

An aerial photograph of Minneapolis, Minnesota, featuring the St. Anthony Falls and the city skyline. The image is overlaid with a semi-transparent blue filter. The text "St. Anthony Falls Regional Park Master Plan" is prominently displayed in white, bold, sans-serif font in the lower-left quadrant. Below it, "DRAFT 12/04/14" and "Minneapolis Park and Recreation Board" are also in white, sans-serif font but smaller. The background shows the Mississippi River, several bridges, and dense urban development.

St. Anthony Falls Regional Park Master Plan

DRAFT 12/04/14

Minneapolis Park and Recreation Board

St. Anthony Falls Regional Park Master Plan

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Introduction and Planning Framework CHAPTER

1

"A river touching the back of a town is like a wing, it may be unused as yet, but ready to waft it over the world. With its rapid current it is a slightly fluttering wing. River towns are winged towns."
- Henry David Thoreau

Introduction and Intent

Central Mississippi Riverfront Regional Park is the current name of the park for which this Master Plan is created. Through the design and community engagement processes it became evident that a name change was needed. The proposed name of St. Anthony Falls Regional Park is a more descriptive and identifiable name which captures the essence of the area. Throughout the rest of this document, the park will be referred to St. Anthony Falls Regional Park, or for short, SAFRP. St. Anthony Falls Regional Park is located in the heart of Minneapolis, encompassing approximately 350 acres of riverfront along the Mississippi River, and running through the historic Mill District and the Downtown Minneapolis core. It is unique in that it encompasses open space, historic and cultural resources, and riparian ecosystems within a vibrant urban area bordering a nationally-significant river. The vision proposed for the SAFRP describes a place that will "connect people to the nature, culture, and spirit of the dynamic river landscape at the birthplace of Minneapolis." This vision imagines a regional park that will connect people to the Mississippi River, restore and enhance natural resources, reveal and interpret past and present nature and culture, engage visitors and adapt to changing social, economic and ecological realities.

The purpose of the SAFRP Master Plan is to provide guidance on the redevelopment and enhancement of existing facilities and resources, as well as the acquisition of additional property and expansion of the regional park boundary.

Planning Framework

In the 1970s, visionary MPRB and City leaders began work that ultimately transformed the riverfront's industrial landscape into the public asset enjoyed today. In 2013, the Metropolitan Council estimated over 2 million visits to the SAFRP.

The SAFRP Master Plan builds on previous planning efforts. The 1982 Central Riverfront Regional Park Plan, adopted by the Metropolitan Council and incorporated into the Minneapolis Comprehensive Plan, has guided acquisition and development in the park for three decades.

The MPRB sees the changes that are happening along the River and the edges of the regional park since the last Master Plan. To stay on top of current trends and to seek better riverfront experiences, the MPRB and its appointed Community Advisory Committee and Technical Advisory Committee have developed a new Vision for the Park.

Regional Park Vision

"The Saint Anthony Falls Regional Park will connect people to the nature, culture, and spirit of the dynamic river landscape at the birthplace of Minneapolis."

Guiding Principles

Supporting the vision statement are the five guiding principles:

- » **Connect to and along the river by foot, bicycle, transit, boat, and private vehicle.**
- » **Restore and enhance natural resources, improve wildlife habitat, and water quality.**
- » **Reveal and interpret past and present, nature and culture.**
- » **Engage visitors through activities, amenities, food, and events.**
- » **Adapt within the changing social, economic, and ecological realities.**

This Vision and its Principles guide the planning efforts within this Master Plan in concert with the goals of the Minneapolis Park and Recreation Board and The Metropolitan Council Regional Park and Open Space Committee.

Planning Agencies

There are two agencies involved in approving this Master Plan; they are the Metropolitan Council and the Minneapolis Park and Recreation Board.

The Metropolitan Council guides regional parks in the seven-county Twin Cities area. These regional parks have many purposes, from preserving green space and wildlife habitat to providing a wide range of natural resource-based recreational opportunities. They are significant to their local communities as well as regionally. In 2012, the system included 53 regional park reserves, 340 miles of 40 regional trails, and eight special recreation features.¹

As a means of managing Regional Parks, the Regional Parks and Open Space System was established in 1974. It was created in response to state legislation, and is supported by the Metropolitan Council in partnership with cities, counties, and special park districts who operate regional parks and trails. The MPRB is the implementing agency for the SAFRP, and oversees its everyday operation and management.²

As dictated by Minnesota Statute 473.313, the Metropolitan Council requires a master plan to be developed and updated regularly for each regional park, park reserve, trail, and special recreation feature in the seven-county Metro Area. As the implementing agency for the SAFRP, the MPRB is responsible for developing this master plan. Plan approval is necessary to be eligible for regional parks system capital funding for land acquisition and development, as well as planning, funding, and advocacy support from the Metropolitan Council.

Elements that need to be addressed in the master plan include:

- » Boundaries and acquisition costs
- » Stewardship Plan
- » Demand Forecast
- » Development Concept
- » Conflicts
- » Public Services
- » Operations
- » Citizen Participation
- » Public Awareness
- » Accessibility
- » Natural Resources
- » Historical + Cultural Resources

More information on the requirements is outlined in the Metropolitan Council's 2030 Regional Parks Policy Plan.³

Minneapolis Park and Recreation Board

The MPRB was created in 1883 by an act of the Minnesota State Legislature and a vote by the residents of Minneapolis. Its mission is to permanently preserve, protect, maintain, improve and enhance its natural resources, parkland and recreational opportunities for current and future generations. The MPRB exists to provide places and recreation opportunities for all people to gather, celebrate, contemplate, and engage in activities that promote health, well-being, community, and the environment.⁴ The Minneapolis Park System currently includes 6,700 acres of land and water in 182 park properties, including local and regional parks, playgrounds, golf courses, gardens, picnic areas, biking and walking paths, and nature sanctuaries. The 55-mile Grand Rounds National Scenic Byway is also a part of the system.⁵ (See **Figure 1**)

The MPRB works cooperatively with the Metropolitan Council, the Metropolitan Parks and Open Space Commission (MPOSC), the State Legislature, and nine other implementing agencies to provide planning, programming, maintenance, and police protection for recreational facilities within its jurisdiction. The MPRB is overseen by a nine-member Board of Commissioners responsible for maintaining and developing the system. They are a semi-autonomous body independently elected every four years, representing each of the six park districts within the city and including three at-large members. The MPRB also works with many partners, including non-profit organizations, government agencies, and for-profit organizations – a primary partner of the MPRB is the City of Minneapolis.⁶

The 2007-2020 MPRB Comprehensive Plan sets the vision and direction for the park and recreation system. According to the plan, key directions include providing captivating urban forests, natural areas, and waters; delivering recreation opportunities that inspire personal growth, healthy lifestyles, and a sense of community; creating dynamic parks that shape city character and meet diverse community needs; and maintaining safe places to play, celebrate, contemplate and recreate.⁷ The vision for the SAFRP aligns with the vision put forth by the MPRB, as it proposes a dynamic park that connects all people to the natural, cultural, and historic landscape of the Mississippi River.



Figure 1: SAFRP Location Within The MPRB Grand Rounds System

Previous and Ongoing Planning Efforts

Many studies and plans are ongoing or have been conducted in and around the study area. (See **Figure 2**) It is a complex and rich area, with many intersecting influences that should be taken into consideration by future park development. Some of the most significant studies and projects include:

RiverFIRST: A Park Design Proposal and Implementation Framework for the Minneapolis Upper Riverfront (Minneapolis Riverfront Development Initiative and MPRB, Completed 2012)

RiverFIRST is a 20-year, phased urban design vision and implementation framework for the Upper Mississippi River corridor. It was approved by the MPRB on March 14, 2012, following an international design competition led by design teams TLS/KVA in 2011. Its main goals include establishing parks as economic drivers, connecting communities to the riverfront, and re-focusing the city toward the Mississippi River. It focuses on eight areas of opportunity, including Riverfront Trails, BioHavens/Floating Islands, Downtown Gateway Park, Fairview Park Expansion, Northside Wetlands Park, Northeast Riverfront Park, Scherer Park, and Spirit Island.⁹ Planning efforts for the Downtown Gateway Park, Spirit Island, and Scherer Park directly affect the SAFRP, and propose the following:

Downtown Gateway Park

Led by the Trust for Public Land and various downtown interests, the development of Downtown Gateway Park complements RiverFIRST and the SAFRP by extending Nicollet Mall to the river through a green spine, creating a downtown pedestrian connection and gateway to the Mississippi River. RiverFIRST recommends that

stormwater daylighting and the riparian landscape be highlighted in future development.¹⁰ The Downtown Gateway Park is an MPRB priority project led by the Gateway Committee, and is currently in the discovery phase.¹¹

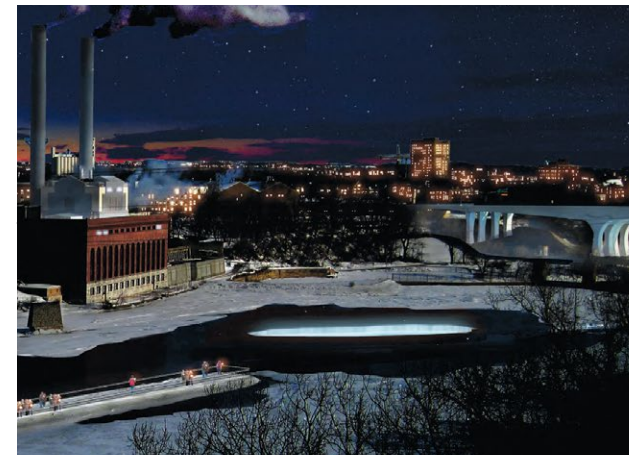
Spirit Island

Spirit Island is one of the 20-year Visionary Projects proposed by RiverFIRST. The now-vanished Spirit Island is a sacred place to the Dakota Indians, and RiverFIRST proposes a commemoration of the site that would physically reconnect Spirit Island to its cultural past. They point to the importance of community engagement as guidance for any future design process, possibly including conversations, research, workshops, walking tours, and a council of representatives from interested groups and tribes.¹²

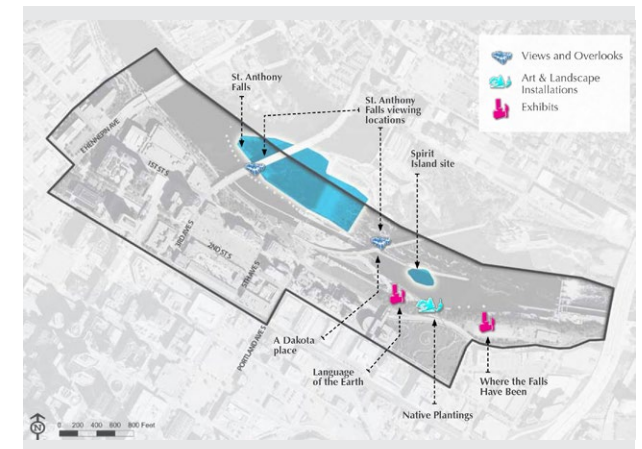
Scherer Park

The Scherer Site, while north of the SAFRP boundary, directly connects to Boom Island beneath the Plymouth Ave Bridge. Due to this direct linkage, its programming is significant to the proposed SAFRP overall programming concept. In the RiverFIRST plan, Halls Island will be restored to create a beach cove and recreational entry point for kayaks, bikes, skiers, runners, and walkers.¹³ The Scherer Site is an MPRB priority project and is currently in the schematic design phase.¹⁴

Other proposed RiverFIRST initiatives are relevant to the larger park network of which SAFRP is a part, and future development should take them into consideration.



Spirit Island Interpretation from RiverFirst Report



St. Anthony Falls Area Interpretation from An Interpretive Vision for the West Bank of Saint Anthony Falls

“Our Changing Relationship to the Power of the Falls: An Interpretive Vision for the East Bank of Saint Anthony Falls” (St. Anthony Falls Heritage Board and Cinncinatus/HKGi, Completed 2013)

This plan has been included as part of this master plan and can be found in the appendix. Key points of this plan are summarized in Chapter 7.

Water Works Schematic Design Project (SCAPE Design Team, Minneapolis Parks Foundation and MPRB, 2014)

The upper portion of Mill Ruins Park is the site of the Water Works Project, a RiverFirst Initiative priority project led by the Minneapolis Parks Foundation and the MPRB. The schematic design is complete and will have been approved alongside this Master Plan. Design work has occurred concurrently and in collaboration with the SAFRP master planning effort. Design initiatives include a new visitor center, removal and interpretation of the Fuji-ya building, historic interpretation of the Mill Ruins, improved ecological shoreline function, enhanced pedestrian and bike connections, and a modified parkway alignment.

West River/James I Rice Parkways Trail Improvements, (MPRB, Construction Completed 2014)

This trail improvement project addresses the bike and pedestrian trails from Franklin Avenue to Plymouth Avenue North. Construction began in the fall of 2014. The project includes new paving, lighting, signs and rest stops with benches and drinking water.⁸ This effort intersects with the SAFRP between the I-35W Bridge and Plymouth Ave North on the west side of the river; future park projects should take this project into consideration.

Water Works Study (MS&R, HR&A, Completed 2012)

This planning study focuses on the area around the Mill Ruins and the terminus of the Stone Arch Bridge in Minneapolis, designated the Water Works Study Area. It proposes a concept plan with the goals of engaging the ruins, interacting with water, being family-friendly, creating seasonal attraction, being prideful of design, and having layered zones of use. These recommendations directly apply to the SAFRP and should be taken into consideration in future development.¹⁵

St. Anthony Falls Historic District Design Guidelines (Adopted by the Heritage Preservation Commission, Completed 2012)

This document proposes design guidelines for the St. Anthony Falls Historic District, which covers a large portion of the SAFRP. The guidelines establish standards for development, with the intent of protecting the integrity, character, and sense of place of the district. The guidelines cover alterations to historic buildings, new structures, improvements to landscapes, and public spaces. They also promote good stewardship of existing historic and archeological structures, emphasizing preservation and interpretation. While they promote historic preservation, they also encourage principles of urban design and streetscape vitality. Future development within the historic district will need to take these guidelines into account.¹⁶

St. Anthony Falls East Bank Waterfall Feasibility Study (Barr Engineering for MPRB, Completed 2011)

This report studies the feasibility of reestablishing the east falls on the Mississippi River, located at Hennepin Island. As part of the study, a preliminary hydrological analysis, a geotechnical review, and meetings with an advisory group and the general public were conducted. Several alternatives and locations are studied in the report, and two alternatives are presented for further

study. The report also covers general site context and



25 Year Vision Concept for the East Bank from An Interpretive Vision for the East Bank of Saint Anthony Falls



East Falls Concept Image from St. Anthony Falls East Bank Waterfall Feasibility Study

Power of the Falls: Renewing the Vision for St. Anthony Falls Heritage Zone (St. Anthony Falls Heritage Board, Completed 2009)

This interpretive plan builds on the 1990 plan for the St. Anthony Falls Heritage Zone, which called for the rejuvenation and improved vitality of the riverfront and saw the opening of the Stone Arch Bridge, the creation of Mill Ruins Park, First Bridge Park, the Mill City Museum, and Heritage Trail. The 2009 plan notes that despite its successes, the area still lacks a strong and compelling identity, and is underutilized by visitors and businesses. In short, it has yet to achieve its full potential. The 2009 plan calls for physical improvements as well as ongoing and future interpretation, strategic goals, and action steps for implementation.

The plan also covers means of facilitating the interpretive experience, existing and potential user groups, digital media audiences, and strategies for engagement. It identifies several important interpretive themes to help guide future development, including Power of the Falls, Spiritual Place, Resilient Nature, Iconic Mississippi, A Revolution in Food, Life of a City, and Confluence and Connections.

The concept plan divides the Heritage Zone into three smaller areas, from north to south: Intimate, Social, and Powerful, and proposes concepts for specific sites within each zone on the east and west banks of the river. The overarching goals for these areas are to enhance pedestrian friendliness, create a cohesive identity and memorable sense of place, and add attractions for all ages and cultures. The 2009 Interpretive Plan is an essential resource for any future development and interpretive design within the Heritage Zone.¹⁸

Minneapolis Riverfront District Signage and Wayfinding Master Plan (St. Anthony Falls Heritage Board, Completed 2004)

A Signage and Wayfinding Master Plan was completed for the Minneapolis Riverfront District in April of 2004, covering the bounds of the SAFRP and extending several blocks into the surrounding neighborhoods. This plan studies existing signage in the riverfront area, wayfinding precedents, traffic patterns, primary destinations and key decision points. It proposes a series of sign types and a hierarchy of information to be displayed.¹⁹

Mill Ruins Park Concept (MPRB, Completed 1991)

The Mill Ruins Park Concept proposes a design for the area around the Stone Arch Bridge, including the interpretation of the Historic Gatehouse, Mill Ruins Park and the Archeological Education Library, the Tailrace Canal, the Parkway Canal Plank Road, and pedestrian gathering areas. Some parts of this plan have been implemented, including the plank road, Mill Ruins Park and the tailrace canal.²⁰

Central Riverfront Regional Park Development Master Plan (MPRB, Completed 1983)

This is the existing master plan which encompasses the entirety of the then named Central Mississippi Riverfront Regional Park boundary. It proposes general concepts for gathering, parking, plant communities, and viewsheds along the riverfront. Many of the parks and landscapes now seen and experienced were in part guided by this master plan. The 1983 Master Plan is outdated due to growing and changing demographics, changing land uses, and changing riverfront ecological needs.²¹



1991 Mill Ruins Park Concept



1983 Central Riverfront Regional Park Development Master Plan

Other Significant Planning Efforts

Downtown East Commons (2014)

The Downtown East Commons, also known as The Yard, is a two-block private park proposed to abut the new Vikings Stadium in Downtown Minneapolis, and will be surrounded by new office and residential development. While this project is not within the SAFRP boundary, any future park development should look for opportunities to reinforce connections to this area, as it has the potential to draw both visitors and residents to its sizeable green space and various attractions. This Department of Community Planning and Economic Development for the City of Minneapolis is responsible for guiding the design and construction of this park. An “Opening Day Commons” version of the park will be ready when the stadium opens July 1, 2016, with a longer timeframe projected for the “Ultimate Commons.”²²

Nicollet Mall Improvements (James Corner Field Operations Design Team, City of Minneapolis, 2014)

The Nicollet Mall Improvement project proposes to create better connections, incorporate more green space in the Downtown core, attract and grow employers, and increase the livability of Downtown Minneapolis. It is relevant to the SAFRP Master Plan in that it suggests a connection to the river with its terminus at Washington Avenue named Mississippi Woods. Future development in this area should take this project into consideration. Construction is planned for the spring of 2015 with completion estimated in 2016.²³

Above the Falls Regional Park Master Plan (MPRB Draft, 2013)

This Draft Master Plan guides park land acquisition, development, and management for both sides of the riverfront between the Plymouth Avenue Bridge and the Camden Bridge in Minneapolis. Because it is a neighboring plan, its proposals and programming recommendations have an impact on the SAFRP in striving to become part of a robust, larger park system.

Future Nicollet-Central Modern Streetcar Line

The Minneapolis City Council approved a resolution on October 4, 2013 recommending a modern streetcar line that would run between Lake Street and 5th Street NE on Nicollet Avenue, Nicollet Mall and Hennepin/1st Avenues. It is proposed to cross the river on the Hennepin Avenue Bridge. The project is still in the planning process, but should be taken into consideration for future circulation and connectivity planning within the SAFRP.²⁴

List of other Significant Planning Efforts:

- » 2012 Granary Corridor Study
- » 2012 East River Road Extension Study
- » 2008-2012 MNRRA Strategic Plan
- » 2011 Boom Island/BF Nelson Renovations
- » 2011 ACOE Whitewater Park
- » 2010 Xcel Energy Water Power Park Rec Plan
- » 2009 Playground at Bassett Creek: Shade Structure

- » 2009 U of M Energy Plan
- » 2008 BF Nelson Park Plan
- » 2004 Environmental Pool Plans, Fish and Wildlife Work Group River Resources Forum
- » 1999 Grand Rounds Scenic Byway Intrinsic Resource Sites
- » 1999 East River Road Extension Study
- » 1998 St. Anthony Falls East Bank Park Development Plan
- » 1993 Nicollet Island Master Plan
- » 1987 Riverfront Renaissance, MPRB
- » 1979 Central Riverfront Open Space Master Plan Report
- » 1977 Central Riverfront Development
- » 1972 Mississippi/Minneapolis
- » 1917 Bennett Plan

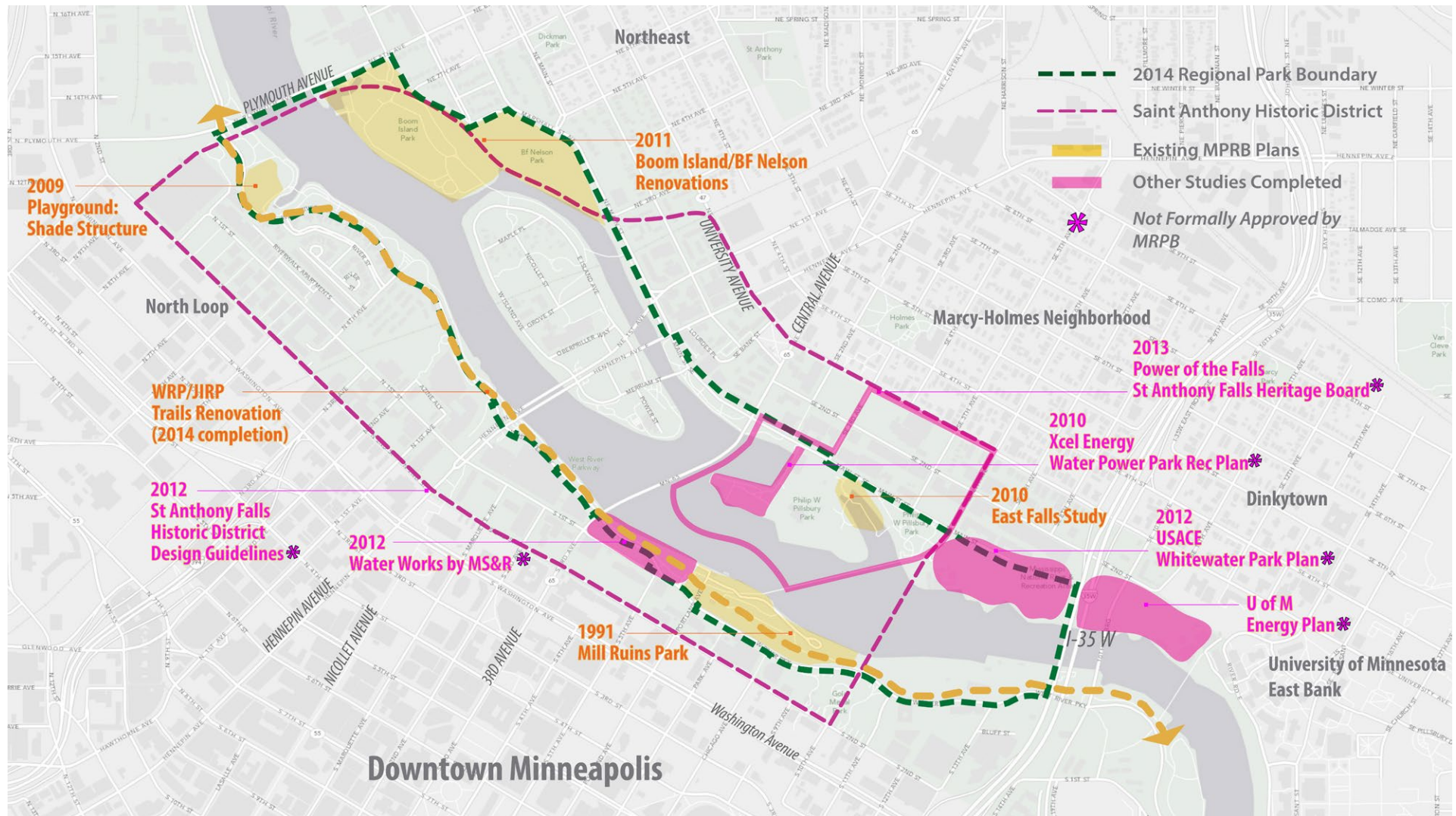


Figure 2: Recent Planning Efforts



Regional Park Background and Context

CHAPTER

2



Recent aerial photograph of SAFRP centered around the Stone Arch Bridge



Location and Boundaries

The St. Anthony Falls Regional Park (SAFRP) takes its name from St. Anthony Falls, which have defined the river character for centuries and lie at the heart of the park. The falls are unique as the only major waterfall on the upper Mississippi River, and have great historical significance to the Twin Cities region.

The SAFRP encompasses approximately 350 acres and 1.75 miles of riverfront along the Mississippi River in Minneapolis. It is part of a larger continuous regional park system along the river, abutted by the Above the Falls Regional Park to the north and the Mississippi Gorge Regional Park to the south. It is bordered by Plymouth Avenue North on its northern edge and the I-35W Bridge on its southern edge, and roughly bound by West River Parkway on the west side of the river and Main Street/Marshall Avenue and the Granary Corridor on the east side of the river.

Within the Regional Park boundary are portions of many neighborhoods and regulatory jurisdictions, as well as Minneapolis Park and Recreation Board (MPRB) park land. Of its current 350 acres, 100 acres are owned by the MPRB, 90 acres are inholding, and 160 acres are river.²⁵ The MPRB parks within the Regional Park boundary include Boom Island, BF Nelson, Nicollet Island, Main Street, Father Hennepin Bluffs, Lucy Wilder Morris, Stone Arch Bridge, Mill Ruins, West River Parkway, and First Bridge Park. Water Power Park is also within the Regional Park, but is privately owned by Xcel Energy.²⁶ (See **Figure 3**)

SAFRP Lies wholly within a unit of the National Park system, the Mississippi National River and Recreation Area. It is served by two National Scenic Byways: The Grand Rounds and the Great River Road. Also, it is served by the first and only state bikeway, the Mississippi River Trail.



Figure 3: 2014 Regional Park Boundary and MPRB land

Existing Conditions by Study Area

The Regional Park is comprised of several distinct, named parks, many of which are connected by trails or other park features. These parks offer opportunities for recreation, river access, picnicking, trail use, education, cultural events and immersion in urban nature. They form the foundation of SAFRP, and including them within a unified park boundary serves to improve park management, better coordinate design and increase connectivity between each park. A continuous regional park experience is the overall goal, providing adequate space along the riverfront for parkways, restored riverbanks, public gathering areas, surface-water management, and improved habitat.

The Regional Park is broken down into eight study areas, which parallel each of the distinct parks it holds. (see **Figure 4**):

1. Bassett Creek
2. Gateway District
3. Mill Ruins Park
4. Gorge Entry
5. Father Hennepin Bluffs Park and Hennepin Island
6. Main Street and University of Minnesota Connection
7. Nicollet Island
8. Boom Island/BF Nelson

SAFRP is a complex and deeply layered area, and because of this the eight study areas have been created. The study areas bleed outside the 2014 Regional Park boundary to ensure connections and compatibility to the vast adjacent land uses.

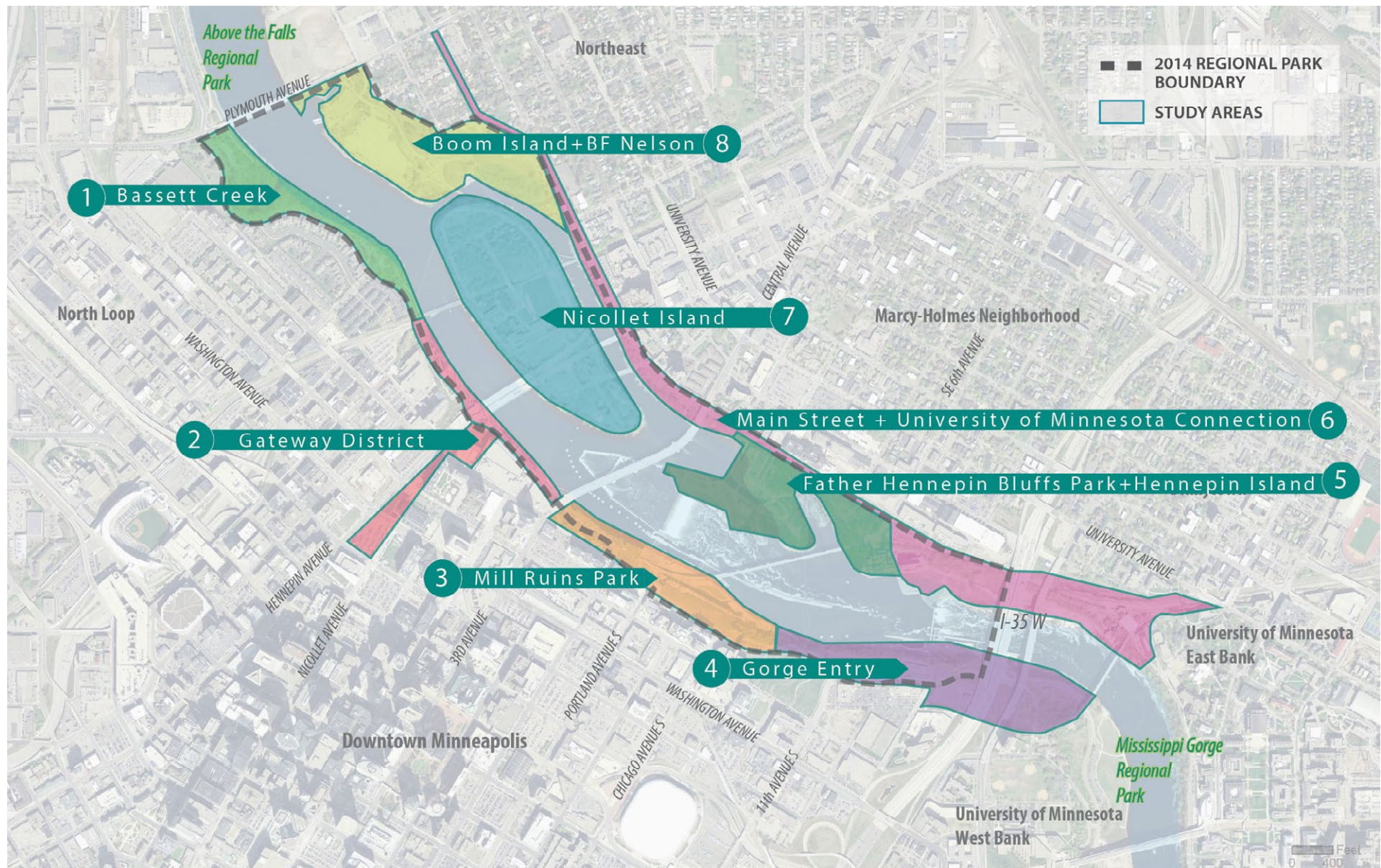


Figure 4: Study Areas

Bassett Creek

Description

Location: James I. Rice Parkway and Plymouth Avenue North

Originating on the verge of Medicine Lake in Plymouth, Bassett Creek used to meander unfettered through extensive marshlands along its twelve mile journey to the Mississippi, where it met the Mississippi River just west of Nicollet Island (south of the modern-day Plymouth Avenue bridge). After major spring floods in 1913, the city installed a sewer pipe in place of the creek, but it did little to solve the flooding issues of the area. An additional diversion pipe was completed in 1992. The original pipe now just serves as a local storm sewer, while the bulk of the suburban runoff is piped 80 feet below downtown Minneapolis and enters the Mississippi at a subsurface outlet near St. Anthony Falls.²⁹ Organizations like Friends of Bassett Creek are proponents of education and interpretation of the history of Bassett Creek, and work to improve the health of the creek before it enters the Mississippi River.

The current MPRB-owned land that rests around the original outlet just south of the Plymouth Avenue Bridge has been transformed into a small seven acre park featuring open space, heavily wooded river banks and benches. There is also an off-street parking lot located off the James I. Rice Parkway. Footbridges allow pedestrians to explore and span over the stormwater run, providing romantic views of the historic stone arch of the outlet. There is a paved trail system along the ridge of the inlet, and several unpaved paths that wind down to the water's edge and provide water access for canoes and kayaks. Although connected to major arteries and nodes north and south of the park along the west bank via James I. Rice Parkway, the space has a private feeling

due to the looming townhomes and industrial buildings bordering the park. (See **Figure 5**)

Just south of Bassett Creek is the newly added 4th Avenue Playground that was first playground to be built on parkland along the west side of the Mississippi River in Minneapolis. The history of saw milling and “nature play” are featured in this playground.

Issues and Opportunities

1. Alignment of West River Parkway across Plymouth Avenue is at an awkward and difficult angle for vehicles to negotiate.
2. Connections to the regional park from the North Loop neighborhood are few and far between, and existing connections are difficult to navigate.
3. Though water access for canoes and kayaks is possible at Bassett Creek, it is difficult to navigate and not well-marked.
4. The shoreline is dominated by invasive plants and in need of restoration.
5. Bassett Creek Outlet is a small, family-friendly park with some opportunities for small gatherings; however there are no picnic shelters, or permanent restrooms.
6. The parking lot takes up valuable space.
7. Opportunity to improve the safety of pedestrian crossings between the North Loop neighborhood and Bassett Creek and the 4th Avenue Playground.



Bassett Creek Study Area



4th Avenue Playground



1 Skewed intersection at West River Parkway and Plymouth Avenue



2 Parking lot edge, small kiosk in background



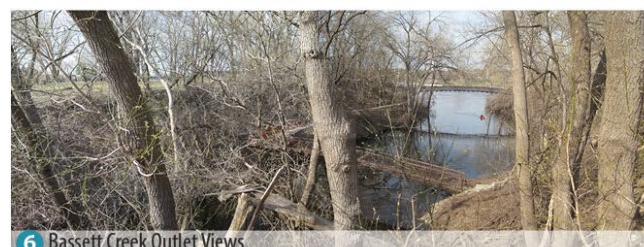
3 View of Star Tribune Property; Desire path to North Loop neighborhood



4 Eroding bluff along trail; Desire paths down to water cause additional erosion



5 Pedestrian bridge over Bassett Creek outlet



6 Bassett Creek Outlet Views



7 Stair connection to the river

Figure 5: Bassett Creek Existing Conditions

Gateway District

Description

Location: Hennepin Avenue and 1st Street South

Located in Downtown Minneapolis, the Gateway District encompasses over 70 acres and several city blocks between the Mississippi River and 4th Street South, and between Hennepin Avenue and 3rd Avenue South. The area was once envisioned as a grand entryway to the City of Minneapolis, and today is occupied by high-rise apartments, offices, the US Postal Service's Central Office, the Downtown Central Library and several large surface parking lots. The Park Board currently owns a 1.66 acre parcel of land along Hennepin Avenue between 1st Street South and Washington Avenue South called Gateway Park.³⁰

The original Gateway Park was envisioned in 1908 as a gateway to the City of Minneapolis due to its proximity to the train depots. Gateway Park was formally dedicated in 1915, and welcomed visitors disembarking from the train station as they entered the city. Several plans for transformation of the Gateway District were proposed from the 1920's onwards, pieces of which were implemented during the public works efforts of the 1930's. However, the current Gateway Park is barely noticeable; the only constant from its original location is the flag pole.³¹

Today, parking is a large component of the space allocation in the Gateway District. The current demand for more green space and inviting public spaces in the downtown area has encouraged the Downtown Council to consider converting some of these parking areas into green space. (See **Figure 6**)

Issues and Opportunities

1. Connections to Downtown Minneapolis are limited and poorly marked.
2. There is no sense of a gateway connecting the city to the regional park.
3. The United States Post Office facility creates a wall between the Regional Park and Downtown.
4. Access point to the Flagpole Plaza through the Federal Reserve property appears private and is underutilized.
5. Flagpole plaza, while providing water access, is an underutilized space dominated by hardscape that is in need of repair.
6. Opportunity for use of Post Office Loggia and Mezzanine.



Gateway District Study Area



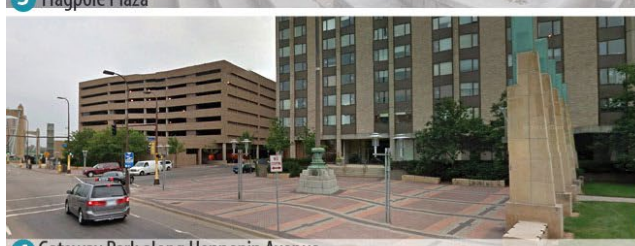
1 Cedar Lake Trail Connection



2 Connection to Federal Reserve Plaza



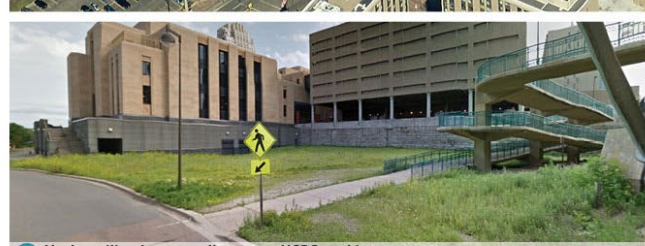
3 Flagpole Plaza



4 Gateway Park along Hennepin Avenue



5 Stair Connection from Hennepin Avenue Bridge to West River Parkway



6 Underutilized space adjacent to USPS parking ramp



7 Trail along USPS facade

Figure 6: Gateway District Existing Conditions

Mill Ruins Park

Description

Location: Portland Avenue S and West River Parkway

Mill Ruins Park is located on the ruins of nineteenth century flour mills on the west bank of the Mississippi River in the oldest area of Minneapolis. Located immediately adjacent to St. Anthony Falls and the western access point of the iconic Stone Arch Bridge, the park is 5 acres and encompasses the walls, foundations, canals, and tailrace ruins of several milling operations, as well as modern access trails and observation decks.³²

The park is on the National Register of Historical Places and lies within the St. Anthony Falls Historic District. Many of the once-buried walls and canals have been revealed, and visitors now have the opportunity to interact with both the ruins and water via trails and catwalks. However, programming remains predominantly passive and access points into the park are unclear upon approach. A significant grade change from street level down to the main area of the park prevents many people from accessing the park, and comfort facilities and food vendors are not obvious or close by. (See **Figure 7**)

Issues and Opportunities

1. Mill Ruins Park interprets the historic riverfront, but only tells part of the story.
2. There are more opportunities to interpret history at this location.
3. The Mill City Museum lacks connection to the river and park.
4. The Guthrie Theater and Mill City Museum both attract visitors to the historic riverfront; however there is no orientation center that is specific to the

regional park to assist these visitors. There are also no public restrooms or other comfort facilities.

5. The USACE lock and dam will be closing in the future, leaving a significant piece of infrastructure potentially underutilized in the middle of the regional park.
6. Shoreline in this area is predominantly hardscape, reducing its ecological function.
7. Trail connections to the Stone Arch Bridge are unclear and difficult to navigate.
8. Connectivity between downtown and the riverfront in this area is complicated and unsafe due to high travel volumes and pinch points.



Mill Ruins Study Area



1 First Street Along Parking Lot Edge; Fuji-ya Building in the Distance



2 Ruins Along West River Road Adjacent to Fuji-ya Building



3 Existing Parking Lot



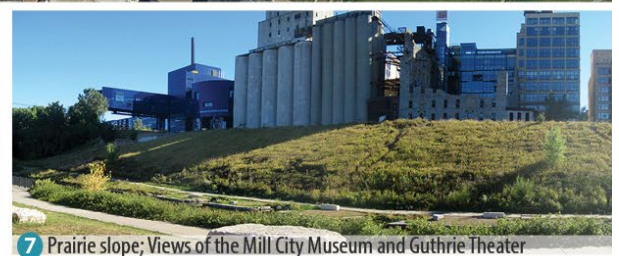
4 Terminus of the Stone Arch Bridge



5 Portland Avenue Connection Underneath Stone Arch Bridge



6 Lower Mill Ruins



7 Prairie slope; Views of the Mill City Museum and Guthrie Theater

Figure 7: Mill Ruins Park Existing Conditions

The Gorge Entry

Description

Location: West River Parkway between 9th Avenue S and Bridge No. 9

The area along the west bank of the river southeast of Mill Ruins Park and downhill from West River Parkway is known as the Gorge Entry. It continues along the floodplain on the west side of the river, past the Lower Lock and Dam of St. Anthony Falls and under the I-35W bridge, ending roughly at the Northern Pacific #9 rail bridge that marks the entrance of the Mississippi Gorge Regional Park, just south of the 10th Avenue bridge. The majority of the land between Mill Ruins Park and the I-35W bridge is currently owned by Centerpoint Energy or the US Federal government. The land between the I-35W bridge and the Bridge #9 is primarily owned by MPRB and is known as Bluff Street Park.

Historically, the site has been used as a rail yard, utility yard, and secure lock and dam access, and has been inaccessible to the public. The area by the southern foundation piers of I-35W was heavily polluted by a prior coal-to-gas processing plant, causing the area to be declared a toxic waste site and necessitating the removal of the contaminated soil. None of its current or historical uses are easily visible from adjacent properties, and its historical privatization creates a significant barrier to pedestrian movement along the lower side of the western bluffs. A pedestrian must go up the bluffs at the end of Mill Ruins Park, use the trail along the West River Parkway, and then re-enter the gorge further south along the West Bank.

The portion of the Gorge Entry underneath I-35W, was seriously affected by the bridge collapse on August 1, 2007. The rescue efforts were staged from this area, and

a great deal of the debris was in the gorge for several months as collapse investigation and recovery efforts progressed. The I-35W Bridge Remembrance Garden is just above the gorge at the northern end of the Gorge Entry area, along West River Parkway and looking south toward the new I-35W bridge.³³ The area below the bridge has since been cleared of debris and has been landscaped for better pedestrian access down to the river and in anticipation of a marsupial pedestrian bridge that was designed in tandem with the new interstate bridge.³⁴

The planned bridge under I-35W will complete the trail loop that connects the Marcy-Holmes neighborhood and East Bank to the downtown riverfront and West Bank, and trails parallel to the river to complete the north-south connection between the Central Riverfront Regional Park and the Mississippi Gorge Regional Park. (See **Figure 8**)

Issues and Opportunities

1. Connectivity along the river's edge from the gorge to the SAFRP is nonexistent due to private property rights and steep slopes.
2. Centerpoint Energy holds land here which blocks access to the river.
3. The lock and dam are a great opportunity for interpretation and provide a unique engineering look into how the river operates.
4. The corridor between the Stone Arch Bridge and the Dinkytown Greenway is railroad land, which the University of Minnesota leases for purposes not including bike and pedestrian paths.

5. Trail linking Bluff Street Tunnel under I-35W and Bluff Street Park with East Bank via Bridge No. 9



Gorge Entry Study Area



1 At Parking Turn Around; Service Drive to Lower Lock and Dam



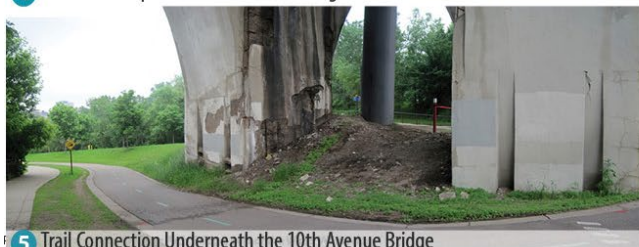
2 Steep Bluff along Service Drive to Lower Lock and Dam



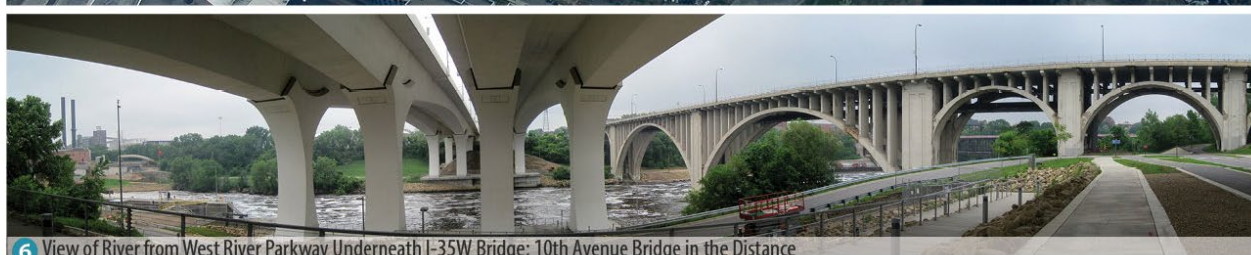
3 West River Parkway Trail Crossing at CenterPoint Energy Inholding



4 Trail and Ramp Underneath I-35W Bridge



5 Trail Connection Underneath the 10th Avenue Bridge



6 View of River from West River Parkway Underneath I-35W Bridge; 10th Avenue Bridge in the Distance

Figure 8: The Gorge Entry Existing Conditions

Father Hennepin Bluffs/Hennepin Island

Description

Location: Riverside of Main Street SE between Central Avenue SE and 6th Avenue SE

Father Hennepin Bluffs Park is located at the corner of historic Main Street SE and 6th Ave SE, and contains portions known as Phillip W. Pillsbury Park and Lucy Wilder Morris Park. The park is 8.02 acres in size, and is owned by the MPRB.³⁵ The park is topographically diverse: the majority is at grade with Main Street SE, and includes trails, benches, open lawn and a stage situated at the bluff's edge. The lower portion of the park is significantly below street level, and is only accessible by stairs. Although paved paths and bridges are present, this area is moderately maintained, unlit, difficult to access, other than by foot, and passively programmed. It is also densely wooded, and provides excellent water access opportunity as it is protected from the strong current of the main river channel. This lower park provides unique views of the downtown skyline and the Stone Arch Bridge, and a rare opportunity to be in a seemingly wild, untamed place within an urban environment.

The land of nearby Hennepin Island is owned by Northern States Power Co. (13.4 acres found at 206 Main St SE) and the University of Minnesota (0.86 acres with no specific address). Based on historical events, Hennepin Island can tell the story of the physical structure of the river around the falls. An industrial spillway tunnel collapsed in 1869 when the river overpowered the tunnel's poor engineering, leading to significant land loss at Hennepin Island and the eventual construction of the concrete apron after the geological structure of the falls was compromised.³⁶

The ADM sub-station is currently a private in holding within lower Hennepin Island and is no longer being used by Xcel Energy. Portions of the U of M St. Anthony

Falls Laboratory are also currently leased from Xcel Energy and provide storage and parking areas for their facility. Roadway access to the Lab is provided through an access easement along 3rd Avenue SE.

The only publically accessible area of Hennepin Island is known as Water Power Park, an interpretive walk leading to an overlook at the top of the falls. Water Power Park was developed by Northern States Power Co. in conjunction with the MPRB, and access to the park is permitted during daylight hours from spring through fall. No connection from Water Power Park to the adjacent Father Hennepin Bluffs Park is present without walking around the power plant along Main Street SE.

Both Father Hennepin Bluffs and Hennepin Island Parks are culturally significant in the community, as events like Northern Spark and the Stone Arch Bridge Festival host activity across the site and draw local and non-local visitors to the area. The stage at Father Hennepin Bluffs Park is also used for weddings, small concerts, and other performances, and the open lawn area is sometimes used for the staging of running events and group yoga classes. (See **Figure 9**)



Father Hennepin Bluffs/Hennepin Island Study Area



1 View of Downtown Minneapolis from the existing bandshell



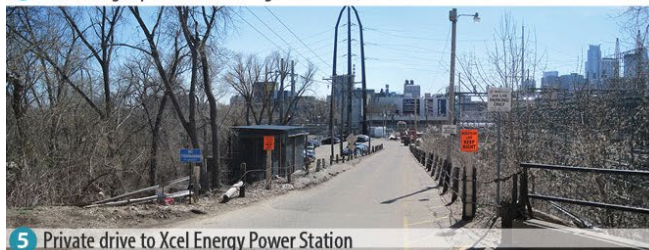
2 Kiosk at entrance to Stone Arch Bridge



3 Father Hennepin Bluffs Park



4 Trail along top of bluff heading north - fall, summer



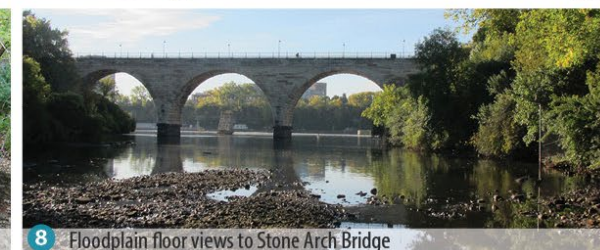
5 Private drive to Xcel Energy Power Station



6 Staircase to Hennepin Island



7 Milling tailrace ruin



8 Floodplain floor views to Stone Arch Bridge

Figure 9: Father Hennepin Bluffs/Hennepin Island Existing Conditions

Issues and Opportunities- Father Hennepin Bluffs Park

1. There is poor circulation and connectivity between the River and the Marcy-Holmes neighborhood—the built structure of the adjacent blocks creates a wall between the river and the neighborhood.
2. Due to the berms and low trees at its edge, Father Hennepin Bluffs Park feels cut off from the street and nearby residential buildings.
3. The bluff edge is degraded – invasive species dominate and erosion is present. In many places vegetation has grown dense enough to block views of the river from the bluff edge.
4. The East Falls were once flowing. The limestone fall ledges are still intact.
5. Pedestrian and bike trails are in poor condition in places, and people have created their own pathways that more directly follow the bluff edge, leading to erosion.
6. The bandshell is situated near the bluff and does not function well with the existing circulation system.
7. The Stone Arch Bridge and Sixth Avenue currently culminate in a cul-de-sac, providing no real sense of place, entry to the regional park or indication of Sixth Avenue's connection to the neighborhood. There is a lack of wayfinding in this crucial entry to the regional park.
8. Despite its recreational use, there are no public restrooms or orientation centers where visitors can get information or maps about the regional park.

Issues and Opportunities- Hennepin Island

1. The river floor is degraded – invasive species dominate the bluff and the shoreline.
2. There are access, circulation and safety issues on Hennepin Island. Currently access to Hennepin Island from Father Hennepin Bluffs is only possible by stair – there are two staircases that are not well-marked and create barriers to access for people with disabilities. There are also safety concerns as the two access points are not connected by trail, creating a one-way-in, one-way-out scenario.
3. Though adjacent to both Water Power Park and the U of MN portage, there is no direct trail access between Hennepin Island and these two spaces.
4. While this area has a rich history related to the beginnings of Minneapolis, there is little interpretation to tell the story.



Father Hennepin Bluffs/Hennepin Island Study Area



1 View of Downtown Minneapolis from the existing bandshell



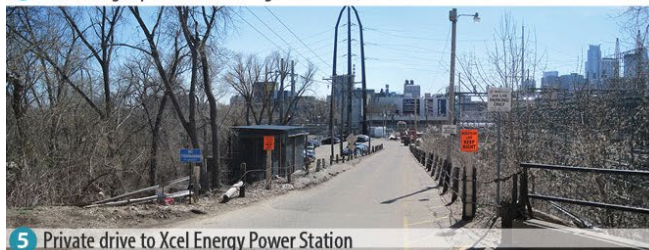
2 Kiosk at entrance to Stone Arch Bridge



3 Father Hennepin Bluffs Park



4 Trail along top of bluff heading north - fall, summer



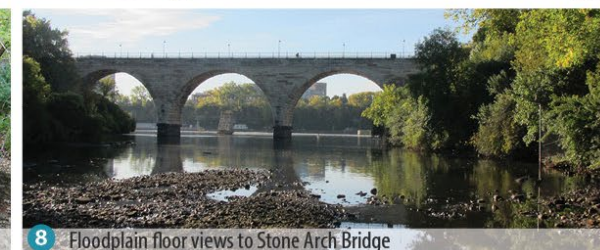
5 Private drive to Xcel Energy Power Station



6 Staircase to Hennepin Island



7 Milling tailrace ruin



8 Floodplain floor views to Stone Arch Bridge

Figure 9: Father Hennepin Bluffs/Hennepin Island Existing Conditions

Main Street and University of Minnesota Connection

Description

Location: Marshall Street/Main Street/UMN Access Road Corridor between 8th Avenue NE and East River Road

Main Street refers to the historic stretch of road along the east side of the river, running from Nicollet Island to SE 6th Avenue. The MPRB owns 5.61 acres, including the street and adjacent riverbank from Hennepin Avenue to Father Hennepin Bluff Park. There are currently bike and pedestrian trails leading from Father Hennepin Bluffs Park to Nicollet Island, with benches and small turf areas in select places along the riverbank.³⁷

Streetscape elements give Main Street a signature parkway look, and many streets and pathways feature the original cobblestone and brick pavers. Many businesses occupy the preserved buildings and boast the historical significance of Main Street. The east side of the street is active with diners, shoppers, movie-goers, and recreational enthusiasts. Recent residential development is introducing mid-to-high end modern apartments and condominiums to the area as historic buildings are repurposed and new structures begin to occupy empty lots.

Main Street SE becomes Marshall Avenue north of Nicollet Island and terminates south of SE 6th Avenue. (See **Figure 10**)

Issues and Opportunities

1. Though it follows the river edge, Main Street is not connected to East River Road to its south, creating a disruption in an otherwise robust, connected parkway and trail system.
2. Bike and pedestrian trails along Main Street are not continuous – there is a break in the trail system at Hennepin Avenue East.
3. Main Street has a unique historic character and location, but still struggles to attract regular activity throughout the year.
4. The brick pavers on Main Street and its sidewalks are in need of ongoing maintenance and repair.
5. Combined trails cause conflicts between pedestrians, bikers, and other visitors to the area, especially during the summer.
6. The shoreline along Main Street is degraded and unkempt. Invasive vegetation is so dense in places it limits views to the river.
7. The street character changes drastically after crossing 1st Avenue NE, and after crossing NE 5th Avenue, the alignment of Main Street turns into Marshall Avenue NE. This portion of the street feels disconnected in character from the rest of Main Street, as well as from the regional park as a whole. It does not feel like a Parkway.
8. Bike connections into the neighborhood are limited from Marshall Avenue.



Main Street Study Area



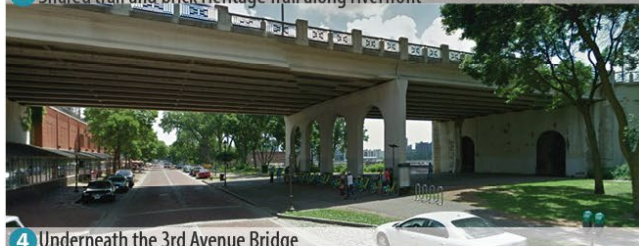
1 Intersection Hennepin Avenue and Main Street



2 Merriam Bridge and Main Street



3 Shared trail and brick Heritage Trail along riverfront



4 Underneath the 3rd Avenue Bridge



5 Historic Main Street

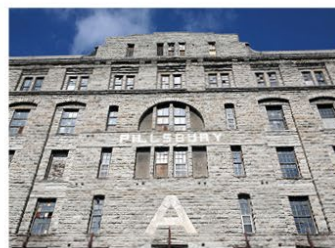


Figure 10: Main Street Existing Conditions

Nicollet Island

Description

Location: Nicollet Island on Mississippi along Hennepin Avenue and 1st Avenue NE

Nicollet Island lies north of St. Anthony Falls on the Mississippi River, situated between Downtown Minneapolis and the neighborhood of St. Anthony West. The East Channel separates the island from the East Bank, and the main channel of the Mississippi is on its west. Hennepin Avenue and 1st Avenue NE cut across the island, connecting Downtown and Northeast Minneapolis. An active rail line crosses the island north of Hennepin Avenue.

The island is 48 acres in size. The MPRB owns the largest portion at 26.8 acres and Minneapolis Public Works owns 2.85 acres. Privately owned properties include De La Salle High School, the Grain Belt Sign parcel, the railroad right-of-way, the Grove Street Flats, the West Island Flats, and the former Hertz truck company site. Historically significant buildings include the Nicollet Island Pavilion (William Bros Boiler Works), the Nicollet Island Inn (Island Sash and Door Company), the Grove Street Flats, DeLaSalle's 1924 Building and 20 of 22 homes (two are reconstructions). The owners of the 22 homes and the Nicollet Island Inn have long-term leases from the Park Board for the land but own the buildings, which they are required to preserve.³⁹

Nicollet Island remains divided by Hennepin Avenue, which is a six lane road elevated above the rest of the island. This grade change makes access to the island limited, and views into the island difficult. The northern part of the island is predominantly residential. While there is a trail connection on the north end of the island to Boom Island and BF Nelson, it is not well marked or connected to any other trails on Nicollet Island. De La Salle High School is active during the school day for part

of the year. The shoreline along the East Channel provides valuable bird habitat within the Mississippi River flyway on this portion of the island.

Activity on south of Hennepin Avenue fluctuates depending on events and time of year. The Nicollet Island Pavilion is currently operated as a private event center – the Park Board has a contract with a private vendor to provide catering services there. There is an open lawn and an amphitheater that has aged to a point of disrepair, as well as several paved trails, a crushed limestone trail, and boardwalk overlooks. There are also two large surface parking lots on the south end of the island that are heavily used for events and during the school year, but remain empty the remainder of the time. (See **Figure 11**)

Issues and Opportunities

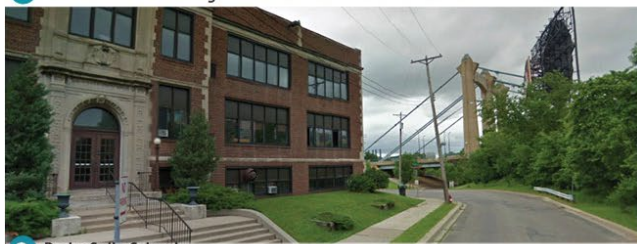
1. Nicollet Island Pavilion is primarily used for private events, limiting public access to this historically significant structure and its surrounding landscape at the southern tip of the island.
2. Hennepin Avenue divides the island providing no sense of arrival.
3. Trail connections to the island are unclear.
4. Hard surface parking dominates the south tip of the island. During large events there is a lack of parking.
5. Vegetation, habitat and shoreline edges are degraded around the island despite its importance to birds within the Mississippi River flyway.
6. Excessive road widths on East Island between De La Salle Drive and Merriam Street contribute to an increase in stormwater runoff.



Nicollet Island Study Area



1 Historic residential neighborhood



2 De La Salle School



3 Unwelcoming experience underneath Hennepin Avenue Bridge



4 Amphitheater



5 Mintahoe managed event space at Nicollet Island Pavilion



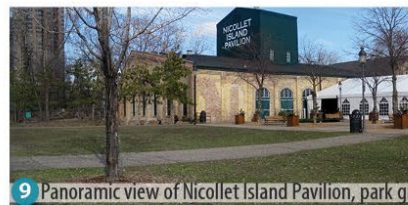
6 Stairway access to trail



7 RR crossing at trail entry



8 Pavilion pay parking lot



9 Panoramic view of Nicollet Island Pavilion, park green space and views to downtown

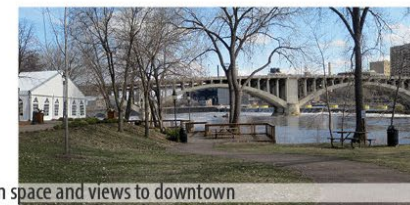


Figure 11: Nicollet Island Existing Conditions

Boom Island Park and B.F. Nelson Park

Description

Location: Riverside of Marshall Street NE between Plymouth Avenue and 3rd Avenue NE.

Originally owned by Benjamin F. Nelson, the 11.99 acre park was occupied by mills and businesses in the late 19th century. Over time, the businesses were re-located to the suburbs and the MN Department of Transportation (MnDOT) acquired the land during a time when a freeway connection ("The North Loop/I-335") was planned for the area. That freeway was never built and the park is now owned by the MPRB.⁴⁰

Recent development of B. F. Nelson has added accessible pathways to the park. Because of its adjacency to Boom Island Park, there is no clear demarcation of where one park ends and the other begins, creating a cohesive path system and easy connectivity between parks. A significant landmark within the park is the Pioneer Statue, a tribute to early area settlers.

Boom Island Park is a 22.5 acre park situated along the river between 8th Avenue NE and 6th Avenue NE. The park was historically a swampy island that became an important site for lumber companies, who used booms there to catch logs floating down the river from the northern logging region. Eventually the island was incorporated into the riverbank. A 113-year-old railroad bridge still links Boom Island Park to Nicollet Island. The bridge is currently open to pedestrian and bicycle traffic, and roadhouse foundations are still buried in the park.⁴¹

Today, Boom Island Park is host to a playground, reservable picnic shelters, lots of open green space, and parking, rendering it capable of hosting large gatherings. A unique feature of Boom Island Park is a short promenade along the river with concrete steps where visitors

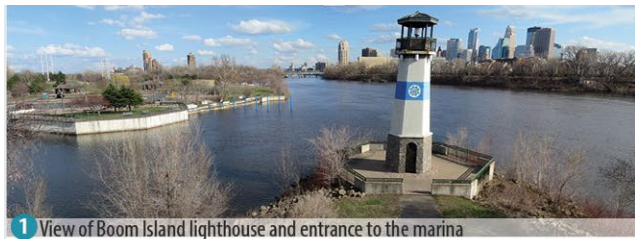
to the park can experience and interact with the water. There is also a marina with a public boat launch, and a lighthouse. (See **Figure 12**)

Issues and Opportunities

1. There is little historic interpretation in the park. There is an opportunity to interpret railroad and logging history.
2. Parking lots and their access roads take up a lot of space within the park and add to stormwater runoff.
3. Connections to the neighborhood and to the proposed Scherer Site are lacking.
4. The picnic shelters are useful, however they are spread out which limits their type of use.
5. The shoreline edge is degraded with excess hardscape.
6. The entry into the park is poorly marked.
7. The existing large lawn is underutilized and has no canopy cover.



Boom Island/BF Nelson Study Area



1 View of Boom Island lighthouse and entrance to the marina



2 Mississippi River edge and overlooks



3 Open lawn looking towards Downtown Minneapolis



4 Promenade benches and terraces overlooking Mississippi River



5 Trail along southwestern edge of Boom Island



6 New parking lot at BF Nelson



7 Trail with newly planted trees in BF Nelson



8 Pioneer Monument

Figure 12: BF Nelson and Boom Island Park Existing Conditions

Land Use and Context

There is a diversity of land use within the SAFRP boundary, including park, commercial, institutional, residential, and industrial. In many places park land is interspersed with other land uses, making for a complex landscape. Industrial and institutional land uses are concentrated on the southern edge of the Regional Park, while commercial and residential land uses are interspersed with parks further north. Neighborhoods adjacent to the regional park include Downtown East and West, North Loop, Marcy-Holmes, St. Anthony West, and Nicollet Island East Bank Neighborhood. This diverse land use is generally described in **Figure 13**.

Along the East Bank near the I-35W Bridge, industrial and institutional land uses intermingle with park land. Lower Father Hennepin Park is one of the largest cohesive areas of vegetation and habitat within the Regional Park boundary. Along its bluffs are remnant ruins of the milling industry, along with the site of the historic East Falls. Both north and south of the park, power generation still dominates the riverfront. Just upstream, Main Street draws visitors to its commercial district as well as new residents to its growing assortment of apartments and condos.

The northern end of the Regional Park on the East Bank is comprised entirely of Park Board-owned land: BF Nelson and Boom Island. Single family residential parcels adjoin Boom Island on its eastern edge, and the neighborhood of St. Anthony West stretches out to the east of both parks.

Across the river and the Plymouth Avenue Bridge, Bassett Creek Outlet offers a naturalized river edge, canoe/kayak access and picnicking. Once an industrial area, this neighborhood is changing and now includes mixed-use, residential, commercial, and industrial land uses. With the development of this neighborhood there

is a growing need for open space and access to the park system in this area is difficult.

Moving further south along West River Parkway, there are a couple of smaller parks perched along the river bluff: the 4th Ave Playground and the Flagpole Plaza. A residential area with limited access points also borders the Regional Park in this area. The shoreline from the Flagpole Plaza south becomes a hard edge, comprised of an engineered wall until the point it transitions into the Upper Lock and Dam.

Beneath Hennepin Avenue is First Bridge Park, with historic footings of the three earliest bridges on the site. Beyond, on the other side of Hennepin Avenue, the United States Post Office's Minneapolis Main Office borders West River Parkway on its western edge for three blocks, and forms a wall that blocks access to the riverfront.

Beyond the 3rd Avenue Bridge, there is a swath of undeveloped park land occupied by a surface parking lot, industrial ruins and the Fuji-ya building, known as the Water Works site. Across West River Parkway, the Upper and Lower Locks and Dams, run by the US Army Corps of Engineers, funnel barges and other watercraft through the river corridor. Further south, the archaeological Mill Ruins Park and its partner, the Mill City Museum, showcase the ruins of the historic milling industry. The Guthrie Theater is a nationally-renowned theater that extends into the park with its "endless bridge" which overlooks the riverfront adjacent to Mill Ruins Park. To its south is Gold Medal Park, a privately-owned public park that provides open green space to the surrounding commercial and residential areas. Overall, this area forms a historically and culturally complex commercial, residential and industrial district that attracts both local and regional visitors to the Regional Park.

The Stone Arch Bridge connects the Mill District to the east side of the river by way of pedestrian and bike trail with panoramic views of St. Anthony Falls, Downtown Minneapolis and the west-side milling district. It is also the site of several annual festivals and events. The Stone Arch Bridge serves as a gateway to the Regional Park on both sides of the river: on the East Bank, 6th Avenue SE leads directly from the Marcy Holmes neighborhood to the Stone Arch Bridge, and to its east is a potential connection to East River Road. On the West Bank it terminates at the juncture of West River Parkway and Portland Avenue, a direct route into Downtown Minneapolis.

Farther south along West River Parkway, Centerpoint Energy operates its plant just north of the I-35W Bridge. It mirrors the industrial land use on the other side of the river, and is adjacent to office and residential land uses. The property, combined with the Lower Lock and Dam, limits public waterfront access in this area.

The I-35W and 10th Avenue river bridge crossings near the south end of the regional park boundary are key travel corridors connecting the east and west sides of the river but do not provide direct vehicular or pedestrian access to SAFRP. Bridge Number 9 was converted from rail use to a bicycle and pedestrian bridge in 1999 and serves as a direct connector to the U of M East Bank campus.

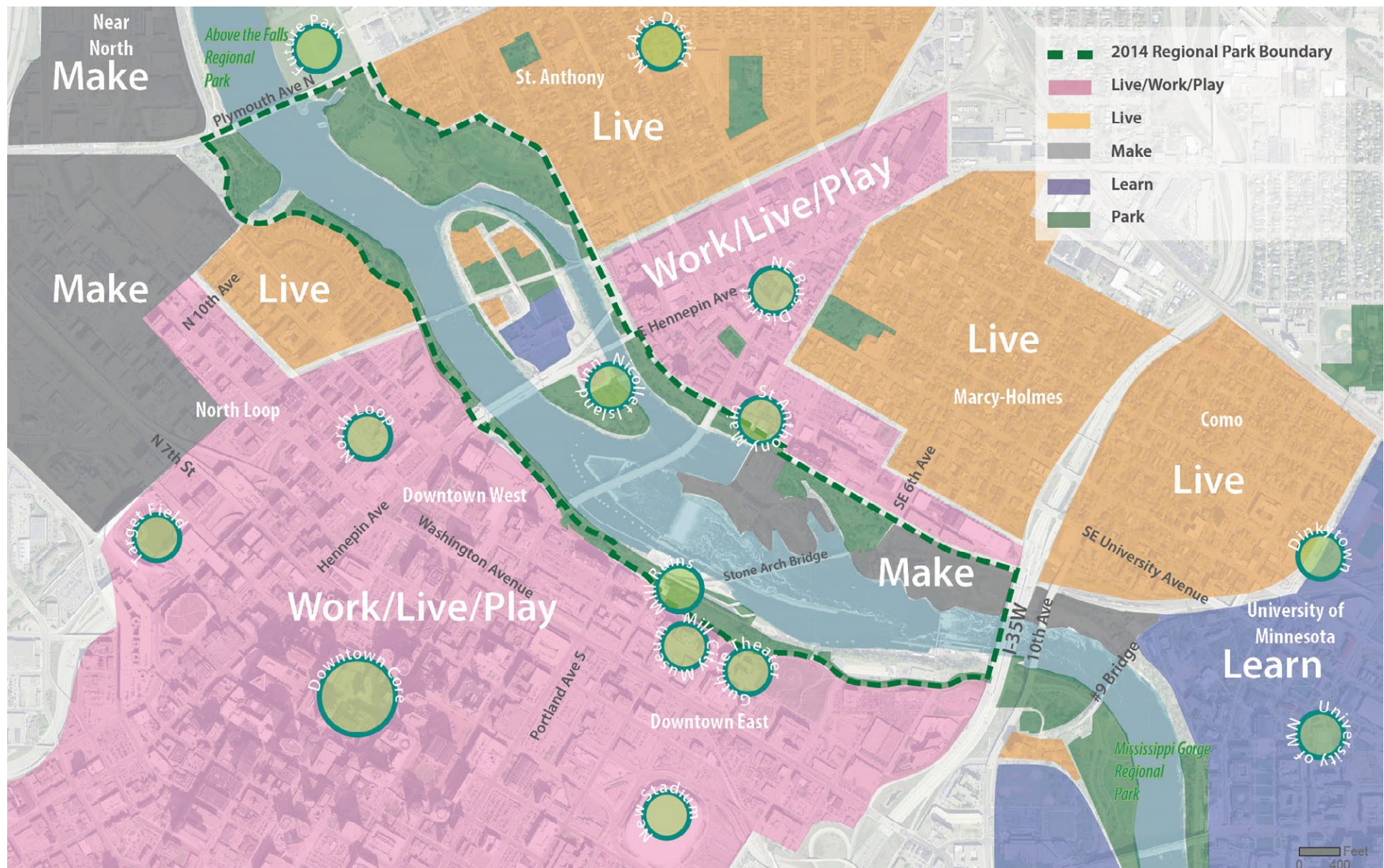
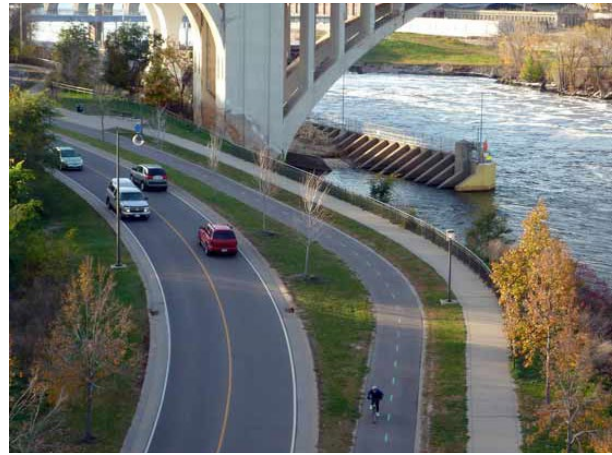


Figure 13: Generalized Urban Context



Left to right - I-35W Bridge, West River Parkway, 3rd Avenue Bridge Across the Mississippi River

Transportation, Transit and Access

The St. Anthony Falls Regional Park is situated near nationally, regionally, and locally-connected transportation systems. This includes major roads and highways, public transportation access such as bus routes, light rail lines and trains, bike trails and on-road bike lanes, sidewalks, and other pedestrian systems. There are five bridges crossing this river in the SAFRP, including Plymouth Avenue, Hennepin Avenue/1st Avenue NE, 3rd Avenue, the Stone Arch Bridge, and I-35W. While this is a robust circulation system, there are key access points affecting the Regional Park that should be addressed in order to increase connectivity and improve circulation.

Motor Vehicle Access

In terms of motor vehicle access, West River Parkway, Main Street and Marshall Avenue generally follow the edge of the Regional Park and provide the most direct vehicle access to the riverfront. Several major arterials, including Hennepin Avenue, Washington Avenue, and SE 4th Street, connect the SAFRP to the regional highway system (394W, I-35W, and I-94). Vehicles can also access the riverfront at Plymouth Ave, North 4th Avenue, Portland Avenue South, and 11th Avenue South on the West Bank, and Plymouth Ave, 5th Avenue NE, SE 3rd Avenue and SE 6th Avenue on the East Bank. There are surface parking lots at Bassett Creek Outlet near Plymouth Ave North, at North 4th Avenue near the playground, within Boom Island and BF Nelson Parks, at the terminus of the Stone Arch Bridge and Portland Avenue South, and on Nicollet Island.

While West River Road is continuous, connecting the SAFRP north to the Above the Falls Regional Park and south to the Mississippi Gorge Regional Park, there is no continuous vehicle access on the east side of the river connecting the SAFRP to these neighboring regional parks. The existing East River Road turns and comes to an end just south of the SAFRP where the BNSF railroad crosses the river at Bridge Number Nine. (See **Figure 14**)

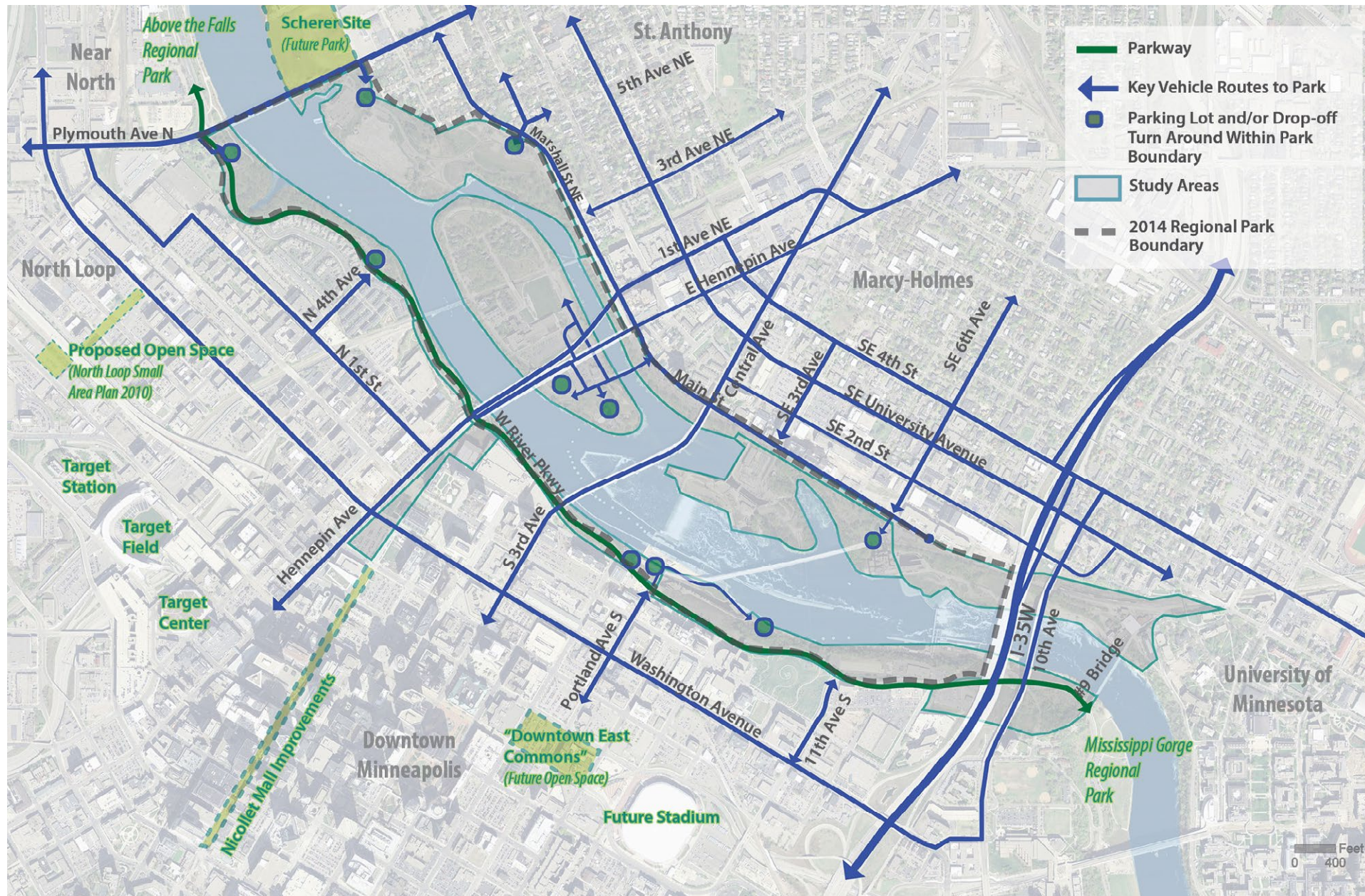
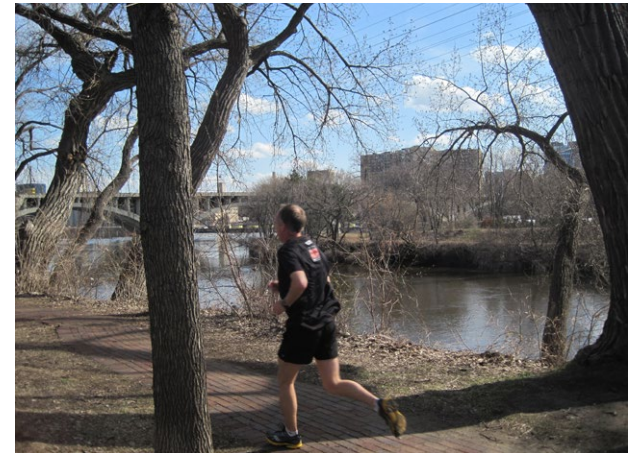
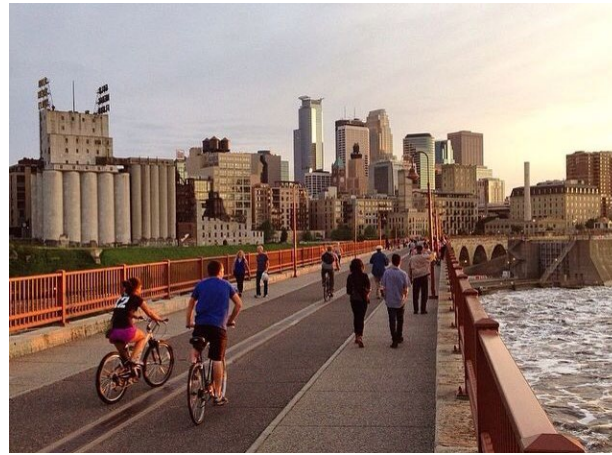


Figure 14: Existing Vehicular Connections



Left to right -Metro Transit Bus in Downtown Minneapolis, Pedestrian and Bicycle Access Across the Stone Arch Bridge, Man Running Along the Heritage Trail

Public Transit Access

In addition to accessing the Regional Park by vehicle, it is also possible to get to the SAFRP using public transit. Currently there are several bus lines with stops within walking distance of major access points at 11th Avenue South, Portland Avenue South, Hennepin Avenue, and North 4th Avenue on the West Bank. On the east side of the river, buses stop a few blocks from the Regional Park along University and Marshall Avenues. There are also bus lines that run on Hennepin Avenue with stops on Nicollet Island. Though it is possible to get within half a mile to the SAFRP by light rail, walking or a bus transfer are necessary to reach the park. The proposed Nicollet-Central Modern Streetcar Line would connect the existing light rail line by way of Nicollet and Hennepin Avenues to the Regional Park, running across Nicollet Island. Currently the most challenging aspect of getting to the SAFRP by public transit is

the lack of signage or other wayfinding strategies identifying routes to the park. (See **Figure 15**)

Pedestrian Access

Accessing the Regional Park as a pedestrian is the easiest from the standpoint of available entry points. Due to the urban location of the SAFRP, the sidewalk network aligns with the grid and provides access to the park alongside all road connections. There are also some locations where only pedestrian access is possible: reaching West River Parkway from Hennepin Avenue is only possible by staircase, and on the East Bank pedestrians can get to Main Street from the 3rd Avenue Bridge via stair. Further upriver, there is a pedestrian stair leading from Lourdes Place to Main Street, and the lower portion of Father Hennepin Park is only accessible by foot.

There are some places where pedestrian access is a challenge, mainly in areas where conflicts with vehicles and

bicyclists are likely. There is a pinch point near the base of the Stone Arch Bridge on the East Bank, where a stair and ramp lead to 1st Street South. Due to the volume of traffic and curving road, this is a dangerous crossing point for pedestrians and bicyclists attempting to enter the SAFRP trail system. There are also several identified places where combined trails in cramped corridors create conflicts between pedestrians and bicyclists: the trail along Main Street can be problematic at a pinch point near Father Hennepin Park, as well as closer to St. Anthony Main which tends to attract large amounts of people on summer days.

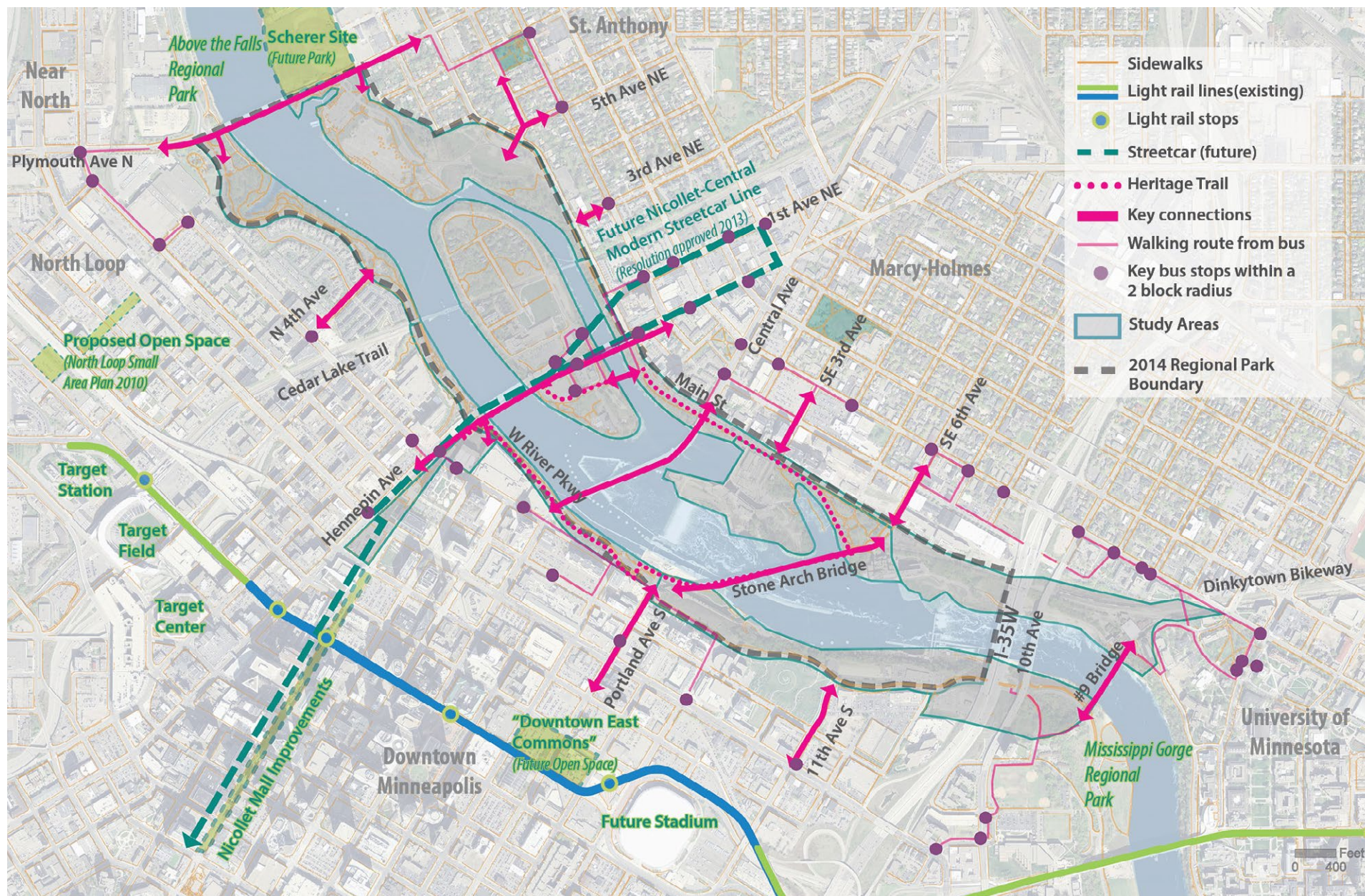


Figure 15: Existing Transit and Pedestrian Connections

Bicycle Access and Trail System

The trail system in the SAFRP is fairly robust, with bike and pedestrian trails along almost the entire length of the riverfront and within individual parks. Bike and pedestrian trails are combined in places where space is limited, and separated in places with more width. There are a few key missing connections, however: while the trail system on the West Bank connects both north to the Above the Falls Regional Park trail system and south to the Mississippi Gorge Regional Park trail system, the East Bank trail has gaps.

One gap exists from where trails currently end at Main Street and the Stone Arch Bridge through the BNSF rail corridor to East River Road and the Dinkytown Greenway. There is also a gap beyond the SE Steam Plant, where public park access doesn't currently exist. At its other end, the East Bank trail ends at Main Street and Hennepin Avenue. An on-road bike lane begins starting at 3rd Ave NE, creating a two-block gap in bike facilities. The bike trail along Main Street also leads onto Nicollet Island, but then does not pick up again until the island's northeast corner, where it is difficult to find. The southern tip of the island is currently fragmented for both pedestrians and bicyclists, with no clear single public trail around it

The trail across the Stone Arch Bridge, which provides one of the main pedestrian and bike connections across the river within the SAFRP, also lacks clarity and sense of entry at both ends of the bridge. On the East Bank the trail currently ends in a cul-de-sac, and on the West Bank it ends in a parking lot.

In addition to missing key trail connections within the Regional Park trail system, there are opportunities to create stronger access points to the system from beyond the Regional Park boundary, such as at the south end of the SAFRP where a link to the Dinkytown Greenway and East River Road would make access to

the SAFRP easier from the University of Minnesota. On the West Bank, though connections to the neighboring north/south regional parks are strong, connections to Downtown Minneapolis are limited. There is an on-street bike lane at North 4th Avenue that leads to the trails, and one block south the Cedar Lake Trail crosses West River Road to connect to the trail system. However, due to the development pattern along West River Road, it is very difficult to reach the trail system between the Cedar Lake Trail and Portland Avenue South, a half-mile distance.

There is an existing connection through the Federal Reserve property north of Hennepin Avenue. It is not well-marked and appears private, making it underutilized. Beyond Portland Avenue and the Stone Arch Bridge connection there is a gap in the link to the future Vikings Stadium.

In addition to off-road bike trails, there is a large network of on-street bike lanes leading to the SAFRP. Streets with key on-road connections include Plymouth Ave, North 4th Avenue, Hennepin Avenue, Portland Ave South, SE 6th Avenue, and 1st Avenue NE. Together with the off-road trails, these lanes create a bike network that reaches out into the city to connect people to the SAFRP.

Another part of the bike system in the SAFRP is the bike share program run by Nice Ride Minnesota. This program locates rentable public bikes at designated locations throughout the Twin Cities, allowing people to check a bike out from a kiosk and return it to any other kiosk after a selected amount of time. Within the SAFRP, there are currently Nice Ride Stations located at North 4th Avenue and West River Parkway, within Boom Island Park, and at 3rd Avenue South and Main Street. These locations are subject to change and are updated on Nice Ride's website.²⁷

Wayfinding

A big challenge related to accessing the St. Anthony Falls Regional Park is the lack of a cohesive signage and wayfinding system. Whether a visitor arrives by interstate, public transit, bike or by walking, knowing that the park exists and how to access it is essential. A Signage and Wayfinding Master Plan was completed for the Minneapolis Riverfront District in April of 2004, covering the bounds of the SAFRP and extending several blocks into the surrounding neighborhoods. This plan studies existing signage in the riverfront area, wayfinding precedents, traffic patterns, primary destinations, and key decision points, and suggests a cohesive design for a riverfront wayfinding system.²⁸ Implementing this plan is important to the success of the SAFRP as a regional attraction. See appendix for more detail.

Water Access

The SAFRP is located in the Anoka to Fort Snelling segment of the Mississippi River State Water Trail. Existing water access for motorized boats is located at Boom Island Park. Currently, there are no official carry-in access points for canoes and kayaks in the SAFRP. An unofficial landing point for canoes and kayaks exists at Bassett Creek. Refer to the proposed portage route map in Chapter 7 for more detail.

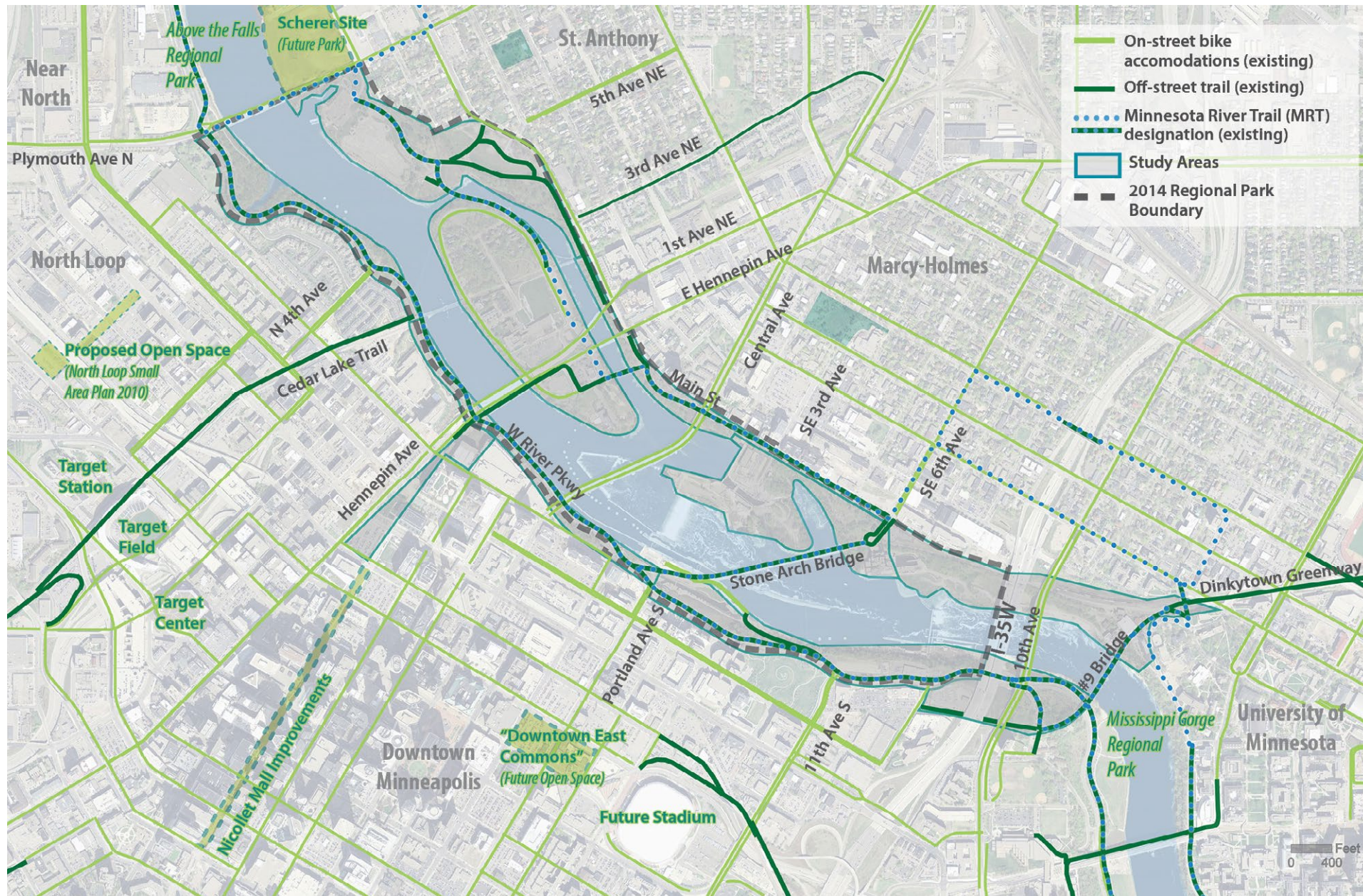


Figure 16: Existing Bike Lanes and Trails



Public Engagement CHAPTER

3



Images from CAC Meetings provided by MPRB



Public Engagement

Introduction

One of the central tenets of the master planning process for the St. Anthony Falls Regional Park (SAFRP) was the involvement of stakeholders in framing directions. Throughout the process, neighbors, stakeholders, and agencies were provided access to MPRB staff and the consulting team in an effort to guide the master plan in ways that best aligned with the diverse interests and perspectives of the Central Riverfront area.

The engagement process integrated the primary work of master planning the Central Riverfront area and the more design-focused work surrounding the Water Works Project. The results differed due to the specific goals of each effort, but as a master plan, the SAFRP established planning principles that were integrated with the Water Works design effort. Each focus area of

the SAFRP was built on both planning and design directions—recognizing it is the design explorations that compel reactions, but that planning principles are the core of this plan.

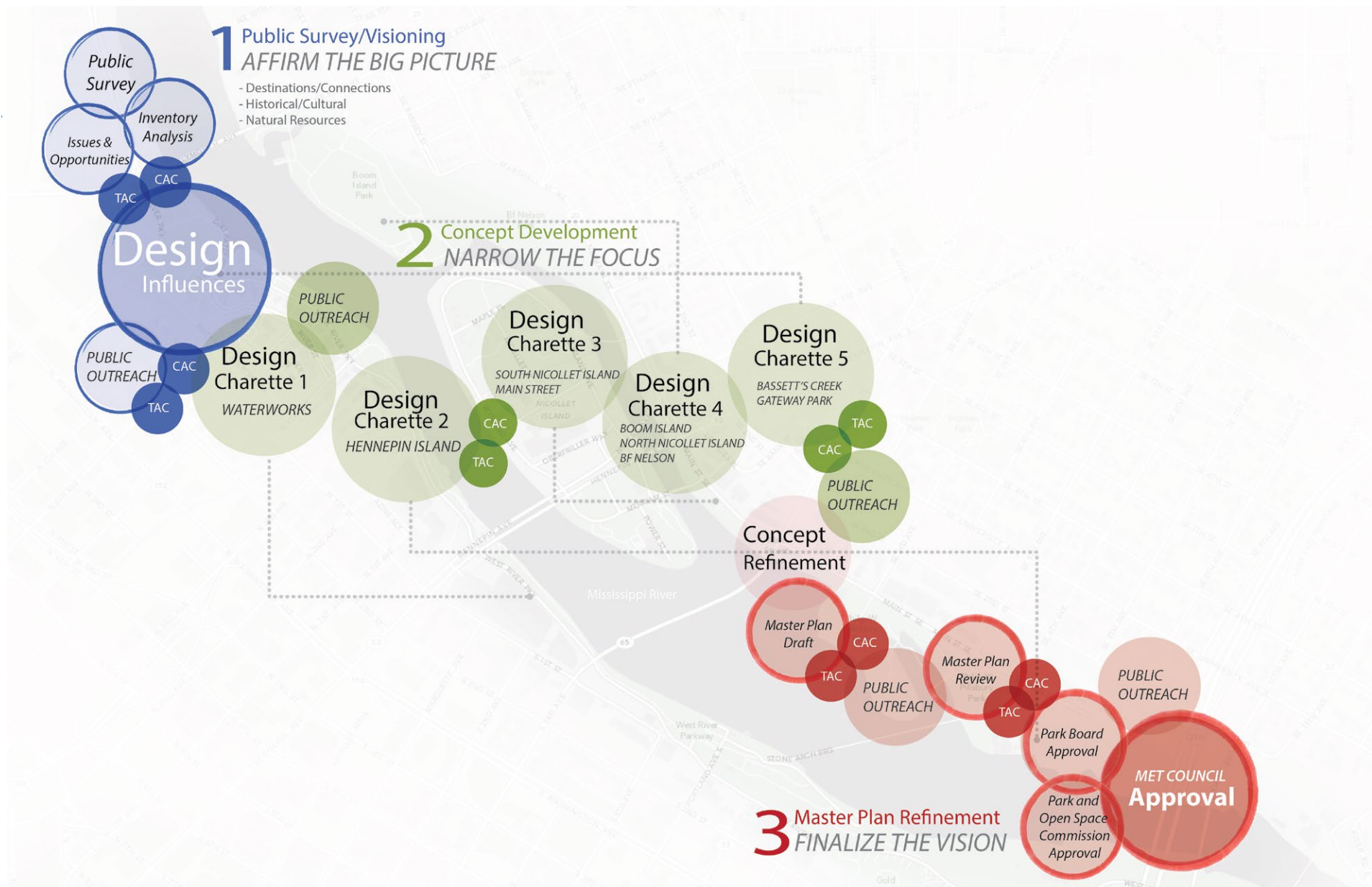
Citizen Advisory Committee

At the outset of the master planning process, the Board of Commissioners appointed a Citizen Advisory Committee (CAC) to provide a direct connection between the planning effort and local interests. The CAC was active in 13 meetings, as well as in charrettes and open houses that occurred throughout the master planning process.

While the perspectives of CAC members varied, there were common interests expressed that became key components of the plan. Foremost among their opinions was the need to recognize Saint Anthony Falls as the primary character-defining element of the Central Riverfront, a recognition that resulted in the CAC rec-

ommending changing the name of the regional park to Saint Anthony Falls Regional Park. The CAC was also keenly interested in preserving and enhancing the natural qualities of the Central Riverfront, making certain that those areas that offered a refuge to people and nature would remain a part of the park with integrity to their character and function.

The CAC offered significant insights into two other areas during the master planning process: maintaining consistency with the history of the riverfront, both in terms of recognizing the places where history is important and how the stories of the riverfront can be portrayed; and ensuring that past planning directions for the Central Riverfront, an area that has been studied intensely for more than 20 years, are maintained so that they make sense in this contemporary master plan. Because the CAC represents neighborhood interests, there were many opportunities for the planning initiatives of adjacent neighborhoods to be connected to the



process of planning the SAFRP. In some cases, those initiatives may not fully align with longer term and more broadly-scaled MPRB policies, with the extension of East River Road being the most prominent example, but those insights became important in defining directions for the master plan.

Finally, members of the CAC were active in the charrette process, which is described more fully below. It was critical that their input occur as plans and directions were formulated; their involvement at the point of creation resulted in sometime significant redirection of work explored during the charrettes. Most significant might be the CAC's expression of interest in maintaining the existing character of spaces like the "floor" of Father Hennepin Park as a refuge with enhanced access, but in ways that retained the more explorative quality of the experience that part of the SAFRP might offer. Throughout the charrette process, the nuances of planning directions were honed by the sharp insights of CAC members.

A record of CAC meetings is included in the appendix.

Technical Advisory Committee

Somewhat parallel to the CAC process, a Technical Advisory Committee (TAC) was established to allow for the insights of agency and Park Board staff to be brought directly to the master planning process. TAC members reviewed the work in process during charrettes and in a similar sequence as the CAC. Where the CAC offered insights from the perspective of neighbors and other park stakeholders, TAC members responded to align the directions of the master plan with policy direction, regulatory parameters, and planning activities of key MPRB partners and the MPRB itself.

Representation on the TAC provided insight and perspective on the historical, cultural, and natural resource components of the Central Riverfront, adjacent land

uses which could impact future regional park improvements, and traffic and circulation issues needing to be addressed. Input solicited also included discussion of existing and future programming needs and identifying key issues to be addressed for securing approval of the master plan by the MPRB and Met Council.

A record of TAC meetings is included in the appendix.

Charrettes

The primary methods of initial exploration for each of the focus areas of the SAFRP were two-day on-site charrette work sessions. Each session included a progress review of proposed changes, and ended with a session open to the community where further input was provided. Separate charrettes were undertaken for each of the focus areas of the central riverfront, sometimes in combination because of the interrelated nature of some sites:

- » Charrette 1 - Father Hennepin Bluffs Park and Hennepin Island
- » Charrette 2 - Main Street
- » Charrette 3 - Nicollet Island
- » Charrette 4- Boom Island and BF Nelson Park
- » Charrette 5 - West River Parkway Study Areas
 - Bassett Creek Outlet
 - 4th Avenue Playground
 - Gateway District
 - Mill Ruins Park
 - Gorge Entry

Many of the directions first explored in the charrettes would find their way into the final master plan. While the focus of the charrette process was exploration and engagement, the interactions with the CAC and the community proved useful in redirecting efforts early in the planning process and honing ideas that would resonate with stakeholders. Importantly, the charrettes allowed the CAC and the TAC a way of focusing discussions and framing policy directions that would form the basis of the SAFRP master plan.



Images from the charrette working sessions

Public Open House Meetings

Sharing work during the SAFRP master planning process occurred during meetings organized as public open houses, which allowed for more directed interactions between the public, stakeholders, MPRB staff and consultants. The open house included time for the public to view the work in progress, an overview presentation and question/answer period, and an opportunity to review the work following the presentation portion of the meeting. Input was gathered through postings placed directly onto presentation boards and comments recorded during the meetings.

4 public open houses were conducted during the master plan process. Input collected resulted in adjustment to directions including:

- » Revisiting the positioning of key design elements for the WaterWorks Project
- » Directing options for Nicollet Island that focused clearly on public uses and opportunities for its south end
- » Creating more explicit links between the central riverfront and neighboring areas, especially at the East Bank
- » Maintaining a non-vehicular connection from Main Street to “downstream” portions of East River Road;
- » Affirming the need for a connection between the riverfront and downtown
- » Establishing areas of regional park expansion



Public Open House 1 at Mill City Museum

The open house and charrette processes were iterative in that defining a final direction for any part of the riverfront was not the focus. Rather, these venues offered ways to explore ideas and share potential directions, with reactions coming from meeting participants. It was only when those ideas were reviewed with the CAC that final directions would become solidified, but even then the planning strategies and directions might be modified.

A record of input from the open house meetings is included in the appendix.

Water Works Project

Somewhat separate from the activities of the overall SAFRP master planning process was the work undertaken for the Water Works Project, at Upper Mill Ruins Park. While the design process for the Water Works project resulted in more definitive directions being established, the SAFRP master plan embraced the key principles underlying the design. The Water Works project included an involvement process focused on public meetings and reviews of the design work as well as interactions with the CAC and TAC.



Visitor Demand CHAPTER

4

Saint Anthony Falls Regional Park (SAFRP) is unlike any other regional park in Minnesota. Due to its well-connected central, downtown location on the Mississippi River and unique historical and cultural resources, its potential draw for visitors is nearly unlimited.

Demographics

According to Metropolitan Council, the population of the seven-county Metropolitan Area is expected to increase to 3.7 million by 2040 from 2.9 million in 2010. The urban center area, which includes the Cities of Minneapolis and Saint Paul, is forecasted to add “162,000 residents, 80,000 households, and 142,000 jobs between 2010 and 2040. This represents growth of 19% in population, 23% in households, and 25% in employment over three decades.”⁴²

The population is changing dramatically in ways that will not only influence future growth for the region by will also influence the demand on the regional park system. By 2040 it is expected that:

- » More than one in five residents will be age 65 and older,
- » 40% of the population will be people of color.

Using the traditional park service model and 2010 census block data, an analysis was conducted to examine the demographics of those who live within walking distance (0.5 mile), biking distance (1.0 mile) and driving distance (5 miles). (See **Figure 17**) Based this data, 35% of the population living within driving distance of the park are communities of color. However, based on annual use visitation data and recent intercept surveys, conducted for the St. Anthony Falls Heritage Zone, the majority of visitors (83%) to the SAFRP are white.

Distance	Total Population	Total Households	% Communities of Color	% Population Over 65	% Population Under 18
.5 Miles (Walking)	28,121	14,037	36%	7%	9%
1.0 Mile (Biking)	66,375	28,022	42%	7%	12%
5.0 Miles (Driving)	531,205	226,824	35%	10%	20%

Figure 17: Population Table

In the last year, Metropolitan Council engaged stakeholders and conducted research to help address equitable usage of regional parks and trails. The investigation entitled “Regional Park Use Among Select Communities of Color” found that the top barriers to regional parks include awareness and safety concerns.

The report also offers the following design elements that should be encouraged for regional parks:

- » Amenities suited for the aging population and those with limited mobility.
- » Picnic areas that accommodate mid-sized groups of 15-25, an emerging recreational pattern.
- » Large open ball fields that could accommodate a variety of pick-up games.
- » Clustering of amenities that would allow for multi-generational groups, such as locating picnic areas near playgrounds and open ball fields.

These design elements were strongly considered as part of the SAFRP master plan and integrated where it

was deemed feasible by CAC stakeholders and MPRB staff.

The median age in walking distance of the park (See **Figure 18**) shows that the majority of the population is between the ages of 25 and 54. These residents are anticipated to use the park most frequently. Those ages 25-34 primarily live in the North Loop neighborhood and those ages 35-54 primarily live in the St. Anthony Neighborhood. Those ages 55-74 are primarily concentrated in small pockets located right along the river and on Nicollet Island. Residents ages 18-24 are found in a strong pattern in the Marcy-Holmes neighborhood due to its proximity to the University of Minnesota campus and housing. These age groups can help inform visitor and recreational demand.

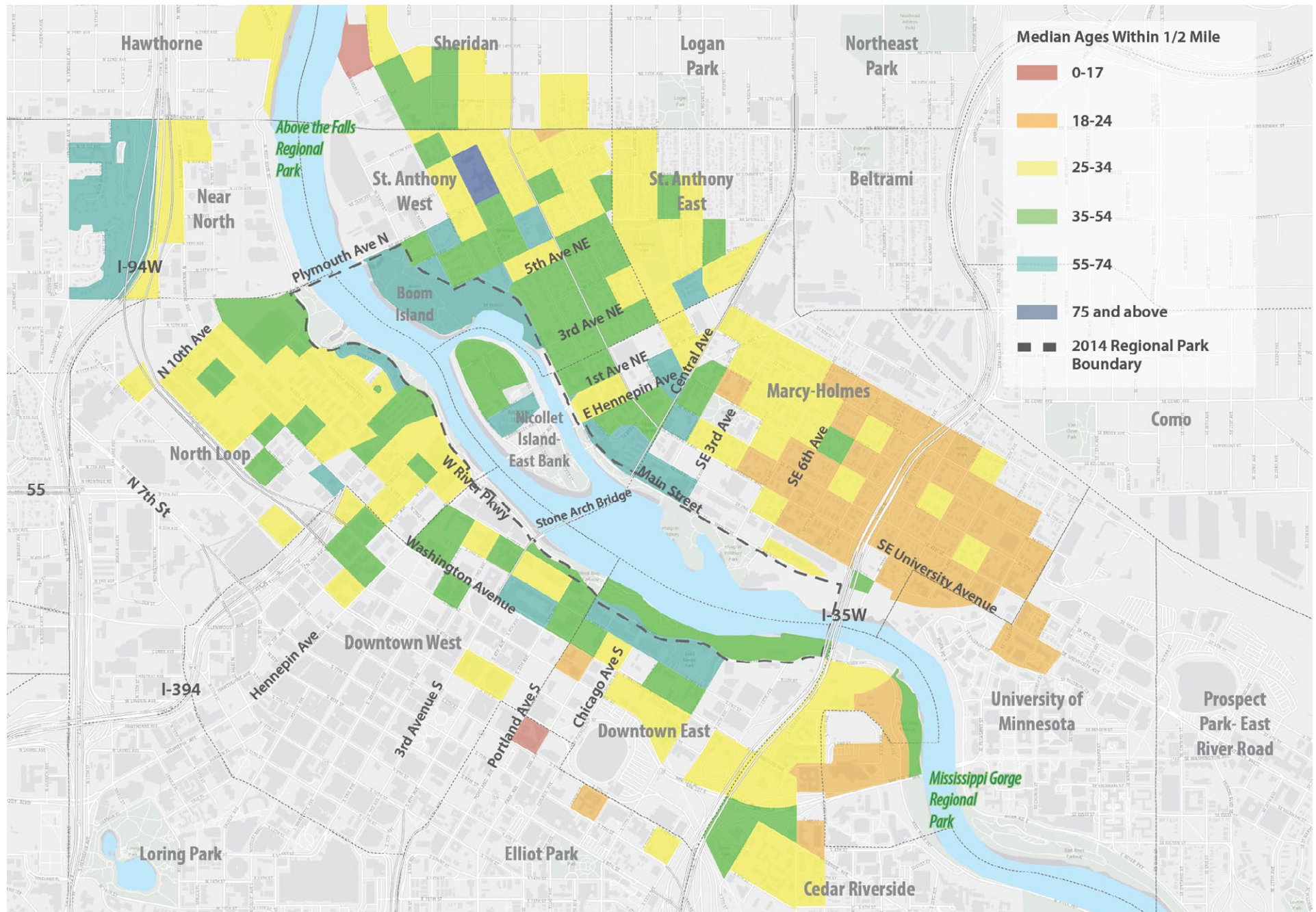


Figure 18: Median Ages Within Walking Distance

Visitor Demand

Regional park demand has continued to rise over the years and is expected to continue, especially in urban settings. According to the Metropolitan Council, total annual visits to regional parks were up 3.9% between 2011 and 2012. The MPRB's facilities draw 33% of the overall annual regional park visits. The SAFRP is the fourth most frequently visited park in the regional park system behind Chain of Lakes Regional Park, Como Regional Park and Zoo, and Mississippi Gorge Regional Park.

The visitation estimate for the SAFRP was 1.8 million people in 2012. This number has increased from 844,000 in 2004 as more attention has been given to the revitalizing the riverfront. (See **Figure 19**) The majority of visits to the SAFRP are from local or regional visitors followed by out-state, Greater Minnesota, and outside of the US. (See **Figure 20**) For the SAFRP, local visitors are from the City of Minneapolis. With its central location, the SAFRP is well-connected through trail systems and transit to the Three Rivers Park System and the larger Ground Rounds system. Due to these connections, the majority of regional visits are from Hennepin County, followed by the City of Saint Paul.

Recreational Trends and Demand

In the MPRB comprehensive plan 2007-2020, the local, state, and national trends influencing recreation in Minneapolis included:

- » Greater numbers of young adults are pursuing active lifestyles.
- » The introduction of club sports for youth is leading to greater sport specialization and year-round engagement in one sport versus a rotation of sports throughout the year.
- » Interest in traditional sports, including baseball, softball, golf, and football, is declining while interest in nontraditional sports such as skateboarding, mountain biking, soccer, disc golf, lacrosse, and cricket is increasing.
- » Older adults, primarily Baby Boomers, are staying active in recreation decades longer than previous generations. They also have more discretionary income than previous generations, and are increasingly applying those funds toward programming and activities for their grandchildren.
- » New technology is enhancing performance and delivery of existing recreation activities.
- » Self-directed sports such as running and biking are popular among adults.

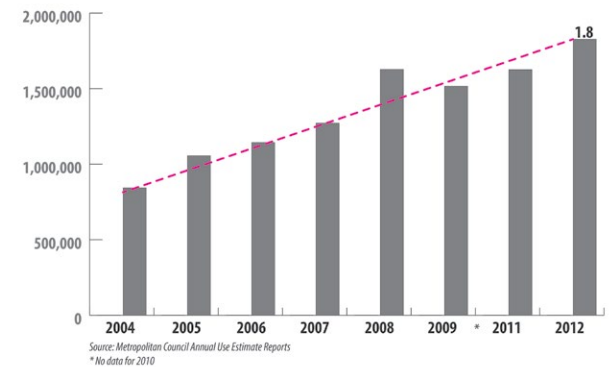
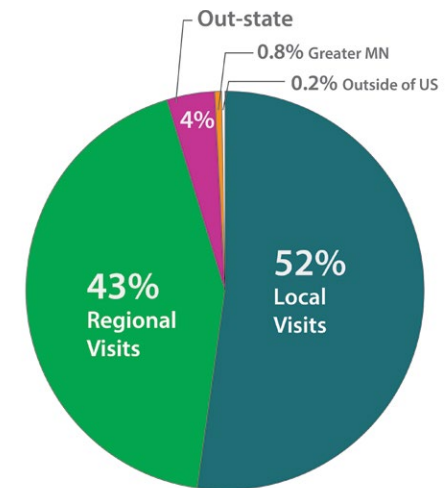


Figure 19: SARFP Visitation 2004-2012



Source: Annual Use Estimate of Metropolitan Regional Parks System for 2012
July 2013

Figure 20: Local vs. Non-local Visitors



Left to right - Biking along the trail in Mill Ruins Park, Segway tours on Stone Arch Bridge, Cultural Events

- » More leisure time, especially among youth, is spent enjoying a multitude of media, technology, and entertainment options.
- » Hobbies, gardening, history, and other self-directed activities are increasingly popular among adults.
- » An increase in foreign-born residents requires focus on reducing language barriers and gaining better understanding of the recreational needs for these individuals.

Overall, it was recognized that parks need to be flexible and dynamic to meet the diverse needs of a rapidly changing community. Presently, for the entire regional

park system the overall top five activities are walking/hiking, biking, swimming, picnicking, and relaxing.

The top activities for the SAFRP differ slightly depending on the source. Based on the information from the Saint Anthony Falls Heritage Board intercept surveys, the top activities are exercise (walking, biking, jogging), scenic viewing, going to restaurants, participating in historical interpretation and educational programming, and special events. This is consistent with observational reports and conversations with the Citizens Advisory Committee (CAC). According to the 2012 Annual Use Estimate, the primary activities for SAFRP were walking/hiking, jogging, relaxing, followed by dog walking, biking, and fishing. It was acknowledged that these biking numbers might not truly represent the actual usage since it is harder to stop a bike commuter for an inter-

cept survey and the number does not reflect Nice Ride usage in the area.

Based on conversations with the CAC, creating more opportunities to physically and visually connect people to the Mississippi River and provide recreational opportunities on the water—such as fishing, kayaking, and canoeing—were of the highest priority. Seasonality and increasing winter activities and programming opportunities were also seen as a growth area for this regional park.



Natural Resources CHAPTER

5



Mississippi River Gorge at Ford Parkway (americanrivers.com)

Introduction

The Mississippi River is an important feature in the Saint Anthony Falls Regional Park (SAFRP). The river is a vital ecological feature on a global, national, and regional scale. It is part of the Mississippi Flyway, a migratory corridor, which extends from the Canadian tundra to the South American Patagonia and includes North America's heartland. Nearly half of North America's bird species, and about 40 percent of its waterfowl, depend on the Mississippi River flyway. From its headwaters at Lake Itasca to its outlet at the Gulf of Mexico, the Mississippi River flows 2,350 miles and is home to 25 percent of all fish species in North America, 50 mammal species, and at least 145 species of amphibians and reptiles.⁴³

In the 72-mile stretch of the Mississippi River that flows through the Twin Cities area, from the Crow River confluence in Dayton and Ramsey to just past the St. Croix River confluence near Hastings and Prescott, the river's character changes more than anywhere else along its course.⁴⁴ In 1988, Congress designated this stretch as a national park: the Mississippi National River and Recreation Area (MNRRA).⁴⁵ This same stretch of river is also designated as the Mississippi River Critical Area Program (MRCCA).⁴⁶ The MRCCA is a joint local and state program that provides coordinated planning and management for the river's resources. The parkway, which parallels the river and circulates through SAFRP, is also part of

the Great River Road and Grand Rounds National Scenic Byways system.

Given the complexity and significance of this natural corridor, coordination with partnering agencies and non-profits will continue to be vital to the success of the SAFRP as it seeks to connect the public to the river and its natural habitats with minimal adverse impact on that habitat.

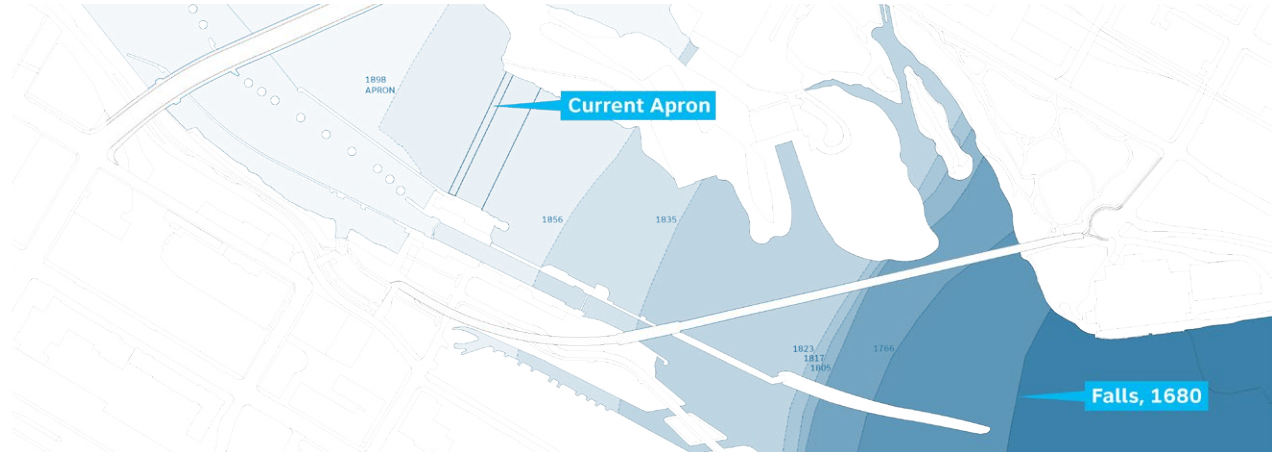
Given the complexity and significance of this natural corridor, coordination with partnering agencies and non-profits will continue to be vital to the success of the SAFRP.



Mississippi Migratory Flyway



Exposed limestone at Hennepin Island



Saint Anthony Falls Recession 1680 to Today (© SCAPE 2014)

Geology

The landscape of the Twin Cities area was sculpted during the most recent advance and retreat of glacial ice, called the Wisconsin Glaciation (35,000-10,000 B.P.) Several phases of glaciation occurred during this period, shifting and depositing glacial sediment to form the landscape that we see today. As the glacial ice melted, the plentiful meltwater formed glacial rivers and tributaries that flowed underneath the ice and cut through the glacial deposits carving valleys over time. The Mississippi River was one of these glacial tributaries to the Glacial River Warren, now the Minnesota River Valley.

Underneath the variegated layer of sediment left behind by glacial deposition lie layers of much older bedrock formed by the accumulation of compacted, cemented sediment and calcium carbonate at the bottom of an ancient, shallow sea. In the Twin Cities Area, a thick overlapping sequence of dolomite, sandstone,

shale, and limestone occur, hosting the region's aquifers and dictating the subsurface flow of groundwater. The bedrock units found at the ground surface in SAFRP area are the St. Peter Sandstone, Decorah Shale, and Platteville-Glenwood Formation.

The Platteville Formation is a very hard, well-cemented limestone that covers a thin mixture of shale and sandstone. Beneath lies a thick deposit of poorly-compacted and cemented St. Peter Sandstone which readily yields to water and erosion.⁴⁷ This combination of bedrock has been responsible for the retreat of Saint Anthony Falls over the last ten thousand years. As water rushed over the falls, it cut away the soft St. Peter Sandstone below, undermining the physical support of the harder Platteville limestone above. Over time, the unsupported edge of the limestone at the falls snapped off the top of the cliff, shifting the edge of the waterfall a bit further

upstream. Once located at the confluence of the Mississippi and Minnesota Rivers, Saint Anthony Falls has migrated upstream nearly to its present location due to the continual undercutting of the Platteville Formation.⁴⁸ (See **Figure 21**)

The natural state of the falls has been significantly modified over time by the construction of milling and hydro-electric power structures and a lock and dam system. With the construction of the concrete apron over the falls, it has ceased to shift upstream. See the Chapter 6 Historical Resources for more detailed information.

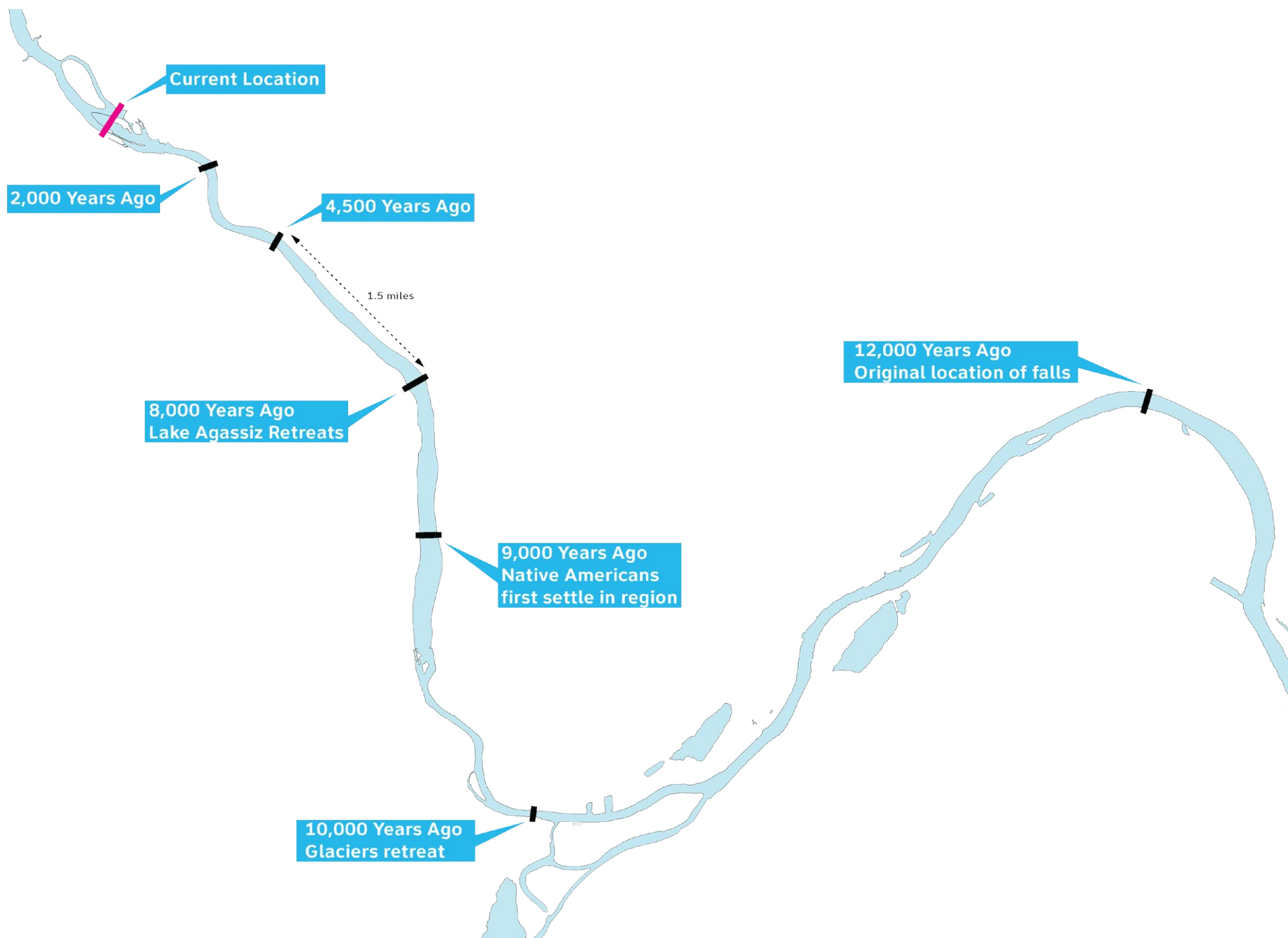


Figure 21: Retreat of the falls (© SCAPE 2014)

Water

Watershed Context

The SAFRP is located in the Middle Mississippi Watershed managed by the Mississippi Watershed Management Organization (MWMO). The reaches flowing through the MWMO are densely urbanized with commercial, industrial, residential, park lands, and downtown Minneapolis land uses contributing to the volume and quality of water entering the river through stormwater drainage systems.⁴⁹

There are three major stormwater outfalls in the SAFRP boundary. The first is Old Bassett's Creek Tunnel outlet which drains water from the Near North Minneapolis Neighborhoods and Bassett's Creek watershed. It enters the river at Bassett's Creek Park and has a flow rate of approximately 50 CFS. In 1992, a new tunnel was routed through downtown Minneapolis with an outfall just downstream from Saint Anthony Falls. This outlet carries the majority of the flow to the river. Lastly, the outfall near I-35W Bridge drains stormwater from the Phillips and Powderhorn Neighborhoods and the southern portion of the Central Neighborhood in Minneapolis, as well as the water from the I-35W freeway. However, the entire Mississippi River basin upstream of MWMO watershed boundary contributes to water quality in this stretch of the river.⁵⁰

Water Quality

The "State of the River Report," authored by the Friends of the Mississippi River and the National Park Service, found that river flow has increased significantly and continues to increase over time. This is significant because high flows can cause increased erosion, flooding risk, habitat degradation, and can carry more pollutants to the river system. Flow increases may be attributed to

urban runoff from ever-growing impervious surfaces and changes in precipitation patterns.

The Mississippi River through MWMO is on the federal list of impaired waters for fecal coliform, mercury, and polychlorinated biphenyls (PCBs). In the SAFRP, fecal coliform and PCBs are the major pollutants found.⁵¹ (See **Figure 22**)

Bacteria pollution comes from human and animal sources and in general the more runoff an area produces, the more susceptible its surface waters are to bacteria pollution. Excess bacteria can create health concerns for recreational users.⁵² This limits swimming in the SAFRP, but fishing and recreational boating is permitted.

Groundwater

Groundwater sensitivity is high throughout the SAFRP boundary. The areas near Hennepin Island, Nicollet Island, Boom Island, and B.F. Nelson Parks are considered to have a very high sensitivity to groundwater pollution.

Wetlands

There are almost no wetlands in the SAF Regional park area. One highly probable, but undelineated, wetland is located in the Hennepin Island area tucked back from the sandy inlet and down from the edge of 3rd Avenue SE near the Xcel Energy parcel.

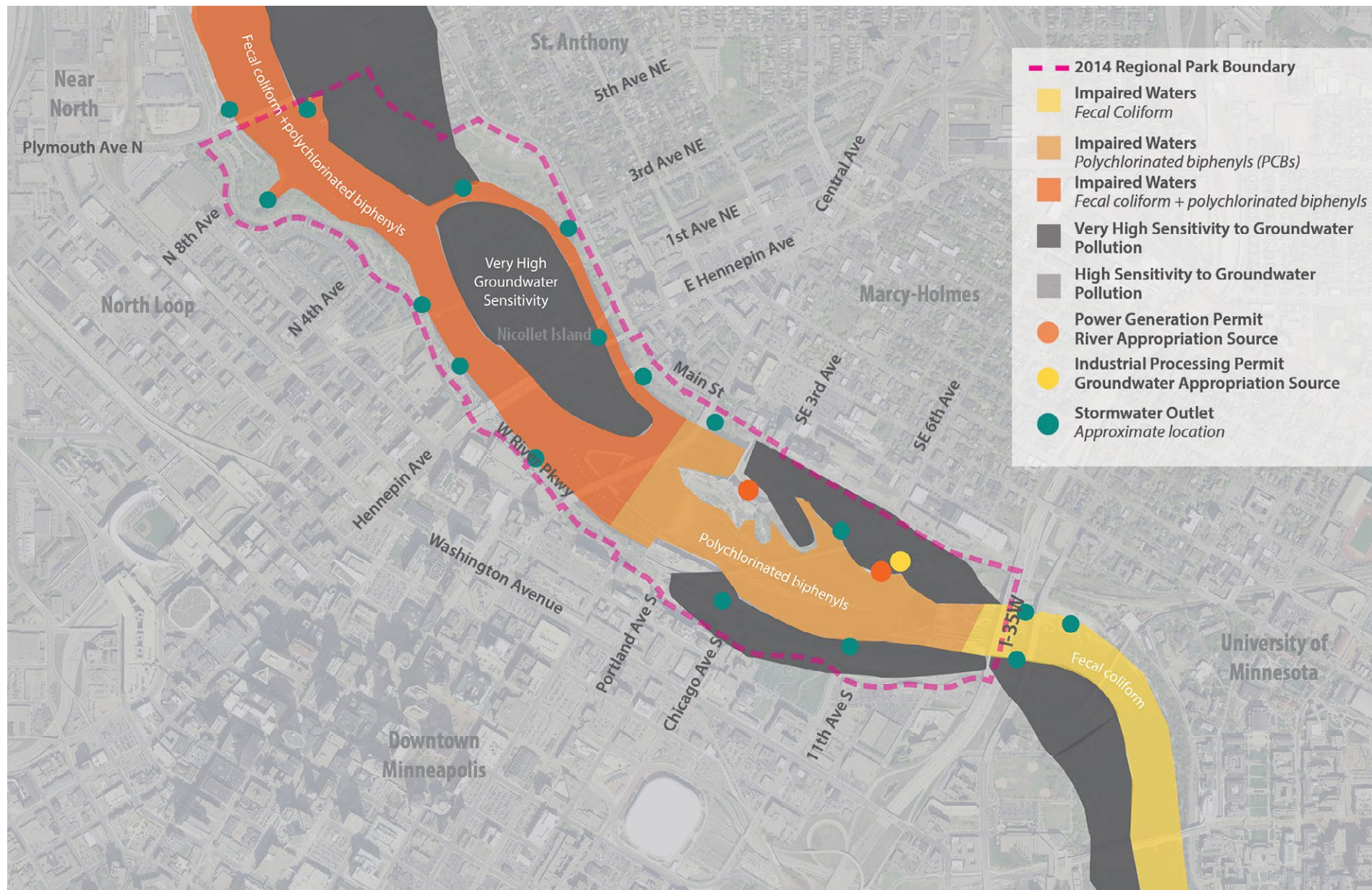


Figure 22: Water Quality and Appropriations

Seeps and Springs

Along the rocky bluff below Father Hennepin Park are many seeps and springs. One of these, Chalybeate Springs, has been flowing clearly and steadily for hundreds of years and has been known for its curative qualities. The spring results from a geological formation between the eroded limestone bluff and layers of soft sandstone which transition to the river bottoms and a defining part of the St. Anthony Falls landscape.

Flood Zones

Extents of the 100 year FEMA floodplain cover portions of the shoreline edge throughout the SAFRP. All of Nicollet Island and Hennepin Island are included in the 100 year floodplain. At Boom Island and B.F. Nelson, the lower drainage ways mark the path of the 100 year flood zone and the slightly higher wooded areas are in the 500 year flood zone. (See **Figure 23**)

Appropriations

There are active water appropriations in the SAFRP located on the east side of the river. They draw water directly from the river for power generation, such as the Xcel Energy plant and the University of Minnesota power plant. A few industrial processing permits are also located on the east side of the river and draw their water from a groundwater source. (See figure X)

Locks and Dams

To move goods up and down the Mississippi, the U.S. Army Corps of Engineers maintains a nine-foot shipping channel from Minneapolis to Baton Rouge, Louisiana. From Baton Rouge past New Orleans to Head of Passes, a 45 foot channel is maintained to allow ocean-going vessels access to ports between New Orleans and Baton Rouge.⁵³

Along with St. Anthony Falls, the upper and lower St. Anthony Falls locks and dams are significant river infra-

structure within SAFRP and are operated by the U.S. Army Corps of Engineers. In the summer of 2014, Congress passed the Water Resources Reform and Development Act which includes a provision for the closure of the Upper St. Anthony Falls lock and dam. The goal of the closure is to protect lakes and rivers upstream of Minneapolis from migrating invasive Asian carp. This closure presents a challenge to those who use the river for recreational purposes but it provides potential for interpretive opportunities and incorporation of portage routes. There would be an opportunity for portage routes to start and end closer to the upper and lower lock and dam when navigation ceases or is restricted.

Soils and Topography

Due to the riverfront's industrial past and the regional park's location in an urban developed area, the majority of soils have been heavily disturbed by cutting or filling. These soils are classified as udorthents and/or urban fill-udorthents complex that are well-drained, do not pond, and rarely flood. A great example of this can be seen at Boom Island and B.F. Nelson. This landform has been continually manipulated throughout human history and most recently new soil was imported with a re-grading effort. This change in soil should provide adequate soil structure to support tree growth which was not the case before. Exceptions to the urban fill soils include Nicollet Island and Hennepin Island.

Nicollet Island is classified as urban land-Hubbard bedrock substratum complex which is comprised of loamy sand, over sand with limestone bedrock resulting in excessively drained soils that are not prone to flooding or ponding. The landform is fairly level with steeper slopes located on the shoreline. As the only inhabited island in the Mississippi River, the landform of the island acts as a terrace in the river that splits the current into

two channels. The East Channel, as it is known, divides the island from the eastern bank of the river.

Just down river of Saint Anthony Falls, the landform of the Mississippi River Gorge starts to become apparent. Shoreline slopes become dramatically steeper: 18% to 65% compared to 2%-8% above the falls. Exposed limestone bedrock walls appear to emerge from the floodplain which can be seen most clearly at Father Hennepin Bluffs and Hennepin Island Park. This area's soil cover is classified as sandy loam outwash and is fairly shallow in depth. This combination of steep slopes with sandy soils over limestone bedrock creates an area that is highly erodible. Given that this area is also punctured with cultural and historical features, such as natural springs and the remnants of milling tailraces, special attention should be given to this sensitive area to secure the bluffs, preserve cultural resources, and promote native vegetation. The landform's unique shape in the Hennepin Island area creates a protected sandy inlet on the floodplain floor. This area also corresponds with the only potential wetland in the SAFRP.



Slopes over 12% in the SAFRP area

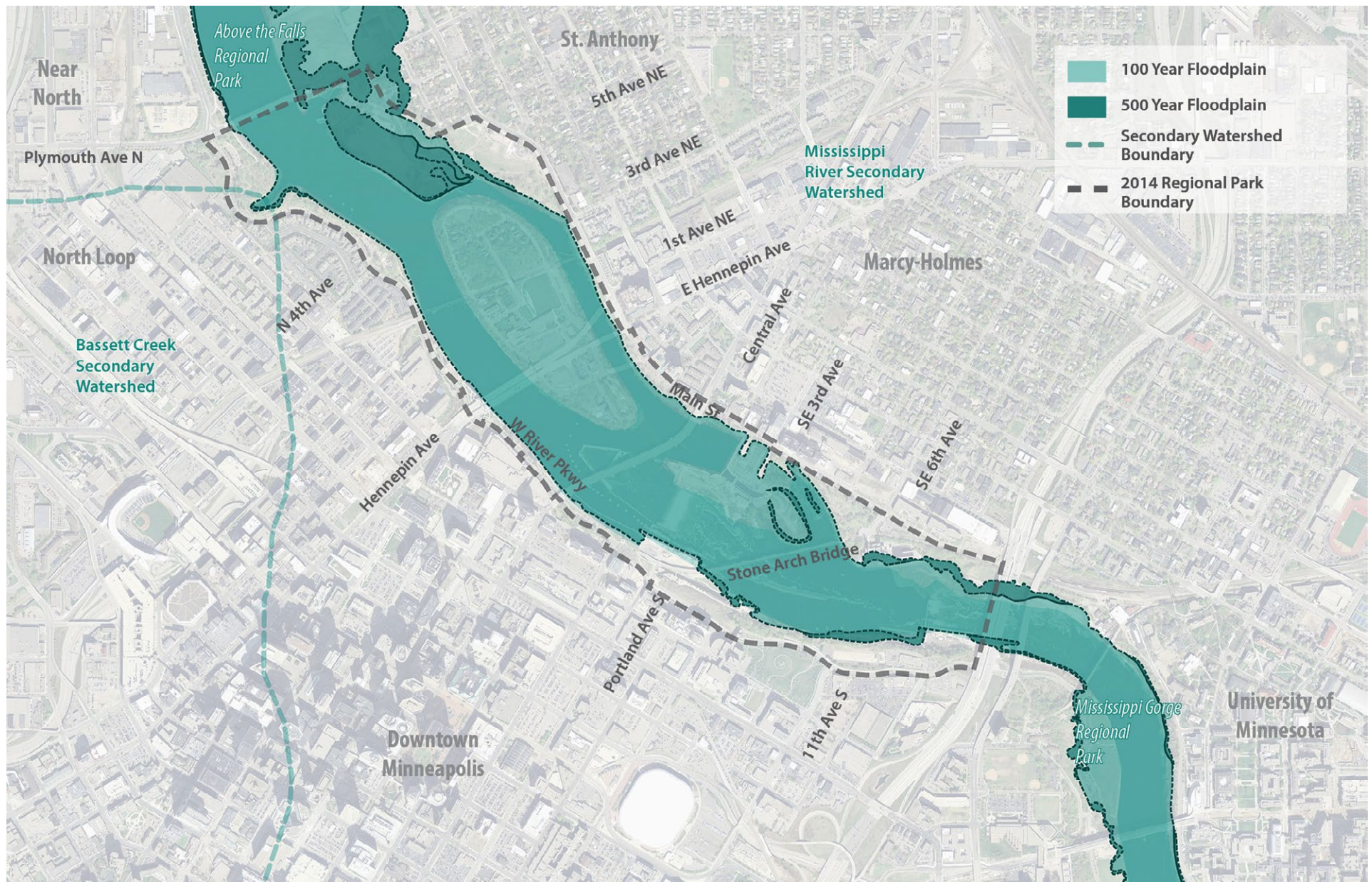


Figure 23: FEMA Floodplain and Secondary Watershed Boundaries

Soil Contamination

Given the area's long industrial history and present uses, potentially contaminated sites dot the SAFRP landscape. A search of the Minnesota Pollution Control Agency (MPCA) "What's in My Neighborhood?" (WIMN) database was reviewed to inventory previously investigated properties, properties suspected of contamination, and currently enrolled cleanup sites, including those managed under the Superfund program. These sites include the following WIMN categories: Feedlots, Voluntary Investigation and Cleanup (VIC), Tanks and Leaks, and Multi-Use sites.

On the west side of the river, there are multi-use sites associated with the St. Anthony Falls Lock and Dam and the Mills Ruins park area and the CenterPoint Energy property.

On the east side, potentially contaminated sites include areas near/around:

- » The University of Minnesota Steam Plant,
- » Drummond Property at 600 Main,
- » U of M St. Anthony Falls Hydro Lab,
- » Xcel Energy power plant,
- » South Nicollet Island,
- » Main Street Bridge over the BNSF Railroad, and
- » B.F. Nelson and Boom Island Parks.

Any new park projects must account for potential remediation needs and a more detailed analysis would need to be completed as part of future environmental documentation to determine if project construction

activities are likely to encounter contaminated soils or groundwater. Properties with potential to contain contaminated materials should be identified in the early stages of a project to avoid impacts caused by disturbing hazardous soils.

Land cover and vegetation

Historical vegetation

Pre-European settlement vegetation consisted of oak openings and barrens (i.e. oak savanna) on the uplands with floodplain forest along the shoreline where bedrock was not exposed. As European settlers moved into the area and started to develop the corridor, much of the natural vegetation was stripped away. In historical photographs of the Saint Anthony Falls area, almost no vegetation is visible.

Existing Land Cover

Based on Minnesota Land Cover Classification System (MLCCS) data, the majority of the SAFRP is classified as "Urban with little vegetation cover" which is also defined as an "artificial surface" which is altered, man-made, or impervious (i.e. paved or built). Brief descriptions of the additional classifications found in the SAFRP are listed below (See **Figure 24**).

Planted or Cultivated vegetation

Planted or cultivated vegetation refers to areas that are maintained as short, turf grass with sparse overstory trees. The traditional park-like vegetation of these areas provides open space for programming and events.



1848 Henry Lewis Painting of Saint Anthony Falls



View of Nicollet Island, the Mississippi River and downtown Minneapolis
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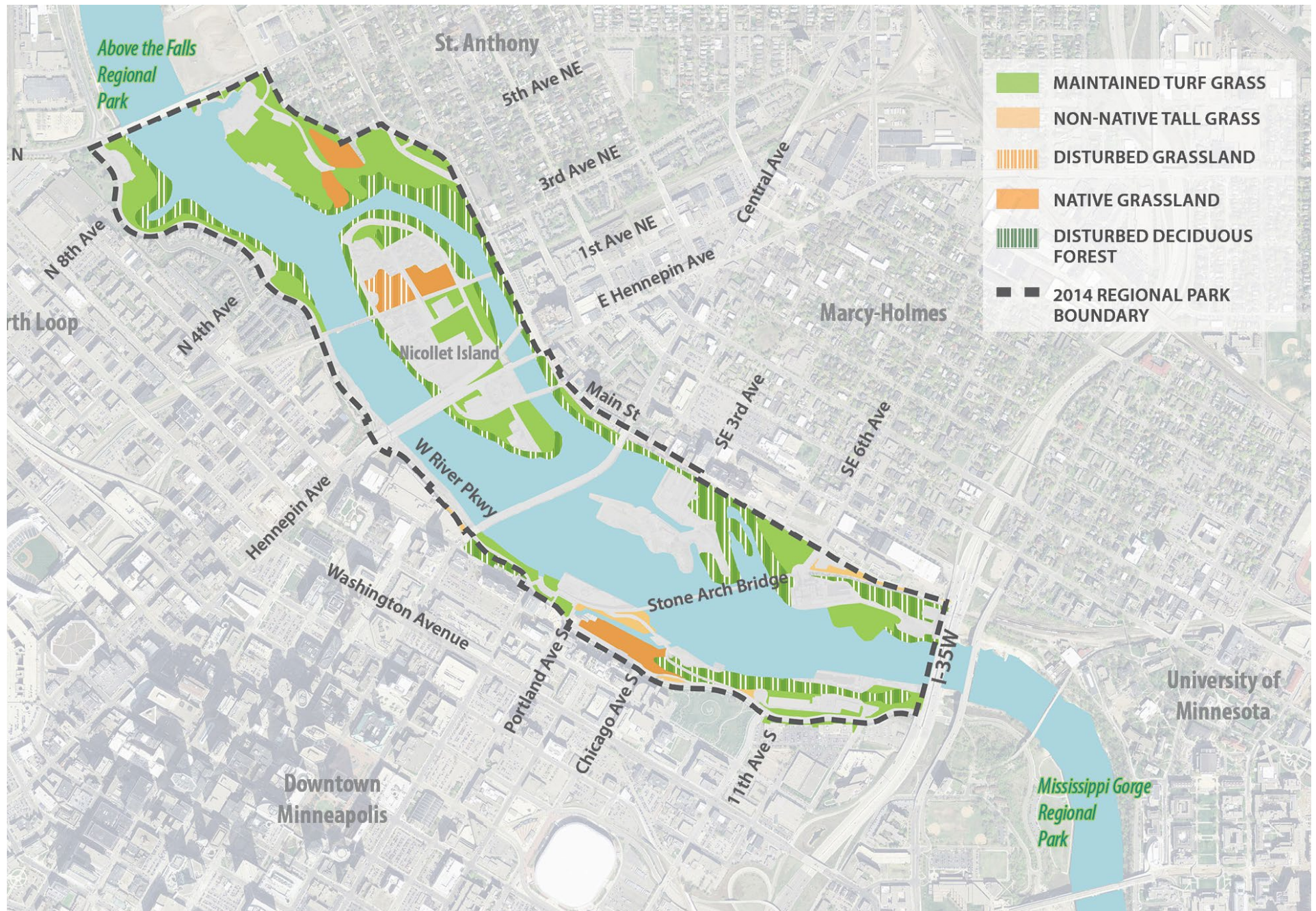


Figure 24: Existing land cover in the SAFRP



Left to right - Open lawn area with overstory tree canopy, Floodplain forest floor at Hennepin Island, Prairie at Mill Ruins Park

Grasslands

Grasslands found in the SAFRP fall into two categories: tall non-native grasses and native grasses, such as mesic prairie. All of the native grasslands are listed in poor condition.

Native mesic prairies are located at Lower Mill Ruins Park, North Nicollet Island, and Boom Island. All of the prairies have been planted along with one of the native grassland patches on north Nicollet Island is considered altered and has been a site of recent tree plantings with the goal of reforestation.

Forests

Woodlands in the SAFRP are typically found along the shoreline and on steep slopes and bluffs. The woodlands are altered deciduous, riparian areas that contain non-native species. There are no defined native woodlands in the area.

Built/impervious cover

Approximately 25% of the SAFRP is considered more than 50% impervious. As discussed previously, impervious surfaces can increase surface runoff, leading to increased erosion, and water quality impacts.

Invasives Species - Vegetation

Non-native, invasive shrubs such as European buckthorn, glossy buckthorn and tartarian honeysuckle are prevalent in the forested areas. Common herbaceous invasives include reed canary grass, smooth brome and garlic mustard. MPRB staff will continue on-going efforts to manage invasives.

Native vegetation establishment should continue to be a priority on all open water shorelines to minimize the potential for erosion and prevent contaminated runoff from draining directly in to the river. Efforts should be made towards working with property owners and

partnering agencies within the park to establish native shoreline buffers.

Sites of Biodiversity

Currently, no sites of significant biodiversity are located within the SAFRP. Essentially this means that there is no group of native plants within the park that has not been altered significantly by human use or introduced plant species.

Existing Land Use/Design Guidelines

There are additional guidelines that need to be considered and addressed when considering new design, development, or landscape aesthetics. Not only does SAFRP fall within the Mississippi River Corridor Critical Area (MRCCA) but it is also within the Saint Anthony Falls Historic District. The majority of the Park's underlying zoning is governed by the City of Minneapolis with small portions controlled by the Federal government.



Left to right - Bald Eagle, River Otter, Fresh water mussel

For any new plantings or streetscape treatment within the park, the Saint Anthony Falls Historic District Design Guidelines will need to be considered so the overall character of the historic district is preserved.

The MRCCA helps guide general development, storm-water standards, vegetation management, and land alteration standards. Currently, the SAFRP falls into the Urban Diversified District of the MRCCA, but this is being revised by the Minnesota Department of Natural Resources.

Wildlife

Nearly half of North America's bird species and about 40 percent of its waterfowl depend on the Mississippi River flyway. The Mississippi River is home to 25 percent of all fish species in North America, 50 mammal species, and at least 145 species of amphibians and reptiles.⁵⁴

Key species, such as eagles and mussels, are seen as indicators of river health. As efforts have been made to improve the overall improve water quality and ecological health of the river, these species have been making a comeback. The portion of the river within the SAFRP is considered good habitat for mussels and has resulted in more mussel species and larger populations.⁵⁵ In the Twin Cities area and within the MRCCA, NPS data indicates that there are approximately 36 active eagle nesting sites, indicating a strong and stable bald eagle population.⁵⁶ Directly within SAFRP, a pair of bald eagles began nesting on the east side of the River near the Lower St. Anthony Lock and Dam in early 2014. Also, river otters have frequently been observed on the banks and in the waters of the Mississippi within the SAFRP.

To keep these animal populations healthy, the NPS routinely conducts studies to assess the quality of wildlife habitat and the impact of humans on their increasingly fragmented living space. Concern about loss of wildlife habitat and corridors within the park has resulted in a

number of partner organizations working with the park to restore, expand, and connect the remaining natural areas.⁵⁷

Species of Special Concern

According to Natural Heritage Information System (NHIS) data, a colony of Tricolored Bats (*Perimyotis subflavus*) has been observed hibernating in the area. Tricolored bats are vulnerable to extinction in Minnesota due to their small population in the state, its susceptibility to disturbance during hibernation, and potential for persecution. Listed as a special concern species, protection of bat hibernation sites from human disturbance is a top priority for DNR management.⁵⁸

The Black Sandshell mussel (*Ligumia recta*) has also been observed in the SAFRP. Given its recent decline in numbers and loss of quality habitat, this species was listed as a special concern species in Minnesota in 1996. The Black Sandshell's habitat is threatened by non-

point source water pollution and sediment pollution as well as infestation of the non-native zebra mussel.⁵⁹

Invasive Species- Wildlife

Invasive species, such as Asian carp and zebra mussels, are a concern as they threaten the river ecosystem. Both of these species are reproducing at an alarming rate and don't appear to have natural predators. The MPRB will continue to coordinate with partnering agencies to protect river habitat.

The closure of the Upper St. Anthony Lock and Dam, included in recent legislation, will create a barrier to the migration of Asian carp upstream and hopefully protect the upper Mississippi and lakes. Currently the MPRB staffs all public boat launches with Aquatic Invasive Species (AIS) boat inspectors.

Natural Resource Recommendations

The Mississippi River and its vibrant grasslands, forests, and wetlands have been compromised by human development and manipulated to the detriment of natural systems and the birds and other wildlife that depend on them.⁶⁰ This pattern of degraded and fragmented habitat can be seen in the SAFRP with its highly urban context. Because of this, there are abundant opportunities to restore existing habitat, increase restoration areas, and connect habitat patches to contribute to a healthier ecological corridor along the Mississippi River.

Considering that there is no existing non-altered native vegetation in the park, the natural resource recommendations focus on restoration, expansion of native vegetation, reduction of impervious surfaces, and incorporation of green infrastructure.

Recommendations fall under five general categories and respond to the existing land cover types found in the park: (See **Figure 25**).

- » Turf grass with overstory canopy
- » Urban gardens
- » Prairie restoration
- » Woodland/shoreline restoration
- » Green Infrastructure

Turf with Overstory Canopy

Existing land cover areas that are maintained turf grass with overstory canopy trees should have the deciduous tree population managed. Ash trees in particular, are threatened by the spread of emerald ash borer, and should be removed over time.

Urban Gardens

Hardscaped areas, such as plazas or entryways, should be softened by eliminating excess paving and integrating native plantings to reduce stormwater runoff. Green infrastructure, such as pervious pavers, could also be utilized if an area is reconstructed to further protect the river's water quality.

Grassland Restoration and Expansion

Native mesic prairies that have been planted and established at Lower Mill Ruins Park and Boom Island should be maintained for invasive species removal. The patches of prairie on North Nicollet Island were historically wooded and the community has a desire to see them reforested. These patches of prairie are recommended to be maintained for invasive species and be

transitioned over time to native woodlands, such as a Maple-Basswood forest. Expansion of native mesic prairie is recommended for B.F. Nelson, Upper Mill Ruins, and the Main Street Portage area.

Woodland/Shoreline Restoration and Expansion

Since the shoreline and forested steep slopes correspond in the SAFRP, shoreline and woodland restoration have been combined for mapping purposes. Invasive species should be removed and erosion control implemented to preserve the bluff/river edges. As invasive species are removed, additional native plants should be reintroduced. Riparian floodplain species, such as a cottonwood forest type, would be appropriate in this corridor. Overstory, understory, shrub, and forest floor species all should be considered in these zones to promote a healthy forest ecosystem and contribute to habitat for migratory birds and other river wildlife.

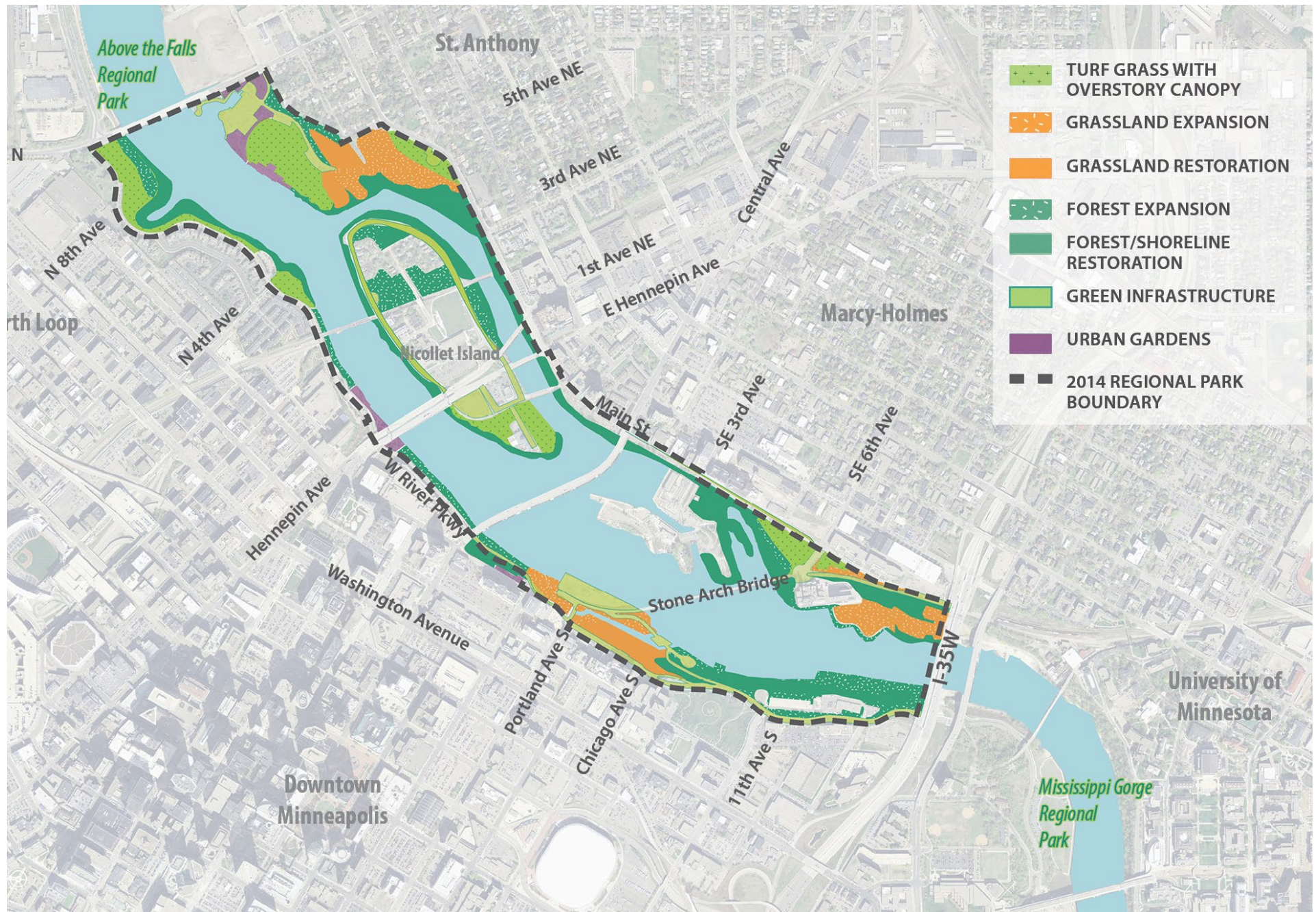


Figure 25: Natural Resource Recommendations



Left to right- "Urban Garden" Precedent from Lurie Garden in Chicago, Urban raingarden precedent in Portland, Native plantings/shoreline buffers

Green Infrastructure

The use of green infrastructure is recommended in order to reduce impervious surfaces within this highly urban park which in turn will:

- » Reduce surface runoff,
- » Reduce phosphorus and nitrates,
- » Decrease erosion and sedimentation, and
- » Protect wildlife habitat.

Examples of green infrastructure include rain gardens, infiltration and filtration basins, tree trenches, and pervious pavers. By including green infrastructure in new park projects, areas have the capacity to be multi-functional: serving a particular park programming need (i.e. parking, wayfinding plaza) while still infiltrating and treating stormwater runoff.

Green infrastructure design should also be considered for all new building development within the regional park.

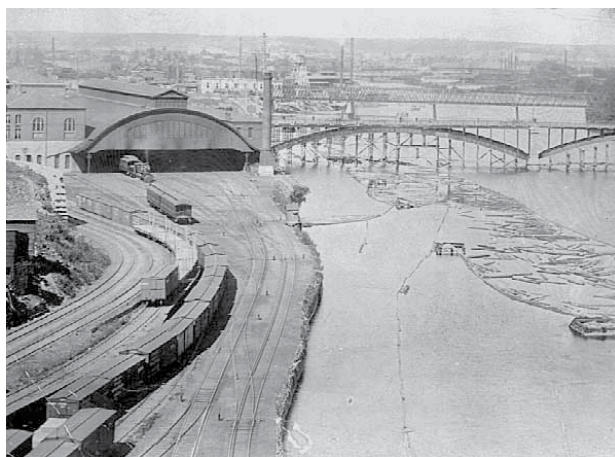
Recommendation areas are graphically depicted in more detail in Chapter 7.



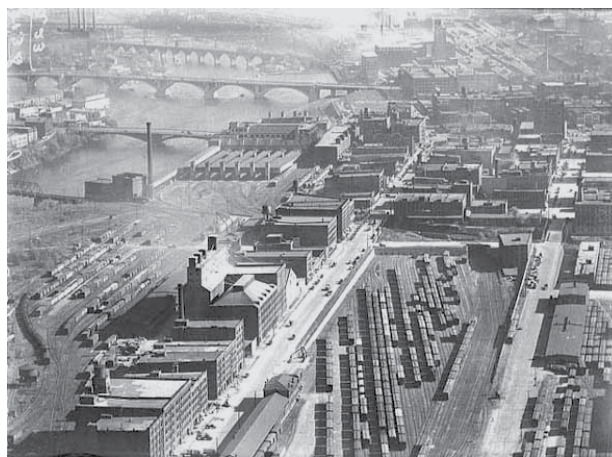
Historical and Cultural Resources

CHAPTER

6



View of the west bank, which looks upstream towards the Hennepin Avenue Bridge in about 1887



View downstream towards the Hennepin Avenue Bridge in about 1921, illustrates how industrial the area was. Railroad tracks lined the area along the riverbank that is now the West River Parkway.



View of the east bank from the west bank in the 1890s. The falls is at the right edge of the photograph. The Exposition Building, a landmark on the east bank, was built in 1886, went bankrupt in 1895, and was demolished in the 1940s

Historical Overview

The Mississippi River is the spine of the Saint Anthony Falls Regional Park (SAFRP). Throughout history, the river has been a powerful force for the people on its banks: dividing and uniting them, supporting and challenging them.

Native Americans occupied the river valley for more than 10,000 years, relying on the Mississippi and its many tributaries for transportation and sustenance. In addition, the river was a potent spiritual presence. Tribes frequently camped in the vicinity of Saint Anthony Falls, and they continued to do so during the early contact period, as noted in the written accounts of early Euro-American settlers. Few artifacts documenting their presence survived subsequent development in the area, but there remains a potential for archaeological

discoveries from the early contact period on Nicollet Island and in the vicinity of the East Channel.

While explorers and missionaries in the seventeenth and eighteenth centuries had little effect on the physical environment, the pre-contact landscape was quickly and irreversibly changed by a torrent of Euro-Americans in the mid-nineteenth century. The area became part of the Fort Snelling military reservation in 1805, two years after the Louisiana Purchase, when the federal government and Indian tribes entered into a treaty. Pioneers gained a foothold on the east side of the falls in the late 1830s and the west side in the 1850s, establishing the communities of Saint Anthony and Minneapolis, respectively. The two sides would be united as Minneapolis in 1872.

Within a few decades, entrepreneurs, engineers, and forces of nature had transformed the physical form of the river and the falls. The basic configuration of the river today was set by a series of initiatives in the last half of the nineteenth century, including the creation of the horseshoe dam and the stabilization of the falls in the west channel. Attempts to put aprons on the falls to stop its recession upstream began in the 1860s with timber structures that were short-lived. Those seeking to maintain the waterpower status quo were undeterred, leading to a series of aprons that were ultimately formed from concrete. Beneath the riverbed, the falls have been protected from seepage by a concrete dike, a remarkable accomplishment that the U.S. Army Corps of Engineers completed in 1876.

The east channel served as a tailrace for sawmills built on the upstream end of Hennepin Island in the late



View of the east bank from the west bank. A towboat herds coal barges through the upper lock in the 1976 photograph



Euro-American settlers prized the river for its utility rather than for aesthetic or religious reasons as these images from the 1890s show. The top photograph documents the “dismantling” of Spirit Island, which was once just below the falls. Logs and other debris litter the river by the lower dam in the photograph on the bottom. The Tenth Avenue truss bridge, was opened in 1874, closed to vehicular traffic in 1934, and demolished in 1942–1943. The foundation of the hydroelectric plant to the left failed in 1987, leading to the building’s removal.



1840s. After they burned in 1870, a new group of sawmills was installed at the foot of Third Avenue SE. This location was appropriated in 1894 by the Main Street Station, replacing mills directly driven by waterpower with a state-of-the art hydroelectric generating plant. With the reconstruction of the plant after a fire in 1911 and changes in land use downstream, the east channel below the plant essentially disappeared.

The Lower Saint Anthony Falls dam and hydroelectric plant were constructed in the 1890s, and the Hennepin Island hydroelectric plant opened in 1908 to claim waterpower not used by the mills. As hydropower usurped the role of waterpower, Hennepin Island lost much of its industrial activity. The island also proved unsuitable for a municipal water works after a plant established there in 1883–1884 was found to be a cause of a typhoid fever epidemic in the early twentieth century. During the late

1930s, the University of Minnesota adapted a sawmill site for the Saint Anthony Falls Hydraulic Laboratory. Today, the Saint Anthony Falls Laboratory continues to house research activities. Two wasteways on Hennepin Island, installed in response to floods in the 1890s, are now partially adapted for experiments at the lab.

More changes were to come to the falls in the twentieth century. Minneapolitans had long sought to become the head of navigation on the mighty Mississippi, a title held by Saint Paul until Lock and Dam #1 opened in 1917. That facility is commonly known by the name of the car manufacturer that developed a massive assembly plant on the river’s east bank in Saint Paul. The Ford Motor Company was lured by the opportunity to generate hydroelectricity at the end of the dam. Minneapolis gained river commerce by giving up its monopoly on waterpower. Still, some were not content until Saint

Anthony Falls no longer blocked navigation. The Upper Harbor Project was approved by Congress in the 1930s, leading to the opening of a lock at the lower dam in 1956 and the upper dam in 1963.

In the meantime, a series of bridges had been strung over the river, starting with the first structure ever to cross the Mississippi in 1855, which used Nicollet Island as a convenient waystation. Bridges have come and gone along the riverfront since then, sometimes leaving remnants of piers in the river or anchors in the banks. Truss structures are among the oldest of the survivors, including one that did not originate in the area: an ornate span of the 1888 Broadway Bridge was floated downstream to Nicollet Island from its original location to enhance the historic district. Railroads were responsible for some of the crossings, including James J. Hill’s iconic Stone Arch Bridge. The Third Avenue Bridge

is part of a series of handsome concrete-arch vehicular bridges that were erected over the Mississippi in the Twin Cities in the early twentieth century.

The bridges connected an ever growing, ever changing metropolis. Sawmills were displaced by grain mills, and grain mills grew obsolete when the city's prominence in that industry began to wane after World War I. Traffic declined on the broad swaths of railroad tracks in corridors weaving through the area. The riverfront was relegated to low-rent residential and commercial uses. The river's natural course had been largely engineered out of existence to maximize its power potential and eliminate obstacles to navigation. It had suffered as a dumping ground for sawdust, sewage, and other pollutants. Few could envision its potential for anything better.

After World War II, however, a few intrepid urban pioneers began transforming the undervalued river and riverfront. Mill ruins and rundown commercial blocks were converted into restaurants and shops. Old mills became housing. Unused train tracks were pulled up and new infrastructure developed. The quality of the Mississippi's water improved. The seemingly impossible turned into an inevitable transformation. While some important cultural resources were lost in the process, many more were repurposed into functions that would ensure their preservation into the twenty-first century.

Cultural Resources in the Saint Anthony Falls Regional Park

The process of evaluating the historical, architectural, cultural landscape, and archaeological resources of the river and riverfront has been underway for decades. A seminal work was Lucille Kane's book *The Waterfall that Built a City: The Falls of St. Anthony in Minneapolis*, which was published in 1966 and updated as *The Falls of St. Anthony: The Waterfall that Built Minneapolis*, in

1987. In recent decades, the area has been the subject of histories, cultural resources reports, and planning studies too numerous to list.

The significance of properties within the SAFRP has been acknowledged in a number of ways:

- » National Register Historic Districts—the Saint Anthony Falls Historic District and the Minneapolis Warehouse Historic District have gone through the nomination process and are officially listed in the National Register; other areas, such as the Saint Anthony Falls Locks and Dams Historic District and the Upper Harbor Historic District, might be eligible for designation but are not officially listed.
- » National Register Individually Designated Properties—some of these resources, such as the Third Avenue Bridge, are also contributing elements in a historic district. As with districts, some individual properties have been listed, while others are eligible for listing.
- » National Historic Landmarks—only a handful of properties in the state are of national significance and qualify for Landmark designation; two of these properties, the Washburn A Mill Complex and the Pillsbury A Mill, are in the central riverfront area.
- » Minneapolis Heritage Preservation Commission Landmarks—the commission can locally designate historic districts and individual properties. In addition to their National Register status, both the Saint Anthony Falls and Minneapolis Warehouse Historic Districts are locally designated.

Historical Signage

Another cultural resource is the historic signage along the downtown riverfront. The Pillsbury's Best Flour sign, the Gold Medal Flour sign, the Northstar Blankets sign are all located directly adjacent to the SAFRP. The Grain Belt beer sign is located on Nicollet Island within the SAFRP boundary and has remained part of the Minneapolis landscape for 80 years. Remnants of the industries that once lined the river, these signs help define the character of this regional riverfront. Efforts should be taken to preserve these signs and the views to them.

Interpretation

For direction on interpretation of the area's history, this plan relies on two recent studies commissioned by the Saint Anthony Falls Heritage Board: "Our Changing Relationship to the Power of the Falls: An Interpretive Vision for the East Bank of Saint Anthony Falls" (draft, October 3, 2013), and "Changing Relationships to the Power of the Falls: An Interpretive Vision for the West Bank of Saint Anthony Falls" (draft, July 2014).¹ Both plans aim to provide visitors with experiences that:

- » Provide physical access with trails and structures
- » Connect the people and events through narrative
- » Extend exploration through online resources and location-based media²

The plan for the East Bank presents the following major recommendations:

1. Establish a visitor orientation center
2. Build clear and connected trails



Figure 26: Proposed Historical and Cultural Interpretation Areas



Left to right - 1869 Eastman tunnel collapse, 1986 Gatehouse excavation, Upper Lock and Dam

3. Integrate interpretive experiences between sites and subjects
4. Develop Main Street as an experience connector
5. Restore and highlight the East Falls
6. Employ a wide array of interpretive modes and tools
7. Get people underground

Specific sites and subjects that should be highlighted are the East Falls, Chalybeate Springs, river ecosystems, hydroelectric sites, the Pillsbury A Mill complex, and tunnels and caves.³

On the opposite side of the river, the West Bank plan makes the following major recommendations:

1. Make indigenous cultures more visible
2. Create a more vibrant riverfront through expanded interpretive programming

3. Preserve the area's industrial ruins while providing appropriate accessibility to the public
4. Meet the needs of a growing number of visitors
5. Strengthen the visual and experiential cohesiveness of the area

The interpretive sites and subjects identified for this bank are Saint Anthony Falls and Spirit Island, the canal and gatehouse, railroads and rail corridors, the Upper Lock and Lower Lock and Dam, the mill ruins and tunnels, bridges, standing mills and related structures, and the Gateway District.

The SAFRP plan has directly incorporated these recommendations at a larger scale. (See **Figure 26**). The Interpretive Vision plans for the West Bank and East Bank are included in the appendix.

¹ Both plans were prepared by consultant Cincinnatus. They will hereafter be cited as "Interpretive Vision: East Bank" and "Interpretive Vision: West Bank," respectively.

² "Interpretive Vision: East Bank," 5, and "Interpretive Vision: West Bank," 2.

³ "Interpretive Vision: East Bank," 6.



Park Development Recommendations

CHAPTER

7

Regional Park Vision Statement

Through an extensive public engagement process the following vision statement for Saint Anthony Falls Regional Park (SAFRP) was formed:

“The Saint Anthony Falls Regional Park will connect people to the nature, culture, and spirit of the dynamic river landscape at the birthplace of Minneapolis.”

Guiding Principles

To support the vision statement the following guiding principles for the SAFRP were developed:

- » **Connect people to the river by foot, bicycle, transit, boat, and private vehicle.**
- » **Restore and enhance natural resources, improve wildlife habitat, and water quality.**
- » **Reveal and interpret past and present, nature and culture.**
- » **Engage visitors through activities, amenities, food, and events.**
- » **Adapt within the changing social, economic, and ecological realities.**

Overall Formative Moves and Rationale

Certain recommendations are critical to the future of the SAFRP. These key moves form the basis for many of the individual development recommendations and include potential property acquisitions. These “formative moves” are listed below. (See **Figure 27**)

» **Expand the regional park boundary at Bassett Creek and realign the parkway to create larger riverfront park space.**

- An expanded park allows the parking lot to be moved farther from the slope to help restore the bluff and incorporate Best Management Practices to capture stormwater runoff.
- More room would be available for restoration and flexible open space along the riverfront.
- Realigning the Plymouth Avenue and West River Parkway intersection would improve safety sightlines and wayfinding.
- An expanded West River Parkway street section would accommodate a median/pedestrian refuge for the 8th Avenue N Connector to the North Loop
- Connect 8th Avenue N to the river

» **Expand the regional park boundary toward Hennepin Avenue and the Postal Service building.**

- The Post Office parking ramp is a visual and physical barrier for park and open space connections between downtown and the riverfront.

- The Gateway is the prime location for central downtown connections and is currently underutilized. This will provide the critical link to connect Nicollet Mall to the riverfront.
- Expansion of the Gateway area enhances physical and visual access to the riverfront, West River Parkway, and First Bridge Park.

» **Provide visitor services in the Mill Ruins area by collaborating with partner agencies to create a visitor’s center on the St. Anthony Falls lock and dam structure.**

- There is no better location to view the Falls than the SAFRP lock and dam, and with the potential closure of the lock, the site and the current building—which is already outfitted with interpretive displays—provides a ready setting for expanded visitorship and orientation to the SAFRP.
 - This is the visitor gateway on the west bank, where culture, history, and recreation converge.
 - Construct vertical link with visitor services at 1st St S near the 3rd Ave Bridge.
-

Change the park name-
SAINT ANTHONY FALLS REGIONAL PARK

Complete a continuous bicycle and pedestrian
trail system on both sides of the River.

Incorporate green infrastructure into
new design initiatives.

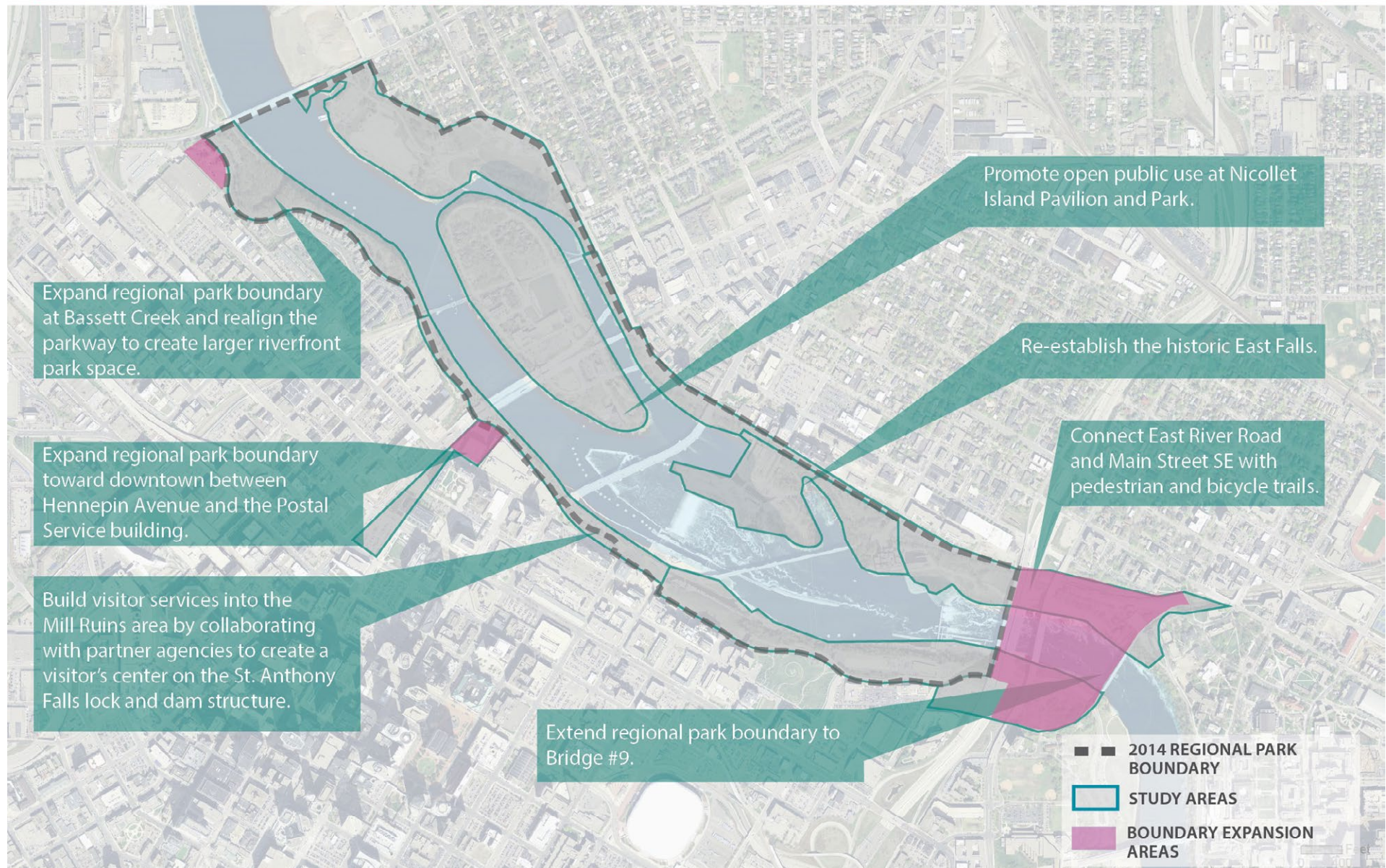


Figure 27: SAFRP Formative Moves

Overall Formative Moves and Rationale, cont.

» Expand the Regional Park Boundary to Bridge No. 9

- Allows all recommended trails to be within the regional park boundary
- Creates seamless connection between SAFRP and Gorge Regional Parks

» Promote open public use of the Nicollet Island Pavilion and Park.

- Short-term: Current building is under lease through 2026. During this time the pavilion may be adapted to better serve public access needs to the south tip of the island during private events.
- Long-term: Consider establishing a partnership with a new enterprise to provide public programming for seasonal or year-round use.

» Complete a continuous bicycle and pedestrian trail system on both sides of the river.

- A continuous trail system would help provide connections, wayfinding, and, in general, orientation to the regional park for visitors.
- Key sections of trail are missing and should be finished to offer a continuous pedestrian- and bicycle-focused trail experience along the entirety of the Saint Anthony Falls riverfront.

» Re-establish historic East Falls

- This initiative is consistent with the East Bank Interpretive Plan and Saint Anthony Falls Historic District Design Guidelines.
- Re-establish the falls so that a natural gravity flow is evident.
- There is an opportunity to reveal and interpret history and draw more people to the Phillip Pillsbury Park, Father Hennepin Bluffs, and the Hennepin Island area.

» Incorporate green infrastructure into new design initiatives.

- Improve water quality in the river and protect wildlife habitat.
- Partnering opportunities and a variety of funding sources are available.
- Expand opportunities for pairing design with green infrastructure function to enhance the experience of the regional park.
- Reduce maintenance costs over the long-term.

Change the park name-
SAINT ANTHONY FALLS REGIONAL PARK

Complete a continuous bicycle and pedestrian
trail system on both sides of the River.

Incorporate green infrastructure into
new design initiatives.

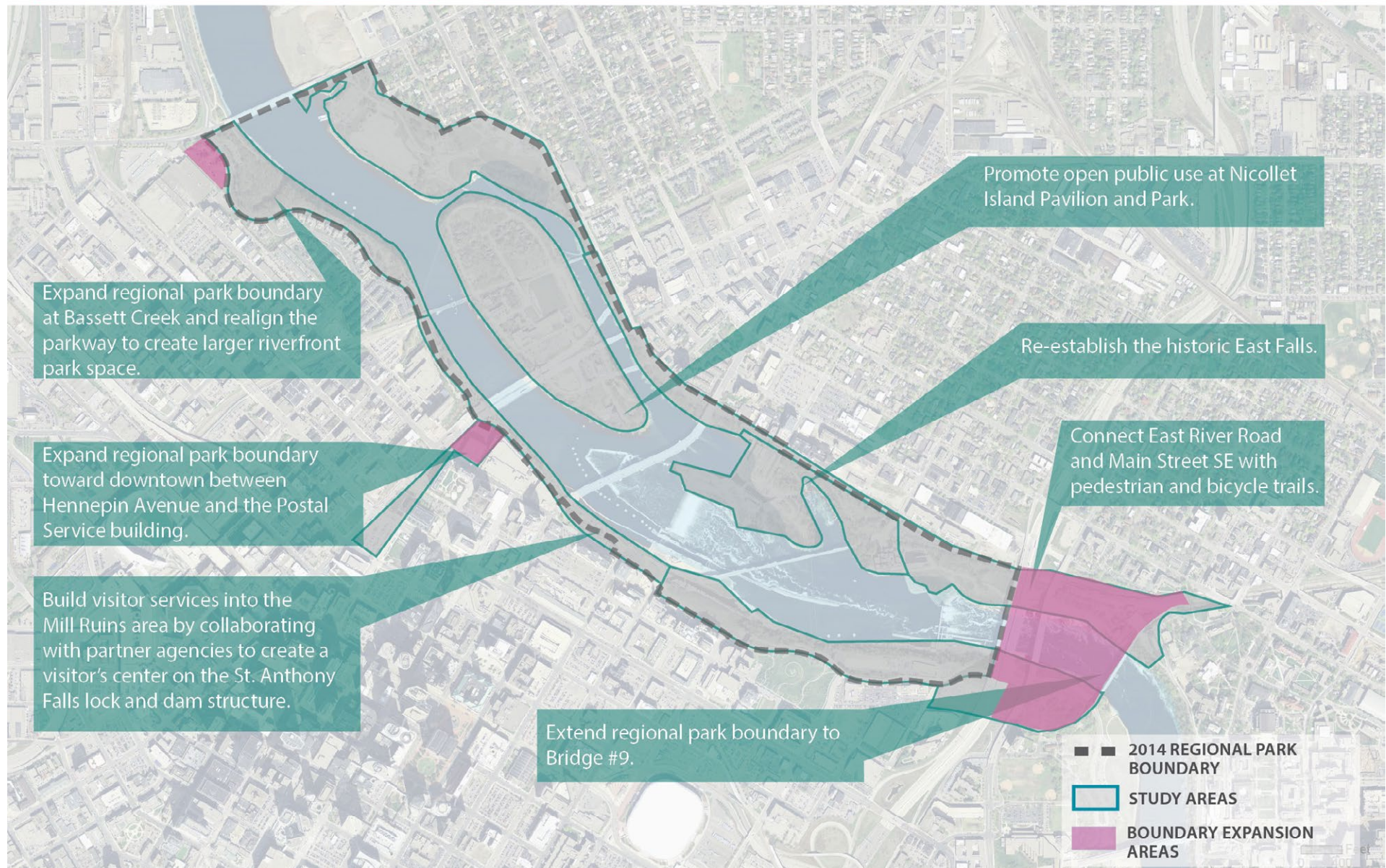


Figure 27: SAFRP Formative Moves



Left to right- Kayaking at Bassett Creek, Kayaing at Night (both photos courtesy of Bob Schmitz), Pedestrians Walking with Kayaks

Completing the Trail Systems

Portage System

With the future closure of the St. Anthony Falls upper lock and dam, the creation of a modern portage route was deemed necessary to facilitate the continuation of recreational paddling along this portion of the river. See **Figure 28** for the overall recommended portage route designations. The portage route is also graphically depicted in more detail in each of the recommendation area maps. The portage route is envisioned as a fully supported system with wayfinding and amenity stations where a user could rent a cart to help move their vessel along the portage route.

Several carry-in points (soft access) for canoes and kayaks would be added on both sides of the riverfront. Wayfinding signage along the Mississippi River is also recommended to help users navigate the water trail and portage system.

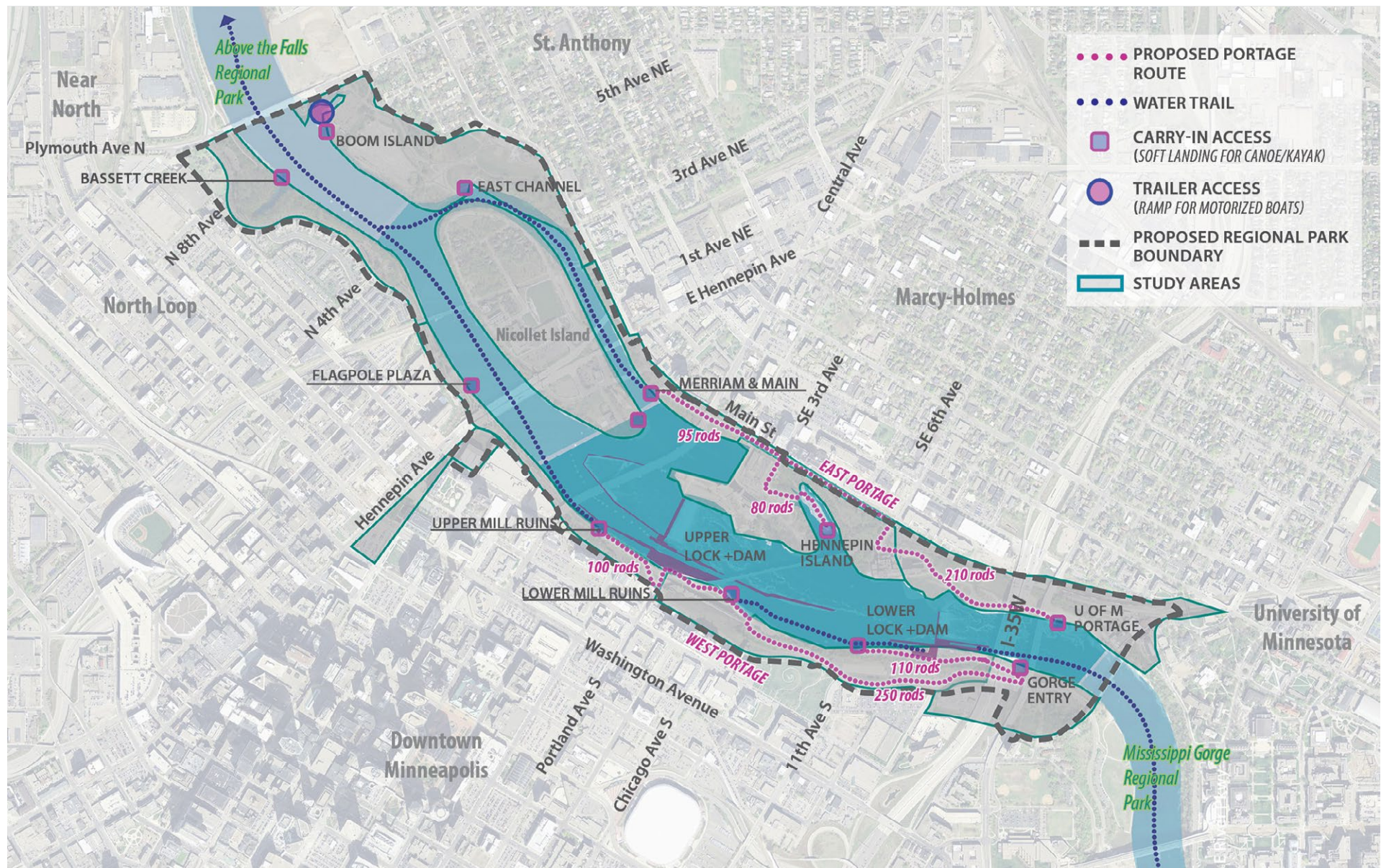


Figure 28: Proposed Portage Routes



Left to Right- On-street Bike Lane, Off-street Bike Trail, Woonerf Example

Bicycle and Pedestrian Trails

When considering key connections, it is imperative to look beyond the boundaries of the regional park to fully understand the regional context. Bicycle and pedestrian trails will provide the user with a variety of experiences along both sides of the river. Where space is limited, priority should be given to the pedestrian or cyclist over motorized vehicles, to the extent possible.

Key focus areas were identified to complete the trail system in the SAFRP. The “missing links” are depicted in **Figure 29** and are as follows:

- » The rustic trail between the railroad and Merriam on Nicollet Island
- » Between 1st Avenue NE and Hennepin Avenue along Main Street/Marshall Avenue

- » Between East River Road/Dinkytown Greenway and the Stone Arch Bridge/Main Street

The areas at each end of the Stone Arch Bridge are significant gateway entry points to the park and will need to be clarified through additional design detail.

Looking outside the boundaries of the regional park, there are strategic links that would provide stronger, more accessible connectivity for bicyclists and pedestrians. On the west side they include:

- » A new 8th Avenue N connection to the West River Parkway.
- » A Gateway connection extending from the Downtown Core to the riverfront.

- » A proposed bicycle and pedestrian-centric connection, or Woonerf, as part of the new development that would connect the trails along West River Parkway to the on-street bike lanes on South 2nd Street.

- » A Chicago Avenue connection to provide direct access between the SAFRP and the future stadium.

Woonerf (Dutch pronunciation: [ˈʋoːn.ɛrf] is a living street implemented in the Netherlands which can accommodate vehicle, bicycle, and pedestrian use in the same corridor to calm vehicle traffic and allow for uninterrupted pedestrian and bicycle use.

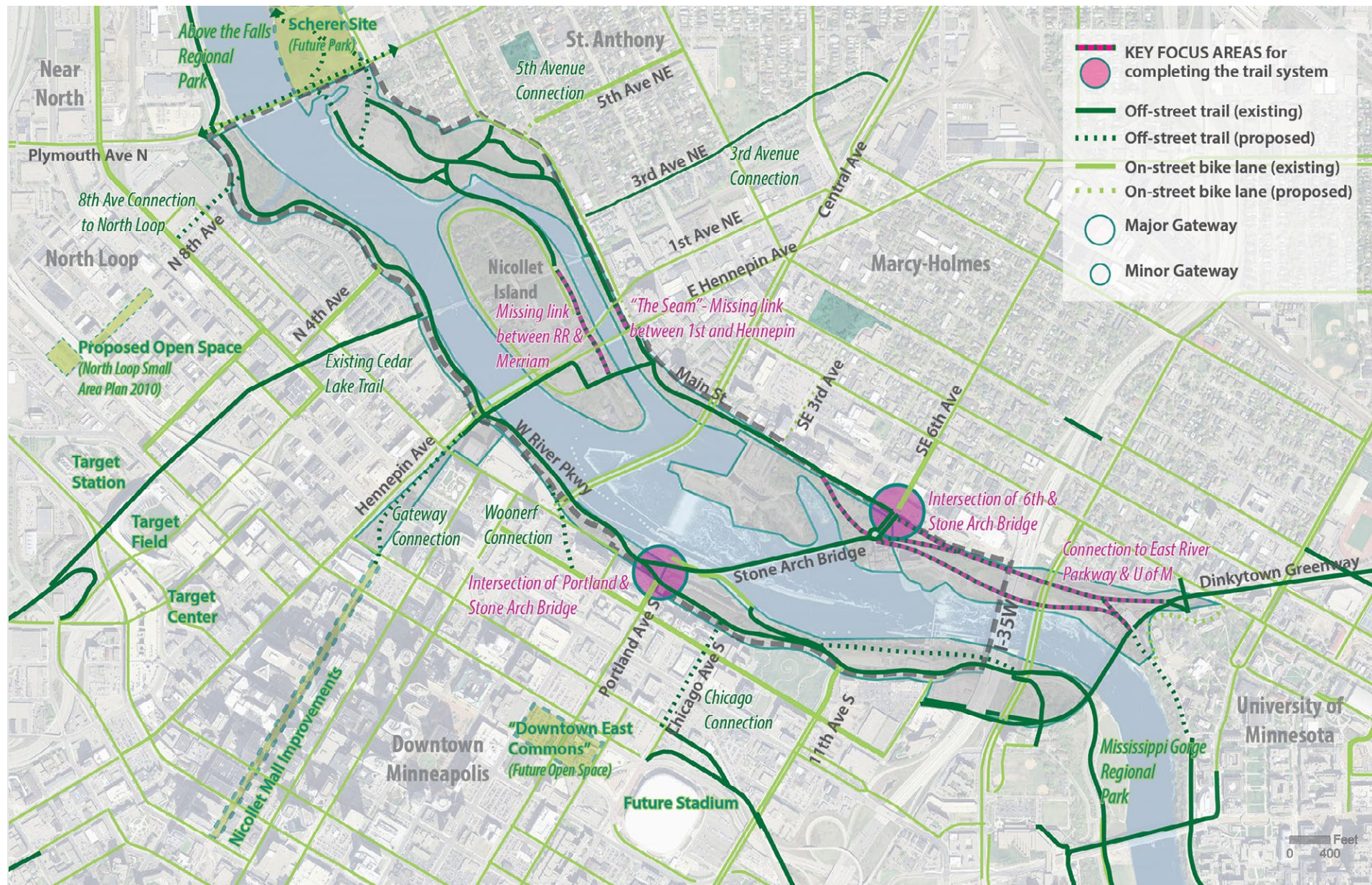


Figure 29 : Critical bicycle and pedestrian connections

Bicycle and Pedestrian Trails, cont.

On the east side they include:

- » Creating a Granary Corridor connection between East River Road and the Dinkytown Greenway. The Granary Corridor is the railroad and industrial land going east from the Stone Arch Bridge;
- » Continuing to strengthen the 6th Ave SE on-street bikeway connection;
- » Upgrading the off-street trail facility along 3rd Avenue NE; and
- » Creating an on-street connection on 5th Avenue NE between the Park and the 5th Street bikeway.

Bridges provide critical connections between both sides of the river and to the river itself. The Stone Arch Bridge is an exceptional example of a completely pedestrian and bicycle focused bridge connection. When opportunities arise with road and bridge rehabilitation projects, the MPRB will work with partnering agencies to establish quality pedestrian and bicycle experiences at every river crossing and connect the bridges to the riverfront. On the north end of the SAFRP, and seen in the RiverFIRST document, the Plymouth Bridge presents an opportunity to create a greenway linking both sides of the river and reinforcing Plymouth as a gateway into both the Above the Falls Regional Park and the SAFRP. On the south end of the park, a planned “mar-supial” pedestrian suspension bridge under I-35W, that was never built, would provide an additional pedestrian loop across the river.

Programming and Events

Based on current recreational and demand trends, monitored by the MPRB, flexible event spaces are needed along the riverfront. These are flexible spaces, meaning one day it could host Polish Fest, and the next day it could host a movie night, and on the following day be used as passive recreation space. Creating spaces that are adaptable ensures no wasted park lands. Below is a general outline of what the MPRB sees as appropriate venue types and locations; further market study by the MPRB is suggested at the time of implementation.

Performance/Event

- » 1 large outdoor flexible use lawn area
- » 2 small outdoor flexible use lawn areas
- » 1 large indoor venue up to 1,500 people

Picnic lawn

- » 2 large group gathering spaces up to 300 people
- » 12 family group sites (some embedded within flexible use lawn area event spaces)

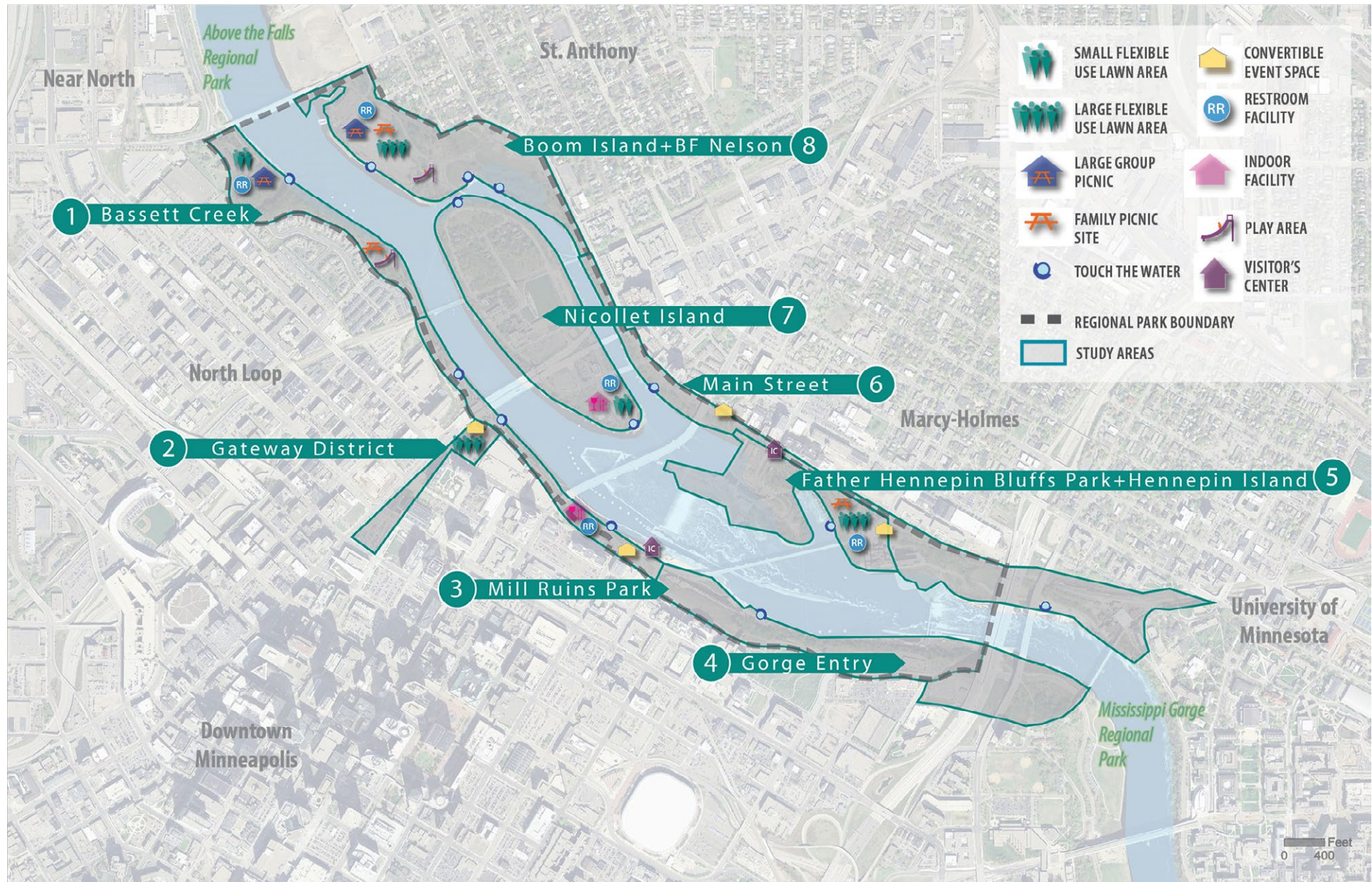


Figure 30 : Programming and Events

Individual Area Development Recommendations

Based on the issues and opportunities set out in Chapter 2 and discussions had during the public engagement process, the following recommendations and supporting initiatives were developed for the key study areas. The areas are numbered 1 through 8 and follow a counter-clockwise order around the river. Each supporting initiative is lettered beginning with 'A' for each area. The letters for the supporting initiatives correspond to the letters keyed on each area's map.

1. Bassett Creek

Enhancing wayfinding and improving connections to the park and river were key design directives for Bassett Creek Park. By acquiring a portion of the Star Tribune property, it is possible to realign a portion West River Parkway to improve the park entry experience and create more room for bicycle and pedestrian connections, restoration, and programmable space along the riverfront. The addition of facilities will support the expansion of its picnicking and multi-purpose gathering area functions.

Supporting Initiatives (see Figure 31):

- A. Acquire Star Tribune property; expand park boundary and realign West River Parkway to Plymouth Avenue Intersection.
- B. Connect the City to the riverfront at 8th Avenue N.
- C. Expand picnicking area and multi-open space functions.
- D. Expand woodland restoration area and stabilize slopes along shoreline.
- E. Add picnic shelter.

- F. Add restrooms.
- G. Relocate parking lot along the realigned West River Parkway, farther away from the sensitive bluff edge and incorporate green infrastructure to capture stormwater runoff.
- H. Realign/improve trail connections to the canoe/kayak landing area.
- I. Integrate nature play areas in a safe manner along the edge of Bassett Creek Outlet.
- J. Interpret the historic canoe ferry route to Boom Island.



Informal family picnicking

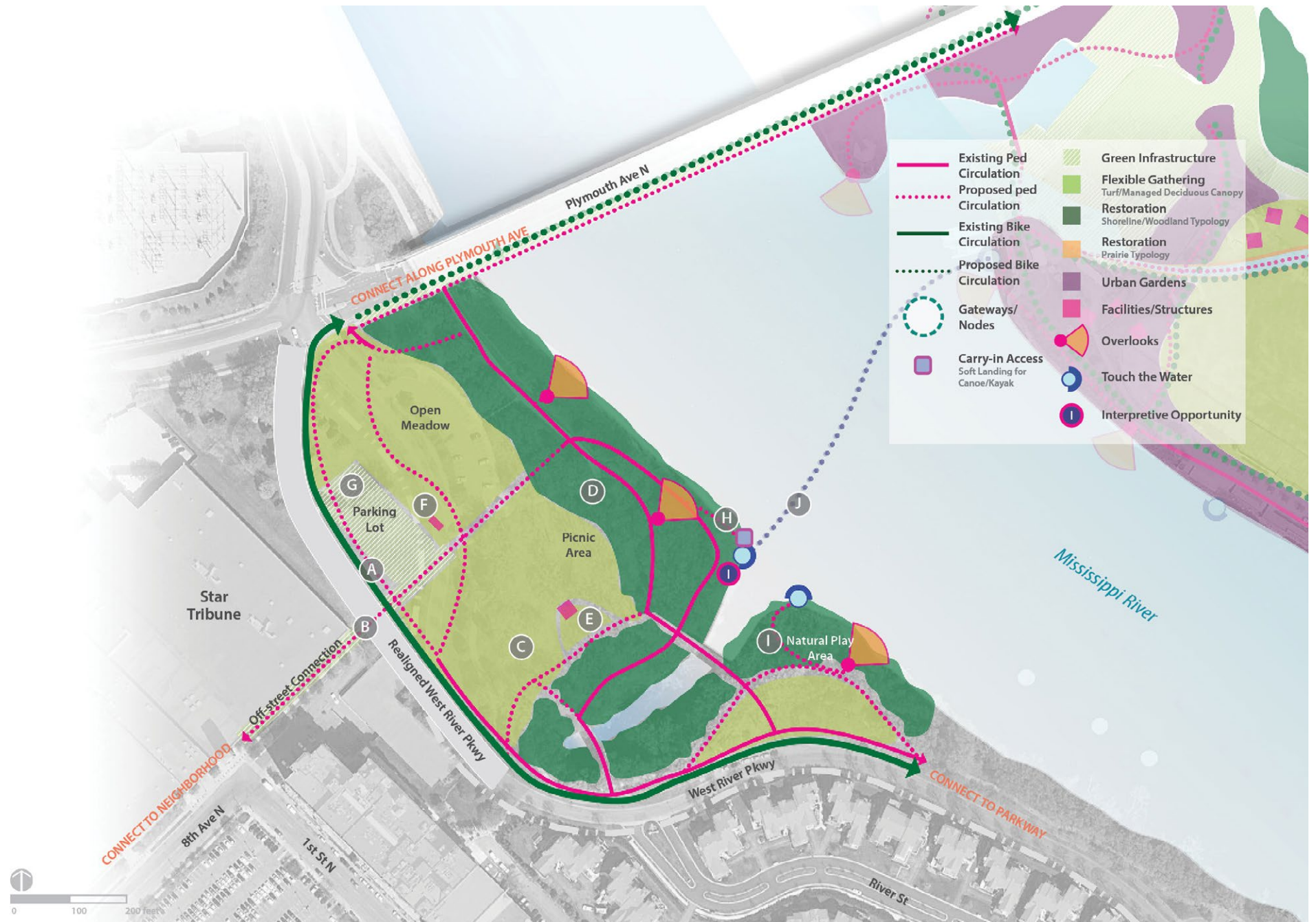


Figure 31 : Bassett Creek Recommendations



Left to Right- Precedent Images of Lurie Garden in Chicago, Simon and Helen Director Park in Portland, and Lurie Garden in Chicago.

2. Gateway District

Expanding the park boundary between the River and Gateway Park and acquiring a portion of the USPS property creates an opportunity to provide a compelling, vibrant park entry experience that will enhance physical and visual access between central downtown and the river that does not exist today. The MPRB envisions working with the City of Minneapolis to enhance streetscape improvements on Hennepin Avenue, and partnering with the Federal Reserve to improve wayfinding to the riverfront. By acquiring a portion of the USPS property, the parking ramp, which impedes circulation and blocks views to the river, could be removed. In its place an expanded Gateway Park would provide a terraced riverfront park that could be programmed year-round.

Supporting Initiatives (see Figure 30):

- A. Expand the regional park boundary to include a portion of USPS property, which contains the parking ramp, along Hennepin Avenue.
- B. Create terraced spaces descending from the bluff that guide visitors to the riverfront and treat stormwater.
- C. Design flexible spaces to be programmed for formal and informal events throughout the year (including ice skating, concerts, markets, food trucks, etc.)
- D. Partner with the Federal Reserve to improve access to the riverfront. Improving wayfinding to Flagpole Plaza, just upriver of the Hennepin Ave Bridge. Opening the 1st Avenue walkway to the public. should be considered as security allows.
- E. Reduce hard space and introduce more native plant materials at the Flagpole Plaza area.

- F. Connect Mill Ruins Park to the new Gateway park by elevated balcony walkway through the Post Office patio terrace.
- G. Add enhanced lighting and amenities underneath Hennepin Bridge to better define "First Bridge Park".
- H. Make a safe and obvious connection and crossing between East River Parkway and the Cedar Lake Trail.

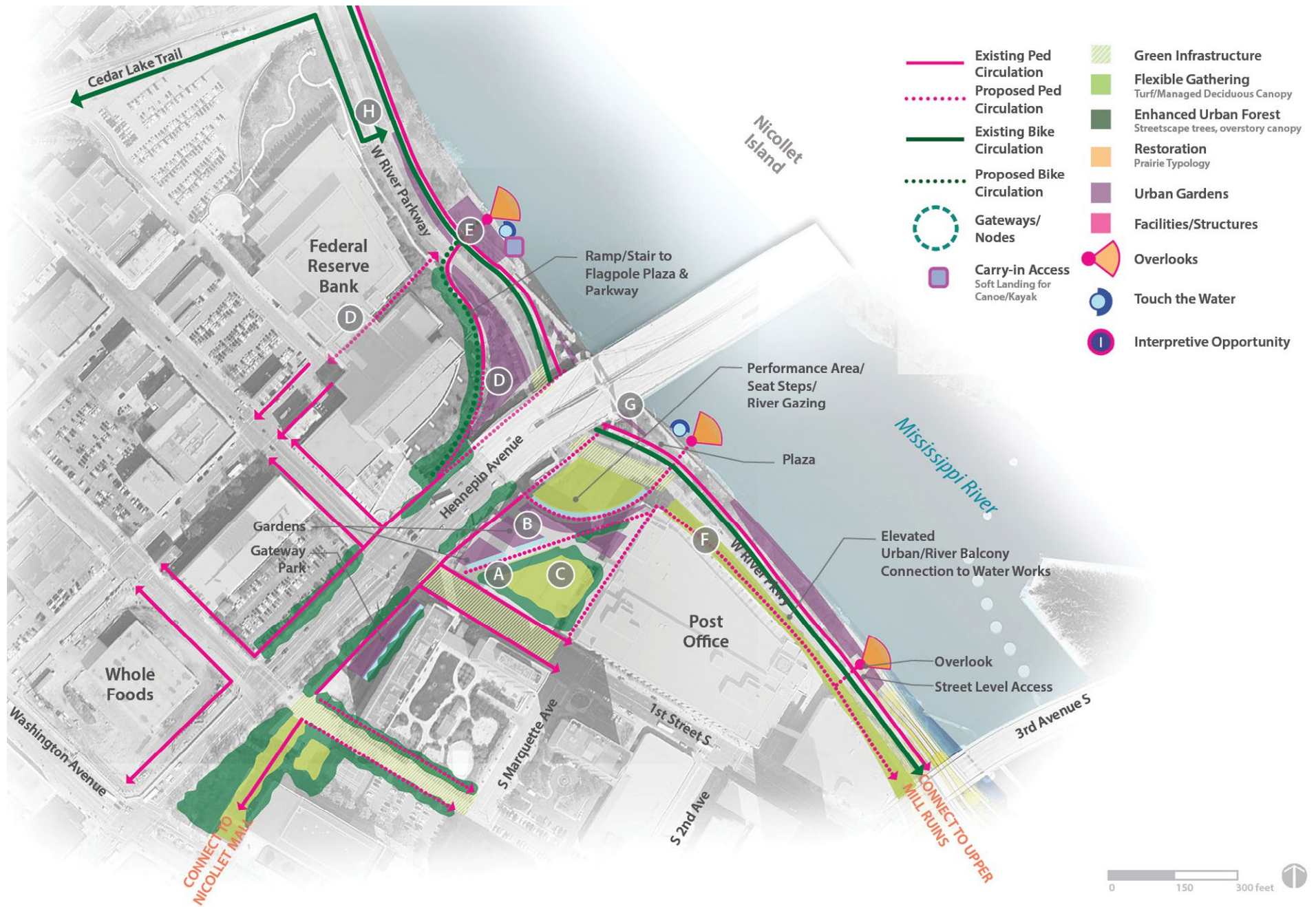


Figure 32 : Gateway District Recommendations

3. Mill Ruins Park

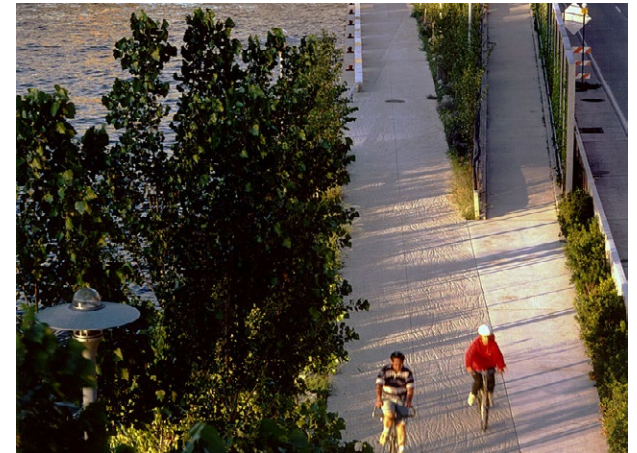
Mills Ruins Park is the premiere visitor's destination on the west bank of the river. With St. Anthony Falls upper lock and dam closing, the potential to create a visitor's center at this structure will create even more demand. Proposed amenities to accommodate this increased visitor demand must also acknowledge that there are two different visitor markets: the daily riverfront user, who may commute or walk through, and the regional park visitor who may spend an afternoon along the riverfront.

Interpreting the water power story of the St. Anthony Falls and continuing to excavate, conserve, and interpret ruins will be a priority for this park. The interpretive recommendations are consistent with the West Bank Interpretive Plan. The recommendations for Upper Mill Ruins, where the Water Works site lies, are consistent with the on-going design efforts of the MPRB and the Minneapolis Parks Foundation. The recommendations for Lower Mill Ruins are consistent with the 1991 Mill Ruins Park master plan and the West Bank Interpretive Plan.

Upper Mill Ruins Park

Supporting Initiatives (see Figure 33):

- A. Collaborate with partner agencies to create a visitor's center on the lock and dam structure. The building is anticipated to include an orientation center, interpretation, classroom, restrooms, food concession, and indoor/outdoor patio.
- B. Develop a park building at 1st Street S, near the 3rd Avenue Bridge adjacent to the rail grade that will facilitate vertical circulation. The building program is anticipated to include food concession, restrooms, indoor/outdoor patio, and outfitting shop.
- C. Remove and historically record Fuji-ya building to expose historic ruins.
- D. Create multi-purpose outdoor "rooms" to interact with the ruins along 1st Street S that are accessible from both sides.
- E. Depict historic inlet canal from the riverbank to the gatehouse by exposing existing walls and bridge piers, using native plantings and pavement details to accurately interpret historic landscape patterns, and bridging new trail over the mouth of the inlet pond in the location of the historic rail bridge.
- F. Expose elements of the stone seawall upstream from the canal inlet while still improving the ecological function of the shoreline.
- G. Enhance pedestrian and bike connection under the Stone Arch Bridge in ways that depict and interpret buried mill ruins.
- H. Enhance and simplify bike trail connectivity at the terminus of the Stone Arch Bridge. Utilize proposed woonerf connection to provide better bike connections from downtown to the riverfront.
- I. Modify parkway alignment to provide a greater buffer to the 1st Street S/5th Avenue intersection in a manner that also interprets and respects the location of the gatehouse and canal.
- J. Provide traffic calming features along West River Parkway that give precedence to the bicycle and pedestrian user.
- K. Create a soft landing for canoes and kayaks.



Precedent Image of Allegheny Riverfront Park, Pittsburgh, PA



Precedent Image of Allegheny Riverfront Park, Pittsburgh, PA

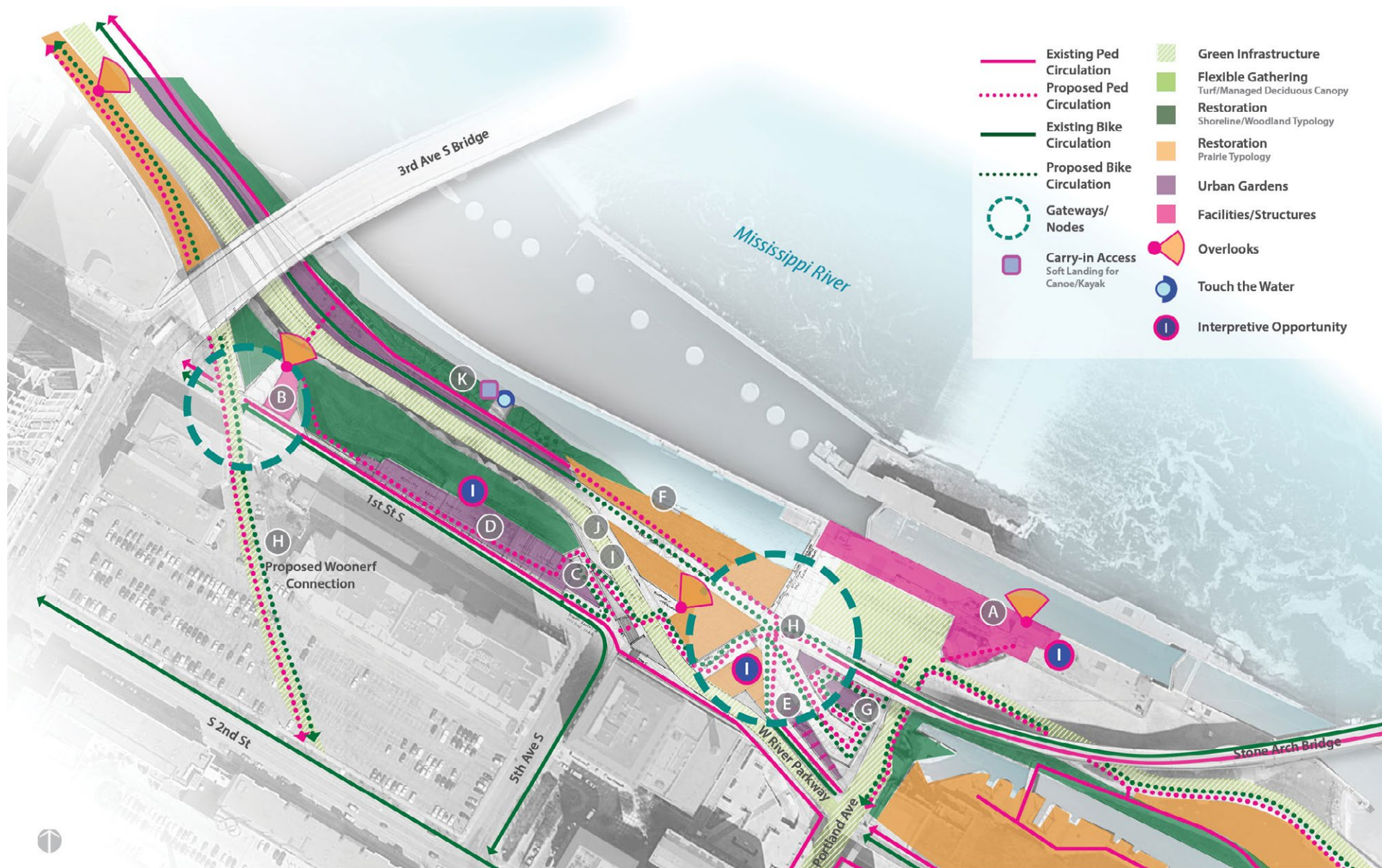
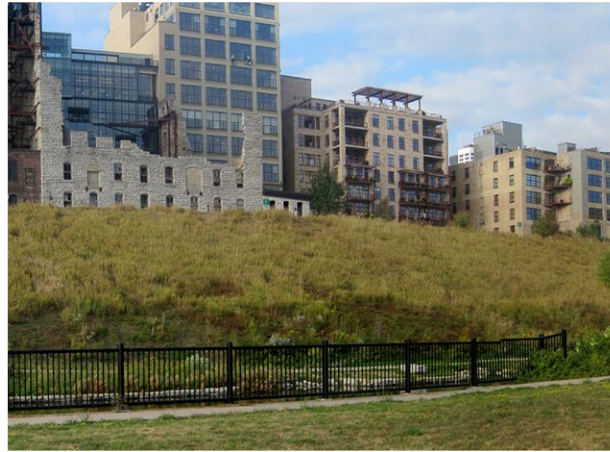


Figure 33 : Upper Mill Ruins Recommendations



Existing Conditions



Lower Mill Ruins Park

Supporting Initiatives (see Figure 34):

- L. Enhance connections from Mill City Museum to the river:
 - Long term: establish an accessible pedestrian tunnel connection between Mill City Museum and the River near the tailraces.
 - Short term: enhance the direct pedestrian connection between West River Parkway and the River via stairways which meander down the hillside.
- M. Continue to implement the ruin plan recommendations as stated in the 2014 West Bank Interpretive Plan.

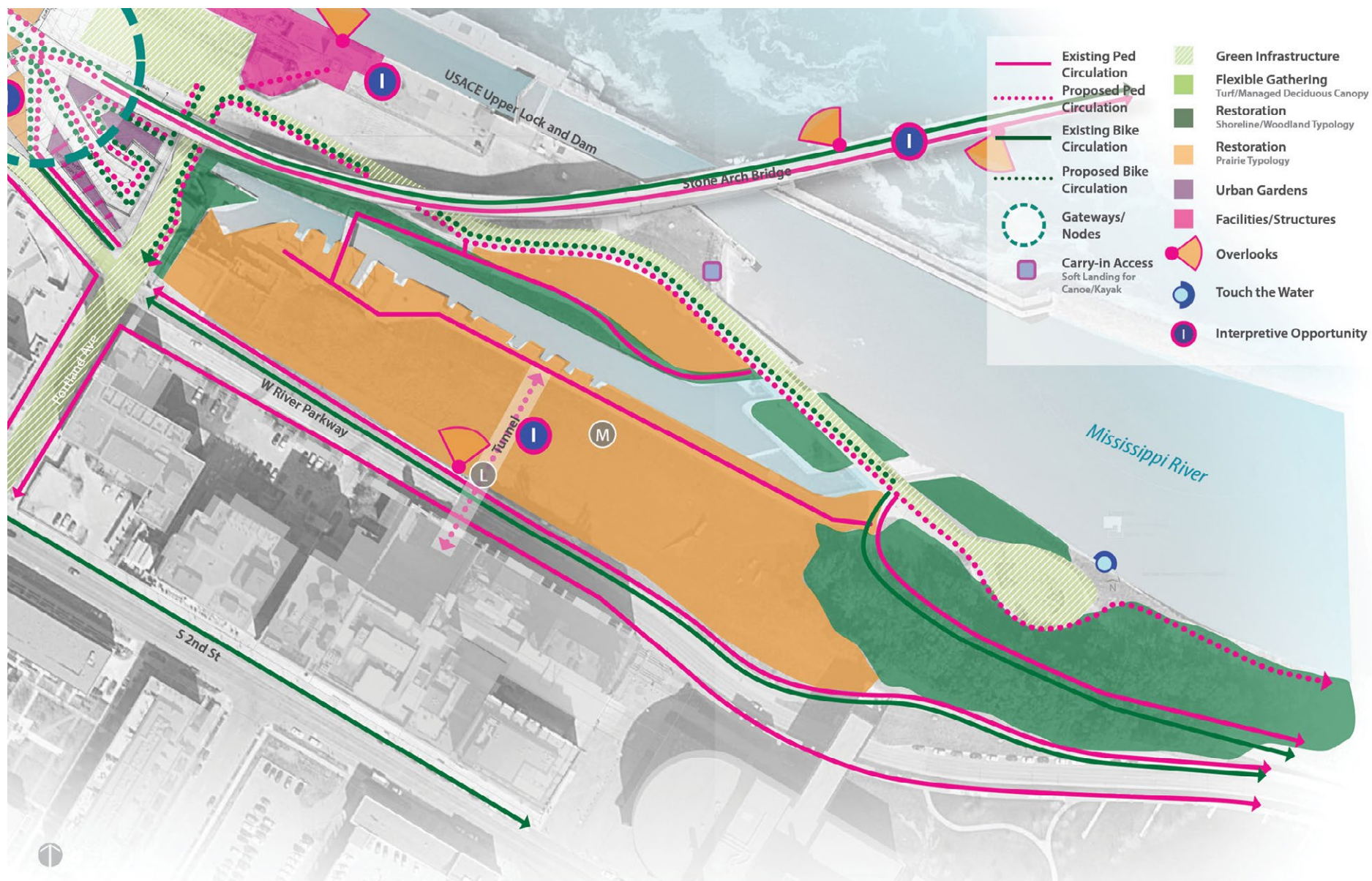


Figure 34 : Lower Mill Ruins Park Recommendations



Concept Renderings of the I-35W Marsupial Bridge by T.Y. Lin In



4. Gorge Entry

Working with partnering agencies to enhance connections along, across and to the river were key directives for the Gorge Entry area. Woodland and shoreline/bluff restoration efforts and additional connections to the riverfront could occur with agreements from partnering agencies and property owners or if inholdings, such as Centerpoint Energy, would decide to sell in the future.

Supporting Initiatives (see Figure 35):

- A. Work with partnering agencies to build the 'marsupial bridge' under the I-35W bridge.
- B. Work with partnering agencies to provide a 'Lower Lock Trail' along the river edge between lower Mill Ruins and the I-35W bridge.
- C. Incorporate overlooks at key locations along lower lock trail.

- D. Woodland/shoreline restoration along bluff to the Number Nine Bridge and Bluff Street Park.
- E. Acquire CenterPoint property when possible to increase connectivity to the riverfront, establish continuous habitat and create a robust trail system.

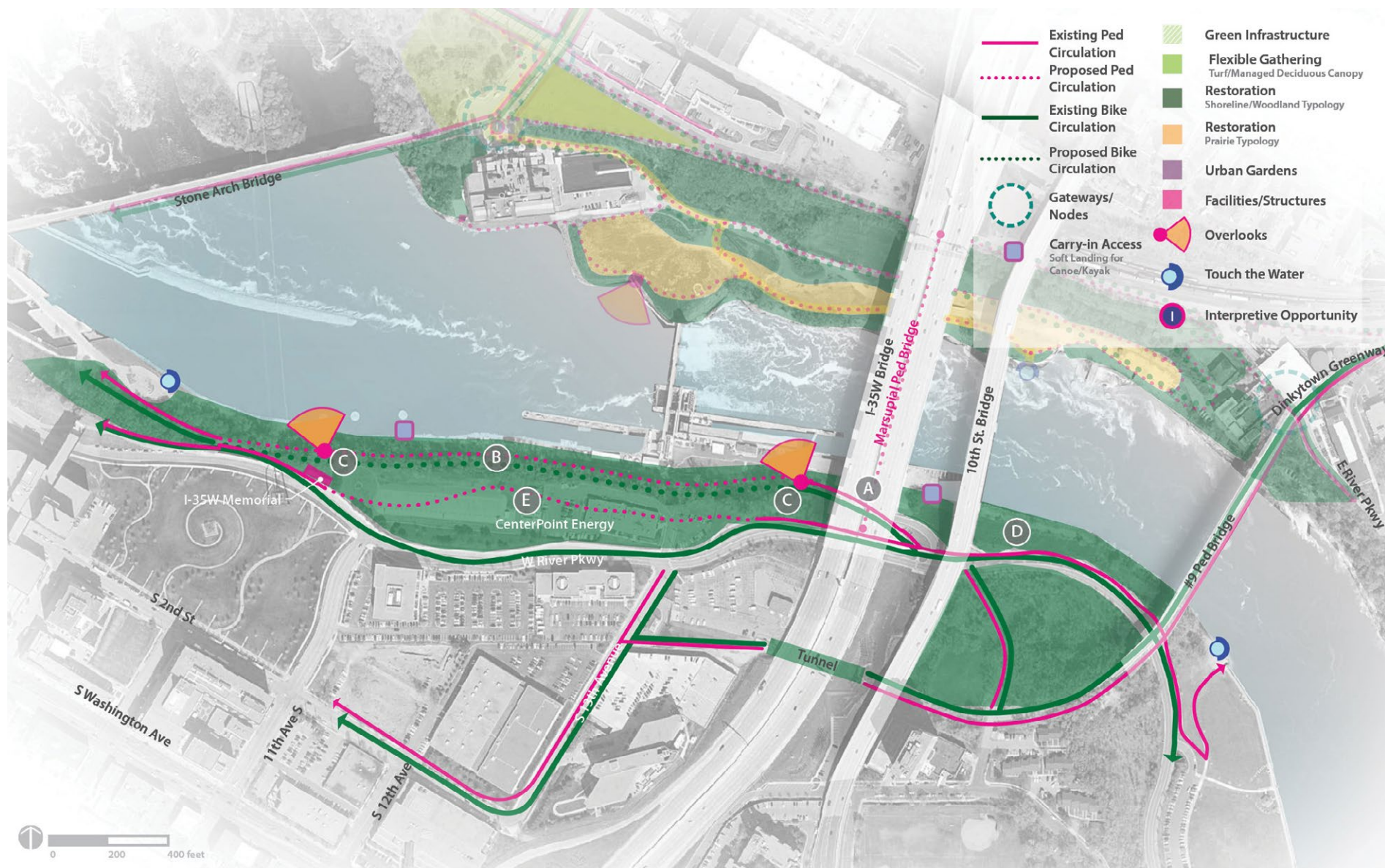


Figure 35 : Gorge Entry Recommendations

5. Father Hennepin Bluffs Park and Hennepin Island

As described in existing conditions portion of Chapter 2, Father Hennepin Bluffs Park lies on the upland portion of the park and Hennepin Island spans the portion of the park down the bluff along the wooded river floor. Because of the topographic change, these two adjacent parks have their own unique character and programming function. This area also encompasses Phillip Pillsbury Park, across from the A Mill, and Lucy Morris Wilder Park between the entrance to the Stone Arch Bridge and the University of Minnesota Power Plant.

Father Hennepin Bluffs Park

Directives for this area were to improve overall circulation between the upper and lower parts of the park. It is important to let people engage with the edge while also protecting the sensitive bluff. The goal for Father Hennepin Bluffs is to improve circulation and park function while opening up the park edge to the street and surrounding neighborhoods. This upland area would continue to be programmed for medium sized events, concerts, and picnicking.

A key inholding is located at 600 Main on the other side of the park from 6th Avenue SE. This land, if acquired in the future, could provide an extension of the programming of Father Hennepin Bluffs Park and would help frame the park entry experience along 6th Avenue to the Stone Arch Bridge. This parcel is on the terminus for the axial view from the east end of the Stone Arch Bridge.

Supporting Initiatives (see Figure 36):

- A. Create a permeable park edge along Main Street that promotes connections to the neighborhood

while strengthening the Park's orientation towards the River. This could include the following initiatives:

- Remove berming along the Main Street edge where appropriate.
 - Manage deciduous trees to maintain an over-story canopy, particularly as ash trees are removed over time, in a manner that also frames views to the River.
- B. Realign pedestrian and bicycle trails to meander close to the bluff edge in a manner that does not interfere with the band shell function.
- C. Build a new band shell away from the sensitive bluff edge in a manner that still maintains the open space of the park.
- D. Selectively remove degraded and/or invasive vegetation to frame views to the river along the bluff edge.
- E. Clarify and emphasize pedestrian and bike circulation at the junction of the Stone Arch Bridge and 6th Avenue SE in a manner that reinforces the historic connection to the rail alignment. This could also include the following initiatives:
 - Provide a signature entry experience as outlined in the East Bank interpretive plan.

- Extend 6th Avenue Greenway design and create a programmable convertible street between the 6th Avenue and Main intersection and the Stone Arch Bridge while still allowing University of Minnesota service vehicles and emergency vehicle access.
 - Interpret the historic railroad alignment to promote wayfinding for bicyclists and pedestrians.
 - Eliminate the utilitarian experience of the existing cu-de-sac.
 - Provide a safe, accessible surface for bicyclists and pedestrians while still maintaining the historic cobblestones.
- F. Add a restroom facility and/or visitor orientation center.



Figure 36 : Father Hennepin Bluffs Park Recommendations



Left to Right- Precedent Image of Boardwalk Trail, Views to Pillsbury A Mill from Hennepin Island, Hennepin Island View to Stone Arch Bridge

Hennepin Island

The goal for Hennepin Island was to preserve the character of the wild river floor while improving accessibility to this unique place. This area would stay programmed for passive recreation, wildlife viewing, and interpretation.

The concept of re-establishing the East Falls has been outlined in multiple planning efforts, including the St. Anthony Falls Historic District Guidelines and the East Bank Interpretive Plan. The addition of the East Falls would bring additional interpretive opportunities and draw more visitors to this area. It is important to the community that the East Falls be re-established in a manner that is not forced or artificial.

Supporting Initiatives (see Figure 37):

G. Stabilize eroded slopes; restore native vegetation on bluff and shorelines to improve wildlife habitat.

- H. Restore water flow to the East Falls in a manner that maintains natural gravity flow.
- I. Improve the trail connection at the “pinch point” along the bluff edge across from the Pillsbury A Mill. Explore options to provide separate pedestrian and bike connections in a manner gives priority to the pedestrian experience versus the vehicular experience. Solutions considered should not impact the historic resources in and along the bluff.
- J. Create a new looped trail connection along the bluff between Hennepin Island and Stone Arch Bridge to replace the existing stairway near Stone Arch Bridge.
- K. Partner with the City and Xcel Energy to promote access to the river.
 - Create ADA access to Hennepin Island using the 3rd Avenue SE extension.

- Consider lengthening the hours and season of Water Power Park.

- L. Create lower pedestrian trail connections to Water Power Park and to the University of Minnesota portage area.
- M. Acquire and remove ADM substation.
- N. Integrate Xcel Energy Main Street Plant as a visitor amenity.



Figure 37 : Hennepin Island Recommendations



Left to Right- Parkway Trail Character, Conceptual Cross-section of Off-Street Trail Between East Hennepin and 1st Avenue NE

6. Main Street

During the process of public engagement, this study area of Main Street grew beyond the historic Main in order to provide a vision for the entire Main Street corridor.

Main Street, for this purpose of this document, includes the Marshall Avenue NE and Main Street corridor from Plymouth Avenue to the north and to 6th Avenue SE to the south. It also includes the segment between 6th Avenue SE to East River Road that is currently outside the existing park boundary.

The key directive for Main Street is to create a continuous parkway experience along Main Street NE and Marshall Avenue and establish a continuous bike and pedestrian trail system on the east side that does not exist today.

A parkway generally includes:

- » Bicycle and pedestrian trails, separated if space allows

» A motor vehicle road, typically 24' in width, large trucks and buses are usually not permitted

» Vegetation of varying types

Main to Marshall (Plymouth Avenue to 1st Avenue NE)

Supporting Initiatives (see Figure 38):

- A. The MPRB will with partner agencies to create a parkway-like experience on Marshall and mitigate the suburban edge to the street.
- B. Promote the Grand Rounds parkway lighting and signage standard to establish a continuous sense of streetscape along Main Street NE/Marshall Avenue NE between Plymouth Ave and 1st Avenue NE.
- C. Establish safe connections and crossings from the neighborhood to the regional park.
 - » 5th Avenue NE bikeway to BF Nelson Park

- » 3rd Avenue NE to BF Nelson Park.

“The Seam” (1st Avenue NE to E Hennepin Avenue)

Supporting Initiatives (see Figure 39):

- D. Narrow the roadway between East Hennepin and 1st Avenue NE to provide space for an off-street pedestrian and bike trail connection on the river-side of the road.



Figure 39: "The Seam" Recommendations



Figure 38: Main to Marshall Recommendations

Historic Main Street (E Hennepin Avenue to 6th Avenue SE)

Supporting Initiatives (see Figure 40):

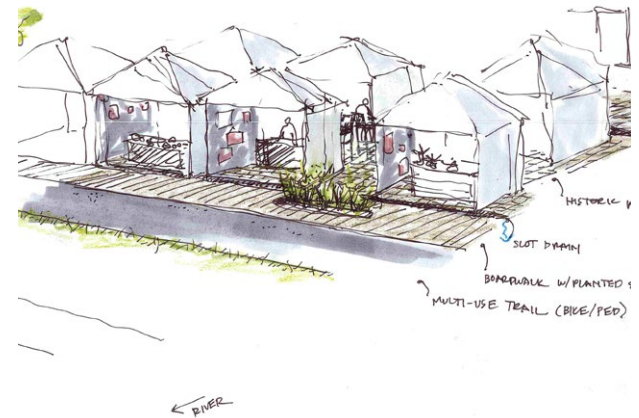
- E. Create more flexible space for everyday activities and events, while maintaining historic features and green space.
- F. Integrate stormwater treatment to define separation between the roadway and trail system.
- G. Create a performance/event space under the 3rd Avenue Bridge by enhancing lighting and the bridge understructure.
- H. Create public gathering areas at the water's edge while promoting shoreline restoration.
- I. Create separate bike and pedestrian trails along historic Main Street SE.



Charrette Concept for 3rd Avenue Bridge Performance Space



Outdoor Seasonal Dining



Charrette Concept for Flexible Street Section for Festivals/Market tents

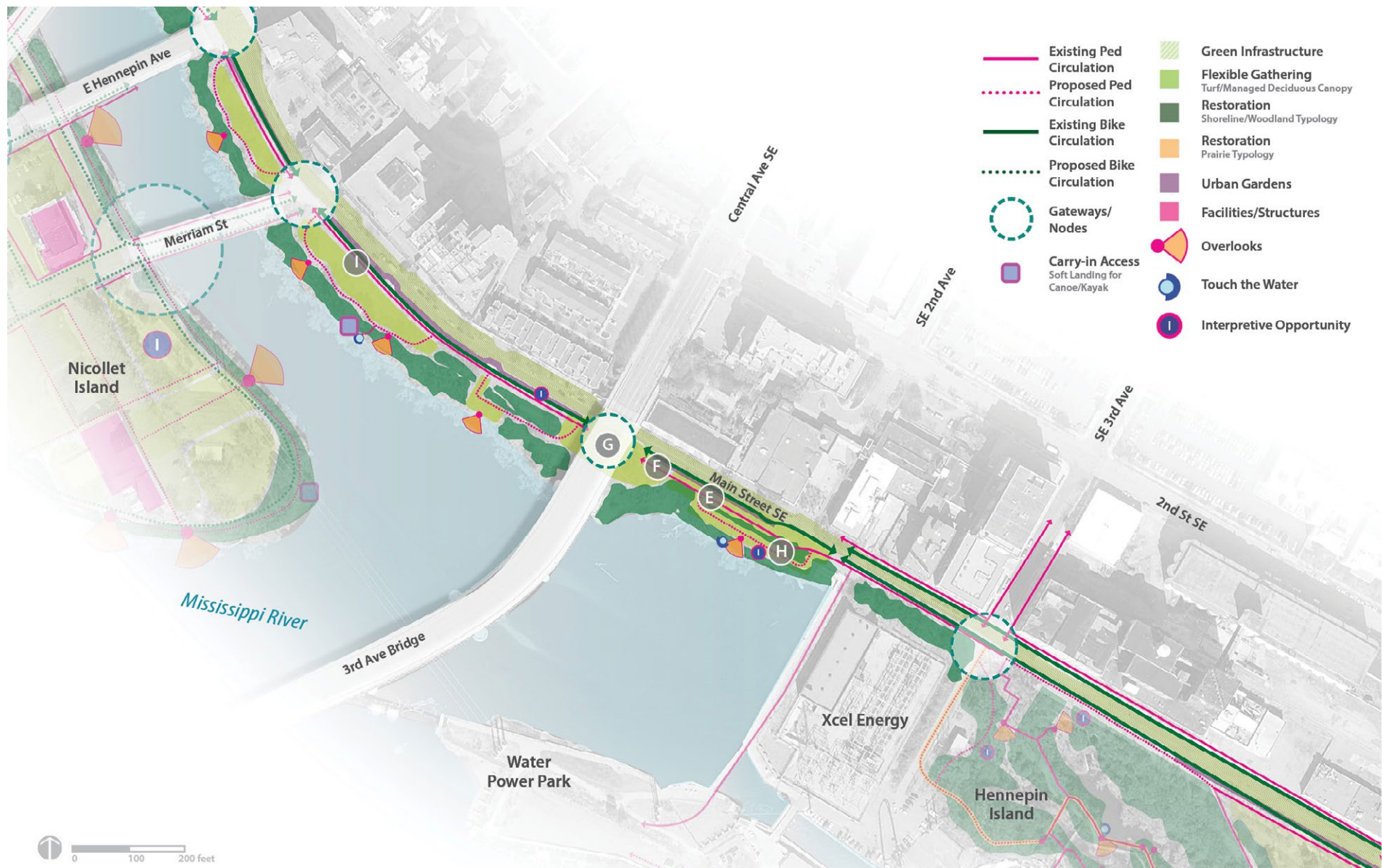


Figure 40 : Historic Main Street Recommendations



Existing Conditions Left to Right - Dinkytown U of M Trail, Coal Haul Road, Service Road Along Rail Corridor

Main Street Portage (6th Avenue SE to Bridge #9)

Supporting Initiatives (see Figure 41):

- J. Extend park boundary to Bridge #9.
- K. Work with partnering agencies to establish pedestrian and bicycle trails between historic Main Street SE and East River Road.
- L. Work with the U of M to provide an upper trail connection to Bridge #9.
- M. Work with partnering agencies to provide public access to the water for portaging or other recreational uses.



Figure 41 : Main Street Portage Recommendations

7. Nicollet Island

Main directives for Nicollet Island include promoting green infrastructure, restoration, more accessible public use, and connectivity while maintaining the island's overall experience and historical character.

Supporting Initiatives (see Figure 42):

- A. Promote pedestrian connections to Nicollet Island from E Hennepin Ave.
- B. Create a "Green Street Loop" with shared bicycle and roadway circulation along Island Avenue and Merriam Street.
- C. Remove gravel parking area along Island Avenue. Restore and expand the woodland habitat.
- D. Remove invasive species and restore woodland habitat on Nicollet Island North.
- E. Improve trail wayfinding and connection from Merriam Street to Boom Island in a manner that does not take away from the existing experience. Promote alternative trail surfaces such as crushed limestone.
- F. Promote open public use of Nicollet Island Pavilion and Park.

» Short-term: The current catering agreement runs through 2026. During this time the pavilion should be adapted to better serve public access needs to the south tip of the island during private events. This could include:

- Removing the tent between the Pavilion and the river that essentially 'claims' public riverfront.

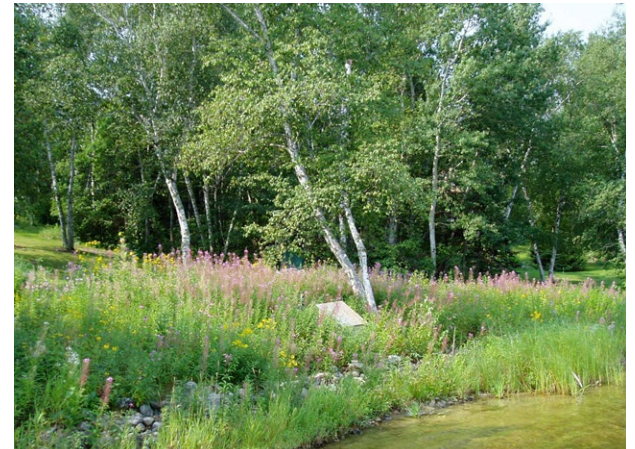
- Providing better access to restrooms inside the pavilion.
- Move dumpsters from the south side of the Pavilion to a more appropriate place to encourage proper aesthetics and pedestrian circulation.

» Long-term: Consider establishing a partnership with a new enterprise to provide public programming for seasonal or year-round use.

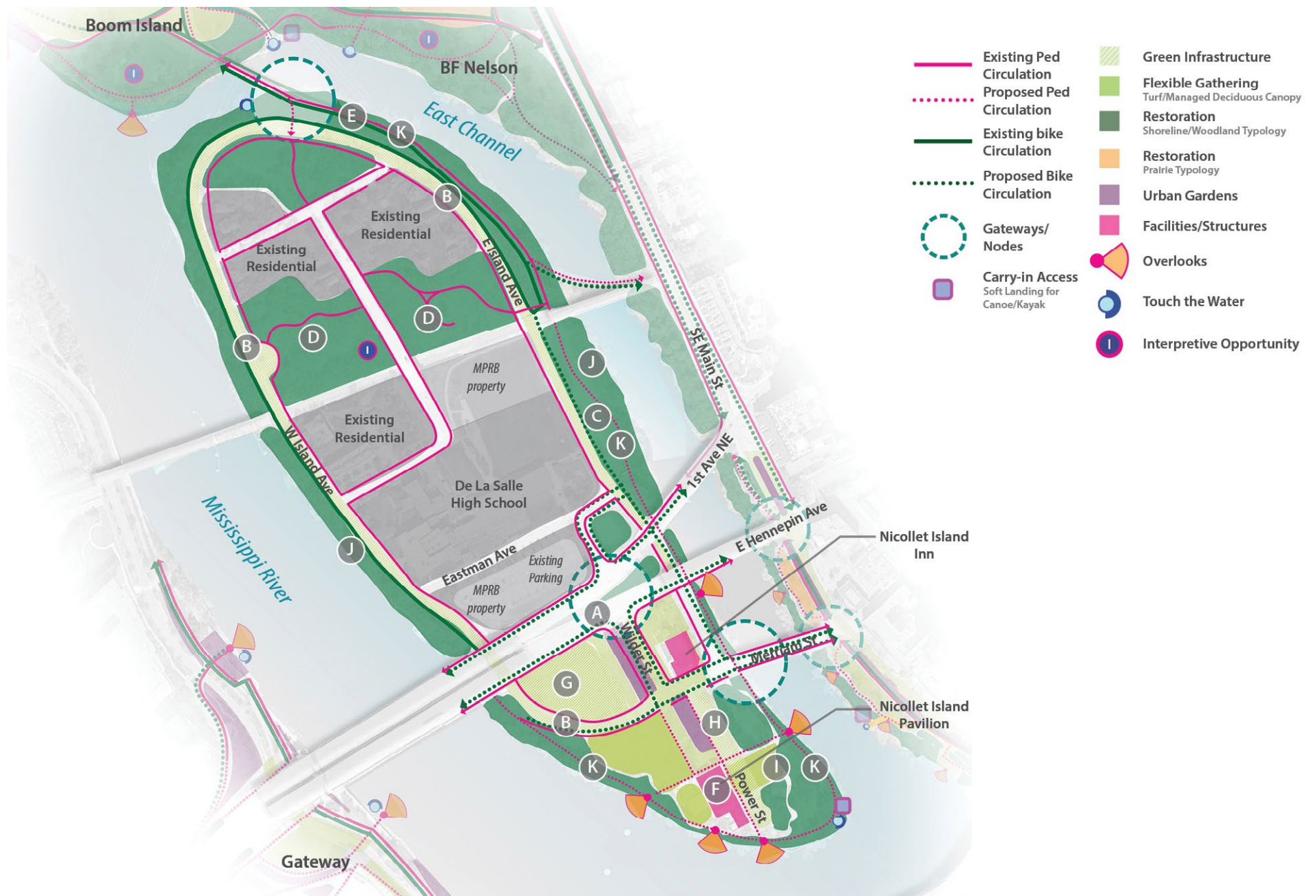
- G. Retrofit existing parking lot to include green infrastructure.
- H. Power Street becomes a "woonerf" to treat stormwater and provide service access to Nicollet Island Pavilion.
- I. Keep amphitheater function and program with low-volume events. Repair and rehabilitate aging infrastructure.
- J. Restore shoreline and remove invasive species around the entire Island.
- K. Ensure an off-street pedestrian trail starts at West Island Ave at the Hennepin Avenue Bridge, going around the south tip of the island, and then along the East Channel to Boom Island. Associated with C, E, and F above.



Woonerf Example



Shoreline Restoration Example





Precedent Images Left to Right- Linear Ice Skating, Concerts in the Park, Unique Pedestrian Bridge Connection

8. Boom Island and B.F. Nelson

Boom Island and B.F. Nelson Park, along with the future park at the Scherer site just north of Plymouth Avenue, will provide the largest continuous swath of park space along this portion of the riverfront. This expanse lends itself as an area for special events, as it functions today. Interpreting and revealing history and incorporating restoration and green infrastructure were key directives for this park area. Providing the key off-street connection between Boom Island and the future park at the Scherer site is seen a top priority to promote connectivity.

Supporting Initiatives (see Figure 43):

- A. Consolidate parking at entry points and incorporate green infrastructure.
- B. Create a dry creek channel that would recall the historic Boom Island channel and provide stormwater treatment.

- C. Create a shared use trail between the Scherer Site and Boom Island underneath the Plymouth Avenue Bridge.
- D. Retain picnic function and cluster picnic areas to better accommodate small or large groups.
- E. Redesign the shoreline's hard edge to remove excess pavement and restore ecological function while still providing visitors the ability to experience and interact with the water.
- F. Retain a multi-purpose lawn area to accommodate large groups/gatherings; manage vegetation to incorporate an overstory deciduous canopy.
- G. Improve wayfinding and enhance the park entry experience at Plymouth Avenue.
- H. Interpret and embrace railroad history at the playground/old roundhouse area and throughout B.F. Nelson Park.

- I. Update and relocate playground closer to parking and picnic amenities. Consider a universal access playground.
- J. Interpret historic canoe ferry route to Bassett Creek.
- K. Promote woodland and prairie restoration at B.F. Nelson.
- L. Incorporate public art within the landscape of the park.



Figure 43 : Boom Island and BF Nelson Recommendations



Ownership, Inholdings and Acquisitions

CHAPTER

8

Regional Park Boundary and Acquisitions

The MPRB owns approximately 100 of the 350 acres of the land within the boundary of the St. Anthony Falls Regional Park (SAFRP). 160 acres within the park boundary is the Mississippi River. Currently, 90 acres within the existing park boundary are considered inholdings (see **Figure 44**). The majority of the inholdings are located on Nicollet Island and around or below St. Anthony Falls.

Nicollet Island is a unique situation in terms of ownership. The MPRB owns the majority of the land on Nicollet Island and currently leases out the land to Nicollet Island Inn on the south portion of the island and many residents who live in historic homes on the north portion of the island. The owners of the 22 historic homes and the Nicollet Island Inn have long-term leases from the Park Board for the land but own the buildings, which they are required to preserve.

Inholdings

Within the SAFRP, inholdings are held by other partnering federal, state or county agencies, educational facilities, railroads, and private individual owners or corporations.

Federal, State, or County Land

St. Anthony Falls upper and lower lock and dams are under the jurisdiction of the Federal government and are operated by the U.S. Army Corps of Engineers (USACE). Some of the old islands that no longer exist, such as Cataract Island, are also still classified as Federal land and show up in the parcel mapping. There is additional land owned by state, county, or municipal agencies, with the majority of that land being underneath bridges or on south Nicollet Island.

Educational Facilities

De La Salle School occupies space on Nicollet Island. The University of Minnesota owns land on Hennepin Island for the St. Anthony Falls Laboratory and has their steam plant operations on the east bank just south of the Stone Arch Bridge. In total, the University of Minnesota owns 10 acres of land within the SARFP boundary.

Railroads

Burlington Northern & Santa Fe Railroad Company own several parcels of land within the Regional Park, including the rail corridor crossing northern Nicollet Island and the rail corridor leading from the University of Minnesota to the Stone Arch Bridge, on the eastern edge of the Regional Park.

Privately-owned properties

Xcel Energy owns 20 acres within the SAFRP boundary on the east bank of the river. CenterPoint Energy (Minnegasco) is located on the west bank of the river and occupies five acres of land. A small, triangular-shaped property located at 600 Main and known as the 'Lupe Property' is also located within the SAFRP boundary.



View of Hennepin Island and the U of M St. Anthony Falls Laboratory



BNSF Railroad Corridor

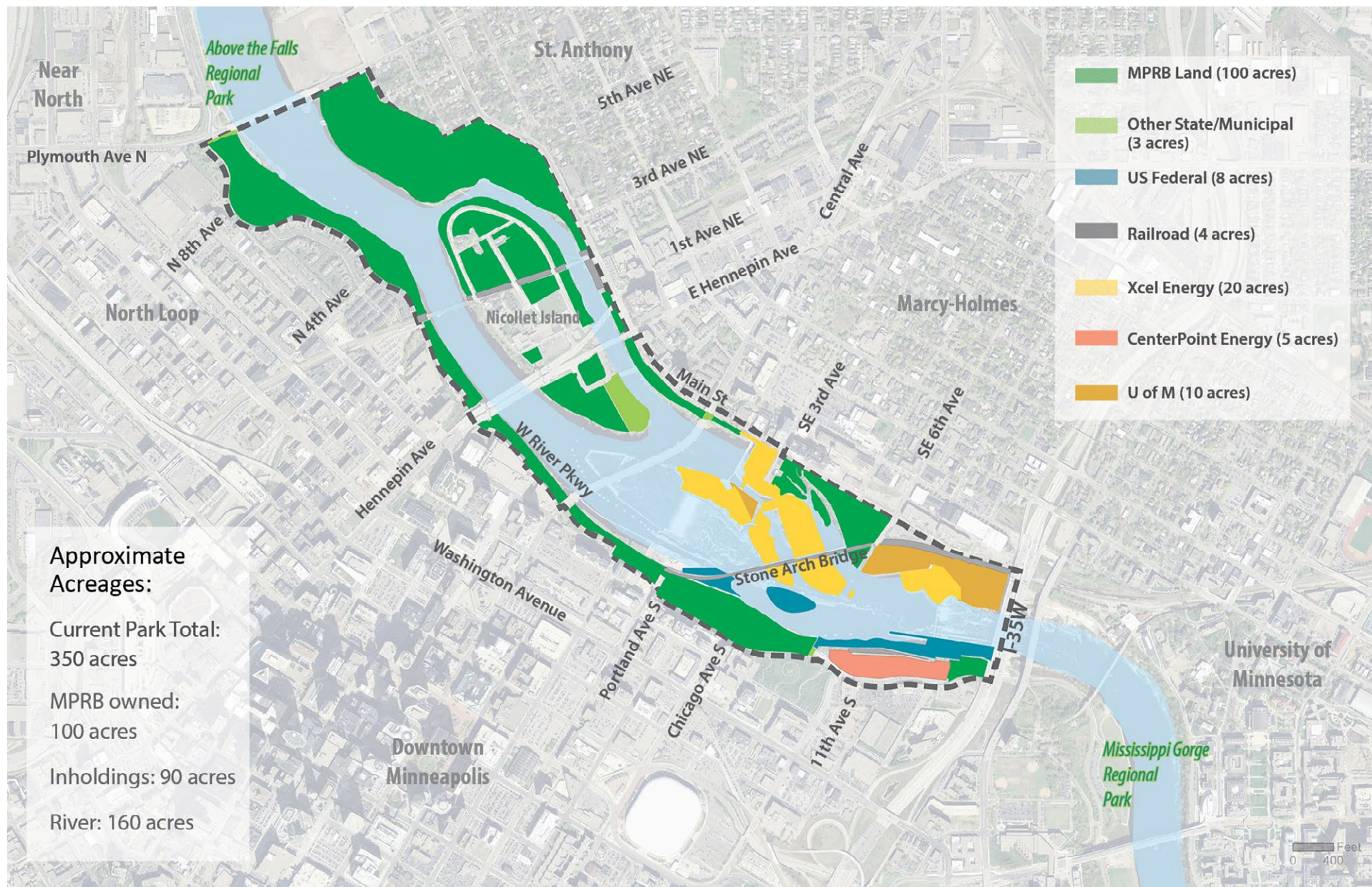


Figure 44 : Existing Regional Park Boundary, MPRB land and Inholdings

Proposed Park Boundary

The regional park boundary should be expanded to support the overarching vision of the SAFRP. Throughout the public engagement process, connecting people to the river and its stories was the most important goal. The addition of the following parcels into the regional park would greatly facilitate that goal of connectivity (see **Figure 45**). These additions to the park boundary also tie directly into the park development recommendations as seen in Chapter 7. They are:

- » A portion of the Star Tribune property adjacent to Bassett Creek Park,
- » A portion of the US Postal Service property that contains the parking ramp adjacent to Hennepin Avenue,
- » A slice of land between 1st Street South and West River Parkway, and
- » The portion of land reaching from the existing boundary at I-35W Bridge east toward Northern Pacific Bridge Number Nine. This area of land was discovered to be a missing link between the SAFRP and the Mississippi River Gorge Regional Park.

Acquisitions

Acquiring available inholdings is a long-term goal and is desirable from the standpoint of increasing connectivity to the riverfront, establishing continuous habitat, and creating a robust trail system. The MPRB will continue its policy of negotiating with willing sellers for acquisition of land within the regional park boundary.

Where it is not possible or feasible to acquire land, the MPRB will work to create partnerships with landown-

ers with the goal of obtaining easements, as necessary, to promote trail connectivity throughout the park and along the riverfront.

Partnerships and Easements

Federal, State and other Municipal lands offer the greatest opportunity for partnerships. With the future closing of the upper lock and dam, there is an opportunity to partner with USACE and NPS on the successful addition of a visitors center. Obtaining an easement from USACE will be necessary for the lower lock trail between Mill Ruins park to the I-35W bridge.

Working with MnDOT and Hennepin County will be essential for any future pedestrian or bicycle amenities on roadway bridges and for better utilizing the space underneath the bridges such as at First Bridge Park or underneath the 3rd Avenue bridge. The marsupial bridge underneath I-35W would need to be facilitated by MnDOT.

The MPRB will continue to build on their existing partnership with Xcel Energy to open up land to the public, like at Water Power Park. Easements or public/private partnerships may be needed for the East Falls effort and obtaining an ADA access route to Hennepin Island.

Easements and coordination with the University of Minnesota and BNSF Railroad will be essential to completing the vision for a trail connection between Main Avenue and the Dinkytown trail that continues to Granary Corridor.

As previously discussed in Chapter 5, because SAFRP is part of the Mississippi National River and Recreation Area (MNRRA) and is also designated as the Mississippi River Critical Area Program (MRCCA), NPS and MnDNR will continue to be key partners. Given the complexity

and significance of this natural corridor, continued coordination with non-profits will also continue to be vital to the success of the SAFRP.

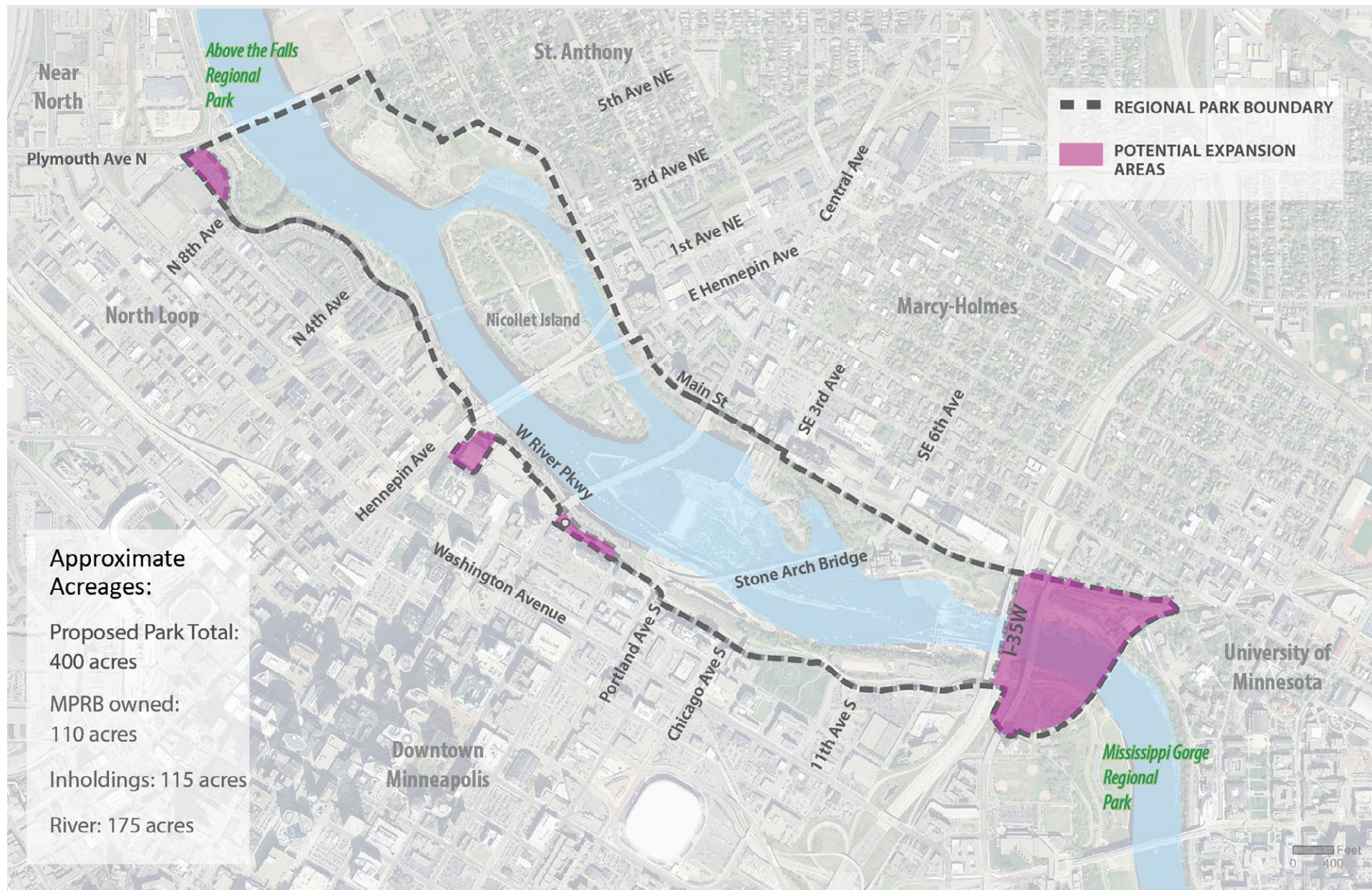


Figure 45 : Proposed Regional Park Boundary



Visitor Services and Accessibility CHAPTER

9

Visitor Services:

The MPRB recommends the guidelines below for visitor services. There is no hard data to support these guidelines so these numbers are based on experience. The recommendations for the SAFRP meet or exceed these goals.

Restrooms (permanent or portable):

- » Every 10 minute walk along the trail system
- » At designated gathering spaces, food concession and playground

Drinking Fountains:

- » Every 20 minute walk along the trail system
- » At designated gathering spaces, food concession and playground

Food:

- » Snacks/refreshments every two miles on both banks
- » Destination food – at least one on each bank

Universal Access:

- » New/rehabilitated facilities and sites to meet current Americans with Disabilities Act (ADA) guidelines/laws
- » One inclusive playground

Wayfinding:

- » Destination/directional signage at primary entry nodes

- » Information kiosk/maps at designated gathering spaces

Accessibility

The Minneapolis Park and Recreation Board is committed to ensuring that park users are connected to the river, to the land, and to each other. To achieve this vision, the MPRB 2007-2020 Comprehensive Plan identified the following three strategies that are specifically related to accessibility and special needs populations:

- » “Build or renew facilities to meet or exceed standards for accessibility.” (p. 25)
- » “Ensure recreation opportunities are available for persons with disabilities.” (p. 18)
- » “Identify and reduce physical and financial barriers to participation in programming.” (p. 18)

In developing new park elements within the SAFRP, care will be taken to design facilities that meet requirements for the ADA, as well as principles for universal accessibility. Some existing facilities do not meet ADA, such as the steps to the riverbank at Father Hennepin Bluffs/Hennepin Park. These will be rehabilitated to meet ADA as resources allow and/or in partnership with adjacent landowners.

Accessibility is not just physical. For example, cultural differences and economic disparities can be barriers to regional park use as well. As discussed in Chapter 4, the SAFRP recommendations also include initiatives based on the Metropolitan Council’s investigation entitled “Regional Park Use Among Select Communities of Color” to address some of these cultural barriers and encourage use.

Most of the SAFRP facilities will not require a fee for public use, consistent with MPRB policy throughout its system. Amenities such as multi-use trails, community gathering spots, and public water access points are generally provided free of charge. Some of the amenities that exist in the SAFRP, such as boat-storage at the Boom Island marina or event fees to reserve gathering spaces, could require minimal user fees. The MPRB offers users the option of purchasing a permit or using meters for parking, and reduced fee arrangements are available for recreational programming.



Public Service Needs CHAPTER

10

Much of the Saint Anthony Falls Regional Park (SAFRP) can be developed without extensive investment in non-recreational public infrastructure, services, and utilities. Within its context of a fully-developed urban core, there are sufficient existing roads, electricity, gas, water, and sewer services to implement the vision.

Recreational Public Infrastructure

The key recreational infrastructure projects necessary to complete the SAFRP vision include road realignments, pedestrian bridge connections, and trail extensions to complete key gaps within the system.

Roads

- » Realignment of West River Parkway at Bassett Creek Park
- » Realignment of West River Parkway at Upper Mill Ruins Park
- » Reconfiguration of Main Street between E Hennepin Avenue and 1st Avenue NE

Trails

- » Lower trail connection from I-35W bridge to lower Mill Ruins Park
- » Trail extension between Hennepin and 1st on Main Street
- » Continuation of trail system along the east bank to East River Road to connect to the University of Minnesota and Granary Corridor
- » Trail connection from Boom Island to new park at Scherer Site

» Accessible trail connections from Father Hennepin Bluffs to Hennepin Island

» Lower pedestrian trail connections from Hennepin Island to Water Power Park and the University of Minnesota portage area

Pedestrian bridges

- » Marsupial bridge under I-35W
- » Pedestrian bridge rehabilitation or additions, as needed, to complete lower pedestrian trails at Hennepin Island
- » Mezzanine level balcony along USPS building

Historical infrastructure

- » Tunnel connection at Mill Ruins Park
- » Tailrace rehabilitation and potential tunnel connections at Hennepin Island
- » Re-establishment of water flow over East Falls

Green Infrastructure

The incorporation of green infrastructure is one of the formative moves for this master plan. Stormwater improvements are largely anticipated to occur as part of new park development projects. The MPRB will implement these projects in partnership with other organizations, such as the Mississippi Watershed Management Organization (MWMO).

Recognizing that stormwater management technology is constantly evolving, the plan does not identify specific strategies, but instead provides a set of principles

to guide the development of stormwater management infrastructure. These principles include:

- » Continue to pursue a range of stormwater best management practices (BMPs) in new development and parks, including rain gardens, impervious surface reduction, pervious pavement, underground treatment structures, and green roofs.
- » Support retrofits of existing sites with stormwater BMPs, including green roofs, reduced impervious surface cover, and other strategies (see the MWMO's 2012 Urban BMP Retrofit Study for cost/benefit analysis).
- » Consider partnerships and coordination between private development and parks to maximize the efficiency of stormwater systems, explore shared solutions, and increase the greening of the public realm.
- » Coordinate the design of stormwater management facilities and parks to enhance public realm connectivity and preserve scenic views.

Continuing to work with partnering agencies and willing property owners for key land acquisitions and/or easements will be essentially to completing the long-term vision for SAFRP.



Operations and Stewardship Plan

CHAPTER

11

The Minneapolis Park and Recreation Board (MPRB) is the steward of a nationally-acclaimed park system. Since 1883 this independently elected, semi-autonomous body has provided high-quality parks and programs relevant to residents of Minneapolis, the region and beyond. Park programs, services and facilities attract millions of regional and neighborhood park visitors each year.

MPRB Policy

The Minneapolis park system is essential to the quality of life and identity of the City. The system's founders understood the role that parks play in a healthy, livable, and balanced city. Through its policies and practices, the Park Board has remained committed to maintaining this vision, and will continue to provide high-quality recreational facilities and services while protecting and restoring natural and cultural resources within its system.

MPRB Comprehensive Plan

The Board's 2007-2020 Comprehensive Plan affirms this commitment to stewardship:

» Land, trees, and water – the foundation of the park system – require long-term investment and care. Parks are protected to benefit the entire city; therefore, all residents have a stake in the future of these resources and bear responsibility for their stewardship. The Minneapolis Park and Recreation Board is committed to providing leadership in natural resource management, connecting people to their natural environment, and fostering a sense of stewardship. (p. 3)

The Comprehensive Plan further articulates policies, goals and strategies for management of the park system's natural and cultural resources, and for the development of partnerships that will further this mission. The Comprehensive Plan identifies stewardship strategies that will guide implementation of the SAFRP Plan:

- » Communicate the importance of preserving and properly managing natural resources for health, water and air quality, and general environmental benefit.
- » Be a resource for residents and visitors seeking information about the regional park's natural resources and the urban forest.
- » Establish and strengthen public and private partnerships that enhance the MPRB's management of natural areas, waters, and urban forest; and sponsor programs and events that promote exploring, protecting, and enhancing these resources.
- » Engage partners and volunteers in the restoration, maintenance, and preservation of the park system's natural and cultural resources.
- » Strengthen existing and create new opportunities for research, cooperative exchange of information, and teaching with universities, state and federal agencies, research institutes, and recognized experts.

Ordinances and Regulations

The MPRB code of Ordinances addresses use, operations and maintenance of MPRB parkland. The MPRB Ordinances are adopted as part of the Code of Ordinances for the City of Minneapolis. For example, under Chapter 12, "Environmental Protection", ordinance PB12-1 governs shoreland and floodplain preservation:

This ordinance is adopted to: enhance and preserve the environmental qualities of surface waters and shoreland areas under the jurisdiction of the MPRB; provide for the reasonable use of such waters and shoreland areas; comply with the requirements of state law regarding the management of shoreland areas; and protect the public health, safety and welfare.

(Pk. Bd. Ord. No. 2001-102, § 1, 9-19-01)

Policies of the following additional organizations will influence the implementation or management of this regional park plan:

- » MPCA – regulates and administers funding programs for remediation of contaminated land, regulates stormwater management policies through the Clean Water Act;
- » MWMO – facilitates the long-term management of its water and associated land resources through the development and implementation of projects, programs, and policies that respect ecosystem principles and reflect changing community values. The MPRB is a represented on the MWMO Board of Directors;
- » MN DNR – regulates public waters, shoreline vegetation, aquatic vegetation, beaches and public water access/boat launch management and construction;

» City of Minneapolis – governs land-use guidance and zoning; regulates and permits buildings and site improvements involving grading/drainage and erosion control, tree preservation, and stormwater management.

Practices

The MPRB is responsible for providing daily and long-term maintenance and operations on park land within the SAFRP. Most typical park maintenance activities are the responsibility of MPRB's Environmental Stewardship division, which is charged in the MPRB organizational plan with "caring for the physical system" in all its aspects (mowing, park patrol, debris removal, lighting, restroom maintenance, cleaning, etc.). Departments include Equipment and Fleet Management, Forestry, Park Maintenance, Natural and Water Resource Management, Park Police, and Volunteer Coordination.

Solid waste such as litter or garbage is collected by MPRB staff from parks and from waste containers on a scheduled basis throughout the regional park. MPRB's outdoor recycling program is a co-mingled program where users can recycle plastic, glass, and aluminum in a single blue recycling container accompanied by "Recycle Here" signs. MPRB delivers waste and recyclable materials to the appropriate City and County facilities.

Partnerships

Many partnerships strengthen the MPRB's role in the SAFRP. The MWMO continues to provide significant funding and technical expertise for improving stormwater management, expanding habitat, and restoring shoreline. The National Park Service (NPS) conducts

interpretive programs and, with Wilderness Inquiry, leads paddling trips that help school children and other groups to experience the river directly. A partnership with NPS and USACE with the recent closure of the lock and dam is seen as a key opportunity. The Friends of the Mississippi River leads volunteer clean-up events in ecologically-sensitive areas. These are just a few examples.

Maintenance of parkway roadways and lighting is a major budget item for the MPRB. In 1999 the Park Board and the City of Minneapolis established a joint services agreement whereby the City of Minneapolis Department of Public Works (DPW) forces will maintain and improve parkway roadways and parkway lighting. All other functions of parkway maintenance and operations within the SAFRP fall under the maintenance responsibility of the MPRB. As in its other regional parks, the Park Board will inspect bicycle and pedestrian trails annually and will complete repairs such as bituminous overlays, crack-sealing, etc. Trail signage, sweeping, or other regular maintenance will be provided by the Park Board.

Operations in Park Sub-areas

Operation and maintenance (O&M) expenditures throughout the SAFRP will be funded by the MPRB's annual operations and maintenance budget with supplementary funding from the State appropriations passed through the Metropolitan Council to regional park implementing agencies for operations. Revenue generated by parking fees, special events, or programs are normally placed in the MPRB's general revenue budget and typically do not fund O&M in its regional parks. Certain projects that include habitat restoration efforts or significant water quality improvements, could qualify for additional State or Federal funding programs, such as the Lessard-Sams Outdoor Heritage Council.

The SAFRP Plan is intended to guide park development and operations not only for existing park lands but also for potential future park land, much of which has yet to be acquired or designed. Specific operations in future park sub-areas will depend on individual park program and development. This is a long-term prospect, and therefore it is difficult to quantify operations costs for much of the SAFRP, with the exceptions below.

Existing Parks

The MPRB will continue to maintain and operate existing parks in the SAFRP as it has in the past. Capital replacement of site improvements and equipment will be scheduled as needed and as funding allows.

Trail and Road Maintenance

Maintenance of future trails will include mowing, trash removal, sweeping, plowing, and other routine operations. Bituminous surfacing of parkway roadway and trails is anticipated to have a life cycle of 20 – 25 years, assuming regular sealcoating. In its Capital Improvement Plan, the Park Board will provide for rehabilitation of trail and roadway surfaces at the end of their life cycles. Maintenance costs for the parkway and trails will be determined on an annual basis as the network expands within the regional park. Currently, through an agreement with the MPRB, the City of Minneapolis Department of Public Works maintains the parkway roadways and all parkway lighting, including capital replacement.

Habitat and Natural Areas

The park development plan includes many areas of restored and constructed habitat which will require specialized maintenance. As in other MPRB regional parks, routine maintenance will be performed by MPRB staff, while contractors and agency partners will perform the majority of the unique ecological services needed in habitat areas. Based on recent contracts, typical costs for maintenance of habitat areas similar to those proposed in this plan approach \$2,000 per acre per year.

Restored river shoreline requires very little regular maintenance following proper establishment. Seasonally, MPRB staff removes litter and debris, and mows to control invasive species as needed. This practice will continue as shoreline restoration expands along both riverbanks within the regional park.

Staffing

Other MPRB staffing such as maintenance and operations, and Park Police must also grow in response to new park development. This does not include Park Police needs for special events, which are usually self-funding through permit fees.



Public Awareness CHAPTER

12

As with other parks and facilities throughout its system, the MPRB will publicize and promote the SAFRP development and programming through a variety of established channels. These channels include the MPRB website and promotional publications as well as community newspapers and other media. Grand openings, press releases, and integration of parks with school and recreational programs will expand awareness. As required by MPRB policy, trails and destinations within the SAFRP will be identified by signs. Existing MPRB system maps will be updated as progress is made in extending trails within SAFRP.

Partner agencies and organizations continue to be an important part of promoting MPRB parks. The National Park Service, for example, conducts programs and events throughout the river corridor and on the water, and will be a critical partner in publicizing the SAFRP and its valuable resources.



Implementation & Costs

CHAPTER

13

Implementation

This master plan intended to be a long term, 20 year-vision for implementing improvements at St. Anthony Falls Regional Park. Significant efforts will be needed in subsequent years to identify new funding sources and donors to achieve master plan goals and initiatives. Through strategic partnering with Federal, State, local and private funding sources, many of the initiatives identified in this master plan can be realized over time to make the downtown central riverfront a truly unique regional park destination.

Estimated Development Costs

The estimated development costs for implementing master plan improvements is \$53.2 million based on 2014 cost projections. Additional refinements to this estimate will be needed to confirm many unknown costs associated with preserving and restoring historical ruins and artifacts present throughout the regional park boundary. The preliminary cost estimate is located on the following three pages.

Phasing Plan

Initial project priorities for the St. Anthony Falls Regional Park will focus on development of the Water Works site which is being targeted as the gateway entry and welcome center for the regional park. Subsequent initiatives will focus on linking the Water Works site to improvements across the river via the stone arch bridge to Father Hennepin Bluffs Park and Hennepin Island which will be the east side orientation and gateway center for the regional park. Additional master plan improvements will be prioritized to respond to other initiatives occurring within or adjacent to the park boundary which can be leveraged with other funding sources.

St. Anthony Falls Regional Park Master Plan: Preliminary Cost Estimate - Focus Area Improvements

Water Works/Mill Ruins Park	\$23,800,000
West River Parkway Realignment	\$1,700,000
Site Improvements - Parkway to 1st Street South	\$6,200,000
Park Pavilion and associated site improvements	\$6,600,000
Site Improvements - Parkway to Rivers Edge	\$9,300,000
Father Hennepin Bluffs/Hennepin Island	\$3,850,000
Realign trail circulation and and regrade open lawn area at Father Hennepin Bluffs	\$225,000
New bandshell/restroom building	\$650,000
Landscape bioswale filtration/Infiltration areas	\$100,000
Convert 6th Ave into programmable street and provide designated bicycle and pedestrian circulation	\$150,000
Restoration of East Falls	\$1,500,000
New ramp/stair access connection to east side of lower Hennepin Island	\$150,000
New pedestrian trail connection between Water Power Park and U of M portage area (includes bridge channel crossing)	\$625,000
Separate bike and ped circulation between Main Street and adjacent bluff edge	\$300,000
Restore natural resoure environment along bluff embankment and shoreline	\$150,000
Main Street Portage (6th Avenue to East River Parkway)	\$1,700,000
Extend bike and pedestrian trail system from 6th Avenue East to East River Road	\$800,000
New public water access below 10th Avenue bridge and riverfront trail circulation from 6th Avenue NE to Bridge #9	\$900,000
Historic Main Street (East Hennepin Avenue to 6th Avenue SE)	\$1,275,000
Modify street edge and adjacent pedestrian walkways to accommodate surface run off stormwater treatment areas	\$550,000
Lighting and bridge understructure aesthetic improvements for performance venue under 3rd Avenue bridge	\$175,000
Pedestrian trail and stair access to shoreline overlooks from street edge	\$150,000
Define separated bike and pedestrian trails along Main Street corridor	\$400,000
The Seam (1st Avenue to East Hennepin Avenue)	\$125,000
Reconfigure roadway between Hennepin and 1st Avenue NE to accommodate off street bike and pedestrian trail connections	\$125,000
Main to Marshall (Plymouth Avenue to 1st Ave NE)	\$330,000
Provide Grand Rounds parkway lighting and wayfindng signage	\$280,000
Establish designated bike trail connection between BF Nelson and 5th Avenue NE bikeway	\$50,000

St. Anthony Falls Regional Park Master Plan: Preliminary Cost Estimate - Focus Area Improvements

Nicollet Island		\$2,630,000
Establish shared use “green street” bike and vehicle roadway along Island Avenue and Merriam Street		\$500,000
Remove “not a lot” parking area along Island Avenue and restore to natural resource area		\$30,000
Improve trail connection from Nicollet Island to Boom Island		\$150,000
Convert Nicollet Island Pavilion to public use facility for three season or year round public use		\$800,000
Integrate green storm water treatment infrastructure into existing surface parking lot west of Wilder Street		\$150,000
Convert Power Street into decorative paving “Woonerf” to serve bike, ped, vehicle and special event use		\$450,000
Renovate existing amphitheater		\$250,000
Restore vegetated shoreline edge along island perimeter		\$150,000
Remove invasives and restore woodland habitat on north Nicollet Island		\$150,000
Boom Island/BF Nelson		\$2,550,000
Reconfigure parking areas in closer proximity to Plymouth Avenue		\$400,000
Create dry creek channel bed through Boom Island and utilize as storm water treatment system		\$450,000
Transition bike/ped trail connection from Boom Island to Scherer Site		\$50,000
Relocate picnic shelters in open space clusters to allow for accommodating large or small group gatherings		\$350,000
Remove hard shoreline edge along river and establish vegetated edge and shoreline overlooks		\$250,000
Overstory tree plantings on great lawn area		\$100,000
Increase visibility of park entrance from Plymouth Avenue		\$50,000
Universal access playground facility		\$500,000
Remove invasives and restore woodland, prairie, and shoreline edge at BF Nelson		\$150,000
Historical and cultural interpretive public art elements at BF Nelson Park		\$250,000

St. Anthony Falls Regional Park Master Plan: Preliminary Cost Estimate - Focus Area Improvements

Bassett Creek	\$1,975,000
Remove and realign West River Parkway to Plymouth Avenue	\$775,000
Pedestrian trail circulation, open lawn areas, overlooks, and improved trail connection to canoe/kayak landing	\$250,000
Picnic shelter	\$125,000
Restroom building	\$300,000
Parking lot reconfiguration	\$125,000
Natural play area	\$250,000
Woodland and river shoreline restoration	\$150,000
Gateway District	\$4,975,000
Stair systems, walkways, terraced gardens and water features	\$3,000,000
Flexible use plaza for informal events and gathering	\$500,000
Flagpole plaza restoration	\$100,000
Elevated balcony connections to Post Office patio terrace and Water Works site	\$1,125,000
Lighting and amenity enhancements as part of First Bridge Park	\$150,000
Wayfinding and expanded urban gardens along edge of federal reserve bank property	\$100,000
Lower Mill Ruins Park	\$1,425,000
Pedestrian tunnel restoration/connection between lower Mill Ruins Park and Mill City Museum	\$1,250,000
Trail/stair access connections between West River Parkway and lower Mill Ruins Park	\$175,000
Gorge Entry	\$8,625,000
Construct marsupial pedestrian bridge connection under I-35W bridge	\$8,000,000
Lower lock trail connection and overlooks from Mill Ruins Park to I-35W bridge	\$475,000
Restore woodland bluff and shoreline edge from Bridge #9 to Bluff Street Park	\$150,000
Estimated Subtotal	\$53,260,000
25% Contingency, Design, and Administration	\$13,315,000
¹Total Estimated Construction Costs	\$66,575,000

1. Add 5% inflation cost for construction every year beyond 2014.

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