kellogg Mall Park will become the centerpiece of the River Balcony, activated by daily lunchtime vendors and early evening entertainment programming. Kellogg Boulevard would be modified to create a great streetscape that supports stronger pedestrian connections into Downtown, and a place in the Grand Round system.

- Collaborate with landowners, businesses and cultural institutions to create the River Balcony as part of the redevelopment of vacant and underutilized buildings along the bluff.
- Utilize redevelopment to provide vertical links between Kellogg Boulevard, the River Balcony and the regional trails along the east side riverfront.
- Activate Kellogg Mall Park through increased daily activity such as food trucks and entertainment programming.
- Create better pedestrian linkages by improving intersections and signal timing along Kellogg Boulevard, and by supporting pedestrian scale redevelopment between Downtown and the River Balcony.
- Enhance Kellogg Boulevard and link it to the Grand Round via 4th Street and Eagle Parkway.
- Create better pedestrian connections on the existing street grid to link Downtown and Lowertown to the River at Jackson, Sibley and Broadway Streets.





key map

- |                                |                            |
|--------------------------------|----------------------------|
| <b>Water Resources</b>         | <b>Roads &amp; Trails</b>  |
| Wetland Restoration            | Regional Trail             |
| Redevelopment Treatment Area   | Park or Local Trail        |
| Park Treatment Area            | Rustic Trail at Airport    |
| Bluff Treatment Area           | Rustic Trail               |
| Creek Restoration Opportunity  | On-Road Bikeway            |
| Shoreline Restoration          | Multimodal Park Access St. |
| <b>Park Types</b>              | Park Access Road           |
| Gathering Place                | <b>Special Features</b>    |
| Active Nature Based Recreation | River Balcony / Riverwalk  |
| Natural Areas                  | Grand Round Extension      |
| Natural Preserves              | Green Connection           |
| <b>Land Use</b>                | Commuter Rail Corridor     |
| Existing Industrial            | Light Rail Corridor        |
| Mixed-Use                      | County Owned Park Land     |

- |                        |                       |
|------------------------|-----------------------|
| Camping                | Dog Park              |
| Picnic                 | Refreshments          |
| Wildlife Viewing       | Restrooms             |
| Scenic Overlook        | Marina                |
| Point of Interest      | Information           |
| Fishing Access         | Pedestrian Underpass  |
| Canoe/Kayak Landing    | Pedestrian Overpass   |
| Motorized Boat Launch  | Vehicle Parking       |
| Swimming Area          | Transit Station       |
| Mountain Biking Trail  | Bus Stop              |
| Multi-Use Trail        | Stairway or Ramp      |
| Hiking Trail           | Vehicular Park Access |
| Nature-based Play Area |                       |

\* Red icons represent proposed items.

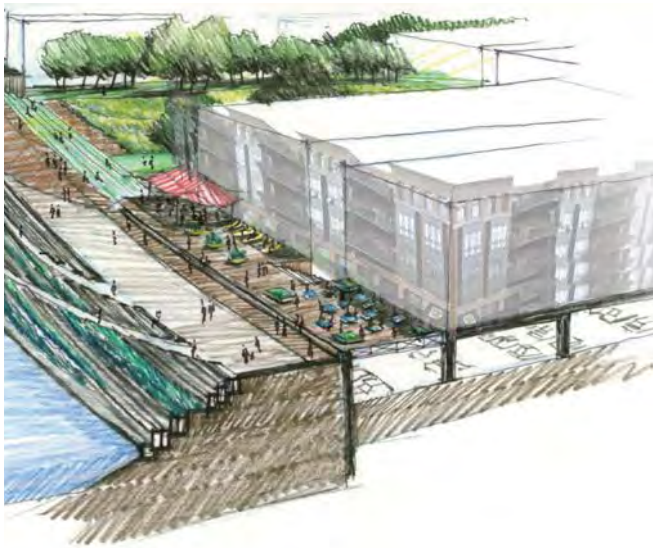


# West Side Levee Riverwalk Vision

The Levee Riverwalk will bring the West Side to the River. Redevelopment of neighborhoods along the levee will embrace a pedestrian urban promenade that extends from Harriet Island Regional Park to the Lafayette Bridge. Like other great waterfronts around the world, broad walkways with riverside cafes will provide views of the river and the downtown skyline year round. Connected to Downtown by streets and bridges, the Levee Riverwalk will become an integral part of a vibrant riverfront community.



*The barge pool and river's edge improvements are shown conceptually as a long-term vision and will be subject to further review with respect to Port Authority needs, barge operations, redevelopment opportunities, and access and parking requirements.*



*Work with the U.S. Army Corps of Engineers to maintain full access to the levee by connecting proposed buildings with a removable semi-public outdoor terrace area connecting to the Levee Riverwalk.*

*This plan is a concept only, and is subject to further planning, design and public input.*





LEGEND

- 1. Swimming Pool Barge  
(location to be determined)
- 2. Levee Riverwalk
- 3. Port Authority Working Docks
- 4. Barge Fleeting Area
- 5. Lafayette Bridge Trail
- 6. Mixed Use Redevelopment
- 7. Green Connections
- 8. Riverwalk Park

This plan is a concept only, and is subject to further planning, design and public input.

Improve the River’s edge to connect new development

The levee along the West Side riverfront will become an urban promenade that encourages public access to the edges of the Mississippi River. A broad Levee Riverwalk, extending from Harriet Island to the Lafayette Bridge, will help establish this area as a riverfront destination. Collaboration between agencies, including the Port Authority and the Army Corps of Engineers, can result in a continuous bridged connection between the levee and new development that allows the promenade to connect adjacent neighborhood redevelopment to the River, while retaining access for the maintenance needs of the levee.

Over time, as the existing rip rap erosion control is replaced as part of regular maintenance operations, terraced stone, repurposed concrete block, and native planting pockets can be incorporated to provide a more attractive, accessible and natural shoreline condition. In the most publicly accessible areas, such as the Levee Riverwalk, the levee can incorporate pedestrian improvements and landscaping that allow the river’s edge to become a public amenity, while still respecting its essential flood control function.

Create neighborhoods connected to the River

Eventual redevelopment of West Side Flats and Riverview Business District will provide opportunities to connect existing and new neighborhoods more directly to the river. Incorporation of continuous public open space along the entire river’s edge with a series of Green Connections that extend into development areas, will allow the West Side to be recognized as a true riverfront community, and a valued and attractive destination for residents, workers and visitors.

The City plans to update the West Side Flats and Riverview Business District master plans in the near future. Updates will include green connections to the river, and the appropriate mix of land uses, open space and connections between West Side developments and the Levee Riverwalk.

Establish Green Connections to the River

Green Connections are linear open spaces that link neighborhoods to the river, creating multiple benefits for the City and its residents. They create much needed open space with trails and views to the river and serve as green infrastructure, conveying and treating the stormwater runoff generated by development, before it reaches the river. By updating the West Side area plans to incorporate Green Connections, the West Side will be more connected to the River.

Explore the intensification and diversification of land uses in the Riverview Industrial Park

As part of the update of the West Side Flats Master Plan and Development Guidelines, the Riverview Industrial Park should be studied for increased density and land use diversity, recognizing that industrial uses are an important job source for the community and an important contributor to the city’s tax base. Link all proposed development to the improved Levee Riverwalk by integrating Green Connections and providing a continuous public edge along the River.



| Strategies and Projects                                                                                                      | Agency/Partners | Est. Cost    | Phasing |
|------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------|---------|
| West Side Riverfront                                                                                                         |                 |              |         |
| Management                                                                                                                   |                 |              |         |
| Update and expand the West Side Flats Master Plan to be consistent with the Great River Passage master plan                  | PED             | \$ 200,000   | short   |
| Support redevelopment that provides continuous public access and amenities along the river's edge                            | PED/Developers  | n/a          |         |
| Acquire park land as available for extension of linear bluff open space                                                      |                 | n/a          |         |
| Program public art and performances along the promenade                                                                      | Arts            | n/a          |         |
| Interpret river industry by providing viewing opportunities along the Levee Riverwalk                                        |                 | n/a          |         |
| Design and Construction                                                                                                      |                 |              |         |
| Road and Trails                                                                                                              |                 |              |         |
| Provide pedestrian & bicycle connections from the Robert and Lafayette Bridges to the Levee Riverwalk                        | SPPW            | \$ 75,000    | med     |
| Extend the regional trail from Harriet Island along Plato Blvd to South Saint Paul and Dakota County                         | RR              | \$ 6,000,000 | short   |
| Provide a continuous Levee Riverwalk from Harriet Island to the Lafayette Bridge trail connection                            | USACE, PA       | \$ 1,500,000 | med     |
| Connect the regional trail along Plato to the Levee Riverwalk and Float Plane Basin                                          | SPPW            | \$ 500,000   | short   |
| Add public boat launch ramp and parking area near Upper Harbor                                                               | DNR             | \$ 200,000   | long    |
| Provide shared use parking for recreational use of the Float Plane basin                                                     | MAC             | \$ 50,000    | short   |
| Restore historic stairs at 2 locations on the West Side bluff                                                                |                 | \$ 2,000,000 | med     |
| Structures and Related Improvements                                                                                          |                 |              |         |
| Provide boat storage facilities for canoes and kayaks at Harriet Island and the Float Plane basin                            | MNRRRA          | \$ 50,000    | short   |
| Implement signage and wayfinding systems                                                                                     |                 | \$ 100,000   | short   |
| Recreation Improvements/Use areas                                                                                            |                 |              |         |
| Provide a swimming pool barge on the river as part of Riverwalk redevelopment                                                | Developer       | \$ 3,000,000 | med     |
| Provide a scenic overlook at the top of restored stairs along the bluff                                                      |                 | \$ 50,000    | med     |
| Identify, restore and interpret Wabasha Cave and other significant caves in the area                                         | Private Partner | n/a          |         |
| Landscape and Site Improvements                                                                                              |                 |              |         |
| Redesign river shoreline where possible to allow revegetation and provide "touch the water" access along the Levee Riverwalk |                 | \$ 1,000,000 | med     |
| Remove invasive vegetation, restore native plants and selectively manage vegetation at overlook view opportunities           |                 | \$ 25,000    | short   |
| Restore shoreline and reopen the float plane basin for shallow draft non-motorized recreational use                          |                 | \$ 500,000   | short   |

Summary Plan Recommendations:

West Side Green Connections

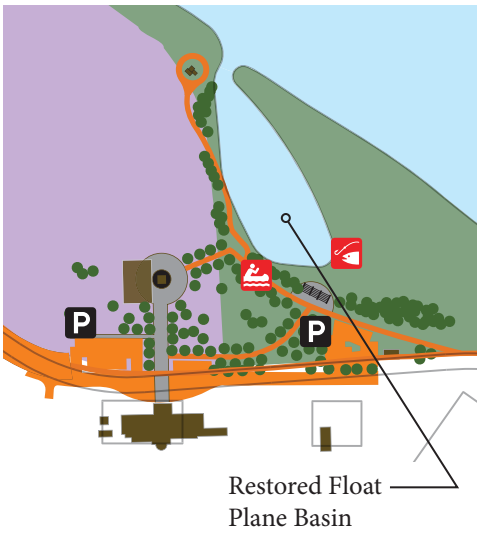
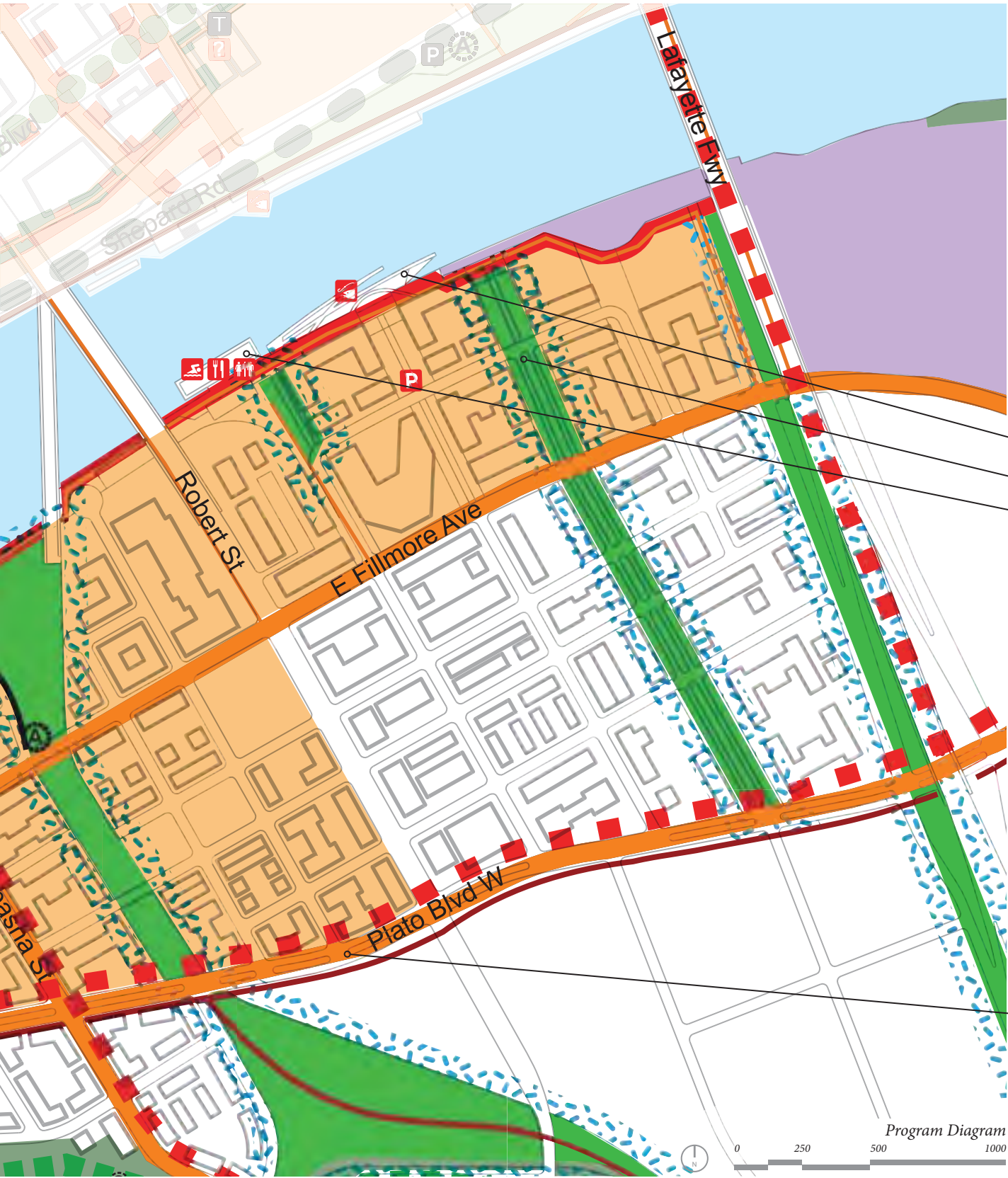
Creating a continuous pedestrian promenade along the river's edge will require careful planning, along with the nurturing of partnerships between private and public entities that can fund, design, build and manage them. The private sector can provide Green Connections to the River through redevelopment, as well as businesses that support river-oriented recreation and leisure with shops, restaurants, cafes, boat services and recreational equipment sales and rentals. Private enterprise can also sponsor entertainment, events and competitions. Highly developed and programmed parks, such as Harriet and Raspberry Islands, can support types of leisure and recreation activities that will activate the area on a daily basis.

Levee Riverwalk

This urban promenade will be developed as part of master planned improvements related to redevelopment of West Side districts. Implementation of the Levee Riverwalk would require the cooperation of various agencies including the Port Authority and the Army Corps of Engineers. Due to the area's economic and ethnic diversity, and its significant historic and cultural resources, it will be critical to further engage the community in the realization of any plans for the West Side.

- Establish a public Levee Riverwalk between Harriet Island and the Lafayette Bridge. Modify the West Side levees as required to include a public promenade with frequent connections to the nearby neighborhoods.
- Identify alternatives to rip rap bank protection that allow public access to the river's edge and ecological restoration of bank areas. Reconstruct the shoreline over time as levee maintenance and improvements are required, and as adjacent neighborhood and infill redevelopment occurs.
- Integrate a series of Green Connections into the West Side neighborhoods, ultimately connecting the river to the bluff. Incorporate enlarged River Park areas along the levee into redevelopment areas to soften the developed edge along the River.
- Modify existing district area plan recommendations to reduce building setback requirements along the levee, create the Levee Riverwalk, and integrate requirements for Green Connections in new developments.
- Expand and restore continuous natural areas along the West Side Flats bluff area between Cherokee Regional Park and the Barge Channel.





key map

- |                                |                            |
|--------------------------------|----------------------------|
| <b>Water Resources</b>         | <b>Roads &amp; Trails</b>  |
| Wetland Restoration            | Regional Trail             |
| Redevelopment Treatment Area   | Park or Local Trail        |
| Park Treatment Area            | Rustic Trail at Airport    |
| Bluff Treatment Area           | Rustic Trail               |
| Creek Restoration Opportunity  | On-Road Bikeway            |
| Shoreline Restoration          | Multimodal Park Access St. |
| <b>Park Types</b>              | Park Access Road           |
| Gathering Place                | <b>Special Features</b>    |
| Active Nature Based Recreation | River Balcony / Riverwalk  |
| Natural Areas                  | Grand Round Extension      |
| Natural Preserves              | Green Connection           |
| <b>Land Use</b>                | Commuter Rail Corridor     |
| Existing Industrial            | Light Rail Corridor        |
| Mixed-Use                      | County Owned Park Land     |

- |                        |                       |
|------------------------|-----------------------|
| Camping                | Dog Park              |
| Picnic                 | Refreshments          |
| Wildlife Viewing       | Restrooms             |
| Scenic Overlook        | Marina                |
| Point of Interest      | Information           |
| Fishing Access         | Pedestrian Underpass  |
| Canoe/Kayak Landing    | Pedestrian Overpass   |
| Motorized Boat Launch  | Vehicle Parking       |
| Swimming Area          | Transit Station       |
| Mountain Biking Trail  | Bus Stop              |
| Multi-Use Trail        | Stairway or Ramp      |
| Hiking Trail           | Vehicular Park Access |
| Nature-based Play Area |                       |

\* Red icons represent proposed items.



# Lower Landing Park Vision

Lower Landing Park will become the riverfront destination for the Lowertown neighborhood. Connected by enhanced crossings of Warner Road at Sibley and Broadway, the riverfront park will be developed to include recreation facilities that meet community needs for active nature based recreation. Park improvements will integrate landform changes to provide views to the river and create a variety of designed spaces, activities and landscape improvements that reflect its unique location at the confluence of the Mississippi River and Phalen valleys.



*This plan is a concept only, and is subject to further planning, design and public input.*



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Concept Plan



LEGEND

- |                                  |                                                         |                                     |
|----------------------------------|---------------------------------------------------------|-------------------------------------|
| 1. Bridge Park Connection        | 7. Native Gardens & Water Quality Wetlands              | 12. Bruce Vento Regional Trail      |
| 2. Lafayette Bridge Trail        | 8. Signature Bridge / Gateway                           | 13. Play and Picnic Area            |
| 3. Indian Mounds Boulevard Trail | 9. Grand Round Extension                                | 14. Samuel H. Morgan Regional Trail |
| 4. Landform / Overlooks          | 10. Troutbrook Regional Trail Connection to Union Depot |                                     |
| 5. Dog Park                      | 11. Bruce Vento Nature Sanctuary                        |                                     |
| 6. Parking                       |                                                         |                                     |

Improve Lower Landing Park as a community park for the Lowertown neighborhood

Lower Landing Park will become an important community asset serving Downtown, Lowertown and Dayton's Bluff. A series of sculpted landforms and natural gardens along Warner Road will mark the transition to Downtown. Overlooks from the top of the landforms will give panoramic views of Downtown and the Working River, and an opportunity to interpret the legacy of river transportation and commerce. A redesigned entry plaza at Broadway, a dog park and a playground and picnic area, will provide amenities to serve the Lowertown neighborhood.



Artist concept provided by Saint Paul Parks & Recreation

Extend the Grand Round into Downtown

4th Street, as it connects Mounds Parkway to Kellogg Boulevard, will be improved to create a continuous parkway-like connection from Indian Mounds Regional Park, through Downtown, reconnecting to the Grand Round at Eagle Parkway and Upper Landing. The Grand Round extension will link existing and new urban parks in Downtown to the City's historic Parkway system.

Link Downtown and Phalen Valley to the River

Improved pedestrian and bicycle connections on Sibley and Broadway from Lowertown will provide safe access to the riverfront for park users. Expanded parking and signage will improve public access to Bruce Vento Nature Sanctuary, Trout Brook, Phalen Valley and the Samuel H. Morgan regional trail systems. The signature bridge connection from Bruce Vento Nature Sanctuary to Lower Landing will provide regional trail access, and become a gateway into Downtown from the south and east.



| Strategies and Projects                                                                                            | Agency/Partners | Est. Cost    | Phasing |
|--------------------------------------------------------------------------------------------------------------------|-----------------|--------------|---------|
| Lower Landing Park                                                                                                 |                 |              |         |
| Management                                                                                                         |                 |              |         |
| Develop a master plan for Lower Landing Park that is consistent with the Great River Passage Master Plan           |                 | \$ 250,000   | short   |
| Program the Parks to support the changing needs of Lowertown                                                       |                 | n/a          |         |
| Develop interpretive programs that focus on the "working river"                                                    |                 | n/a          |         |
|                                                                                                                    |                 |              |         |
| Design and Construction                                                                                            |                 |              |         |
| Road and Trails                                                                                                    |                 |              |         |
| Implement a pedestrian/bicycle trail connection from Lafayette Bridge to the riverfront trail                      |                 | in process   | short   |
| Provide a new parking area that supports Lower Landing with access from Warner Road                                |                 | \$ 500,000   | med     |
| Improve the Samuel Morgan Regional Trail by separating bicycle and pedestrian paths where possible                 |                 | \$ 240,000   | med     |
| Add Park trail loops to support park design and activities                                                         |                 | \$ 200,000   | med     |
| Provide a Park trail connection from Union Depot to Trout Brook along the north side of the Railroad lines         |                 | in process   | short   |
|                                                                                                                    |                 |              |         |
| Structures and Related Improvements                                                                                |                 |              |         |
| Extend Regional trail connection over signature bridge from Lower Landing Park to Bruce Vento Nature Sanctuary     |                 | \$ 7,000,000 | short   |
| Implement signage and wayfinding systems                                                                           |                 | \$ 40,000    | short   |
| Provide a new restroom building to support picnic and playground areas                                             |                 | \$ 300,000   | med     |
| Provide a scenic overlook to the river from landforms in the park                                                  |                 | \$ 250,000   | short   |
|                                                                                                                    |                 |              |         |
| Recreation Improvements/Use areas                                                                                  |                 |              |         |
| Add a Broadway Terrace plaza area for community events                                                             |                 | \$ 1,500,000 | med     |
| Add a dog park and playground that support the Downtown and Lowertown neighborhoods                                |                 | \$ 600,000   | short   |
|                                                                                                                    |                 |              |         |
| Landscape and Site Improvements                                                                                    |                 |              |         |
| Create sculpted landforms with vibrant and colorful natural gardens that incorporate a variety of native plants    |                 | \$ 1,500,000 | med     |
| Redesign river shoreline where possible to allow revegetation and provide "touch the water" access                 |                 | \$ 375,000   | med     |
| Provide and enhance stormwater treatment areas in the park landscape                                               |                 | \$ 500,000   | med     |
|                                                                                                                    |                 |              |         |
| Bruce Vento Nature Sanctuary and Indian Mounds Regional Park                                                       |                 |              |         |
| Management                                                                                                         |                 |              |         |
| Plan for an adaptive re-use of the depot building that complements the park as a gathering place                   |                 | n/a          |         |
| Expand/acquire open space to support an connect to Lowertown as reflected in Lowertown Master Plan                 | PED/Development | n/a          |         |
| Work with the Dakota to provide interpretive signage and native language place names                               |                 | n/a          |         |
|                                                                                                                    |                 |              |         |
| Design and Construction                                                                                            |                 |              |         |
| Road and Trails                                                                                                    |                 |              |         |
| Improve Mounds Boulevard and 4th Street as part of the Grand Round extension through Downtown                      | SPPW            | \$ 1,000,000 | med     |
| Improve Regional trail connections at Lower Landing, Bruce Vento Nature Sanctuary, Phalen Creek and Trout Brook    |                 | \$ 250,000   | short   |
| Improve and expand parking and trail heads                                                                         |                 | \$ 100,000   | med     |
|                                                                                                                    |                 |              |         |
| Structures and Related Improvements                                                                                |                 |              |         |
| Implement signage and wayfinding systems                                                                           |                 | \$ 40,000    | short   |
| Investigate feasibility of relocating transformers to enhance Grand Round extension at Bruce Vento NS              | XCEL            | n/a          | long    |
|                                                                                                                    |                 |              |         |
| Landscape and Site Improvements                                                                                    |                 |              |         |
| Daylight Trout Brook where feasible                                                                                | CRWD            | \$ 1,000,000 | med     |
| Remove invasive species of vegetation and utilize selective vegetation management to enhance viewing opportunities |                 | \$ 30,000    | short   |
| Provide stormwater treatment on top of bluff and in non-sensitive habitat areas in the Park                        | CRWD            | \$ 250,000   | med     |
| Protect, enhance and interpret Wakan-tipi (Carver's Cave)                                                          | Private Partner | n/a          | long    |
|                                                                                                                    |                 |              |         |

Summary Plan Recommendations:

Lower Landing Park

A master plan for the park will be developed to identify facility and program requirements through a public process. It will be necessary to work closely with Public Works and Union Depot to ensure improvements to pedestrian, bicycle and vehicular park access from Lowertown at Sibley, Broadway and Bruce Vento Nature Sanctuary, and to add parking along Warner Road. It will also be necessary to work with the Port Authority and the Corps of Engineers to determine what improvements can occur along the shoreline, especially to improve access to, and interpretation of historic Lambert's Landing.

Recommended park improvements include an entry plaza at Broadway, improved access to the riverfront at Lambert's Landing, significant landform designs that support overlooks with river views, interpretation, a dog park, playground, picnic area and park support facilities.

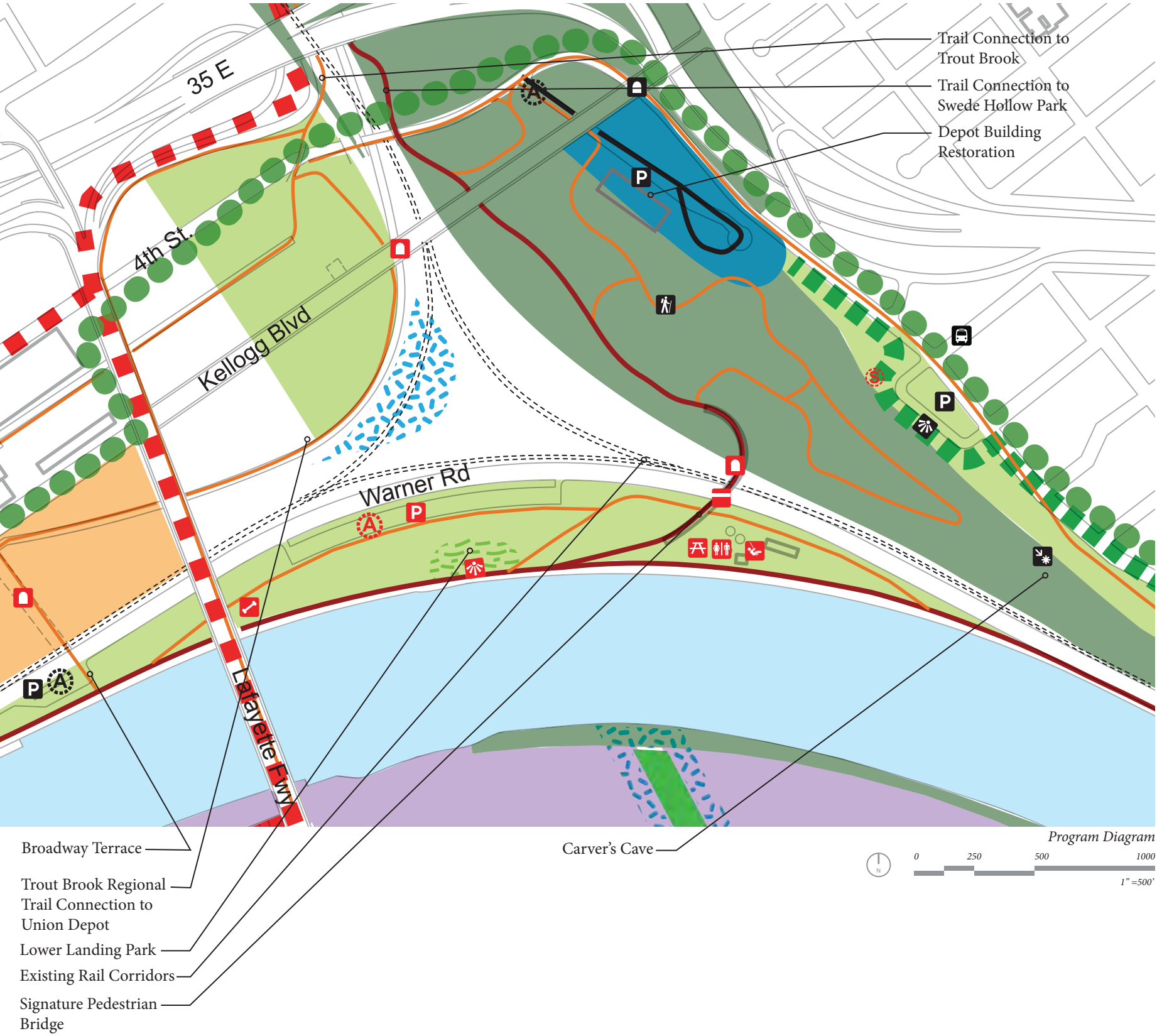
- Renovate the Lower Landing entry plaza at Broadway and improve access to Lambert's Landing.
- Provide nature based recreation facilities including a dog park, children's playground, picnic areas and support facilities that serve Lowertown and community residents.
- Include sculpted landforms with interpretive river overlooks and stormwater treatment gardens.
- Develop a signature pedestrian bridge connecting to Bruce Vento Nature Sanctuary and the riverfront regional trails.
- Add parking with access from Warner Road.

Bruce Vento Nature Sanctuary & Indian Mounds Regional Park

Recommendations include improving trail connections through the park to the regional trail systems at Trout Brook and Phalen Creek, as well as streetscape improvements along Mounds Parkway, Fourth Street and Kellogg Boulevard to extend the Grand Round through Downtown. Restoration of Trout Brook will be coordinated with the Capital Region Watershed District and integrated into park improvements where feasible. Develop and implement the ongoing community driven master plan for Indian Mounds Regional Park. Connect the historically and archaeologically significant landscapes of the park to the Great River Passage.

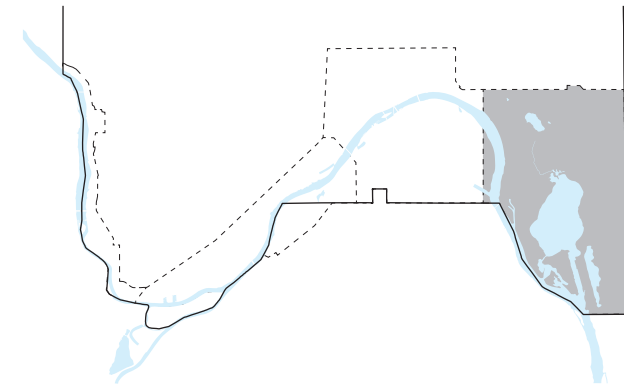
- Improve pedestrian and bicycle access along the Grand Round extension.
- Explore the feasibility of relocating the existing electrical substation to allow for street realignment and streetscape improvements.
- Integrate proposals for daylighting and naturalization of the Trout Brook and Phalen Valley/Swede Hollow corridors.
- Use landscape management strategies to selectively maintain viewing opportunities of the River from the top of the bluff and include them in the interpretation of the history and natural resources of the River.
- Develop trail connections between Indian Mounds Regional Park and proposed trailhead improvements at the Fish Hatchery and Pig's Eye natural area.





\* Red icons represent proposed items.





## The Floodplain

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The Floodplain Reach is a landscape of contrasts. The vast open spaces of lakes, wetlands, and floodplain forests of the Pig's Eye area are a counterpoint to the heavily wooded and steeply sloping Highwood bluffs that define the eastern edge of the valley. Heavy industrial uses at both ends of the reach are connected by a high-speed highway and heavily used rail lines, which form a major barrier between the bluffs and floodplain landscapes. The industrial uses and major transportation infrastructure contrast with the less densely developed and heavily wooded neighborhoods to the east.

Recommendations for the Floodplain Reach include expanding park access, establishing buffers for natural areas, and improving connections to the lakes and river.



Establish a protective buffer of natural areas and preserves

To protect natural areas, a park buffer will be established that allows limited access in areas designated as natural areas or preserves. Rehabilitated creeks, wetlands and water-quality treatment areas will be created for secondary watersheds, such as Battle Creek and Fish Creek, as part of the buffer areas.

Incorporate the Highwood Bluffs into the City’s open space system

Park land will be acquired to protect the scenic and ecological value of the bluffs along the east side of Highway 61. Natural areas will be expanded to provide a continuous open-space corridor connection extending from Indian Mounds Regional Park to Fish Creek and beyond. Trails, scenic overlooks and passive recreational uses will be included to better connect the east side to the City and to the region.

Improve connections between Pig’s Eye Regional Park and nearby city and regional parks

New and expanded trails will improve connections to Pig’s Eye Regional Park from the east side, Indian Mounds Regional Park, Battle Creek Regional Park and Highwood Bluff. Several grade separated trail connections from the bluffs, across Highway 61, will improve access to Pig’s Eye. A network of park and rustic trails that connect to the regional system will be developed within Pig’s Eye Regional Park. In the long term, the potential for improved recreational access within industrial areas, such as along Childs Road and Red Rock Road, should be re-evaluated as land uses evolve.

Integrate recreational uses in the Pig’s Eye area.

The current State DNR facility can become a gathering place, a trailhead and interpretive center serving the Pig’s Eye Lake area. Vehicle, bicycle and pedestrian access will be improved from Warner Road at Pig’s Eye Road, and a trailhead established near Pig’s Eye Lake. Improved access across existing rail lines will benefit river-related industries while allowing public access to a variety of outdoor recreation uses around the lake. Nature based recreation activities include boating, fishing, hiking and wildlife viewing.

Improve the aesthetic quality of Warner Road and Highway 61.

The native landscape along Warner Road, especially at the intersection of Highway 61 will be restored with Oak Savanna plantings, parkway-like amenities and signage. Warner Road will take on more of a parkway-like character that helps identify it as an integral part of the Grand Round.



The floodplain supports a rich and dynamic ecosystem.



Trails provide assessable connections to natural areas in the city.



The Pig’s Eye ecosystem provides habitat for fish and wildlife as well as flood control and water quality.



This plan is a concept only, and is subject to further planning, design and public input.



# Warner Road Area Vision



Existing view of Warner Road looking southwest at Highway 61: There is currently nothing that would indicate its significance as part of the City's Grand Round.



Highway 61 looking west along Warner Road: Restoration of the oak savanna that once existed at the intersection, along with native stone walls, and the restoration of panoramic views of the River Valley will identify the intersection as a gateway into the City and a part of the historic Grand Round.

*This plan is a concept only, and is subject to further planning, design and public input.*



This plan is a concept only, and is subject to further planning, design and public input.



**LEGEND**

- |                            |                                            |                                                          |
|----------------------------|--------------------------------------------|----------------------------------------------------------|
| 1. Fish Hatchery Trailhead | 6. DNR Regional Office                     | 11. New Park Access Road                                 |
| 2. Regional Trail          | 7. Industrial Area                         | 12. Warner Road Gateway                                  |
| 3. Nature Trail            | 8. Potential River Edge Trail <sup>1</sup> | 13. Green Connections provide visual access to the river |
| 4. Levee Trail             | 9. Battle Creek Restoration                | 14. Trailhead Park <sup>2</sup>                          |
| 5. Park Access Bridge      | 10. Parkway Improvements                   |                                                          |



<sup>1</sup> Potential trail location subject to approval of the Federal Aviation Administration and the Metropolitan Airport Commission.

<sup>2</sup> Potential acquisition & park development subject to change in existing commercial uses and Port Authority approval.

**Enhance the image of Warner Road**

Enhance the image of Warner Road from its intersection with Highway 61, west to the river and Downtown. Improve landscape, street lighting and signage to create a parkway-like character along Warner Road and its intersections. Selectively clear adjacent woodland understory of invasive weed species on the downhill side, to restore historic vistas of the river valley and the city skyline.

Warner Road at Highway 61 will become one of the main gateways to the Great River Passage. Its landscape, lighting and amenities will extend the Grand Round character from Downtown, better integrating it as an important part of the Great River Passage. Further studies will be required to determine the limits and feasibility of landscape enhancements at Highway 61, with respect to highway sight lines and setback requirements.

**Develop Fish Hatchery Trailhead improvements.**

Improvements at the Fish Hatchery site will allow for convenient parking access to a network of local, park and rustic trails at Indian Mounds Regional Park and the upper parts of Pig's Eye. A signalized intersection at Pig's Eye Road including improved access, signing and parking, will support expansion of trail use and facilitate recreational access throughout the area.

**Improve public access to Pig's Eye Regional Park**

Partner with the railroads, the Port Authority, Ramsey County, the State Department of Natural Resources and commercial industry and businesses, to improve access to natural areas at Pig's Eye Regional Park. A new road and bridge that provides improved access for trucks, cars, bicycles and pedestrians, must accommodate the needs of industrial as well as recreational uses. Streetscape improvements on Pig's Eye and Childs Roads will help support safe recreational access.

Work with the Port Authority and river industry tenants to find opportunities that provide safe public access (visual or physical) to the river and lake edges. Provide landscape buffers adjacent to the more unsightly industrial uses.



| Strategies and Projects                                                                                                                | Agency/Partners | Est. Cost    | Phasing |
|----------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------|---------|
| Warner Road Area                                                                                                                       |                 |              |         |
| Management                                                                                                                             |                 |              |         |
| Develop plan for area in conjunction with master plan for Pig's Eye Regional Park and as part of the Grand Round                       |                 | \$ 100,000   | short   |
| Develop working partnership with DNR, Ramsey County and Port Authority to improve management of and access to parks                    | DNR, MNRRRA, PA | n/a          |         |
| Determine feasibility of reusing DNR facilities for Pig's Eye Regional Park access, education and administration                       | DNR, MNRRRA     | n/a          |         |
|                                                                                                                                        |                 |              |         |
| Design and Construction                                                                                                                |                 |              |         |
| Road and Trails                                                                                                                        |                 |              |         |
| Provide a new signalized intersection at Fish Hatchery Road                                                                            |                 | \$ 300,000   | med     |
| Add and improve parking at the Fish Hatchery                                                                                           |                 | \$ 100,000   | med     |
| Extend the Regional trail along the south side of Warner Road at Highway 61 and connect to the Battle Creek Regional trail             |                 | \$ 75,000    | med     |
| Separate the Samuel Morgan Trail from the Warner Road/Child's Road highway ramps to provide a continuous trail system                  |                 | \$ 200,000   | short   |
| Add Park trail connections to Mounds Park, the Fish Hatchery, Child's Road and Pig's Eye Road                                          |                 | \$ 250,000   | med     |
| Provide a continuous Park trail connection from the MnDOT overlook to Battle Creek Regional Park, connecting back to the neighborhoods |                 | \$ 250,000   | med     |
| Provide a Park trail along the Child's Road levee to the Water Treatment Plant looped back to Pig's Eye Lake Road                      |                 | \$ 200,000   | med     |
| Expand and improve Rustic trails in Upper Pig's Eye and Battle Creek Parks                                                             |                 | \$ 150,000   | short   |
| Extend Rustic trail along the West Side from the Float Plane Basin to Barge Channel Road if it meets requirements of FAA               |                 | \$ 100,000   | med     |
|                                                                                                                                        |                 |              |         |
| Structures and Related Improvements                                                                                                    |                 |              |         |
| Provide public art involvement and enhanced design and pedestrian amenities as part of the Warner Road bridge redesign                 | SPPW, PASP      | \$ 100,000   | short   |
| Provide a grade separated Park access road over the rail lines to Pig's Eye Lake Road                                                  | SPPW, RR        | \$ 7,000,000 | long    |
| Implement signage and wayfinding systems                                                                                               |                 | \$ 50,000    | short   |
|                                                                                                                                        |                 |              |         |
| Landscape and Site Improvements                                                                                                        |                 |              |         |
| Restore wetlands near storm outfalls below Highway 61 along Battle Creek and Little Pig's Eye Lake                                     |                 | \$ 2,000,000 |         |
| Restore base flows to Battle Creek to the degree possible, diverting a portion of it as it passes under Hwy. 61                        |                 | \$ 1,500,000 | med     |
| Improve the character of Warner Road to be more parkway-like including bridges, lighting, guardrails, signs and landscaping            |                 | \$ 1,500,000 | short   |
| Selectively manage vegetation at key view opportunities to the river by removing invasive species and restoring natives                |                 | \$ 150,000   | med     |
| Create main gateway to the Great River Passage at Warner Road and Hwy 61                                                               |                 |              | med     |
|                                                                                                                                        |                 |              |         |

Summary Plan Recommendations:

Warner Road Area

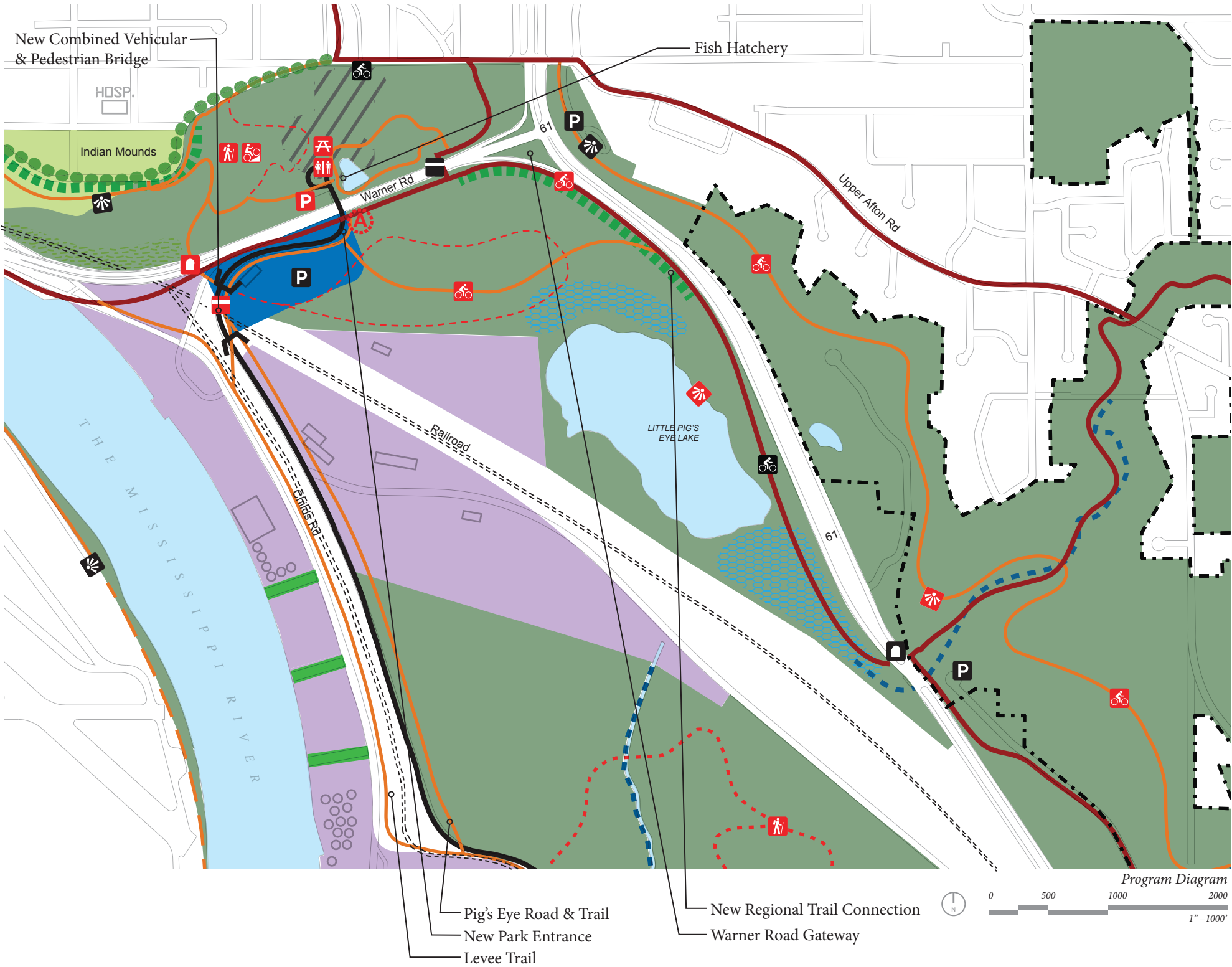
Enhance Warner Road as it extends from the narrows between Indian Mounds bluffs and the river, to its intersection with State Highway 61. Vehicular park access improvements include the redesign of Warner Road intersections at the Fish Hatchery and at Child's Road. From the intersection at the Fish Hatchery a new bridge over the existing railroad corridor will improve access to Childs Road and provide multimodal access to the Pig's Eye Lake area.

Warner Road improvements will include new trailhead areas and better trail connections that will vastly improve recreational access to the regional park system. An expanded network of trails will accommodate bicycle and pedestrian access between Indian Mounds and Pig's Eye and improvements to the Samuel Morgan Regional trail will enhance bicycle commuting options from the east side.

Warner Road, as part of the Grand Round, will include enhanced landscaping, lighting, guardrails and signage improvements. The intersection with Highway 61 will be improved to reflect the historic landscape character of the area, and as a gateway to the Grand Round.

- Improve Warner Road to make it more parkway like.
- Develop a gateway treatment of the intersection at Highway 61 and Warner Road.
- Mimic historic vegetation patterns of the oak savanna hillsides into the Warner Road landscape and integrate it into the Great River Passage.
- Improve the Fish Hatchery Road intersection at Warner Road and improve trailhead parking with restrooms and picnic area at the Fish Hatchery.
- Collaborate with DNR to coordinate potential joint use of the existing DNR facilities, as a river Gathering Place that serves the Pig's Eye natural area.
- Reconstruct the Child's Road interchange to improve the Samuel Morgan Regional trail, eliminating at grade ramp crossings.





key map

- |                                |                            |
|--------------------------------|----------------------------|
| <b>Water Resources</b>         | <b>Roads &amp; Trails</b>  |
| Wetland Restoration            | Regional Trail             |
| Redevelopment Treatment Area   | Park or Local Trail        |
| Park Treatment Area            | Rustic Trail at Airport    |
| Bluff Treatment Area           | Rustic Trail               |
| Creek Restoration Opportunity  | On-Road Bikeway            |
| Shoreline Restoration          | Multimodal Park Access St. |
| <b>Park Types</b>              | Park Access Road           |
| Gathering Place                | <b>Special Features</b>    |
| Active Nature Based Recreation | River Balcony / Riverwalk  |
| Natural Areas                  | Grand Round Extension      |
| Natural Preserves              | Green Connection           |
| <b>Land Use</b>                | Commuter Rail Corridor     |
| Existing Industrial            | Light Rail Corridor        |
| Mixed-Use                      | County Owned Park Land     |

- |                        |                       |
|------------------------|-----------------------|
| Camping                | Dog Park              |
| Picnic                 | Refreshments          |
| Wildlife Viewing       | Restrooms             |
| Scenic Overlook        | Marina                |
| Point of Interest      | Information           |
| Fishing Access         | Pedestrian Underpass  |
| Canoe/Kayak Landing    | Pedestrian Overpass   |
| Motorized Boat Launch  | Vehicle Parking       |
| Swimming Area          | Transit Station       |
| Mountain Biking Trail  | Bus Stop              |
| Multi-Use Trail        | Stairway or Ramp      |
| Hiking Trail           | Vehicular Park Access |
| Nature-based Play Area |                       |

\* Red icons represent proposed items.



## Pig's Eye and Highwood Bluffs Vision

The 1200 acres of open lakes, wetlands, prairie landscapes and woodlands at Pig's Eye Regional Park represent approximately one third of the Great River Passage. Impacted by past and current industrial uses, sliced by railroads and roadways, and home to some of the region's most unique wildlife, the area is nearly inaccessible. A careful balance of natural areas protection and restoration that also allows an appropriate level of recreational access, will greatly expand the potential for public awareness and, ultimately stewardship, of this valuable resource.



*This plan is a concept only, and is subject to further planning, design and public input.*



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LEGEND

- |                      |                 |                                                                           |                                         |                                 |                          |
|----------------------|-----------------|---------------------------------------------------------------------------|-----------------------------------------|---------------------------------|--------------------------|
| 1. Trailhead Parking | 3. Park Trail   | 5. Long Term Potential Conversion of Existing Rail Line to Regional Trail | 6. Municipal Wastewater Treatment Plant | 8. Future Red Rock Rail Station | 10. Park Access Overpass |
| 2. Observation Blind | 4. Rustic Trail | 7. Canoe / Kayak Landing                                                  | 9. Levee Trail                          | 11. Regional Trail              |                          |

Protect and restore the natural resources of Pig’s Eye Regional Park

Identify sensitive ecologies such as wetlands, marshes and wildlife habitat, and develop a resource management plan that provides strategies and resources for preservation, mitigation and restoration of sensitive landscapes and riparian areas. Include environmental interpretation, education and interface opportunities for limited public use as appropriate.

Expand open space at Highwood Bluffs

This open space corridor will provide trail connections to adjacent neighborhoods, overlooks and scenic vistas; and interpretation of the river valley, while protecting sensitive bluff landscapes and enhancing wildlife habitat. Create a continuous mid-bluff recreational trail above, and parallel to, Highway 61.

Acquire land along the bluff, with a priority for that which is identified as high value habitat, non-buildable and/or available as open space.

Provide opportunities for nature based recreation and passive day use

Provide rustic improvements that allow for the expansion of limited day use recreational activities in the Pig’s Eye area. Primary uses will focus on enjoyment of the outdoors and stewardship of the area’s natural resources. Recreation enhancements will include providing trails for hiking, overlooks and blinds near wildlife areas, and learning opportunities related to the resources of the floodplain, and the industrial legacy of the “Working River”.

Improve recreational access to Pig’s Eye Lake

Provide development of a trailhead parking area and connection to an enhanced system of walking trails. Limited lake access could be provided at a canoe and kayak landing area. Trail improvements include grade separated crossings of the railroad and highway to connect the lake area to the Mississippi River Trail and Highwood Bluff. Coordinate trail improvements with the Wastewater treatment plan to allow access from the Childs Road levee and recreational trail connections around the plant.



| Strategies and Projects                                                                                                             | Agency/Partners         | Est. Cost    | Phasing |
|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------|---------|
| Upper Pig's Eye Lake Management                                                                                                     |                         |              |         |
| Develop a master plan for long term recreation and habitat improvements at the Pigs Eye Regional park                               | MNRRRA, DNR, Ramsey Co. | \$ 200,000   | short   |
| Pursue a joint parks management agreement with MNRRRA, DNR and Ramsey County Parks for the Pig’s Eye Area                           | MNRRRA, DNR, Ramsey Co. | n/a          | short   |
| Work with DNR to identify opportunities to clean up contaminated areas and make them accessible for public open space uses          | DNR                     | n/a          |         |
| Work with Ramsey County Wastewater Treatment to integrate the wastewater management facility into the Passage                       | Ramsey County           | n/a          |         |
| Acquire open space land along Highwood Bluff to provide a continuous open space connection from Battle Creek to Henry Park          |                         | n/a          |         |
| Identify alternative location to relocate city's mulching and storage operations to enhance open space                              |                         | n/a          |         |
| Create an interpretive program that includes environmental education, history of land uses and water treatment and quality          | MNRRRA, DNR, Cty        | n/a          |         |
| Design and Construction                                                                                                             |                         |              |         |
| Road and Trails                                                                                                                     |                         |              |         |
| Improve and extend new Park access road to Pig's Eye Lake                                                                           |                         | \$ 1,000,000 | short   |
| Provide grade separate trail crossing with proposed Ramsey County Regional Rail station improvements at Lower Afton Road            | Ramsey County, RR       | n/a          | long    |
| Add trailhead parking at the northern edge of the Lake                                                                              |                         | \$ 50,000    | short   |
| Create Park trails providing access to Pig's Eye lake area and connecting to the river and Lower Afton Road                         |                         | \$ 500,000   | med     |
| Provide Rustic trails as part of a hierarchy of looped trails with boardwalks along the east side of and adjacent to Pig's Eye Lake |                         | \$ 200,000   | med     |
| Provide a continuous midbluff Park trail from Battle Creek to Henry Park, connecting back to the neighborhoods                      |                         | \$ 250,000   | med     |
| Extend the Park trail along Lower Afton Road from Highway 61 to McKnight Road                                                       |                         | \$ 225,000   | med     |
| Preserve options for making future connection across River from Pig's Eye to Kaposia Landing using existing rail bridge             |                         | n/a          | long    |
| Structures and Related Improvements                                                                                                 |                         |              |         |
| Provide rustic toilet facilities near the trailhead                                                                                 |                         | \$ 200,000   | short   |
| Provide storage for small non-motorized boats                                                                                       |                         | \$ 50,000    | short   |
| Provide wildlife blinds and observation tower to provide views to lake water fowl and Heron rookery                                 | MNRRRA                  | \$ 500,000   | med     |
| Implement Signage and wayfinding systems                                                                                            |                         | \$ 100,000   | short   |
| Recreation Improvements/Use areas                                                                                                   |                         |              |         |
| Provide controlled/seasonal access for hiking, wildlife viewing, photography and non-motorized boating                              |                         | \$ 100,000   | short   |
| Add overlooks at key viewing opportunities along Highwood bluff and in Pig's Eye                                                    |                         | \$ 100,000   | med     |
| Landscape and Site Improvements                                                                                                     |                         |              |         |
| Restore shoreline area in vicinity of small boat landing                                                                            |                         | \$ 50,000    | short   |
| Restore Pine Creek along Lower Afton Road                                                                                           | Watershed District      | n/a          | long    |
| Identify and protect sensitive ecologies such as wetlands and bird habitat areas                                                    | MNRRRA, DNR             | \$ 200,000   | short   |
| Identify and selectively manage invasive plant species and restore with native species                                              |                         | \$ 500,000   | med     |
| Restore wetlands near storm outfalls below Highway 61 along Pig's Eye Lake                                                          | Watershed District      | \$ 1,000,000 | med     |

Summary Plan Recommendations:

Pigs Eye Lake

A new connection from Warner Road will provide the primary route to access parking, trails and open space areas around Pigs Eye Lake. Facilities in the area will mostly be rustic, and support passive recreation uses such as hiking, wildlife obser- vation and canoeing. A variety of park and rustic trail experiences will be limited to the areas north of the existing electric transmission lines to provide an adequate buffer for the Heron Rookery Nature Preserve.

- Develop trailhead parking and day use amenities, including canoe/kayak lake access.
- Provide wildlife viewing blinds and overlooks, especially at the Heron rookery. Incorporate environmental education and interpretation

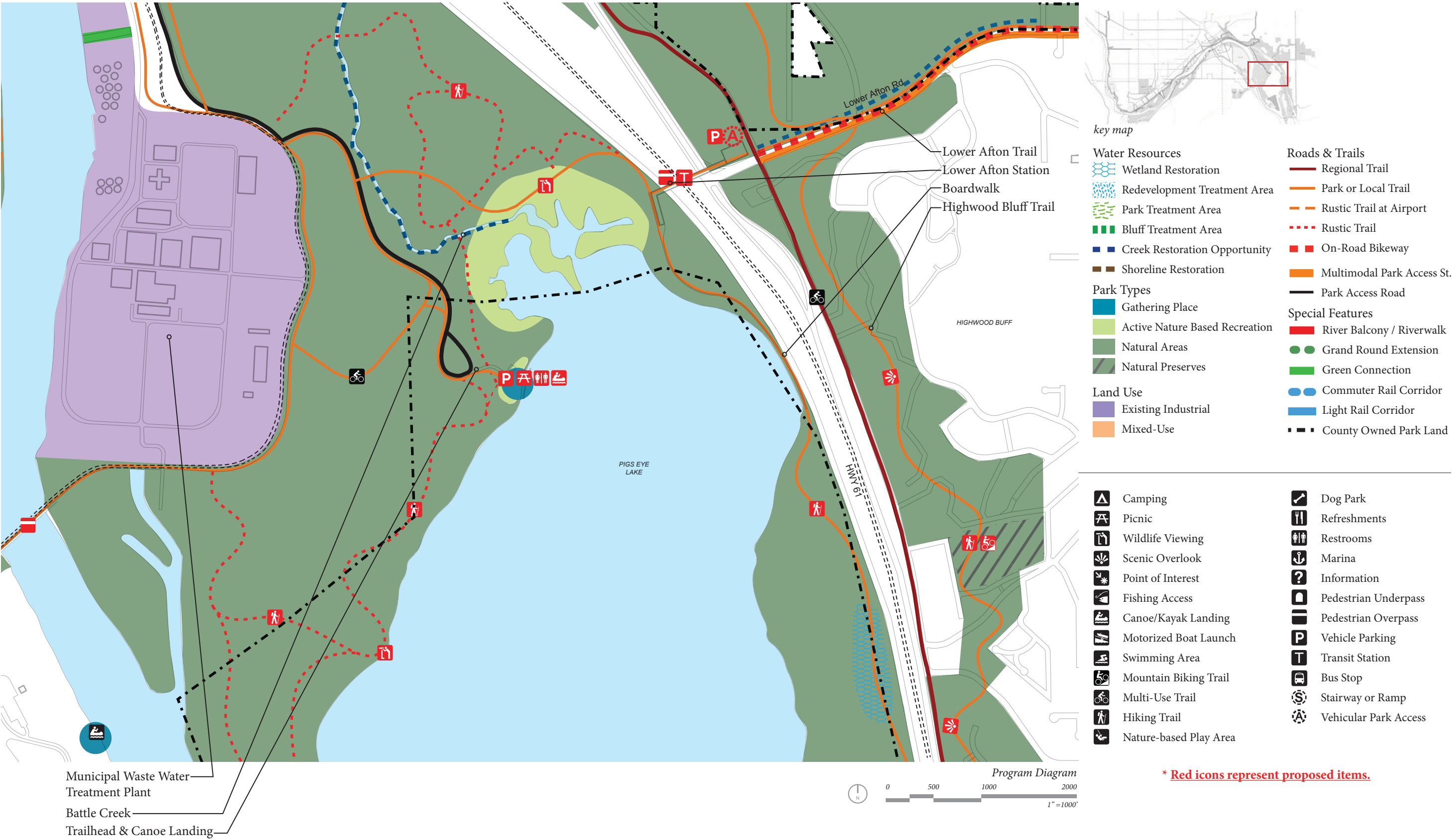
Highwood Bluffs

The bluff is a subarea of the Floodplain Reach that is clearly defined by geography and the network of roads and railroads that divide the area. Preserve Highwood Bluffs as parkland, providing improved connections between the Pig’s Eye natural area and surrounding neighborhoods, while expanding the existing network of parks and trails to meet the area’s recreation needs.

Upper Pig’s Eye and Highwood Bluffs will have significant trailhead, open space, and trail expansion that link Indian Mounds Regional Park and the east side of the City.

- Develop a hierarchy of trails, providing regional access across Highway 61 and across the river, and local access for recreation around the lake.
- Provide new overlooks that incorporate the story of the valley’s natural history and industrial legacy.













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**Utilize existing partnerships to provide resource management**

Collaborate with Ramsey County, the Department of Natural Resources (DNR), the Department of Transportation (MnDOT), the National Park Service (MNRRA), Friends of the Mississippi River, the Mississippi River Fund, the Audubon Society and other environmental organizations, to create a resource management plan for the Pig's Eye area. The plan should consider appropriate levels of public access, safety, and the management and restoration of natural resource areas, including stream corridors, wetlands and water treatment areas.

**Balance access with resource protection**

Carefully integrate a system of rustic trails, including boardwalks in sensitive wetland environments , to balance the need for public access with the protection of natural resources. Provide wildlife observation areas, blinds and signing to improve visual access and understanding of floodplain ecology. Access improvements will facilitate monitoring and management of resources by the various agencies that are responsible for stewardship of this vast natural and Working River area.

Work with the Port Authority and river industry tenants to find opportunities that provide safe public access (visual or physical) to the river and lake edges. Provide landscape buffers adjacent to the more unsightly industrial uses.



| Lower Pig's Eye Lake                                                                                                               |                        |            |       |
|------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------|-------|
| Management                                                                                                                         |                        |            |       |
| Develop a master plan for long term recreation and habitat improvements at Pig's Eye Regional Park                                 | Ramsey Co., DNR, MNRRA | \$ 200,000 | short |
| Identify appropriate public access points to the park, the lake and the river                                                      | DNR, County, MNRRA     | n/a        | med   |
|                                                                                                                                    |                        |            |       |
| Design and Construction                                                                                                            |                        |            |       |
| Road and Trails                                                                                                                    |                        |            |       |
| Provide a continuous Rustic trail/boardwalk along east side of the lake                                                            |                        | \$ 300,000 | long  |
| Provide limited trailhead parking and lake access for day use at the end of Red Rock Road                                          |                        | \$ 100,000 | long  |
| Provide a continuous midbluff Park trail connection from Henry Park to the 494 Greenway in Washington County                       |                        | \$ 250,000 | long  |
|                                                                                                                                    |                        |            |       |
| Structures and Related Improvements                                                                                                |                        |            |       |
| Investigate the feasibility of providing a grade separated crossing of Highway 61 from Highwood Bluff at Fish Creek and Henry Park | MnDOT                  | \$ 50,000  | long  |
| Implement Signage and wayfinding systems                                                                                           |                        | \$ 40,000  | med   |
|                                                                                                                                    |                        |            |       |
| Landscape and Site Improvements                                                                                                    |                        |            |       |
| Restore the lake edge to enhance habitat and provide limited public access                                                         | DNR                    | \$ 100,000 | long  |
| Provide wetlands restoration at Fish Creek outfall                                                                                 | DNR                    | \$ 100,000 | long  |
|                                                                                                                                    |                        |            |       |

Summary Plan Recommendations:

Lower Pig’s Eye

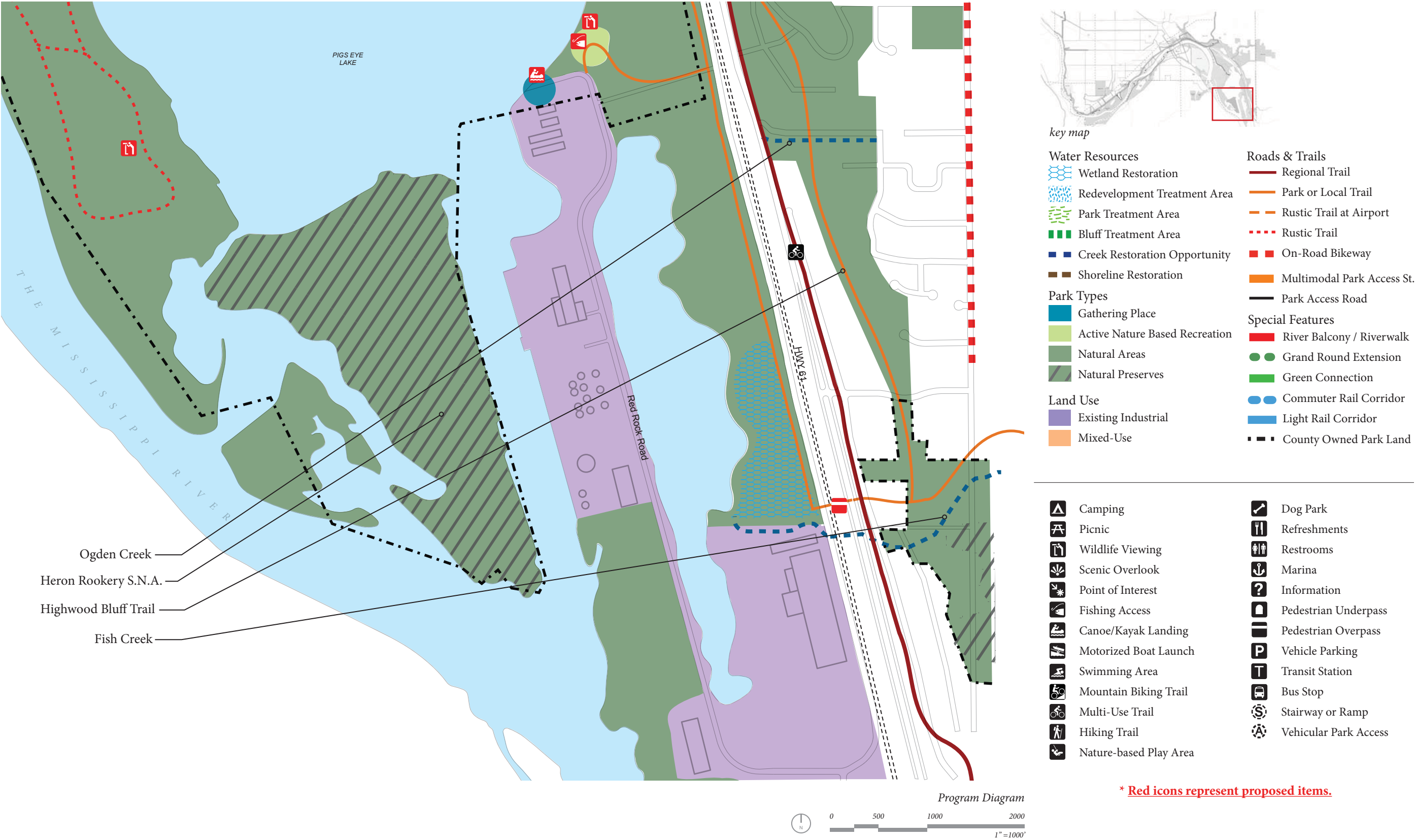
Long term trail head and trail improvements are proposed at areas south of Pig’s Eye lake. Because of the isolated nature of the area and the current lack of convenient and safe vehicle and trail access, grade separated trail access points are recommended at key locations across Highway 61.

Highwood Bluff Connections

Acquire privately owned land between Battle Creek and Henry Park to provide continuous open space. Identify land with the most scenic and ecological value. Develop a multi-use system for bicycles and pedestrians that links the MnDOT overlook, Battle Creek Regional Park, Lower Afton Trail, Henry Park and other adjacent regional and local trails. Create overlooks at view points along the trail.

- Develop rustic trails and wildlife viewing areas and blinds, especially for the Heron Rookery. Incorporate environmental education and interpretation into trail experiences.
- Develop connections across the railroad and highway to the regional and park trails at Highwood Bluff. Provide improved pedestrian access from the Fish Creek natural area.
- Develop Working River interpretation at key overlook locations.
- Provide pedestrian river edge access where appropriate along the eastern edge of the lake and ultimately from the end of Red Rock Road as it becomes feasible.







## Delivering the Vision

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The Great River Passage Master Plan represents a transformation for Saint Paul's parks. New ways of thinking about managing, funding and marketing parks are necessary to lead this transformation. This plan represents the goals of the community for the future of this great place and these strategies can help the City of Saint Paul achieve them.



# CHAPTER 7

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## Delivering the Vision



## Next Steps

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The development of the vision for the Great River Passage has evolved with a great deal of community and partner support, and their ongoing participation in the next steps will be essential to its success. The Great River Passage is an immense natural landscape in an urban setting. It brings value to Saint Paul by bringing people to nature and to downtown, retaining and attracting businesses and improving the quality of life for its residents.

Following decades of resource challenges, cities throughout the country are increasingly turning to a wide range of private sector sources to cover funding gaps. Different park types, such as gathering places, nature based recreation areas and natural areas, will have very different management and funding needs. Next steps must address the following questions:

- What is the appropriate public commitment baseline?
- How is the value created by the resource fairly recognized?
- How is a foundation for sustained philanthropy created?

This section establishes the framework for a sustainable park stewardship structure, and for development of implementation systems and priorities. This is a long term plan, yet short term wins are imperative. By identifying and implementing vital projects that have broad support, and by increasing engagement of people in the recreation and leisure opportunities that are available along the River, the Great River Passage will become what the City envisions it to be.



Delivering the Vision

Consolidated operating budgets, a dedicated stewardship structure, and strong intergovernmental leadership will be central to the implementation of the Great River Passage plan. This section describes the best means for realizing all three of these pillars of implementation. It focuses on:

- Establishing an operating budget for the park commensurate with the project’s goals of becoming a unified system that is more natural, more urban, and more connected;
- Devoting the organizational resources necessary to ensure appropriate stewardship of riverfront lands, and to leverage ongoing support from the private sector; and
- Developing a leadership mechanism for capital and legislative delivery of the plan, including intergovernmental collaboration, negotiations with property owners, and raising capital from the private sector.

Ultimately, while the plan will take decades to complete in full, these systems establish the working framework for shepherding the plan through multiple budgetary cycles, administrations, and changes in leadership.

Budgeting for the Great River Passage

The City of Saint Paul has some of the most beloved, best maintained, and highly active parks in the country. From the premier destination of Como Park to the downtown landscape of Mears Park, to the recreation centers embedded in the lives of communities, parks and the opportunities they provide for structured activities are a high priority for the City, and are at the heart of its efforts to be the most livable city in America. The riverfront, separated by bluffs, rail lines, and arterial roads from established communities, cordoned off by seasonal flooding, and lacking the active recreation centers that are so well used by local residents, is the next frontier, as represented by the Great River Passage plan.

An analysis of the City of Saint Paul’s budget for Parks and Recreation reveals a difference between the allocation of expenses to riverfront parklands and to parks elsewhere in the city. In 2010, the average expenses per acre of all parklands throughout the city were approximately \$12,500. The approximately 3,000 acres of City-owned parklands within Great River Passage received approximately \$1,500 per acre. Some of this discrepancy in stewardship investment per acre is warranted: naturalized areas are less expensive to maintain than ballfields and recreational centers. However, as the Great River Passage calls for a more active riverfront, with new capital investments, new centers for active recreation like Watergate Marina, and more active programming downtown and throughout the parklands, new investment in stewardship and programming will be required.

The Plan projects future expenses for the Great River Passage based on best practices in Saint Paul’s upland parks and the experience of administrators of parks of comparable nature around the country. Appropriate expenditures were considered based on the character of the different elements of the park and the standard of care desired for each. Moving through the spectrum of natural areas

and preserves, community and river parks, and urban promenades and gathering places, ascending levels of operating costs should be expected as a result of ascending levels of use and specialty design features.

- Natural Areas in parks have a wide range of costs, depending on the particular nature of the park, its size, and the budgetary processes of its steward. An analysis of the requirements for maintaining these parks within the Great River Passage conducted in collaboration with the City of Saint Paul Department of Parks and Recreation suggested that it will be prudent to allocate approximately \$600 per acre per year for the stewardship of the 2,500 acres of naturalized areas in the Plan, for a total of approximately \$1.6 million per year.
- Nature-based Recreation Areas require not only a greater level of maintenance than Natural Areas as a result of more maintained landscapes, hardscape treatments, and park structures, but also greater investment in the coordination of structured activities for users. For example, plans for Hidden Falls Regional Park or Lower Landing Park express an aspiration for annual investment comparable to some of the best, most actively used parks in upland communities. The Daytons Bluff Recreational Center, which receives annual investment of approximately \$12,000 per acre, can be considered an appropriate benchmark. With 18 of these areas existing or proposed as part of the Great River Passage plan, amounting to nearly 3,500 acres in total, it is anticipated that a budget of approximately \$4 million per year should ultimately be devoted to their management, including routine operations and maintenance, and structured activities for their users.
- Gathering Places and Urban Promenades areas that have the potential to attract new businesses, residents, and visitors to a city, require the greatest annual investment. Their landscapes and structures are costly to maintain, their locations require the highest standards of care on a daily basis, and investment in attracting or producing frequent programming and events is required to meet economic development goals. A new generation of these parks in major cities across America has resulted in significant ongoing operating expenditure, from about \$300,000 to nearly \$900,000 per acre. Money is dedicated not only to routine park costs, but also to the care of signature artworks or pavilions, the provision of frequent programming and the resulting higher level of maintenance required for the landscape, and for dedicated management and security staff. Given the local market and the nature of Saint Paul’s Great River Passage parks, such as Kellogg Mall Park, Chestnut Plaza and Harriet Island, the Plan assumes required expenses will be at the low end of the cost range shown above. Nonetheless, that is a figure substantially higher than the approximately \$16,000 per acre per year that is currently spent on these parks; the difference is primarily attributable to better and more active programming and marketing, as well as higher standards of care. A total of approximately \$3.4 million in annual investment should be reserved for these parks as the Plan is implemented.

The conceptual Great River Passage operating budget of approximately \$9 million per year – a figure that must be refined and built from the bottom-up as this Plan is implemented – will be phased in over time, as the park is built. It represents a sizable increase in the amount of funds that the Great River Passage receives,

and enhances its status as the next great signature park for the City of Saint Paul, following Como Park, the annual budget of which exceeds \$10 million per year, and the acreage of which is about 10% of that of the Great River Passage.

The majority of funds for operations and maintenance must be provided from the City’s general fund, as is the case now. A stable base of City funding is a prerequisite for maximizing philanthropy, and will be required to ensure the park meets its civic aspirations. In the initial years of the park’s development and operations, City funding will likely be the only major source of operating revenue for the park. Over time, however, as the vision is implemented and the park becomes more successful – and requires more investment – the City will seek several potential sources of additional revenue to fill the likely funding gap left by stable City funding and increasing park costs. These sources include:

- Philanthropy and Sponsorships: Great River Passage should develop a means for concentrating philanthropic resources to be devoted to the park, and should develop a program for corporate sponsorships for certain elements within the park. Often, sponsorships can be provided with minimal concessions, either in the form of small signage or naming rights opportunities, or in the form of sponsorships for specific programs or events within the park.
- Real Estate: The City of Saint Paul should seek to leverage real estate assets within and adjacent to the Great River Passage; implementation of the Plan will make these lands more valuable for development. Three sites in particular should be targeted for real estate development that can produce ongoing, sustainable revenues for the park: downtown riverfront lands owned by Ramsey County, lands contemplated for a new community around Island Station, and the former Lowertown Depot in the Bruce Vento Nature Sanctuary. Each of these sites has limitations, and the City of Saint Paul does not own all of them right. Now, however, through specific negotiations with property owners, and the potential for legislation to enable Great River Passage to receive a portion of the incremental value that the plan will yield for these sites, the park should share in the benefits that it brings to these properties in particular.
- Programming and Concessions: As the Plan is implemented and more programming is developed, opportunities may exist for the City to enhance the level of large-scale programming to an extent that can produce additional revenues for the Passage’s operations and maintenance. A concerted effort must be made to promote appropriate venues for major events, and for the Great River Passage to be the beneficiary of those events, both through permitting fees and through an increase in concessions income. Moreover, other opportunities for revenue generation through permits, programs and concessions may exist elsewhere in the Passage, from potential outdoor wedding venues to seasonal restaurants.

All of these sources of funds will require a tailored management solution for the Great River Passage that unifies all 17 miles of parklands into a single park that can attract private funding in addition to a steady baseline of public sector support.



## Managing the Great River Passage

The consolidation of seventeen miles of parklands along the Mississippi into a single, integrated riverfront parks system requires a management system that can deliver a standard of care and activation commensurate with project goals. Ultimately, the City requires an organizational structure that can provide a single point of leadership for the park – one person, overseeing an organization, who can be accountable for the entire Great River Passage system, including stewardship of lands owned by the City, and the coordination of comparable stewardship for lands owned by third parties.

Many cities across the country have recognized through their waterfront planning processes that the best means for implementing their plans was through the creation of a new special-purpose entity, frequently a quasi-public not-for-profit corporation. These decisions are generally driven by a recognition that local parks departments have been decimated by repeated rounds of fiscal belt-tightening. In contrast, Saint Paul is relatively unusual in having retained a relatively healthy – albeit strained – parks infrastructure, professional complement, and budget.

Further, St. Paul has in place a functioning structure for managing one of the greatest parks in the country, Como Park. Whereas parklands throughout the city are operated and maintained by Parks and Recreation as a whole, the Como Campus operates under its own division within the agency. Budgets are tracked separately, staff are specifically dedicated to the park, and additional revenue sources are developed and maintained within the park, including revenues related to Como's attractions and philanthropy developed through a conservancy structure. As the next great signature park for the City of Saint Paul, Great River Passage should be endowed with a similar leadership structure. A new division, created within Parks and Recreation, and specifically dedicated to Great River Passage, will be structured with three primary responsibilities:

- **Implement this plan:** The division's first order of business will be to prioritize and commence implementation of this plan. It will become the steward of the plan, coordinating the collaboration of multiple government agencies and the engagement of private sector players required to turn the plan into action.
- **Manage the parklands to a high standard of care:** The division will be wholly accountable for the cleanliness, safety, operations, and programming within Great River Passage. Although some of the public lands within the park will continue to be owned by Ramsey County and the Minnesota Department of Natural Resources, this new division of the City's parks department will be responsible for delivering and coordinating a quality of service commensurate with the plan's goals, including building a budget for the parklands from the bottom-up.
- **Develop revenue sources:** The division will spearhead the development

of revenue sources for the plan, including fostering the complementary governance structures that can consolidate sources of philanthropy for greater impact, partnering with other public agencies to put in place structures to capture the value of new real estate development along the park corridor, and developing a programming and concessions structure that can spinoff revenue for the park.

Although it is likely that revenues captured from the incremental value of real estate development, and funds from philanthropy and corporate sponsorship may be greatest over the long-term, this new Great River Passage division should maximize the potential of the park for earned income – events and concessions that can make money for the park's operations. Several options for revenue generation related to programming, concessions and events, should be evaluated in particular:

- **Leveraging Harriet Island as a destination event venue** for large-scale ticketed concerts and festivals, including the consideration of engaging a private event promoter or production partner. The Island is already used for ticketed events, and can be promoted further as a destination for outdoor concerts and festivals that attract thousands of attendees.
- **Developing Watergate Marina with revenue-generation opportunities.** Active recreation destinations like that planned for Watergate Marina typically rely on the baseline support of local governments, as with recreation centers throughout Saint Paul's parks system. Nonetheless, Watergate does and will continue to provide opportunities for generating revenues to offset some of those costs, including the operations of the marina itself, and seasonal concessions.
- **Establishing a more robust program for private event permitting** throughout the Great River Passage. With the implementation of this plan, including restored places like Hidden Falls Park, and the enhanced marketing opportunities for the park as a whole, Great River Passage can be promoted as an inexpensive destination for private parties like weddings, or for fundraisers.
- **Developing a paid parking system for larger events.** Parks in Minneapolis and elsewhere around the country have raised funds for parkland operations through paid parking systems. While there is not a desire to implement paid parking lots on a regular basis in the Great River Passage, the City should consider establishing a system for enforcing paid parking rules during major events at Harriet Island and elsewhere.

The Great River Passage division of Parks and Recreation will be established with the adoption of this plan and the identification of an Executive Director skilled in park management, revenue generation and real estate, and intergovernmental relations. Although the division will be its own operating division of the parks department, like the Como Campus division, it will draw on the resources of other divisions like Design and Construction or Recreation Services to advance the plan.



*The River is a great place to bring people Downtown.*



*By temporarily vacating a public street, Paris introduces people to their river.*



Potential Project Partners

- Ramsey County Parks and Recreation
- Metropolitan Council
- Saint Paul District Councils
- Minnesota Department of Natural Resources
- MNRRA, the National Park Service
- US Fish and Wildlife Service
- Saint Paul Port Authority
- Ramsey County Regional Rail Authority
- Metropolitan Airports Commission
- Saint Paul Planning and Economic Development
- Saint Paul Public Works
- Riverfront Corporation
- Friends of the Parks and Trails (St. Paul & Ramsey Cty)
- Friends of the Mississippi River
- Lower Phalen Creek Project
- Great River Greening
- Mississippi River Fund
- Audubon Society
- Lower Mississippi River Watershed Management Organization
- Saint Paul Parks Commission
- Ramsey County Parks & Recreation Commission
- The Conservation Fund
- The Nature Conservancy
- Ducks Unlimited
- The Trust for Public Land
- The Minnesota Land Trust
- Transit for Livable Communities
- 1000 Friends of Minnesota
- Minnesota Environmental Partnerships
- Center for Energy and Environment
- The Conservation Fund
- Environmental Initiative
- Tree Trust
- Warner Nature Center
- Neighborhood Energy Consortium

Implementing the Great River Passage Plan

Although the management and operations of the Great River Passage will be of utmost importance to the project's long-term success, there are short term responsibilities required of the Division and other governmental and private sector actors to realize the capital plan for the Passage, and to set in place appropriate regulations for private development. These major requirements include:

- Negotiating development agreements. Some of the proposals in the Great River Passage plan affect lands owned by third parties. In some cases, as with Island Station, land is privately owned, and held by multiple private parties. Elsewhere, as with the downtown riverfront lands upon which the balcony is proposed, other government agency’s own the land. The specific elements described in this Great River Passage plan must be negotiated with these third party landowners.
- Securing capital for project construction. Many construction projects are proposed for the Great River Passage. Although they will not all be implemented in the immediate future, diversifying funding sources for capital projects can help ensure they will be implemented as quickly as possible. This diversification will require close collaboration between the planned Great River Passage division and other government agencies, including the City of Saint Paul Department of Public Works, the Minnesota State Departments of Transportation and Natural Resources, the National Park Service, among others. Moreover, certain projects will have appeal to philanthropists and foundations.
- Establishing the structure for park programming and philanthropy. There are several organizations involved in raising funds for lands within Great River Passage, and for producing programming. In order to harness these resources and establish a more robust programming structure, Great River Passage needs to have a clear and defined private sector champion – an organization that can both raise funds for the park and produce park programs. Major philanthropists and foundations, as well as the general public, must know that there is a single preferred partner of the parks department for implementing this plan in order to devote major resources to it.

In order to succeed at these three requirements for plan implementation, the Great River Passage Division cannot work alone. It will not have sufficient authority to marshal collaboration with other agencies and divisions of government at County, State, and Federal levels, the interests of which may not be wholly aligned with the interests of the Plan. Moreover, political administrations change; the priorities of this administration may not be aligned with the priorities of future administrations. This challenge is of particular concern to negotiations with private sector land owners and funders; deals made in the near future should not be at risk of collapse, and philanthropists should know that their investments will remain a priority for the City.

Although the new Great River Passage Division will be charged with spearheading implementation, it must be endowed with the ability to work with other government agencies at all levels. Moreover, the organizations that will partner in implementing the Plan –the preferred not-for-profit partner described above, major corporations invested in the future of the city, and major landowners along the corridor – must be represented. Establishment of a body that includes representation from these diverse interests will help ensure that the Plan will have the fortitude to withstand changes in administrations and governmental policies.

Ultimately, as a priority project for the City, requiring approvals and collaboration with several City agencies, as well as County, State and Federal interests, responsibility for Plan implementation must reside with the Mayor.

Although the Executive Director of the Great River Passage division will be charged with managing the process, the Mayor must take on the responsibility of bringing other public and private interests to the table. Therefore, the Mayor should convene a **Great River Passage Action Committee** – a body charged with coordinating the implementation of this Plan in collaboration with the Great River Passage Division of the Parks and Recreation Department, with representation from all affected government agencies and neighborhoods, as well as the preferred not-for-profit partner of Great River Passage, and major Saint Paul corporate citizens and philanthropic interests. The Great River Passage Action Committee will be convened by the Mayor, with its inaugural members establishing bylaws that ensure it can function effectively for decades to come.



The Great River Passage

Objective

The principle purpose of our identity and branding process was to capture the history of Saint Paul and the sentiment of its people—bringing to life an authentic, timeless and unified expression of the Great River and the communities that have grown from it.

Process

Given the number of individuals and inputs that can shape an identity and branding exercise, we implemented a three-step process to ensure it was both holistic and inspiring. First, we gathered insights from unique river enthusiast groups—the city of Saint Paul, its residents, and the many experts who have committed themselves to the history and future of this river. We then distilled these inputs into statements that could guide and focus our creative exploration. And, finally, we began the naming and identity development process, culminating in the work you see here today.

Positioning

Given the large number of influencers, finding a singular statement to represent the deeper meaning of the Mississippi is a challenging task. However, after numerous discussions, we did find a common and powerful thread to lead our creative development process: “The Great River is the lifeblood of Saint Paul, connecting and sustaining communities across cultures and generations.”

Personality

Equally challenging is capturing the personality traits of this world river. Through a fluid lens, we worked to extend an empathetic ear toward what the river is, has been, and will be. As such, we used the following words and phrases to add depth and texture to our creative exercise: “Epic, yet intimate.” “Nurturing.” “Spiritual.” “Vibrant.” “Inviting.” “Fluid, yet constant.”

Opportunities

Great River Passage—an evolution of the name Great River Park—is a concept in its infancy. When fully realized, it will be a formidable system of parks that engage visitors from all walks of life. At this early stage, however, it remains firmly rooted in its past, grounded in all the experiences of those who came before us. Embracing this notion, Great River Passage should remain a “vision” of what is to come until tangible changes are made. While we may see the name and identity work its way organically into our vernacular, the weight of the branding effort should be realized when the vision, itself, is realized.

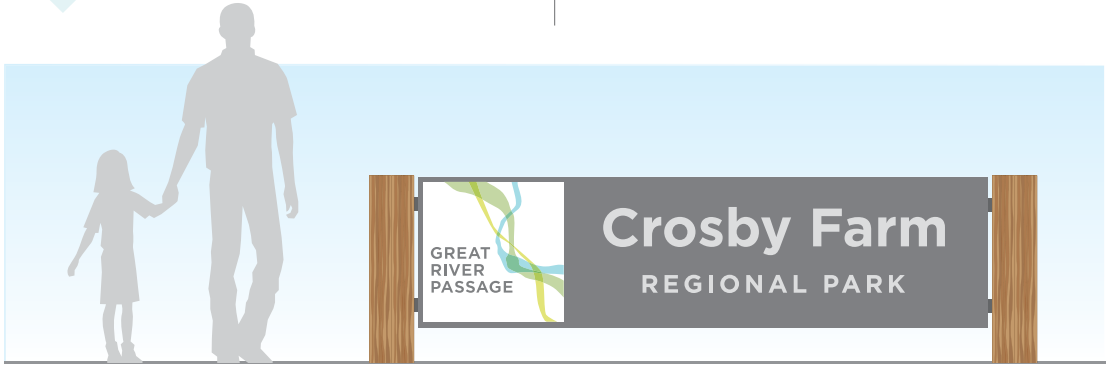


Identity

Great River Passage leverages the equity of the former name—Great River Park—while elevating it beyond the idea of simply being a park. The word “Passage” invites a sense of experience, exploration and adventure to all who engage with it. The name also unifies all parks along the 17-mile stretch into a clear and singular system by avoiding “parks within a park” references.

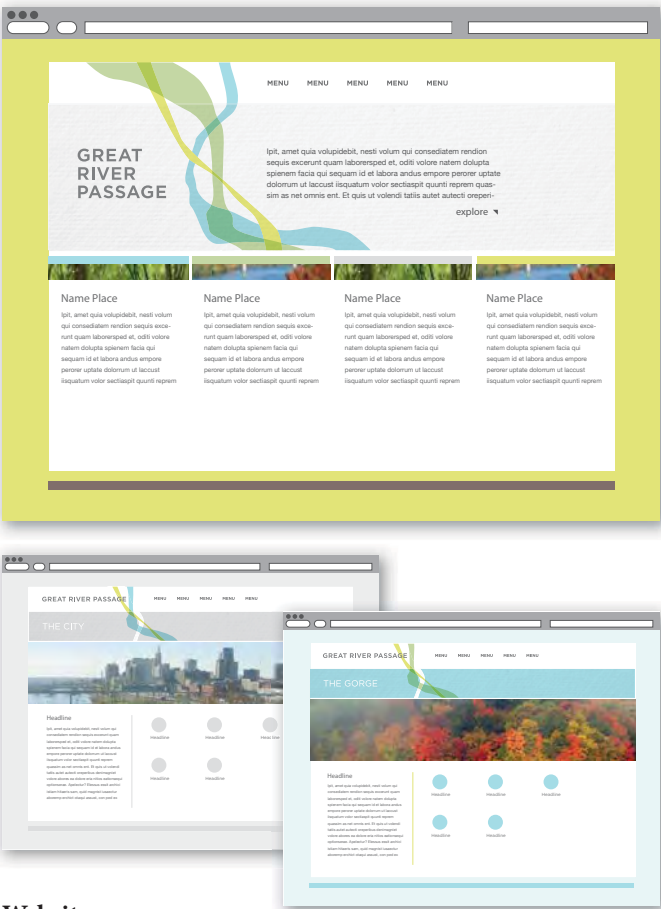
Signage

Utilizing a mixed base of materials that can adapt to diverse surroundings, Great River Passage signage blends beautifully into its defined environment while still offering important wayfinding instruction.



Stage

The scalability of the identity demonstrates its power to represent Great River Passage on grand stages for big public events.



Website

The identity’s personality comes to life through the versatility of color and logo configuration. It works in all mediums, including digital expression.





“Telling the story”

The Great River Passage is a wonderfully unique destination within Saint Paul — and for that matter, of the world. People from all walks of life seek out its individual parks for inspiration, relaxation and recreation. And, just as the park design is focused on creating connections between the diverse experiences that the Passage offers, the marketing and communications can begin to break down existing walls to create new connections between those with interest in this Minnesota treasure.

The river is the bond that draws us all together. We can leverage this notion to connect disparate groups, to connect communications initiatives and to bring new relevance to residents of Saint Paul and surrounding communities.

The strategies that follow seek to maximize the efficiencies created by these natural connections. We will begin with those closest to the river and use their influence, networks and passions to draw people to the Great River Passage. Once engaged, we'll work diligently to maintain a valued relationship that provides a continuous stream of relevant reasons to return.

Three primary goals. Each lending strength to the others.

The Great River Passage marketing framework has three primary objectives that will help to establish a foundation for increased efficiency and long-term success:

- 1. Build its database of current and potential users
- 2. Stimulate trial of the “system” of parks
- 3. Increase the frequency of visitation among identified users.

Fortunately, much of what is needed to achieve these objectives already exists. First, Saint Paul has databases that exceed 20,000 active users of park and recreation facilities or programs. And, second, each of these users has a network of friends, family and neighbors that can help to grow the database. We just have to arm them with relevant reasons to engage, and re-engage, throughout the year.

A vibrant river destination will begin with those closest to it

The primary target for the Great River Passage are largely those we already know – they, or their networks, are simply under leveraged. The first are “Core Users” who represent most frequent and passionate of Great River Passage users. Some live on the river and others travel in from other suburban cities. However, they all likely participate in one or more lifestyle groups that focus on river assets (e.g., trails) and attractions (e.g., wildlife).

The other primary audience has been deemed “Active Users.” These are occasional users who have personally registered for park activities (e.g., picnic), but may not see the Great River Passage as an integral part of their lives.

At this time, our secondary audience is comprised of residents from the seven-county metro area. The key will be to create relevant connections with this group, so they engage in activities that ladder them up into the primary audience.

Seven key marketing strategies for the Great River Passage

1. Centralize Great River Passage communications

- Near-term
- a. Consolidate the contact databases within Saint Paul Parks and Recreation and other complementary departments to optimize reach and frequency among the primary audience.
  - b. Create a common messaging platform that forms the foundation of all outgoing communications (i.e., including current and future initiatives).
  - c. Develop an internal and external team of “expert” communicators to engage with communications partners and the media. Each should maintain a deep knowledge of the Great River Passage, its history, assets and priority messages.
  - d. Create a 12-month editorial calendar for all outgoing Saint Paul Parks and Recreation communications. Initial focus should be on “what is said.” Once the message hierarchy and flow is established, the calendar can refocus on delivery channels.

- Long-term
- a. Train public-facing Saint Paul Parks and Recreation representatives on the events and activities within the Great River Passage.

2. Develop a systems-level communication plan

- Near-term
- a. Execute a database-driven email campaign to reintroduce Saint Paul to the current system of parks that makes the Great River Passage.
  - b. Leverage high-traffic assets as media hubs to distribute tiered systems-level and park-level information.

- Long-term
- a. Audit the consolidated database to identify demographic and behavior-based data that can translate into relevant, targeted communications opportunities (e.g., a playground guide for families).
  - b. Add profiling capability to allow users to segment Saint Paul Parks and Recreation and Great River Passage content by areas of interest.
  - c. Use emerging technologies (e.g., mobile scanning) to deliver deeper park content and to drive turnkey user registration.

3. Cultivate strategic partnerships

- Near-term
- a. Identify and segment potential partners based on one of three attributes: financial support, advocacy or program support.
  - b. Build a “vision” kit to demonstrate the evolution, diversity and opportunities in the Great River Passage.
  - c. Integrate contacts from partner databases into the master Saint Paul Parks and Recreation database and/or execute an opt-in campaign through partner communication channels (e.g., email, newsletter, social networks).
  - d. Execute a web “linking” initiative on all partner sites, both traditional web sites and social networks.
  - e. Create a Great River Passage “partner tool kit” that offers identity elements (e.g. logos), images, links to Great River Passage content, related promotional materials and simple guidelines for application.

- Long-term
- a. Develop a news and activity aggregator that sources and segments partner content.

4. Optimize web communications

- Near-term
- a. Update Saint Paul Parks and Recreation and Great River Passage web pages to optimize search engine exposure, including keywords, page names, tagging, navigation, etc.

- Long-term
- a. Seed Great River Passage assets onto existing social communities (e.g., FourSquare, Facebook Places).

5. Proactively market event and facility assets

- Near-term
- a. Develop a relationship campaign for past users of park facilities.
  - b. Create an online event and facilities resource and registration guide.
  - c. Formalize and streamline the event registration process.

- Long-term
- a. Execute public relations campaign to position the Great River Passage as a top event destination.

6. Expand Great River Passage programming

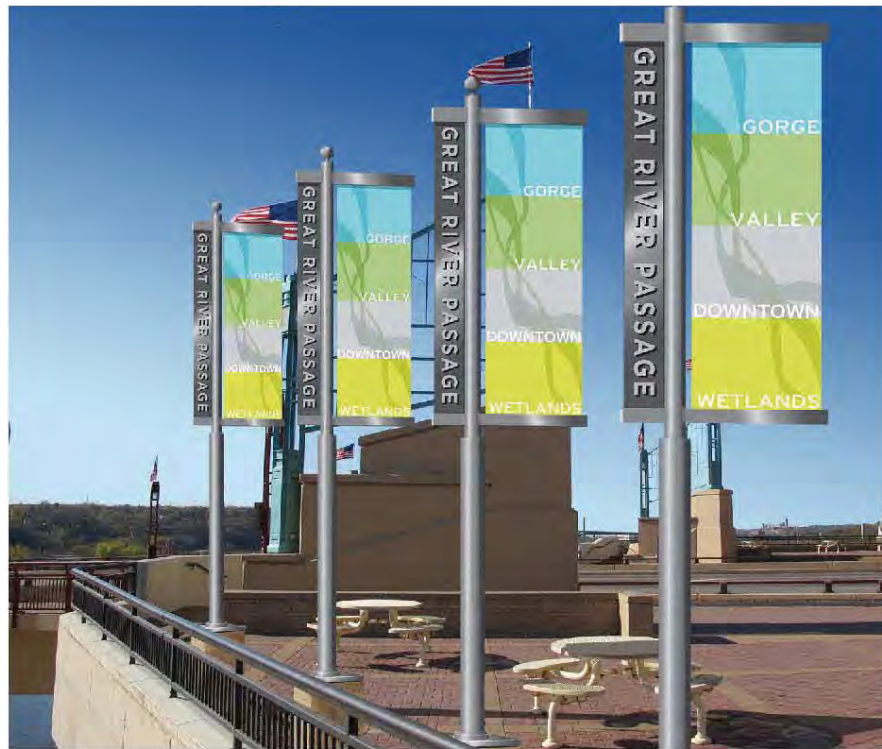
- Near-term
- a. Explore legacy grants as means to support additional programming.
- Long-term
- a. Build a structure that allows more 3rd party programming in the Great River Passage.
  - b. Investigate the possibility of corporate/local business/media sponsorship of Great River Passage programs.

7. Infuse the Great River Passage into cultural staples

- Long-term
- a. Host well-known, annual Saint Paul events (e.g., Winter Carnival, State Hockey Tournament) and performances (e.g., Prairie Home Companion) in the Great River Passage

- Action items
- 1. Establish and/or benchmark goals for visitation, permits, database contacts and strategic partnerships.
  - 2. Conduct a resource review of current Saint Paul Parks and Recreation staff to determine new roles, responsibilities and resource gaps.
  - 3. Execute a technology audit of current Saint Paul and Saint Paul Parks and Recreation databases to outline steps required to consolidate contacts.
  - 4. Build an executable road map of priorities and key marketing milestones.





1.1 Gateway in urban plaza setting

## Bringing visibility to the Great River Passage

The sign system celebrates and brings visibility to the diverse experiences of the Great River Passage. Individual sign types integrate the brand—logo, color and reaches—of the Great River Passage and serve to orient and engage pedestrians, cyclists and motorists in wayfinding throughout the Gorge, Valley, Downtown, and Wetlands of the region. To herald the Great River Passage experience, the sign system is distinctive, but also features select design details and materials established along the Grand Round, Parkways and Boulevards and Park Access Routes, in order to be appropriate with other City signs and street amenities.

## Wayfinding & Connectivity

A hierarchy of sign types—from gateways to regulatory signs—in conjunction with landmarks, pathways, and amenities, serve to engage and connect locals and visitors to the many opportunities of the Great River Passage experience.

## Sustainable Materials

The materials palette of the signature sign system has been chosen to integrate with the diverse urban and natural environments of the Great River Passage parks through a carefully considered balance of appropriate forms, materials and finishes. Various sign types will feature a materials palette of: general aluminum and steel construction with paint and powdercoat finishes; factory milled and laminated cedar, stained and sealed; native Mankato limestone; waterjet-cut aluminum letter forms; vinyl banner fabric; machine-cut reflective vinyl messages; reinforced concrete footings with break-away hardware as required.

### Signs & Wayfinding Goals

- \* Implement a system of environmental graphic components that enhance wayfinding, safety and quality of experience.
- \* Enhance the branding to bring visibility to the Great River Passage.
- \* Engage locals and visitors in discovering the Great River Passage.
- \* Spur economic development in and around the parks.
- \* Promote and foster stewardship of the City's many park amenities.
- \* Celebrate the diversity of the reaches—urban to natural
- \* Foster community pride and respect for the parks with a system of distinctive signs.

### Action Items

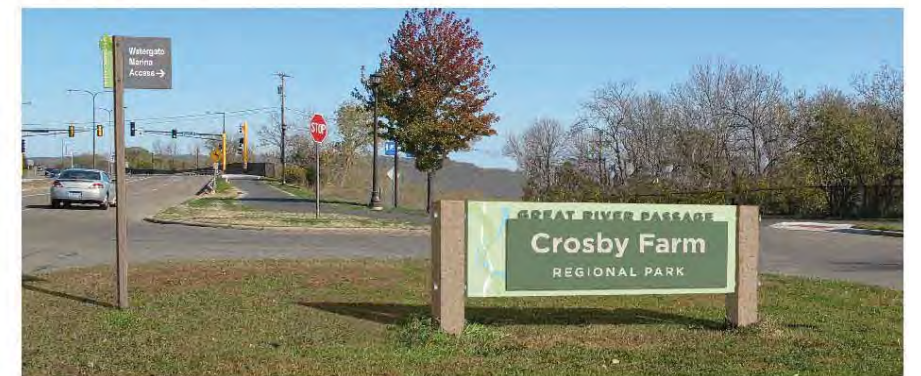
- \* Complete a city-wide Location Plan identifying potential placement of all sign types.
- \* Incorporate the sign system plan into the GRP Marketing Strategy Plan.



1.0 Gateway grouped with public art



2.0 Primary Directional



5.0 Site Identification & 3.0 Secondary Directional



4.0 Banners on pedestrian light poles

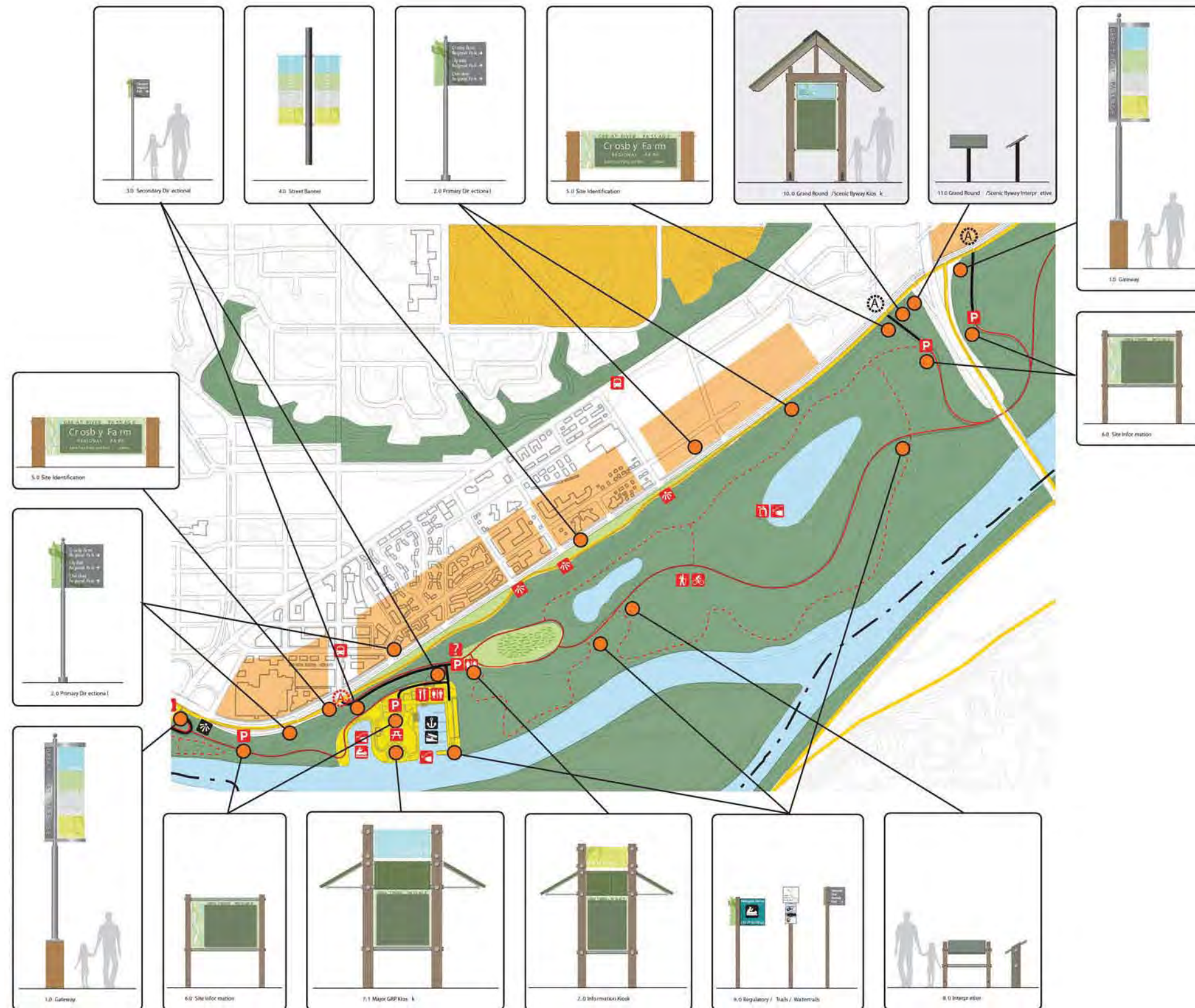


4.0 Banners on median street light poles









## Sign Location Example

Concept plan to demonstrate the Great River Passage Sign and Branding System at the Crosby Farm Park segment of the GRP Corridor

- 1.0 **Gateways:** Serves to “bookend” Crosby Farm Park section of the GRP corridor.
- 2.0 **Primary Directional:** Call-out approach/turns to Crosby Farm Park and directions to other GRP sites beyond.
- 3.0 **Secondary Directional:** Sign location on plan is typical and does not include other potential locations on secondary roads & bicycle paths.
- 4.0 **Street Banner:** Banners applied to median and/or pedestrian light poles on Shepard Road adjacent to Crosby Park to identify and celebrate the GRP Corridor.
- 5.0 **Site Identification:** Located at primary park entries.
- 6.0 **Site Information:** Located at parking lots.
- 7.0 **Information Kiosk:** Located at key convergence of parking, pavilion and trailhead.
- 7.1 **Major GRP Kiosk:** Located at large gathering area of Watergate Marina.
- 8.0 **Interpretive:** Sign located on plan is typical with wetlands interpretation. Signs to be placed as needed.
- 9.0 **Regulatory / Trails:** Signs located on plan are typical and do not include other potential locations requiring regulatory or informational messages along trails and throughout park.
- 10.0 **Grand Round Kiosk:** Integrates with Saint Paul Grand Round and Scenic Byways system, and GRP specific graphics and information.
- 11.0 **Grand Round Interpretive:** Integrates with Saint Paul Grand Round and Scenic Byways system.



| GRP SIGN SYSTEM                                                                                                                                                                                   | PURPOSE                                                                                                                                                                            | TYPICAL SETTING                                                                                                                  | EXAMPLE                                                                                              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| <b>1.0, 1.1 Gateway</b><br>Double face GRP logo and identity displayed on pole with stone base.                                                                                                   | Provide landmark-scale wayfinding features that celebrate and brand the GRP. Define GRP arrival points                                                                             | Placed at important City & GRP entry points as single elements, in groupings or with other landmark elements such as public art. | Crosby Farm Regional Park near Shepard Rd. and Gannon Rd; Warner Road at Highway 61; Wabasha Bridge. |
| <b>2.0 Primary Directional</b><br>Single or double face directional/informational and GRP identity mounted to single pole.                                                                        | Directional sign scaled for wayfinding and GRP identification from automobile.                                                                                                     | Used on main routes to GRP sites and decision points along main arterial streets.                                                | Shepard Road; Warner Road; 7th Street W.                                                             |
| <b>3.0 Secondary</b><br>Directional single or double face information and GRP identity mounted to single pole.                                                                                    | Scaled for wayfinding and GRP identification from car or bicycle                                                                                                                   | Secondary streets and bicycle trails.                                                                                            | Sam H. Morgan Regional Trail at Crosby Farm Road; Lillydale Road, Big Rivers Regional Trail.         |
| <b>4.0 Street Banner</b><br>GRP identity banners applied to existing street light poles.                                                                                                          | To brand and celebrate GRP, emphasize paths ,routes and park edges.                                                                                                                | Applied to existing city street banner systems or new GRP purposed structures at locations on GRP route streets or site edges.   | Shepard Road; Warner Road; Kellog Blvd.                                                              |
| <b>5.0 Site Information</b><br>Site name, St. Paul Parks and GRP i.d. on “can” sign face mounted between stone piers. Opt. up lighting.                                                           | Important GRP site’s arrival statement and identity.                                                                                                                               | Regional Park Entries.                                                                                                           | Crosby Farm Regional Park entry at Crosby Farm Road. (see Sign Location Example)                     |
| <b>6.0 Site Information</b><br>Single or double face sign panel mounts between two poles.                                                                                                         | Carries site specific, semi-permanent and changeable information including maps, park features, rules, events, and identification of partner/sponsor organizations.                | Main parking area/trailhead within parks.                                                                                        | Crosby Farm Regional Park. (see Sign Location Example)                                               |
| <b>7.0 Information Kiosk</b><br>Four sided structure of glue-lam cedar and alu. with display panels. Option of PV panels & LED light.                                                             | Orientation feature with site specific information and city-wide mapping of partnering trail systems and partner organizations. Displays sized to match Grand Round Kiosk.         | At key locations in Regional Parks.                                                                                              | Crosby Farm Regional Park. (see Sign Location Example)                                               |
| <b>7.1 Major Kiosk</b><br>Landmark-scaled , four-sided, timber, aluminum structure with display panels.                                                                                           | Wayfinding and orientation gathering place feature. Celebrates the GRP. Displays GRP-wide and site specific mapping, features, events, partnering organizations and trail systems. | Large public gathering sites within parks or plazas                                                                              | Watergate Marina                                                                                     |
| <b>8.0 Interpretive</b><br>Glue-laminated cedar and aluminum base with angled display panel.                                                                                                      | Display interpretive themes, messages and graphics.                                                                                                                                | Key interpretive sites within the GRP.                                                                                           | Wetlands education site/ Crosby Farm Regional Park                                                   |
| <b>9.0 Regulatory/ Trails/ Watertrails</b><br>System of single- or double faced signs mounted to single pole.                                                                                     | Enhance safety and quality of experience with displayed regulatory, informational, and directional messages.                                                                       | Throughout all GRP parks and trails                                                                                              | Along park and connecting trails, water trail/ canoe landings.                                       |
| <b>10.0 Grand Round Kiosk</b><br>Developed for St. Paul Grand Round/Scenic Byways program—propose incorporation of GRP identity, color and graphics - particularly where systems/trails coincide. | Orientation feature with site specific information and city-wide mapping of partnering trail systems and partner organizations.                                                    | Along Grand Round at designated orientation locations.                                                                           | Crosby Farm Regional Park access at Shepard Road and Elway Street.                                   |
| <b>11.0 Grand Round Interpretive</b><br>Single metal post with angled display panel -developed for St. Paul Grand Round/Scenic Byways program.                                                    | Display interpretive theme, messages and graphics.                                                                                                                                 | Key interpretive sites on the Grand Round/Scenic Byways Trail.                                                                   | Crosby Farm Regional Park access at Shepard Road and Elway Street.                                   |



Providing a Healthy River Ecosystem

This section is not intended to be prescriptive, but provides a tool for Parks and Recreation, and other agencies, to implement measurable sustainability goals that are consistent with citywide goals and policies. The intent is to promote stewardship of resources in the corridor that, over a period of time, will substantially improve their quality. Sustainability goals are generally organized into six broad categories:

- Management
- Natural Resources
- Water Resources
- Quality of Life
- Built Environment
- Transportation Choices

The GRP boundaries extend well beyond the approximately 3,500 acres of parks property. Areas include the river, parks and open space, neighborhoods and businesses and the infrastructure that supports them. The stakeholders are the larger community that enjoy the benefits of the Great River Passage. While the sustainability goals focus primarily on parks, they can be applied through policy alignment and adoption by other agencies, and by private development and redevelopment in areas adjacent to the River corridor.

The State of Minnesota and City of Saint Paul (Sustainable Building Policy 68.402) favor voluntary compliance with regional sustainability goals for smaller projects as well, providing incentives and assistance. New construction and retrofits should use the following rating systems to measure sustainability in design and implementation:

- Leadership in Energy and Environmental Design (LEED), US Green Building Council
- Sustainable Sites Initiative (SITES), American Society of Landscape Architects, et al.
- Green Globes , Green Building Initiative (GBI)
- State of Minnesota B3 Guidelines
- Minnesota Green Star

Parks Projects

The following sustainability goals are intended to support the Plan’s goals and objectives. Minimum performance benchmarks are specific measures that should be established upon the initiation of any park project or program. Where applicable, ultimate performance objectives are longer term goals for ideal future conditions.

- The master plan addresses a wide range of projects, programs, maintenance and management recommendations that are divided into the following categories:
- New projects should meet the minimum performance benchmarks specified. All new regional park master plans and area plans within the corridor should include specific sustainable performance goals and benchmarks that meet or exceed those established herein.
  - Existing facilities should be reviewed for opportunities to implement sustainable practices through maintenance and retrofit.

- Operation and Maintenance protocols should adopt the SITES operations and maintenance best practices detailed in Chapter 8 of that document.

Other Public Projects

While these sustainability goals and strategies are developed primarily for the use of Saint Paul Parks and Recreation Department, they are not prescriptive, and may be integrated into the policies and actions of other agencies. Those that can contribute to the success of these guidelines include Public Works, Planning and Economic Development, Mississippi River National River Recreation Area (MNRRA), Saint Paul Port Authority, Ramsey and Dakota Counties, and the State of Minnesota (MNDOT and DNR).

Private projects

New private redevelopment projects should use the model sustainability framework developed for the Ford Plant Redevelopment Site, called “The Road map to Sustainability” <http://www.stpaul.gov/DocumentView.aspx?DID=16428> . This document is developed specifically for the Ford Site but the goals and performance standards for sustainability are relevant to any large scale redevelopment in the GRP. Sustainability Guidelines should be adapted to the following planned developments:

- Davern Gateway
- ADM Site
- Island Station
- Downtown/Lowertown
- West Side Flats
- Riverside
- District del Sol

Manage for Sustainable Systems

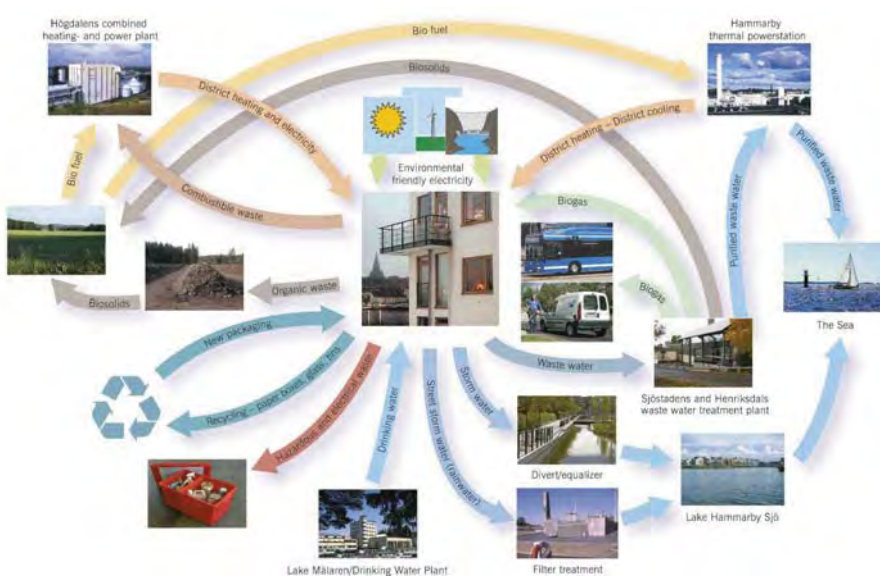
1.0 Process and Innovation

Sustainability Goals:

- Establish the Great River Passage as a leader in sustainable practices
- Recognize Parks as Green and integral to the City’s sustainability goals
- Adapt to and help mitigate climate change

Performance Benchmarks

- 1.1 Identify a champion and facilitator for Sustainable Practices.
- 1.2 Review, adopt and refine sustainability policies, goals and best practices for parks planning, design, operations and maintenance.
- 1.3 Provide adequate funding for Park improvements, management and maintenance.
- 1.4 Engage the public and the private sector as participants in park planning, design and maintenance.
- 1.5 Provide assistance to voluntary efforts in sustainable design and building
- 1.6 Develop incentives for success such as sustainable design awards and recognition for projects in the Great River Passage.



Sustainability systems are complex and interrelated.



Take a comprehensive approach to application of principles.





Constructed wetlands improve water quality, erosion control and habitat.



Upland areas incorporate local materials and native plantings.

**2.0 Implementation**

Sustainability Goals:

- Approach environmental responsibilities comprehensively rather than on a project-by-project basis (Parks policy 3.11)
- Further develop and implement sustainable practices for the Great River Passage
- Engage all Park users and potential users
- Communicate success and share knowledge
- Create and support stewardship partners

Performance Benchmarks

- 2.1 Use an integrated planning and design process (SITES 2.2)
- 2.2 Engage users and stakeholders and the public in site planning and design
- 2.3 Prepare an overall ecological assessment and site preservation master plan that addresses soils, vegetation, habitat and water resources.
- 2.4 Integrate maintenance planning into the planning and design process and establish level of service for landscape performance.
- 2.5 Monitor performance of sustainable practices.

**3.0 Identify Resources and Establish Benchmarks**

Sustainability Goals:

- Identify and protect highly sensitive areas
- Explore options for sustainable outcomes
- Educate stakeholders about opportunities and threats

Performance Benchmarks

- 3.1 Identify and update inventory mapping of microclimate areas, soils, threatened and endangered species, sensitive habitat areas, vegetation, floodplains, wetlands, historic streams, drainage and buffer areas.

**Enhance the Natural Environment**

**4.0 Vegetation and Habitat**

Sustainability Goals:

- Manage Park landscapes to protect and enhance native vegetation and manage invasive species
- Expand natural areas to create continuously connected and synergistic systems
- Preserve threatened and endangered species and their habitats
- Reduce the risk of catastrophic wildfire
- Maximize ecosystem services both in the Park and in surrounding areas

Performance Benchmarks

- 4.1 Meet or exceed all relevant existing sustainability goals recognized by City, County, State and Federal agencies (refer to summary below).
- 4.2 Update current GIS data to maintain a comprehensive vegetation inventory
- 4.3 Identify existing species of vegetation and invasive species for eradication (SITES 4.1)
- 4.4 Designate Soil and Vegetation Protection Zones (SPVZ) for areas of special significance (SITES 4.2)
- 4.5 In woodland areas provide >75% tree canopy cover on all impervious

surfaces (LEED SS 7.1)

- 4.6 Improve park and street tree health by providing adequate space and soil volume (coordinate with City Forester)
- 4.7 Restore native plant communities to at least 75% of the site vegetated area in natural areas and river parks (SITES 4.7, 4.9)
- 4.8 Provide habitat corridors in “green fingers” connecting Parks to adjacent off site natural areas (SITES 4.9)
- 4.9 Identify threatened and endangered species in all project and program areas

**5.0 Soils**

Sustainability Goals:

- Protect and restore soil structure, stability and biological health to optimize plant health and water infiltration.
- Reduce soil loss and minimize disturbance of existing healthy soils.
- Protect unique geologic features such as the bluffs and floodplain.
- Address impacted and contaminated soils in public open space

Performance Benchmarks

- 5.1 Provide comprehensive soil testing and analysis
- 5.2 Create a Soil Management Plan (SMP) (SITES 4.3)
- 5.3 Meet MPCA soil cleanup criteria with land use restrictions. (MPCA)
- 5.4 Minimize soil disturbance in existing parks
- 5.5 Provide adequate soil volume and depth
- 5.6 Re-use on-site soils and use compost to improve soil function (SITES 4.4)

**Implement Water Efficient Landscapes**

**6.0 Stormwater and Hydrology**

Sustainability Goals:

- Protect floodplain function (SITES 1.2)
- Meet or exceed current stormwater management and water quality goals
- Restore the natural qualities and ecological functions of urban streams
- When feasible, restore historic hydrology in tributary watersheds
- Preserve, enhance and rehabilitate riparian, wetland and shoreline buffers to improve flood control and water quality, stabilize soils and improve wildlife habitat
- Reduce flows to storm sewers and increase the quality of urban stormwater entering rivers and streams.
- Do not exceed natural erosion and sedimentation levels in streams and lakes.

Performance Benchmarks

- 6.1 Comply with USACE requirements for work in the 100 year floodplain.
- 6.2 Comply with or exceed current local regulations for stormwater runoff volumes and rate control (CRWD, MPCA, B3)
- 6.3 Eliminate discharge of untreated stormwater runoff from on site sources. (SITES 3.5, 3.6)
- 6.4 Reduce off-site runoff volumes by at least 90% by infiltration and evaporation or reuse, or provide a corresponding water quality benefit. (Ford)



STRATEGIES

- 6.5 Maintain minimum cover (>3') above bedrock and follow MPCA guidelines for infiltration
- 6.6 Use rain gardens and bioretention areas, including green roofs, to reduce runoff, improve water quality and irrigate landscape areas
- 6.7 Use porous pavements on park roads and parking areas where feasible to accommodate stormwater runoff
- 6.8 Preserve (and restore if necessary) the riparian, wetland or shoreline buffer and designate it as a VSPZ ( SITES 3.3)
- 6.9 Rehabilitate (daylight, restore) artificially modified stream channel or shorelines using geomorphological and vegetative methods (SITES 3.4).
- 6.10 Rehabilitate degraded or lost wetlands (SITES 3.4)
- 6.11 Produce and implement a Stormwater Pollution Protection Plan per MPCA guidelines for all construction activities.

7.0 Water Efficiency

Sustainability Goals:

- Reduce potable water use for irrigation in Parks
- Utilize stormwater to provide a landscape amenity
- Design/retrofit irrigation systems and water features to conserve water

Performance Benchmarks

- 7.1 Predicted building potable water use must be 30% below the EPA Policy Act of 1992 (SPSBP)
- 7.2 Eliminate the Use of irrigation in all Natural Areas and River Parks
- 7.3 Limit the amount of irrigated turf grass to that required to support planned Park programs.
- 7.4 Use an ecological approach to planting vegetation to reduce landscape water demand
- 7.5 Reduce potable water use for landscape irrigation and water features in all other parks by 50% or more from the established baseline (SITES 3.2).
- 7.6 Provide 50% of park irrigation needs from grey water or harvested rainwater sources

Improve the Quality of Life in Saint Paul

8.0 Recreation and Public Spaces

Sustainability Goals:

- Improve community quality of life by providing accessible and safe outdoor spaces for recreation
- Improve personal health by providing opportunities for outdoor physical activity and social interaction
- Provide park and recreation facilities that appeal to and are accessible by all
- Support educational and scientific uses of the corridor
- Promote sustainability awareness, education and environmental stewardship
- Implement park facilities in a manner that minimize impact on natural resources

Performance Benchmarks

- 8.1 Complete network of ADA accessible off road trails connecting park entries and major uses areas (SITES )
- 8.2 Provide nature based recreation facilities or programs adjacent to and supporting the recreation needs of, each neighborhood along the GRP
- 8.3 Provide opportunities for group and social interaction (SITES 6.8)
- 8.4 Provide access for schools and university research, sustainability awareness and education (SITES 6.3)
- 8.5 Provide at least two large outdoor public gathering places for civic events (e.g.: Island Station and Harriet Island)
- 8.6 Provide ADA access to the River for fishing and/or boating in at least 6 locations in the corridor
- 8.7 Provide smaller outdoor spaces for small group gathering, (e.g.: camping, picnicking) to support recognized recreation needs. (Parks Program System Plan)
- 8.8 Provide indoor public spaces for community meetings, education, public art and culture, club use, events, etc to support recognized recreation needs.

9.0 Culture, History and Art

Sustainability Goals:

- Preserve and interpret Cultural and Historic resources
- Plan and program Parks for diverse users

Performance Benchmarks

- 9.1 Perform a detailed assessment of historic and cultural assets and cultural community needs.
- 9.2 Accommodate Dakota heritage landscapes (SITES 6.4)
- 9.3 Interpret all historic resources (SITES 6.4)

10.0 Scenic Resources

Sustainability Goals:

- Create and manage accessible viewpoints that accent attractive views and screen unattractive views (SITES 6.7)
- Create and support the creation of attractive urban features (SITES 6.7)
- Address and manage attractive/unattractive auditory and olfactory impacts

Performance Benchmarks

- 10.1 Provide visual access to the river from upland public areas by providing accessible public overlooks at minimum 1 mile intervals

Improve the Built Environment of the GRP

11.0 Buildings, Energy, Lighting and Maintenance

Sustainability Goals:

- Reduce the urban heat island effect by minimizing development footprint of park facilities
- Reduce operating energy use in all Park buildings, structures and landscape
- Maximize the use of renewable energy



Access to recreation provides a higher quality of life.



Recreation programming supports the needs of a diverse range of users.





The built landscape can integrate environmental function and beauty.



The grand stair (Rome) provides both a connection and a destination.

- Use vegetation to reduce building heating and cooling requirements
- Reduce light pollution by limiting glare, trespass and sky glow
- Reduce energy consumption for operations and maintenance

Performance Benchmarks

- 11.1 Apply LEED Silver or better requirements to all new Parks buildings (LEED-NC)
- 11.2 Meet energy use and Greenhouse Gas Emissions (GHG) targets specified in Minnesota 2030 program (B3)
- 11.3 Use renewable sources to provide at least 25% of all park energy needs (SITES 8.5)
- 11.4 Provide >50% green roofs on all new parks buildings (LEED SS 7.2)
- 11.5 Adopt Dark Sky policies from the International Dark Sky Association (IDA) and Illumination engineering Society (IES) model lighting ordinance (IDA, IES)

12.0 Materials

Sustainability Goals:

- Reduce embodied energy use, GHG emissions and other environmental impacts associated with building, infrastructure and landscape materials.
- Decrease damage to the environment caused by materials harvesting, production, installation and use. Increase longevity and ease of maintenance.

Performance Benchmarks

- 12.1 Comply with Minnesota B3 building guidelines, Materials and waste, Section M2 – Environmentally Friendly Materials
- 12.2 Use regional, local and certified materials (SITES 5.1, 5.6, 5.7)
- 12.3 Maintain or salvage existing structures and materials where practical (SITES 5.2, 5.3, 5.4)
- 12.4 Recycle and use recycled materials – minimum 30% of value of total materials used on site (SITES 5.5)
- 12.5 Use less pavement by reducing roadway widths and parking space sizes.
- 12.6 Use recycled materials and avoid toxic materials for site furnishings and improvements
- 12.7 Use VOC compliant materials (SITES 5.8)

Provide Transportation Options

13.0 Transportation and Mobility

Sustainability Goals:

- Make the GRP more physically and visually connected to the city and its neighborhoods.
- Provide for optimum accessibility, safety and wayfinding
- Create transportation infrastructure that better balances mobility choices between walking, biking, vehicles and transit.
- Reduce average vehicle miles driven by persons visiting or passing through the GRP
- Increase average walking and biking miles per year for persons using the GRP
- Reduce energy use and GHG emissions related to motor vehicle use and reduce the human health effects of air pollution

Performance Benchmarks

- 13.1 All streets and intersections shall implement methodologies consistent with Complete Streets policies and 2010 ITE manual: “Designing Walkable Urban Thoroughfares: A Context Sensitive approach, An ITE Recommended Practice” (ITE, )
- 13.2 Provide ADA accessible route from transit to park entrances and to main parking and/or activity zone(s) within each park.
- 13.3 Provide continuous off street trails along both sides of the River for the entire length of the GRP that meet Minnesota DNR Trail Planning, Design and Development Standards for Shared-use Paved Trails
- 13.4 Provide continuous bike lanes from light rail transit stations to regional trails along most direct route.
- 13.5 Provide connections to on street designated bike routes every ½ mile minimum (as recommended in the master plan)
- 13.6 All park entrances shall be within ¼ mile of a bus or transit stop
- 13.7 Provide one bicycle parking rack for every 10 vehicular parking spaces with a minimum of 4 per parking area. (LEED-ND)
- 13.8 Provide for optimum wayfinding. (SITES 6.5)





*Provide public access to the River shoreline.*



*Partner to protect and restore natural areas.*

## Completing the Park

The Great River Passage calls for expanding parks to support open space connections, protection of sensitive resources, improved access to the riverfront and expanded opportunities to meet community recreation needs. During the planning process several opportunities to expand the Great River Passage were identified. Park expansion can happen in one of several ways:

- Acquisition through direct land purchase or private land dedication
- Site redevelopment through Public-Private or not-for profit partnerships
- Green Connections including public use easements
- Intergovernmental agreements and Public-Public partnerships

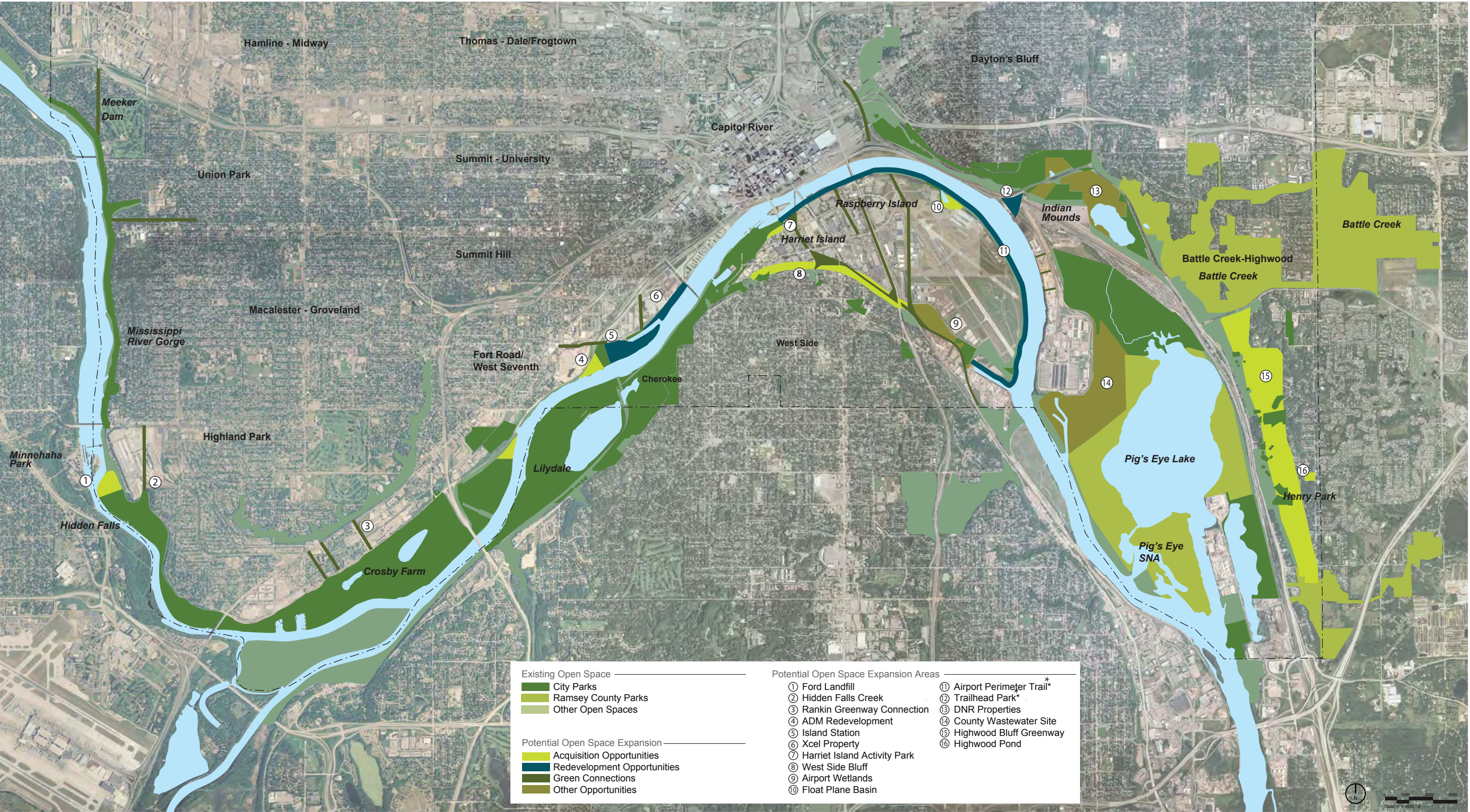
Existing land owners of open space areas consist primarily of City, County, State and quasi-governmental agencies such as the Saint Paul Port Authority and Metropolitan Airports Commission. Privately owned redevelopment areas adjacent to existing parks may dedicate or restrict open spaces within new development areas as part of their development agreements with the City.

The land acquisition plan describes several potential areas for Great River Passage expansion including:

- Portions of the Ford site that are on the river side of Mississippi River Boulevard and along Hidden Falls Creek into the Ford Site (land dedication)
- Green fingers in redevelopment areas (land dedication)
- Island Station and adjacent land holdings by Xcel Energy and Archer Daniels Midland (public-private partnership)
- Harriet Island (land purchase)
- Bluff open space – West Side (land purchase)
- West side promenade (public use easement)
- Float Plane basin and airport wetlands (Inter-governmental Agreement - IGA)
- Fish Hatchery, Department of Natural Resources site and Upper Pig's Eye (IGA)
- County open space at Pig's Eye, Battle Creek and Wastewater Treatment Plan (IGA)
- Highwood Bluff (land Purchase or Conservation Easement(s))

As the primary manager and steward of the Great River Passage, Saint Paul Parks and Recreation should explore which means of park expansion are best suited to their goals, management structure, funding and staffing capabilities.





\*Note: Potential acquisition dependent on change in existing commercial uses.  
G.I.S. Data source: City of Saint Paul









[www.greatriverpassage.org](http://www.greatriverpassage.org)

more natural . more urban . more connected



# GREAT RIVER PASSAGE

more natural . more urban . more connected

## APPENDIX

Master Plan for Saint Paul's  
17 Miles of Mississippi River Parklands









**Section**

|                                          |            |
|------------------------------------------|------------|
| <b>A.1 Planning Context</b>              | <b>A5</b>  |
| <b>A.2 Existing Conditions Inventory</b> | <b>A9</b>  |
| • Natural Resources                      | A10        |
| • Parks and Open Space                   | A27        |
| • Economic Redevelopment                 | A41        |
| • Access and Connections                 | A45        |
| • Public Art                             | A47        |
| • Cultural Resources                     | A49        |
| <b>A.3 Regulatory Requirements</b>       | <b>A52</b> |
| <b>A.4 Community Participation</b>       | <b>A64</b> |
| • Cultural Audit <sup>(TM)</sup>         | A67        |
| • Project Website                        | A69        |
| • Public Comment Summary                 | A71        |



General Intent

The following diagrams were prepared to summarize the history of planning and the consultant’s review of prior planning context. Research was provided by members of the consulting team including Wenk Associates, Hoisington Koegler Group and 106 Group.

Sources of Information

Plans were researched from information provided by the City of Saint Paul through library and internet research.

Further Study

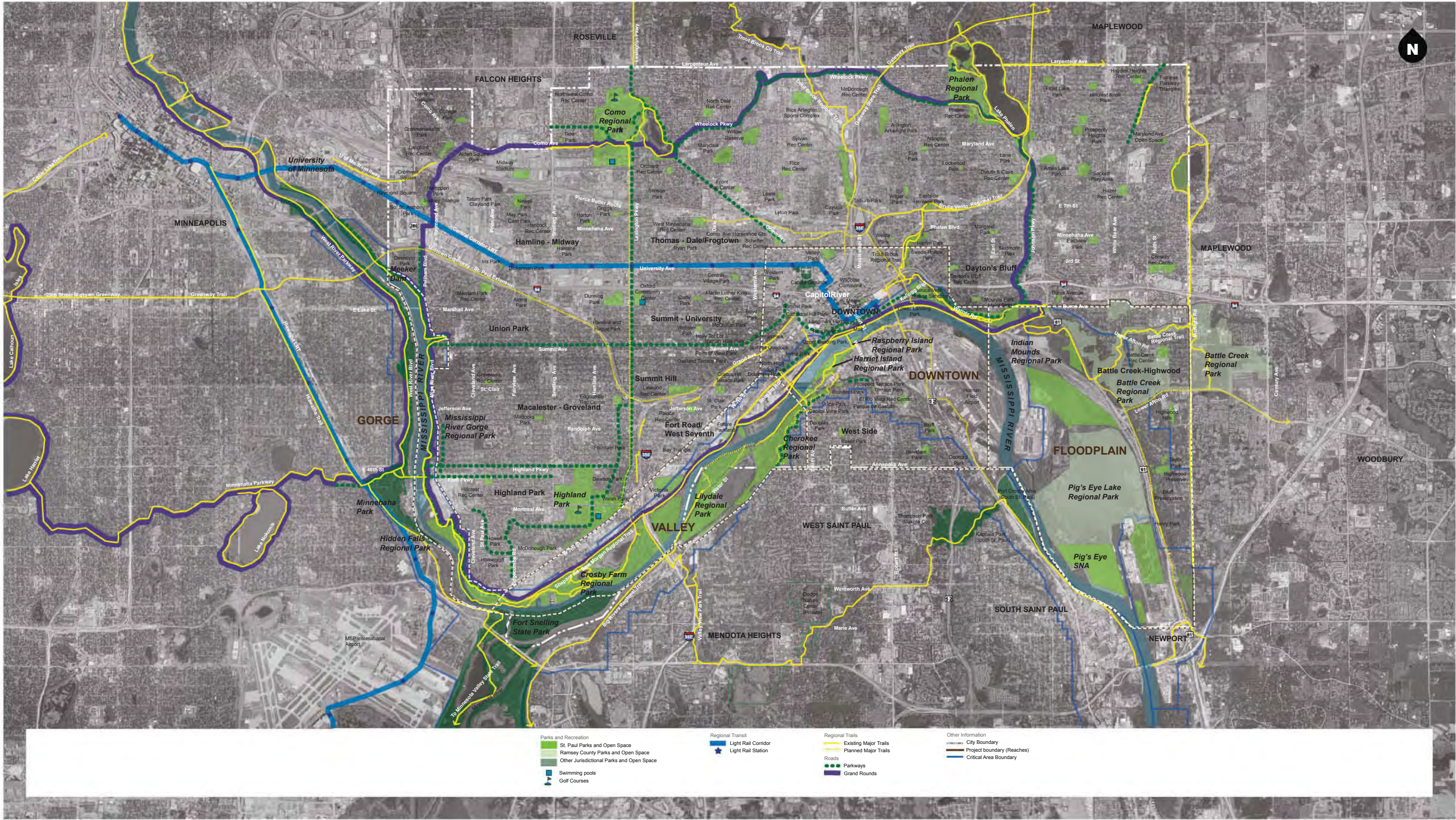
Further updates should be considered based on the results of other relevant studies that were more recently completed or are presently ongoing at the time this research was completed. A sample of relevant ongoing planning that we are aware of includes:

- MNRRA – Alternative Transportation Study, Headquarters Siting study
- Union Depot Area Plan
- Central Corridor Studies

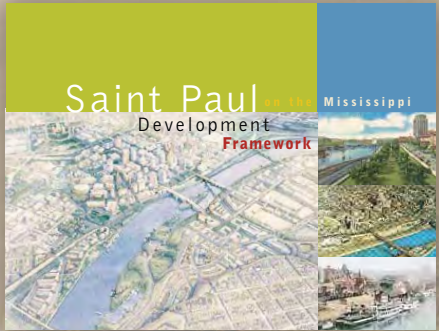
Following Maps and Documents

- 6 GRP Context Base Map
- 7 Planning Context: Development Framework
- 8 Planning Context: Framework Chapter









# Saint Paul on the Mississippi Development Framework

## Reconnecting the City and the River

The Saint Paul on the Mississippi Development Framework is about a reconnection of the city and river as profound and far-reaching as the industrialization of the river in the late 19th and early 20th centuries.

## The Vision – Capital City on the Mississippi

The vision for Saint Paul articulated in the Framework is of a system of interconnected urban villages nestled in the lush green of a reforested river valley.

### Ten Principles that Underpin the Framework

1. Evoke a sense of place

- » Create a unique urban setting on the Mississippi River
- » Create a community of urban villages, each focused on a high quality public space

2. Restore and establish the unique urban ecology

- » Establish a balance between built and natural areas
- » Create an urban forest
- » Restore native habitats
- » Improve the water quality of the Mississippi

3. Invest in the public realm

- » Design streets to be attractive and inviting
- » Encourage pedestrian use of streets
- » Increase the diversity of parks and open spaces
- » Encourage greater use of parks and open spaces
- » Improve access to natural features, such as the Mississippi River, the bluffs and the reaches

4. Broaden the mix of uses

- » Create a series of mixed-use urban villages
- » Complement urban villages with mixed-use corridors

5. Improve connectivity

- » Increase access to the river, bluffs and reaches by creating connected pedestrian and bicycle trails
- » Improve access to the river flats from the bluff tops
- » Improve connections between parks by greening linking streets
- » Create a more inviting pedestrian environment
- » Preserve view corridors

6. Ensure that buildings support broader city-building goals

- » Contribute to the public realm
- » Encourage diversity
- » Consistent with character and scale of downtown

7. Build on existing strengths

- » Extend successful urban areas
- » Build incrementally and strategically on initiatives already underway

8. Preserve and enhance heritage resources

- » Supplement the Historic Sites Survey to include all historic buildings, structures, landscapes, monuments and geologic features within downtown and the river corridor
- » Promote and designate Heritage Preservation Districts

9. Provide a balanced network for movement

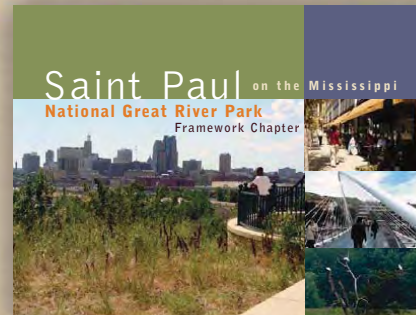
- » Improve the quality of the pedestrian environment
- » Enhance bicycle movement and connections
- » Improve public transit systems

10. Foster public safety

- » Encourage people to live downtown
- » Encourage activities that create downtown vibrancy







## Saint Paul on the Mississippi National Great River Park Framework Chapter

### The Great River Park - “The City in a Park, a Park in the City”

*“The Great River Park strives to be a regional asset of national significance that is More Natural, More Urban and More Connected”*

#### More Natural

**The Great River Park is first and foremost a place of great natural beauty and value. Every action should respect, protect and enhance the ecology of the river corridor and valley.**

- » Protect, maintain, enhance and restore the natural environment of the river and river valley.
- » Design the public and private realms with environmental sustainability in mind.
- » Approach all actions impacting the river, riverfront and adjacent neighborhoods with an eye toward environmental stewardship.
- » Accommodate human activity while maintaining the integrity of natural systems.
- » Continue to invest in neighborhood, city and regional park systems.
- » Recognize that parks, open space and a well-designed public realm are essential for creating and sustaining a quality, livable urban environment.

#### More Urban

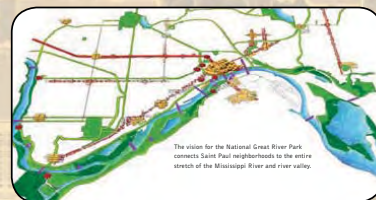
**With such high “place value,” the Great River Park is an area of great economic/real estate value. New urban development in the Great River Park should be high quality, sustainable and strategically located to enhance the natural environment.**

- » Promote high-quality, sustainable urban development, both along the river’s edge and in adjacent neighborhoods.
- » Provide more choices for movement.
- » Preserve visual and physical access to the river.
- » Maintain a strong commitment to community-based planning and make development decisions in the context of the Great River Park.

#### More Connected

**Being connected to the Mississippi River and making the river a part of everyday life are fundamental values in Saint Paul. More physical and visual connections should be created to bring more people to the river, respecting the need to balance increased public access with environmental preservation.**

- » Maintain and improve visual and physical connections to the river and river valley.
- » Create a comprehensive education and interpretation program on the environmental, natural, cultural, aesthetic, historic and economic significance of the Mississippi River.
- » Connect key neighborhood commercial nodes and districts to the river.
- » Celebrate the Great River Park as a unique asset within Saint Paul.
- » Tell the story of the Mighty Mississippi.
- » Explore opportunities and encourage investment in cultural tourism and ecotourism.
- » Broaden the base of citizen participation to involve as many voices and perspectives as possible in enhancing, celebrating and protecting the Mississippi River.



» Vision Sketch

the River



» the Gorge



the Floodplain

Downtown

the Valley





Plan mapping was assembled as part of the inventory analysis phase and compiled with narrative summaries for each subject area as follows:

- Natural & Water Resources
- Parks & Recreation
- Access & Connections
- Potential Economic Development

Following Maps and Documents

- 11-12 Existing Landscape Management Plans
- 13 Existing Natural Resource Zones
- 14 Significant Natural Resource Zones
- 15-18 Landscape Classifications
- 19 River Activities
- 20 Water Resources Inventory - (study area) water/sewersheds, Storm Water District proposed stream daylighting, wetlands surveys, existing water bodies.
- 21 Stormwater Management
- 22 Historic Stream Daylighting Opportunities
- 23-26 Wetland Inventory



## General intent

The water resources and natural resources inventory was prepared to define the existing knowledge base for these two aspects of the natural resources within the boundaries of the Great River Park area. The inventories provide the ecological context for the parks, waters and other natural resources within the project area. Existing data sources, with some manipulations of the data, were the primary inputs to extract and summarize the most pertinent information. Some of the data sets had limited metadata provided and as such the quality, collection data, and other background information are unknown (see data listing in section 2). Other data sets, such as those provided by state agencies are well documented. Within these constraints, the data presentations provide a good visual representation of the larger ecological setting, as well as the threats and opportunities to the resource base.

## Source(s) of information

MCBS Sites of Biodiversity Significance; Time Period of Content Date: 1980 – Present; Originator: Minnesota County Biological Survey, Minnesota Department of Natural Resources, Division of Ecological Resources <http://deli.dnr.state.mn.us/> (1)  
Pre settlement vegetation of Minnesota; Based on Marschner’s original analysis of Public Land Survey notes and landscape patterns; Time Period of Content Date: 1895; Originator: Minnesota DNR - Division of Forestry <http://deli.dnr.state.mn.us/>  
100 year flood plains; FEMA Q3 Flood Data are derived from the Flood Insurance Rate Maps (FIRMs) published by the Federal Emergency Management Agency (FEMA) – Extent of 100 and 500 year flood plains; Publication Date 2003-09-04; Originator: Minnesota DNR - MIS Bureau <http://deli.dnr.state.mn.us/>  
Scientific and Natural Area Boundaries is based on the SNA\_BASE\_DATA feature class in the DNR’s core GIS Library; Time Period of Content Date 1987-Present; Minnesota DNR - Division of Ecological Services - Scientific & Natural Areas Program <http://deli.dnr.state.mn.us/>  
1890’s Mississippi River Commission Maps; Georeferenced images of maps produced by the Mississippi River Commission from the late 1880’s and early 1900’s high-resolution survey of the Mississippi River; Originator: USGS Upper Midwest Environmental Sciences Center; Publication date: 10/1/2005; [http://www.umesc.usgs.gov/data\\_library/maps\\_quads\\_figs/1890s\\_mrc.html](http://www.umesc.usgs.gov/data_library/maps_quads_figs/1890s_mrc.html)  
City of St. Paul Stormsewer Infrastructure data; Provided by the City of St. Paul via <ftp://ftp.ci.stpaul.mn.us/> ; Data set included pipe locations, manhole locations and pipe sizes (2)  
City of St. Paul Stormsewer Subwatershed Boundaries; Provided by Anne Weber, St. Paul Sewer Utility; Subwatershed shape file of large subwatersheds that were drawn in from paper maps; XML metadata file provided (incomplete).

Historic Streams and Potential Stream Daylighting; Provided by Capitol Region Watershed District; Data developed for CRWD Report: Historic Waters of the Capitol Region Watershed District, Ramsey County, Minnesota. 3/25/10 Draft. (2)

All other data provided by the City of St. Paul; Downloaded from Wenk Associates project website; <https://wenkgrp.sharefile.com/>

## Further Study

For the majority of the water and natural resources data, if further information is needed contact can be made with the agency that generated the original data to see if greater detail is available for the attribute data provided. Where more detailed information is not available from the source, field visits would be needed to provide more detail.

## Contact

Jeff Lee and Mike Strong of Barr Engineering

## NOTE:

The DNR copyright and disclaimer information needs to be added where required. (1)

Minnesota County Biological Survey (MCBS) Native Plant Communities  
Copyright 2010 State of Minnesota, Department of Natural Resources



A.2 Existing Landscape Management Plans

A P P E N D I X

|    | Name                                                                                  | Parks                                | Author                                                                         | Summary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----|---------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1  | Desnoyer Seep Native Plant Community Inventory and Management Recommendations (2004)  | Desnoyer Seep                        | Fred Harris, Great River Greening                                              | The Desnoyer Seep is a small 0.28 acre seepage area situated between River Road and the Mississippi River at Eustis St. in St. Paul. The wetland is groundwater-fed and supports wet meadow vegetation, such as grasses and sedges. Results of the summer 2004 survey describe vegetation, soils, bedrock geology, invasive species issues, and human recreational impacts in the seepage area.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 2  | Crosby Farm Regional Park Ecological Inventory and Restoration Management Plan (2005) | Crosby Farm Regional Park            | Great River Greening                                                           | Crosby Farm Regional Park is a large natural area park situated in the floodplain and blufflands of the Mississippi River. A detailed inventory of vegetation, analysis of management issues, and an assessment of the bluff trail were conducted in 2004. The report focuses on erosion issues associated with the bluff trail, terrestrial and aquatic native plant communities within the park, and potential strategies for restoring and managing native plant communities. Other CFRP management plans deal with wildlife, aquatic environments, and recreation.                                                                                                                                                                                                                                                                                                                 |
| 3  | Crosby Lake Management Plan, 2010-2011 Work Plan                                      | Crosby Farm Regional Park            | Capitol Region Watershed District                                              | Crosby Lake, surrounded by the Crosby Farm Regional Park, has been declining on water quality measures since 2005. As such, monitoring efforts are underway to assess the current and predicted future conditions in the lake, culminating in a Crosby Lake Management Plan.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 4  | Crosby Farm Park: Bluff Stabilization/Restoration Feasibility Study (2007)            | Crosby Farm Regional Park            | Emmons & Oliver Resources, Inc.                                                | The bluffs between Youngman Ave. and Homer St. in Crosby Farm Regional Park are known to be unstable and actively eroding. Most of the headcuts along this portion of the bluff pose a threat to infrastructure and natural resources. Erosion along the bluff produces significant inputs of sediment to Crosby Lake creates ravines which threaten the integrity of Shepard Rd. Primary sources of erosion include stormwater outfalls, surface water discharge areas, and recreation sites along the bluff. Recommendations are provided for mitigating storm and surface water erosion points along the bluff.                                                                                                                                                                                                                                                                     |
| 5  | Crosby Park: Bluff Trail Project (2004)                                               | Crosby Farm Regional Park            | Great River Greening                                                           | The management plan gives recommendations for enhancing the Bluff Trail in Crosby Park. A study was conducted to assess the current trail conditions for the purpose of assisting the city with managing trails in a cost-effective and ecologically sustainable manner. The Bluff Trail has eroded over the past 30 years from pedestrian usage and storm runoff and requires reconstruction in numerous places. The management plan outlines several trail design factors which could be used to mitigate the natural resource issues.                                                                                                                                                                                                                                                                                                                                               |
| 6  | Lilydale Regional Park Natural Resources Management Plan (2009)                       | Lilydale Regional Park               | Bonestroo                                                                      | The management plan describes the current plant communities, natural areas, water resources, and contaminated areas, as well as projected future conditions, in the park. The main priority identified in the report was water quality monitoring in Pickerel Lake. Improving the lake water quality would require bluff stabilization and clean up of a nearby dump. Specific management recommendations are provided for all of the natural areas.                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 7  | Lilydale Regional Park Master Site Plan (2009)                                        | Lilydale Regional Park               | City of St. Paul, Parks and Recreation                                         | Proposed improvements to the Lilydale Regional Park include: creating a park entrance, wildlife viewing areas, shoreline trails, a dog park, and a stormwater treatment solutions. Wetland and shoreline restoration activities will also occur throughout the park, and existing trails will be updated and/or expanded.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 8  | Pickerel Lake Protection Plan                                                         | Pickerel Lake                        | Minnesota Pollution Control Agency and Lower Mississippi River WMO             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 9  | High Bridge Commons (2009)                                                            | High Bridge Commons                  | Sanders Wackler Bergly, Inc.                                                   | Two maps depict the future vegetation and recreation opportunities for the High Bridge Commons area. The area below the Smith Avenue Bridge (between Shepard Rd. and Randolph Ave.) could potentially be restored to a mosaic of woodlands and meadows, with existing housing on the riverfront to the east and a coal yard/powerplant to the west. The "community vision" for the area includes walking and horse trails, natural areas, a parking area, stables, and a dog park.                                                                                                                                                                                                                                                                                                                                                                                                     |
| 10 | West Side Bluff Ecological Inventory and Vegetation Management Plan (2001)            | West Side Bluff                      | Great River Greening                                                           | The management plan describes the results of an ecological inventory conducted at the West Side Bluffs and also provides management recommendations. The report focused on plant communities (native and exotic), trails, erosion, soils, and cultural activities. Recommendations included planting native species, reducing erosion, and removing invasive species. Much of the management work was designed to be carried out by volunteers.                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 11 | The West Side Bluff Management Action Plan - Phase 1 (2002)                           | West Side Bluff                      | City of St. Paul, Parks and Recreation                                         | The plan provides a framework for the restoration and protection of environmental resources along the bluff. A coalition of neighborhood groups, St. Paul Parks and Recreation, and Great River Greening implement the management plan and action items. The managment plan divides the bluff into three segments and details the environmental, cultural, recreational, and community involvement goals for each segment.                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 12 | Bruce Vento Nature Sanctuary                                                          | Bruce Vento Nature Sanctuary         | The Lower Phalen Creek Project in partnership with St. Paul Parks and Rec.     | The BVNS is an on-going ecological restoration project located between the Mississippi River and I-94. Native plant communities, such as oak woodlands, floodplain forests, savannas, streams, and wetlands, will be restored. Key park planning elements also include the development of nature trails and interpretive facilities, as well as connections to exisitng regional trails and Indian Mounds Park (via stairway).                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 13 | Natural Resource Inventory and Management Plan of Indian Mounds Park (2007)           | Indian Mounds Park                   | Daniel Tix, Fred Harris, Hugh Johnson, and Tara Newhouse, Great River Greening | Indian Mounds Park is an urban natural area located in east St. Paul between Mounds Blvd and the blufflands of the Mississippi River. The park is visited by over 100,000 people annually for a variety of recreational uses. Dominant habitat types include oak savanna, oak woodland, oak mesic forest, and a black ash seepage swamp. The park management plan covers four resource management objectives: documenting trail hazards and erosion, inventorying native plant communities, identifying areas in need of restoration, and defining strategies for managing and restoring native plant communities. Priority projects for the park include: restoration of oak savanna, general forest restoration, and expansion of oak savanna.                                                                                                                                       |
| 14 | Pigs Eye Habitat Restoration Lake, St. Paul, Minnesota                                | Pigs Eye Lake at Battle Creek Park   | U.S. Army Corps of Engineers                                                   | Pigs Eye Lake is a backwater of the Upper Mississippi River Pool 2 and has been severely contaminated by the adjacent Pigs Eye Landfill. The lake could potentially contribute unique natural resource value to the urban area; however funding for the requisite ecological restoration was not available at the time of repo publication. The aim of restoration, if funded, would be to improve backwater aquatic and floodplain habitat and remove contaminants which pose a threat to human and ecological health.                                                                                                                                                                                                                                                                                                                                                                |
| 15 | Health Consultation, Pigs Eye Landfill (2000)                                         | Pigs Eye Landfill, Battle Creek Park | U.S. Department of Human Services, Minnesota Department of Health              | The Minnesota Pollution Control Agency requested that the Minnesota Department of Health prepare a Health Consultation to identify potential human health concerns related to a potential clean-up of the Pigs Eye Landfill. The Health Consultation focuses on the site remediation plan being proposed and was conducted in 1997. The dump was originally used for municipal, commercial, and industrial waste and is now considered a Minnesota Superfund site. The report concludes that direct and indirect public health hazards exist from contaminants released from the dump but that the precise public health hazard is uncertain due to lack of information. MDH agrees that the site remediation goal of creating a passive park on the dump site is possible. A list of recommendations for preventing human health issues in the vicinity of the dump is also provided. |
| 16 | Pigs Eye Scientific and Natural Area                                                  | Pigs Eye Scientific and Natural Area | Minnesota Department of Natural Resources                                      | The Pigs Eye SNA is located on an island at the south end of the lake and is only accessible by boat. The area is managed by MN DNR as a scientific and natural area. So access and infrastructure are limited, and the area is maintained as a floodplain forest.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

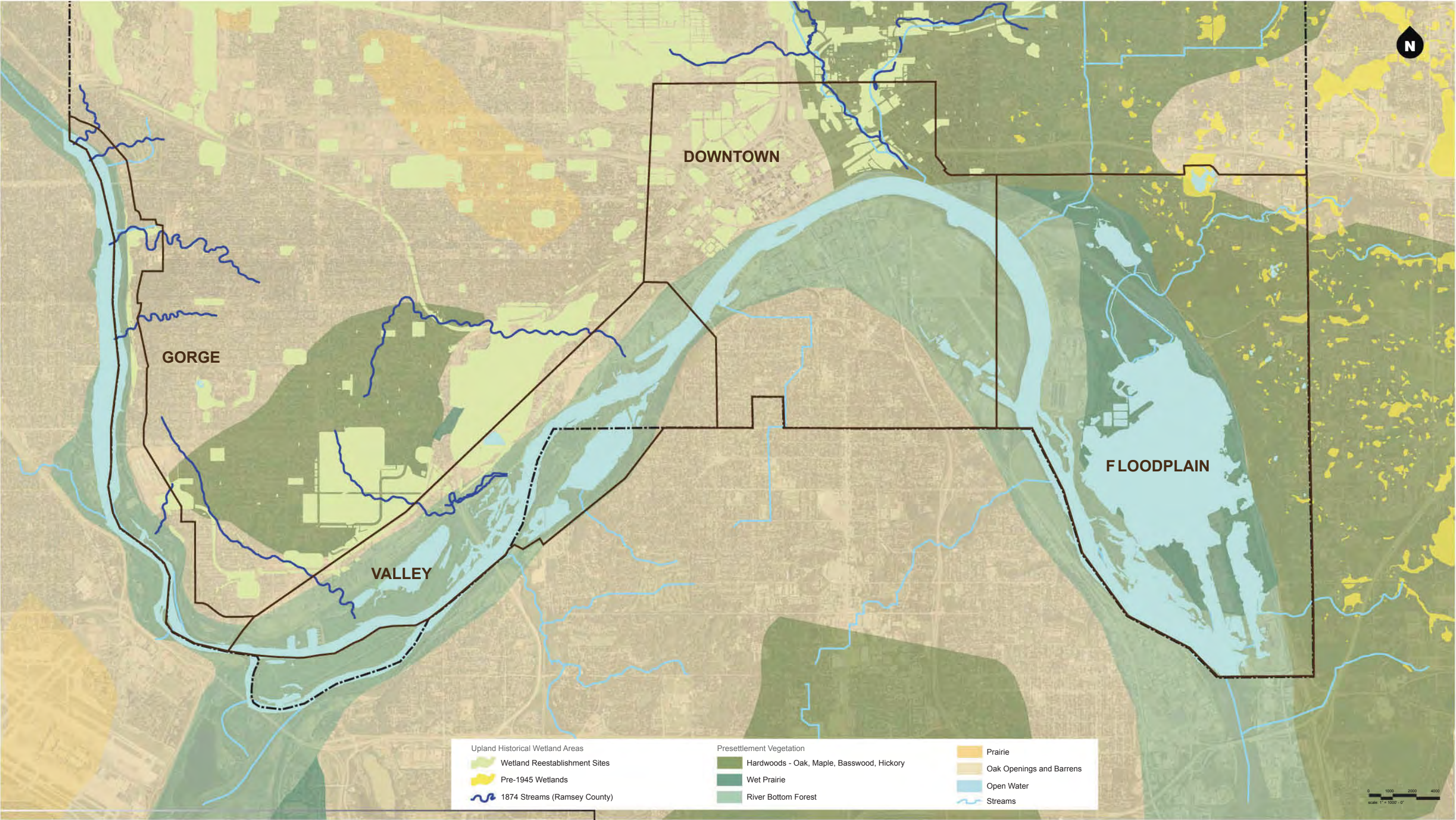


|    |                                                                      |                                                                          |                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|----|----------------------------------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 17 | 2006-2016 Ramsey-Washington Metro Watershed District Management Plan | Pigs Eye Lake Subwatershed                                               | Ramsey-Washington Metro Watershed District                   | Pigs Eye Lake is a 628 acre riverine wetland connected to the Mississippi River. The lake provides little recreational value, due to surrounding landuses, but wildlife habitats for birds and mammals are considerable. The Minnesota Pollution Control Agency classifies the lake as hypereutrophic, with historic sediment and nutrient loading issues. Future water quality goals center on improving the water quality of stormwater discharged into Pigs Eye Lake.                                                                                                                                                                                                                                                          |
| 18 | 2006-2016 Ramsey-Washington Metro Watershed District Management Plan | Blufflands Subwatershed                                                  | Ramsey-Washington Metro Watershed District                   | The Blufflands cover a 2,137 acre area of St. Paul and Maplewood along Hwy. 61 and contribute runoff to several ravines which drain into Pigs Eye Lake. The RWMWD plans to reduce stormwater runoff entering Pigs Eye Lake by providing upstream stormwater storage areas, thereby reducing flows and sediment loads in the eroding ravines. No projects are currently planned for the Blufflands subwatershed, but hydrology and wetlands monitoring may occur in this area as part of district-wide projects.                                                                                                                                                                                                                   |
| 19 | Natural Resources Management Plan (2008)                             | Battle Creek Park and Fish Creek Open Space                              | Ramsey County Parks and Recreation (RCPR)                    | The plan focuses on: preservation, restoration, park maintenance, and environmental education and ethics across all of the Ramsey County Parks. Key wildlife habitat types are identified, defined, and described for each park, and a vegetation management plan is outlined for each habitat type. Current projects related to vegetation, habitat, and wildlife management are also discussed for each park.                                                                                                                                                                                                                                                                                                                   |
| 20 | System Plan (2006)                                                   | Battle Creek Park, Bruce Vento Regional Trail, and Fish Creek Open Space | Ramsey County Parks and Recreation (RCPR)                    | Battle Creek Park key habitat types include: prairie, savanna, oak woods, floodplain forest, and wetland. The greatest natural resource concerns at the park are invasive species management, prairie and oak restoration, oak wilt, maintaining wildlife diversity, and controlling deer and Canada goose populations. Fish Creek Open Space key habitat types include: savanna and oak woods. The primary natural resource concerns for the open space are invasive species and deer population control. No information was provided for the Bruce Vento Regional Trail.                                                                                                                                                        |
| 21 | Highwood Park Nature Preserve Management Recommendations (2001)      | Highwood Park Nature Preserve                                            | Perry, Jason Husveth, and Cynthia Lane, Great River Greening | Highwood Park Nature Preserve is a passive use park in southeastern St. Paul designated for preserving plants, wildlife, and a view of downtown St. Paul. Great River Greening conducted a natural resource inventory of the park and devised recommendations for the creation of a long-term park management plan. The report presents ecological, social, cultural, and economic aspects of the park area, in order to assist in the creation of a park management plan. General goals include: preserving the property as a natural area, preserving existing biodiversity, improving the ecological value of the park, promoting natural resource education, and providing recreational uses.                                 |
| 22 | Historic Waters of the Capitol Region Watershed District (2008)      | Capitol Region Watershed District water resources                        | Emmons & Oliver Resources, Inc.                              | The report describes the historically significant waterbodies present in the CRWD. Information is provided pertaining to the physical condition, historic context, and formation of each water resource feature, and restoration suggestions are offered where applicable. Waterbodies discussed in the report include caves, springs, buried and surface streams, and former lakes. Additionally, the Bringing Water Back to St. Paul campaign is in the planning stages and will eventually organize and implement historic stream restoration projects. Twelve stream corridors have been identified for restoration. The feasibility studies will occur from 2011-2016, and restoration activities will take place 2014-2019. |



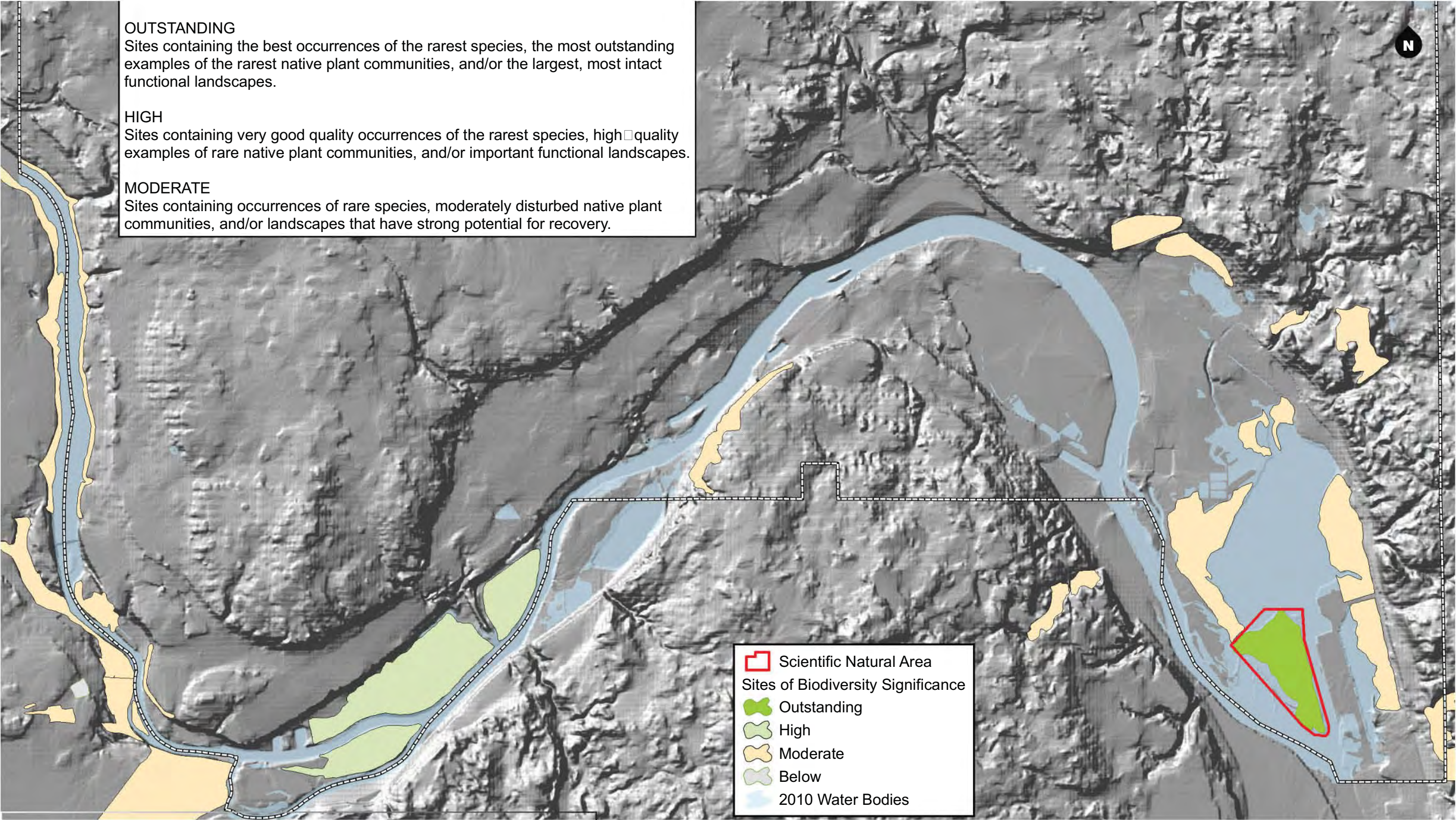
A.2 Existing Natural Resource Zones

A P P E N D I X



Map provided by the City of Saint Paul G.I.S. Data, 2010. Data subject to verification and change.





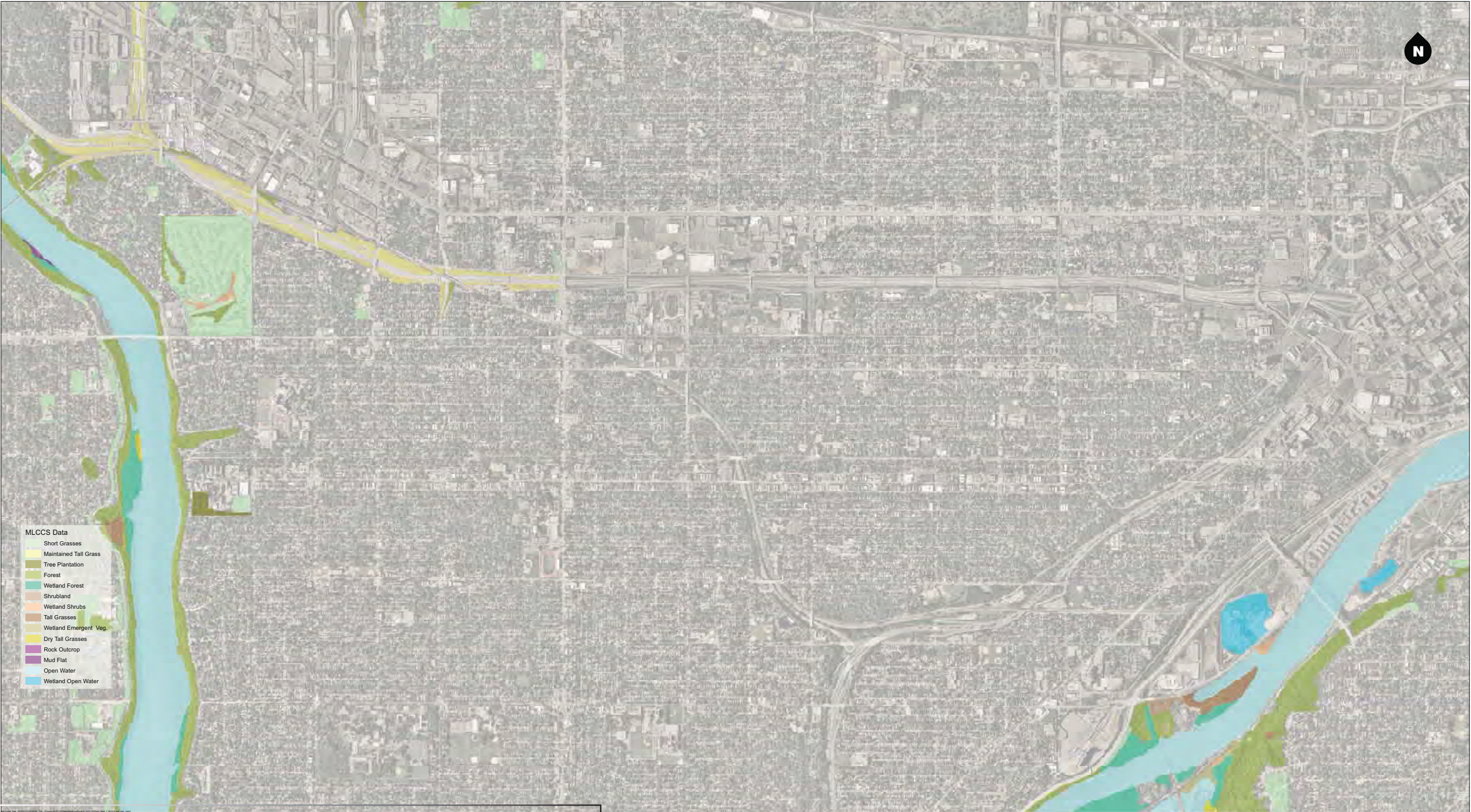
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A.2 Landscape Classifications - Northwest Quadrant

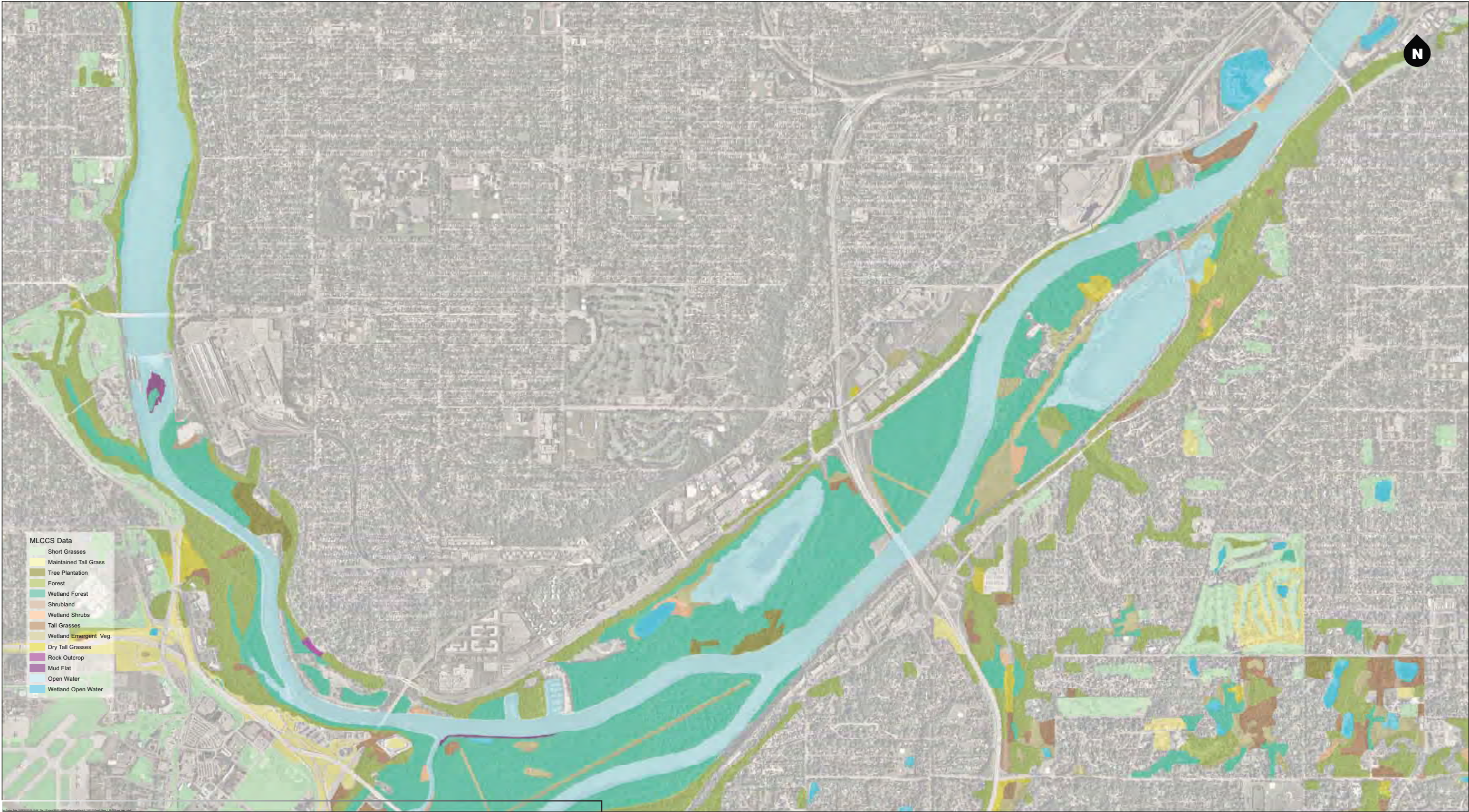
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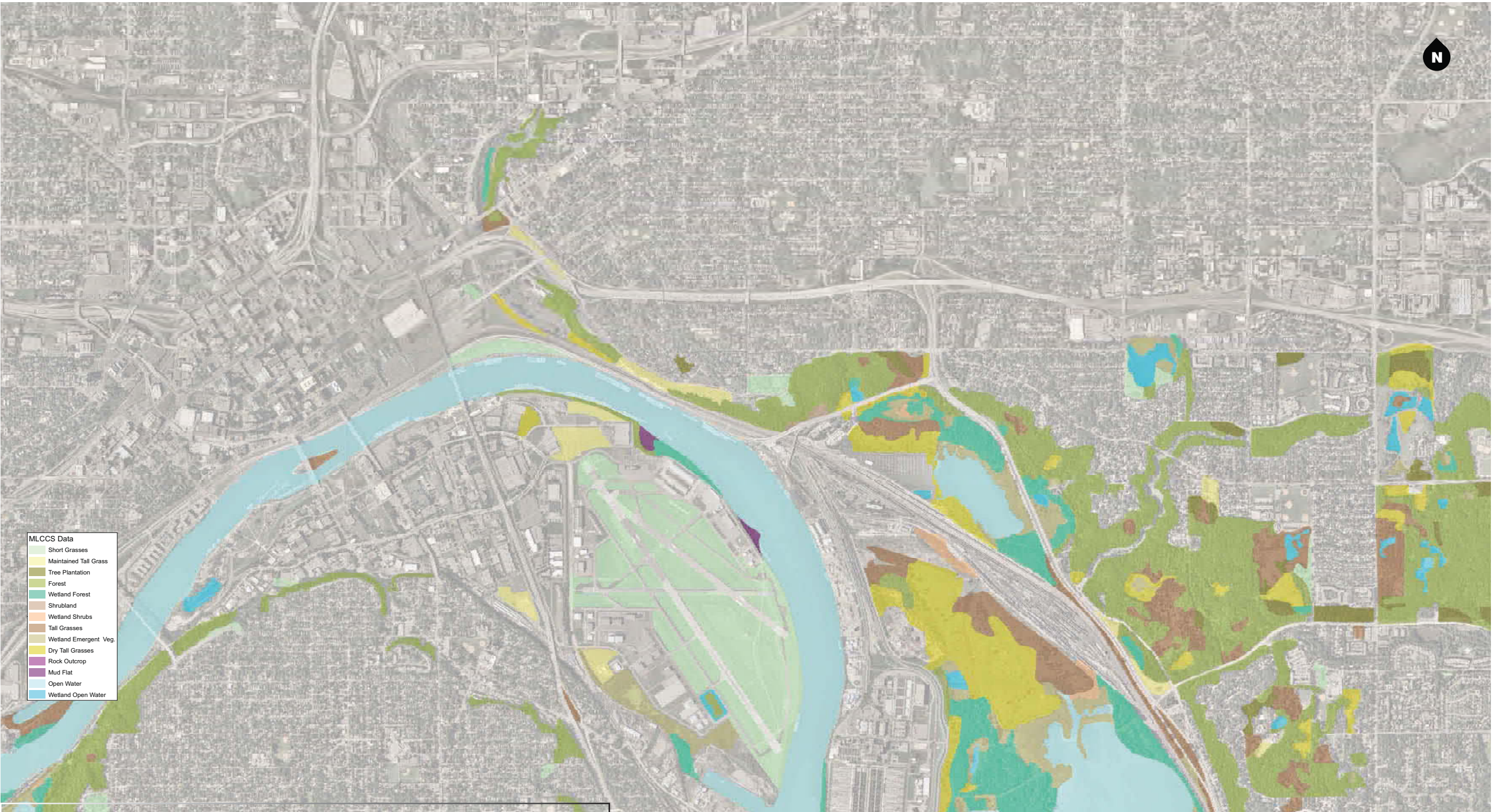
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A.2 Landscape Classifications - Northeast Quadrant

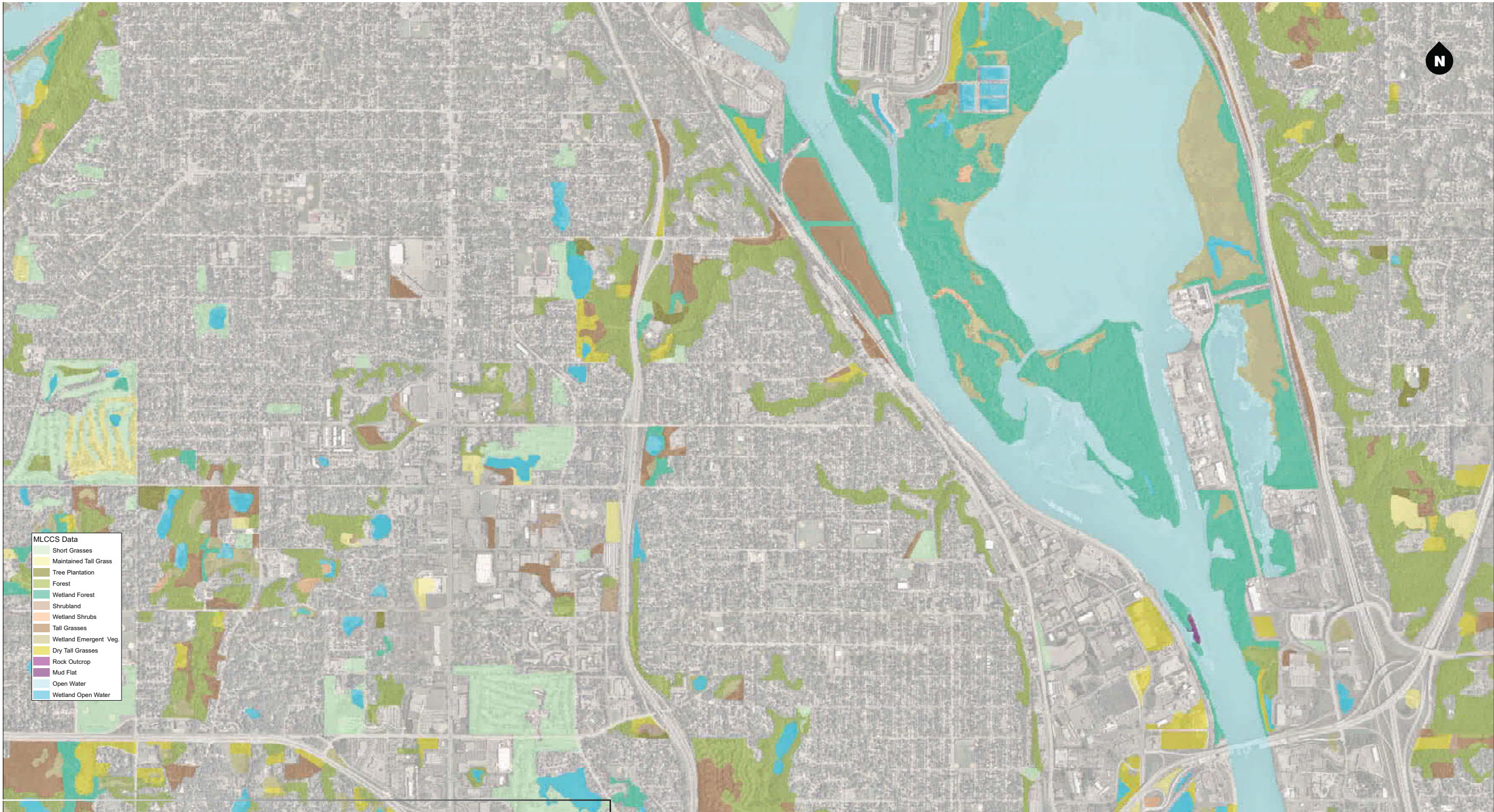
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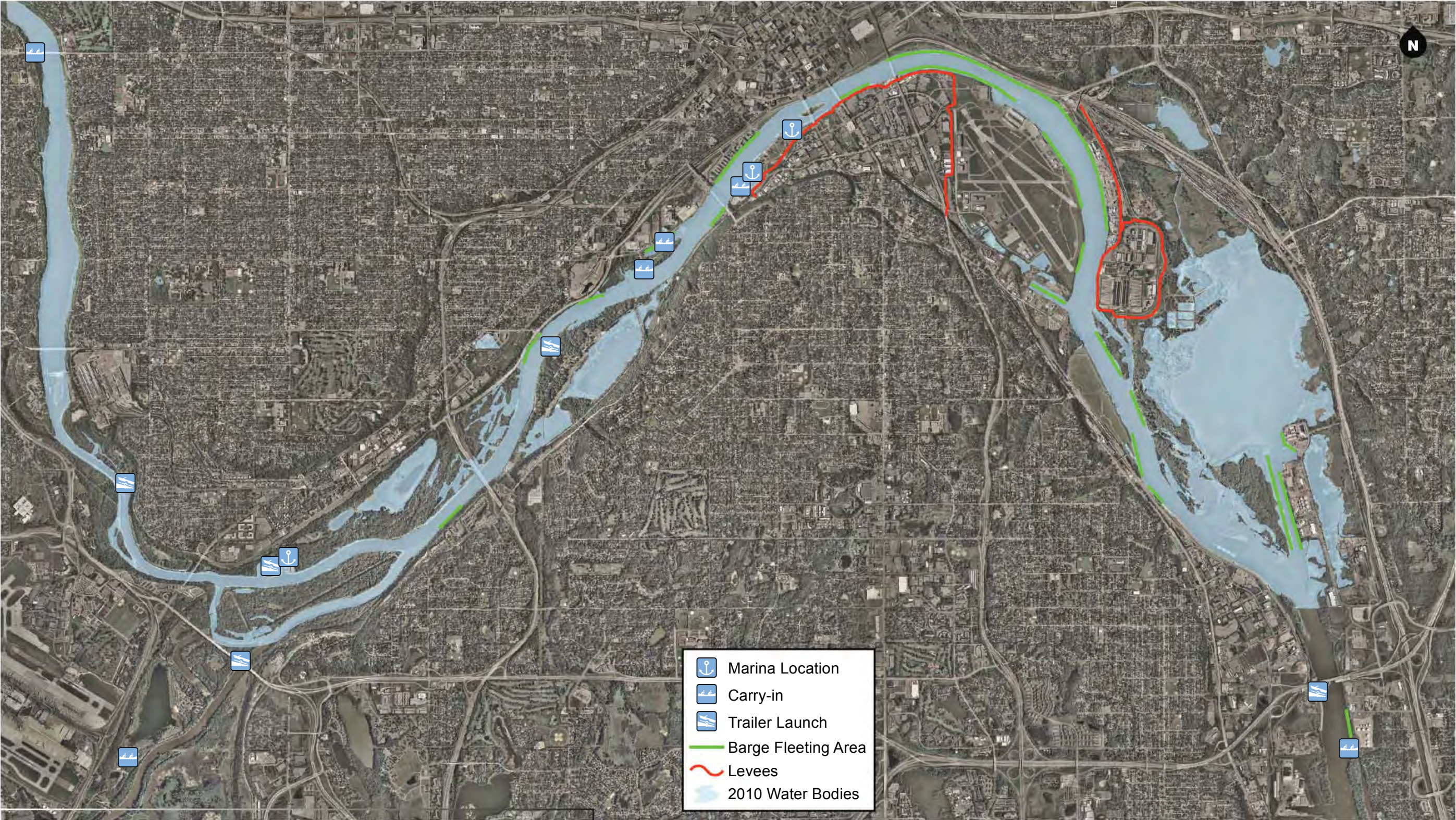




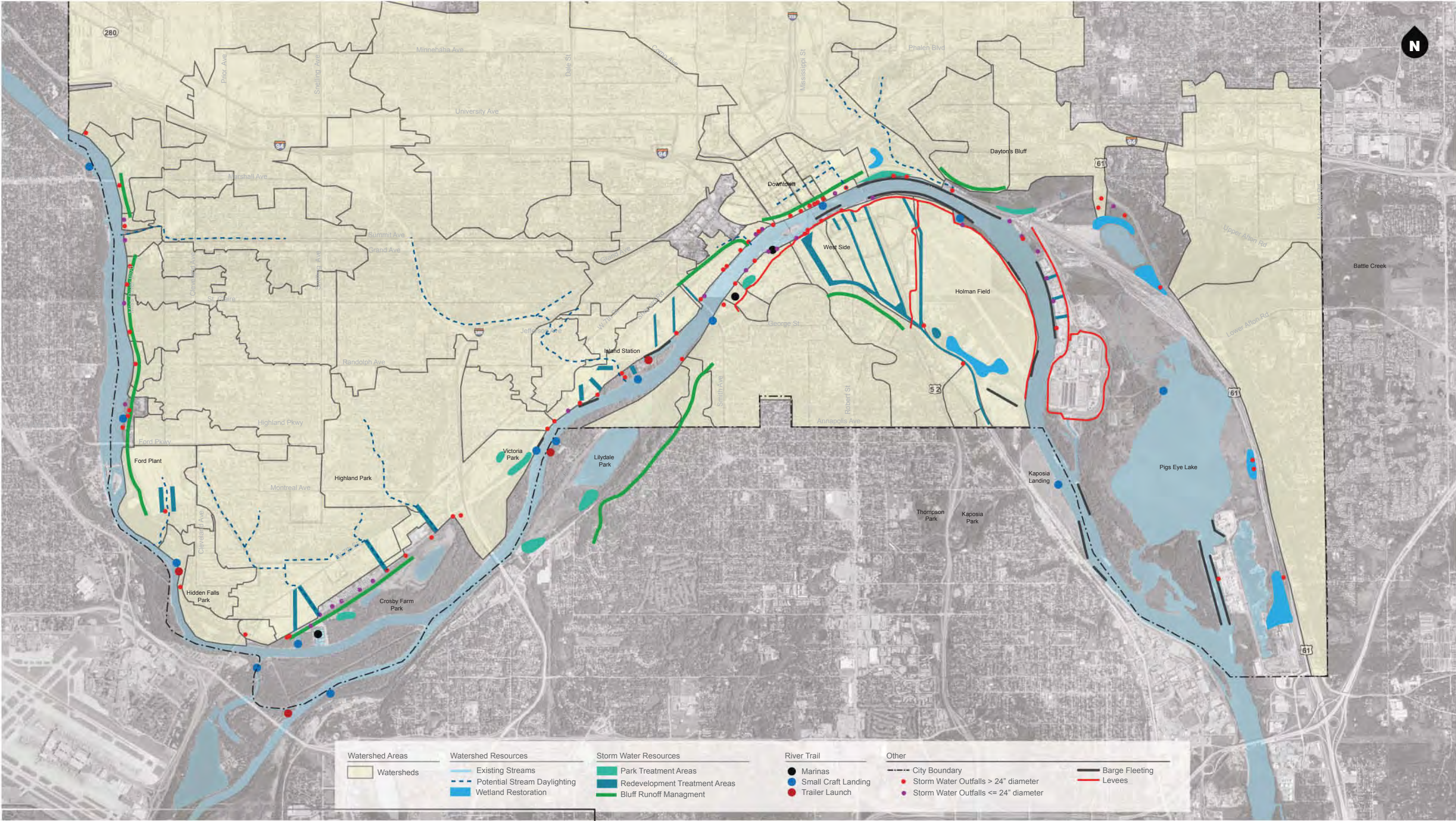


A.2 River Activities

APPENDIX







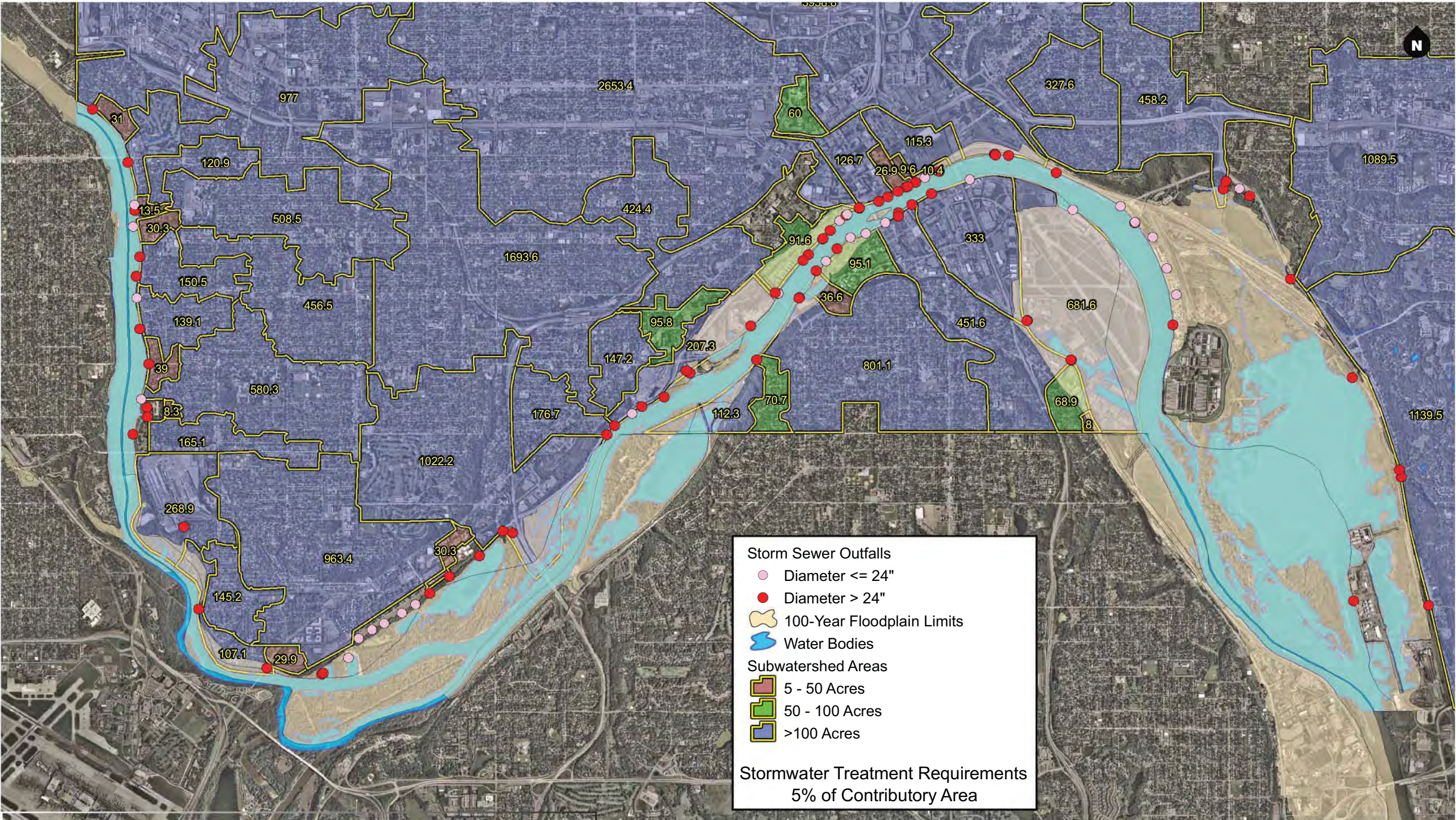
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A.2 Stormwater Management

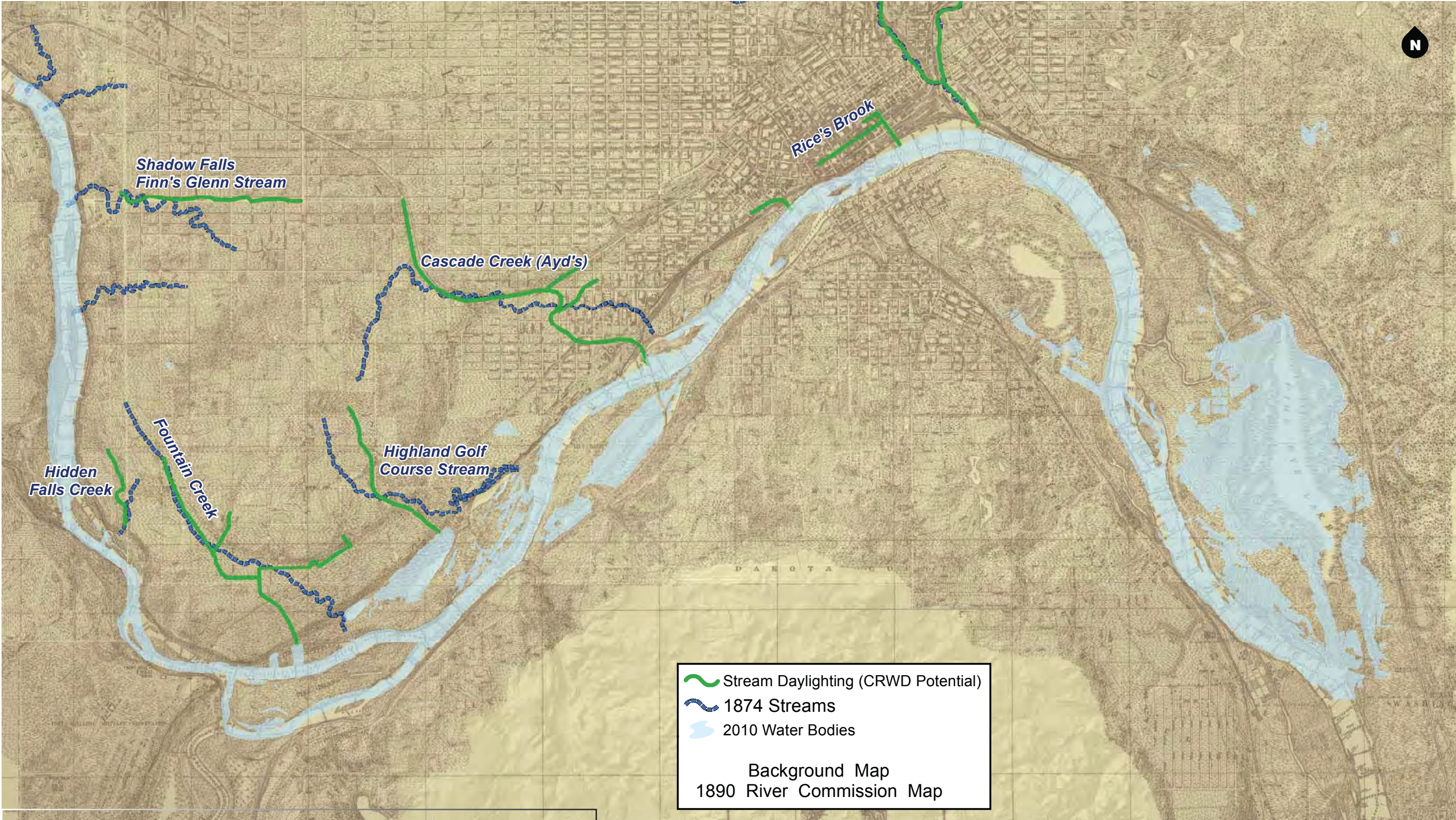
APPENDIX



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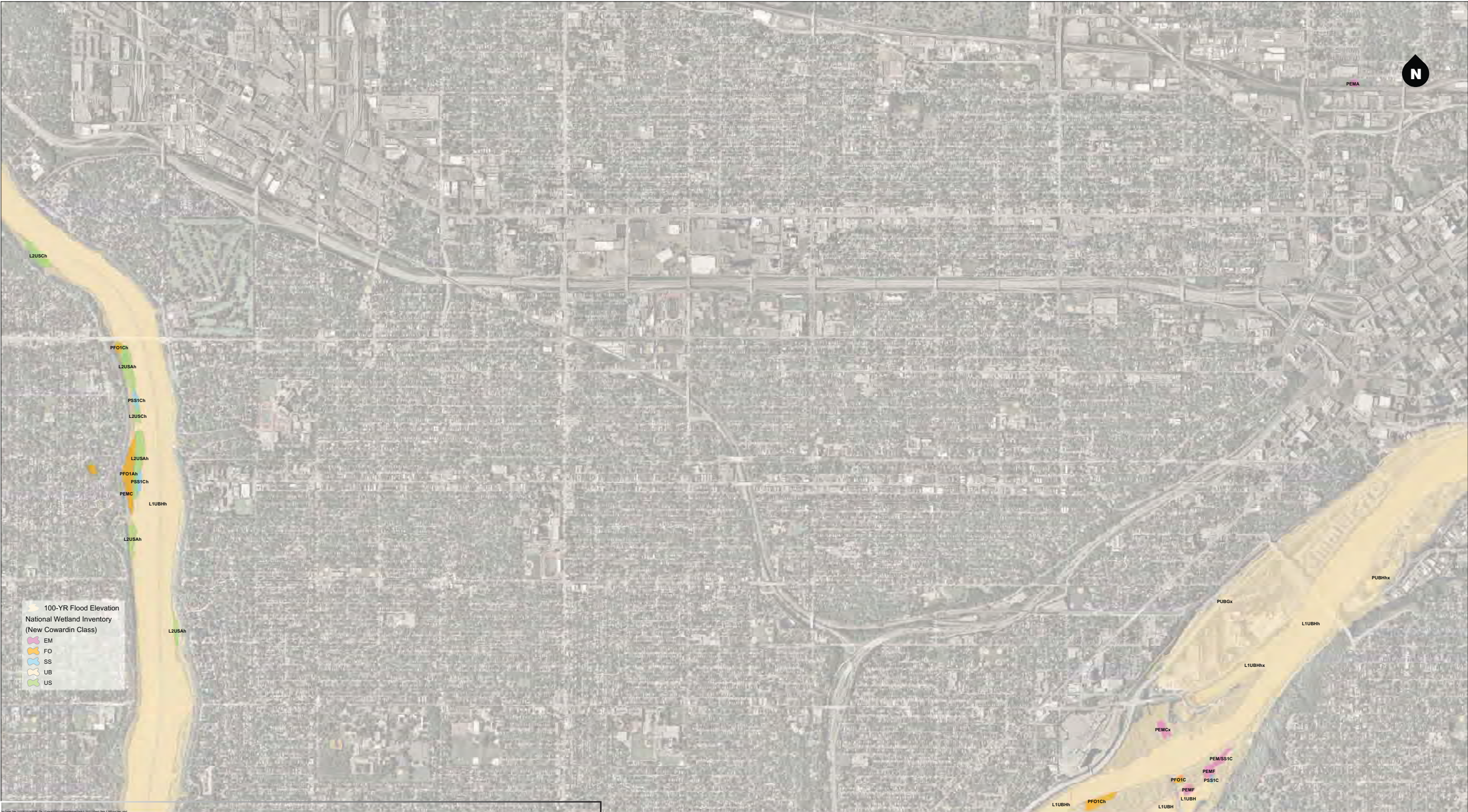
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A.2 Wetland Inventory - Gorge

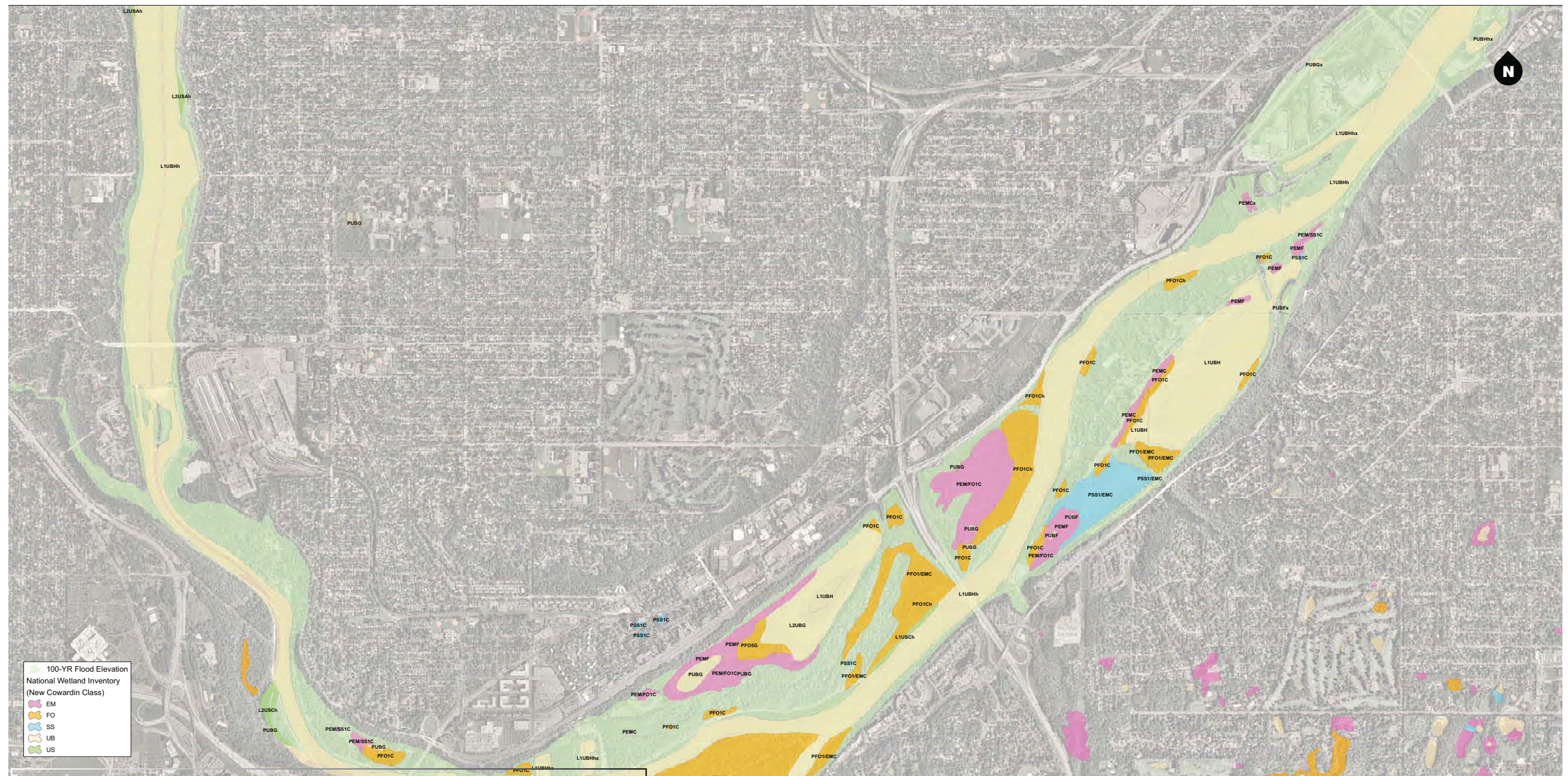
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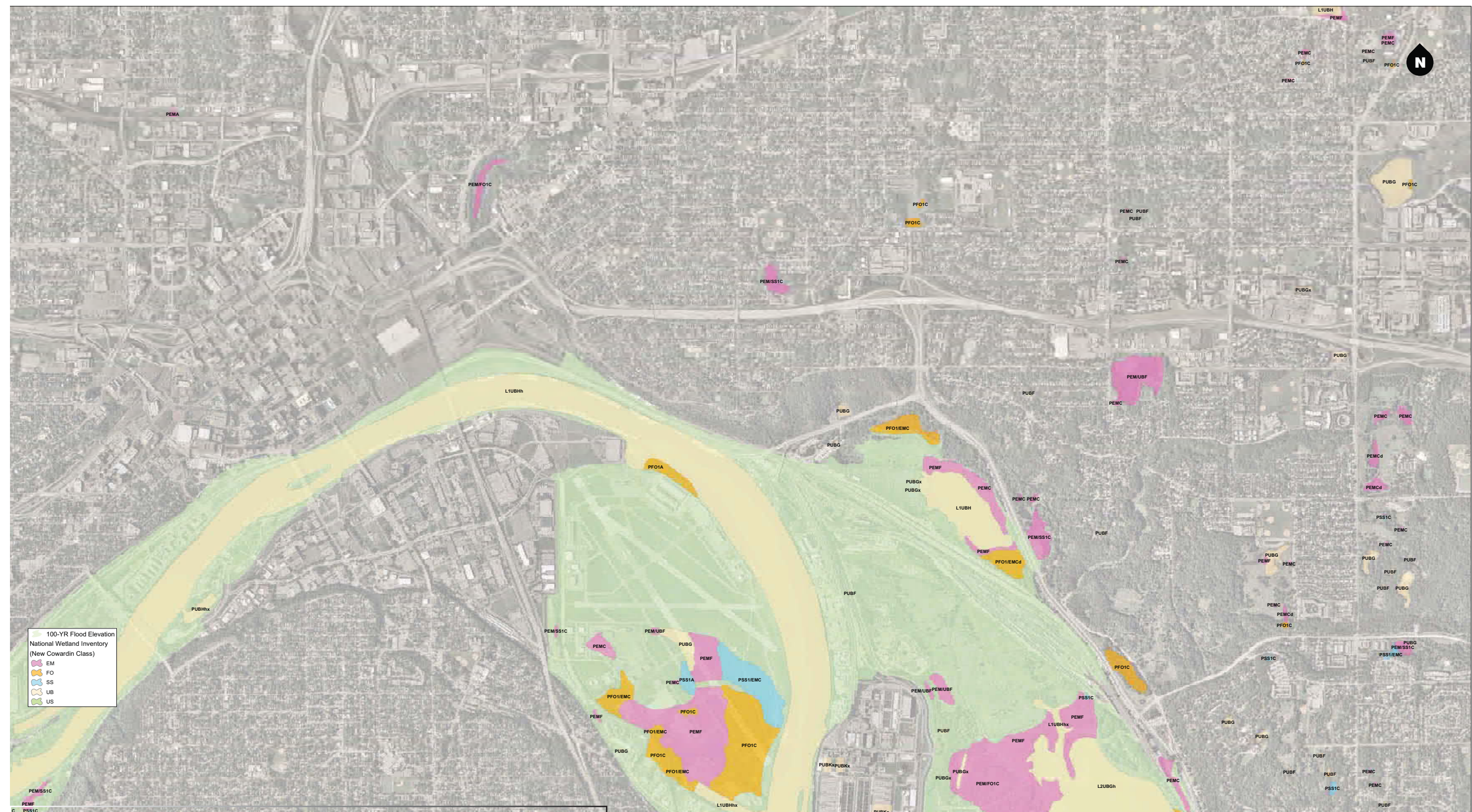


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## A.2 Wetland Inventory - Downtown

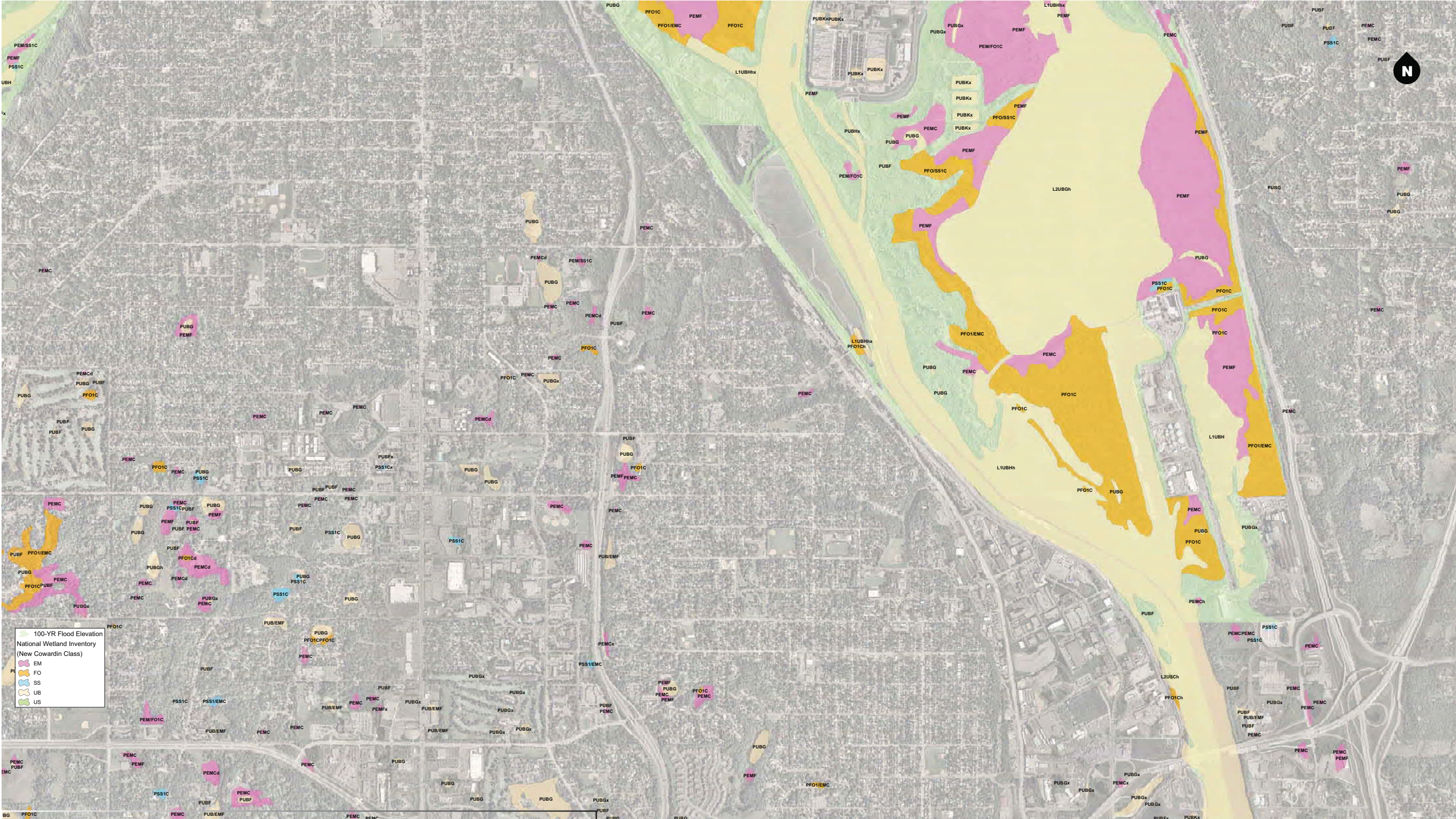
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General intent

The general intent of the Parks and Open Space Analysis related to the Great River Park Master Plan Inventory is to gain a better understanding of the following:

- Existing parks, trails and open spaces within and adjacent to the River Corridor.
- Proposed parks, trails and open spaces within and adjacent to the River Corridor.
- City goals regarding future growth of parks, trails and open spaces within and adjacent to the River Corridor.
- Identify gaps and needs within the current City of Saint Paul Parks, Trails and Open Space System
- Identify opportunities for potential acquisition of property along the riverfront for future parks, trails and open space growth.
- Identify trends in parks, trails and open space use.

The scope of the investigation included a thorough review of City policy documents, plans, and prior planning studies. Additionally, the planning team interviewed City Parks and Recreation staff to confirm the information being studied was current and accurate. The areas studied included all parks and open space properties along the River Corridor, including National, State , Regional and City parks and open spaces within and adjacent to the River Corridor study area.

The information can and should be used in the following ways:

- Guide decision making and prioritization regarding parks and recreation facilities, park and open space land, investment, programs and activities.

Source(s) of information

The following sources were utilized to gather data and information in the study:

- City of Saint Paul Comprehensive Plan (2010)
- Saint Paul Parks and Recreation Needs Assessment Summary (2010)
- Overview of Saint Paul’s River Park System (2009)
- Saint Paul Parks and Recreation Vision Plan (2008)
- Saint Paul Parks and Recreation Systems Plan (2010)
- Metropolitan Council Regional Parks and Trails Survey (2008)
- Annual Use Estimate of the Metropolitan Regional Parks System (2009)
- Crosby Park: Bluff Trail Project (2004)
- Indian Mounds Park Master Plan (Ongoing)
- Bruce Vento Nature Sanctuary (Ongoing)
- Vento Trail Connection at Warner Road (Ongoing)
- Cherokee Regional Park Trail (Ongoing)

- Victoria Park Master Plan (2007)
- Trout Brook Trail Master Plan (2009)
- Highwood Development Policies: A Plan for Growth Management in the Highwood Area of Saint Paul
- The Renaissance Project (1999)
- Bruce Vento Nature Sanctuary Interpretive Center Redevelopment Plan
- Smart Growth Twin Cities: Harriet Island/District Del Sol Opportunity Site (2002)
- West Side Flats: Master Plan and Development Guidelines (2001)
- Harriet Island Regional Park Master Plan (2010)
- Lilydale Regional Park Master Plan (Ongoing)
- Saint Paul on the Mississippi Development Framework (1997)
- Mississippi River Corridor Critical Area: Report to the Minnesota Legislature(2008)
- Report of the Diamond Products Task Force (2005)
- Saint Paul on the Mississippi National Great River Park – Physical Connections Inventory (2008)
- Saint Paul on the Mississippi National Great River Park – Framework Chapter (2007)
- Saint Paul on the Mississippi Development Framework – Great River Park Master Plan: Charrette Briefing Package (2005)
- City of Saint Paul Parks and Recreation Staff – Jody Martinez, Don Ganje, Don Varney, Ellen Stewart

Further Study:

- City of Saint Paul Parks and Recreation Staff should be consulted for further studies and/or information related to parks and open spaces within the River Corridor.
- Monitor future parks, trails and open space proposals within the River Corridor.

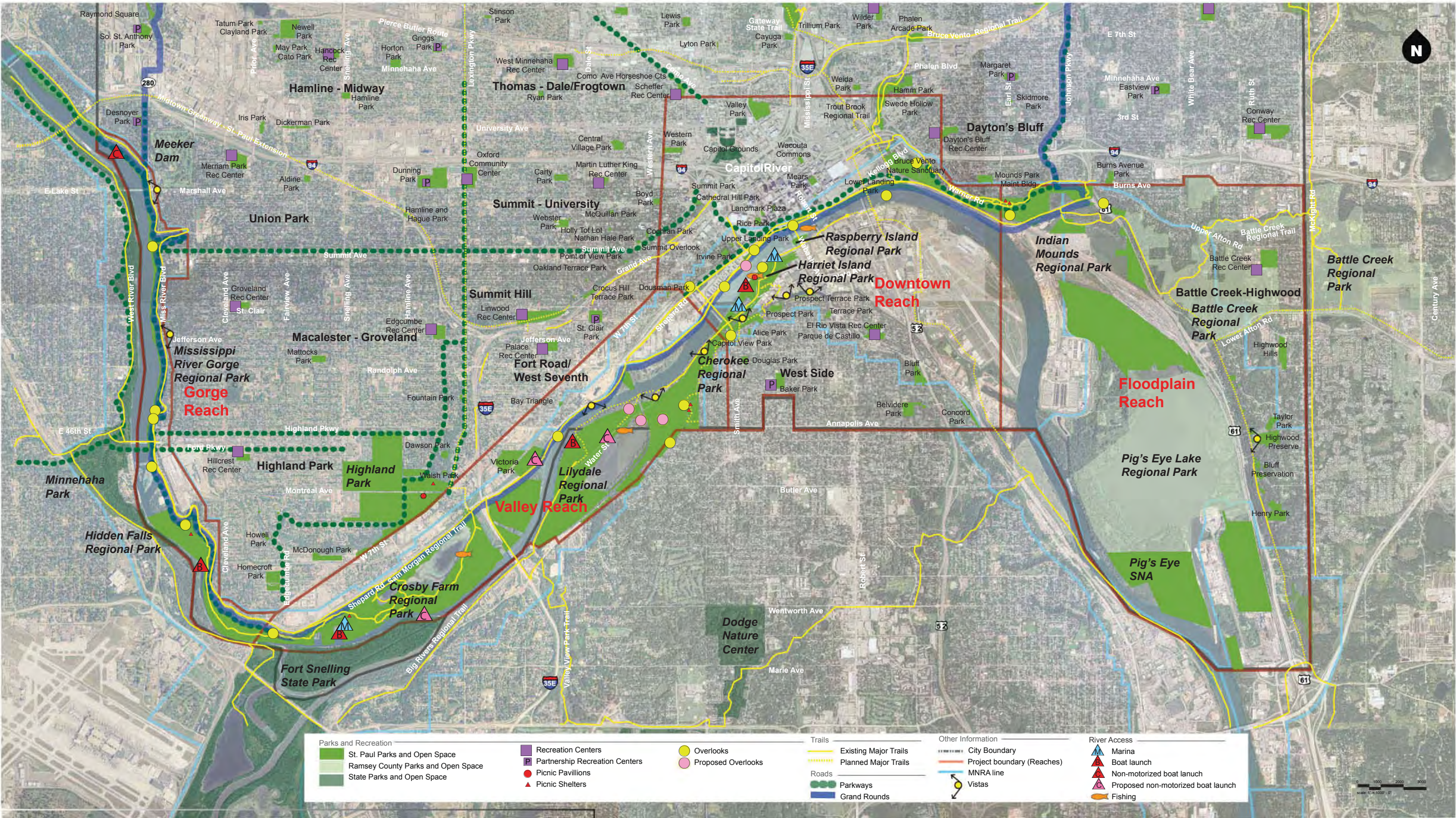
Contact

- Hoisington Koegler Group, Inc., Greg Ingraham, Bruce Chamberlain, Lil Leatham, Gabrielle Grinde
- Wenk Associates, Craig Coronato, Neil Emick

Following Maps and Documents

- 28 Parks & Recreation Resources Inventory
- 29-40 Summary Description of Existing GRP Parks





Map provided by the City of Saint Paul G.I.S. Data, 2010. Data subject to verification and change.



Overview of Saint Paul’s River Park System  
Traveling from upstream to downstream

At 17 miles of running river, and 26 miles of river frontage, Saint Paul has more miles of Mississippi River than any other municipality along the entire length of the river. The valley includes bluffs, lakes, and wetlands as well as active commercial sites and neighborhoods. In total, there are over 3,500 acres of parkland for outdoor recreation, enjoyment of scenic views, wildlife habitat, and special events.

Until now, these incredible assets have been viewed as individual parks and development sites. One of the outcomes of the master planning process is to transform this valuable collection of parks, natural resources, cultural amenities and neighborhoods and development sites into a single “Great River Park.”

The following is a general description of the existing parks and places of the Great River Passage: Size and length of acres are approximate.

THE GORGE REACH

Meeker Island/Lock and Dam #1

**General Description:** The site of the first lock and dam (above Keokuk) on the Mississippi. In 2003, the ruins of the Meeker Island Lock and Dam (demolished 1912) were included on the National Register of Historic Places.

A new trail (2007) connects bluff top neighborhoods to the river and lock and dam site. The trail follows an old wagon road that led down to the lock keepers house and now provides access to the historic site and improved river edge trail. The park lies on the boarder of Saint Paul and Minneapolis.

Existing amenities:

- River edge trail
- Benches for river viewing

Proposed:

- Link Meeker Island Trail to the Minneapolis river valley trail system several hundred yards away.

Mississippi River Boulevard Parkway

**Size:** 219 acres

**General Description:** The scenic Mississippi River Boulevard in is a parkway and trail corridor alongside the only gorge on the Mississippi River. Gorgeous views of the Mississippi River and Minneapolis can be seen from above the bluff tops; below, public park land is covered with Oak Forest and stone outcrops. The parkway is lined with well-to-do neighborhoods, institutions and retail. Original concept by Horace Cleveland: current Boulevard setback/ownership

The Twin Cities Marathon, one of the most beautiful in America, runs along a portion of the Parkway. Many other scheduled walks and runs use this facility too – along with recreational walkers, joggers, bikers, bird watchers, and folks that want a scenic place to read a book. Non-motorized use of this trail is in excess of 36,000 uses per year.

More Urban:

Adjacent Neighborhoods: Merriam Park, Macalester-Groveland, Highland Park  
Existing Commercial Areas: Grand Avenue corridor, Ford Parkway and Highland Business District, and a newly constructed mixed-use building across the Lake Street Bridge in Minneapolis.

Institutions: Macalester College, University of Saint Thomas, Ford Motor Company  
Twin Cities Assembly Plant College of Saint Catherine

**More Natural:** Plant Communities include oak forest and prairies  
A large number of invasive species and erosion from foot paths threaten the ecosystem of the bluffs. Improvements include bluff and shoreline plantings, stormwater management, removal of invasive species and restricting walking paths along steep slopes.

**More Connected:** Access to the river and bluffs is limited to only views and vistas. The only opportunity to transverse down the river bluff is at the Historic Meeker Lock and Dam #1.  
The Parkway is connects to Minneapolis’s Grand Rounds System and many Saint Paul parkways including: Ford, Pelham, and Summit Ave.

Existing amenities:

- 5.7 miles of continuous pedestrian/bike trail and vehicular parkway
- River edge access and at historic Meeker Island lock and dam site located near upstream city limits
- Lock and Dam #1 interpretation
- Civil War Monument at Shadow Falls
- Sequence of parking areas
- Sequence of overlooks and vistas
  - Two Rivers Overlook
  - Overlook at Hidden Falls
  - Ford Lock and Dam #1



- Saint Thomas/Shadow Falls Overlook

**Proposed:**

- Additional bluff preservation work
- Bluff trail restoration and addition
- In April, 2006, Ford announced the closure of the plant in 2007. It is not yet decided what will become of the ¼ square mile of real estate along the Mississippi; the largest private landownership on Saint Paul’s Riverfront.

**Shadow Falls Park Preserve**

**Size:** 16 acres

The parkland, purchased in 1900, includes the Shadow Falls ravine and still active waterfall. A plan to bridge the ravine with Mississippi River Boulevard was defeated in the early 1900s, so the boulevard takes a leisurely 1/2 mile bend around the ravine.

**Summit Ave Overlook**

**Size:**

Overlook at the terminus of Summit Avenue, on limestone bluffs, adjacent to Shadow Falls; contains a 36 foot tall 1922 monument erected by the Daughters of American Revolution in memory of the Ramsey County Civil War dead.

**Hidden Falls Park** (part of Crosby Farm/Hidden Falls Regional Park)

**Size:** 128

**General Description:**

Family and group day-use floodplain park. The landscape is a mixture of natural flood plain and maintained traditional picnic areas flanked by the river on one side and 75-100 foot high bluffs on the inland side. Paved and looped soft paths offer close hand views of both the sandstone bluffs and the Mississippi River.

The park dates back to 1887, when it was selected by Horace Cleveland, a nationally known landscape architect and park planner, as one of four major park sites for the City of Saint Paul. Except for the use of a portion of the land as a tree nursery, no improvement was made in Hidden Falls Park until 1936-37, when the WPA carried out an extensive improvement program on the site. Featured in the park was a small spring-fed waterfall from which the park got its name. In the mid 1960's the park took much of its present form as work began on the park's four primary use areas: the primitive area, boat launching area, general picnic area, and scenic falls area Though hidden, the park is visited over 4,500 times a year. It is one of a handful of parks that close at dusk for security reasons.

**More Urban:**

Adjacent Neighborhoods: Highland  
The boat launch and picnic area on the south side of the park becomes an active site.

**More Natural:** The gorge was formed as the Mississippi River cuts away the soft sandstone that supported an upper layer of harder limestone and shale. Over

thousands of years, the sandstone wore away and the limestone fell to the bottom of the river. Therefore, this floodplain contain on one of the rarest native plant communities in Minnesota

**More Connected:** There are two entrances to the park located at the north and south end along Mississippi River Boulevard Parkway slightly west of Hwy 5 in St. Paul. A restored stone WPA staircase also connects pedestrians to the Parkway near Shadow falls.

**Existing amenities:**

- small waterfall cascading over a natural stone ledge
- Restored stone WPA pedestrian bluff steps at upstream end connect trail and parkway above to the park below
- 6.7 miles continuous paved pedestrian/bicycle trail and additional loop soft paths
- Open shelter that covers 12 of 16 picnic tables and seats approximately 60 people. Electricity is available, it is 110 volts. Multiple crock pots, coffee pots, roasters and other electric items may cause overloads on the power source.
- restrooms
- Open air picnic tables, barbecue grills and fire rings
- Water fountains
- Public boat launch river access with no fee car and trailer parking
- Cross country ski shelters
- horseshoe pits
- Walking trails along wooded bottomlands of the Mississippi River
- Fishing (walleyes, sauger, northernpike and muskie in the Mississippi River)
- Panoramas of river gorge and views up to Fort Snelling

**Proposed:**

- 1 additional picnic shelter/restroom structure at the downstream end

**Two Rivers Overlook**

Completed in 2004, the project was initiated by Highland Park District Council with funding from federal Scenic Byways program, Saint Paul STAR grant, and private funds. Design work by artist Philip Ricky and City Parks designer Jody Martinez. Across from historic Fort Snelling, 1819

Area called B’dote (Dakota for “confluence”), where the Dakota people came from Across from Pilot Knob sacred site, was one of 10 most endangered sites, saved, burial grounds and treaty site where Dakota ceded Minnesota, Iowa and South Dakota, 1851 Where the gorge becomes the valley River Warren/glacial Lake Agassiz REFER to monuments/information



A.2 Summary Description of Existing GRP Parks

A P P E N D I X

THE VALLEY REACH

**Crosby Farm Park** (part of Crosby Farm/Hidden Falls Regional Park)  
**Size:** 534/546 acres of bluff, two lakes, wetland and flood plain forest serves as the City's principal natural resource interpretive area.

**General Description:** An operating farm until 1963, now naturalized Crosby Farm Nature Area preserves a natural floodplain habitat of the Mississippi River. Today, Crosby Farm includes Upper Lake and Crosby Lake which provide mostly pan fish and northern pike. A mixture of woods and wetlands can be seen from the 6.7 miles of paved trails surrounding the two lakes, scattered ponds, and Mississippi River. The Crosby Farm Extension East of Hwy 35E is a popular destination for dog walkers and bird watchers.

The park is named after Thomas Crosby, an English immigrant who, in 1855, staked out 160 acres in the valley southwest of the present-day junction of Shepard Road and Interstate 35E in 1858. Before Crosby's death in 1886, the farm became one of the largest and longest running in the West End and Highland Park area. A succession of families farmed it between 1902 and 1962. In pre-refrigerator days ice companies cut ice out of Crosby Lake for summer cooling.

Crosby Shelter is available for rent. The shelter seats approximately 50 people and has a fire pit, a barbecue grill and restrooms. Electricity is available, it is 110 volts, 220 volts not available in the park system. Multiple crock pots, coffee pots, roasters and other electric items may cause overloads on the power source. Alcohol - The possession or consumption of alcohol is prohibited in this park.

The Lakes  
Crosby Farm Park contains two lakes: Crosby Lake and Upper Lake. These lakes provide important habitat for a variety of animals. Birds, such as mallards, wood ducks, great blue herons and egrets, use Crosby’s lakes as breeding and nesting grounds. Painted turtles may be seen basking on logs near the lakes shores. Crosby’s lakes support a variety of fish, including northern pike, largemouth bass, sunfish, cattail, bur reed, and even the exotic invader, purple loosestrife can be found. Crayfish, snails, and various invertebrates are also important residents, playing a crucial role in the ecosystem’s food chain.

**More Urban:**  
Adjacent Neighborhoods: West 7<sup>th</sup>/Ford Road , Highland Park, Victoria Park  
Existing Commercial Areas: West 7<sup>th</sup> St. Buca’s Italian Restaurant  
Watergate Marina is the uppermost full service marina on the Mississippi River

**More Natural:** When this wetland floods, fish and other aquatic animals gain access the Lakes and ponds, including the popular Pan Fish and Northern Pike.

**More Connected:** The trail along the river in Hidden Falls seamlessly connects into the park. Watergate Marina and Lower Crosby Lake are accessed from a public entrance just south of Shepard Road and the Samuel Morgan Trail. A smaller entrance and service road has recently been blocked off near 35E, restricting access to the Crosby Farm Extension.

- Existing amenities:**
- Watergate Marina
  - Vehicular, pedestrian and bicycle access at the upstream end
  - Pedestrian and bicycle access at the downstream end
  - Miles of soft and paved interpretive trails
  - Floating boardwalk and dock between Upper and Lower Crosby Lakes
  - Small gathering structure/picnic shelter
  - Interpretive signage explaining cultural history, wildlife and geography
  - Activities include: Fishing, birdwatching, paddling, hiking, history
  - There are 13.9 kilometers of cross-country skiing and snow shoe trails making the park a year ‘round facility.

- Proposed:**
- Nature interpretive facility
  - Addition to and restoration of trails
  - Additional interpretive program tools
  - Stronger programming could significantly increase the 1,600 visits a year the park currently enjoys.

**Watergate Marina**  
28 acres of land and harbor, which is technically part of Crosby Hidden Falls Regional Park. Two harbors are separated by a peninsula of land at an elevation above the 100-year flood. The upper harbor is no longer used for marina purposes. The peninsula, an abandoned construction site, is primarily covered with volunteer vegetation. The lower harbor is one of two functioning full service marinas in this stretch of the river.

- Existing amenities:**
- 190/140 slips
  - Winter storage
  - Summer storage
  - fee-based boat launch
  - Boat service building and supply store

**Crosby Farm Addition**  
**Size:** 8.5 acre dump site



Fountain Cave

Fountain Cave, a landmark known as early as 1811, was named for the sparkling creek that flowed from its mouth and continued from 375 feet through a ravine to join the Mississippi River about 140 feet downstream from this marker. The cave attracted such noted explorers as Stephen H. Long in 1817. Henry R. Schoolcraft in 1820 and Joseph N. Nicollet in 1837 – all of whom described it in their journals.

Before the land east of the Mississippi was opened to settlement, Pierre “Pig’s Eye” Parrant, a vagrant voyageur who sold whiskey illegally to soldiers and Indians, in 1837 staked a calm where the ravine met the river. Here, in 1838 he built a saloon, and small hovel that was the first building on the site of what is now Saint Paul. He was followed during that year by several refugee settlers who had been ousted from the Fort Snelling military reservation. For several years, what was to become Saint Paul, was known as Pig’s Eye, because people would suggest they could be reached by mail at Pig’s Eye.

For many decades tourists visited Fountain Cave to view its pure white sandstone walls and mysterious interior chamber. Through the years debris accumulated to block its entrances. Construction of a highway in the early 1960’s made it necessary to fill in most of the ravine, so that there is no visible indication for where the cave is located.

Lilydale Park (Lilydale/Harriet Island Regional Park

Size: 219 acres

**General Description:** Steep 200 feet bluffs, a flood plain including a 100acre lake and 3.2 miles of shoreline make up the park. The park is owned and operated by the City of St. Paul and partially falls within its limits. It is also located in the cities of Lilydale and Mendota Heights. Until recently, the park was a combination of landfill, industrial, commercial and residential subject to severe flooding. The land was purchased for regional park purposes from the 1960s to the 1980s. Structures have been removed, however significant rubble protrudes from the landscape rapidly being entangled in volunteer vegetation growth. Fossil hunting is a favorite activity in former clay mine/brick manufacturing area. The area has great potential for natural resource restoration and recreation. The main park area is currently accessible at each end.

Lilydale, formerly a residential community, Lilydale Park extends to the west of Harriet Island and is now an natural floodplain area, 2 1/2 miles in length and 1/2 miles in width. Within its boundaries are found a 100-acre Pickerel Lake and connected pond and approximately 100 acres each of marsh and wooded areas that provide habitat for a variety of water fowl, mammals and vegetation. A boat launch has just recently been constructed on the Mississippi River, and a trail system is planned. Lilydale is also the site of the former Twin City Brick Co. which mined the bluff for clay for almost 100 years. The mining operations exposed extensive fossil beds which are visited by many school and museum groups.

The park currently hosts over 11,500 visits a year.

Current Plans include continued envireomental remediation, construction of a realigned roadway, new trail where new road alignment bisects the existing trail, and addition of wildlife viewing platforms along the river. Next steps in park enhancements include constructing a shelter and restroom facilities at Pickerel Lake and seeking funding for implementation of the remainder of the Master Plan.

More Urban:

Adjacent Neighborhoods: Mendota

Existing Commercial Areas: Bluff of Mendota Mall, Saint Paul Pool and Yacht Club (The Saint Paul Yacht Club, established in 1912, provides recreational boating opportunities at Harriet Island, and is the home port for many upper Mississippi historic watercraft)

Lilydale is near downtown but is an undeveloped park with no park facilities

**More Natural:** Bluffs visible in the “Brick Yard” area expose 450,000,000 years of rock formations starting with Loess, Cromwell Glacial Till, Riverfalls Glacial Till, Pierce Gravel Glacial Till, Missing Rock Record, Galena Limestone, Decorah Shale, Platteville Limestone, Glenwood Shale, St. Peter Sandston.

**More Connected:** Regional bike trail extends from Harriet Island into Lilydale before joining Dakota County’s Big River Trail.

**Historical Context:** The village of Lilydale was platted as Lilly Dale in 1886, in honor of the many Water Lillies that flourished in Pickerel Lake. Between Water Street on the downstream end, and the hill to Highway 13 at the upstream end, was the village of Lillydale, bracketed by the river and Pickerel Lake. It was a village of several dozen homes on the flood plain. Lilydale is also the site of the former Twin City Brick Co. which mined the bluff for clay for almost 100 years. The mining operations exposed extensive fossil beds, and the area has become well known among paleontologists.

Pickerel Lake is the site of an 1826 attack by Dakota on 200-300 Ojibwa camped by the lake during a visit to Fort Snelling. Pickerel Lake was also the site of hot-rod racing on the ice in the winters of the 1950's.

Existing amenities:

- Pickerel Lake
- Lake aeration
- 2 miles of pedestrian/bicycle trail
- Secured bat cave
- Public Mississippi River boat launch and parking
- Planting native vegetation
- Temporary carry-in boat access to the lake
- Soft trail development and erosion control
- 1 bluff top overlook
- Exposed fossil beds
- Swinging Railroad Bridge
- Old Wooden Trestles



A.2 Summary Description of Existing GRP Parks

A P P E N D I X

- “Brick Yard” area
  - Clay Pits
  - Cherokee Ravine
  - Kilns
  - Water Falls
  - Echo Cave
- Numerous seeps provide potential for ice climbing in the winter
- Wildlife Viewing Platform opened in 2002; constructed of stones that had been part of the 1885 Ramsey County Courthouse City Hall. The City Hall stood at 4th and Wabasha, had a 218 foot-tall tower, but was demolition in 1935. The stones had been hauled as waste to the Acacia Cemetery in Mendota until their rediscovery and recovery in 2001. Other of the stones are being used in landscaping at the Stonebridge housing development in Lilydale (Old Man River website).

Proposed

- Additional development, operation and maintenance of supporting trails throughout the park
- Bike trail improvements on and off Lilydale Road
- Lake restoration
- Pickerel Lake access and interpretive functions
- Pickerel Lake fish and lake management including possible items such as aeration and biological lake preservation
- Develop access for non-motorized boats at Pickerel Lake
- Provide fishing docks especially to the deeper part of the lake for fishing at Pickerel Lake
- Clean up the existing fill area on the north side of the lake and relocate current parking use away from the lake
- Park activity/interpretive center building as a gathering point for interpretive uses, picnicking, restrooms and maintenance related storage space
- Open activity area: a multi-purpose area in the vicinity of the parkactivity/interpretive center will serve picnicking, day camping, formal and informal gatherings and as a base for nature as well as other interpretive programs; site furnishings will include benches, sitting stones, logs, trash containers, fore rings and picnic tables and grills
- Develop a butterfly garden for public viewing and cultivate plants throughout the park that will support butterflies
- Develop a boat dock for small boats using the picnic facilities and/or the boat launch
- Wetland restoration and augmentation
- Trash fill clean up or removal
- River bluff improvements including elimination of some existing informal paths
- Signs: provide park entrance, information, trail and interpretive signage throughout the park
- Park road adjustments will be made where possible and necessary to improve safety and accommodate parking arrangement and trail development
- Establish park entrance at Joy Street and realign the road to improve trail access

- Provide parking bays along the road
- Adjust the alignment to accommodate pedestrian/bicycle trail improvements at the west end of the park
- Interpretive facility improvements include the fossil area, kiln and MAC wetland and brickyard quarry
- Campgrounds
- Trail network development throughout the park.
- Viewing platform at the top of the bluff and a way to connect the top and the bottom of the bluff through the brickyard area in a safe manageable way
- Side trail to the perched wetland located in the vicinity of the brickyard area and to the bat cave
- Shoreline and lake bottom improvements
- Remove trash from the lake
- Provide pedestrian access along the railroad bridge especially to areas of deep water for fishing or some sort of floating or stationary dock and connection under the railroad bridge

Cherokee Heights Park

Size: 64/66 acres

**General Description:** Cherokee Park is situated on the bluffs overlooking Lilydale, Harriet Island and the Mississippi River. A linear bluff-top park used principally as a parkway and picnic grounds; serves the local neighborhood as well as the region. The majority of the park consists of mature over-story trees and turf. Many of the panoramic views it was once known for have overgrown but a spectacular view from the Smith Ave. High Bridge showcases the downtown skyline and the new Upperlanding development. The park is now a popular place for picnicking.

In 1903 the Park Board recognized the potential of this land as a park because of the spectacular view along the bluffs of the Mississippi. The land was acquired in segments from money donated by James J. Hill and others between 1903 and 1914. Originally used as a campground for tourists, it took much of its present form in 1924 when the roads were paved, trees and shrubs were planted, and horseshoe courts and ball field were added.

Cherokee Park offers two open-air picnic shelters, one large and one small. The large shelter accommodates approximately 100 people and is equipped with electricity. The small shelter accommodates approximately 60 people. Barbecue grills are located throughout the park. A handicapped accessible restroom building is located between the shelters.

Both shelters are equipped with electricity at 110 volts, 220 volts not available in the park system. Multiple crock pots, coffee pots, roasters and other electric items may cause overloads on the power source. Alcohol - The possession and consumption of non-intoxicating malt liquor (containing not more than 3.2% alcohol by weight) is permitted from 8:00 a.m. to 8:00 p.m. within designated picnic areas. Glass beverage containers are not allowed.



**More Urban:**

Adjacent Neighborhoods:  
Existing Commercial Areas:  
Institutions:

**More Natural:**

**More Connected:**

**Historical Context:** The Park was originally used as campground for tourists. A tourist camp was established on the bluff-top as automobile touring became popular in the 1920's. It is now a popular picnic, scenic viewing, and "lover's lane" area after dark. The tourist camp had scenic vistas both up and down stream, had room for 648 cars with tents attached to their sides, and boasted a bathhouse with 8 showers.

**Existing amenities:**

- Picnic facilities, including two shelters
- Barbeque grills
- Children’s Play area and tot lot
- Informal athletic fields
- One basketball and two tennis courts
- Parkway
- Access to Bruce Vento’s View and Nature Walk in Lilydale Regional Park
- Two formal scenic overlooks
- Scenic overlook at Smith Ave High Bridge

**Proposed:**

- Rebuilding the parkway including overlooks
- Addition of a continuous pedestrian/bicycle trail
- Bluff restoration and preservation
- Bluff connection between Cherokee and Lilydale

**Prospect Terrace Park (Preserve)**

A small neighborhood park with play equipment overlooking the river valley and downtown.

At South Bellows and West Delos Streets on the Upper West Side

**Existing amenities:**

- Children’s play equipment
- overlook

**THE DOWNTOWN REACH**

**North High Bridge Park**

**Size:** .85 acres

**General Description:** Created when the new High Bridge was developed in 1987. This neighborhood park offers dramatic river views of the Smith Avenue High Bridge and the river valley.

**More Urban:** Bohemian Hill neighborhoods of Upper Town and Uppertown Triangle.

**Existing amenities:**

- Overlook
- Gardens
- Public Art Installations
- Environmentally-sensitive sculpture (artist Craig David incorporated historic, salvaged materials including a baptismal gate from St. Stanislaus Kostka Catholic Church and granite curb stones and pavers from St. Paul streets.)
- Granite curb stones installation
- Peace Poles in Four Languages
- Green Chair (The sculpture was on exhibit at the Walker Art Center before being moved and re-assembled in the park. There were four of the over-sized chairs in various parts of the Twin Cities.)

**West End Park**

**Size:** 1/2 acre

Public Park; private ownership and maintenance.

- Children’s play equipment and play surface (often covered with chalk art)
- Two drinking fountains, one for people, lower one for dogs.

**Science Museum Park**

**Size:**

Small, open, landscaped park adjacent to Science Museum

**Upper Landing Park**

**Size:** 4 acres

**General Description:** The park provides a variety of spaces to accommodate individuals, intimate gatherings and moderate-sized events. Upper Landing Park contains fountains, sculptures, an amphitheater and gathering spaces. The park is a gateway to and from the regional trail system, open space for historic Irvine Park and new Upper Landing neighborhoods, river access and program support for the Science Museum, National Park Service visitors center, River Center and other tourists visiting St. Paul. The park supports adjacent commercial and food service developments.



A.2 Summary Description of Existing GRP Parks

A P P E N D I X

More Urban:

Adjacent Neighborhoods: Upper Landing  
Existing Commercial Areas: Science  
Institutions: Museum of Minnesota, MNRRA

More Natural:

More Connected:

**Historical Context:** From the late 19th Century to the mid 20th Century, the west end of the Upper Landing was home to a residential community that became known as Little Italy. The east end was a home to a variety of river-related industrial operations culminating in the construction of grain elevators in 1916. World War II and the spring floods of 1951 and 1952 caused the City to re-zone the area for industrial use. By the end of the 1950s, the last residents had left, and the Kaplan Scrap Iron Company operated on the site until the City acquired the property (1988) and demolished the buildings (1990). Recently, the Science Museum has been developed to the east of the site, the new Shepard Warner Road was developed to the north of the site, and Upper Landing neighborhood.

Existing amenities:

- Riverside promenade
- Public art/sculptures
- 2-acre lawn
- Parking
- Riverside amphitheater/sitting area
- Interpretive landforms
- Fireworks launch pad
- 900 feet of bike/pedestrian trails
- Chestnut Plaza
- City House park pavilion

Proposed:

- 2010 Replace Rip Rap along Upper Landing Park and neighborhood

Chestnut Plaza

brings the neighborhood right to the river with a lower level trail, fishing pier and boat landing, remarking on the original 1850s Upper Landing jetty.

Existing amenities:

- Two fountains, water rill and cascading water towards the Mississippi.
- Benches
- Adjacent Caribou Coffee shop

City House

The National Register grain elevator buildings have been restored as a park pavilion, trail head and interpretive center.

Existing amenities:

- Interpretive panels
- Deck out over the river

Proposed:

- Bathrooms
- Potential catering facility, heating and air conditioning

Samuel H. Morgan Trail

**Size:** 7.7 miles of paved pedestrian/bike trails

**General Description:** The Samuel Morgan Regional Trail follows the Mississippi River waterfront throughout the City of Saint Paul. The paved pedestrian/bicycle trail is part of a statewide trail system connecting from Mississippi River Boulevard at Highway 5, completing a continuous route the entire length of the river through the city to Battle Creek. The character of the trail reflects the surrounding landscape, ranging from open bluff top upstream to a more intensely developed urban downtown and wooded forest downstream. The Samuel Morgan trail is a portion of the presidentially designated National Millennium Trail and the National Mississippi River Trail

More Urban:

Adjacent Neighborhoods: Downtown, West 7<sup>th</sup>/Ford Road,  
Existing Commercial Areas: West 7<sup>th</sup>  
Institutions:

More Natural:

Native planting

More Connected:

Larger parking lot on Warner Road east of Sibley St. Parking lot near Xcel Energy High Bridge power plant

**Historical Context:** Foot of Drake Street is North Mississippi Brewery. The brewery nearly went bankrupt after a worker fell into a hot vat of beer and was boiled to death. Frederich and William Banholzer built North Mississippi into a popular brand, using multi-chambered caves below the Drake Street bluff. The brewery closed in 1898 and the buildings razed in 1937.

Existing amenities:

- 7.7 miles of paved pedestrian/bicycle trails
- Site furnishings
- Native planting areas
- 1 interpretive scenic overlook
- 1 river promontory at lower landing park
- 1 interpretive monument



**Proposed:**

- Additional bluff preservation work
- Connect to Bruce Vento Nature Sanctuary
- River promontory in the downtown segment
- Additional site furnishings
- Educational and interpretive information

**Kellogg Mall Park**

**Size:** 3 acres

**General Description:** 3 acres of bluff top balcony overlooking the river: a true balcony of the park extends downtown out over an underground parking garage and over 2<sup>nd</sup> Street. The park supports events but principally provides downtown visitors and workers with commanding views of the river corridor and quick access to gardens, art and interpretive elements. The park is a historical site from which the city derived its name and the views access significant historical, cultural, natural and economic resources as well as its central location makes it accessible to all of downtown. The views access significant historical, cultural, natural and economic resources. Birthplace of name Saint Paul for a chapel 1841 Father Lucien Galtier

The current form of the park, and its artwork and fountains, was developed in 1989 by artist Cliff Garten, with City Park designers Tim Agness and Jody Martinez, artist George Mason and poet Karen Sproles.

**More Urban:**

Adjacent Neighborhoods:  
Existing Commercial Areas:  
Institutions:

**More Natural:**

**More Connected:**

**Historical Context:**

**Existing amenities:**

- 1,000 feet of river balcony walk
- Interpretive sculpture and monuments
- Significant interpretive art
- 2 fountains
- Ornamental gardens
- Boulevard Gardens

**Proposed:**

- Extend mall park upstream along Kellogg Boulevard (Ramsey County site)
- Connection to the river

**Culture Park** (Poetry Park) disconnected part of Kellogg Mall Park

**Size:**

Developed in 1993

Public Art Saint Paul and The Saint Paul Foundation.

Park is created space over a parking ramp

- Culture Garden commemorates the Native American, African, Asian, Hmong, Latin, and Anglo cultures that make up St. Paul with a mix of granite and iron shapes and poems.
- Created as a collaboration by several artists and poets

**Harriet Island Park** (part of 636 acre Lilydale/Harriet Island Regional Park)

**Size:** 72 acres

**General Description:** Harriet Island retains its island status in name only; the back channel was filled in in 1950. The park is situated just across the Mississippi from the core of downtown. Several floods jeopardized the park and nearby neighborhoods until a floodwall was constructed. Today, the “great lawn” is used for large attractions and gatherings in Saint Paul. The 72 acres urban riverfront Regional Park provides outdoor water related recreation to the neighborhood, the city and the region. The park has a long, rich history of serving as public access to the river for cultural, health and recreational purposes.

Harriet Island became the city’s riverfront recreational site and gathering place in 1900, purchased, developed and donated to the city as a private philanthropic effort of the City’s health officer, Dr Justus Ohage. It was renovated exactly 100 years later in 2000 to resume that role. The \$15.4 million renovation was paid for with State, City and philanthropic dollars.

Special medallions on riverside fencing were developed for top level donors, as well as community buy a brick campaign. Putting a gateway opening through the newly improved levee took a lot of negotiations with the Corps of Engineers. The park has a significant variety of facilities and spaces for programming opportunities including the Clarence Wiggington Pavilion, named after the first African American municipal architect in America who designed the building, now on the National Register of Historic Places. Park use ranges from single-family use of children’s play area to multi-day events of over 350,000 people and everything in between. The playground, as well as the “island” is named after Harriet Bishop, the City’s first schoolteacher. A silhouette of her first school building is part of the playground design. The park includes unique uses such as Showboat theater and residents living on houseboats. The band shell use designed by renowned architect Michael Graves.



A.2 Summary Description of Existing GRP Parks

A P P E N D I X

More Urban:

Adjacent Neighborhoods:  
Existing Commercial Areas:  
Institutions:

**More Natural:** To maintain a healthy Mississippi and river valley, storm water runoff is captured and filtered through a biofiltration system before reaching the river. Bio-swales are located in the center islands of the west and east parking lots and the biofiltration basins are located nearby. Native species are planted throughout the park, including native grasses, flowering plants, trees and shrubs.

**More Connected:** Bike, hike, skate, blade or jog the beautiful regional park and trails connected to Harriet Island. Park at Harriet Island and follow the trail through Harriet Island, west on the trail/street to Lilydale Regional Park and the Big Rivers Regional Trail, and east on the riverfront walkway to the Robert Street Bridge.

**Historical Context:** Up until 1950, the park was a true island, separated from the mainland by a channel of water varying in width from 100 to 200 feet. This channel was subsequently filled. The park is named after pioneer school teacher Harriet Bishop. Harriet Island was built as an enclave for healthy living when Dr. Justus Ohage, Saint Paul’s health officer, bought the island and built a new park there, complete with public bathhouse and beach, playgrounds, handball and tennis courts, cafeteria, pavilions, zoo, childcare facilities, bandstand and picnic grounds.

Existing amenities:

- Outdoor family picnic facilities
- 20 acres “great lawn” event space.
- St. Paul Yacht Club and marina harbors, storage area, landing and restroom facilities, live aboard ships in lower harbor
- Formal river walk
- River watching
- National Register Clarence W. Wigington Pavilion is a 5,000 square foot year round rental facility for large group events
- Public dock
  - Covington Inn Bed and Breakfast – old tow boat
  - River Boat Grill floating restaurant
- Permanent landing dock
  - Minnesota Centennial Showboat
- Excursion dock
  - Paddleford Packet Boat Company
- 2 Ticket booth/restroom buildings
- Formal pedestrian access plaza, public art and information kiosks
- Target Stage
- Two Boat Harbors – year ‘round “live-a-boards” in lower harbor
- Harriet Bishop playground
- Great Stairs – river access and seating area

- Harriet Bishop Children’s Playground
- Public Dock
- veterans memorial

Proposed:

- Additional landscaping
- Replacement of maintenance/operation building
- A marina clubhouse and trailhead facility at the upper harbor

Harriet Island Levee Gateway

Unique closable (for floods) pecestrian gateway through the flood protection levee features artwork by Ann Klefstad and Craig David. The gateway has a pedestrian/bike trail over the top of the opening, which can be closed with aluminum stop logs when flooding occurs.

Raspberry Island (part of Lilydale/Harriet Island Regional Park)

**Size:** 3 ½ acres

**General Description:** Raspberry Island, located under the Wabasha Street Bridge, is the last true island in Saint Paul’s stretch of the Mississippi. Others islands have been dredge out or accreted to the mainland over time. The downstream end will descend to meet the river. Private donation helped construct the Schubert Club (Keugler) band shell. Designed by Jamie Carpenter (his work on Wabasha Bridge resulted in the open center and echoing the downstream bend of the bridge) The privately owned Minnesota Boat Club, on Raspberry Island is the oldest amateur athletic association in the state. Their clubhouse is on the National Register of Historic Places. The island was known as Navy Island when it was used as a naval reserve station from the 1950s through the 1970s.

Existing amenities:

- The Minnesota Boat Club has operated a rowing club on Raspberry Island, also called Navy Island, since 1870. The current structure was built by the club in 1910 and renovated in 2003. The upstairs portion of the club house is available for event or meeting rental. The boat club, on the upstream portion of the island, is private property.
- The Schubert Club's Heilmaier Memorial Bandstand of glass and steel has a shape inspired by the double curved hull of a classic 1930's era Chris-Craft boat. Designed by Jamie Carpenter.
- New landscaping, river walk, lighting, landscaping and lawn, to support small to medium events of 50-5,000 people
- New public restrooms – integral to Boat Club
- New rip-rap and edge improvements

Proposed:

- Small fountain in parking area



**Lower Landing Park / Lambert’s Landing**

**Size:** 22 acres  
**General Description:** The site of one of Saint Paul’s two early steamboat landings, the steam boat landings were the furthest point of navigation and landing on the Mississippi, and the reason for Saint Paul’s birth. In the 1980s, the site of a river edge highway and dozens of rail tracks, the park is now open green space, wetlands, the new river edge Samuel H. Morgan Regional Trail and a river overlook.

The river edge Lower Landing Park was created by the relocation of Warner Road; a linear strip of open space, manmade wetlands and significant landscaping. Future use is primarily on the trail, however the site is a hub of transportation activities. Significant barge fleeting, tow boat docking and national river excursion boat docking take place in and adjacent to the park. It is also adjacent to the main line of the railroad and in the landing pattern of the downtown airport

**More Urban:**  
Adjacent Neighborhoods: Downtown and Lowertown  
Existing Commercial Areas: Downtown,  
Institutions: Farmers Market,

**More Natural:**

**More Connected:** Samuel Morgan Regional Trail runs through the park.

**Historical Context:** The Lower Landing was named "Lambert's Landing" in 1937 after Colonel George C. Lambert. Lambert was a lawyer and mushroom grower who was active in the Farmer's Union Terminal and a leader in the campaign to persuade Congress to fund a 9-foot navigation channel.

- Existing amenities:**
- Paved pedestrian and bicycle trails
  - Wetlands
  - Observation platform and interpretive scenic overlook
  - Historic Lower Landing sill docks excursion boats
  - Site furnishings
  - Parking

**Proposed:**

**Bruce Vento Nature Sanctuary**

**Size:** 35/27 acres  
**General Description:** Situated between the bluffs of Mounds Park and Railroad along the Mississippi River, this reclaimed industrial site is filled with beautiful natural features and Saint Paul history. Beginning in 1997, a strong grassroots effort began to restore the Brownfield site into a spring-fed wetland and daylight Trout Brook. Carver’s Cave (Wakon Tipi – Spirit House to the Native Americas) is situated in the sanctuary. The

nature sanctuary was developed from a recently reclaimed brown field site; historic, cultural and geological features. Two-thirds of the site is a conservation easement preserving it for natural resource management. The park was purchase and redeveloped through a community partnership, Trust for Public Land, state and local funding.

**More Urban:**  
Adjacent Neighborhoods:  
Existing Commercial Areas:  
Institutions:

**More Natural:** Ecological restoration will increase habitat in this critical urban stretch of the Mississippi River flyway — a migration corridor used by 40% of the continent's migrating birds and waterfowl. Natural springs exist on the site and plans include recreating a wetland area

**More Connected:** Once completed, the sanctuary and associated trail links will, for the first time in more than 100 years, provide Saint Paul’s East Side with safe, easy access to the Lowertown neighborhood and Mississippi River.

**Historical Context:** Remnants of the land's former use as a rail yard exist, and the sanctuary will include important interpretation of the land's transformation from a vital floodplain to industrial land and back to riverfront habitat  
Once a focal point for Native American trade and ceremony

- Existing amenities:**
- Breathtaking sandstone bluffs
  - Two fascinating caves
  - Natural Springs
  - Recreated 2 acres of wetlands
  - Trout Brook and Phalen Creek estuary
  - Soft surface hiking trails
  - Regional bicycle trail loop
  - Secured historic Carver’s Cave/Wakon Tipi
  - Salvaged historic railroad interpretive facilities
  - North Star Brewery storage caves and foundation
  - 2 acres of restored spring-fed wetlands
  - Trout Brook daylighting interpretation
  - Three wetlands to capture spring water

- Proposed:**
- Stairway connection between Vento Nature Sanctuary and Mounds Park
  - Paved Bike Path
  - Lower Pahlen Creek Project will connect the Bruce Vento Regional trail near 7th St and Payne Ave; the 5th St and Broadway intersection near Lowertown; and the Southwest entry to Indian Mounds Regional Park at Plum Street and Mounds Blvd.



A.2 Summary Description of Existing GRP Parks

A P P E N D I X

- Connect Bruce Vento Regional Trail corridor to Samuel Morgan Trail at the river – over railroad tacks and under Warner Road
- Interpretive program and facilities
- Future picnic area
- Parking
- More native plantings

Fourth Street Trail Extension

**Size:** 1/2 mile  
New (2009) paved pedestrian/bicycle trail extending the existing Bruce Vento trail into Lowertown.

THE FLOODPLAIN REACH

Holman Air Field

- Potential:**
- Improving the old floatplane harbor as a small park
  - Connecting trail system around the airport to connect West Bank trail/ Harriet Island to South St. Paul trail system

Indian Mounds Regional Park (part of 296 acre Battle Creek Regional Park)

**Size:** 79 acres  
Scenic views, trails, parkway, historic and cultural sites, Indian burial grounds, picnic areas, recreational facilities and municipal forest. The multi-use park is principally defined by its bluff top locations, views of downtown and the river corridor, remaining burial mounds for which it is named and historic streetcar station.

On the high bluff above and somewhat to the east of Carver's Cave stood a group of 18 tall mounds. As early as 1862 a public park was proposed for the site, which commands a sweeping view of the Mississippi Valley to the southeast.

Some of the mounds were leveled to make way for streets and to improve the view, but six of the largest were preserved, and there they remain today. They had, however, attracted the curiosity of St. Paul settlers, and until the early 1900s they were repeatedly "explored," looted, and vandalized. Another group of 19 smaller mounds that stood along the bluff directly above Carver's Cave and somewhat to the north and west of the present park was completely destroyed.

In 1981 a modern survey and some testing of the site (21RA10) was conducted by Minnesota Historical Society archaeologists in anticipation of park improvements. The location of mounds was mapped and it was determined that a few relatively undisturbed areas remain in the park despite extensive cutting and filling. Occasional traces of early Indian occupancy were found, but dating was impossible.

Historic Background

Six burial mounds atop the bluff in Indian Mounds Park preserve a reminder of Minnesota's history for future generations. At least 16 burial mounds originally sat on the high bluff. Nineteen more were located further down the bluff above Carver's Cave (now at the end of Cherry Street). All of these and most of those in Indian Mounds Park were destroyed. It is clear that these mounds were added to by many later cultures over the centuries. However, it is generally thought to be that the Hopewell findings created the original mounds, some dating to the beginning of the Christian era, or over 2,000 years.

In the mid-1800s, several scientists with an interest in Minnesota's prehistory -- Edward Duffield Neill in 1856, and later the Minnesota Historical Society under the leadership of Colonel DA Robertson excavated the remaining mounds. T.H. Lewis, however, contributed most of the information on his later series of excavations. Several types of burials were found in both Mounds Park and Dayton's Bluff. Most common were simple internments frequently accompanied by mussel shells and occasionally a projectile point. Small bundle burials were found in the upper parts of several mounds -- these were placed there by later peoples. Log tombs were found at the base of at least 3 mounds. A pit burial was found in one mound. In two of the Indian mounds were 8 stone cists about 7 inches high and made of thin limestone slabs set upright. Human bones were found in each cist and were accompanied by grave offerings, including shells, perforated bear teeth, copper ornaments, and a piece of hammered sheet copper, as well as a number of projectile points.

Among the more startling discoveries was a skull covered with red clay producing the image of the original face. Nothing similar to this "death mask" had ever been found by archaeologists in mounds or ancient graves. The mask was removed intact during that excavation. The log tombs, hammered sheet copper and especially the clay death mask belong to the Hopewellian period. Indian Mounds Park contains remnants of one of mankind's earliest organized civilizations, a civilization that prospered while there were still pharaohs in Egypt and great dynasties in China.

Existing amenities:

- Protected burial mounds
- Historic streetcar station
- Picnic area including two shelters/restroom buildings
- Restored oak savanna and prairie plantings
- Tennis courts
- Children's plan area
- 2.9 miles paved pedestrian/bicycle trails
- Mounds Boulevard Parkway
- Two scenic overlooks
- Municipal forest



**Proposed:**

- Additional slope/bluff stabilization
- Additional native plantings
- Trail connection to Vento Regional Trail

**Pig's Eye Regional Park**

**Size:** 1,200 acres

Park includes 500 acres of shallow lake and 700 acres of mostly undeveloped wetland and flood plain forest. The park also includes a restricted access scientific and natural area near the river and a wood recycling facility in the northwest corner; adjacent private industrial areas. Part of the Northern Park was a landfill at one time. Named for Pig’s Eye Parrant, earlier settler and the first name of Saint Paul – “Pig’s Eye.”

**Existing amenities:**

- Recycling equipment

**Proposed:**

- Limited soft hiking trails
- Observation blinds
- Connection to Battle Creek and Samuel H. Morgan Trails

**Highwood Nature Preserve**

**Size:** 13 acres

Scenic bluff property in southeastern Saint Paul (748 Brookline Ave) containing deciduous woods, native and rare prairie plant species. Land purchased in 1999.

**Existing amenities:**

- Scenic views
- Natural habitat

**Henry Park (Park Preserve)** 2120 Skyway Drive

**Size:** 11 acres

Newest city park: forested bluff land. Land purchased in 2007 following community activism. No development plan yet

**Battle Creek Regional Park**

**Size:** 390 acres (check acreage here, and Mounds Park)

Rolling wooded bluff and a deep ravine creek bed owned by Ramsey County. Principally naturalized open space, with trail and picnic facilities focused mainly in the ravine which connects to contiguous County park facilities in the neighboring City of Maplewood. Separated from the flood plain by Highway 61, a tunnel connects the park to the Samuel H. Morgan Regional Trail.

**Existing amenities:**

- Soft pedestrian trails
- Hard surfaced pedestrian/bicycle trails
- Picnic facilities
- Parking
- Mountain bike trails
- Cross country ski trails

**Proposed:**

- Invasive species control
- Native plantings
- Additional soft hiking trails

**Great River Park Heritage**

Saint Paul’s Mississippi, valley, road and trail system is a part of:

**National Heritage River (Clinton)**

**Great River Road (National Scenic Byway)**

**Mississippi River Trail (MRT) from Itasca, MM to New Orleans LA**

HKGi  
GREAT RIVER PARK MASTER PLAN  
Draft July, 2011



General intent

The general intent of the Economic Development Analysis related to the Great River Park Master Plan Inventory is to gain a better understanding of the following:

- The City’s goals related to economic development potential within and adjacent to the Mississippi River Corridor.
- Identify potential opportunity sites for future real estate development within the River Corridor.
- The significance of the economic resources of the working river and the potential for future industrial activity within the River Corridor.
- Identify potential acquisition sites for future parks and recreational uses within the River Corridor.
- How future development within the River Corridor can contribute to better connectivity between surrounding neighborhoods and the river.
- How future development within the River Corridor can utilize sustainable development practices to enhance water quality and reduce the impacts of stormwater runoff.
- Identify the issues related to redevelopment activity within each Reach of the River Corridor, ie. context, scale, land use, transportation, open space requirements, etc.

The scope of the investigation included a thorough review of City policy documents, plans, and prior planning studies. Additionally, the planning team interviewed City planning staff to confirm the information being studied was current and accurate. The areas studied included all properties along the River Corridor, including designated commercial corridors and mixed-use nodes adjacent and connected to the River Corridor.

The information can and should be used in the following ways:

- To identify potential acquisition sites (Saint Paul Parks and Recreation)
- To establish potential programs for future development within the River Corridor.
- To ensure that physical and visual access to the river is maintained.
- To promote high-quality sustainable urban development, both along the river’s edge and in adjacent neighborhoods.
- To sustain the economic resources of the “working river”.
- To confirm and support City goals for future economic redevelopment activity within the River Corridor.

Source(s) of information

The following sources were utilized to gather data and information in the study:

- City of Saint Paul Comprehensive Plan (2010)
- Mississippi River Corridor Plan: Saint Paul Comprehensive Plan (2001)
- West Side Flats: Master Plan and Development Guidelines (2001)

- Shepard Davern Gateway and Saint Paul Gateway Project (1998)
- Seven Corners Gateway Plan: A Design Charrette for West 7th Street (2000)
- Historic Lowertown Small Area Plan: An Amendment to the Land Use Chapter of the Comprehensive Plan
- Brewery/Ran-View Small Area Plan (2000)
- Saint Paul on the Mississippi Development Framework (1997)
- Smart Growth Twin Cities: Harriet Island/District Del Sol Opportunity Site (2002)
- Saint Paul Downtown Development Strategy: A Chapter of the Comprehensive Plan (2003)
- Mississippi River Corridor Critical Area: Report to the Minnesota Legislature(2008)
- Report of the Diamond Products Task Force (2005)
- Saint Paul on the Mississippi National Great River Park – Physical Connections Inventory (2008)
- Saint Paul on the Mississippi National Great River Park – Framework Chapter (2007)
- Saint Paul on the Mississippi Development Framework – Great River Park Master Plan: Charrette Briefing Package (2005)
- Ford Plant Site Redevelopment Scenarios (2007)
- Victoria Park Master Plan (2007)
- Fort Road Development Plan (2005)
- Invest Saint Paul Map (2007)
- Renaissance Project (1999)
- Saint Paul Investment Area Map (2009)
- Randolph Station Area Master Plan
- Bruce Vento Nature Sanctuary Interpretive Center Redevelopment Plan
- City of Saint Paul Planning and Economic Development Staff – Lucy Thompson

Further Study:

- City of Saint Paul Planning and Economic Development Staff should be consulted for further studies and/or information related to economic development within the River Corridor.
- Monitor future redevelopment proposals within the River Corridor.

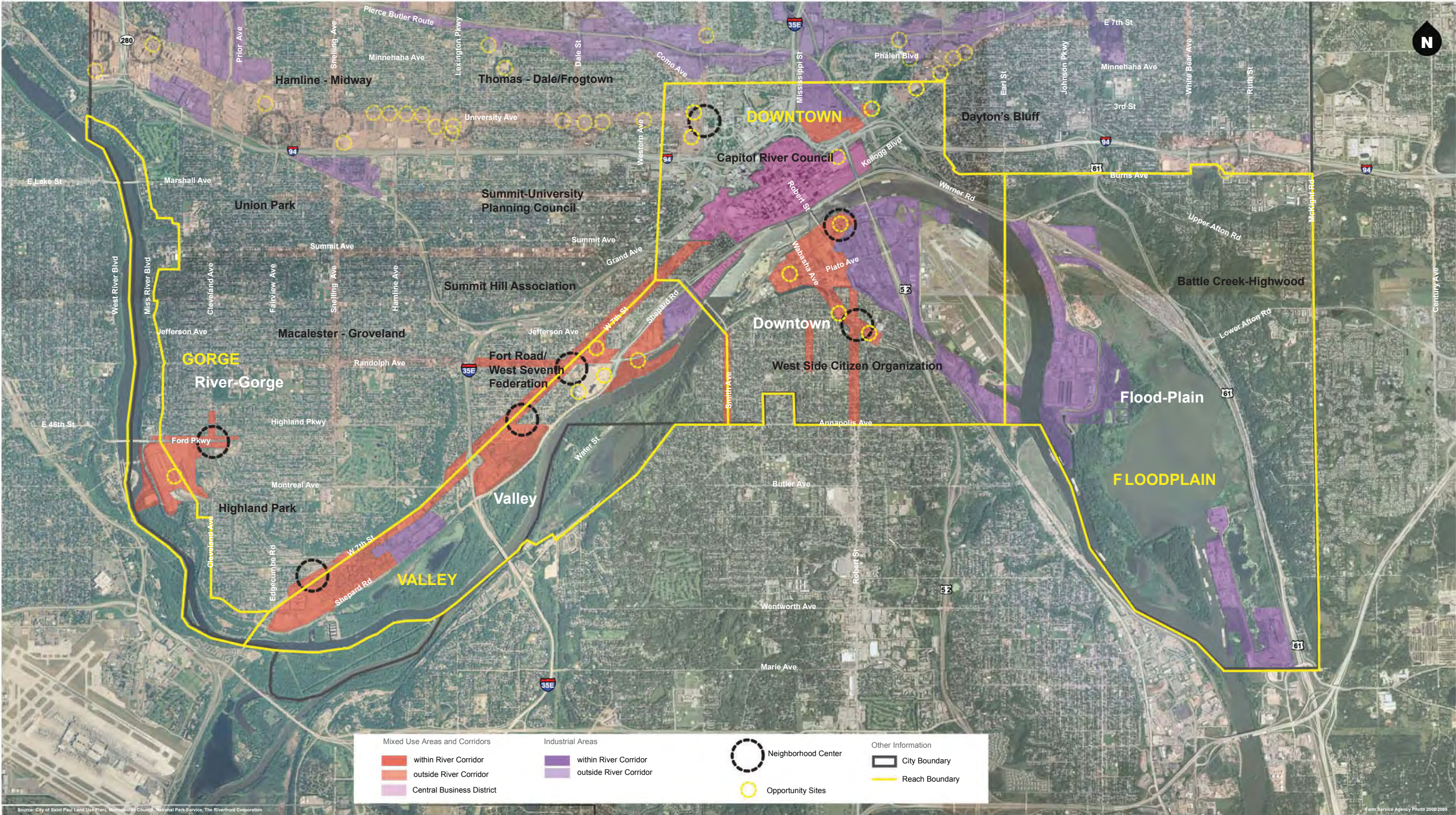
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- Hoisington Koebler Group, Inc., Jeff McMenimen, Gabrielle Grinde
- Mithun, Mark Shapiro

Following Maps and Documents

- 42 Targeted Economic Redevelopment
- 43 Potential Redevelopment Sites
- 44 Economic Investment Areas
- 46 Access and Connections
- 48 Public Art Inventory (extra document provided beyond contract scope)

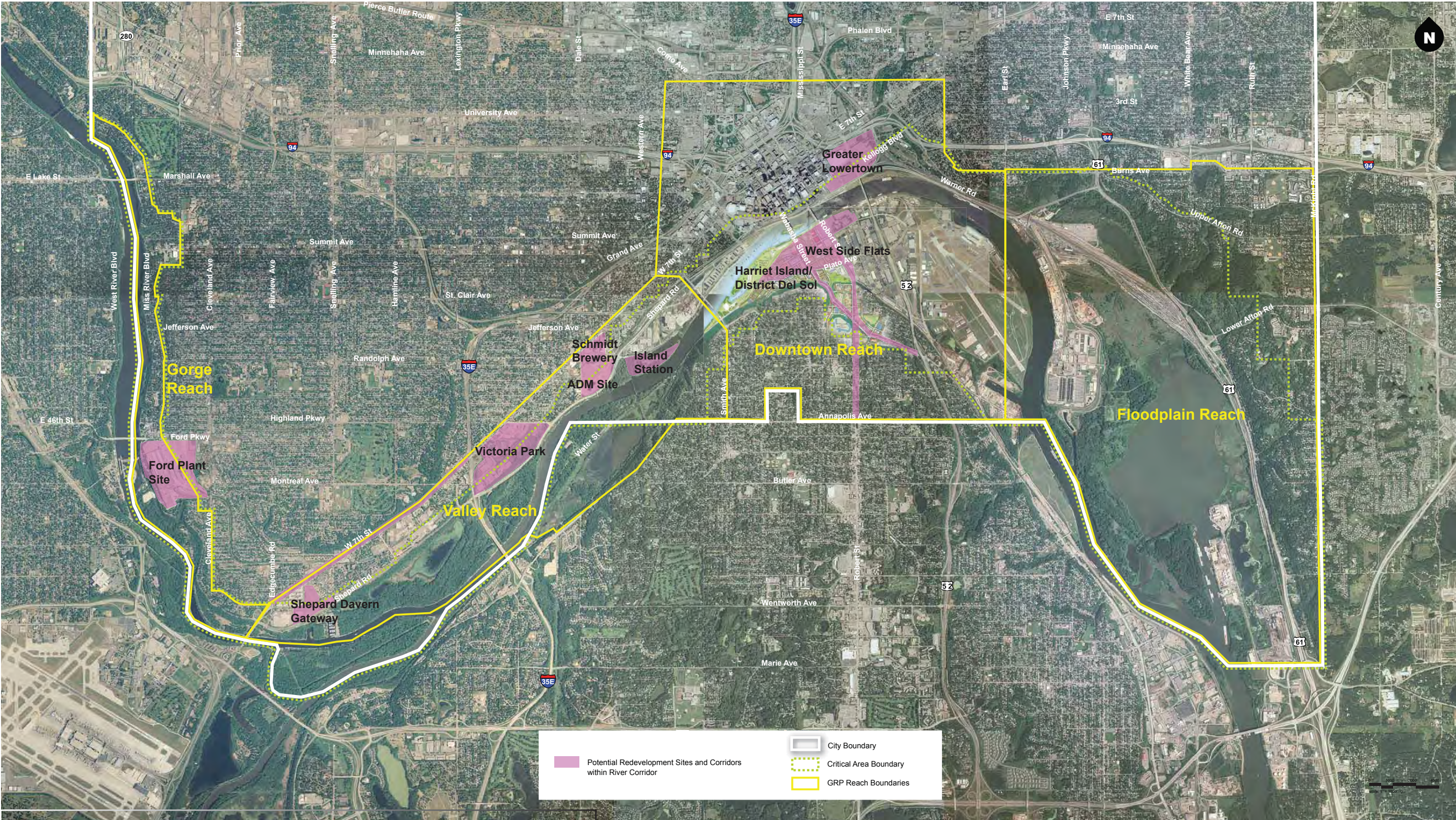






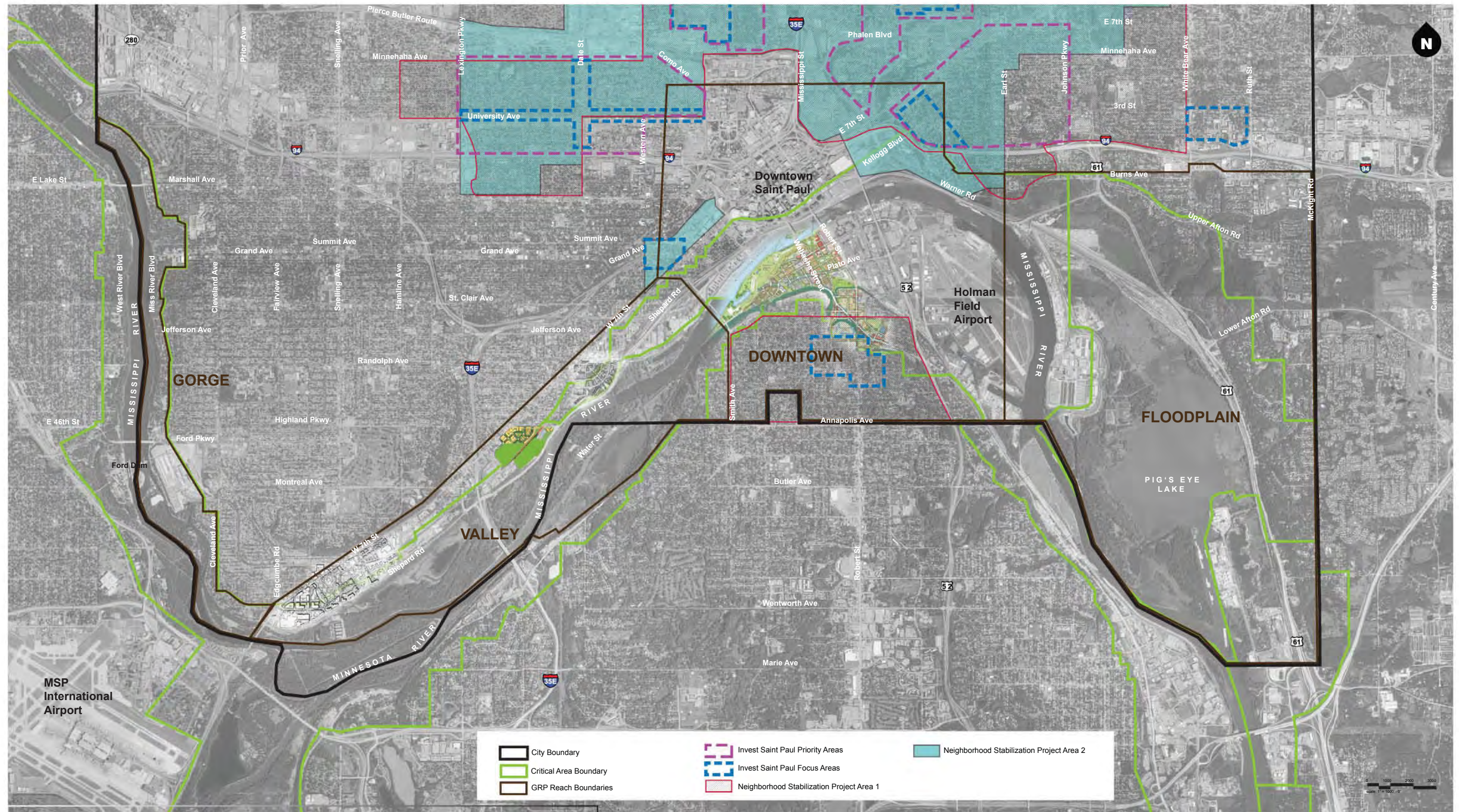
A.2 Potential Redevelopment Sites

APPENDIX



Map provided by the City of Saint Paul G.I.S. Data, 2010. Data subject to verification and change.





Map provided by the City of Saint Paul G.I.S. Data, 2010. Data subject to verification and change.



General Intent

The access and connections inventory map is intended to show all existing and proposed transportation infrastructure in the vicinity of the Great River Park (GRP) as of August 2010. Existing data from numerous sources was assimilated to provide context on how existing and proposed GRP facilities connect with citywide and regional transportation systems.

The scope of the investigation included a thorough review of City policy documents, plans, and prior studies. Additionally, the planning team interviewed City Public Works staff to confirm the information being studied was current and accurate. The areas studied included all major transportation system components along the River Corridor, including State, Metro, County and City streets, trails and public transit systems within and adjacent to the River Corridor study area.

The information has been and should continue to be used in the following ways:

- Identify critical missing links in the City’s multimodal transportation systems.
- Guide policy development, decision making and prioritization to improve transportation infrastructure that support the goals of the GRP Master Plan.
- Coordinate planning and design of large multi-jurisdictional projects to accomplish multiple objectives and address access for all modes.
- Program implementation of new infrastructure projects to overcome identified system gaps.
- Comprehensively address seamless integration of multiple modes of travel to expand travel choices and personal mobility.

Source(s) of information

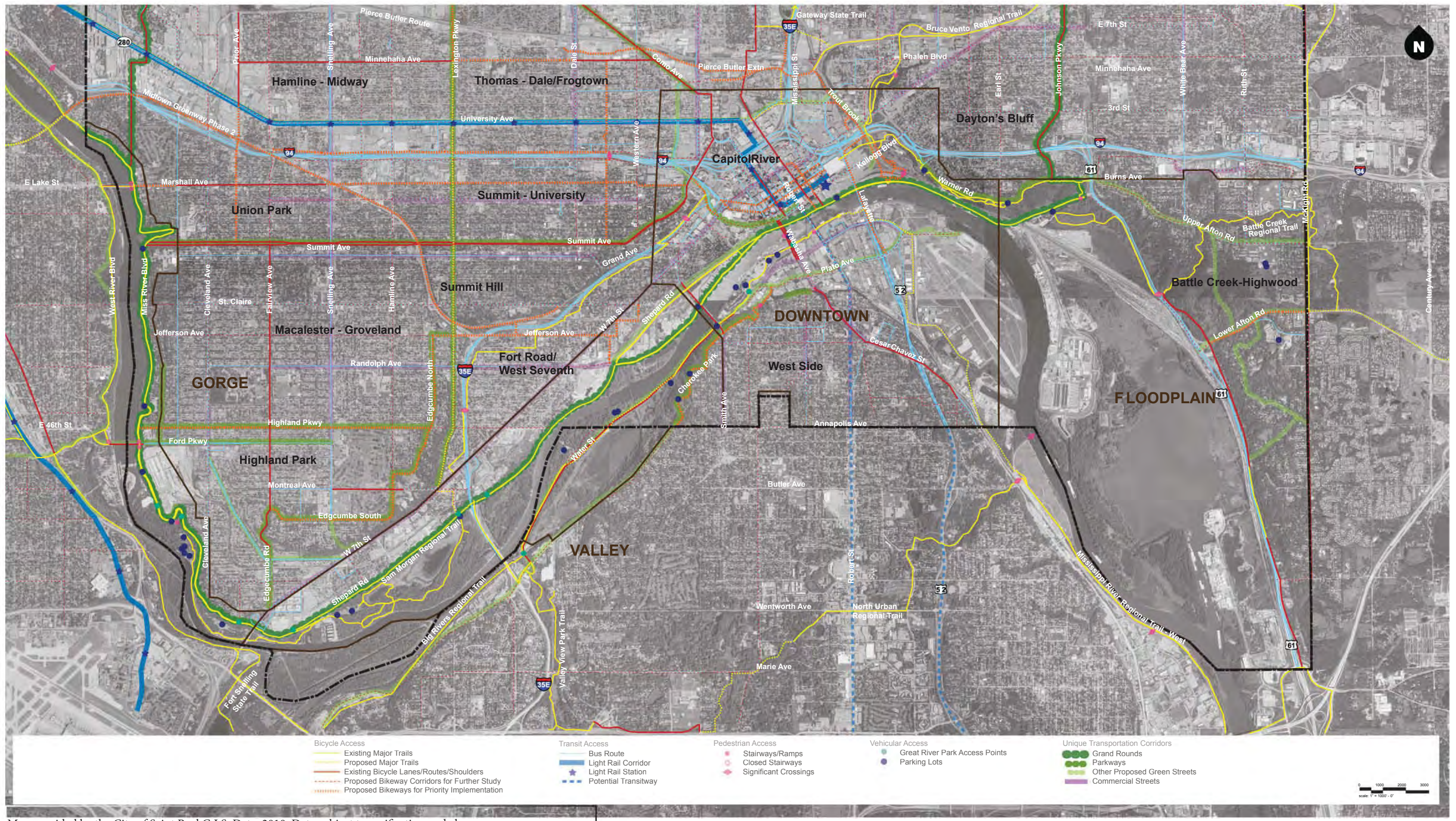
- GIS layers received from the City: bike routes, bus routes, major trails, park access points, parking lots, railroads
- Added and/or modified the City’s GIS layers for bicycle routes, parkways, and Grand Rounds per GIS files created by Hoisington Koegler Group Inc., August 2010
- Added stairways/ramps, park access points (vehicular), and park parking lots per St. Paul on the Mississippi: 2005 Charrette Briefing Package
- Added proposed green streets and commercial streets per St. Paul on the Mississippi: 2007 Framework Chapter
- Added priority proposed bikeways per the Transportation Plan Chapter of The St. Paul Comprehensive Plan, March 31, 2009

- Depicted bike routes in Downtown per the Downtown Saint Paul Bicycle Transportation Master Plan, March 2008
- Added CCLRT routing and station locations per Central Corridor LRT Station Area Plans, Oct. 2008
- Added proposed bike routes and priority projects around the CCLRT per the Bike Walk Central Corridor Action Plan, May 2010
- Added existing and planned regional greenways per the St. Paul/Dakota County Regional Greenways by Dakota County Planning and Analysis, 2010
- Updated park trails per City of St. Paul Parks and Recreation, Crosby Farm Regional Park map; Master Plan Amendment, Lilydale Regional Park Master Plan, Sept. 2009; Fort Snelling State Park map, State of Minnesota, Department of Natural Resources, 2006; Indian Mounds Regional Park Trails Map, City of St. Paul Parks and Recreation; and Lafayette Bridge Replacement layout, MnDOT
- Verified/revised any discrepancies found based upon Google Earth analysis, in-field verifications and public comments, as applicable

Contact

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Map provided by the City of Saint Paul G.I.S. Data, 2010. Data subject to verification and change.



General Intent

According to the City of St. Paul’s website: “The public art in Saint Paul helps to preserve memories and history, tell stories, and signify that art is an important asset to the City and its landscapes and residents.... The City of Saint Paul works in partnership with Public Art Saint Paul, a non-profit, to maintain, promote and exhibit public art. Follow this link for more information about Public Art Saint Paul.”

In July, 2009, the city adopted a public art ordinance (<http://www.stpaul.gov/DocumentView.aspx?DID=12228>), stressing the importance of aesthetic and social values inherent in the city’s vision of the future. In order to facilitate the encouragement and inclusion of public art in planning and development, the city believes public artists should be involved at the earliest stages of conceptual planning and continue through project design and implementation, and that “sufficient resources should be committed to sustain an innovative public art and design program.”

Policies and procedures are currently being developed to support the creation and implementation of a public art plan. Funds from the city’s long-range capital improvement budget will be allocated where appropriate. For major capital projects resulting in city-operated property, one percent of the budget will be allocated for public art and involving artists in the planning and design phase. Artists may serve on design teams, function as artists-in-residence, and other methods of engagement. The neighborhood design advisory committee for the district council representing the area in which a project will be located shall advise the implementing city department on the selection of artists and recommend acceptance of the design of the project.

Beyond this newly evolving system for insuring the inclusion of fixed, permanent public art in public improvement projects, there are many ways that artists and arts organizations (as well as cultural and community groups) can participate in public art via temporary events, performances, installations, and interventions. Indeed, there is a long history of projects and annual programs that utilize St. Paul riverfront property involving artists and public art, from ice castles for the Winter Carnival to Barebones Productions’ annual Halloween pageant at Hidden Falls. Likewise, temporary outdoor sculpture displays, concerts, fireworks, and parades have helped create the vibrancy of St. Paul’s riverfront.

CONTACT

Jack Becker, Forecast Public Art





*Not To Scale*



General Intent

The purpose of this portion of the plan is to establish the overall direction for interpretive recommendations for the Great River Park and to generate consensus on the direction for future interpretive planning in the Park. Many of the ideas in this document have evolved through the course of the broader master planning process. In addition, the plan provides an overview of federal and state laws that govern the treatment of historic, archaeological, and cultural resources in the Park, and some direction on procedures for historic preservation.

The importance of fostering meaningful partnerships among the many local, regional, and national stakeholders, including other regional agencies and organizations, cannot be overemphasized. Partners need a shared vision and strategy to preserve, manage, and interpret the site. Interpretation can and should be developed by many organizations and agencies, dependent upon compatible missions and availability of resources. The key will be that anyone who develops and implements an interpretive planning, programming, and/or exhibit project within the Park does so within the framework of this document and a comprehensive interpretive plan.

Four strategies for implementation are proposed at the conclusion of this section that build upon the concepts set out in this document and development of partnerships throughout the community.

Staff participated in many workshops throughout the one-year planning process. These included sharing images ideas for key stories and places along the river corridor. In addition, individual input was provided by many participants. Two key questions were asked:

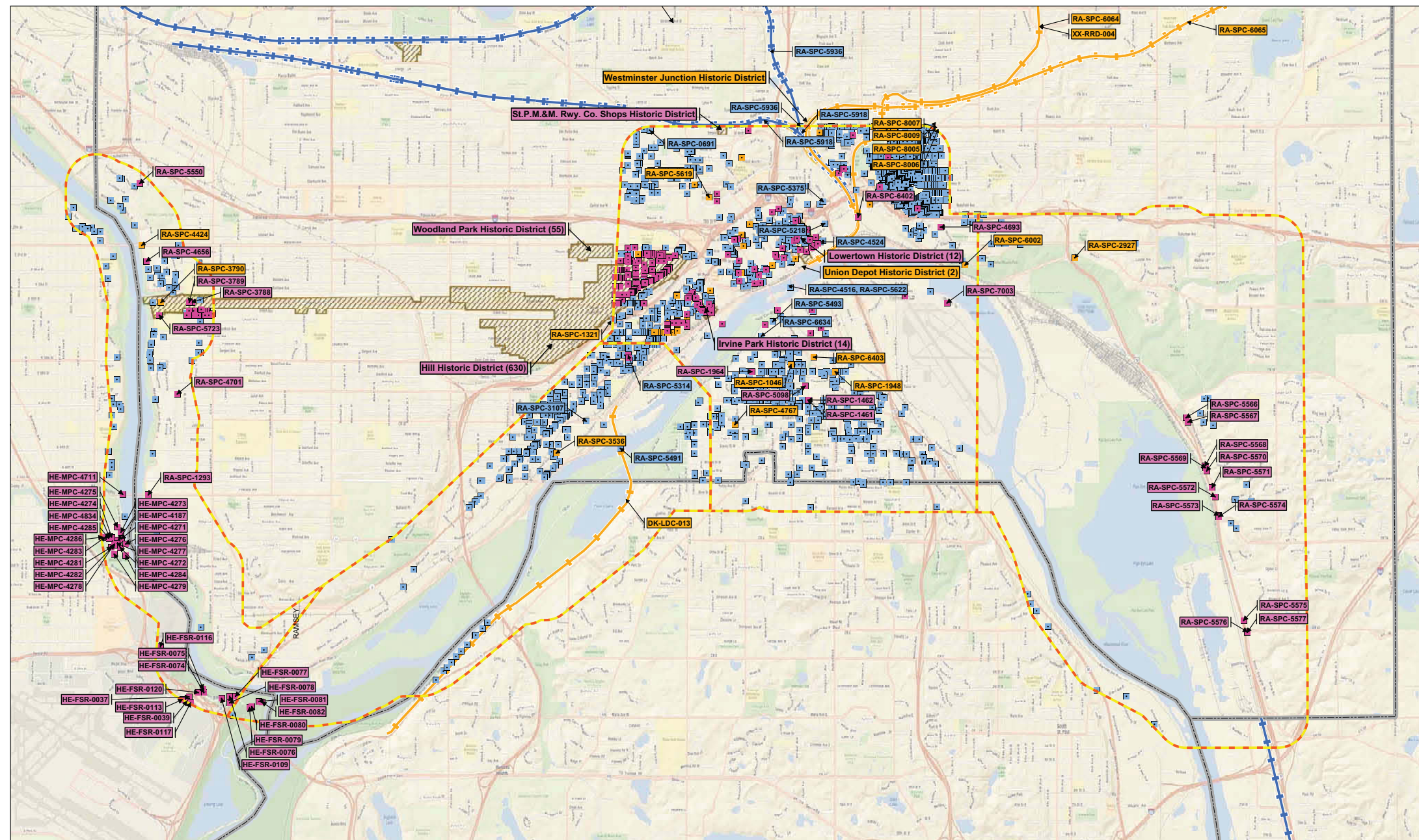
- What does the Mississippi River mean to you or your community?
- Are there special places along the river for you or your community? If so, where are they and why are they important?

The workshops were characterized by wide-ranging discussions with a free exchange of ideas. While a diversity of views on a variety of topics was expressed, there were two key principles that interpretation can support as an effective tool: stewardship and connections.

Contact

Anne Ketz, 106 Group  
Jeff McMenimen, Hoisington Koegler Group

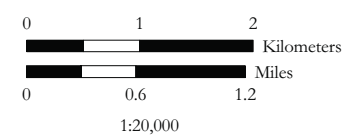




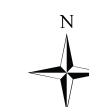
Source: MN SHPO; ESRI; The 106 Group Ltd.

Map Produced by The 106 Group Ltd. 3/30/2011

## Cultural Resources Summary Great River Park Minnesota



|  |                                 |  |                                                 |  |                                          |
|--|---------------------------------|--|-------------------------------------------------|--|------------------------------------------|
|  | Project Area                    |  | NRHP Listed Architectural History Property      |  | Eligible Railroad Corridor               |
|  | NRHP Historic District          |  | Eligible Architectural History Property         |  | Previously Inventoried Railroad Corridor |
|  | Eligible NRHP Historic District |  | Previously Identified Railroad-Related Resource |  |                                          |



*Specific locations of archaeology sites and burial mounds are not included in order to protect sites from potential vandalism. Locational data can be obtained from the Office of the State Archaeologist.*



Strategies for Interpretation: Next Steps in Planning for Implementation

The Mississippi River, as it passes through Saint Paul, has been home to a succession of cultures that date back thousands of years. Each culture has left its mark on the landscape, creating a rich layering of history, that when preserved and interpreted, can enhance the lives of visitors and residents, and strengthen their bond to the river is a meaningful part of their daily lives. Four specific strategies are proposed for the next step in implementation.

Protect and Interpret Historic, Cultural and Natural Resources

The River Corridor is rich in archaeological and historic resources, adding to the value of the expanse of natural resources that largely define the character of the valley. Many resources have been lost or been compromised over time, because their value as part of the historical record has been unappreciated or ignored. The city’s preservation plan chapter of the comprehensive plan calls for a Saint Paul Parks, Parkways, and Cultural Landscape Context Study. Completion of such a study would greatly contribute towards ongoing preservation efforts within the Park. Implementation of this plan should be constantly mindful of the broader recommendations in the city’s preservation plan.

This plan identifies a series of themes and sub themes that are important to the history, culture, and ecology of the corridor, and describes an approach to preservation and interpretation of the resources. Themes identified include the following.

- Food - The Mississippi has nourished people throughout history
- River Transport - The Mississippi has served as the major transportation route throughout history
- Home and Shelter - The Mississippi has defined and shaped our communities and neighborhoods
- Recreation - Residents Enjoy the river is a place of rest and relaxation
- Commerce and Control - For more than a century man has tried to control and harness the Mississippi as a working River
- Economy -The Mississippi has been the basis for economic opportunity throughout history
- Natural resources - The Mississippi sustains life
- Health - The River has contributed to the health of area inhabitants throughout history
- Native Cultures - The River has supported communities for 12,000 years
- Immigrant Communities -Many immigrant communities have come to the Valley over time.

Develop a Comprehensive Interpretive Plan and Specific Strategies for Interpretation

Themes and sub themes form the basis for the preparation of a Comprehensive Interpretive Plan. The Plan will describe specific interpretive messages and means for interpretation at key locations throughout the Park. The Plan will also begin to identify partners for implementation of the plan.

This plan will require the following steps:

- Work with a Technical Advisory Committee made up of Parks staff and key stakeholders
- Review existing historic, cultural, and natural resources and interpretive programs
- Develop new mission-centered themes and subthemes for the Park
- Identify important stories that
- Support the concept topics themes
- Can be told using physical resources and special places throughout the Park
- Identify key interpretive places and appropriate means of conveying each message
- Identify way-finding needs and solutions associated with interpretive media
- Identify development (structural) needs at sites to improve access, traffic flow and overall visitor experience
- Provide implementation strategy/matrix that includes interpretive media and development needs and cost estimates
- Identify which communities and stakeholders may take on implementation opportunities
- Refine procedures for Parks to partner with communities and stakeholders in implementation process

Develop Partnerships to Protect and Interpret Unique Resources within the Corridor

Most of the resources within the Park can only be preserved and interpreted through partnerships that supplement city resources and capabilities. Parks needs to develop a policy for working with partners and implementing recommendations from this concept interpretive plan.

Develop Nontraditional Strategies for Interpretation and Storytelling

Repurposing of industrial artifacts as multiple use Park elements, guided tours as part of public-private partnerships, and multiple other techniques discussed above can supplement more traditional interpretive signage to bring history to life, and make parks and natural areas within the corridor unique in time and place.

Once a group/entity/agency chooses to take on leadership for a specific interpretive program or exhibit the following provides steps that need to be followed in the planning and implementation process.

Stage I: Develop Scope/Work Program

- Mission statement
- Identify partners and strategy for public engagement
- Explain how this fulfill the goals and objectives of the GRP Interpretive Concept Plan
- Propose timeline
- Identify existing and anticipated funding sources and estimated budget
- Submit to Parks for review
- Draft cooperation agreement between Parks and agency/group that addresses:
- Maintenance
- Budget
- Planning process
- Responsibility for production, fabrication , and/or installation

Stage II: Concept Development

- Review existing planning and research materials including draft text, graphics from old panels and signs, historical research materials, GRP Master Plan recommendations
- Review existing media within GRP that tell this story
- Conduct a site visit to assess current trail conditions focusing particularly on existing interpretive media and to assess visitor demographics and trail user needs
- Review existing design guidelines for interpretive displays, signs, and audio tour
- Understand the staffs’ and stakeholders’ visions for trail interpretation and orientation
- Facilitate stakeholder input through a workshop session, or other appropriate means to obtain public input and review
- Refine interpretive themes already developed by the DNR and further develop the trail’s key stories
- Identify the locations for all interpretive media
- Develop recommendations for the method of communication for each message (e.g., signs, kiosks, audio tour, print publications)
- Establish the look and feel of interpretive and orientation media through design typicals (e.g., colors, fonts, logos, graphic layouts)
- Produce schematic sketches for orientation signs, interpretive kiosks, and interpretive signs along the trail
- Refine budget for production, delivery, and installation of all interpretive and orientation media

Stage III: Design Development 50%

- Design development must always implement the goals and objectives of the GRP Concept Interpretive Plan
- Submit to Parks for review

Stage IV: Design Development 100%

- Design development must always implement the goals and objectives of the GRP Concept Interpretive Plan
- Submit to Parks for review



Regulatory Environment

Inventory and analysis included a review of City, County, State and Federal agencies that have jurisdiction over components of the Great River Passage. A Technical Resource Group was established that consisted of those agencies and a series of focus group meetings were held to help identify typical project issues and constraints. The key agencies that were included in the master plan development were:

- The National Park Service (NPS)
- US Army Corps of Engineers (USACOE)
- State of Minnesota Department of Natural Resources (MnDNR)
- State of Minnesota Department of Transportation (MnDOT)
- Minnesota State Parks
- Ramsey County
- Dakota County
- City of Saint Paul, Parks, Public Works, Planning and Economic Development, Port Authority

The charts and matrices on the following contain information about the jurisdiction of each agency and an explanation of their role and interest in approving and/or permitting proposed projects and actions within the Great River Passage. Due to report size limitations the text is small and may be difficult to read. A copy of the report data will be made available in electronic spreadsheet format for use upon request.

Agency Accountability for Water Resource Management

A variety of government agencies have accountability for guiding development activities affecting water resources. Agency accountability may include the Authority (A) for issuing permits and approving plans to Responsibility (R) for developing plans and other guidance documents and resources to help better manage water resources. See the following tables for a description of the specific type of authority and responsibility each agency has.

| Water Topic                      | Federal |        |       |      |     | State |        |        |      |     | Regional |        |        |        |             |                           |                     | Local         |          |
|----------------------------------|---------|--------|-------|------|-----|-------|--------|--------|------|-----|----------|--------|--------|--------|-------------|---------------------------|---------------------|---------------|----------|
|                                  | USACOE  | USFWS  | USEPA | FEMA | NPS | BWSR  | MDNR   | MPCA   | MDOT | EQB | MWMO     | LMRWMO | RWMWD  | CRWD   | Met Council | Mosquito Control District | MDOT Metro District | Ramsey County | St. Paul |
| Wetlands                         | A       | A      | A     |      |     | A     | A<br>R |        | A    |     | R        | R      | A<br>R | A<br>R |             | R                         | A<br>R              | R             | A<br>R   |
| Surface Waters                   | R       |        | A     |      | R   | A     | A<br>R | A<br>R | A    |     | A<br>R   | A<br>R | A<br>R | A<br>R | A<br>R      |                           | A                   | A<br>R        | A        |
| Floodplains                      | R       |        |       | A    |     |       | A      |        |      |     | R        |        | A<br>R | A<br>R |             |                           |                     |               | A        |
| Shoreland                        |         |        |       |      |     |       | A      |        |      |     | R        | R      |        |        |             |                           |                     |               | A        |
| Navigable Waters                 | A<br>R  |        |       |      |     |       |        |        |      |     | R        |        |        |        |             |                           |                     |               |          |
| Habitat                          | R       | A<br>R |       |      |     |       | A<br>R |        |      |     | R        |        | R      | R      |             | R                         |                     | R             |          |
| Environmental Review             | A       |        |       |      |     |       | A      | A      | A    | R   | R        |        |        |        | A           |                           |                     |               |          |
| Mississippi River Corridor Plans | R       | R      |       |      | R   |       | R      |        |      |     | R        |        |        |        | R           |                           |                     |               | A<br>R   |



A.3 Regulatory Requirements

A P P E N D I X

Great River Master Plan - Agencies with Water Resource Review Authority

| Water Category and Topics    | Applicability/Description for each Topic                                                                                                                                                                                                                                                                                                                                                                                                                                             | Activity Type  |                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                          | General Comments, reference to other related program areas, etc. | Chain of Authority                                                          | Website (informational resources)                                                                                                                               |  |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                | State                                                                                                                                                                                                                                                 | Regional                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                          |                                                                  |                                                                             |                                                                                                                                                                 |  |
|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                | MDNR                                                                                                                                                                                                                                                  | MWMO                                                                                                                                                                                                                                                     | LMRWMO                                                                                                                                                                                                                                                                                                     | City of St. Paul                                                                                                                                                                                                         |                                                                  |                                                                             |                                                                                                                                                                 |  |
| Shoreland                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                |                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                          |                                                                  |                                                                             |                                                                                                                                                                 |  |
| Shoreland Management Program | The Shoreland program provides the framework for statewide standards that local governmental units must adopt into their own land use controls to provide for the orderly development and protection of shorelands (both rivers and lakes). At a minimum, shorelands are defined as lands within 1000 feet of a lake greater than 25 acres (10 acres in a municipality) or within 300 feet of a river and its designated floodplain defined by the ordinary high water level (OHWL). | Authority      | Administers the State Shoreland Management Program by developing shoreland statewide standards and model ordinances for implementation/adoption by local units of government. Also reviews and approves LGU draft ordinances prior to local adoption. | Planning Program                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                            | Administers and enforces regulations protecting shoreland, floodplains, wetlands and bluffs (Ch 68 Art. IV - 68.400 of the City Code). Also see Critical Area Section below and floodplain protection regulations above. |                                                                  | Minnesota Statutes, section 103F.201-221; Minnesota Rules 6120.2500 - 3900; | <a href="http://www.dnr.state.mn.us/waters/watermgmt_section/shoreland/index.html">http://www.dnr.state.mn.us/waters/watermgmt_section/shoreland/index.html</a> |  |
|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Contact        | MDNR Division of Waters                                                                                                                                                                                                                               | See contact information at end of table.                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                            | Department of Safety and Inspections. Department of Planning and Economic Development (651) 266-6589.                                                                                                                    |                                                                  |                                                                             |                                                                                                                                                                 |  |
|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Responsibility |                                                                                                                                                                                                                                                       | Requires members to have a MDNR approved Shoreland Ordinance as part of the review of local water management plans for inclusion of appropriate shoreland management policies<br>Provides guidance on restoration of eroded Mississippi riverbank areas. | Requires member cities to adopt DNR-approved shoreland ordinances, in accordance with the DNR's priority phasing list.                                                                                                                                                                                     |                                                                                                                                                                                                                          |                                                                  |                                                                             |                                                                                                                                                                 |  |
|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                |                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                          |                                                                  |                                                                             |                                                                                                                                                                 |  |
|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Contact        |                                                                                                                                                                                                                                                       | See contact information at end of table.                                                                                                                                                                                                                 | See contact information at end of table.                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                          |                                                                  |                                                                             |                                                                                                                                                                 |  |
| Monitoring Programs          | Administers, conducts, coordinates monitoring of water bodies.                                                                                                                                                                                                                                                                                                                                                                                                                       | Responsibility |                                                                                                                                                                                                                                                       | Monitors Mississippi riverbank erosion.                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                          |                                                                  |                                                                             |                                                                                                                                                                 |  |
|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Contact        |                                                                                                                                                                                                                                                       | See contact information at end of table.                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                          |                                                                  |                                                                             |                                                                                                                                                                 |  |
| Misc. Shoreland Studies      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                |                                                                                                                                                                                                                                                       | Watershed Assessment Program<br>Member Grant Program<br>Planning Program<br>MWMO Capital Improvement Projects<br>Stewardship Fund Program<br>Greening Program<br>Land Acquisition Program<br>Education Program                                           |                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                          |                                                                  |                                                                             |                                                                                                                                                                 |  |
| General Contact Information  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                |                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                          |                                                                  |                                                                             |                                                                                                                                                                 |  |
|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                | Minnesota Department of Natural Resources<br>500 Lafayette Rd.<br>St. Paul, MN 55155<br>Telephone: (612) 296-6157<br>Web: <a href="http://www.dnr.state.mn.us/index.html">http://www.dnr.state.mn.us/index.html</a>                                   | Mississippi Watershed Management Organization<br>1224 Marshall St NE, Suite 201<br>Minneapolis, MN 55413<br>Telephone: (612) 465-8780<br>Web: <a href="http://www.mwmo.org/">http://www.mwmo.org/</a>                                                    | Lower Mississippi River Watershed Management Organization<br>c/o Dakota County Soil and Water Conservation District<br>4100 220th St. West, Suite 102<br>Farmington, MN 55024<br>Telephone: 651-480-7784<br>Web: <a href="http://www.dakotaswcd.org/watersheds/">http://www.dakotaswcd.org/watersheds/</a> | City of St. Paul<br>St. Paul City Hall<br>15 Kellogg Blvd. West<br>St. Paul, MN 55102<br>Telephone: (651) 266-8989<br>Web: <a href="http://www.stpaul.gov/">http://www.stpaul.gov/</a>                                   |                                                                  |                                                                             |                                                                                                                                                                 |  |



Great River Master Plan - Agencies with Water Resource Review Authority

| Water Category and Topics      | Applicability/Description for each Topic                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Activity Type  | Jurisdictional Entities and brief description of function (authority & responsibility)                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                        |                                                                                                                                                                 |                                                                                                                                           |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                | USACOE                                                                                                                                                                                                                                                                                                                                  | Federal<br>USEPA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | USFWS                                                                                                                                                                                                                                                                                          | BWSR                                                                                                                                                                                                                                                                   | State<br>MDNR                                                                                                                                                   | MnDOT                                                                                                                                     |
| Wetlands                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                |                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                        |                                                                                                                                                                 |                                                                                                                                           |
| 404 permit                     | Applies to the placement of dredged or fill material into "water of the United States (territorial seas; all navigable waters and adjacent wetlands; tributaries to navigable waters and adjacent wetlands; interstate waters and adjacent wetlands; and all waters not identified above in which the destruction or degradation could affect interstate commerce). Wetlands are one component of "waters of the United States;" however, there are numerous other types including intermittent streams, small perennial streams, rivers, lakes, bays, estuaries, and portions of the oceans. Wetlands are afforded special status as one of six types of "special aquatic sites".                                                                                                        | Authority      | Administers 404 permit program. The USACOE handles the actual issuance of permits (both individual and general); it also determines whether a particular plot of land is a wetland or water (jurisdictional determinations) of the United States. The USACOE has primary responsibility for ensuring compliance with permit conditions. | USEPA plays a role in compliance and enforcement. Develops and interprets policy, guidance and environment criteria used in evaluating permit applications. Determines scope of geographic jurisdiction and applicability of exemptions, Approves and oversees State and Tribal assumption, Reviews and comments on individual permit applications, Has authority to prohibit, deny, or restrict the use of any defined area as a disposal site (Section 404(c)), Can elevate specific cases (Section 404(q)), Enforces Section 404 provisions. | Evaluates impacts on fish and wildlife of all new federal projects and federally permitted projects, including projects subject to the requirements of Section 404 (pursuant to the Fish and Wildlife Coordination Act), Elevates specific cases or policy issues pursuant to Section 404 (q). |                                                                                                                                                                                                                                                                        | Has the opportunity to review and comment on Section 404 permit applications.                                                                                   |                                                                                                                                           |
|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Contact        | USACOE - St. Paul District                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                        |                                                                                                                                                                 |                                                                                                                                           |
|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Responsibility |                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                        |                                                                                                                                                                 |                                                                                                                                           |
|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Contact        |                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                        |                                                                                                                                                                 |                                                                                                                                           |
| Wetland Conservation Act (WCA) | Applies to the drainage, fill, or excavation of jurisdictional wetlands (meeting the criteria for soil, hydrology, and vegetation outlined in the 1987 Army Corps of Engineers Wetland Delineation Manual) in the state that are not regulated by MDNR as Public Waters wetlands. Proposed projects are required to demonstrate through sequencing requirements that the project first seeks to avoid disturbing the wetland; second try to minimize any impact on the wetland; and finally, when impact is unavoidable, replaces any lost wetland acres, functions, and values. Certain wetland activities are exempt from the act, allowing projects with minimal impact or projects located on land where certain pre-established land uses are present to proceed without regulation. | Authority      |                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                | Administers WCA throughout the State by promulgating administrative rules for the program, providing training to LGUs, participating on technical evaluations panels, hearing appeals from local government determinations, and assuring proper implementation by LGUs | Enforces WCA. Issues and enforces wetland restoration orders, verifies and enforces activities concerning invasive species.                                     | Acts as the WCA LGU for all state-owned lands managed by MnDOT.                                                                           |
|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Contact        |                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                | (651) 296-3767                                                                                                                                                                                                                                                         | MDNR - Division of Ecological Resources (651) 259-5125                                                                                                          | Sarma Straumanis 651-366-3626                                                                                                             |
|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Responsibility |                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                        |                                                                                                                                                                 |                                                                                                                                           |
|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Contact        |                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                        |                                                                                                                                                                 |                                                                                                                                           |
| Public Waters Work Permit      | Applies to all water development activities below the ordinary high water level (OHWL) in public waters. The Public Waters Work Permit Program applies to those lakes, wetlands, and streams identified on DNR Public Water Inventory maps. Proposed projects affecting the course, current, or cross-section of these water bodies may require a Public Waters Work Permit.                                                                                                                                                                                                                                                                                                                                                                                                              | Authority      |                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                        | Reviews and issues permits. Oversees Public Water Inventory (PWI) program.                                                                                      |                                                                                                                                           |
|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Contact        |                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                        | MDNR Waters Division (651) 259-5667                                                                                                                             |                                                                                                                                           |
| Wetland Inventories            | Create and maintain wetland inventories                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Responsibility |                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                        |                                                                                                                                                                 |                                                                                                                                           |
|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Contact        |                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                        |                                                                                                                                                                 |                                                                                                                                           |
|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                |                                                                                                                                                                                                                                                                                                                                         | Creates and maintains the National Wetland Inventories (NWI) using the Cowardin system of wetland designation.                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                        | Oversees Public Water Inventory (PWI) program. Maintains PWI maps on a county basis.                                                                            |                                                                                                                                           |
|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                |                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                        | MDNR Waters Division (651) 259-5667                                                                                                                             |                                                                                                                                           |
| Monitoring Programs            | Administers, conducts, coordinates monitoring of water bodies.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Responsibility |                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                        |                                                                                                                                                                 |                                                                                                                                           |
|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Contact        |                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                        |                                                                                                                                                                 |                                                                                                                                           |
| General Contact Information    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                | United States Army Corps of Engineers<br>St. Paul District<br>190 Fifth Street East<br>St. Paul, MN 55101-1638<br>Telephone: (651) 290-5200<br>Web: http://www.mvp.usace.army.mil/                                                                                                                                                      | United States Environmental Protection Agency<br>Region 5<br>77 West Jackson Boulevard<br>Chicago, IL 60604<br>Telephone: (312) 353-2000<br>Web: http://www.epa.gov/Region5/                                                                                                                                                                                                                                                                                                                                                                    | United State Fish and Wildlife Service - Midwest Region<br>1 Federal Drive<br>Fort Snelling, MN 55111<br>Telephone: (612) 713-5360<br>Web: http://www.fws.gov/midwest/who.html                                                                                                                 | Board of Water and Soil Resources<br>1 West Water Street<br>St. Paul, MN 55107<br>Telephone: (612) 296-3767<br>Web: http://www.bwsr.state.mn.us/                                                                                                                       | Minnesota Department of Natural Resources<br>500 Lafayette Rd.<br>St. Paul, MN 55155<br>Telephone: (612) 296-6157<br>Web: http://www.dnr.state.mn.us/index.html | Transportation Building<br>395 John Ireland Blvd<br>Saint Paul, MN 55155<br>Telephone: 1-800-657-3774<br>Web: http://www.dot.state.mn.us/ |



### A.3 Regulatory Requirements

## A P P E N D I X

## Great River Master Plan - Agencies with Water Resource Review Authority

| Jurisdictional Entities and brief description of function (authority & responsibility) - continued                                                                                                                                                                                                  |                        |                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MWMO                                                                                                                                                                                                                                                                                                |                        | LMRWMO                                                                                                                                                                                                                                                                                                                                                   | RWMWD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | CRWD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | MnDOT-Metro District                                                                                                                                                                                                                           | Metropolitan Mosquito Control District                                                                                                                                                                                              |
| Wetlands - continued                                                                                                                                                                                                                                                                                |                        |                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                     |
|                                                                                                                                                                                                                                                                                                     |                        |                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Acts as WCA LGU for all state owned lands managed by MnDOT                                                                                                                                                                                     |                                                                                                                                                                                                                                     |
|                                                                                                                                                                                                                                                                                                     |                        |                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Katie Heinz 651-234-7532                                                                                                                                                                                                                       |                                                                                                                                                                                                                                     |
|                                                                                                                                                                                                                                                                                                     |                        |                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Participates on WCA Technical Evaluation Panel (TEP)                                                                                                                                                                                           |                                                                                                                                                                                                                                     |
| All wetlands inventoried will need to meet one of the following MWMO Standards:<br>The project must meet hydroperiod standards adapted from “Stormwater and Wetlands Planning and Evaluation” or “Guidelines for Addressing Potential Impacts of Urban Stormwater and Snowmelt Runoff on Wetlands.” |                        |                                                                                                                                                                                                                                                                                                                                                          | Any action in a wetland to fill, drain, excavate or otherwise alter the character of a wetland requires a permit.<br>RWMWD adopts WCA with the following exceptions:<br>(1) Sequencing flexibility shall not be allowed.<br>(2) Public value credit shall not be given for water quality treatment areas.<br>(3) Wetland replacement, where permitted, shall be in accordance with the following prioritization for the location of the replacement wetland (both constructed and banked):<br>(i) On-site replacement is most preferred;<br>(ii) Within the same sub-watershed;<br>(iii) Within the District;<br>(iv) Outside of the District is least preferred.<br><br>The RWMWD is the Local Government Unit responsible for administering the WCA except in St. Paul, and on Minnesota Department of Transportation Projects. | Any action in a wetland to fill, drain, excavate or otherwise alter the character of a wetland requires a permit.<br>CRWD adopts WCA with the following exceptions:<br>(1) The de minimis size will be zero.<br>(2) Flexibility Sequencing will not be allowed.<br>(3) Public Value Credits can not be used for replacement.<br>(4) All other WCA non-temporary impact exemptions to wetlands will not be allowed.<br>(5) All wetland replacements shall be within the Districts boundaries. |                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                     |
| See contact information at end of table.                                                                                                                                                                                                                                                            |                        |                                                                                                                                                                                                                                                                                                                                                          | See contact information at end of table.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | See contact information at end of table.                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                     |
| Reviews and comments on Public Works applications before DNR (e.g. dam repair permits)                                                                                                                                                                                                              |                        |                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                     |
| See contact information at end of table.                                                                                                                                                                                                                                                            |                        |                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                     |
| Conduct Watershed Wide Wetland function and Value assessment (MNRAM 3.3). Develop a Wetland Management Classification system.                                                                                                                                                                       |                        | Requires member cities to inventory, classify, and determine the functions and values of wetlands, either through a comprehensive wetland management plan or on an as-needed basis.                                                                                                                                                                      | Wetlands in the District have been classified using MNRAM 3.0 are are identified in the District's Watershed Management Plan.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | All wetlands were inventoried and classified in 1999 and 2009 using MNRAM.                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                | Maintains an inventory of wet areas as small as 400 square feet that occasionally hold water for seven days. Updated annually and available for viewing at <a href="http://www.mmcd.org">www.mmcd.org</a> .                         |
| See contact information at end of table.                                                                                                                                                                                                                                                            |                        | See contact information at end of table.                                                                                                                                                                                                                                                                                                                 | See contact information at end of table.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | See contact information at end of table.                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                | MMCD Technical Coordinator, 651-643-8386                                                                                                                                                                                            |
| Monitor Kasota Ponds wetland complex. Wetland monitoring program.                                                                                                                                                                                                                                   |                        | WMO and some member cities participate in the Dakota County Wetland Health Evaluation Program.                                                                                                                                                                                                                                                           | The RWMWD began a biomonitoring program in 2000 to supplement the traditional chemical monitoring of RWMWD water resources. The monitoring program is based on procedures developed by the MPCa. Sixteen wetlands are monitored per year, with some sites receiving a visit every year to serve as reference sites. “Wetland Health Charts”; user-friendly documents which summarize monitoring findings for each monitored wetland are available on the RWMWD’s website.                                                                                                                                                                                                                                                                                                                                                         | Conduct yearly wetland monitoring using the IBI assessment tool. 10 wetlands were monitored and assessed in 2007 and 2008.                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                | Monitor wetlands for presence of water and of mosquito larvae, usually within 1 wk of rainfall >1 inch. Daily results available at <a href="http://www.mmcd.org">www.mmcd.org</a> .                                                 |
| See contact information at end of table.                                                                                                                                                                                                                                                            |                        | See contact information at end of table.                                                                                                                                                                                                                                                                                                                 | See contact information at end of table.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | See contact information at end of table.                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                | MMCD Director of Operations (651)643-8365                                                                                                                                                                                           |
| General Contact Information - continued                                                                                                                                                                                                                                                             |                        |                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                     |
| Mississippi Watershed Management Organization<br>1224 Marshall St NE, Suite 201<br>Minneapolis, MN 55413<br>(612) 465-8780<br><a href="http://www.mwmo.org/">http://www.mwmo.org/</a>                                                                                                               | Telephone:<br><br>Web: | Lower Mississippi River Watershed Management Organization<br>c/o Dakota County Soil and Water Conservation District<br>4100 220th St. West, Suite 102<br>Farmington, MN 55024<br>Telephone: 651-480-7784<br>Web: <a href="http://www.dakotaswcd.org/watersheds/lowermisswmo/index.html">http://www.dakotaswcd.org/watersheds/lowermisswmo/index.html</a> | Ramsey-Washington Metro Watershed District<br>2665 Noel Drive<br>Little Canada, MN 55117<br>Telephone: (651) 792-7950<br>Web: <a href="http://www.rwmwd.org/">http://www.rwmwd.org/</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Capitol Region Watershed District<br>1410 Energy Park Drive, Suite 4<br>St. Paul, Minnesota 55108<br>Telephone (651) 644-8888<br>Web: <a href="http://www.capitolregionwd.org/">http://www.capitolregionwd.org/</a>                                                                                                                                                                                                                                                                          | Minnesota Department of Transportation - Metropolitan District<br>Waters Edge Building<br>County Rd. B-2<br>MN 55113<br>Telephone: (651) 234-7500<br><a href="http://www.dot.state.mn.us/metro.html">http://www.dot.state.mn.us/metro.html</a> | Metropolitan Mosquito Control District<br>Metro Counties Government Center<br>2099 University Ave. W.<br>St. Paul, MN 55104-7646<br>651-645-9149<br><a href="http://www.mmcd.org/contact.html">http://www.mmcd.org/contact.html</a> |



## Great River Master Plan - Agencies with Water Resource Review Authority

| Jurisdictional Entities and brief description of function - continued                                                                                |                                                                                                                                                                                                                              | General Comments, reference to other related program areas, etc.                                                                                                                                                                                                                                                                                                                                                      | Chain of Authority                                                                                                                                                                                                 | Website (informational resources)                                                                                                                                                                                                                | Spatial (GIS) Data Description                                                                                                                           | Spatial (GIS) Data Source                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| Ramsey County                                                                                                                                        | Local Government Units (LGUs)                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                  |                                                                                                                                                          |                                                    |
|                                                                                                                                                      | City of St. Paul                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                  |                                                                                                                                                          |                                                    |
| <b>Wetlands - continued</b>                                                                                                                          |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                  |                                                                                                                                                          |                                                    |
|                                                                                                                                                      |                                                                                                                                                                                                                              | Anyone who wishes to obtain a federal permit for any activity that may result in a discharge in waters of the state must first obtain a state 401 water quality certification from MPCA.                                                                                                                                                                                                                              | Section 404 of the Fed Clean Water Act. For definition of US Waters see: 33 CFR 328.                                                                                                                               | <a href="http://www.epa.gov/owow/wetlands/pdf/reg_authority_pr.pdf">http://www.epa.gov/owow/wetlands/pdf/reg_authority_pr.pdf</a>                                                                                                                | N/A                                                                                                                                                      | N/A                                                |
|                                                                                                                                                      | Implements WCA. Develops and enforces ordinances (Ch 63 Art VI - 63.600 of the City Code).                                                                                                                                   | Projects disturbing wetlands may also require permits or approvals from the Department of Natural Resources, U.S. Army Corps of Engineers, and Minnesota Pollution Control Agency. A joint application form has been developed that may be used for application to all of these agencies.                                                                                                                             | 1991 Minn. Laws ch. 354. §§ 103G.222-.2372. Chapter 8420 of Minnesota Rules. Mn Rules Chap. 8420.20 Subp. 1.B designates the LGU for implementation as the city unless it has officially delegated that authority. | <a href="http://www.dnr.state.mn.us/eco/wetlands/index.html">http://www.dnr.state.mn.us/eco/wetlands/index.html</a>                                                                                                                              | N/A                                                                                                                                                      | N/A                                                |
| County SWCDs sit on the WCA Technical Evaluation Panel (TEP)                                                                                         | Planning and Economic Developmnet (651) 266-6589.<br>Water Resources Coordinator (651) 266-9112<br><br>Developed a comprehensive wetland management plan.<br><br>City of St. Paul Water Resources Coordinator (651) 266-9112 |                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                  |                                                                                                                                                          |                                                    |
|                                                                                                                                                      |                                                                                                                                                                                                                              | DNR designated OHWL of any public waters or public wetlands, including lakes, wetlands, and streams For lakes and wetlands, jurisdiction extends to designated USFWS Circular #39 Types 3,4, and 5 wetlands which are 10 acres or more in size in unincorporated areas, or 2.5 acres or more in size in incorporated areas. Public waters in the MWMO include: the Mississippi River, Loring Pond, and Mallard Marsh. | Minnesota Statutes 103G.245 Minnesota Rules Chapter 6115                                                                                                                                                           | <a href="http://www.dnr.state.mn.us/waters/watermgmt_section/pwpermits/index.html">http://www.dnr.state.mn.us/waters/watermgmt_section/pwpermits/index.html</a>                                                                                  | Polygons showing the approximate boundary of the Public Waters Inventory (PWI) waterbodies; Lines showing the approximate centerline of PWI watercourses | MDNR Data Deli                                     |
|                                                                                                                                                      | Developed a comprehensive wetland management plan.                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                    | <a href="http://www.fws.gov/wetlands/FAQs.html">http://www.fws.gov/wetlands/FAQs.html</a> ,<br><a href="http://www.dnr.state.mn.us/waters/watermgmt_section/pwi/maps.html">http://www.dnr.state.mn.us/waters/watermgmt_section/pwi/maps.html</a> | Polygons showing National Wetlands Inventory (NWI), Public Waters Inventory Wetlands (PWI), Hennepin County Comprehensive Wetland Inventory              | USFWS (NWI), MDNR Data Deli (PWI); Hennepin County |
|                                                                                                                                                      | See general contact information at end of table                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                  |                                                                                                                                                          |                                                    |
|                                                                                                                                                      |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                  |                                                                                                                                                          |                                                    |
| <b>General Contact Information - continued</b>                                                                                                       |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                  |                                                                                                                                                          |                                                    |
| Ramsey County<br>Telephone: (651) 266-8500<br>Web: <a href="http://www.co.ramsey.mn.us/home/index.htm">http://www.co.ramsey.mn.us/home/index.htm</a> | City of St. Paul<br>St. Paul City Hall<br>15 Kellogg Blvd. West<br>St. Paul, MN 55102<br>Telephone: (651) 266-8989<br>Web: <a href="http://www.stpaul.gov/">http://www.stpaul.gov/</a>                                       |                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                  |                                                                                                                                                          |                                                    |



A.3 Regulatory Requirements

A P P E N D I X

Great River Master Plan - Agencies with Water Resource Review Authority

| Water Category and Topics    Applicability/Description for each Topic |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Activity/Type          | Jurisdictional Entities and brief description of function (authority & responsibility)                                                                                                                                                  |                                                                                                                                                                                                                        |
|-----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                        | USACOE                                                                                                                                                                                                                                  | Federal<br>USEPA                                                                                                                                                                                                       |
| Surface Waters                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                        |                                                                                                                                                                                                                                         |                                                                                                                                                                                                                        |
| NPDES Phase I & II Stormwater Permit                                  | Applies to Minneapolis and St. Paul and all metro cities operating a Municipal Separate Storm Sewer System (MS4) and other designated entities. Program is designed to reduce the amount of sediment and pollution that enters surface and ground water from storm sewer systems to the maximum extent practicable. Stormwater discharges associated with MS4s are regulated and the owners or operators of these systems are required to develop a SWPPP that incorporates best management practices applicable to their jurisdiction. | Authority              |                                                                                                                                                                                                                                         | Oversight of NPDES permit program, administered in MN by MPCA. EPA develops rules & standards. States may adopt more stringent standards.                                                                              |
|                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Contact                |                                                                                                                                                                                                                                         |                                                                                                                                                                                                                        |
| NPDES Construction Permit                                             | Applies to anyone disturbing one-acre or more. Permit covers measures to control erosion and sedimentation during construction activity and long-term post construction storm water management.                                                                                                                                                                                                                                                                                                                                         | Authority              |                                                                                                                                                                                                                                         | Oversight of NPDES permit program, administered in MN by MPCA. EPA develops rules & standards. States may adopt more stringent standards.                                                                              |
|                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Contact Responsibility | Review and comment on permit likely if proposed discharge is into the Mississippi River. Section 10 permit (navigable waters) may be needed (e.g. if dispersion pipe crosses navigable channel). Section 404 permit may also be needed. |                                                                                                                                                                                                                        |
|                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Contact                | USACOE - St. Paul District                                                                                                                                                                                                              |                                                                                                                                                                                                                        |
| Water Quality Standards                                               | Water Quality Standards are the foundation of the water quality-based pollution control program mandated by the Clean Water Act. Water Quality Standards define the goals for a water body by designating its uses, setting criteria to protect those uses, and establishing provisions to protect water bodies from pollutants.                                                                                                                                                                                                        | Authority              |                                                                                                                                                                                                                                         | Develops national standards and criteria for water quality                                                                                                                                                             |
|                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Contact                |                                                                                                                                                                                                                                         |                                                                                                                                                                                                                        |
| Impaired Waters                                                       | Applies to water bodies not meeting water quality standards. The federal Clean Water Act (CWA) requires states to adopt water-quality standards to protect waters from pollution. These standards define how much of a pollutant can be in the water and still allow it to meet designated uses, such as drinking water, fishing and swimming.                                                                                                                                                                                          | Authority              |                                                                                                                                                                                                                                         | Oversight of impaired waters programs.                                                                                                                                                                                 |
|                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Contact                |                                                                                                                                                                                                                                         |                                                                                                                                                                                                                        |
| Section 401 Water Quality Certification                               | Applies to all activities requiring a federal permit that may have discharge to state waters. This program requires the applicant to demonstrate that a proposed activity will not violate Minnesota's water quality standards or result in adverse long-term or short-term impacts on water quality. Such impacts can be direct or cumulative with other indirect impacts.                                                                                                                                                             | Authority              |                                                                                                                                                                                                                                         | Oversight of 401 water quality certification. Set federal water quality standards. States may adopt more stringent standards.                                                                                          |
| Surface Water Management                                              | Covers the development of Local Water Management Plans (WMPs) to address a broad range of water resource issues.                                                                                                                                                                                                                                                                                                                                                                                                                        | Authority              |                                                                                                                                                                                                                                         |                                                                                                                                                                                                                        |
|                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Contacts               |                                                                                                                                                                                                                                         |                                                                                                                                                                                                                        |
| Public Water Access                                                   | Locations of access points into public waters                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Responsibility         |                                                                                                                                                                                                                                         |                                                                                                                                                                                                                        |
| Monitoring Programs                                                   | Administers, conducts, coordinates monitoring of water bodies.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Contact                |                                                                                                                                                                                                                                         |                                                                                                                                                                                                                        |
|                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Responsibility         |                                                                                                                                                                                                                                         |                                                                                                                                                                                                                        |
|                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Contact                |                                                                                                                                                                                                                                         |                                                                                                                                                                                                                        |
| General Contact Information                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                        |                                                                                                                                                                                                                                         |                                                                                                                                                                                                                        |
|                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                        | United States Army Corps of Engineers<br>St. Paul District<br>190 Fifth Street East<br>St. Paul, MN 55101-1638<br>Telephone: (651) 290-5200<br>Web: <a href="http://www.mvp.usace.army.mil/">http://www.mvp.usace.army.mil/</a>         | United States Environmental Protection Agency<br>Region 5<br>77 West Jackson Boulevard<br>Chicago, IL 60604<br>Telephone: (312) 353-2000<br>Web: <a href="http://www.epa.gov/Region5/">http://www.epa.gov/Region5/</a> |



Great River Master Plan - Agencies with Water Resource Review Authority

| Jurisdictional Entities and brief description of function (authority & responsibility)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BWSR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | State<br>MDNR                                                                                                                                                   | MPCA                                                                                                                                                                                                                                                                                                                                       | MnDOT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Surface Waters - continued                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                 | Administers the SDS/NPDES Program - Permitting and enforcement authority. Receives and reviews annual report from permittees.<br><br>MPCA Stormwater Hotline at 651-757-2119                                                                                                                                                               | An MS4. Required to adopt a Stormwater Pollution Prevention Program (SWPPP) to reduce the discharge of pollutants from ROW to the maximum extent practicable. The SWPPP covers six minimum control measures:<br>1. Public education and outreach; 2. Public participation/involvement; 3. Illicit discharge detection and elimination; 4. Construction site runoff control; 5. Post-construction site runoff control; and 6. Pollution prevention/good housekeeping.<br><br>Wes Saunders-Pearce 651-366-3629 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                 | Administers the SDS/NPDES Program - Permitting and enforcement authority<br><br>MPCA Stormwater Hotline at 651-757-2119                                                                                                                                                                                                                    | Brett Troyer 651-366-3629                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                 | Implements water quality standards in MN. States are required to review their water quality standards every three years and adopt standards that meet minimum national requirements, including addressing additional pollutants that may threaten beneficial uses. Minnesota's water quality standards meet or exceed federal requirements |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                 | Administers the impaired water program: Assesses water quality, lists impaired waters, conducts TMDL studies, oversees completion of implementation plans.<br><br>Howard Markus at the MPCA ((651)757-2551 or 800-657-3864                                                                                                                 | Wes Saunders-Pearce 651-366-3638 or Nick Tiedeken 651-366-3628                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                 | Administers program. Evaluates and approves 401 applications for conformance with water-quality standards. MPCA has authority to take necessary enforcement actions to ensure that the applicant and the project's construction, installation, and operation comply with water quality standards, statutes and rules.                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Administers Metropolitan Area Surface Water Management Program. Oversees the adoption and implementation of comprehensive surface water management plans, which are created by watershed districts, watershed management organizations, or county/ city/ township joint powers organizations within the seven county metropolitan area. After local, regional, and agency review, plans are approved by the Board of Water and Soil Resources. The WMO/WD/JPO then formally adopts the plan and requires each city or town ship within the WMO/WD/JPO to create and implement their own local water management plan consistent with the WMO/WD plan. Updates are required every 5-10 years.<br><br>(651) 296-3767 |                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Maintains maps of pubic water access points. Access points are managed by different LGU<br><br>MDNR-Trails and Waterways (651) 259-5666                         |                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                 | Administers the Milestone River Monitoring Program. Monitors one site at the northern boundary of the MWMO on the Mississippi River.                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| General Contact Information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Board of Water and Soil Resources<br>1 West Water Street<br>St. Paul, MN 55107<br>Telephone: (612) 296-3767<br>Web: http://www.bwsr.state.mn.us/                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Minnesota Department of Natural Resources<br>500 Lafayette Rd.<br>St. Paul, MN 55155<br>Telephone: (612) 296-6157<br>Web: http://www.dnr.state.mn.us/index.html | Minnesota Pollution Control Agency<br>520 Lafayette Rd.<br>St. Paul, MN 55155<br>Telephone: (612) 296-6300<br>Web: http://www.pca.state.mn.us/                                                                                                                                                                                             | Transportation Building<br>395 John Ireland Blvd<br>Saint Paul, MN 55155<br>Telephone: 1-800-657-3774<br>Web: http://www.dot.state.mn.us/                                                                                                                                                                                                                                                                                                                                                                    |



A.3 Regulatory Requirements

A P P E N D I X

Great River Master Plan - Agencies with Water Resource Review Authority

| Jurisdictional Entities and brief description of function (authority & responsibility)                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MWMO                                                                                                                                                                                                                                                                                                                                                                                                              | Regional<br>LMRWMO                                                                                                                                                                                                                                                                                                                               | RWMWD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Surface Waters - continued                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Opportunity to comment on member cities annual reports, generally in April of each year.                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                  | RWMWD is the owner and operator of the Beltline Interceptor, an MS4 system that ultimately drains to the Mississippi River. At a part of the RWMWD's ongoing inspection of its stormwater management systems, the RWMWD checks for non-stormwater (illicit) discharges into the stormsewer system. The current SWPPP is available on the RWMWD website.<br><br>The RWMWD requires a permit and stormwater management plan for any new connections or replacement of existing connections to the Beltline interceptor or other components of the District's MS4.<br><br>To minimize duplication and to increase efficiency, the RWMWD also collaborates with cities within the watershed to help them implement their NPDES Phase II MS4 requirements. The RWMWD is also willing to collaborate with the City of St. Paul to meet it's NPDES Phase I MS4 requirements.                                            |
| See contact information at end of table.                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                  | See contact information at end of table.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                  | No person or political subdivision shall commence a land disturbing activity or the development of land one acre or greater without first obtaining a permit from the RWMWD that incorporates and approves a stormwater management plan for the activity or development. The RWMWD permits addresses slope and buffer requirements near waterbodies, post-construction runoff requirements, among other considerations.<br><br>See contact information at end of table.                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Sets water quality and quantity (rate & volume) standardswatershed-wide for surface waters discharging to the Mississippi River that are at least as stringent as state water quality standards.                                                                                                                                                                                                                  | Sets runoff volume and rate control and water quality policies and standards. Standards are implemented by member cities (LMRWMO does not have a permit program).                                                                                                                                                                                | Sets runoff volume and rate control standards for development or redevelopment generally over an acre in the RWMWD. Proposed rate cannot exceed the existing 2-, 10- and 100-year discharges. Volume must be reduced by 0.9 inches off impervious, unless infiltration cannot be achieved. Additional BMPs to achieve 90% TSS reduction must be installed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| See contact information at end of table.                                                                                                                                                                                                                                                                                                                                                                          | See contact information at end of table.                                                                                                                                                                                                                                                                                                         | See contact information at end of table.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| The MWMO is not a MS4. However, it will voluntarily work with the MS4's to plan and implement TMDLs within the watershed.                                                                                                                                                                                                                                                                                         | The MWMO is not a MS4. However, it will voluntarily work with the MS4's to plan and implement TMDLs within the watershed, as requested.                                                                                                                                                                                                          | RWMWD implements TMDLs for impaired waters unless a municipal government implements a District-approved Local Water Plan that addresses implementation of TMDLs.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| See contact information at end of table.                                                                                                                                                                                                                                                                                                                                                                          | See contact information at end of table.                                                                                                                                                                                                                                                                                                         | See contact information at end of table.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Adopts Water Management Plan (WMP) per approval of BWSR.<br><br>10 yr WMP addresses MWMO standards, goals, strategies, implementation actions to be carried out, discriptions of program areas<br>Requires local governments to adopt their own Water Management Plan consistent with WMO Plan.                                                                                                                   | Adopts Water Management Plan (WMP) per approval of BWSR.<br><br>10 yr WMP addresses standards, goals, strategies, implementation actions to be carried out, discriptions of program areas<br>Requires local governments to adopt their own local water management plan consistent with WMO Plan.<br><br>See contact information at end of table. | The RWMWD works with local units of government in the preparation of their local (city) water management plans. The RWMWD must review the local plans for consistency with the RWMWD plan, and has the sole authority to approve the local plans. The RWMWD is reponsible for addressing water resource management issues that affect more than one city or issues defined by the RWMWD to be of District-wide significance. Specifically, the RWMWD is responsible for managing water level and water quality issues for the following 14 lakes and streams: Battle Creek Lake, Beaver Lake, Carver Lake, Eagle Lake, Gervais Lake, Keller Lake, Kohlman Lake, Lake Phalen, Round Lake (Maplewood), Round Lake (Little Canada), Tanners Lake, Twin Lake, Wakefield Lake, Willow Lake, Battle Creek, Fish Creek, Gervais Creek, Kohlman Creek, and Willow Creek.<br><br>See contact information at end of table. |
| Reviews and approves local water management plans.<br><br>Monitoring and Outfall Study. An on-going program to establish baseline water quantity and quality data that can be used for management of outfalls and receiving waters. Six sites are monitored, five stormwater outfalls discharging to the River and one site at Loring Pond. Monitors six (e-coli) sites in the main stem of the Mississippi River | The LMRWMO monitors the intercommunity water bodies, as funding and/or volunteer monitors are available.                                                                                                                                                                                                                                         | The RWMWD water quality monitoring program tracks water quality and quantity in District lakes and streams. The annual program includes in-lake monitoring on all nine major District lakes. Water quality monitoring reports for each lake are available on the RWMWD website. BMP performance throughout the RWMWD is also monitored annually.<br>The RWMWD stream monitoring program is part of a larger monitoring efforts carried out by the Metropolitan Council Environmental Sewices (MCES) Watershed Outlet Monitoring Program (WOMP). The RWMWD WOMP sites are located at the Fish Creek, Battle Creek and Beltline Interceptor outlet locations near the Mississippi River. RWMWD has been monitoring these outlets since 1995. Kohlman Creek, Gervais Creek and Willow Creek have been monitored since 2007.                                                                                         |
| See contact information at end of table.                                                                                                                                                                                                                                                                                                                                                                          | See contact information at end of table.                                                                                                                                                                                                                                                                                                         | See contact information at end of table.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| General Contact Information                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Mississippi Watershed Management Organization<br>1224 Marshall St NE, Suite 201<br>Minneapolis, MN 55413<br>Telephone: (612) 465-8780<br>Web: http://www.mwmo.org/                                                                                                                                                                                                                                                | Lower Mississippi River Watershed Management Organization<br>c/o Dakota County Soil and Water Conservation District<br>4100 220th St. West, Suite 102<br>Farmington, MN 55024<br>Telephone: 651-480-7784<br>Web: http:// www.dakotaswcd.org/watersheds/lowermisswmo/index.html                                                                   | Ramsey-Washington Metro Watershed District<br>2665 Noel Drive<br>Little Canada, MN 55117<br>Telephone: (651) 792-7950<br>Web: http://www.rwmwd.org/                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |



Great River Master Plan - Agencies with Water Resource Review Authority

| Jurisdictional Entities and brief description of function (authority & responsibility)                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CRWD                                                                                                                                                                                                                                                                                                                                                                                                          | Regional - continued<br>Met Council                                                                                                                                                           | MnDOT-Metro District                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Surface Waters - continued</b>                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| CRWD regulates pollutants and illicit discharges/connections to the District's MS4. The District requires a permit and stormwater management plan for any new connection to the District's MS4 and prohibits new connections to the Trout Brook Interceptor. The District has the authority to suspend MS4 access to reduce or eliminate illicit discharges.                                                  |                                                                                                                                                                                               | An MS4. Required to adopt a Stormwater Pollution Prevention Program (SWPPP) to reduce the discharge of pollutants from ROW to the maximum extent practicable. The SWPPP covers six minimum control measures:<br>1. Public education and outreach; 2. Public participation/involvement;<br>3. Illicit discharge detection and elimination;<br>4. Construction site runoff control; 5. Post-construction site runoff control; and 6. Pollution prevention/good housekeeping. |
| See contact information at end of table.                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                               | Barb Loida 651-234-7539                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| CRWD requires an erosion and sediment control plan that meets the NPDES standard for any land disturbing activity greater than 1 acre unless the development is within the 100-year floodplain or adjacent to a public water or wetland, in which case the trigger is 1000 square feet of land disturbance.<br><br>See contact information at end of table.                                                   |                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Sets runoff volume and rate control standards for development or redevelopment generally over an acre in the District. Proposed rate cannot exceed the existing 2-, 10- and 100-year discharges. Volume must be reduced by 0.9 inches off impervious, unless infiltration cannot be achieved. Additional BMPs to achieve 90% TSS reduction must be installed.<br><br>See contact information at end of table. |                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| CRWD implements TMDLs for impaired waters unless a municipal government implements a District-approved Local Water Plan that addresses implementation of TMDLs.<br><br>See contact information at end of table.                                                                                                                                                                                               |                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Local water management plans (LWMPs) for all cities (Falcon Heights, Lauderdale, Maplewood, Roseville and St. Paul) in the District must be submitted for approval by CRWD. The LWMPs must conformto the District Plan. The District sets forth 2 different levels of requirements based on whether the city has taken over permitting authority from the District.                                           | Reviews Comp Plans which must include water resources chapter for consistency with Council Policy Plans. Has review and comment authority over local water management plans of LGUs and MWMO. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| See contact information at end of table.                                                                                                                                                                                                                                                                                                                                                                      | MCES Water Resources Section (651) 602-1156                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Reviews and approves local water management plans.                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| See contact information at end of table.                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| The District monitors stormwater BMP performance, stream and lake water quality, precipitation, and flow discharge. Annual monitoring reports are published online.                                                                                                                                                                                                                                           | Administers the River and tributary monitoring program,(the watershed outlet monitoring program -WOMP) and the Citizen Assisted Monitoring Program (CAMP)                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| See contact information at end of table.                                                                                                                                                                                                                                                                                                                                                                      | MCES Monitoring Section (651) 602-8117                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>General Contact Information</b>                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Capitol Region Watershed District<br>1410 Energy Park Drive, Suite 4<br>St. Paul, Minnesota 55108<br>Telephone (651) 644-8888<br>Web: <a href="http://www.capitolregionwd.org/">http://www.capitolregionwd.org/</a>                                                                                                                                                                                           | Metropolitan Council<br>390 Robert Street N<br>St. Paul, MN 55101<br>Telephone: (651) 602-1000<br>Web: <a href="http://www.metrocouncil.org/">http://www.metrocouncil.org/</a>                | Minnesota Department of Transportation - Metropolitan District<br>Waters Edge Building<br>1500 W. County Rd. B-2<br>Roseville, MN 55113<br>Telephone: (651) 234-7500<br>Web: <a href="http://www.dot.state.mn.us/metro.html">http://www.dot.state.mn.us/metro.html</a>                                                                                                                                                                                                     |



A.3 Regulatory Requirements

A P P E N D I X

Great River Master Plan - Agencies with Water Resource Review Authority

| Jurisdictional Entities and brief description of function (authority & responsibility)                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | General Comments, reference to other related program areas, etc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Chain of Authority                                                                                                                                         | Website (informational resources)                                                                                                             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Ramsey County                                                                                                                                                                                                                                                                                                                                                                                                                                               | Local Government Units (LGUs)<br>City of St. Paul                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                            |                                                                                                                                               |
| Surface Waters - continued                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                            |                                                                                                                                               |
| An MS4. Required to adopt a Stormwater Pollution Prevention Program (SWPPP) to reduce the discharge of pollutants to the maximum extent practicable. The SWPPP covers six minimum control measures:<br>1. Public education and outreach; 2. Public participation/involvement; 3. Illicit discharge detection and elimination; 4. Construction site runoff control; 5. Post-construction site runoff control; and 6. Pollution prevention/good housekeeping. | The City has an NPDES phase 1 permit that requires discharge monitoring and implementation of stormwater management activities in the following areas: Structural controls, Facilities operation and quality control, Removed substances, New development & construction, Roadways, Flood control, Pesticides and fertilizers, Illicit discharges and improper disposal, Construction of storm sewers, public education & participation programs, Pilot program for storm water management, Storm water monitoring program manual, Alternative sources of monitoring data, and coordination with other governmental entities. An annual report is required by June 1 of each year. Permit requires the city to adopt ordinances to address construction site runoff, and post-construction runoff control for projects disturbing more than one acre. City administers ordinances, reviews plans and issues permits for construction projects. This includes an Erosion Control Permit for all land disturbance activities which are in excess of 10,000 square feet. A stormwater plan is required for all activities disturbing more than one acre. | The MPCA will provide public notice and opportunity for public comment and hearing on each MS4s proposed SWPPP. Permits renewed every five years. City MS4s administer ordinances for illicit discharge, erosion and stormwater control that meet the terms of their individual MS4 permit which vary. Each MS4 must submit an annual report by June 1 following a public comment period. MPCA may attach requirements for implementing TMDL projects to future MS4 permits. All MS4 permits expire May 31, 2011. Phase 1 permits (Mpls, St. Paul) have unique expiration dates. | Section 402, Clean Water Act; Minnesota Statutes, Chapter 115; Minnesota Rules, Chapter 7001; Minnesota Rules, Chapter 7050; Minnesota Rules, Chapter 7090 | <a href="http://www.pca.state.mn.us/water/stormwater/stormwater-ms4.html">http://www.pca.state.mn.us/water/stormwater/stormwater-ms4.html</a> |
| Public Works 651-266-7100                                                                                                                                                                                                                                                                                                                                                                                                                                   | Public Works Department (651) 266-6245                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                            |                                                                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                             | City erosion and stormwater ordinances may apply depending on size of disturbance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | MS4 cities often model local ordinances on the requirements found in the general NPDES construction permit.                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Section 402, Clean Water Act; Minnesota Statutes, Chapter 115; Minnesota Rules, Chapter 7001; Minnesota Rules, Chapter 7050; Minnesota Rules, Chapter 7090 | <a href="http://www.pca.state.mn.us/water/stormwater/stormwater-c.html">http://www.pca.state.mn.us/water/stormwater/stormwater-c.html</a>     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Public Works Department (651) 266-6245                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                            |                                                                                                                                               |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Sections 101(a), 303, 401, & 510 of Clean Water Act; CFR Title 40 part 131. Mn Rules, Ch. 7050, 7053                                                       | <a href="http://www.epa.gov/waterscience/standards/">http://www.epa.gov/waterscience/standards/</a>                                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                             | The City is responsible for implementing measures to meet the defined wasteload allocation for their Municipal Separate Storm Sewer System (MS4) for approved TMDLs.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | A TMDL is required for each impaired water body. Implementation and restoration measures are required to bring water bodies into compliance with standards. The MPCA may attach requirements on MS4 permits for implementation and restoration measures.                                                                                                                                                                                                                                                                                                                         | Section 303d of Clean Water Act, CFR Title 40 Part 130.                                                                                                    | <a href="http://www.pca.state.mn.us/water/tmdl/index.html">http://www.pca.state.mn.us/water/tmdl/index.html</a>                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Public Works Department (651) 266-6245                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                            |                                                                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Section 401 of the Fed Clean Water Act, Minnesota Statutes, Chapter 115; Minnesota Rules, Chapters 7001& 7050.                                             |                                                                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Adopts local water management Plan Consistent with MWMO, LMRWMO, CRWD, and RWMWD Water Management Plans. Current plan dated October 2006.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Mn Statutes 103B. Mn Rules 8410                                                                                                                            | <a href="http://www.bwsr.state.mn.us/watermgmt/metroareasurface.html">http://www.bwsr.state.mn.us/watermgmt/metroareasurface.html</a>         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Public Works Department (651) 266-6245                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                            |                                                                                                                                               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Four points: Camden boat launch/fishing pier, Boom Island Park, Mississippi River Access University of Minnesota, Minneapolis Rowing Club.                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                            | <a href="http://www.dnr.state.mn.us/water_access/index.html">http://www.dnr.state.mn.us/water_access/index.html</a>                           |
| Lake water quality monitoring program, 29 lakes profile water chemistry throughout growing season; bacteriological testing of 11 County beaches; winter dissolved oxygen monitoring                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                            |                                                                                                                                               |
| (651)266-7160                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                            |                                                                                                                                               |
| General Contact Information                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                            |                                                                                                                                               |
| Ramsey County<br>Telephone: (651) 266-8500<br>Web: <a href="http://www.co.ramsey.mn.us/home/index.htm">http://www.co.ramsey.mn.us/home/index.htm</a>                                                                                                                                                                                                                                                                                                        | City of St. Paul<br>St. Paul City Hall<br>15 Kellogg Blvd. West<br>St. Paul, MN 55102<br>Telephone: (651) 266-8989<br>Web: <a href="http://www.stpaul.gov/">http://www.stpaul.gov/</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                            |                                                                                                                                               |



Table X. Summary of rare species documented in Natural Heritage Information System (NHIS) database by reach

| Reach       | Scientific Name                   | Common Name           | Type                   | Minnesota Status | U.S. Status    | # of Occurrences in NHIS Database | First Observed | Last Observed |
|-------------|-----------------------------------|-----------------------|------------------------|------------------|----------------|-----------------------------------|----------------|---------------|
| Downtown    | <i>Arcidens confragosus</i>       | Rock Pocketbook       | Invertebrate Animal    | Endangered       | None           | 1                                 | 2001           | 2005          |
| Downtown    | <i>Elliptio crassidens</i>        | Elephant-ear          | Invertebrate Animal    | Endangered       | None           | 1                                 | 2001           | 2007          |
| Downtown    | <i>Fusconaia ebena</i>            | Ebonyshell            | Invertebrate Animal    | Endangered       | None           | 1                                 | 1977           | 2001          |
| Downtown    | <i>Plethobasus cyphus</i>         | Sheepnose             | Invertebrate Animal    | Endangered       | Candidate      | 1                                 | 2001           | 2001          |
| Downtown    | <i>Quadrula nodulata</i>          | Wartyback             | Invertebrate Animal    | Endangered       | None           | 1                                 | 1977           | 2007          |
| Downtown    | <i>Actinonaias ligamentina</i>    | Mucket                | Invertebrate Animal    | Threatened       | None           | 1                                 | 1989           | 2007          |
| Downtown    | <i>Quadrula metanevra</i>         | Monkeyface            | Invertebrate Animal    | Threatened       | None           | 1                                 | 2001           | 2001          |
| Downtown    | <i>Lasmigona costata</i>          | Fluted-shell          | Invertebrate Animal    | Special Concern  | None           | 1                                 | 2004           | 2004          |
| Downtown    | <i>Ligumia recta</i>              | Black Sandshell       | Invertebrate Animal    | Special Concern  | None           | 1                                 | 1944           | 2007          |
| Downtown    | <i>Marpissa grata</i>             | A Jumping Spider      | Invertebrate Animal    | Special Concern  | None           | 1                                 | 1978           | 1978          |
| Downtown    | <i>Obovaria olivaria</i>          | Hickorynut            | Invertebrate Animal    | Special Concern  | None           | 1                                 | 2000           | 2004          |
| Downtown    | <i>Truncilla donaciformis</i>     | Fawnsfoot             | Invertebrate Animal    | Unknown Status   | None           | 1                                 | 1996           | 2007          |
| Downtown    | <i>Falco peregrinus</i>           | Peregrine Falcon      | Vertebrate Animal      | Threatened       | None           | 2                                 | 1987           | 2010          |
| Downtown    | <i>Polyodon spathula</i>          | Paddlefish            | Vertebrate Animal      | Threatened       | None           | 1                                 | 1950-1959      | 2004          |
| Downtown    | <i>Cycleptus elongatus</i>        | Blue Sucker           | Vertebrate Animal      | Special Concern  | None           | 1                                 | 2002           | 2008          |
| Downtown    | <i>Lampropeltis triangulum</i>    | Milk Snake            | Vertebrate Animal      | Tracked          | None           | 1                                 | No data        | 1948          |
| Downtown    | <i>Besseyia bullii</i>            | Kitten-tails          | Vascular Plant         | Threatened       | None           | 1                                 | 1903           | 1903          |
| River Gorge | <i>Arcidens confragosus</i>       | Rock Pocketbook       | Invertebrate Animal    | Endangered       | None           | 1                                 | 2001           | 2005          |
| River Gorge | <i>Lampsilis higginsii</i>        | Higgins Eye           | Invertebrate Animal    | Endangered       | Endangered     | 2                                 | 2000           | 2002          |
| River Gorge | <i>Quadrula nodulata</i>          | Wartyback             | Invertebrate Animal    | Endangered       | None           | 2                                 | 1977           | 2007          |
| River Gorge | <i>Actinonaias ligamentina</i>    | Mucket                | Invertebrate Animal    | Threatened       | None           | 2                                 | 1977           | 1977          |
| River Gorge | <i>Alasmidonta marginata</i>      | Elktoe                | Invertebrate Animal    | Threatened       | None           | 1                                 | 2000           | 2001          |
| River Gorge | <i>Cyclonaias tuberculata</i>     | Purple Wartyback      | Invertebrate Animal    | Threatened       | None           | 1                                 | 2001           | 2001          |
| River Gorge | <i>Ellipsaria lineolata</i>       | Butterfly             | Invertebrate Animal    | Threatened       | None           | 1                                 | 1997           | 2005          |
| River Gorge | <i>Elliptio dilatata</i>          | Spike                 | Invertebrate Animal    | Special Concern  | None           | 1                                 | 2000           | 2000          |
| River Gorge | <i>Ligumia recta</i>              | Black Sandshell       | Invertebrate Animal    | Special Concern  | None           | 4                                 | 1944           | 2007          |
| River Gorge | <i>Truncilla donaciformis</i>     | Fawnsfoot             | Invertebrate Animal    | Unknown Status   | None           | 1                                 | 1996           | 2007          |
| River Gorge | <i>Falco peregrinus</i>           | Peregrine Falcon      | Vertebrate Animal      | Threatened       | None           | 1                                 | 1996           | 2010          |
| River Gorge | <i>Polyodon spathula</i>          | Paddlefish            | Vertebrate Animal      | Threatened       | None           | 1                                 | 1950-1959      | 2004          |
| River Gorge | <i>Cycleptus elongatus</i>        | Blue Sucker           | Vertebrate Animal      | Special Concern  | None           | 1                                 | 1995           | 2007          |
| River Gorge | <i>Notropis amnis</i>             | Pallid Shiner         | Vertebrate Animal      | Special Concern  | None           | 1                                 | 1926           | 1926          |
| River Gorge | <i>Seiurus motacilla</i>          | Louisiana Waterthrush | Vertebrate Animal      | Special Concern  | None           | 1                                 | 1999           | 1999          |
| River Gorge | <i>Elaphe vulpina</i>             | Western Fox Snake     | Vertebrate Animal      | Tracked          | None           | 2                                 | 1955           | 1993          |
| River Gorge | <i>Lampropeltis triangulum</i>    | Milk Snake            | Vertebrate Animal      | Tracked          | None           | 1                                 | No data        | 1951          |
| River Gorge | <i>Vireo bellii</i>               | Bell's Vireo          | Vertebrate Animal      | Tracked          | None           | 1                                 | No data        | 1980          |
| River Gorge | <i>Carex formosa</i>              | Handsome Sedge        | Vascular Plant         | Endangered       | None           | 2                                 | 1924           | 1937          |
| River Gorge | <i>Carex plantaginea</i>          | Plantain-leaved Sedge | Vascular Plant         | Endangered       | None           | 1                                 | 1903           | 1903          |
| River Gorge | Mesic Oak Savanna (Southern) Type |                       | Native Plant Community | Not Applicable   | Not Applicable | 1                                 | 1994           | 1994          |
| River Gorge | Southern Wet Ash Swamp Class      |                       | Native Plant Community | Not Applicable   | Not Applicable | 1                                 | 1994           | 1994          |
| River Gorge | Undetermined Class                |                       | Native Plant Community | Not Applicable   | Not Applicable | 1                                 | 1994           | 1994          |
| Floodplain  | <i>Arcidens confragosus</i>       | Rock Pocketbook       | Invertebrate Animal    | Endangered       | None           | 1                                 | 2001           | 2006          |
| Floodplain  | <i>Fusconaia ebena</i>            | Ebonyshell            | Invertebrate Animal    | Endangered       | None           | 1                                 | 1998           | 2001          |
| Floodplain  | <i>Pleurobema coccineum</i>       | Round Pigtoe          | Invertebrate Animal    | Threatened       | None           | 1                                 | 2001           | 2001          |

Source: NHIS



A.3 Regulatory Requirements

A P P E N D I X

| Reach      | Scientific Name                                          | Common Name            | Type                   | Minnesota Status | U.S. Status    | # of Occurrences in NHIS Database | First Observed | Last Observed |
|------------|----------------------------------------------------------|------------------------|------------------------|------------------|----------------|-----------------------------------|----------------|---------------|
| Floodplain | <i>Quadrula metanevra</i>                                | Monkeyface             | Invertebrate Animal    | Threatened       | None           | 1                                 | 1997           | 2000          |
| Floodplain | <i>Obovaria olivaria</i>                                 | Hickorynut             | Invertebrate Animal    | Special Concern  | None           | 1                                 | 2001           | 2001          |
| Floodplain | <i>Polyodon spathula</i>                                 | Paddlefish             | Vertebrate Animal      | Threatened       | None           | 1                                 | 1950           | 2004          |
| Floodplain | <i>Cycleptus elongatus</i>                               | Blue Sucker            | Vertebrate Animal      | Special Concern  | None           | 1                                 | 2002           | 2008          |
| Floodplain | <i>Haliaeetus leucocephalus</i>                          | Bald Eagle             | Vertebrate Animal      | Special Concern  | None           | 6                                 | 1979           | 2007          |
| Floodplain | <i>Ictiobus niger</i>                                    | Black Buffalo          | Vertebrate Animal      | Special Concern  | None           | 1                                 | 2008           | 2008          |
| Floodplain | <i>Elaphe vulpina</i>                                    | Western Fox Snake      | Vertebrate Animal      | Tracked          | None           | 1                                 | 1990           | 1990          |
| Floodplain | <i>Besseyia bullii</i>                                   | Kitten-tails           | Vascular Plant         | Threatened       | None           | 4                                 | 1884           | 2005          |
| Floodplain | <i>Liparis liliifolia</i>                                | Lilia-leaved Twayblade | Vascular Plant         | Tracked          | None           | 1                                 | 1997           | 1997          |
| Floodplain | Colonial Waterbird Nesting Area                          |                        | Animal Assemblage      | Not Applicable   | Not Applicable | 2                                 | 1980           | 1997          |
| Floodplain | Dry Sand - Gravel Prairie (Southern) Type                |                        | Native Plant Community | Not Applicable   | Not Applicable | 2                                 | 1990           | 1990          |
| Floodplain | Undetermined Class                                       |                        | Native Plant Community | Not Applicable   | Not Applicable | 3                                 | 1975           | 1990          |
| Valley     | <i>Arcidens confragosus</i>                              | Rock Pocketbook        | Invertebrate Animal    | Endangered       | None           | 1                                 | 2001           | 2005          |
| Valley     | <i>Elliptio crassidens</i>                               | Elephant-ear           | Invertebrate Animal    | Endangered       | None           | 1                                 | 2001           | 2007          |
| Valley     | <i>Fusconaia ebena</i>                                   | Ebonyshell             | Invertebrate Animal    | Endangered       | None           | 1                                 | 1977           | 2001          |
| Valley     | <i>Plethobasus cyphus</i>                                | Sheepnose              | Invertebrate Animal    | Endangered       | Candidate      | 1                                 | 2001           | 2001          |
| Valley     | <i>Quadrula fragosa</i>                                  | Winged Mapleleaf       | Invertebrate Animal    | Endangered       | Endangered     | 1                                 | 2001           | 2001          |
| Valley     | <i>Quadrula nodulata</i>                                 | Wartyback              | Invertebrate Animal    | Endangered       | None           | 1                                 | 1977           | 2007          |
| Valley     | <i>Actinonaias ligamentina</i>                           | Mucket                 | Invertebrate Animal    | Threatened       | None           | 2                                 | 1977           | 2007          |
| Valley     | <i>Alasmidonta marginata</i>                             | Elktoe                 | Invertebrate Animal    | Threatened       | None           | 1                                 | 2000           | 2001          |
| Valley     | <i>Cyclonaias tuberculata</i>                            | Purple Wartyback       | Invertebrate Animal    | Threatened       | None           | 1                                 | 2001           | 2001          |
| Valley     | <i>Ellipsaria lineolata</i>                              | Butterfly              | Invertebrate Animal    | Threatened       | None           | 1                                 | 1997           | 2005          |
| Valley     | <i>Pleurobema coccineum</i>                              | Round Pigtoe           | Invertebrate Animal    | Threatened       | None           | 1                                 | 2001           | 2001          |
| Valley     | <i>Quadrula metanevra</i>                                | Monkeyface             | Invertebrate Animal    | Threatened       | None           | 2                                 | 1997           | 2001          |
| Valley     | <i>Tritogonia verrucosa</i>                              | Pistolgrip             | Invertebrate Animal    | Threatened       | None           | 1                                 | 2001           | 2003          |
| Valley     | <i>Elliptio dilatata</i>                                 | Spike                  | Invertebrate Animal    | Special Concern  | None           | 4                                 | 1988           | 2002          |
| Valley     | <i>Ligumia recta</i>                                     | Black Sandshell        | Invertebrate Animal    | Special Concern  | None           | 3                                 | 1944           | 2007          |
| Valley     | <i>Obovaria olivaria</i>                                 | Hickorynut             | Invertebrate Animal    | Special Concern  | None           | 1                                 | 2000           | 2004          |
| Valley     | <i>Truncilla donaciformis</i>                            | Fawnsfoot              | Invertebrate Animal    | Unknown Status   | None           | 1                                 | 1996           | 2007          |
| Valley     | <i>Emydoidea blandingii</i>                              | Blanding's Turtle      | Vertebrate Animal      | Threatened       | None           | 2                                 | 1990           | 2000          |
| Valley     | <i>Falco peregrinus</i>                                  | Peregrine Falcon       | Vertebrate Animal      | Threatened       | None           | 1                                 | 1999           | 2010          |
| Valley     | <i>Polyodon spathula</i>                                 | Paddlefish             | Vertebrate Animal      | Threatened       | None           | 1                                 | 1950           | 2004          |
| Valley     | <i>Vireo bellii</i>                                      | Bell's Vireo           | Vertebrate Animal      | Tracked          | None           | 1                                 | No data        | 1980          |
| Valley     | <i>Haliaeetus leucocephalus</i>                          | Bald Eagle             | Vertebrate Animal      | Special Concern  | None           | 1                                 | 2006           | 2006          |
| Valley     | <i>Myotis septentrionalis</i>                            | Northern Myotis        | Vertebrate Animal      | Special Concern  | None           | 1                                 | No data        | 1985          |
| Valley     | <i>Notropis amnis</i>                                    | Pallid Shiner          | Vertebrate Animal      | Special Concern  | None           | 1                                 | 1926           | 1926          |
| Valley     | <i>Notropis anogenus</i>                                 | Pugnose Shiner         | Vertebrate Animal      | Special Concern  | None           | 1                                 | 1890           | 1890          |
| Valley     | <i>Elaphe vulpina</i>                                    | Western Fox Snake      | Vertebrate Animal      | Tracked          | None           | 2                                 | No data        | 1955          |
| Valley     | <i>Lampropeltis triangulum</i>                           | Milk Snake             | Vertebrate Animal      | Tracked          | None           | 2                                 | No data        | 1951          |
| Valley     | Bat Colony                                               | Bat Concentration      | Animal Assemblage      | Not Applicable   | Not Applicable | 1                                 | No data        | 1985          |
| Valley     | Freshwater Mussel Concentration Area                     | Mussel Sampling Site   | Animal Assemblage      | Not Applicable   | Not Applicable | 1                                 | 1989           | 1989          |
| Valley     | Dry Sand - Gravel Prairie (Southern) Type                |                        | Native Plant Community | Not Applicable   | Not Applicable | 1                                 | 1990           | 1990          |
| Valley     | Silver Maple - (Virginia Creeper) Floodplain Forest Type |                        | Native Plant Community | Not Applicable   | Not Applicable | 1                                 | 1990           | 1994          |

Source: NHIS



The Great River Park Master Plan will express a vision and an implementation roadmap for Saint Paul’s seventeen miles of Mississippi River corridor. The Plan will take decades to accomplish and require ongoing political dedication and community support.

Establishing community support to implement a long-term plan effectively begins with meaningful involvement of the community in the planning process; hearing what the community has to say and infusing the plan with prevailing interests and values. The approach and strategies used to encourage community participation in the Great River Park planning process is the subject of this technical brief.

Strategies for community participation are built around two fundamental components: outreach and community involvement. Outreach is defined as reaching out to the community with project information, updates, key findings, recommendations and most importantly, invitations to participate in the planning process. Community involvement is defined as active participation of the public and project stakeholders in helping shape plan outcomes. There are several community participation strategies employed in the planning process that accomplish either outreach or involvement and many that accomplish both.

Outreach: The Great River Park master planning effort is organized to reach out to the full spectrum of Saint Paul residents as well as other stakeholders within and beyond Saint Paul’s boundary. As can be imagined, this can be a tremendous task and must be approached as a manageable project endeavor. The outreach strategies employed in the project provide for mass outreach however the majority of effort expended in outreach is targeted to key and impacted constituencies as well as communities underserved by mainstream media.

Community Involvement: The master planning approach has been devised as an iterative process that combines the project team’s incremental development of the plan with ongoing feedback loops with the community. A series of open houses, community workshops and focus groups allow the community to help establish the fundamental principles that form the basis of plan initiatives as well as react to ideas as they evolve.

The outreach and community involvement techniques used in the project are:

Cultural Audit: A “cultural audit” will be conducted early in the effort by a performance artist on the project team. The audit will conduct personal video interviews in public places around the community to gain an understanding of community feelings about the river and its role in their lives.

Project Website: A website [www.GreatRiverPark.org](http://www.GreatRiverPark.org) has been established for the planning effort. The website is both an outreach and a community involvement tool. From an outreach standpoint, the website will be routinely updated to contain a broad range project information including background, interim and final products, community feedback, project contacts and information about community participation opportunities. The website will house the most comprehensive set of project information available to the public. For this reason, all project media should drive website visitation. From a community involvement standpoint, the website will allow visitor comments about the project.

Community Task Force & Technical Advisory Group: These groups will meet together regularly through the course of the planning process. While their primary role is community involvement (providing direct project feedback to the planning team), they also represent a broad base of constituencies to whom they are charged with providing project reports.

District Councils: Seventeen district councils represent Saint Paul’s neighborhoods. Each district council is represented on the Community Task Force. The district councils will be asked to advertise project events to their constituencies through their own various means of communication including listserves, newsletters and meetings. There will also be limited presentations to key district council groups by the project team.

Newspapers: The numerous metro and community newspapers throughout Saint Paul have been identified and will be encouraged to write articles about the project and publish project news releases prepared and distributed by the project team.

Library Displays: Displays advertising project event will be set up at libraries around the community.

Listserve: The city of Saint Paul and the Saint Paul Riverfront Corporation have listserves that will be utilized to distribute project event advertisements.

Outreach to Underserved Communities: There are numerous communities in Saint Paul that are difficult to reach via mainstream media outlets, may not traditionally participate in civic activities, have felt disenfranchised from past planning efforts, have language and/or cultural barriers, or lack Internet access and/or transportation to attend public events. The project team will seek meaningful connections with communities in this category. Planned approaches include 1) seeking the advice and counsel of community leaders, 2) communicating through trusted community organizations, 3) communicating with specific organizations within the community even if they do not necessarily represent the full community (such as a church), and 4) attend community events/meetings. Known actions in this category of outreach include:

- Gain representation of underserved communities on the Community Task Force
- Participate in Dakota Peoples homecoming event and Native River Stories meetings
- Work with River’s Edge Academy charter school on river-oriented class project and encourage their participation in project events
- Host a display/booth at the Hmongtown Marketplace
- Communicate with newly formed Asian outdoor heritage group and the DNR’s Southeast Asian outreach effort
- Communicate with Confederation of Somali Communities in Minnesota and the East African Women’s Center
- Communicate through KFAI’s Somali, Hmong, Oromo, Ethiopian, Vietnamese and other cultural radio programming
- Connect with REDA, WSCO and/or other West Side groups to engage Hispanic and Latino citizens
- Host a display at Neighborhood House
- Participate in Riverboat tour with Pilgrim Baptist Church
- Connect with [e-democracy.org](http://e-democracy.org) community outreach organizers for Frogtown and the East Side



A.4 Community Participation

A P P E N D I X

Public Open Houses: Several public open houses will be scheduled throughout the planning process. The first open house will initiate the process. The second will be held at the draft master plan stage when key initiatives and design directives are established but need community vetting. The third and final open house will be held near the end of the planning process to gain community feedback about strategic directives proposed by the project. The open houses will be significant public events that will both present project information and request community feedback. Feedback techniques will include comment cards, dot voting, notes on display boards and direct conversation with the project team. The open houses represent significant project milestones and transitions between the major stages of the planning process.

Design Forums: To initiate the process of preparing design concepts, three multi-day design forums will be held. The design forums will assemble the project team in public locations for intensive sessions of design and community involvement. Each multi-day design forum will host two public workshops and one “open studio”. While the workshops will be open to everyone, the open studio will be targeted to project leadership, Community Task Force and Technical Advisory Group members.

The public workshops will occur at the beginning and the end of each design forum. They will allow participants to work in small groups as well as individually to build consensus around preferred approaches and provide personal feedback. The first workshop, termed an “alternative futures” workshop will allow participants to help establish underlying approaches to be explored by the project team during the following few days. The closing workshop, termed a “concept review” workshop will allow participants to critique and prioritize the ideas just developed by the project team. The open studios will be held midway through each design forum to allow the project oversight groups time to talk with the project team about concepts as they are being developed.

The concepts explored and community input gained through the design forums will establish a crucial foundation for eventual plan initiatives.

Focus Groups: A series of focus groups organized around special interests will be convened mid-way through the planning process to test preliminary concepts and gain targeted insights about project initiatives.

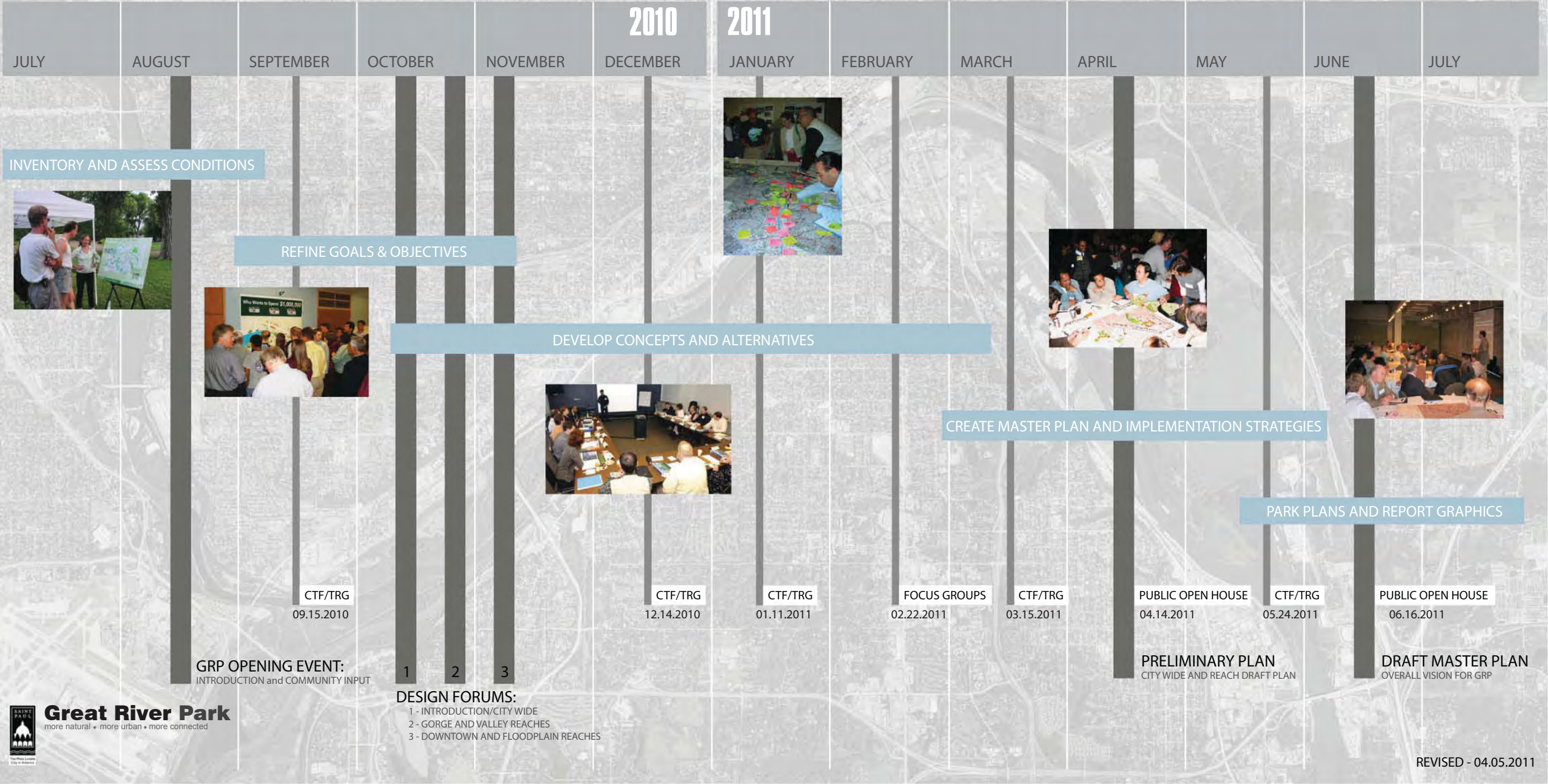
The following chart depicts the outreach and community involvement roles of each of the techniques described above.

| Technique               | Outreach | Community Involvement |
|-------------------------|----------|-----------------------|
| Cultural Audit          | •        | •                     |
| Project Website         | •        | •                     |
| Community Task Force    | •        | •                     |
| District Councils       | •        | •                     |
| Newspapers              | •        |                       |
| Library Displays        | •        |                       |
| Listserve               | •        |                       |
| Underserved Communities | •        | •                     |
| Open Houses             |          | •                     |
| Design Forums           |          | •                     |
| Focus Groups            |          | •                     |

Each of these community participation techniques will require detailed organization as they are carried out through the project. The appendices attached provide examples of the greater level of details employed with several specific community participation elements of the project.



# YOUR OPPORTUNITY TO PARTICIPATE





Notes from the CulturalAudit™ - Wednesday May 26 – Sunday May 30, 2010

I am providing general comments based on my interviews, observations of existing conditions and experiences. *This is a draft summary for internal use only.*

The final media and executive summary including recommendations, hierarchy of issues and concerns, demographic, and mapping data will be completed and available the end of June.

This draft summary organized in a bulleted outline format shows the yin/yang; positive/negative aspect of interviewees’ opinion, as is typical. There isn’t a right or wrong, per se, but instead, this draft gives a snapshot into the culture of thinking.

- For the most part the mention of St. Paul Parks and Recreation produces a favorable response.
  - People interviewed are generally aware of the green space in their community, and are aware of the river front whether they use/ access the river front or not.
  - This is seen as an amenity, privilege and inalienable right.
  - Some people feel the need for green space to be a “meditative” space, instead of a recreational focused or programmed space.
    - This was particularly true in the Frog Town area. There is an urban agriculture movement in this community, with great cross-cultural synergies developing that define green space differently than what have previously may have been considered.
- There is confusion about the varying projects coming out of the Parks & Rec organization.
  - People generally did not know about the “Great River Park” project, and assumed I was representing other Parks & Rec planning projects.
- There is a communications disconnect between the citizens of St. Paul and the activities or amenities available on the River.
  - Citizens are confused as to what agency they need to access to get current information.
  - There is a desire for more communications: on site signage, a one-stop web resource, and better coordination of and between activities and events along the river for improved time sensitive and long term planning communications and planning.
- The feeling is that there isn’t much ethnic integration; however from my perspective people were conversational and accessible to each other.
  - What part does urban agriculture have as part of the GRP? I could imagine this being a catalyst for synergies between the Hmong population, and other resident cultures, and could also be a meaningful way for the Hmong population to become involved with the GRP, and the river front.
- The top issue on peoples’ minds is the economy.

- People are looking at their own neighborhoods and seeing the effects of our national economic crisis.
  - Foreclosures, emptying neighborhoods, transient populations, crime opportunities.
  - Some homeowners feel targeted by those who need, or have less, and are expecting some amount of “fall-out” to affect them directly and personally.
  - Regardless of neighborhood, residents would like adjacent landlords to act more responsibly to their community and neighbors by more rigorous tenant screenings and maintaining property up keep.
- Residents wonder why empty housing stock isn’t used to house those in need and the homeless.
- There is concern about the cost of the GRP.
  - Is the money already designated? Will there be additional funds needed?
    - How will the money be raised?
    - How will this money be used?
    - How will future/ potential fundraising impact existing systems or services?
    - What are the operational expenses and how are they budgeted?
    - Is there an operational plan that runs parallel to the Master Plan and how far out does it go?
- There is a feeling that St. Paul is “not me”.
  - The Lake Wobegon myth and A Prairie Home Companion, supported by the success and celebrity of MPR is a cultural disconnect for many.
  - St. Paul culture transitioning from Euro American to multi cultural / global ethnicities makes for a new and different context for communication.
  - The Dakota Peoples displacement, continuing struggles and ongoing dialogue is very important to the GRP. This cannot be overstated.
- There is a feeling of mistrust
  - West side displacement in the 1960’s is considered a contemporary issue.
  - Roosevelt Elementary School adjacent to the Paula and Sheila Wellstone Center is closing after this academic year, which is a huge community disruption.
  - A feeling that St. Paul agencies engage ethnic minorities to exploit ethnic involvement for bureaucratic purposes.
    - No follow through or genuine involvement between city agencies and ethnic “minorities”
    - “I am not heard, and what I say doesn’t make any difference”
    - “Parks & Rec will do what they want anyway”



Based on my experience, interviews, and observations of existing conditions including the expanse and geography of the GRP, I am making the below recommendations, which I believe will help to stimulate inter and intra community synergies, critical to the success of the GRP and important to the client. I also feel these recommendations will help to establish a positive first step for this long term project.

Public Engagement:

- I recommend that the outreach team engage and invite divergent community leaders and / or residents to host the client and consultant team into their community to present the who, what, why, and how of the GRP as the kick-off meeting. Like a Tupperware Party, client and consultant would make a “tour” of St. Paul reaching out to people where they live.
  - There are some existing strategic engagements that would make this model successful.
- As is assumed, the media deliverable from the CulturalAudit™ will be presented at the public meeting kick-off. Again - I recommend this meeting be a neighborhood tour, perhaps presented in an outdoor forum as appropriate? I recommend that the sound track from the media deliverable be translated and transcribed into multiple languages as a hand-out.
- I recommend that the outreach and public engagements begin with a conversation about relevant community issues and ideas. These issues and ideas establish the basis for conversation and mutual understanding, while generating ideas for community synergies and project ownership / stewardship relevant to the GRP.

Communications:

- I recommend a communications strategy that includes specific cultural elements such as color, pattern, language, imaging, as they pertain to pictures, graphics, sound and writing.
  - I recommend school –aged engagements to help build the communications look + feel.
- I recommend that a clearly defined GRP communications strategy be developed that not only describes the GRP but separates the GRP from other, similar St. Paul City projects.
  - I recommend that the client and consultant team develop a vision and mission statement for the GRP in advance of the first public meetings, and use this language consistently in all communications touch points.
- I recommend a dedicated web presence for posting transcripts of public opinion, and as a vehicle for public engagements and conversations that would transcend neighborhood boundaries, and promote neighborhood and community integration and engagements.
- I recommend in all communications, that economic responsibility, strategy and reporting regarding the GRP be included and transparent.

Based on my initial findings, I feel that an atypical public outreach and engagement process will provide extended benefit in the short and long term for the GRP project and the health of the engaged communities. While this may be “painful” as a concept, there is enough confusion, diversity, and baggage to unpack, that I would suggest we embrace and support strategies in which the diverse communities own: not only this project as users, but develop and own their community engagement process as well.

An example of pattern responses to interview questions:

*Do you know about the GRP?* (For the most part – people were unaware, or confused with other St. Paul Parks & Rec., or City initiatives.)

*What makes this area / community special?* Diversity/ Neighborhood feel/ Not Minneapolis/ Friendly people/ My family re-located here/ My heritage is of this area/ This has a community feel within a city.

*What are your feelings of safety & comfort?* I feel safe/ I am concerned about gang activity/ I walk anytime day or night and feel comfortable/ I didn’t use to lock my doors, but that has changed/ I am concerned about the economy and how that will increase crime

*What issues or concerns do you have about this area or community and/or the GRP?* I am concerned about the vacant homes in my community/ I don’t know what to expect with the GRP/ We need more activity for our youth/ How much will GRP cost?

*Do you access the river now?* I use the trails for biking/ I take my family to Harriet Island in the summer/I take my family to the park for picnic – it is an affordable thing to do/ I walk along the river front / I go fishing/ I go to concerts on Harriet Island/ I go boating

*What would enhance this experience?* More information about activities along the river/ more garbage receptacles/ more bathrooms/ More retail like restaurants or small retail/ Connections across the river by bike or boat/ A continuous promenade/ Agriculture space

*What would you like to see change about your experience in St. Paul and/or the River?* I would like to see the homes in my community better taken care of/ I would like to see less garbage along the River

*What would you like to see remain the same about your experience in St. Paul and/or the River?* I would like to see the community feel remain/ I want the bike trails to remain/ I don’t want the River Front to get too built up

*What does “Sustainability” mean to you?* Being able to take care of my family/ Sustaining my life style/ Taking care of my community/ People helping each other/ Growing food

Contact:

Prepared by: Laura Curry, Mithun, 2010





# GREAT RIVER PARK MASTER PLAN

[Home](#)[Updates](#)[About](#)[Gallery](#)[Team](#)[Contact](#)[Comments](#)

Project Updates

more natural

more urban

more connected



TRAILS CONNECT DIVERSE AREAS ALONG THE RIVER.

### Overview



### An effort years in the making

"The Mississippi River reaches beyond any one neighborhood. It brings together Saint Paul's rich history and exciting future and symbolizes a united city. We invite you to join us in

### Explore the River



### Team

The Great River Project planning and design team, led by Saint Paul Parks and Recreation Department, with a consulting team led by Wenk Associates and Hoisington Koegler

### Share Your Views



### Contact

We invite you to participate in the process of creating the master plan for the Great River Project in and around Saint Paul. You can express yourself on our Public Comments





GREAT RIVER PARK

MASTER PLAN

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Natural Environment



17

Natural environment

Nature and the natural environment figure prominently in the planning for The Great River Project. We welcome your input as we move forward. Just fill in the Leave a Reply form below. Thank you for your interest in the project. Return to the blog to see what [other topics](#) you can comment on.

17 Responses

Donna M. Bremer says:

November 8, 2010 at 6:06 pm



I would just like to comment on the sandstone caves. I know people fear them and want them closed for good, but with the right care they could be a wonderful learning tool for future (and present) generations. I know they are not all salvageable, nor should they be, but a few of the easily accessed and better preserved caves would be a wonderful addition to the park. They are part of the growth along the river, they are part of the local history, and they have been here for 150 years or more. It would be a shame to loose all of the original caves because of fear. If fear is the driving force, then don't we fear that someone will wander into the River? A National Park should honor the history, it's resources, and help us learn about the natural elements that form this area. Wouldn't it be wonderful on a hot summer day to wander into a 52 degree cave to cool off, or in the middle of winter when you are snow shoeing or cross country skiing to enter a cave to warm your face for a few minutes? I would like to hear some discussion on this.

Reply

Craig says:

December 16, 2010 at 11:17 am



Thanks for your comment Donna. We have also heard from others that the caves are a unique geographic and cultural resource in Saint Paul. Aside from what we have heard about their danger, they have a unique place in history - native american and early european settler shelters, storage of foods, making of beer and cheese, etc. The concepts we are exploring include ways of allowing people to experience these cultural resources.

Reply

Christel Paulis says:

November 3, 2010 at 11:35 pm



Hello, please inform us when we could see a follow up!

Reply

Amy Garcia says:

October 27, 2010 at 12:37 pm



Restoring and enhancing the natural environment are a must. As our understanding of the river as resource change, so should our natural environment. Older industrial buildings and areas are new opportunities for natural resources (rain gardens, wildlife refuges, not condos!) The intrinsic benefits may not be readily felt, but will become more and more important with climate change and population growth in the Metro area.

Reply

Andrew Hine says:

September 27, 2010 at 2:54 pm



Here are some photos of Pickerel Lake in winter. Grit's friend brought snowshoes this day, which would be great to have available at City House, e.g.  
<http://picasaweb.google.com/amhine2/PickerelLakeLilydale#>

Reply

jimmy hosta says:

September 2, 2010 at 9:08 am



Would love to see DNR, Ramsey County, and National Park Service have a more active day-to-day presence in terms of managing the eco-systems within our Great River Park area of interest. There just isn't enough \$\$\$ at the local level to properly manage the high value resources and knock those invasives species back.

Would love to see Island Station become mixed use public/private hub for entertainment, eco-education, and a tourism day trip jumping-point. Make it gorund zero for demonstrating a can-do partnership of agencies & private sector.

DNR Fish Hatchery near pig's eye could become a multi-jurisdictional central maintenance facility for Fed, State, County & Local enviro and eco-maintenance staff. Forestry, Aquatic, invasiv species control, etc. Limits the footprint of having several maintenance hubs for each agency.

Rmasey County is looking to upgrade Battle Creek as winter ski destination over next 10 years...where are they at with signing on to a joint powers eco-mgmt strategy? Seems to me we would all get more bang for our buck if there was a pact that helps each govt partner focus on what they do best, rather than saying "i only work in my Park area" and "you only manage in your trail corridor".

DNR might be our conservation, law enforcement, water quality go-to.

Maybe Ramsey County could be the primary agency for eco-frinedly outdoor recreation mgmt planning in the ENTIRE river corridor not just Battle Creek?

National Parks Service could be the #1 agency for natural history & eco-education?

City could focus on removing invasives and planting natives?

Let's not worry so much about Park Boundaries, but focus more on maximizing outcomes for the taxpayer. Besides, mother nature really doesn't subscribe to these boundaries anyhow.

Reply

lyncvb says:

August 18, 2010 at 2:44 pm



GSMrAH [ulvrbukxdnt](http://vxhopeajtw.com/), [url=http://vxhopeajtw.com/]vxhopeajtw[/uri], [link=http://trohlgonufvc.com/]trohlgonufvc[/link], <http://fjsziikxdieb.com/>

Reply

Kent Petterson says:

August 18, 2010 at 1:39 pm



Preserving the river corridor as a natural area should be a given for the process. Development of river edge amenities should be minimal points of contact with the river. If anyone needs a good rational as to why the corridor should be preserved, a good read would be Bringing Nature Home by Douglas Tallamy, Timber Press 2007.

Reply

peter dodge says:

August 17, 2010 at 8:38 pm



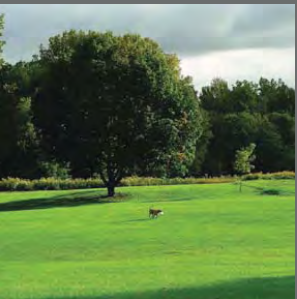
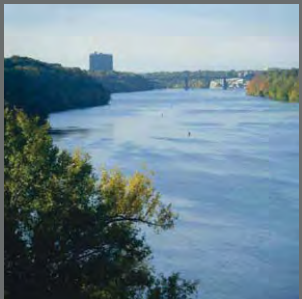
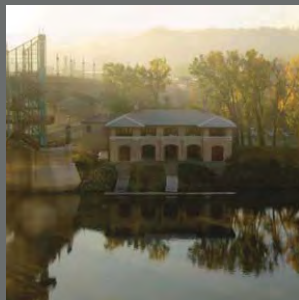
A70



August 17, 2010

# The River and You

- Do you use the river now? How do you use it?
- Where are your special places along the river?
- What role does the river play in defining St. Paul's personality and culture?
- Do you have a favorite memory that you would like to share?



# Tell us what you think

Please write down your thoughts on a post-it note and stick it in the white space below.

**SAINT PAUL IS PASSIONATE ABOUT THIS RIVER**

- > I walk, run and bike along the river. I look at it from my rooftop patio. Special places include Raspberry Island and Lilydale. My husband's ashes went down river last year and are now circling the globe. I would like to kayak on the river but need access and a place to store my boat.
- > There is so much new, beautiful improvement already. Thank you! Keep it up. I bicycle and walk a lot on the river trails. I'd really love to see Kellogg Mall Park improved (mainly safety) and utilized more for downtown music fests, etc. Thank you!
- > 1. Walking, biking, bird watching, coyote sighting. 2. Fountain Cave--origin of St. Paul 3. River = life 4. Night barges in the mist!
- > Seeing Kenny G concert 24 years ago at Harriet Island "in the mud". What a nice place we have now!
- > My family and I enjoy playing soccer, frisbee, walking and biking at Indian Mounds Park, Harriet Island and Raspberry Island
- > I row in the river gorge--also coach. I am on the river somedays 4-6 hours. It's wonderful.
- > I planted pine trees in Crosby Park in the 60s
- > Live on the river and love it! Use the bike trails and parks. It's a great place to live!
- > I love sitting on the other side of the river at Upper Landing and watching the river.
- > We boat on the river
- > Water flows and the world continues
- > I cruise the river year after year thousands of miles.
- > Live on river--kayak, bird, relax, etc.
- > The river is food for my soul.
- > Kayaked on river--saw site--bought two years later
- > The river is peaceful and wonderful for boating
- > Everything is wonderful
  - > Boat, fish, bike, walk/walk dog, run
  - > I bike the trails all the time.
  - > Everything
  - > Pike Island

**SEEK OUT PARTNERSHIPS**

- > Partner with the National Park Service--the Mississippi here is a national park!
- > Focus on implementation recommendations. Focus on working with partners. (generally)
- > Partnership with the Arboretum for planned spaces and programming in Mounds Park

**RIVER CORRIDOR HAS TO FEEL AND BE SAFE**

- > Better park security and safety in parking lots
- > More often (frequent) police/park security patrol from 8pm -2am; around Upper Landing Park; groups of young men, homeless can be intimidating
- > Clean up river banks/more patrols
- > Mounds Park on July 5th is always a mess. More trash cans. Security needed.
- > Police in Como Park -- too much vandalism

**CAVES SHOULD BE TAKEN BETTER ADVANTAGE OF**

- > Recover Fountain Cave
- > Where do the bluff concerns fit in the plan?
- > Can the (caveins)? be a path from the city to the river?

**BRING PERMACULTURE/ URBAN AG INTO THE VISION**

- > Community gardens bring neighbors together
- > Plant fruit bearing trees and shrubs
- > vegetable gardens are important for connecting with nature
- > Community gardens in empty lots and fruit trees planted in parks
- > Urban ag on the west side flats
- > Plant edible trees and shrubs
- > Urban agriculture on flats

**REDUCE NOISE AND LIGHT POLLUTION**

- > Reduce noise from district energy.
- > Make all lights 'dark sky' friendly **Yes!!**
- > Make the energy plant less noisy
- > Less noise from district energy
- > Rebulb old lights near parks, less light pollution.

**IS TOURISM IMPORTANT?**

- > Youth/Elder Hostel in jail
- > Do we make river access for the city residents or for the tourists?
- > Who do we make the open space for? Tourists? Residents?
- > Do we make economic decisions based on potential tourism or for residential use?

**CULTURE AND INTERPRETATION ARE IMPORTANT TO THE RIVER**

- > Do art installations incorporating the river (big and small)
- > We can include the American Indian Heritage...
- > Powerplant > Headwaters NPS/DNR Trail Center
- > Put interpretive signs along Cherokee Ave to tell people what they are seeing across the river. and in Mounds park too!
- > Public art and creative experiences--things that surprise and delight and stretch our imaginations
- > Keep old Lilydale landmarks like Brickyard Stack
- > National Park/DNR service need to be on river at Island Plant -HSP-

**BLUE HERON IS AN APT SYMBOL FOR THE GREAT RIVER PARK**

- > Make a great bird--the great blue heron--a symbol for St. Paul's great river

**DOG PARKS**

- > Please respect the rules about dogs and leashes
- > Need a fenced dog park in greenspace on Warner Road by the river!
- > Dog-drinking fountains!!
- > Yes! Dog parks, small or large, offer a growing downtown population a place to connect with nature and each other.



August 17, 2010

# Parks and Open Space

- *Is the river corridor a suitable place for active recreation?*
- *What types of leisure activities are appropriate in the river corridor?*



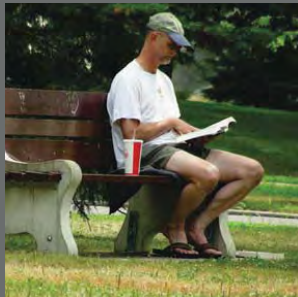
Trails



Winter Sports



Solitude



Relaxation



Events



Adventure



Sports



Fishing



Boating

# Tell us what you think

Please write down your thoughts on a post-it note and stick it in the white space below.

## **DON'T OVERDESIGN – LET NATURE PREDOMINATE**

- > Keep open spaces open (less development)
- > Don't over-design so that parks and amenities become more of a focus than the 'natural' river. Beware of fancy fountains
- > Do not sacrifice "old growth" trees for airport zoning concern
- > Restore the west part of the heron rookery--replant trees that were removed.
- > Get rid of the parking lot below the bluff between Wabasha and Robert Street bridges--naturalize it!
- > Restore the riparian zone on Harriet Island. The river is going to reclaim it every few springs so include that in the plan. More rain gardens, flood plain gardens. ie. natural flood plain.
- > We like the 'wild' parks like Lilydale. We have plenty of overdesigned parks. Preserve the natural character.
- > Keep in natural but neat. Control weeds. More native flowers and plants.
- > Have some pockets of more intense development (retail, bathrooms, industry) separated by mostly wild stretches.
- > Keep it natural and wild.
- > Less is more at Lilydale Park!

## **TRAILS, TRAILS, TRAILS – WE LOVE THEM**

- > Like bike trails from gateway to greenway
- > Connect to suburbs. ie. Maplewood, Falcon Heights
- > Lilydale south bank is "really cool, beautiful ride" -- see river and woods. Can't believe you're in the city, feels safe. Would be fun to bike by airport.
- > Mileage markers at Lower Landing Park heading east for runners and walkers
- > Connect Vento Park to Sam Morgan Trail. Extend Sam Morgan Trail downstream.
- > ??Status of Midtown Greenway -- Is this a rail with trail or pending abandonment?
- > 2. Trails--especially west side all the way to Hastings--co/connection to Macalaster College Scientific Area and Pine Bend Bluffs Scenic and Natural Area
- > Sign to ID Hidden Falls (and set of trails) and also trail maps to indicate where trails go. Put sign inside park.
- > Eagerly awaiting continuous bike trail from St. Paul to Hastings through Inver Grove etc.
- > Check for new Lilydale plans for trails
- > Connect the trails more!

## **miscellaneous comments**

- > Why do they shut down the city dock to the boaters during celebrations?
- > How can we trust a process when at the start of the process you run out of post-it notes!
- > Please post past documents of studies or [links]? at website
- > So many studies--put some money into projects. We know what has to be done--too many duplicate studies.
- > How can one get on the final plan committee?
- > What are "green streets"? esp. in the Vicinity of Afton Road

## **RIVERFRONT PARKS ARE GREAT BUT ACCESSING THEM IS CHALLENGING**

- > Pedestrian crossing? (ferry/skyway)
- > Access to river at barge channel (up river side)
- > Warner Road is a barrier, blocks convenient access to riverfront
- > Figure out a way to avoid getting stuck at train crossings along river (can be very long trains)
- > Combine transit, bike/ped, water access along river
- > Access Access Access. Parts of the river we can't see or touch even though we are on top of it. Highway between us. Open Crosby at both ends. Beautiful underused park. Improve access to, along and across. Need options when confronting wildlife. Bike to canoe loops between parks along string of pearls. Nice Ride etc. Island Station!!
- > Think at access for those with disabilities holistically
- > Please make much more accessible by bike, walking
- > More accessibility for disabled
- > People with disabilities need to be on the water also
- > Growing park but no parking
- > So far so good, but let's get more parking space!
- > Public transit to (or close to) key river destinations!
- > Access to river at barge channel up river side
- > "Bring water back to St. Paul"

## **CANOEING & KAYAKING**

- > Canoe launch at Pig's Eye lake
- > Create kayak slalom area in river.
- > Downtown residents (and likely others) need boat racks.
- > Kayak/canoe landings with signs to restaurants. (especially on city side of river)
- > Place on river to rent kayaks, canoes, bikes -- non-motorized recreation
- > Urban Boatbuilders would like a safe (to launch boats) spot on the water
- > Yes-suitable! son canoed the length. I bike south bank (Lilydale) and grand round; Pig's Eye less because separated by highway and farther from home.
- > Access & Connections: Please support increased public water access development for the Urban Wilderness Canoe Adventures (UWCA). This is literally the biggest paddling outreach/youth engagement effort in the country and will expose 10,000 youth/year to the river with experience and education. Thanks! Consider the old NSP Building and 11-acres off of Shepard and Randolph. Offer canoe and kayaking in this location
- > Promote non-motorized use of the river--like city lake in Austin, TX. canoe, kayak, rowboat rental
- > Paddler friendly canoe landings for WWCA restrooms at canoe/kayak launch points
- > Yes! rowing canoeing, non-motorized paddling
- > Need canoeing/kayaking access close to Harriet Island
- > 1. Yes! Rinks by Island Station, canoes, swim, fish, explore!
- > Canoe rentals/outfitter from U of M to Smith Bridge
- > Kayak storage at Lilydale
- > Kayaking and canoeing
- > Canoe launch!

## **BIRDING**

- > Bird sanctuary
- > Best place for bird watching is Crosby Farm Park.
- > Bird Sanctuary for bird watchers

## **FISHING**

- > Off river bay for fishing
- > Possibly a couple fishing piers/docks on river
- > Additional fishing access points. Boat boat landings and shore fishing opportunities.
- > Bait and tackle shops near/on river
- > Fishing piers for kids on Pickerel!

## **PROVIDE MORE**

### **RIVER-ORIENTED REC PROGRAMMING & FACILITIES**

#### **TRAILS**

- > Benches
- > Walkers need more porta-potties along the way. They are spaced okay for bikers, but not walkers.
- > Non-motorized use of river (via the MRT)

#### **CAMPING**

- > Camping along Pig's Eye and Lilydale
- > Urban campsites, paddle-in, cart-in
- > Backpacking/cart in camping. Love the bike trails. Not too much development--it is peaceful now. Need accessible canoeing/kayaking
- > group camping



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# Economic Vitality

- Are there areas in the river corridor where new homes, businesses and /or industry should be built? If so, where? And why?
- Are there certain locations that are better for private development?



Festivals



Industrial



Markets



Food



Entertainment



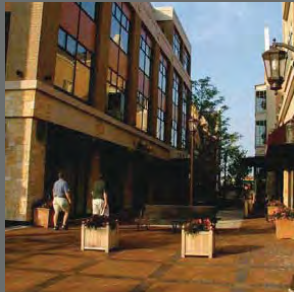
River Tourism



Residential



Businesses



Mixed use

# Tell us what you think

Please write down your thoughts on a post-it note and stick it in the white space below.

**BOAT BUILDERS WOULD BE GREAT ADDITION TO RIVER CORRIDOR**

- > A combination nature center, boating center/river recreation and Urban Boatbuilders in one location in a slow/safe spot?
- > Youth boatshop on the waterfront. Urban Boatbuilders
- > Urban Boatbuilders and Great River Park = great match!
- > urban boat builders

**MORE DEVELOPMENT**

- > If you build on the river use architecture that is compatible with natural environment, no big high rise, no box apartments
- > Any new construction required to have green components meet high energy efficiency standards
- > I'd like to see more mixed use/ residential property that supports independent or local businesses and adds a cultural aspect
- > Randolph Gateway - Morgan Trail, Island Station, Fire Station, Clinic, West 7th
- > Continue to build out west side flats master plan, residential
- > More retail on river next to Upper Landing, under High Bridge
- > Develop (locally owned) private owner (not chain stores) stores and restaurants with economic incentives along the riverfront
- > Convert Red Rock to river oriented residential
- > 1. More development opportunities along river trail through South St. Paul and Inver Grove Heights to Hastings
- > Dog park to activate Warner Road area would spin off retail
- > Communities seize control of vacant/dilapidated lots through eminent domain and develop as they see fit according to needs of neighborhood.
- > 7th is truly a multi-modal corridor. It needs businesses to support such - bike shops, underground service garage for limos, bar shuttles, etc.
- > Leverage NPS (Island Station); Historic Tax Credits for Schmidt; Transportation Corridor-\$ green taxis
- > Need more pedestrian crossings (controlling lights) on Shepard Rd. Need more commercial establishments within 1 block of river to go with that access.
- > The buildings should look better than Upper Landing.
- > Boat Livery
- > More boat landings.

**CREATE MORE RIVERFRONT DINING OPTIONS**

- > Any chance for a small market nearby housing at Upper Landing?
- > Cafe, ice cream restaurant near Harriet Island
- > More entertainment in parks and plus it draws more attention to the park!
- > Place for boats to park to access food/drink establishments in downtown.
- > We need a few nice restaurants on the river. **Yes!!**
- > Access from West 7th to river! Possible Fountain Cave connection--Pig's Eye Tavern Tours. Island Station a new 'Sea Salt' (Minnehaha)
- > Get something like Sea Salt going in the Boat Club--with beer/wine/food for concerts at the Schubert Club Stage
- > More food/coffee/drink options that coexist with the natural surroundings
- > I just love the Showboat
- > Good and really good restaurants
- > Food available on the river
- > Restaurants, popcorn, ice cream, along the river front
- > Powerplant would be a great restaurant with docks for boats
- > Is it possible to have a cafe on Harriet Island?
- > Food on piers at boat landing
- > More food and nightlife.

**BARGES AND INDUSTRY ARE PART OF RIVER HERITAGE AND ATTRACTION**

- > Let's not forget this is a working river. Barges belong.

**RECREATION & ENTERTAINMENT**

- > More music--band shell in Mounds Park
- > Biking, bird watching, fishing, hiking, riverboat access, leisure space
- > Place to rent boats--maybe a shuttle too? (like Taylor's Falls)
- > Amphitheater for outdoor concerts like in Chicago (like Weisman Art Museum design)
- > Opportunities to 'elevate' and get extended views eg. Flour Tower at Mill City Museum
- > Be sure to include a link to the river at Victoria Park. How about a satellite outfitter?
- > The River Stage at the Irish Fair was spectacular! Make this a permanent venue for music, etc. along the river. Start zip-line tours to explore the riverfront
- > Get diverse groups of youth into the river. All kids should learn to swim!
- > Evening cruise--non dinner--just cruising
- > How about a "City Museum" (a la St. Louis' Museum) in the head house/sac house?
- > Concert Hall--something like Grant Park in Chicago with weekend lawn concerts free to the public
- > Need waterfalls and other interactive art. Things to do that are free (like Como Park)
- > Ice skating, soccer fields
- > Cross-country ski trails along the river!
- > Have a zip line from downtown to Harriet Isle
- > Outdoor yoga. **Like this**
- > German festival!
- > Cross country skiing/snow shoeing trails
- > Skating and warming house
- > Rowing for everyone!

**TRANSITION INDUSTRY AND AIRPORT AWAY FROM RIVER**

- > Clean up of industrial yards south of Holman - on west side
- > Phase out industrial from Pig's Eye Lake area
- > Convert airport land to light industry/green focus
- > Shrink the airport; limit it to props and historical events, no jets.
- > Eliminate staging of barges between Robert St bridge and High bridge
- > Away from River, industry not in view or pollute
- > Remove airport at Holman Field
- > I don't think beautiful land should go to industrial development
- > Remove industrial and junk yards
- > Airport zoning could remove many larger, older trees--neighborhoods say no.
- > Remove airport from downtown.
- > River should not be used as a junk yard -- scrap metal

**LESS DEVELOPMENT**

- > Not all parks need to be developed.
- > I like access but limited development at river edge
- > Keep the river corridor public and open space like parks. Keep residential areas out of the floodplain.
- > Wall = Upper Landing ≠ River
- > Harriet Island, less regional entertainment venue, more neighborhood park
- > Tear down the "City House"
- > West half of Ford Site as park



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# Access and Connections

- Can you easily and safely get to the river? If not, why?
- Do you drive, bike, or walk there?
- Do you currently use the river trails? If not, why?



Transit



Bike Transit Connection



Water Taxi



Bridges Over Barriers



Urban Trails



Pedestrian Crossings



Leisure Trails



Green Streets



Park Trails

# Tell us what you think

Please write down your thoughts on a post-it note and stick it in the white space below.

**THIS IS THE TOP ISSUE**

- > Transportation hub of downtown=crossroads. That's why the city is where it is.
- > Drive and walk--love it!
- > 1. Yes--in fall, winter and spring. 2. I walk or bike there. 3. Yes many times per week.
- > River access has improved over the years
- > My family regularly bikes and walks along the river (Harriet Island to Fort Snelling and back)
- > 7th key corridor for multi-modes originally Fort to Landing now Airport to downtown and excel energy center

**BLUFF TOPS TO RIVERFRONT PEDESTRIAN CONNECTIONS ARE LACKING**

- > Need to show existing trail across north side of Mendota Bridge
- > Green stair replacement on west side to connect bluffs to flats
- > Absence of the "Green Stairs" is a major negative access issue.
- > Please replace the green stairs! We used it and miss it!
- > Wabasha/Channel "Green" stairs and Ohio St. Stairs on the west side have been lost and should be replaced
- > Replace green stairs!
- > Preserve and develop the system of pedestrian stairs
- > Give serious attention to replacing system/network of stairs on bluffs -- critical part of transportation system
- > Stairs on the Shepard Road side up to the Wabasha bridge--ideally an elevator or spiral ramp for wheelchairs or bikes. Another idea--check out elevator in Salvador, Brazil for idea for ped bridge from lowertown to bluffs.
- > Access (bike and ped) from Smith to riverfront
- > Open up historic views from Cherokee Park to reconnect people with the river
- > Ped connections from West side bluffs needs emphasis--great park to look at from bluff but impossible to walk to

**WATER TAXIS WOULD BE A GREAT ADDITION**

- > Water Taxis would be a wonderful idea!
- > Where is the water taxi?
- > Water taxis similar to what Chicago has done. ie. Harriet Island to Upper Landing
- > Water taxi
- > Water Taxis--yay!! also better bike trail signage as to what's ahead

**TRAIL ACCESS ACROSS HWY 61 TO PIGS EYE LAKE IS NEEDED**

- > Trail and bridges from Henry Park to Pig's Eye Lake
- > Physical access to Pig's Eye: trailhead at reserve street, then looped trails north of Pig's Eye with trail west side of Hwy 61 and bridge over 61 v. staircase south of Mounds Blvd to Warner-- closed (exit pavilion and go south) to old fish hatchery
- > Pig's Eye needs a trail out of Battle Creek to bring bikers into Pig's Eye
- > Pig's Eye Lake is a special place that should be accessible.
- > Access from Henry Park out Pig's Eye over Hwy 61--also boardwalk along East side of Lake
- > Barge repair to move SE of airport in process of rebuilding Lafayette Bridge; Access to river off Barge Channel Road? (direct river access from West side neighborhoods to East)
- > Trail around Holman Field
- > Trail at river's edge at Holman Field
- > Access to Pig's Eye Lake from South

**CONNECTIONS TO RIVER CORRIDOR FROM DOWNTOWN & NEIGHBORHOODS ARE LACKING**

- > Crosswalks at both Jackson and Selby
- > Needs a crosswalk to Harriet Island main entrance (Better connectivity between Ohio & Harriet Island)
- > Create visitor boat parking (short term) and transit shuttle running passengers up to downtown
- > Increase access between Science Museum and river
- > How about a ferry to cross river at Upper Landing
- > Cable tramway from downtown to Harriet Island
- > Standing in Lowertown, you can't even tell there's a river a few blocks away...!
- > Pedestrian bridge from Science Museum or new condos to Harriet Island (like Grant Park in Chicago)
- > Bike trails/raised crossing from Upper Landing to Harriet Island
- > Access from Kellogg is too restricted. It would be great to have more STs, such as Wall St, open to river
- > Walking/biking connections to WS neighborhood
- > Better connections to the river through pedestrian bridges across Shepard and Warner Roads. Today we have a few crosswalks from Lowertown to river.
- > Better trails are needed from P & Y Club in Lilydale to Harriet Island
- > Enhance trail access on Warner from Bruce Vento
- > Desire for trail heading SE off Warner Rd closer to river
- > Possibly move RR tracks back into first arch north on Robert Street Bridge
- > Lower town/Broadway connection directly to river -- visual and physical
- > Realign Sibley to east and RR tracks for better visual access and physical access

**SAFE PEDESTRIAN & BIKE CONNECTIONS ARE NEEDED**

- > Check bike crash stats -- especially on Ohio
- > Slow cars on Humbolt/Wabasha from George down hill, wide enough for bikes but speeds at crossing are tough
- > Lethal bike trail 'connections' on Warner Road at trainyards! (Marked now as existing trail.)
- > Pay attention to bike access points. eg. bike lane access from Jackson to Warner/Shepherd
- > Link bike trail from Cherokee Park to the river
- > Bike trails need connections.
- > Bikes should stay on the trails that are built for them -- it is safer.
- > Commuter traffic north of Lexington toward Pierce Butler Road area makes biking tough
- > Pedestrian walks on Lake and Franklin Street bridges need to be safer for children
- > Improve the walking aesthetics of the Robert Street bridge--feels unsafe with no railings between traffic and pedestrians
- > A bridge crossing (foot, car?) between 494 and downtown
- > We need a bridge to connect with Saint Paul to lower afton area. Also will be nice to see biking trail improvement down the Brick Factory.
- > I run along the river 3-5x per week. We need more ped xings on Shepard Rd
- > Need either Lexington and/or Snelling to be improved to go north/south across railroad tracks (traffic calming)
- > Connections! to and from river
- > Access from future LRT stops

**NEED BETTER WAYFINDING**

- > Signage for all trails like the Grand Rounds in Minneapolis
- > More welcoming entry into trailhead/parking areas...so that 'journey' is also an experience. ie. going to Crosby feels deserted at street level.
- > Signage to bring attention to the natural features of the park
- > Access to downtown from river--signage needed--visitors do not know where to go.
- > Covington Inn access and signs
- > Gateway signage for Mounds Park (entrances)



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Nature and Environment

- What are the most critical natural areas along the river?
- What is most important about the river's natural qualities?



Aquatic Habitat



Outdoor Education



Scenic Resources



River Habitat



Wetland Habitat



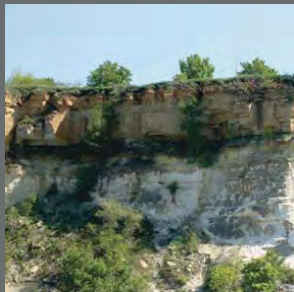
Upland Habitat



Wildlife



Improve Storm Runoff



Bluffs

Tell us what you think

Please write down your thoughts on a post-it note and stick it in the white space below.

WILDLIFE AND NATURE  
CONTRIBUTE TO OUR QUALITY OF LIFE

- > the pelicans are great and the bluffs!
- > Aquatic habitat: Keep the Mississippi the great river nature intends it to be!
- > Pig's Eye--great habitat potential and recreation needs rehab
- > Keep Lilydale wild/natural
- > Use native vegetation for replanting and restoration--eliminate invasive species.
- > Focus on native plantings even in landscaped areas.
- > Keep Lilydale Park wild for a more natural experience
- > How much development will impair the corridor's value to migratory and nesting birds? The River corridor is a nationally important migratory flyway and has critically important breeding and stop over sites. We need to look at the river corridor as a whole and the needs of hundreds of species of birds as we proceed. -St. Paul Audubon Society
- > Lilydale Park: please keep it simple, keep it natural, keep it wild, keep it green, keep it quiet (barking dogs are ok :))
- > Lilydale Park, Bruce Vento Nature Sanctuary, Indian Mounds Park--need to maintain a natural riparian zone
- > Crosby Park and Fort Snelling State Park
- > Pine Bend Bluffs now part of a designated scenic and natural area (in Inver Grove Heights)
- > Daylight the streams that have been buried
- > Maintain floodplain ecosystems-Crosby Park, Pickerel Lake
- > Plant fruit and nut trees/bushes in public spaces. eg. hazelnut, chokecherries. Use native plantings
- > Plant native fruit trees (Serviceberry) when ash come down
- > Do not cut trees -- protect eagle, heron nesting
- > Bruce Vento Nature Sanctuary
- > Dayton's Bluff and Mounds Park
- > Expand Pike Island or duplicate
- > natural ....
- > Plant fruit trees in parklands

PRESERVE VISTAS

- > Remove airport at Holman Field
- > Do not remove trees for airport concerns
- > What are the plans for the very large area where the coal plant was torn down?
- > Hidden Falls Park unique because has direct access to river. Don't put up a barrier! I like picnicking there, watching boats and birds.
- > The majestic view from Mounds Park needs to be maintained.
- > Return airport to wetland and open space
- > Restore airport property as open space
- > Cherokee Regional Park viewing points are great, so much of the bluff is parkland, it's great.
- > Viewing scope at the Ford Parkway overlook.
- > Obscured view in Mounds Park is a waste!

LINK PEOPLE TO NATURE

- > More access
- > Trail bridge from Henry Park to Pig's Eye Lake
- > Lilydale--lake and old brick yard area (possible interpretive opportunities)
- > Boat docking near housing on the river
- > Water Taxi -- Upper Landing to Harriet Island
- > Establish an urban enviro learning center (ELC) designed to engage students and public to think about integrated, sustainable communities with the river as its epicenter.
- > Bruce Vento Nature Sanctuary ties a neighborhood to the river and to the underground streams the flow under it.
- > Restore/preserve the cave entrances below Mounds Park. --connect trails on the east side to the river
- > St. Paul was first settled by "Pig's Eye" who served whiskey to soldiers down river from Fort Snelling near fountain cave. (today Shepard/Randolf) I think we should re-create this birthplace of St. Paul -- complete with tours of fountain cave (which has been blocked off when Shepard Road was built) It is also important we connect the west 7th neighborhood to the river. Shepard Road is a huge problem for this neighborhood. Bridges? Tunnels? Connect!
- > 2 more votes for kayak storage in Lilydale Park (near Pickerel maybe?)
- > Parkway and Trails to Pig's Eye Lake
- > Why can't we dock a boat across from Harriet Island Pavilion?
- > Have boat transportation across river at Harriet Island Pavilion and Upper Landing Park
- > Bridge from Upper Landing to Harriet Island
- > What happened to water taxi idea?
- > Promote nearby cave tours (Wabasha Street caves)
- > xc-skiing
- > 24 hour boat launch
- > River Services location -- future uses
- > Ice skating!

RIVER CORRIDOR NEEDS A HIGHER STANDARD OF CARE/ MAINTENANCE

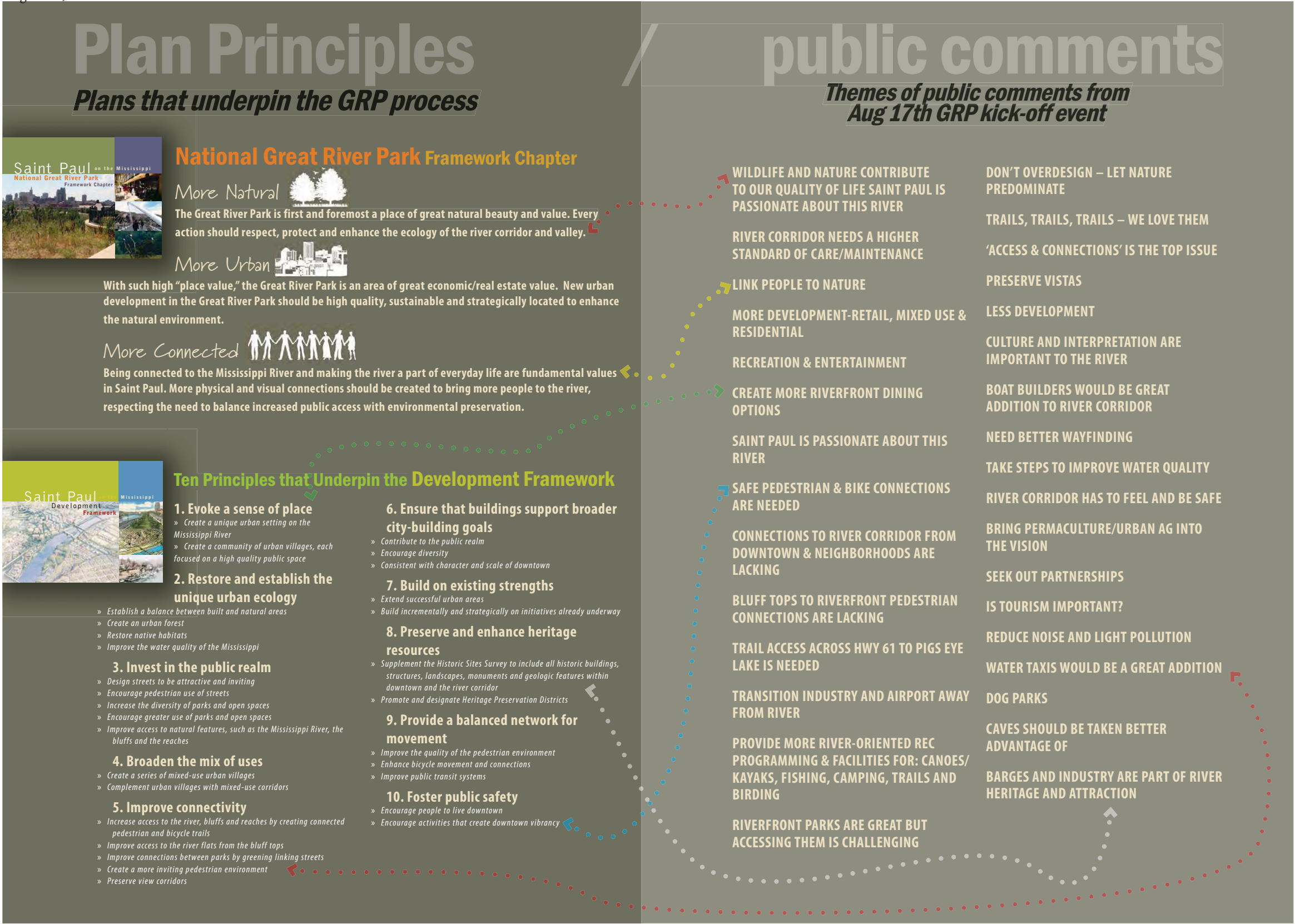
- > Bruce Vento Trail--needs weeding many invasive plants
- > More clean up days along the river - St. Paul
- > Work with Minneapolis to have a restoration plan for the Mississippi Gorge
- > St. Paul Landing Park needs improvement--too much pavement, not enough access.
- > Are we doing a good enough job with clean-green events along the river?
- > Trail south and east of downtown needs attention--clean up amenities
- > Parks need to be better maintained. All of the weeds and litter suggest no one cares.
- > In the winter, the path along the river is not kept clean all the way along--keep it clean like sidewalks across the Robert St bridge to encourage more winter use!
- > Very frustrated and sad when I see broken bottles and vandalism along the bike path
- > Swede Hollow has invasive growth -- needs attention
- > Mounds Park is an under-funded asset. Restore and preserve it.
- > Don't ignore Indian Mounds Park -- it's a looked over gem.
- > Plantings needed on South St. Paul side of river
- > Relocate wood chippers out of Regional park
- > Clean river bank after spring flood!!!
- > Maintain areas for wildlife and birds, native plantings
- > The paths at Crosby Park and Hidden Falls are falling apart
- > Do something about the canadian goose population.
- > Provide maintenance dredging in Yacht Club harbor
- > More park clean-up events

TAKE STEPS TO IMPROVE WATER QUALITY

- > Stop street and lawn runoff into river
- > Improve Water Quality
- > The river needs to be dredged so we can appreciate the qualities
- > Clean water runoff from Mendota Heights (Pickerel Lake)
- > Clean up the Minnesota River so the sediment and nutrients aren't brought into the Mississippi River!
- > We need clean water!
- > More rain gardens/rain barrels
- > Clean up the water!



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October 14, 2010 - Design Forum #1

\* RESTAURANTS for pre/post recreation  
Riverboat restaurants, airport, terrace on 1st National Bank Building, Upper Landing, Kellogg Park, 445 Smith Ave, Island Station, Crosby Park, Marina, Bluff top overlooking skyline, Rail Station/Depot, Old "No Wake Cafe"

Protect Bluffs  
Daylight streams  
Restore Coulee -> Get historic streams out of culverts.

Both for West Side Flats

Greenway along Bluff

Important area for people: confluence-contemplation

Food and beverage by the river: -coffee -wine/beer -breakfast

SAFETY

Bike/Ped Connection to Dakota County Parks

Framework Vision - Parks and Natural Areas  
Primary Attributes

- 1 Create park and open space improvements linking Mounts Park to Battle Creek and Bruce Vento Park
- 2 Add Fitzgerald and Holman Basin parks
- 3 Open views and maintain current level of physical access at Gorge
- 4 Implement Lilydale Master Plan
  - Mendota Heights >> stormwater treatment
  - Reconsider site of dog park
  - Reconsider size of picnic shelter area

Alternative Vision - Parks  
Primary Attributes

- 1 Extend Battle Creek Park to create open space along Highway 51 and "The Bluff"
- 2 Extend "green fingers" of river-oriented park space into industrial and mixed use areas when redevelopment occurs
- 3 Interweave expanded river-oriented recreation opportunities in Crosby Farm, Hidden Falls and Lilydale Parks
- 4 Cross-country skiing
- 5 Expand park space between Bruce Vento and Lower Town redevelopment areas
- 6 Swing bridge?

Alternative Vision - Natural Areas  
Primary Attributes

- 1 Significant reduction in vehicle access and use in Crosby Farm, and to a lesser degree, in Lilydale Parks
- 2 Creation of continuously linked habitat areas through West Side Flats, and along the Highway 51
- 3 Holwood Bluffs east of Hwy. 51
- 4 Accessibility
- 5 Daylighting of buried streams within the city to connect River and upland habitats
- 6 Collaborate with County to integrate planning for natural areas in Pigs Eye
- 7 Increase vehicle access to Lilydale Park
- 8 ATD will
- 9 Along 35E?

Circle Top 3 Attributes

Community Gathering Throughout  
Keep pushing for connectivity >> Eco Fingers

| Parks and Natural Resources                                                                                                          | Comments                                                                                                                                                 |
|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Is more park space adjacent to the downtown, and in East St. Paul important?<br><b>YES</b>                                           | <b>Quality vs. Quantity</b><br>Local or Regional Goal?                                                                                                   |
| Should better recreation access be provided in Pigs Eye?<br><b>YES</b>                                                               | <b>Balance natural vs. recreational</b><br>Passive recreation only--no motorized vehicles<br>Rookery Access not recreation?                              |
| How important, relative to habitat values and other natural qualities of the river, is recreation use and river access?              | <b>Balance</b><br>low impact in Critical Habitat Areas                                                                                                   |
| How important is it to expand, restore and connect wildlife habitat within the city, relative to recreational use and redevelopment? | <b>Very &gt; selected areas</b><br>combine with education<br>flyway                                                                                      |
| Is it important to restore original landscapes, especially if it means removing trees to restore oak savanna landscape?              | <b>Invasives Yes!</b><br>Quality?<br>Selective restoration                                                                                               |
| How important is recreational use of the Pigs Eye area, relative to wildlife habitat?                                                | <b>Visual access restored</b><br><b>Balance recreation with seasonality of habitat...restrict during breeding cycles</b><br>Keep recreation on the water |

Framework Vision - Access  
Primary Attributes

- 1 Add green streets linking neighborhoods and the river
- 2 Add Fort Snelling
- 3 Include regional trail links on both sides of the river including connection to the Grand Rounds and to Minneapolis and West Saint Paul and South Saint Paul regional systems
- 4 Better trail connections in Lilydale per master plan, complete esplanade at West Side and off street trail connecting to South Saint Paul

Alternative Vision - Expanded Recreation Connections  
Primary Attributes

- 1 Expansion of Greenstreet network to provide localized corridor access
- 2 Creation of multiple ramp access points over railroad and bluff barriers
- 3 Expansion of recreational small craft river access
- 4 Expanded river edge trail network, including the Gorge
- 5 Expanded vehicular access in Lilydale and Crosby Farm parks
- 6 Greatly expanded trail networks in the Pigs Eye/East Saint Paul Areas

Alternative Vision - Improved Natural Area Connections  
Primary Attributes

- 1 Vehicular access to existing and proposed Parks along the river will be limited to trailheads in several areas
- 2 Trail access will be limited/excluded in ecologically sensitive habitats

Circle Top 3 Attributes

TOP ISSUES:

- Accommodate kayak/canoes in safe manner (barges/boats/etc.)
- Noise and noxious fumes (boats/etc.)
- Emphasis on hiking, biking, non-polluting uses
- Broad gradation of access. Handicapped access.
- Sustainable long-term?
- Johnson Parkway
- Safety-eyes on the park

Framework Vision - Redevelopment  
Primary Attributes

- 1 Support mixed use development in several areas including the Ford plant, along Shepard Road, Lowertown, Island Station, Diamond products site, and the West Side Flats

Alternative Vision - River-Oriented Redevelopment  
Primary Attributes

- 1 Green street connections through redevelopment areas include stormwater treatment and enhanced pedestrian and bicycle access
- 2 Limits Lowertown redevelopment to allow expanded parks
- 3 "Villages"
- 4 Connections to working river
- 5 Temporary docks for boaters >> Downtown Restaurants
- 6 Overnight

Alternative Vision - Expanded River-Oriented Redevelopment  
Primary Attributes

- 1 Maximize the potential to create and implement a series of compact, mixed-use villages at key redevelopment sites (ie. Lowertown, West Side Flats, Harriet Island/District Del Sol, Island Station, ADM, Victoria Park, Shepard/Davern Gateway and Ford Plant) along the corridor, connected by a linear park and parkway system
- 2 Develop new streets, blocks and neighborhoods in the river corridor that continuously reinforce connections to the river and incorporate best management practices for sustainability
- 3 Sustain the economic resources of the working river
- 4 Expand and intensify river based industrial activity in current brownfield and river industry areas
- 5 Keep elevator open in science building until 11:00 to Shepard Road
- 6 Physical/visual connections to nature...with interpretation

Circle Top 3 Attributes

Redevelopment - only in downtown CBD

| Redevelopment                                                                                                                                                  | Comments                                                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Depends on location                                                                                                                                            | Don't expand barge traffic                                                                                                        |
| How important is economic development along the river corridor?<br>-a variety of uses<br>1 - not important                                                     | Complement and support cultural reliance and growth<br>River-oriented industry, intensity.<br>One supports the other.             |
| Both Yes and No                                                                                                                                                | watch building heights > not too tall                                                                                             |
| Is it important to maintain a "working river" within the river corridor?<br>1 - no vote                                                                        | Appropriate development downtown.<br>Balance recreation with economy<br>Yes-can also be considered a cultural/historic attraction |
| Can development/redevelopment be utilized to create better physical and visual access to the river?<br>Yes green streets/neighborhood connections              | Can't see the river from Shepard Road.<br>Yes- as projects are built.<br>Why do we allow the airport to prevent any river access? |
| Where are the most significant barriers to river access and what can be achieved to enhance river access through development?<br>Union Depot<br>Island Station | Pig's Eye Lake, Railways, Shepard Road<br>More visual connections too!<br>Bluffs Private property ownership                       |
| How can development achieve sustainability measures and enhance water quality along the corridor?<br>Require it!<br>STORMWATER                                 | Green streets<br>Shepard Road<br>Less concrete<br>Green jobs                                                                      |

Circle Top 3 Attributes

TOP ISSUES:

- Don't send stormwater directly to river
- How can homeowners address their stormwater connection to the river?
- Develop a cultural center/nature center
- Create public/private partnerships.
- River tourism
- Alternative energy
- Programming for education
- It needs to be available/affordable for everyone in the city.
- Make it possible for small businesses.
- Attract economic opportunities that protect the values of the river and create complementary partnerships.

**Great River Park**  
more natural • more urban • more connected

framework vision and alternative futures  
summary board  
october 11th, 2010

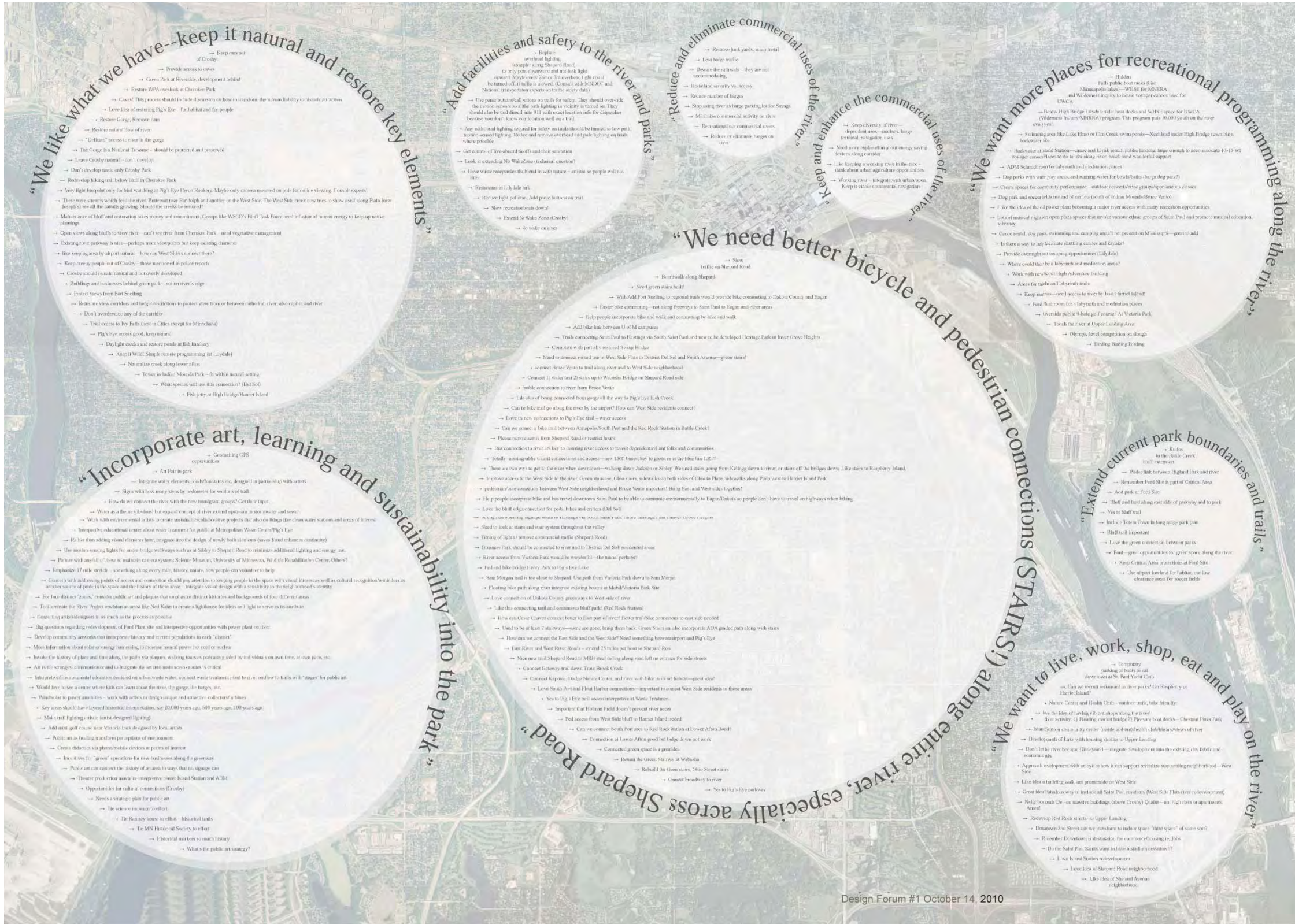
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## A.4 Public Comment Summary

# A P P E N D I X

October 14, 2010 - Design Forum #1



Source: City of Saint Paul (2005 Charrette Briefing Package and Generalized 2030 Future Land Use Plan). Metropolitan Council, National Park Service, Saint Paul Riverfront Corporation



October 25, 2010 - Design Forum #2

Park Program Menu:  
Potentially New Activities/Features

|                               | WOULD LIKE TO SEE IT ADDED SOMEWHERE | NOT SURE IT FITS IN THE GREAT RIVER PARK |
|-------------------------------|--------------------------------------|------------------------------------------|
| More/better natural habitat   | <input checked="" type="checkbox"/>  | <input type="checkbox"/>                 |
| Urban agriculture             | <input type="checkbox"/>             | <input checked="" type="checkbox"/>      |
| Dog park                      | <input checked="" type="checkbox"/>  | <input type="checkbox"/>                 |
| BMX training course           | <input type="checkbox"/>             | <input checked="" type="checkbox"/>      |
| Park rangers                  | <input checked="" type="checkbox"/>  | <input type="checkbox"/>                 |
| Zip-line course               | <input checked="" type="checkbox"/>  | <input type="checkbox"/>                 |
| Ropes course                  | <input checked="" type="checkbox"/>  | <input type="checkbox"/>                 |
| Rock/ice climbing             | <input checked="" type="checkbox"/>  | <input type="checkbox"/>                 |
| Mountain biking               | <input checked="" type="checkbox"/>  | <input type="checkbox"/>                 |
| Swimming                      | <input checked="" type="checkbox"/>  | <input type="checkbox"/>                 |
| Adventure playground          | <input checked="" type="checkbox"/>  | <input type="checkbox"/>                 |
| Groomed x-country skiing      | <input checked="" type="checkbox"/>  | <input type="checkbox"/>                 |
| Environmental learning center | <input checked="" type="checkbox"/>  | <input type="checkbox"/>                 |
| Restaurant/Cafe               | <input checked="" type="checkbox"/>  | <input type="checkbox"/>                 |
| Food Concessions              | <input checked="" type="checkbox"/>  | <input type="checkbox"/>                 |
| Performance venue             | <input checked="" type="checkbox"/>  | <input type="checkbox"/>                 |
| Camping                       | <input checked="" type="checkbox"/>  | <input type="checkbox"/>                 |
| Canoe/fishing outfitter       | <input checked="" type="checkbox"/>  | <input type="checkbox"/>                 |
| Birding                       | <input checked="" type="checkbox"/>  | <input type="checkbox"/>                 |
| Other                         | <input type="checkbox"/>             | <input type="checkbox"/>                 |
| Other                         | <input type="checkbox"/>             | <input type="checkbox"/>                 |

Hidden Falls  
Regional Park



1 What We've Heard

|                               | AGREE                               | DISAGREE                            |
|-------------------------------|-------------------------------------|-------------------------------------|
| 'Don't overdevelop'           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 'Keep it natural'             | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 'Extend park into Ford site'  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 'Add canoe/kayak launches'    | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 'Add boat racks'              | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 'Add a restaurant/cafe'       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 'Make it safer'               | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 'Restore the falls'           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 'Provide views to the river'  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 'Protect the resource'        | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 'Provide access to the caves' | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

2 Existing Park Activities/Features

|             | WORKS WELL                          | ELIMINATE                | ENHANCE                             |
|-------------|-------------------------------------|--------------------------|-------------------------------------|
| Parking     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| Overlook    | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            |
| Boat Launch | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            |
| Restrooms   | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Picnicking  | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/>            |
| Trails      | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| Habitat     | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Fishing     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |

3 What activities/features would you consider adding?

Other comments:

- Signage.
- Trail connections to road.

Lilydale  
Regional Park



1 What We've Heard

|                               | AGREE                               | DISAGREE                 |
|-------------------------------|-------------------------------------|--------------------------|
| 'Don't overdevelop'           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 'Keep it natural'             | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 'Add restrooms'               | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 'Add canoe/kayak launches'    | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 'Add a restaurant/cafe'       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 'Keep it wild'                | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 'Provide views to the river'  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 'Protect the resources'       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 'Make it safer'               | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 'Address erosion'             | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 'Provide access to the caves' | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

2 Planned Park Activities/Features

|                  | WORKS WELL                          | ELIMINATE                | ENHANCE                             |
|------------------|-------------------------------------|--------------------------|-------------------------------------|
| Parking          | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Boat Launch      | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Picnicking       | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Trails           | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Habitat          | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Group Camping    | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Dog Park         | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Wildlife Viewing | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Restoration      | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Fishing          | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Ice Climbing     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| Fossil Hunting   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |

3 What activities/features would you consider adding?

- Skating.

Other comments:



1 What We've Heard

|                                       | AGREE                               | DISAGREE                            |
|---------------------------------------|-------------------------------------|-------------------------------------|
| 'Don't overdevelop'                   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 'Keep it natural'                     | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 'Extend park into Ford site'          | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 'Add canoe/kayak launches'            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 'Add boat racks'                      | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 'Access to Hidden Falls is obscure'   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 'Make it safer'                       | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 'Make more places to touch the water' | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 'Provide access to the caves'         | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

2 Existing Park Activities/Features

|          | WORKS WELL                          | ELIMINATE                | ENHANCE                             |
|----------|-------------------------------------|--------------------------|-------------------------------------|
| Parking  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| Overlook | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Trails   | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Habitat  | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

3 What activities/features would you consider adding?

Other comments:

- Enhance overlooks & views.
- Parking.
- Pedestrian Bridge - Connect to Minneapolis trail system.
- Sidewalk on east side of Mississippi River blvd.

Crosby Farm Regional Park



1 What We've Heard

|                                     | AGREE                               | DISAGREE                 |
|-------------------------------------|-------------------------------------|--------------------------|
| 'Don't overdevelop'                 | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 'Keep it natural'                   | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 'Make it safer'                     | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 'Add canoe/kayak launches'          | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 'Add environmental learning center' | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 'Add mountain biking trails'        | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 'Add a dog park'                    | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 'Provide views to the river'        | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 'Keep cars out'                     | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 'Protect the resources'             | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 'Provide access to caves'           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 'Make it easier to get to'          | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

2 Existing Park Activities/Features

|            | WORKS WELL                          | ELIMINATE                | ENHANCE                             |
|------------|-------------------------------------|--------------------------|-------------------------------------|
| Parking    | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Overlook   | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| Restrooms  | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Picnicking | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Trails     | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Habitat    | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

3 What activities/features would you consider adding?

Other comments:

- Signage/Continue trails to the east.
- Public water access.

Cherokee  
Regional Park



1 What We've Heard

|                              | AGREE                               | DISAGREE                 |
|------------------------------|-------------------------------------|--------------------------|
| 'Don't overdevelop'          | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 'Keep it natural'            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 'Protect the resources'      | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 'Provide views to the river' | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 'Add a restaurant/cafe'      | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

2 Existing Park Activities/Features

|            | WORKS WELL                          | ELIMINATE                | ENHANCE                             |
|------------|-------------------------------------|--------------------------|-------------------------------------|
| Parking    | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| Overlook   | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Restrooms  | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Picnicking | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Trails     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| Basketball | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| Tennis     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| Playground | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |

3 What activities/features would you consider adding?

Other comments:

- Better signage.
- Respect current planning effort.
- Park for events/venues.



SUMMARY OF RESULTS

KEY TO COLORS  
Very strong preference  
Significant preference  
Slight preference

Roughly 80 participants worked in 12 small groups to identify consensus responses to the information on this worksheet. This is a composite summary of the responses.

design forum #2 public worksheet  
October 25, 2010

Map scale:  
0 1000 2000 feet



## A.4 Public Comment Summary

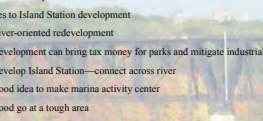
## A P P E N D I X

October 25, 2010 - Design Forum #2

“No to  
development-keep the river  
corridor natural!”

- ▶ Remove Island Station
- ▶ Over-develop. Reuse station, restore habitat on balance
- ▶ Minimize development at Island Station
- ▶ Keep peninsula natural (Island Station)
- ▶ Lylidae where less is more. Keep it natural
- ▶ Close the road through Lylidae. Commute traffic is a safety hazard
- ▶ No additional buildings around Island Station, but like idea of public re-use of plant building
- ▶ Keep wild areas as wild as possible—50% of North American birds use this river as a migratory corridor and/or for nesting
- ▶ Keep more of Crosby and Hiding Falls more natural—not over developed!
- ▶ Do not over-develop Island Station—re-use existing building but no new ones
- ▶ Too much development!
- ▶ No big development at Island Station
- ▶ Natural area on top of bluff —no soccer fields (Victoria Park)
- ▶ Concern about over development—we have lots of inner city parks to put state parks
- ▶ Blotz: confluence of river = place of genesis for Dakota people. Eligible for UNESCO world heritage site if you don't over commercialize and develop this area. Please be honoring even if you don't believe it or it's not your Garden of Eden (at Pike Island, For Snelling, Crosby)
- ▶ Keep development very limited and only in restricted (eg Marina area)
- ▶ Too much activity that has nothing to do with the river
- ▶ I'm concerned about over developing this section of the river. Too much development and too frequent use will limit not enhance the movement of species and habitat throughout the corridor. This was what was agreed to in first charter.
- ▶ We don't need basketball and volleyball at river—plenty of other places to serve food
- ▶ Food carts yes. Restaurants No. Plenty of nearby local businesses to serve food needs

“Yes to  
development in focused  
areas-get people to the  
river!”

- 
- The image is an aerial photograph of a coastal region. A large river flows from the top left towards the bottom right. A prominent bridge spans the river in the middle. To the right of the river, there is a large area outlined in red, indicating a proposed development. The surrounding landscape includes green fields, some buildings, and a road. The sky is clear and blue.
- Love to see Island Station redesigned by NPS
  - Love developed Island Station!
  - Yes to Island Station development
  - River-oriented development
  - Development can bring tax money for parks and mitigate industrial uses
  - Develop Island Station—connect across river
  - Good idea to make marina activity center
  - Good go at a tough area
  - Love idea of multi-use building at Watergate
  - Keeping development clustered here good idea—keep the rest natural
  - Save Island Station
  - National Park Service Headquarters in an Island Station restored habitat
  - Keep 40' building heights all along corridor
  - Keep the future building heights low (less than 35')—respect the river views (Ford Plant)
  - Keep future building heights less than 35'—respect the river views (Shepard Davern)
  - Keep buildings on river low (35' or less)

“We need more signage”

- ▶ All these areas need much better signage; better maps to show where trails go, how long they are and how developed or accessible they are, at trailhead so people can know what they are facing.
- ▶ Better trails great idea but need signs showing loops and distance (Crosby)
- ▶ More interpretive information signs identifying history and trees, etc.
- ▶ Let users know that they are entering a part of the national park system—signage should include it
- ▶ Signs on West 7th announcing national park 3 blocks away
- ▶ Connect trails to commercial corridor turn offs—directional/wayfinding signs to West 7th, District del Sol, Highland, etc.

“Victoria Park”

- ▶ NO soccer fields: not river relevant, can be anywhere, un-neighbor friendly (Victoria Park) AGREE!
- ▶ No soccer, more general use park (Victoria Park)

“No dog parks”

- ▶ No dog parks along river (Ford site)
- ▶ Soccer vs. dog parks—recreation for kids first, they are our next generation, dogs are not. (Victoria Park)
- ▶ No dog park redundant with one across the river—leverage resources with adjacent cities (reciprocity, etc.) Dogs' noisy barking impairs St. Paul park users' experience
- ▶ Soccer vs. dog parks—kids are our next generation, dogs are not (Victoria Park)

“Connect to the other side of the river!”

- ▶ Connect trail across old rail bridge (Denoyer Park)
- ▶ Ped bridge at Otto across river—Where are loops across river?
- ▶ What about connections to other side of river? Intentional connections to trails in Dakota and Hennepin County
- ▶ Better bike connection to Fort Snelling
- ▶ Reinforce regional connections
- ▶ Remember there are parks and park system on the other river bank here (Gorge)—how does Saint Paul relate to Minneapolis and to the fact this is also a National Park?

“Non-motorized  
boating is great!”

- ▶ Maybe no marina—but canoe, kayak rental-YES! (Island Station)
- ▶ Boat launch not marina (Island Station)
- ▶ Canoe/Kayak access here (Island Station) but no marina
- ▶ Love canoe landing at marina
- ▶ Like canoe and access fishing pier
- ▶ Also need place to store canoes
- ▶ Instead of Saint Paul parks providing canoe/kayaks, why not use non-profit partners? They need launch/storage areas anyway and are doing it now.
- ▶ Expanding opportunity for non-motorized boating is important
- ▶ Find a suitable spot for urban boatbuilders boat shop

“Programmed activity areas are needed-especially for youth.”

- Like camping in Ljalydavee? Yes!—for urban young people and maybe occasional x-generation
- Have there been conversations of basketball or volleyball options? Both are very popular at Minneapolis parks—especially in Cedar Riverside
- Swimming on river would be nice
- Skateboard park on Harriet Island would be fabulous!
- Cherokee Park also has “unofficial” BMX/mountain bike areas—particularly at top of bluff. Could be important for West Side youth to have an “official” less sensitive alternative
- The old brickyard bluff (Ljalydavee) should be modified to look like limestone cliffs (Teddy Bear Park, Stillwater, MN)—allow rock climbers to use it—adventure park here!
- A place to go swimming in clean water! (swimming barge)
- Retreat (camp) stay overnight for learning (Crosby)
- Youth boat shop!
- Reconnect our urban youth to nature—if they don’t care about it they won’t perpetuate our work
- Enhance Pickerel Lake fishing for urban children/young people with a dock/pier and safe walkway across to deepest/best fishing area
- Swimming barge at piers and canoe/kayak ramp into water, whitewater park?
- Soccer fields are a great idea—needed! (Victoria Park)
- Like more active use at Victoria Park
- Camping—especially for organized groups of kids is needed
- What about basketball, volleyball, dirt/BMX, bikes? This is what I see West side youth playing! (and soccer and camping)
- Yes to camping opportunities for urban youth
- I like this whole idea (adventure sports) This involves and integrates youth with the river. These things don’t really exist within the city. It gives youth structures to do without having to go to the suburbs.
- MN Company-Landscape Structures can make synthetic play logs (looks real but doesn’t destroy natural resources)
- Adventure park is great!
- Like this idea—adventure park
- Yes, take a look? (swimming barge)
- Yes! To large swimming? So someone to be surrounded by water with no place to swim!! Great for downtown/west side.
- Is adventure activity areas to attract existing enthusiasts or create new ones through exposure? Getting more people active? That’s more my priority. Get kids outside playing
- Activities for kids on lay-overs at MSP International
- Adventure playgrounds are awesome, cheap to maintain and appropriate for multiple ages
- Soccer fields at Highland Golf Club
- Increase programming to bring people—good
- Swimming beach (Lower Hidden Falls)
- Enhance cross-country skiing opportunities
- Are activities to raise a profit for Saint Paul or to provide access for citizens?? Profit or opportunity? Hopefully the latter?
- Focus on one park for adventure activities (Hidden Falls)
- Enhance visitor experience and connections through programming—birding, bird programs, bird banding, etc. Celebrate national flyway
- Very important to the overall idea of Great River Park. Teaching, learning, activity and youth—priceless!
- Love (as you know) idea of boardwalk crossing Pickerel to connect to deep best fishing and to the bluff side across little Pickerel and the side of the park.
- Bird blind here (Crosby Farm lake)
- Work with nonprofit to manage campsites rather than parks dept.—Yes for camping! (Lower Hidden Falls)
- Want to see public art along Shepard Road
- Develop public-private partnerships to develop and maintain trail system
  - Add path along river edge at Upper Crosby
    - Explore putting pathway on top of bluff. Scenic view and opens up park and Fountain Cave (ADM site)

“Low impact improvements are key.”

- Could see something like this in this parts of Lilydale Park trail system (wood steps)
- How about something like this in the Lilydale Park picnic area – for gathering with low impact?
- Lots across river at Fort Snelling state park and need use to its full potential. Without lots of growth in activity, not good use of funds.
- Awesome!! (boardwalks through wetlands)
- More soft trails in Lilydale Park
- Too expensive! Could we open up the falls and figure out a different access (waterfall perspective)
- Fix up Meeker site in Minneapolis
- Use solar energy to power the new path lighting proposed on the trails. (Of course, it may need to have back-up grid power, but use as much renewable and sustainable resources as possible)
- Access in the Gore similar to Minneapolis
- Agree with a sanctioned accessible entry to trails at Shadow Falls, but develop one set of trails well and put signage to keep people from using areas that are over-used
- I like most of the ideas about Hidden Falls and Shadow Falls area, but if you put an elevated walking bridge at Shadow Falls, don't use the steel structure illustrated in slides. We want it to look more natural and blend in.
- Keep pitch black at night (Crosby Farm)

“Safety is important!”

- ▶ Clear the creeks (Crosby Farm)
- ▶ I like 35/40 mph (Shepard Road)—safer
- ▶ Stop sign and increased ped safety at corner of Annapolis and Cherokee Blvd—no entrance to Cherokee Park. Right now it's a suburban speedway to downtown
- ▶ What about e-coli when it floods? (Crosby and Lilydale)
- ▶ As we provide more access for small craft, can we provide more knowledge of navigation rules in that population?
- ▶ Be careful at barge safety with more watercraft!
- ▶ Address seep at wharf turn on Lilydale Road—can it be "pooled" and kept from shutting the road?

“Keep making connections from neighborhoods to river!”

- ▶ Connect trail along 35E to bridge and Shepard Road
- ▶ Show 35E bikeway north of Saint Clair—connect
- ▶ Ped/bikes West 7th crossing at Lexington? Study
- ▶ Arrows should point to the river
- ▶ Connect to river (direct route) (along 35E)
- ▶ Yes! Access across Shepard Road
- ▶ Don't forget the thousands in the neighborhood with little access to river—Onto to Randolph, Randolph to Irvine Park
- ▶ Mitigate at West 7th crossings too
- ▶ Love this—intersection street ideas
- ▶ Very interesting thought (Shepard Davenport context sensitive access diagram)
- ▶ Great ideas about making Shepard more "crossable"—thanks
- ▶ Ped bridge from Pointe Elway across Shepard
- ▶ Want to see Victoria Park area connected to riverfront
- ▶ Bus or LRT to Fort Snelling. Access and easy wayfinding from the other side of river would get urban kids to river!
- ▶ Love to see the parkway world!

“Daylight streams, treat  
stormwater, protect and restore  
habitat”

- ▶ Yes! Please do daylight Hidden Falls.
- ▶ Love daylighting Hidden Falls
- ▶ Creek daylighting is cool (waterfall perspective)
- ▶ Can Hidden Falls be returned to a natural state too?
- ▶ Like!! Pedestrian only (waterfall perspective)
- ▶ Want to see Shadow Falls restored
- ▶ Love idea of daylighting stream (Ford site) AGREE!
- ▶ Continue creek to Highland Village restaurants and outdoor seating along creek
- ▶ Great. Do more of this approach, daylight creeks (waterfall perspective)
- ▶ Yes to Creek along Rankin
- ▶ Love the idea of runoff catchment and wild rice (Lilydale)
- ▶ Love treatment of stormwater from Mendota Heights, etc. to Pickerel Lake—water quality.
- ▶ Extend wetlands (Lilydale)
- ▶ Great idea (Rankin daylighting)
- ▶ I like Rankin daylighting
- ▶ Wow! A slot canyon
- ▶ Great idea! (restored wetlands with seating)
- ▶ School district building/parking lots need to be redesigned to manage huge run off issues to river
- ▶ Eco Restoration at Crosby
- ▶ Be sure not to destroy highly ecological sensitive and important areas...through expanded use/access...identify those sensitive areas and protect
- ▶ What about plans for restoring this as a wetland? Army Corps of Engineers
- ▶ What happened to habitat protection?
- ▶ U.S. Corps of Engineers plan for Pool 2 has this (inlet above Watergate Marina) identified as a restored wetland
- ▶ Need to restore this area (Lower Hidden Falls)—dangerous pilings exposed from 1970s project to build condos
- ▶ Restore as natural area and scenic view area up and down river (Ford Plant)
- ▶ Restore river islands (Gorge)
- ▶ Wild rice—yes. Bird watching. Restore the habitat—good ideas (Lilydale)
- ▶ Maintain planted prairie (state funded) (Crosby Farm)
- ▶ Develop enhanced restored natural areas and celebrate the resource. Example: Eloise Butler wildflower garden in Minneapolis



November 9, 2010 - Design Forum #3

# DOWNTOWN REACH

## 1 What We've Heard

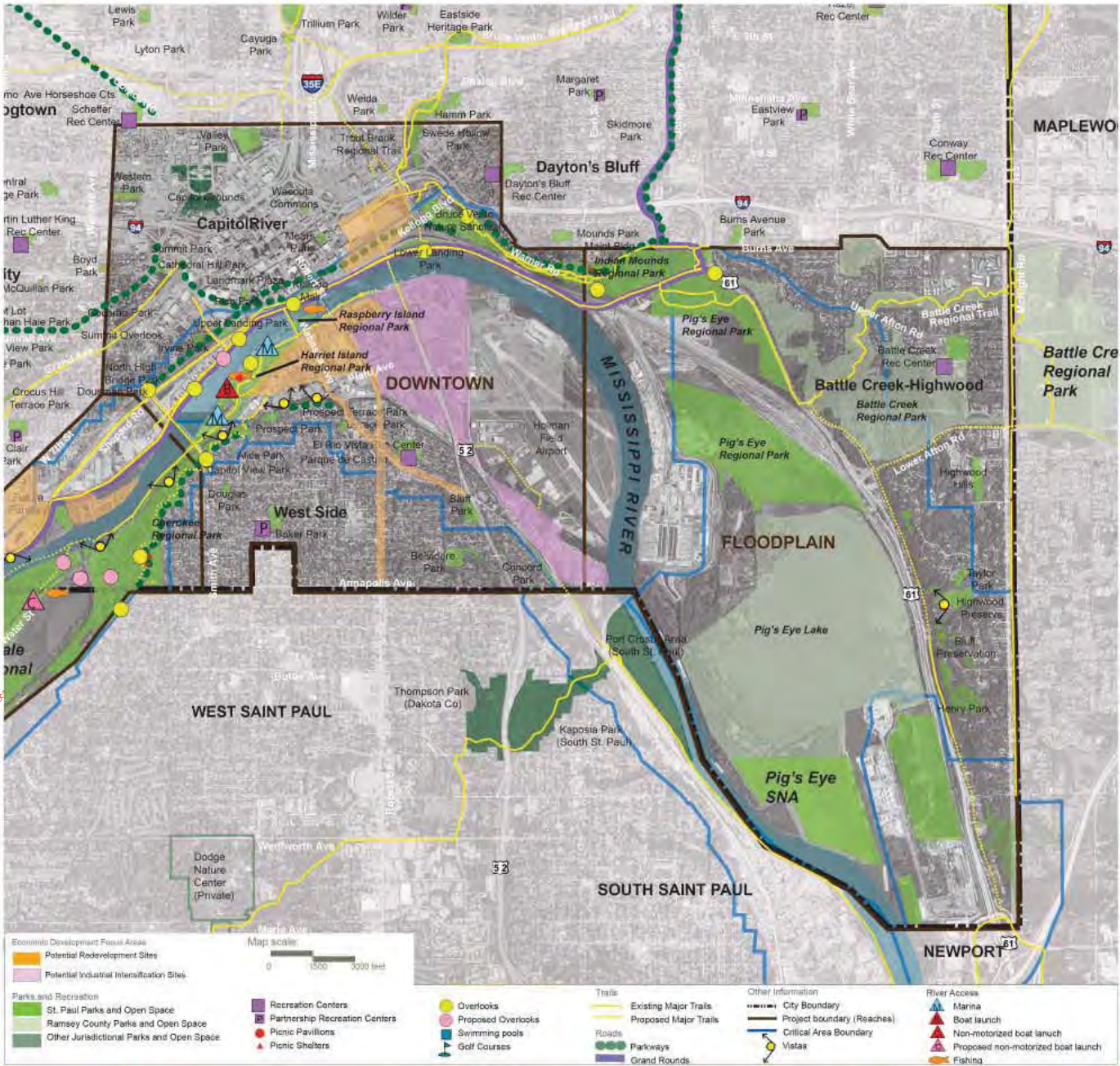
- Easy path/bike flow between downtown and downtown
- Historic field is an economic asset but creates significant limitations
- New development in West Side Flats should establish view and pod corridors to the riverfront
- Respect and celebrate caves below bluffs park
- A "signature" bridge (water taxi, cable car) across the river would be an attraction
- Better built top to bluff bottom connections
- Visual boat parking: *No overnight - city side access to retail/pool*
- Grade-separated crossing of Warner Road
- Better signage/wayfinding
- Riverfront dining and entertainment destinations
- West Side neighborhood lacks river connections
- Houseboat living is ultimate lifestyle option: *Vacation*
- New development needs to be model of sustainability
- Enhance riverfront safety/security

## 2 Our Impressions

- Visual and physical barriers inhibit river access downtown
- Lack of river-oriented programming downtown
- Public art should have a greater role in downtown park
- Opportunity to reuse existing City House: *A. Bonin/Zimmerman - better access*
- West Side Flats underdeveloped and underutilized: *MUGEL parking on river*
- Lowtown underdeveloped and lacks river access
- Redevelopment of Union Depot should improve connection to river
- Phalen Creek Corridor offers opportunity to connect upland habitat to river
- Stormwater management strategies offer opportunities for improved river access and water quality enhancement: *be aggressive*
- New pedestrian infrastructure and wayfinding is needed to improve river access: *not but why parkways?*
- The West Side badly defined pathways for intercity neighborhoods with river
- Prohibit two-car garage boats between Dayton's Bluff, Indian Mounds Park and Bruce Vento Native Sanctuary can be improved
- Redevelopment of Lowtown - should provide better connection to Bruce Vento Native Sanctuary than downtown
- Airport and industrial uses inhibit river access from West Side
- Existing parking lots disconnect development from river on West Side: *both sides*
- River's edge should allow better access for recreation: *Kayaks, canoes, boat racks*
- There should be more food and entertainment venues along the river: *in certain locations*

## 3 Your thoughts?

- (Write here and mark on the map)*
- Use what we have and build on it!
- Activate Kellogg Park, Downtown, Riverfront
- Access: Boats, Landings, trails, gondola, water taxi
- separate trails for bike & pedestrian - green streets
- access from bridges and bluffs -> river including ADA
- separation of cars & bikes on High Bridge
- Provide respite: attraction nodes, rest stops on trails, restrooms
- dining/waterfront, commercial nodes, natural areas, wildlife viewing
- West Side Flats shows great potential. Think Stillwater
- Activities: dog parks, fishing piers, canoe/kayak rental
- community gardens
- connect BVNS to Lowtown and river and Farmers Market
- viewing areas
- events to draw attention to connections to the river
- (DNR) bike tour
- restaurants on waterfront!
- Party barge, programmed boats, ice, restaurants, cafes, etc.
- ice trails river performance venue attract visiting boaters
- Daylight creeks where possible
- What about West Floding, building?



# FLOODPLAIN REACH

## 1 What We've Heard

- Preserve bluffs and bluff-top views
- Integrating public access around Pig's Eye needs sensitive approach
- Habitat should remain primary in the Pig's Eye area
- Recreation/habitat & connections needed in development area
- Highway 61 needs grade-separated peak bike crossing
- Daily "river dependent" industry on the river
- More trails and better inter-connection
- Better habitat management
- Maybe a dog park near Warner Road
- Enhance riverfront safety/security
- What do we do with Pig's Eye??

## 2 Our Impressions

- Provide improved but limited access to Pig's Eye Lake Regional Park *secco*
- Highway 61 and rail lines create physical barrier to Pig's Eye Lake River
- adjacent neighborhoods: *non-motorized boating*
- Existing industrial uses create challenges for recreation and park access
- Landmarkization may limit recreational use of Pig's Eye Lake
- "Working river" industrial uses, airport, etc. is important to the local/regional economy
- Unique landscape qualities offer opportunities for habitat protection and enhancement
- Opportunities for nature-based interpretive trails
- Battle Creek offers opportunities for upstream water quality treatment, stream restoration and regional trail connections
- Highlands bluffs offer opportunities for additional open space, trails and scenic views
- Connect-in opportunities at Pig's Eye: *substitute for trails*
- Expand heron rookery - potential bird sanctuary station at Pig's Eye Lake
- Battle Creek Park offers tremendous opportunity for additional active park uses
- Potential to connect Pig's Eye to upper bluffs through Indian Mounds Park
- Potential to connect Pig's Eye Lake Regional Park to Kaposia Landing across the swing bridge
- Look at better connections across the river south of downtown
- Working river and river-based industry provide opportunities for integration with open space

## 3 Your thoughts?

- (Write here and mark on the map)*
- Preserve Heron Rookery and natural areas, bird/wildlife viewing, platforms, critical habitat
- Provide access: link trails, downtown to floodplain and views, trails to Pig's Eye and river
- access to view industry, have industries clean up yards some
- Limited access to heron rookery - pod bridges
- Implement Shepard Road as element of Grand Rounds
- observation decks for trains, boats
- connections by Canastota, river trail
- Activate: more amenities along trails, rentals, fishing, paddling
- extreme sports - rock climbing, skate boarding
- barge cafe or hotel urban camping
- Tours - DNR, visitor's center for National Parks H2O on water
- concessions -> restaurants -> pop events
- interpretive information of stormwater, creeks
- City needs to recognize Harriet Island and public docks as amenity
- Ensure safe power boat access water ski show, skill racing on river
- more support from ethnic communities
- Think long-term alternatives for airport
- "Lobby to move prime meridian: St. Paul - Where Time Begins"
- Balance industry and parkland
- Interpret: natural functions of river, streams, watershed, American Indian history



design forum #3 public worksheet  
November 8, 2010

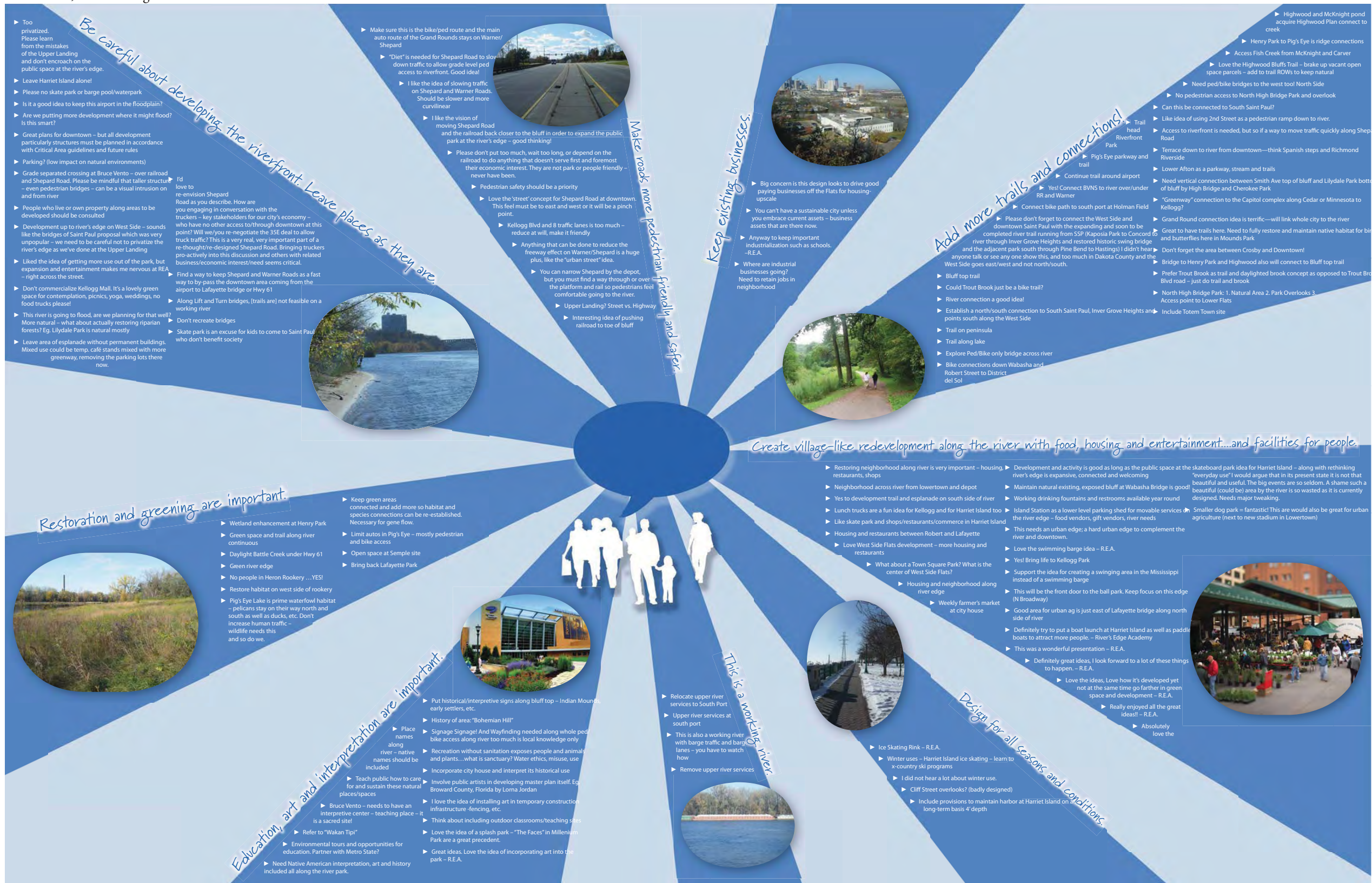
## SUMMARY OF PUBLIC COMMENTS



A.4 Public Comment Summary

A P P E N D I X

November 9, 2010 - Design Forum #3





April 14, 2010 - Open House

# PUBLIC COMMENTS FROM APRIL 14 OPEN HOUSE

## ECONOMIC VITALITY / REDEVELOPMENT

- Connections between Upper Landing and Uppertown
- Water taxi can encourage activity on both sides of the river
- Industrial uses – removal from river's edge. Treat east side and west side equally. Why are the west side industrial uses (ADM, Koch Mobil) slated for removal and they are not in Pig's Eye? (2 green dots)
- The connection from Lowertown to the river is important
- Support restaurants and local businesses on the streets above (7th/Shepard Road).
- Really like new ideas for the young people.
- Views from bluffs (Island Station)
- Look at Lebanon Hills in Eagan as a model. (Island Station)
- Keep building heights as low as possible in River Corridor. (Island Station)
- Make sure to get lots of input from families - this is great! (Island Station)
- I like the idea of the rink the ice climbing and biking. (Island Station)
- I like the out door rink, is it open skating? (Island Station)
- Fountain Cave(Island Station)
- I like mountain biking, I think the idea is cool. (Island Station)
- I really like the idea of the outdoor activities (biking, climbing, ropes course!). - Liam age 11(Island Station)
- Good job(Island Station)
- I like the pool idea because I'd like to have more pools in my community - Liam age 11 (West Side Riverwalk)
- I like the idea of getting down to the river easier and the rink(West Side Riverwalk)
- This is awesome! We need to do this. Don't let the negative few gut this. (West Side Riverwalk)
- Seas Salt type restaurant at upper landing park (or food trucks)
- Yes to skate park & other outdoor sports, yes to splash park.
- Good idea for all of this, I like the rinks and water parks
- Good job
- Need to balance homelands of Dakota with contemporary city needs. How about co-caring model?
- Recommend semi permanents stands or tents rather than truck (toxic and loud)
- Love the youth (& adult) oriented & year round uses (skate park, ice skating, water park)-Harriet Island
- How does the river balcony get developed over time? In conjunction with private development and public?
- How is Xcel connected to Uppertown?
- What are the septic needs of new businesses?
- Siting in marinas – dock maintenance is an issue (1 green dot)
- Demand for more economic development along the river – is economic development being driven by demand?
- Concern with lack of Dakota concepts of sacredness of these areas – especially to the descendants of the original indigenous peoples
- Use of Victoria Park – no neighborhood agreement yet regarding future park programming
- Ford site – no high rise residential development on the river side of the MRB (1805 Dakota Treaty)
- Note that first floor uses along West Side Riverwalk are commercial/public to interface with rivers edge.
- Pool barge is located where commercial barges are currently parked
- What is a bath house and why is it located so far from the pool barge?
- What happens to the skate park, splash park when flooding occurs? How do we design with that in mind?
- Need to maintain views of the river on the West Side Flats – consider this when redevelopment occurs (building height issue).
- How do you provide parking for a more active Harriet Island?
- Where is discussion of Fountain Cave?
- It is insulting to W 7th neighborhoods to say the scope of GRP is not the bluff side of Sheppard Road. Do you not care about visual access from the bluff? (Island Station)
- Water gate Marina café & shops will draw too many people with no interest in the natural environment. Protect the natural! (Island Station)
- Ensure building heights do not block views of river from bluffs(West Side Riverwalk)
- #18 labeled as Harriet Island - Should the label read Raspberry Island?
- No or limited soccer fields! (Victoria Park)
- The neighborhood & parks have NOT come to an agreement about soccer fields on our only bluff park in the city. (Victoria Park)
- Stage flooding - how would some of these enhancements clean -up?
- Building heights in the corridor should be carefully considered
- Concern for development of 19 ac site on rivers side of Ford Plant site

## ACCESS AND CONNECTIVITY

- Put sidewalks on Otto
- Bluff stair at High Bridge
- Smith Avenue: High Bridge to 7th needs traffic calming
- Need more connections from downtown to the river – Broadway.
- Provide a canoe/kayak trail with wayside rest areas along the river.
- Concern regarding park and ride station with old Indian mounds location along Hwy 61.
- Want steps at the high bridge included in the plan.
- Provide connections across the river for canoes and kayaks
- Replace the stairway from the High Bridge to the river (3 green dots)
- Return High Bridge steps (3 green dots)
- Provide a bike/pedestrian connection from Highland Parkway to Otto (1 green dot)
- Provide better connections from Lowertown residential/entertainment district to the riverfront and Lower Landing Park.
- Provide a bike route along Hamline, from Como Park to the River. Lots of schools along the route. - Hamline University, Concordia College, Central High School, Crelin Derham-Hall, Talmud Torah (?).
- Try to find more connection at ground level to downtown.
- Gateway treatment & signal at Fish Hatchery.
- Traffic calming wanted at Fish Hatchery.
- Bike/ped bridge from Irvine Park to River is more scenic!
- Ped bridge over Shepard Rd & tracks at Eagle St for Upper Landing to downtown.
- Ped connections under Depot train track - Broadway tunnel very important.
- Can trail be closer to river at Shepard & Randolph/Island station?
- Switch back bike trail to connect Highland - or a lift? Could be attraction!
- Broadway connection very important as car/bike/ped use.
- Need to connect I35E Bridge to I35E trail north of 7th Street, currently stops at Race Street/ does not go south of 7th.
- Reopen stairways
- On -street parking to help slow traffic on Shepard Road?
- Bike/Ped bridge at Irvine Park to River - access from river trail for(isp?) to significant architecture of neighborhoods
- How do we get over Shepard Road near Mississippi River Boulevard to connect to Sibley Plaza (retail) and Sibley Place (housing)?
- Smith Ave speeding issue & high number accidents downtown high bridge & 7th.
- Funding? How When
- Very long term, Why showing saving bridge at Omaha RR - too active for bike use
- Can we use Legacy funding?
- Are building heights being addressed?
- ?Orange line north of gorge???
- Crosby U. What purpose is this road?
- Victoria Park park access, What purpose is this road?
- Label Streets
- Concerns wlerosion caused by mountain bikes

## HISTORY, ARTS AND CULTURE

- Partner with the Minnesota Historical Society?
- Adopt a river program (DNR) – some have already been done, more would be helpful
- Partner opportunities: DNR, Dakota Nation (1 green dot), Audubon Society, NPS
- Important to recognize the Dakota Nation's history
- Brick yard? Pottery
- History of Dakota
- Dakota names for sacred/significant places
- Preservation of language/naming
- Education of Dakota history
- Map of Dakota places and names
- Program to interpret historic period – living history/educational events
- Victory – repurposed dock area would be very high maintenance. An alternative solution – let it naturalize and silt in
- Integrate history and art – integral with the design of the park feature
- What is being considered to preserve the housing stock of historical significance?
- Interpretation of flood impacts through time
- Interpretation of water resources – sources, education, connections to other places and cultures, history
- History of regional crafts, artisans – Ironwork (Schmidt Brewery), woodworking/carving, guild of the metal smiths
- More inclusion of Native American culture – one contact is Rev. Jennie Lightfoot (she recently led a prayer vigil in front of the court house – native drumming – all were invited to attend)
- Demonstration/interpretation of environmental issues/solutions – ie. stormwater management, restoration practices – using public art as a vehicle to explain and inspire the public
- Involve local arts organizations and artists in planning and design – they have a vested interest in downtown's success and the riverfront
- Add local artists' displays at Lamberts Landing during (and near) Farmer's market to give audiences incentive to get closer to the river.
- Consider travelling shows. Maybe we could find an institution willing to lend us a Picasso, Calder or du Buffet?
- Awesome examples of arts and events, programming is essential, this is what makes it "cool", more modern expressions.
- Is there an age limit for artists? - Liam age 11
- Dragon boat races - a la Portland or
- Lets have a Dakota run pottery at the Brick works!
- Lack of Dakota sacred sites – descendants of original indigenous peoples
- Invite Native artists to be priority creators of public art in St Pauls River.
- Dakota homeland is 12,000 years old. European immigrants is only 150 years. Lets make a public art sculpture that honors this. (Pigs eye)
- Dakota interpretive plaques (and English) (2 green dots)
- Locations for performing arts and retail of Dakota art(?)

## WATER QUALITY & NATURAL RESOURCES

- Hierarchy of management and use based on sensitivity and quality of ecological resources
- Creation site
- Stormwater – thoughts about TX Upland
- Restoration of the river itself
- Daylighting creeks – Trout Brook down to the river
- Interpret significant natural features and systems artfully
- Need to properly allow more opportunities for natural habitat corridors to be re-established for continuity for species migration. Use our best resources: more research, work with habitat experts at the U of M, etc.
- Research historical Dakota name for Pig's Eye Lake – this area is very sacred
- Consult with Dakota people on historical issues
- Site to the Dakota people and "Pig's Eye" has been the hope of the Dakota people to be renamed.
- Basis for Vision Plan – quality, sensitivity, determining management and development
- Working with watershed entities – partnering
- Manage Hidden Falls area more like this. (Pigs eye)
- How is the water quality in Hidden Falls Creek?
- Water quality – what measures are being taken to clean up the river?

## RIVER PARKS AND RECREATION

- Investigate feasibility/cost of removing Ford site toxic waste dump/ mound adjacent to Hidden Falls
- Provide affordable camps and classes for kids: environmental sports, arts, history, etc. (not just for scouts...)
- Keep businesses, restaurants, etc. on top of bluff (Watergate Marina)
- Awesome! Family friendly (Watergate Marina)
- Visual - Dakota Involvement (Watergate Marina)
- Ditto - Excellent protective & integration of quality bird habitat (Watergate Marina)
- Camp at BSA Fort Snelling - have a houseboat that can quarter families - dredge Thompson is available (Watergate Marina)
- Native culture & history still very present. Need to include Dakota at every step. (Watergate Marina)
- Wonderful ideas, exciting!(Hidden Falls/Watergate Marina)
- (pointing to carry in boating lagoon)Designated as AUSCOE wetland - look at that plan (Watergate Marina)
- Involve the neighborhood adjacent to riverfront areas - The river doesn't belong to staff or Riverfront Corp. Real citizen participation in planning & decision making! (five green dots attached to post-it notes) (Watergate Marina)
- Concern about mountain biking in the floodplain
- Concern re: lack of Dakota concepts of sacredness of many areas of the parks especially to family – and descendants of indigenous peoples
- Lack of bluff overlooks in vicinity of the High Bridge
- Fountain Cave connection should be addressed
- Are proposed uses compatible? Mountain biking and hiking for example?
- A bit insulting to W 7th neighborhoods to say that the scope of GRP's is not the bluff side of Sheppard Rd. (Pigs eye)
- Is there a good year-round natural history inventory? There are still some special remnants of flora in parts of Crosby
- Concern about level of skill needed for people to participate in canoe and kayak activities on the river – very strong current; safety first.
- Too much happening at Hidden Falls, Do a natural resource inventory before building.
- Hidden Falls concept appears to be really over-developed. I seriously question if it is truly a sustainable design. I suspect it will be fragile to flooding.













[www.greatriverpassage.org](http://www.greatriverpassage.org)

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