Appendix A

Mississippi River Corridor Critical Area Plan

Table of Contents

List of Figures

Chapter 1 - Introduction

CORRIDOR LOCATION AND HISTORY

The Mississippi River Corridor Critical Area (MRCCA) extends 72-miles through the Twin Cities Metropolitan Area, from the townships of Dayton and Ramsey in Hennepin and Anoka counties downstream to just south of Hastings in Dakota County. Governor Wendell Anderson designated the MRCCA in 1976 by Executive Order 130. It was renewed by Governor Al Quie in 1979 by Executive Order 79-19. See Figure 1-1 for the MRCCA boundaries within the City of Minneapolis.

FIGURE 1-1: MRCCA BOUNDARY IN MINNEAPOLIS.

The MRCCA contains many significant natural and cultural resources, including: scenic views, water, navigational capabilities, geology and soils, vegetation, minerals, flora and fauna, cultural and historic resources and land and water based recreational resources. The MRCCA is home to a full range of residential neighborhoods and parks, as well as river-related commerce, industry, and transportation. Though the river corridor has been extensively developed, many intact and remnant natural areas remain, including bluffs, islands, floodplains, wetlands, riparian zones, and native aquatic and terrestrial flora and fauna.

In 1988, Congress (Public Law 100-696) established the Mississippi National River and Recreation Area (MNRRA) as a unit of the National Park Service to: (1) protect, preserve, and enhance the significant values of the Mississippi River corridor through the Twin Cities, (2) encourage coordination of federal, state, and local programs, and (3) provide a management framework to assist the State of Minnesota and units of local government in the development and implementation of integrated resource management programs and to ensure orderly public and private development in the area. The MNRRA shares the same boundaries as the MRCCA. In 1995, a Final Comprehensive Management Plan for the MNRRA was approved by the Secretary of the Interior. This plan lays out a policy-level framework for management of the river corridor. It also determined that the National Park Service would not acquire significant land holdings or establish land use regulations for the MNRRA, but would instead rely on state and local administration of Executive Order 79-19 to protect the resources.

The MRCCA is governed by special land planning requirements and land development regulations. These regulations, which are implemented through local MRCCA plans and ordinances, protect and preserve the natural, scenic, recreational, and transportation resources of this section of the Mississippi River. In response to residents and interest groups raising concerns around the adequacy of the MRCCA regulations, the Legislature directed the Minnesota Department of Natural Resources (DNR)

to establish rules for the MRCCA in 2009 and 2013. Minnesota Rules, Chapter 6106, became effective on January 4, 2017, and replace Executive Order 79-19, which previously governed land use in the MRCCA. They provide the land planning and regulatory framework that protects the MRCCA's resources.

PUBLIC INPUT PROCESS

Public input was gathered through the community engagement for the city's comprehensive plan update (Minneapolis 2040) during 2016 and 2017. This engagement covered many topics relevant to the MRCCA plan including land use, open space, and environmental issues. In addition, many policy recommendations are from adopted small area plans, which all had significant community engagement. Finally, the document was included with the comprehensive plan update document during the public review and comment period in March of 2018.

IMPLEMENTING THE 2006 MRCCA PLAN

Several major projects and activities have occurred in the MRCCA that implemented the goals and policies of the 2006 MRCCA plan including, but not limited to:

- Between 2006 and the present, several developments were constructed in the MRCCA, all of which were reviewed for compliance with the MRCCA plan.
- Between 2006 and the present, the Minneapolis Park and Recreation Board (MPRB) acquired several parcels, implemented park and trail improvements, and undertook various planning processes. These include, but are not limited to, park and trail improvements on the west bank from Plymouth Avenue North to 22nd Avenue North, pollution remediation at Gluek Park, development of Water Power Park, construction of Sheridan Memorial Park, acquisition and preliminary construction of Scherer Park and Hall's Island, acquisition of several parcels on the upper river, and planning for the future Water Works Park.
- In 2008, the I-35W Bridge was replaced after the previous bridge collapsed.
- In 2009, the Xcel Riverside Plant was converted from coal to natural gas reducing emissions in the area and removing the storage of coal at the site.
- In 2012, the Lowry Avenue Bridge, which includes new overlooks and adjacent improvements, was completed.
- In 2012, the Mississippi River Watershed Management Organization offices, which includes a stormwater park and learning center, opened on the banks of the river.
- In 2012, the St. Anthony Falls Historic District Guidelines were updated to protect the integrity and character of the district.
- In 2014, the Water Resources Reform and Development Act was passed closing the Upper St. Anthony Falls Lock to navigation in June of 2015. Because of this closure there is no more commercial barge traffic on the Mississippi in Minneapolis. This allows for the Upper Harbor Terminal to convert from heavy industry to mixed-use and park land (planning process underway).
- In 2016, the C.A. Smith Lumber District was established on the west bank in the Camden Neighborhood to protect historic properties related to the lumber industry.

PLAN PURPOSE AND ORGANIZATION

The purpose of this document is implement Minnesota Rules Chapter 6106 (See Appendix A) and to ensure that the City's land use and regulatory framework protects the MRCCA's resources. It is guided by existing plans and ordinances, but it is not intended to be an exhaustive study of all land use and park planning documents, regulations (such as erosion control or stormwater management ordinances), historic district guidelines, or the various river-related projects of all the public agencies working on the river. Activities in the Critical Area should consult relevant adopted plans and ordinances for additional information and requirements. In the case of overlap of plans/policies the most protective of the Critical Area will prevail.

This document generally does not address the holdings of the University of Minnesota as the University will prepare its own Critical Area Plan. However, the Minneapolis Park and Recreation Board (MPRB) is subject to all City of Minneapolis land use policies and regulations and this

plan. As a large land owner in the MRCCA, the MPRB will play a significant role in implementing the goals of this plan.

Local governments must submit their updated MRCCA plans to the Metropolitan Council and the DNR at the same time that the 2040 Comprehensive Plan update is due to the Metropolitan Council. Once a local MRCCA plan update has been approved, the DNR will notify each local government to update their MRCCA zoning ordinance. Once notified, each local government will have 12 months to update their zoning ordinances. The DNR anticipates that it will notify all affected local governments to update their zoning ordinances between 2019 and 2021 and at that time the City will update its zoning ordinance related to the MRCCA.

GEOGRAPHIC AREAS

This document organizes the geographic area of the corridor into three general areas: Upper River, Central River, and Lower Gorge. These are not exact geographic or regulatory boundaries, but are designed to make the information presented easier to understand. Where there are maps, they reflect these generalized geographic areas.

Upper River

The upper river area includes the corridor from the north City limits south to the area around the Plymouth Avenue Bridge. At the north end of the corridor, on the west bank, is the North Mississippi Regional Park. In Minneapolis, it extends from 53rd Avenue North (the city limits) south to the Soo Line Railroad Bridge (just south of the Camden Bridge). In this area, the river and shores are broad and flat with second-generation vegetation growing wildly along the banks. There are also mature woods. Many birds, small mammals, and deer inhabit this woodland. The MPRB has restored the river bank along the west bank from north of Broadway south to Plymouth Avenue and other areas in recent years.

Shingle Creek enters the river near the Camden Bridge. The Shingle Creek waterfall, while just outside the boundary of the MRCCA, is located just west of Lyndale Avenue North in Webber Park. This amenity was created during the construction of I-94 through the area. The project also created paths beside the creek under the freeway and enabled the uninterrupted connection of pathways along Shingle Creek to the park, river trails, and beyond.[1]

On the east side of the river the northern city limits start at 37th Avenue NE (roughly at the same location as 44th Avenue North in North Minneapolis). The area north of the Minneapolis City limits and opposite North Mississippi River Regional Park is the location of the Minneapolis Public Works water treatment and distribution facility in the City of Fridley.

From the Soo Line Railroad Bridge south to the Plymouth Avenue Bridge, only a few vestiges of the original natural features remain. Even the naturally low slopes have been re-contoured in many locations to accommodate shoreline development; only minor bluffs exist above the falls. Development is largely industrial and commercial, built near the water in many cases with fill and retaining walls. Although vegetation is minimal, it helps screen many uses unrelated to the river. River edge parks, where present, provide naturalistic relief along a part of the river. Along the east bank, there are stands of trees along St. Anthony Parkway and in the Marshall Terrace, Edgewater, and Gluek Parks. A new park has been established at the former Scherer Lumber site just north of and adjacent to Plymouth Avenue on the east side of the river. Remnant trees are present along the shoreline in many other locations where urban development has cleared the rest of the site.

Several small islands are untouched except for the flooding and scouring action of the river. A heron rookery once occupied an island just downstream from the visitor center at the North Mississippi River Regional Park, but it was devastated by a tornado that also hit north Minneapolis in May of 2011. The surviving herons moved downstream to other islands near Marshall Terrace Park while others

1 https://www.minneapolisparks.org/parks__destinations/parks__lakes/north_mississippi_regional_park/#group_3_17931

moved upstream to an existing rookery at Coon Rapids Dam Regional Park. The MPRB is currently recreating Hall's Island adjacent to the former Scherer Lumber site. This will restore the channel between the island and the shoreline that was filled in 1966. Restoration of the channel and island is currently underway and is expected to be completed in the summer of 2018.

Central River

The central river area is generally between the Plymouth and Franklin Avenue Bridges. From Plymouth Avenue to the 10th Avenue Bridge, linear parks have created an attractive wooded stream valley. The river edge includes natural woods, manicured parks, hard plazas, rocky bluffs, and man-made structures. St. Anthony Falls is the dominant natural and visual feature here (other than the river itself) and is a major tourist and resident attraction. The steep bluff line begins to rise below the falls. Bassett Creek enters the river just downstream of the Plymouth Avenue Bridge. Park improvements at Boom Island and the mouth of Bassett Creek have enhanced the natural setting near Plymouth Avenue.

The central river area is a visually interesting and varied segment of the corridor. This area hums with activity and dramatic views are available in every direction. The former mills, the arching bridges, the river cascading over dam aprons, the transmission line towers, the high-rise housing, the smoke stacks of the power plants, and the locks all contribute to the dramatic visual setting. The urban plazas, overlooks, promenades, and bridges provide many vantage points. Downtown and the Main Street development provide an active and varied backdrop. In contrast, areas like the Father Hennepin Bluffs and Nicollet Island's east channel provide secluded, wildly vegetated retreats. The central river area is also home to the University of Minnesota Campus.

St. Anthony Falls is the birthplace of Minneapolis and is of primary importance to the City's history and its future. St. Anthony Falls has cultural and spiritual significance to the Dakota. As the only natural waterfall on the Mississippi River (now altered), St. Anthony Falls provided the power source that nurtured the growth of the City of Minneapolis. St. Anthony Falls is now the core of the City's central riverfront redevelopment efforts to enable people to live nearby and to enjoy the vitality of the urban setting and its natural resources. St. Anthony Falls is the center of a 150-acre regional park and is a contributing resource in the state-designated St. Anthony Falls Heritage District. It lies between a national engineering landmark (James J. Hill's Stone Arch Bridge) and the site of the first public bridge across the Mississippi River. St. Anthony Falls was a major tourist attraction in the 1850s, and both state and local governments have invested heavily in making the area a major attraction again. It is also adjacent to the last lock constructed on the Mississippi at the former head of navigation for the river. St. Anthony Falls has cultural, historic, economic, scenic, and recreational significance to the nation, the state, the region, and the City, and should be treated with the utmost respect. Accordingly, the City will continue to participate on the St. Anthony Falls Heritage Board as established by the State legislature in 1988.

Lower Gorge

The Mississippi River Gorge is the only gorge on the entire length of the Mississippi River and was created by the retreating St. Anthony Falls over a period of 10,000 years. It runs approximately eight miles from Saint Anthony Falls in downtown Minneapolis to the Minnesota River confluence in Mendota, Minnesota (the lower gorge geographic area for the maps in this plan is generally between the Franklin Avenue Bridge and the southern city limits). Historically this area had an eight mile stretch of rapids, but for approximately the last century it has been impounded by locks and two dams that also produce hydropower.

The lower gorge is the least-changed section of the river, with limestone bluffs, natural springs, falls, oak savanna, and hardwood forests. Its steep, heavily wooded bluffs retain much of their original character. In fact, from the water it is difficult in some places to recognize that there is a major city just beyond view. It is an area of exceptional scenic beauty that is unique in the heart of the city. It has

high-quality native vegetation and restored areas. It is an area of significant wildlife habitat and is a major migratory corridor for birds.

The West River Parkway runs along the river down to Minnehaha Park, and from there, a bicycle and pedestrian path extends along and below the bluff to Historic Fort Snelling State Park. Bohemian Flats, East River Flats, and Riverside Park are areas that provide easy access to the gorge. In other areas, access to the water is more difficult, but people have worn paths down the slopes. The area offers opportunities for hiking, birdwatching, canoeing and rowing, and photography. In the autumn the area can provide spectacular viewing as trees change colors.

In the Lower Gorge the prominent visual feature should be trees and bluffs. The district should continue to be managed to preserve and enhance those natural scenic qualities. Because a significant portion of the gorge is located in St. Paul, continued coordination between the cities and other relevant agencies is important for the management of the gorge.

Chapter 2 - Districts

CORRIDOR LOCATION AND HISTORY

Executive Order 79-19 originally established four land use districts based on generalized land use patterns and natural resources within the corridor (Rural Open Space, Urban Open Space, Urban Developed, and Urban Diversified). Over time, these four districts became less consistent with actual development within their boundaries. Therefore, the Legislature directed the DNR to establish new districts within the MRCCA that considered the protection of public recreational and interpretive resources; drinking water supply functions of the Mississippi River; the protection of resources identified in the MNRRA plan and local comprehensive plans; management of the corridor consistent with natural characteristics, existing development and the potential for new development; and protection of scenic, geologic and ecological resources.[1]

After receiving input from work groups, local governments, and other interests, six districts were created through the rulemaking process. The City of Minneapolis participated in the rulemaking process to facilitate the rules conformance with adopted City land use policy as well as advancing the goals of the MRCCA. The MRCCA rules established the following districts:

- Rural and Open Space (CA-ROS)
- River Neighborhood (CA-RN)
- River Towns and Crossings (CA-RTC)
- Separated from River (CA-SR)
- Urban Mixed (CA-UM)
- Urban Core (CA-UC)

The intent and level of protection for each of the six districts is based on the natural resource values within the district, with the greatest levels of protection in those areas that abut the river and still retain natural features. Greater flexibility is provided in those districts that contain areas with more limited resource values, areas that are separated from the river, and fully developed areas of the two major cities – downtown Minneapolis and downtown St. Paul. This array of districts is intended to more accurately reflects the different land uses existing within the MRCCA, current development patterns, and proposed future development.[2]

All six districts are geographically present in Minneapolis. The following section provides a description of each district and its purpose as provided by State of Minnesota Administrative Rules MR 6106.001. See Figures 2-1 through 2-3 for maps of actual district locations and boundaries.

Rural and Open Space District (CA-ROS)

Description: The rural and open space district (CA-ROS) is characterized by rural and low-density development patterns and land uses, and includes land that is riparian or visible from the river, as well as large, undeveloped tracts of high ecological and scenic value, floodplain, and undeveloped islands. Many primary conservation areas exist in the district.

Purpose: The CA-ROS district must be managed to sustain and restore the rural and natural character of the corridor and to protect and enhance habitat, parks and open space, public river corridor views, and scenic, natural, and historic areas.

River Neighborhood District (CA-RN)

Description: The river neighborhood district (CA-RN) is characterized by primarily residential neighborhoods that are riparian or readily visible from the river or that abut riparian parkland. The district includes parks and open space, limited commercial development, marinas, and related land uses.

Purpose: The CA-RN district must be managed to maintain the character of the river corridor within the context of

1 Minn. Stat. § 116G.15, subd. 3 (2015).

2 State of Minnesota Department of Natural Resources Division of Ecological and Water Resources; Statement of Need and Reasonableness (SONAR); December 1, 2015; p 42-43.

existing residential and related neighborhood development, and to protect and enhance habitat, parks and open space, public river corridor views, and scenic, natural, and historic areas. Minimizing erosion and the flow of untreated storm water into the river and enhancing habitat and shoreline vegetation are priorities in the district.

River Towns and Crossings District (CA-RTC)

Description: The river towns and crossings district (CA-RTC) is characterized by historic downtown areas and limited nodes of intense development at specific river crossings, as well as institutional campuses that predate designation of the MRCCA and that include taller buildings.

Purpose: The CA-RTC district must be managed in a manner that allows continued growth and redevelopment in historic downtowns and more intensive redevelopment in limited areas at river crossings to accommodate compact walkable development patterns and connections to the river. Minimizing erosion and the flow of untreated storm water into the river, providing public access to and public views of the river, and restoring natural vegetation in riparian areas and tree canopy are priorities in the district.

Separated from River District (CA-SR)

Description: The separated from river district (CA-SR) is characterized by its physical and visual distance from the Mississippi River. The district includes land separated from the river by distance, topography, development, or a transportation corridor. The land in this district is not readily visible from the Mississippi River.

Purpose: The CA-SR district provides flexibility in managing development without negatively affecting the key resources and features of the river corridor. Minimizing negative impacts to primary conservation areas and minimizing erosion and flow of untreated storm water into the Mississippi River are priorities in the district.

Urban Mixed District (CA-UM)

Description: The urban mixed district (CA-UM) includes large areas of highly urbanized mixed use that are a part of the urban fabric of the river corridor, including institutional, commercial, industrial, and residential areas and parks and open space.

Purpose: The CA-UM district must be managed in a manner that allows for future growth and potential transition of intensely developed areas that does not negatively affect public river corridor views and that protects bluffs and floodplains. Restoring and enhancing bluff and shoreline habitat, minimizing erosion and flow of untreated storm water into the river, and providing public access to and public views of the river are priorities in the district.

Urban Core District (CA-UC)

Description: The urban core district (CA-UC) includes the urban cores of Minneapolis and St. Paul.

Purpose: The CA-UC district must be managed with the greatest flexibility to protect commercial, industrial, and other high-intensity urban uses, while minimizing negative impacts to primary conservation areas and minimizing erosion and flow of untreated storm water into the river. Providing public access to and public views of the river are priorities in the district.

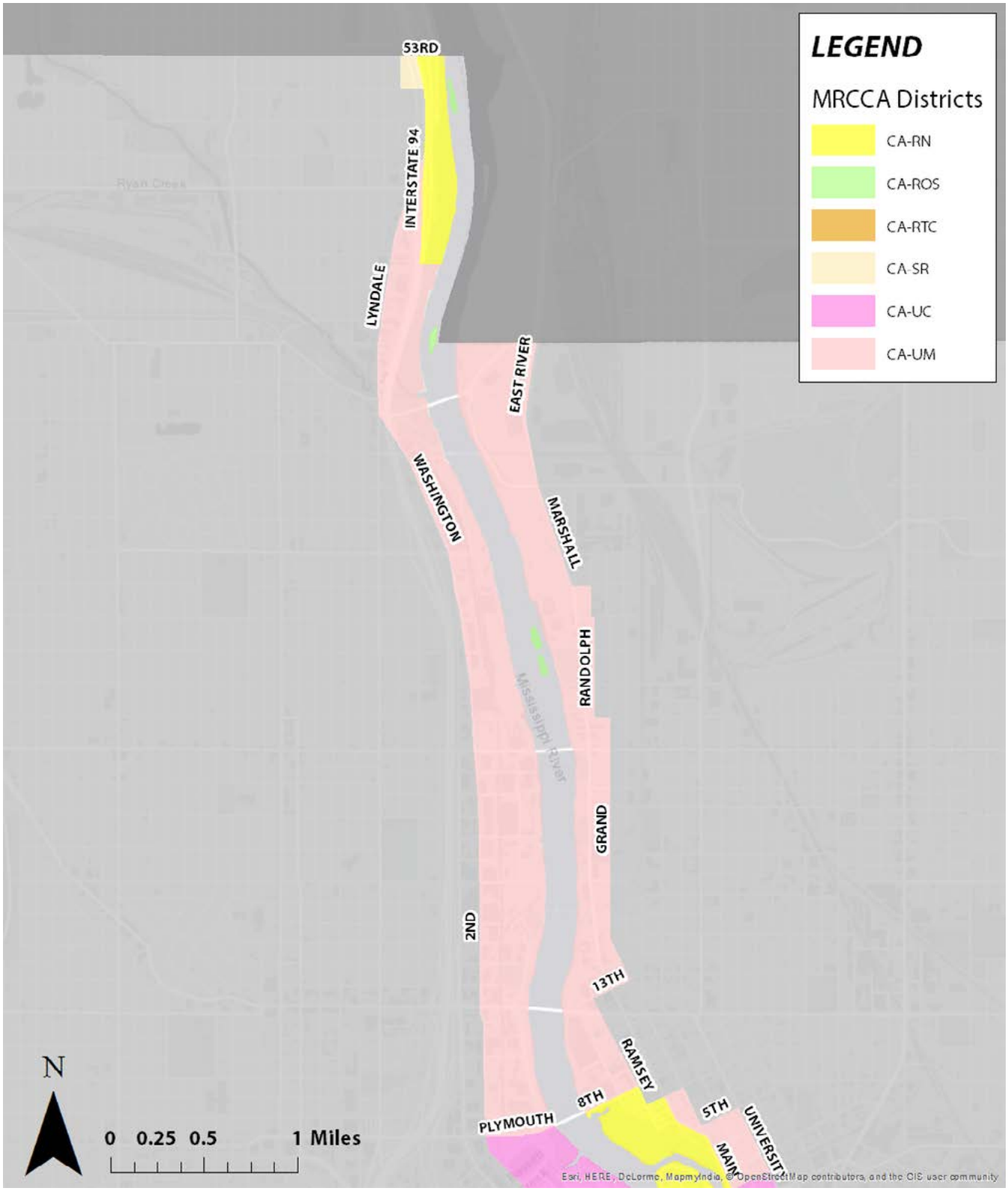


FIGURE 2-1: UPPER RIVER MRCCA DISTRICTS.

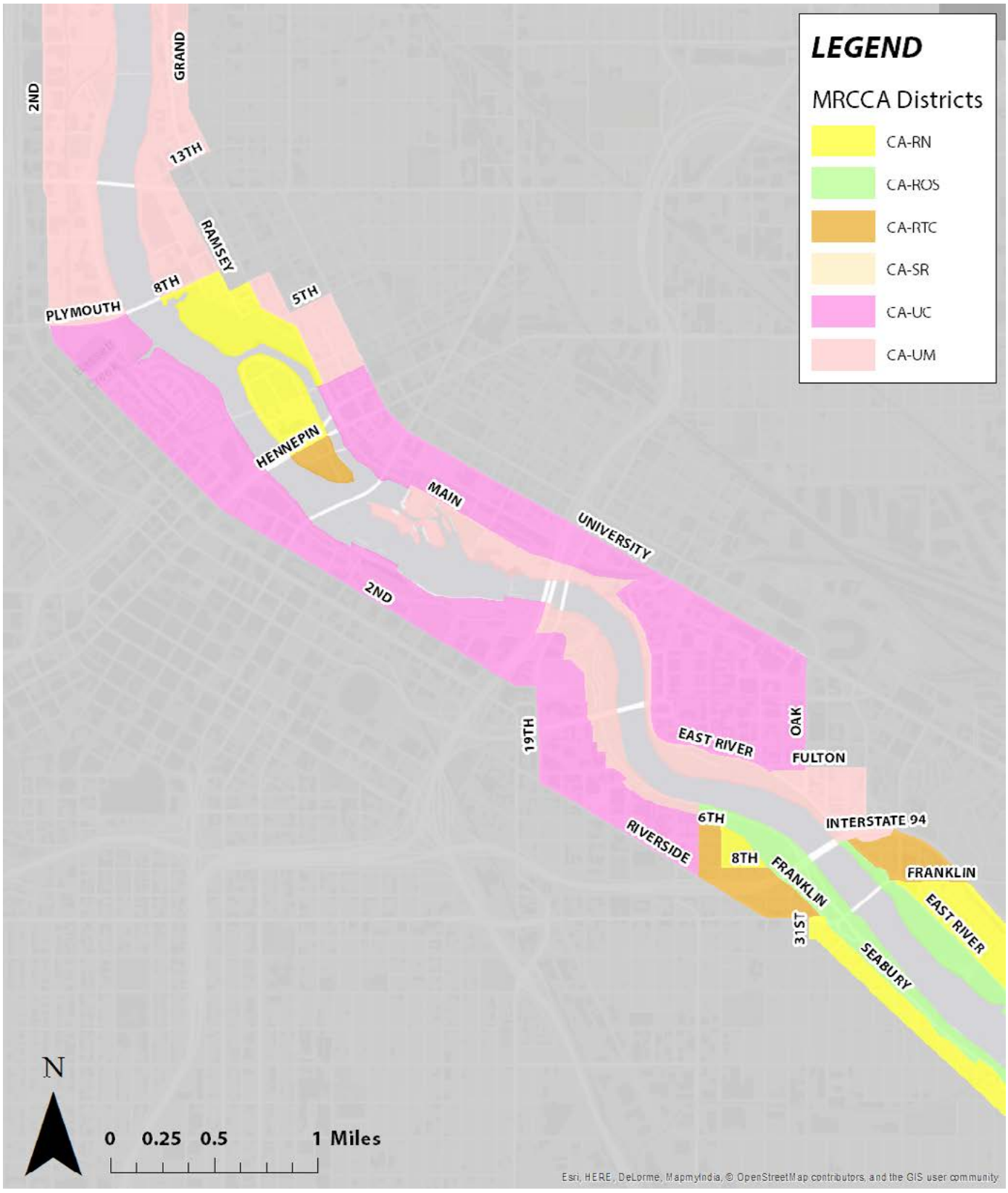


FIGURE 2-2: CENTRAL RIVER MRCCA DISTRICTS.

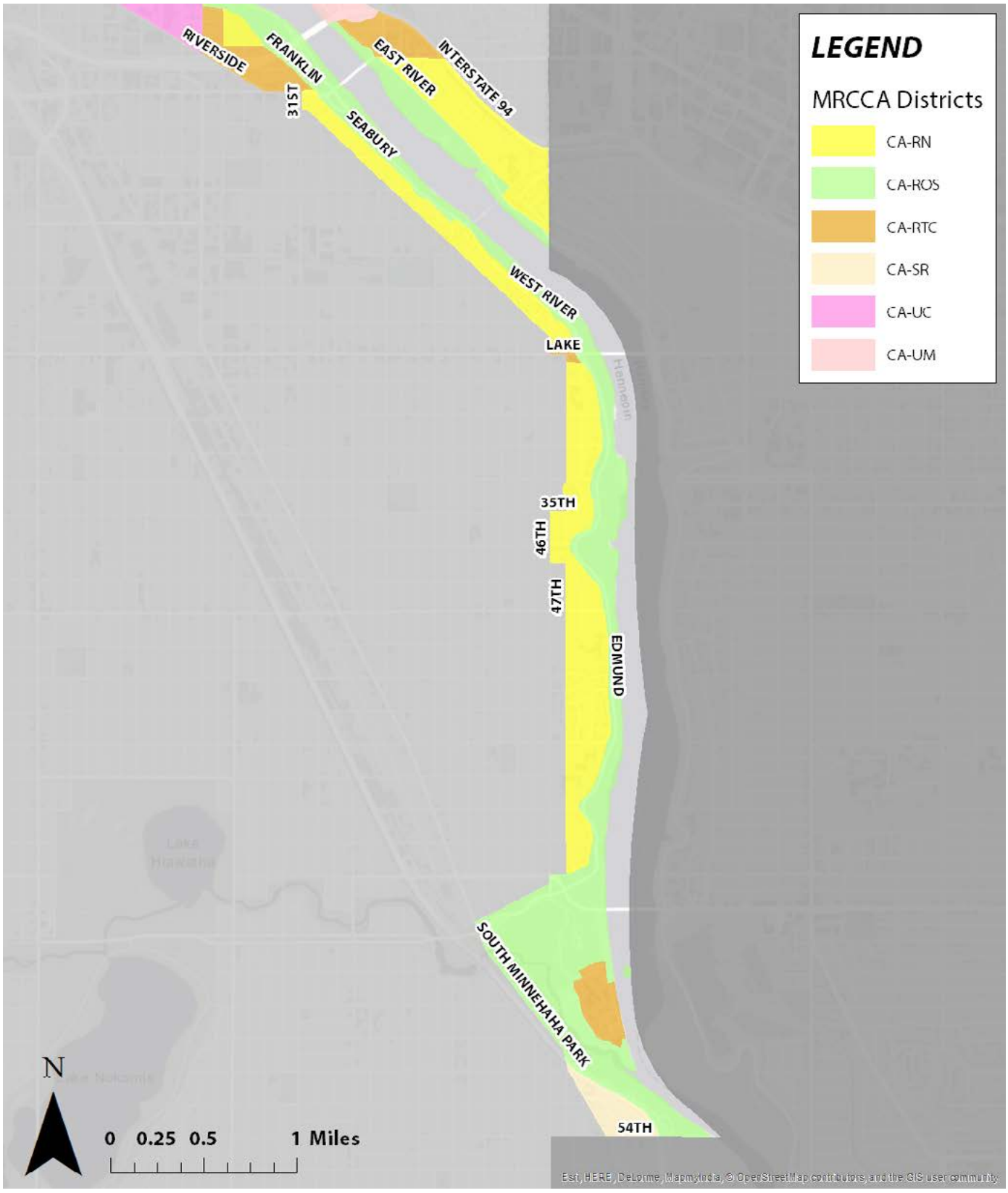


FIGURE 2-3: LOWER GORGE MRCCA DISTRICTS.

DIMENSIONAL STANDARDS - STRUCTURE HEIGHT

Structures, including accessory structures as defined by local ordinance, must be no taller than the heights specified for each district as required by Minnesota Rules, 6106.0120. B. Height is determined by applicable local government zoning regulations, provided it is measured on the side of the structure facing the Mississippi River. The height requirements do not apply to those structures and facilities identified in part Minnesota Rules 6106.0180 as exempt from these requirements.

Rural and Open Space District (CA-ROS)
Structure height must be no taller than 35 feet.

River Neighborhood District (CA-RN)
Structure height must be no taller than 35 feet.

River Towns and Crossings District (CA-RTC)
Structure height must be no taller than 48 feet, provided that tiering of structures away from the Mississippi River and from blufflines is given priority, with lower structure heights closer to the river and blufflines, and that structure design and placement minimizes interference with public river corridor views. Taller buildings are allowed by conditional use permit, as provided under the standards for conditional use permits for increase in height section of this document, with consideration of the relationship of building height to the mature treeline, where present, and existing surrounding development, as viewed from the ordinary high water level of the opposite shore and from public river corridor views.

Separated from River District (CA-SR)
Structure height is determined by the local government's underlying zoning requirements, provided the structure height in the underlying zoning is generally consistent with the height of the mature treeline, where present, and existing surrounding development, as viewed from the ordinary high water level of the opposite shore.

Urban Mixed District (CA-UM)
Structure height must be no taller than 65 feet, provided tiering of structures away from the Mississippi River and from blufflines is given priority, with lower structure heights closer to the river and blufflines, and that structure design and placement minimize interference with public river corridor views. Taller buildings are allowed by conditional use permit, as provided under the standards for conditional use permits for increase in height section of this document.

Urban Core District (CA-UC)
Structure height is determined by the local government's underlying zoning requirements, provided tiering of structures away from the Mississippi River and blufflines is given priority, with lower structure heights closer to the river and blufflines, and structure design and placement minimize interference with public river corridor views.

STRUCTURE TIERING

The purpose of the dimensional requirements (height and setbacks) in the Critical Area districts is to protect primary conservation areas and public river corridor views. The CA-RTC (Rural Towns and Crossings), CA-UM (Urban Mixed), and CA-UC (Urban Core) districts, in addition to their height limits have the provision that "tiering of structures away from the Mississippi River is given priority."

Historically, before the creation of the new districts, the majority of this area was part of the Urban Diversified District, which had no height requirements beyond those of the underlying zoning districts or the Shoreland Overlay. Therefore, the development pattern, especially in the core of the city is of varying building heights, some very tall. Therefore, a strict literal application of tiering, to create a step pattern up from the river will not always be practical or within the character of an existing major city. Further, in some instances it could actually harm the protection of primary conservation areas and public river corridor views. For example, a short boxy building may block more views at ground level than a taller tower that does not cover an entire building site.

In general, structures within the Critical Area should be shorter when located closer to the river with height increasing as distance from the river increases. However, taller buildings can be considered closer to the river when the existing built character is similar, especially in the downtown area, or where measures are taken to provide significant landscaping and buffering of the structure. In addition, buildings should utilize tapered profiles as building height increases to allow views of and from the river and to avoid overly wide buildings that can create a wall along the riverfront significantly blocking views for other structures, development sites, and neighborhoods. Tiering is most appropriate to consider when requests are made for conditional use permits to increase the height of a building beyond the district height limits in the CA-RTC and CA-UM districts.

STANDARDS FOR CONDITIONAL USE PERMITS FOR INCREASE IN HEIGHT

The CA-RTC and CA-UM Districts allow for increases in height from the Critical Area District height limits by conditional use permit. In addition to the conditional use permit requirements of the Minneapolis Zoning Ordinance, Minnesota Rules 6106.0120(D) provides criteria for considering whether to grant a conditional use permit for buildings exceeding the height limits and state they must include:

1. assessment of the visual impact of the proposed building on public river corridor views, including views from other communities;

2. identification and application of techniques to minimize the perceived bulk of the proposed building, such as:

- **a.** placing the long axis of the building perpendicular to the river;
- **b.** stepping back of portions of the façade;
- **c.** narrowing the profile of upper floors of the building; or
- **d.** increasing the setbacks of the building from the Mississippi River or blufflines;

3. identification of techniques for preservation of those view corridors identified in the local government's plan; and

4. opportunities for creation or enhancement of public river corridor views.

Minnesota Rules 6106.0080 further requires that in addition to the criteria above and in addition to meeting the requirements of Minnesota Statutes, sections 394.301, 394.303, 462.3595, and 462.3597, a local government's review of conditional and interim uses must consider potential impacts of the conditional or interim use on primary conservation areas, public river corridor views, and other resources identified in a local government's plan. In evaluating a request for a variance or conditional or interim use permit, if a local government identifies a potential negative impact to primary conservation areas, public river corridor views, or other resources identified in the local government's plan, the variance or conditional or interim use permit must require mitigation. Mitigation must be directly related to and must bear a rough proportionality to the impact of the project on primary conservation areas, public river corridor views, and other resources identified in the local government's plan.

DIMENSIONAL STANDARDS - STRUCTURE SETBACKS

Structures and impervious surfaces must not be located in the shore impact zone and must meet setback requirement from the ordinary high water level of the Mississippi River and other waters within the Mississippi River Corridor Critical Area, as specified for each district (note that the CA-SR and CA-UC districts do not require setbacks from the ordinary high water level , but are subject to underlying zoning district setbacks). Also, structures and impervious surfaces must not be located in the bluff impact zone and must meet setback requirements from the bluffline as specified for each district. Minnesota Rules 6106.0180 list structures that are exempt from these requirements.

Rural and Open Space District (CA-ROS)
River Setback: 200 feet
Bluff Setback: 100 feet

River Neighborhood District (CA-RN)
River Setback: 100 feet
Bluff Setback: 40 feet

River Towns and Crossings District (CA-RTC)
River Setback: 75 feet
Bluff Setback: 40 feet

Separated from River District (CA-SR)
River Setback: Not applicable
Bluff Setback: 40 feet

Urban Mixed District (CA-UM)
River Setback: 50 feet
Bluff Setback: 40 feet

Urban Core District (CA-UC)
River Setback: s specified by underlying zoning
Bluff Setback: 40 feet

Where principal structures exist on the adjoining lots on both sides of a proposed building site, the minimum setback may be altered to conform to the average of the adjoining setbacks, provided that the new structure's scale and bulk riverward or bluffward of the setbacks required under from the river and bluffs are consistent with adjoining development. No structures or impervious surfaces are allowed within the bluff impact zone or shore impact zone, except as specified under Minnesota Rules 6106.0180.

Figure 2-4 shows the height and river and bluff setback requirements for each MRCCA district. It is provided for general context. It is not intended to be a comprehensive list of all the MRCCA district and rule requirements. Please consult the MRCCA rules and the Minneapolis Zoning Ordinance for the specific MRCCA district and zoning ordinance regulations.

	CA-ROS	CA-RN	CA-RTC	CA-SR	CA-UM	CA-UC
Height	35'	35'	48'*	Underlying zoning	65'*	Underlying zoning
River Setback	200'	100'	75'	NA	50'	Underlying zoning
Bluff Setback	100'	40'	40'	40'	40'	40'

*Greater height may be allowed with a local Conditional Use Permit.

FIGURE 2-4: GENERAL MRCCA DISTRICT HEIGHT AND SETBACK REQUIREMENTS.

MINNEAPOLIS 2040 FUTURE BUILT FORM GUIDANCE

The Built Form categories of the comprehensive plan guide the scale of development for every parcel in the city, independent of the uses allowed on the site. The built form of all new and remodeled buildings must be consistent with the guidance of the Built Form Map and MRCCA district requirements. The built form districts are described below and are mapped in Figures 2-5 through 2-7. They are consistent with the MRCCA Districts in the MRCCA. Where the built form guidance guides for a height greater than the Critical Area districts, the Critical Area regulations apply. Where the Critical Area districts allow for a conditional use permit to increase height, the built form category provides additional guidance on appropriate building height.

Interior 1

The Interior 1 district is typically applied in parts of the city farthest from downtown, in the areas between transit routes.

Built Form Guidance: New and remodeled buildings in the Interior 1 district should be small-scale residential. Individual lots are permitted to have up to three dwelling units. Combining of lots is generally not permitted. Building heights should be 1 to 2.5 stories.

Interior 2

The Interior 2 district is typically applied in parts of the city that developed during the era when streetcars were a primary mode of transportation, in the areas in between transit routes, and on select streets with intermittent local transit service. It is also applied adjacent to the Corridor 4 and Corridor 6 districts, serving as a transition to lower intensity residential areas.

Built Form Guidance: New and remodeled buildings in the Interior 2 district should be small-scale residential . Individual lots are permitted to have up to three dwelling units. Multifamily buildings with more than three units are permitted on larger lots. Limited combining of lots is permitted. Building heights should be 1 to 2.5 stories.

Interior 3

The Interior 3 district is typically applied in parts of the city closest to downtown, in the areas in between transit routes. It is also applied adjacent to select corridors and near METRO stations, serving as a transition to lower intensity residential areas.

Built Form Guidance: New and remodeled buildings in the Interior 3 district should reflect a variety of building types on both small and moderate-sized lots, including on combined lots. Building heights should be 1 to 3 stories.

Corridor 4

The Corridor 4 district is typically applied along high frequency transit routes farther from downtown, that are on narrower rights of way, and on select streets with local transit service. It is also applied near downtown in areas between transit routes, and serves as a transition between lower intensity residential areas and areas immediately surrounding METRO stations.

Built Form Guidance: New and remodeled buildings in the Corridor 4 district should reflect a variety of building types on both small and moderate-sized lots, including on combined lots. Building heights should be 1 to 4 stories. Requests to exceed 4 stories will be evaluated on the basis of whether or not a taller building is a reasonable means for further achieving Comprehensive Plan goals.

Corridor 6

The Corridor 6 district is typically applied along high frequency transit routes as well as in areas near METRO stations.

Built Form Guidance: New and remodeled buildings in the Corridor 6 district should reflect a variety of building types on both moderate and large sized lots. Building heights should be 2 to 6 stories. Building heights should be at least 2 stories in order to best take advantage of the access to transit, jobs, and goods and services provided by the Corridor 6 district. Requests to exceed 6 stories will be evaluated on the basis of whether or not a taller building is

a reasonable means for further achieving Comprehensive Plan goals.

Transit 10
The Transit 10 district is typically applied along high frequency transit routes, adjacent to METRO stations, in neighborhoods near downtown, and in downtown.

Built Form Guidance: New and remodeled buildings in the Transit 10 district should reflect a variety of building types on both moderate and large sized lots. Building heights should be 2 to 10 stories. Building heights should be at least 2 stories in order to best take advantage of the access to transit, jobs, and goods and services provided by the Transit 10 district. Requests to exceed 10 stories will be evaluated on the basis of whether or not a taller building is a reasonable means for further achieving Comprehensive Plan goals.

Transit 15
The Transit 15 district is typically applied along high frequency transit routes, adjacent to METRO stations, in neighborhoods near downtown, and in downtown.

Built Form Guidance: New and remodeled buildings in the Transit 15 district should reflect a variety of building types on both moderate and large sized lots. Building heights should be 4 to 15 stories. Building heights should be at least 4 stories in order to best take advantage of the access to transit, jobs, and goods and services provided by the Transit 15 district. Requests to exceed 15 stories will be evaluated on the basis of whether or not a taller building is a reasonable means for further achieving Comprehensive Plan goals.

Transit 20
The Transit 20 district is typically applied along high frequency transit routes, adjacent to METRO stations, in neighborhoods near downtown, and in downtown.

Built Form Guidance: New and remodeled buildings in the Transit 20 district should reflect a variety of building types on both moderate and large sized lots. Upper floors of taller buildings should be set back to increase access to light and air. Building heights should be 6 to 20 stories. Building heights should be at least 6 stories in order to best take advantage of the access to transit, jobs, and goods and services provided by the Transit 20 district. Requests to exceed 20 stories will be evaluated on the basis of whether or not a taller building is a reasonable means for further achieving Comprehensive Plan goals.

Transit 30
The Transit 30 district is typically applied along high frequency transit routes, adjacent to METRO stations, in neighborhoods near downtown, and adjacent to the downtown office core.

Built Form Guidance: New and remodeled buildings in the Transit 30 district should reflect a variety of building types on both moderate and large sized lots. Upper floors of taller buildings should be set back to increase access to light and air. Building heights should be 10 to 30 stories. Building heights should be at least 10 stories in order to best take advantage of the access to transit, jobs, and goods and services provided by the Transit 30 district. Requests to exceed 30 stories will be evaluated on the basis of whether or not a taller building is a reasonable means for further achieving Comprehensive Plan goals.

Core 50
The Core 50 district is applied in the downtown central business district. The district supports the office core as the center of the region's economy by allowing the largest building types in the city.

Built Form Guidance: New and remodeled buildings in the Core 50 district should reflect a variety of building types on both moderate and large sized lots, with multiple buildings per block. The Core 50 district supports the office core as the center of the region's economy, with the largest building types in the city. Building heights should be at least 10 stories, with no maximum.

Production

The Production district is typically applied in areas of the city that are intended for the long term preservation of production, transportation, and job generating uses.

Built Form Guidance: New and remodeled buildings in the Production built form district should reflect a variety of building types, usually on large sized lots. Building heights should be 1 to 10 stories. Requests to exceed 10 stories will be evaluated on the basis of whether or not a taller building is a reasonable means for further achieving Comprehensive Plan Goals.

Parks

The Parks district is typically applied in areas with the Parks and Open Space future land use designation.

Built Form Guidance: New and remodeled buildings in the Parks built form district should be designed to support typical parks activities such as shelters, amphitheaters, food service, and equipment rental. Building heights should be 1 to 2.5 stories. Requests to exceed 2.5 stories will be evaluated on the basis of whether or not a taller building is a reasonable means for further achieving Comprehensive Plan goals.

Transportation

The Transportation district is typically applied in areas with the Transportation future land use designation.

Built Form Guidance: New and remodeled buildings in the Transportation built form district should generally conform to the districts adjacent to it on the map.

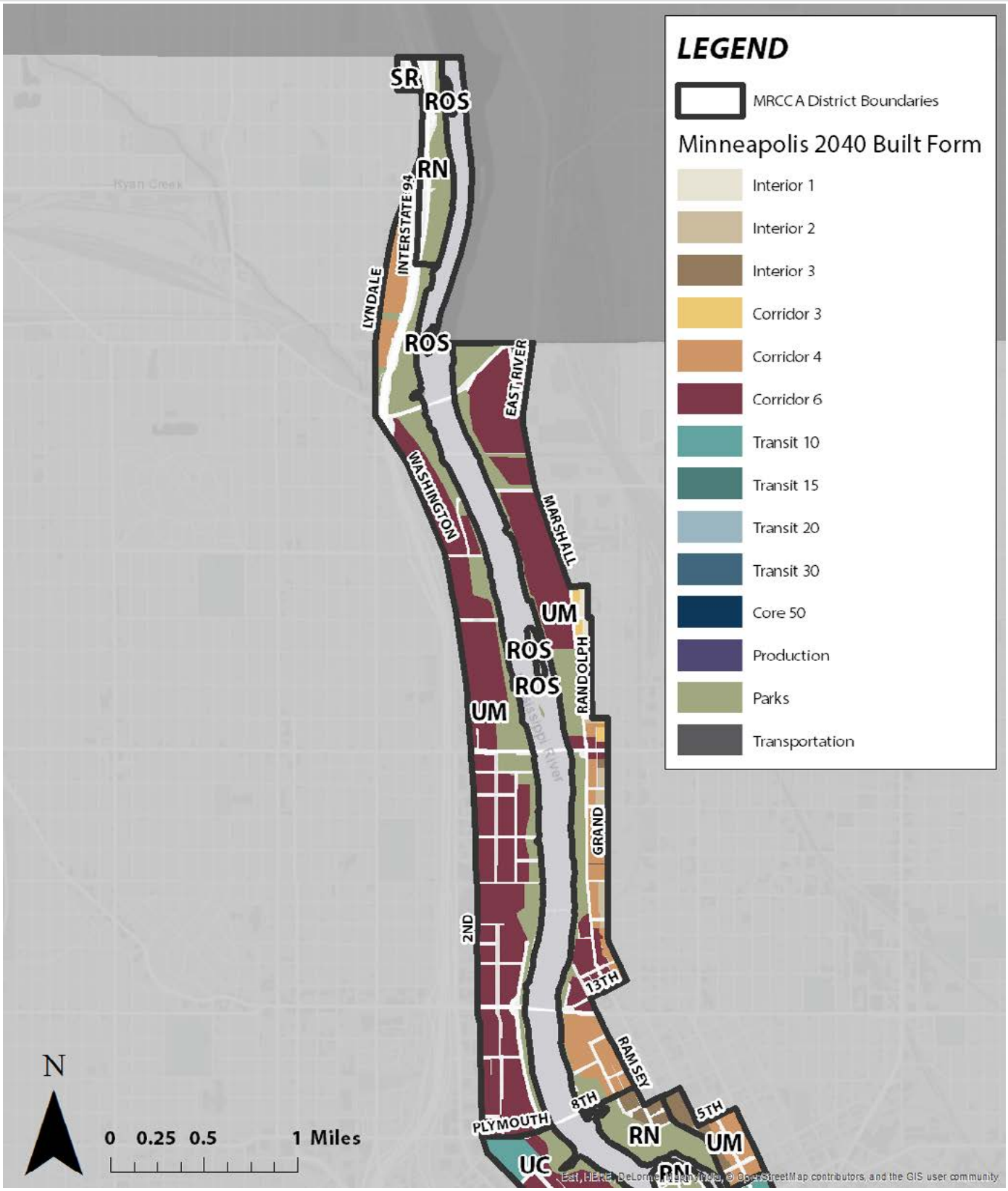


FIGURE 2-5: UPPER RIVER - MINNEAPOLIS BUILT FORM GUIDANCE OVER MRCCA DISTRICTS.

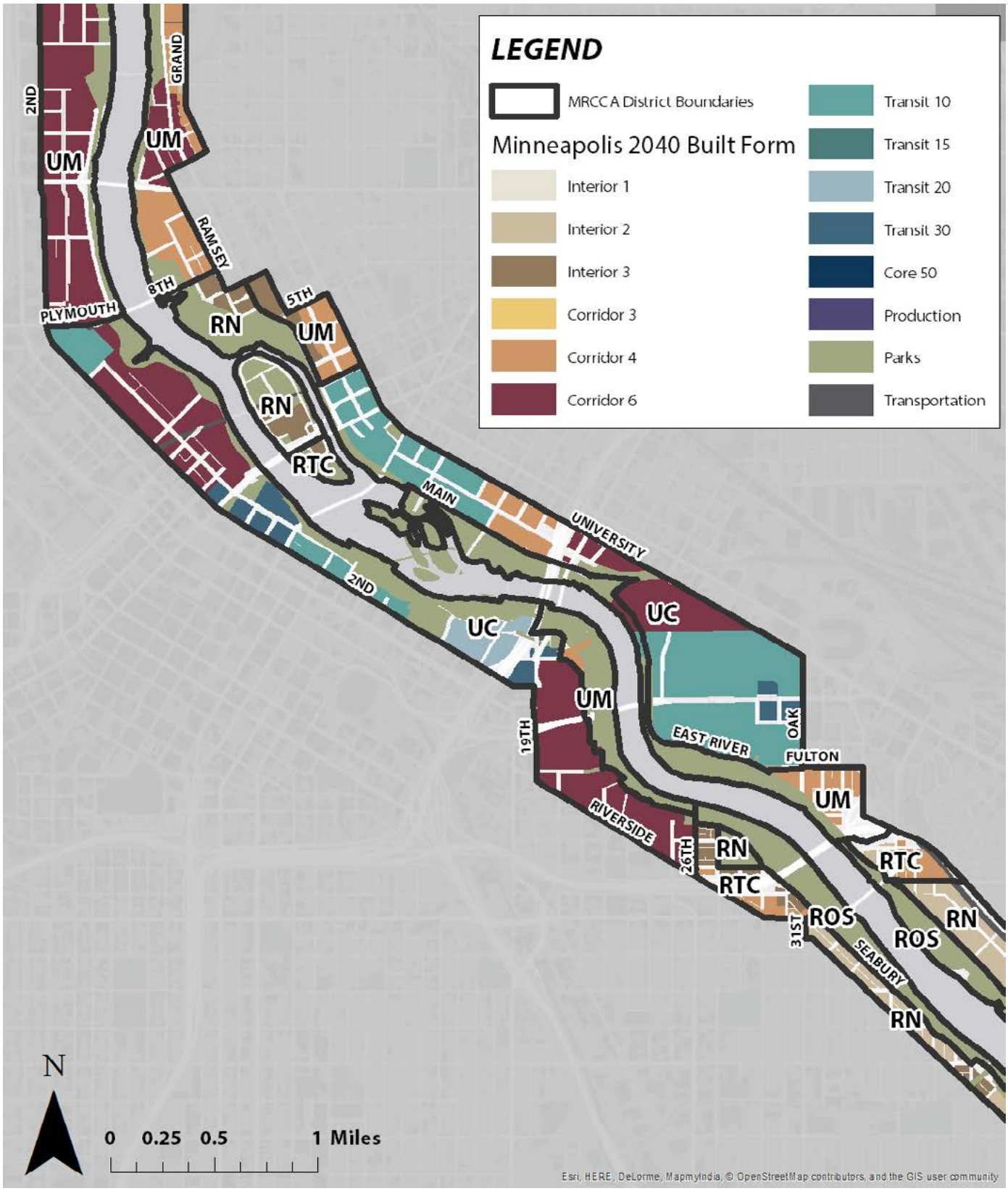


FIGURE 2-6: CENTRAL RIVER - MINNEAPOLIS BUILT FOR GUIDANCE OVER MRCCA DISTRICTS.

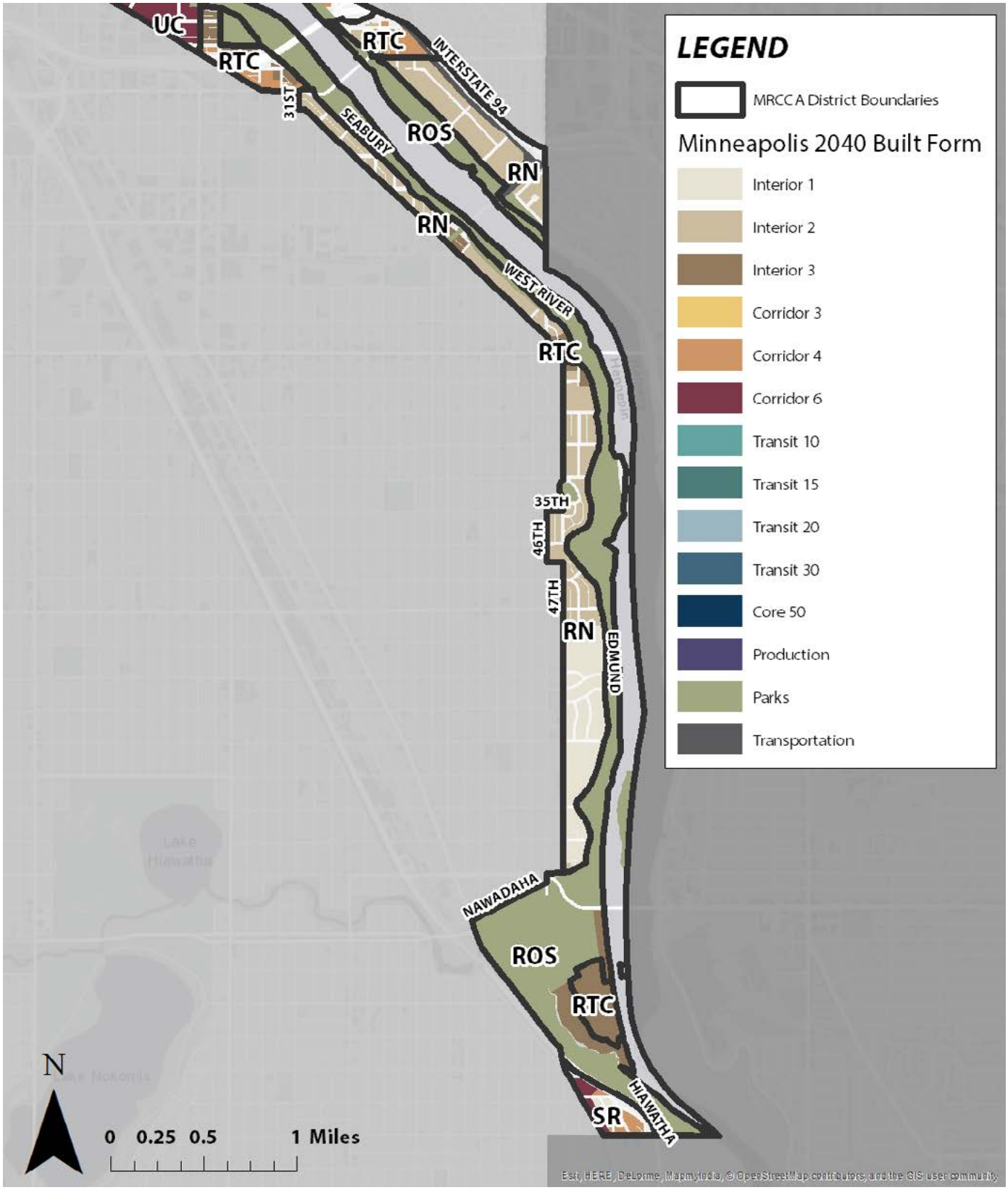


FIGURE 2-7: LOWER GORGE - MINNEAPOLIS BUILT FORM GUIDANCE OVER MRCCA DISTRICTS.

Chapter 3 - Primary Conservation Areas

GENERAL OVERVIEW

Primary Conservation Areas (PCAs) are defined in the MRCCA rules (6106.0050, Subp. 53) as key resources and features, including shore impact zones, bluff impact zones, floodplains, wetlands, gorges, areas of confluence with tributaries, natural drainage routes, unstable soils and bedrock, native plant communities, cultural and historic properties, significant existing vegetative stands, tree canopies and "other resources" identified in local government MRCCA plans.

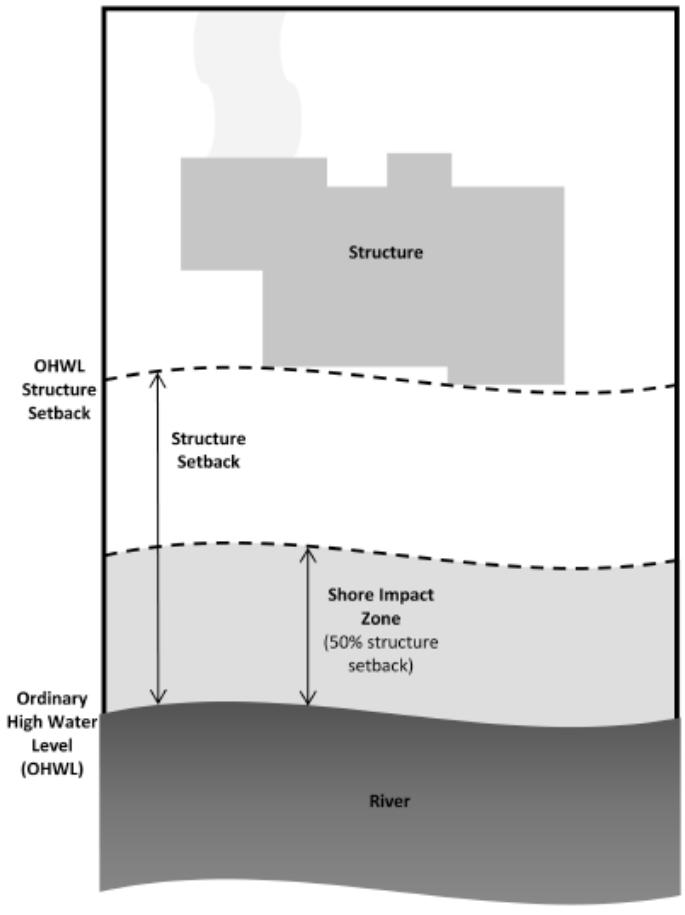


FIGURE 3-1: SHORE IMPACT ZONE.

SHORE IMPACT ZONE

"Shore impact zone" means land located between the ordinary high water level of public waters and a line parallel to it at a setback of 50 percent of the required MRCCA district structure setback (or underlying zoning district in CA-SR or CA-UC districts) or, for areas in agricultural use, 50 feet landward of the ordinary high water level (MRCCA Rules 6106.0050, Subp. 68). See **Figures 3-1 through 3-4.** Structures and impervious surfaces must not be located in the shore impact zone and must meet setback requirement from the ordinary high water level of the Mississippi River and other waters within the Mississippi River Corridor Critical Area, as specified for each district (note that the CA-SR and CA-UC districts do not require setbacks from the ordinary high water level, but are subject to underlying zoning district setbacks).

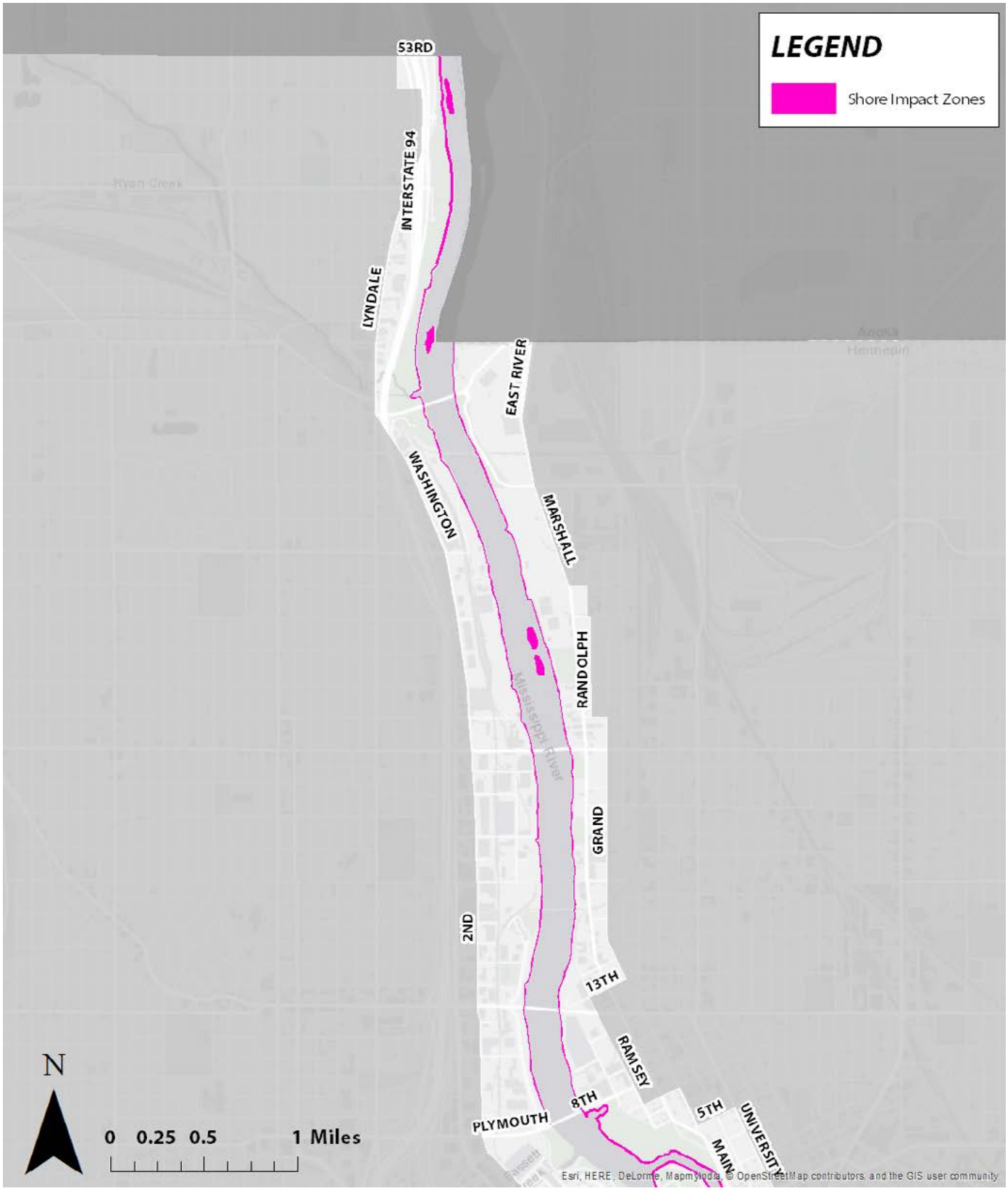


FIGURE 3-2: UPPER RIVER - SHORE IMPACT ZONE.

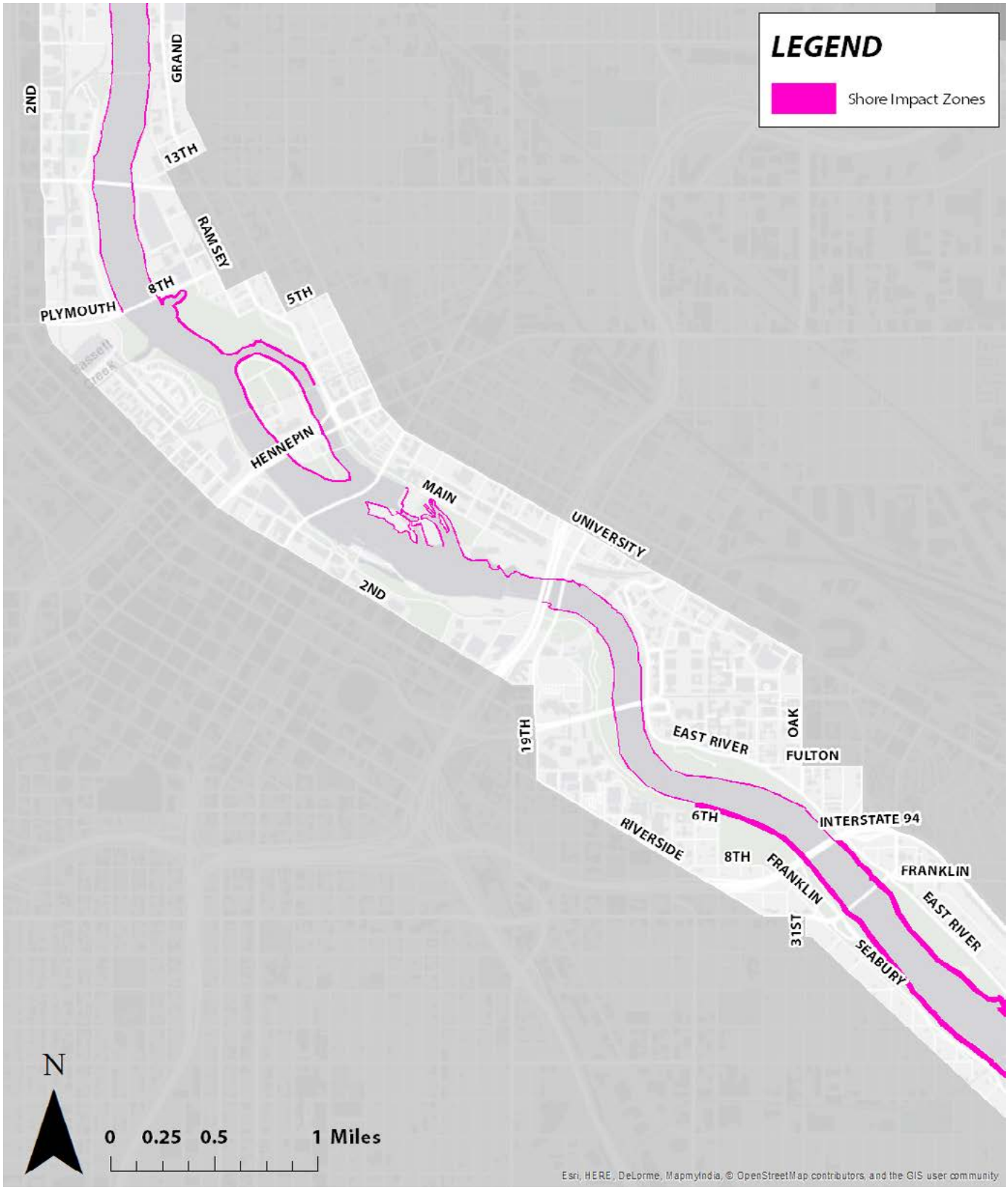


FIGURE 3-3: CENTRAL RIVER - SHORE IMPACT ZONE.

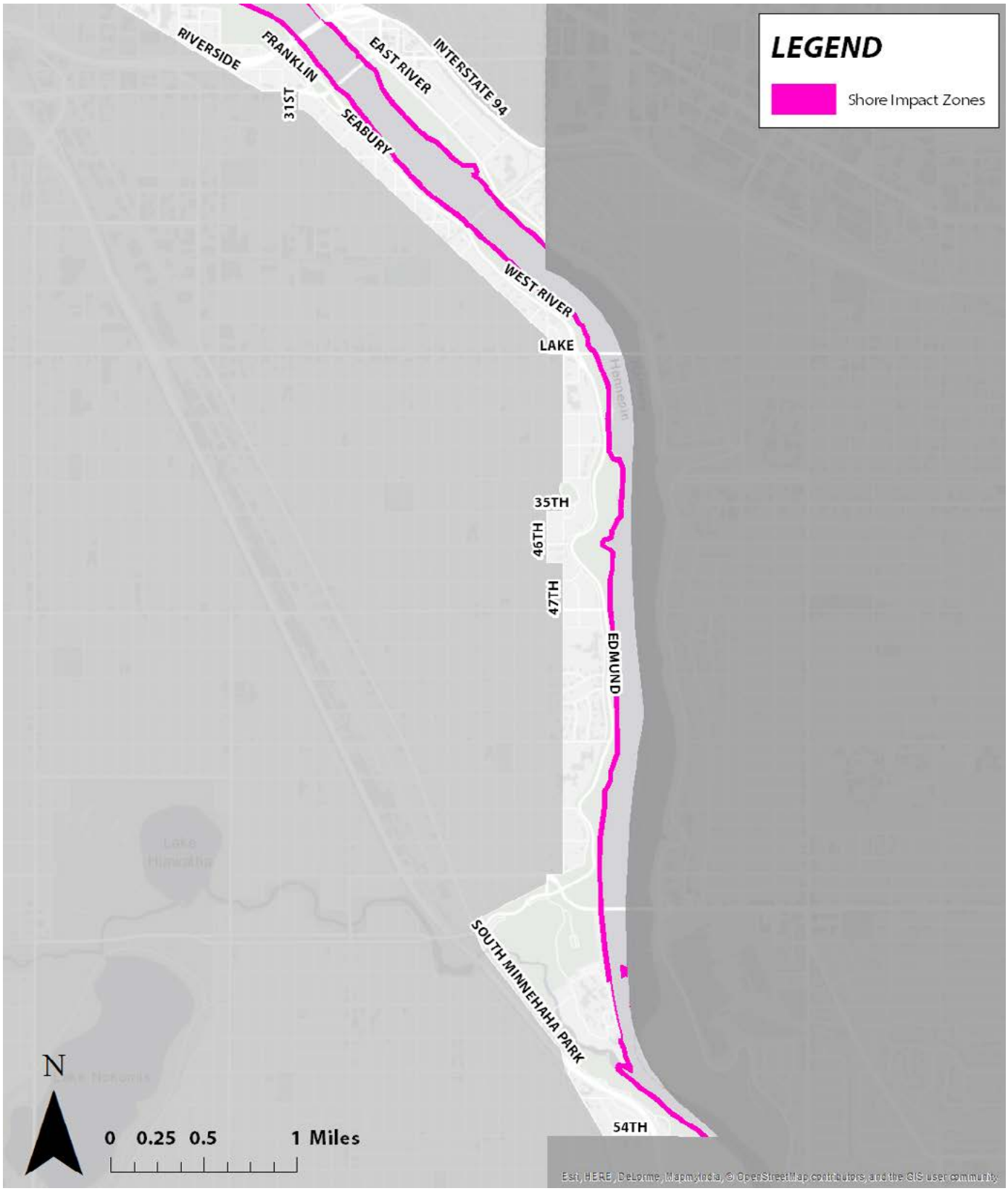


FIGURE 3-4: LOWER GORGE - SHORE IMPACT ZONE.

FLOODPLAINS AND WETLANDS

The floodplain is the riverbed and the area adjoining a wetland, lake or watercourse which has been or hereafter may be covered by the regional flood (1% annual chance). Wetlands are areas where water covers the soil, or is present either at or near the surface of the soil all year or for varying periods of time during the year, including during the growing season. The approximate location of the floodplain and wetlands are included on the maps in Figures 3-5 through 3-7 for context. The City's Zoning Ordinance and Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps should be consulted for further detail on boundaries and requirements.

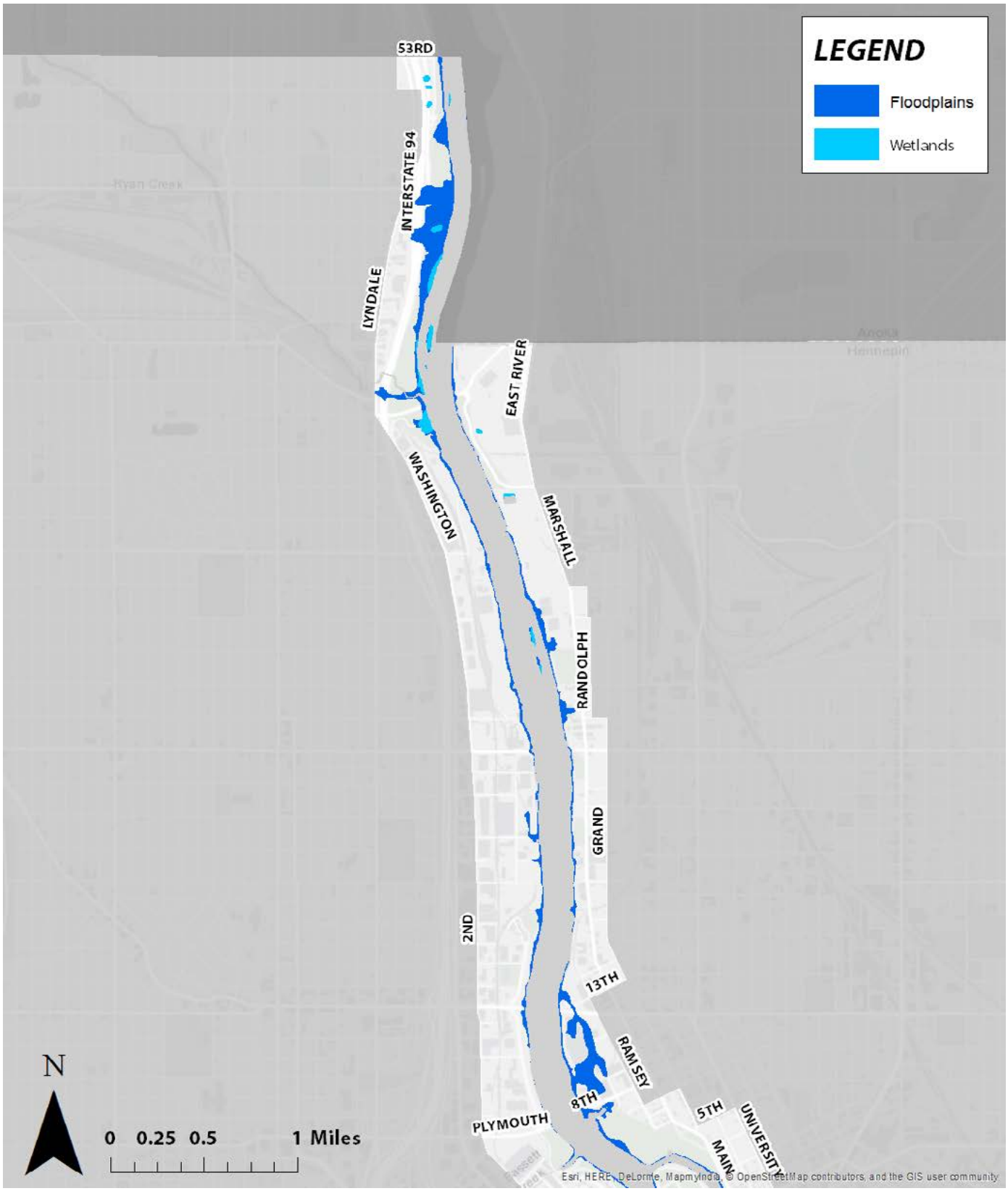


FIGURE 3-5: UPPER RIVER – WETLANDS AND FLOODPLAINS.

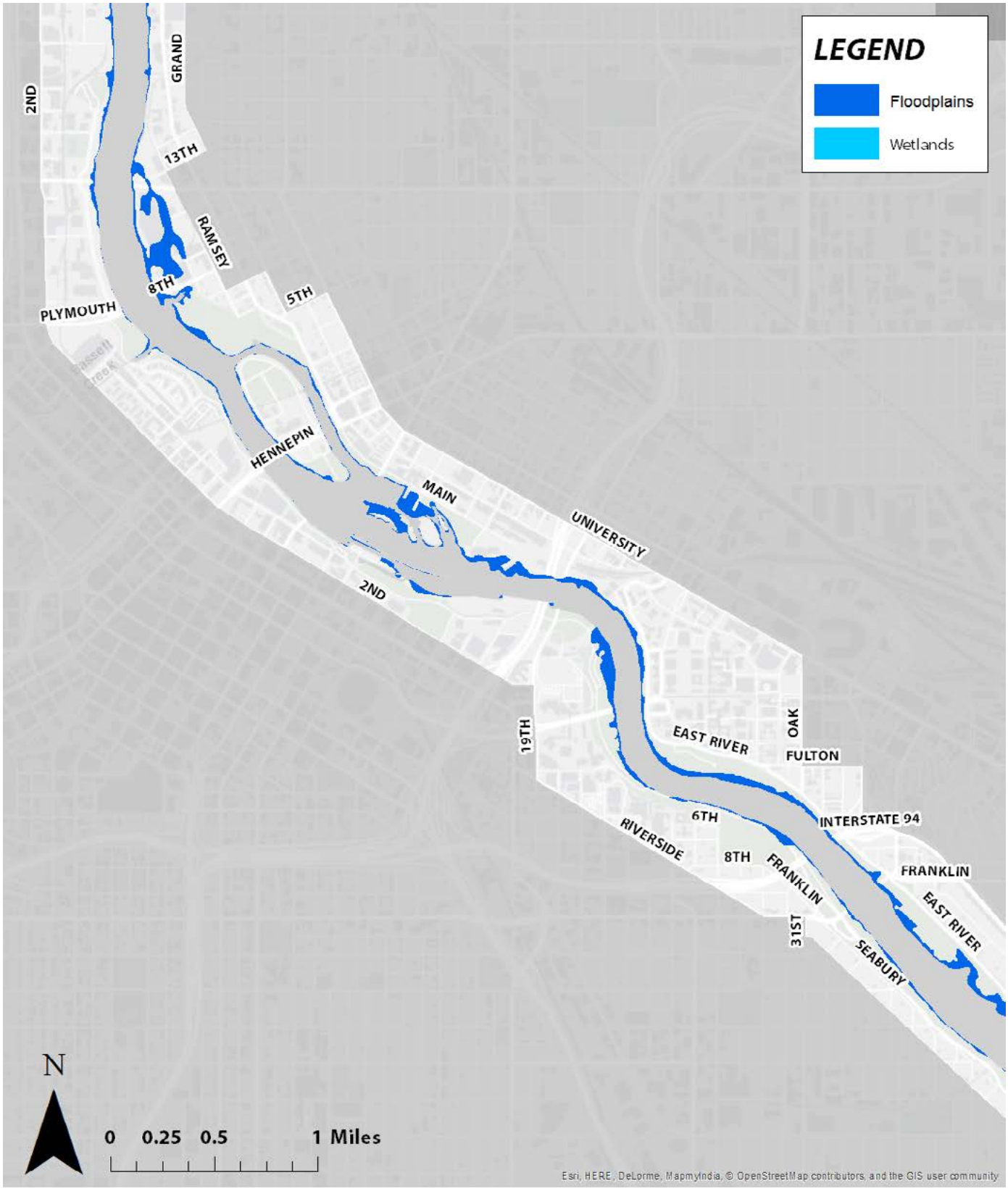


FIGURE 3-6: CENTRAL RIVER – WETLANDS AND FLOODPLAINS.

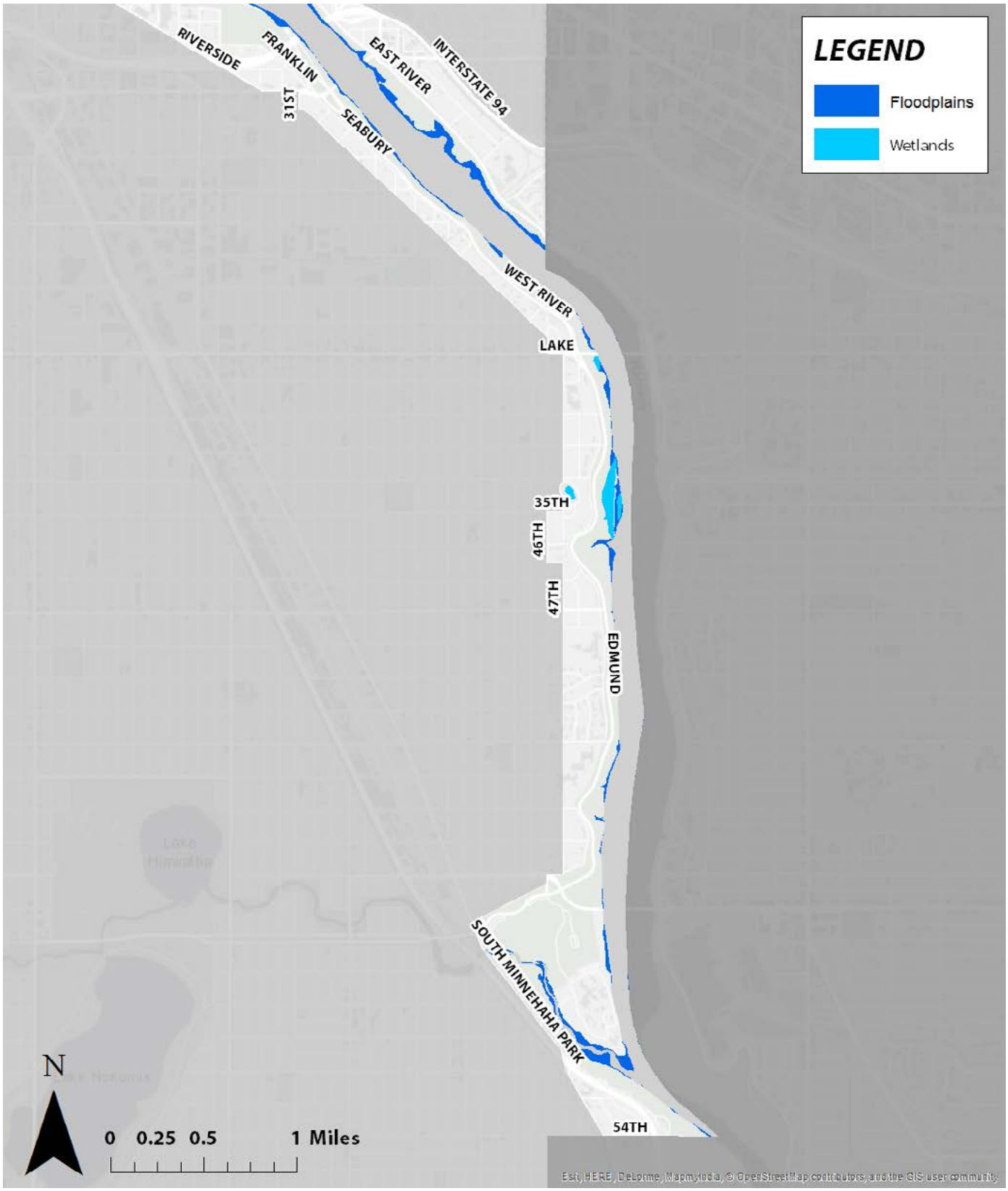


FIGURE 3-7: LOWER GORGE – WETLANDS AND FLOODPLAINS.

NATURAL DRAINAGE WAYS

Natural Drainage Ways in Minneapolis include Shingle Creek and Minnehaha Creek. Bassett Creek is conveyed to the river in a tunnel and Bridal Veil Creek in a pipe, exiting as a falls. They are included in this map, but are not day-lighted drainage ways.

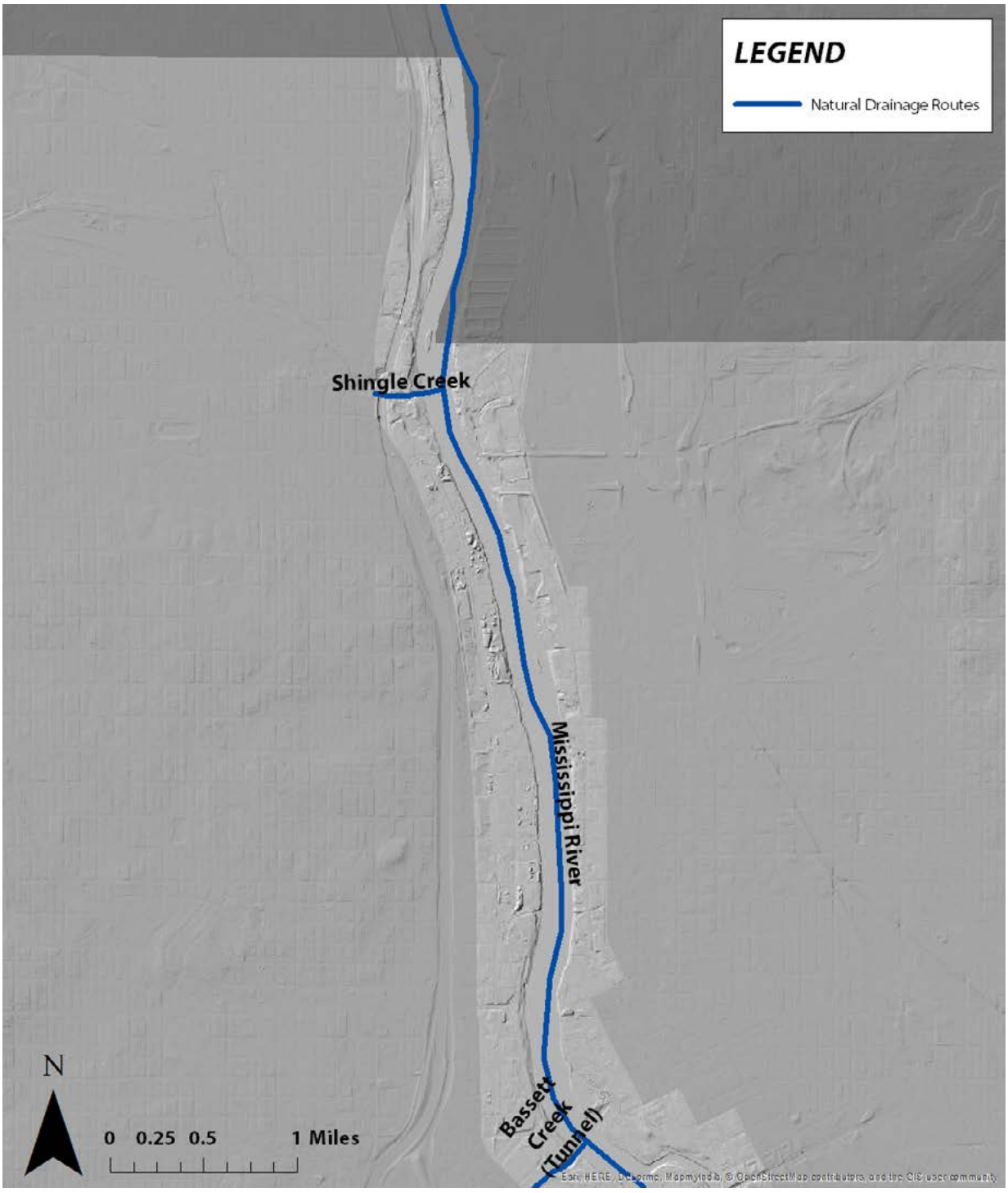


FIGURE 3-9: UPPER RIVER – NATURAL DRAINAGE WAYS.

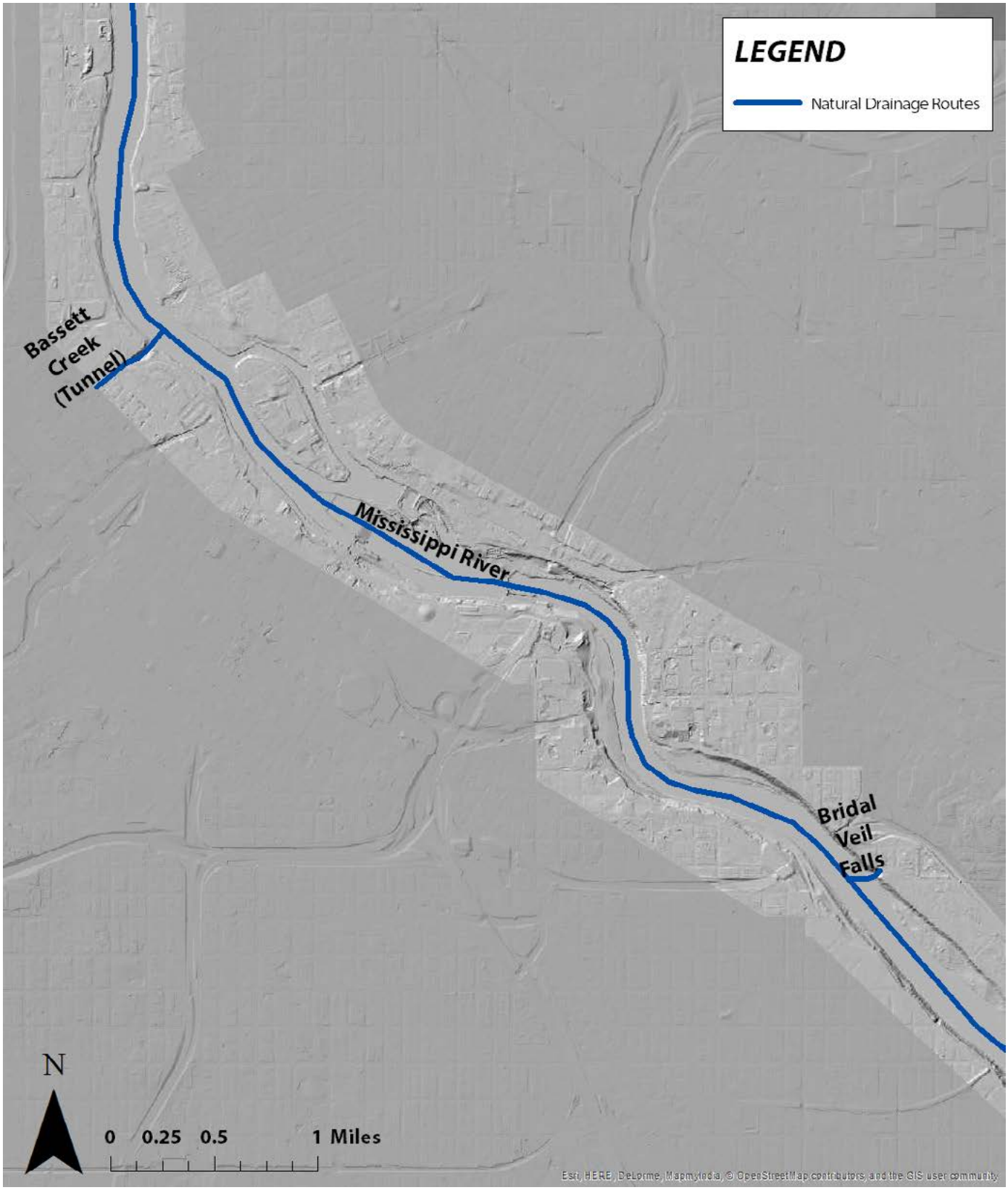


FIGURE 3-10: CENTRAL RIVER – NATURAL DRAINAGE WAYS.

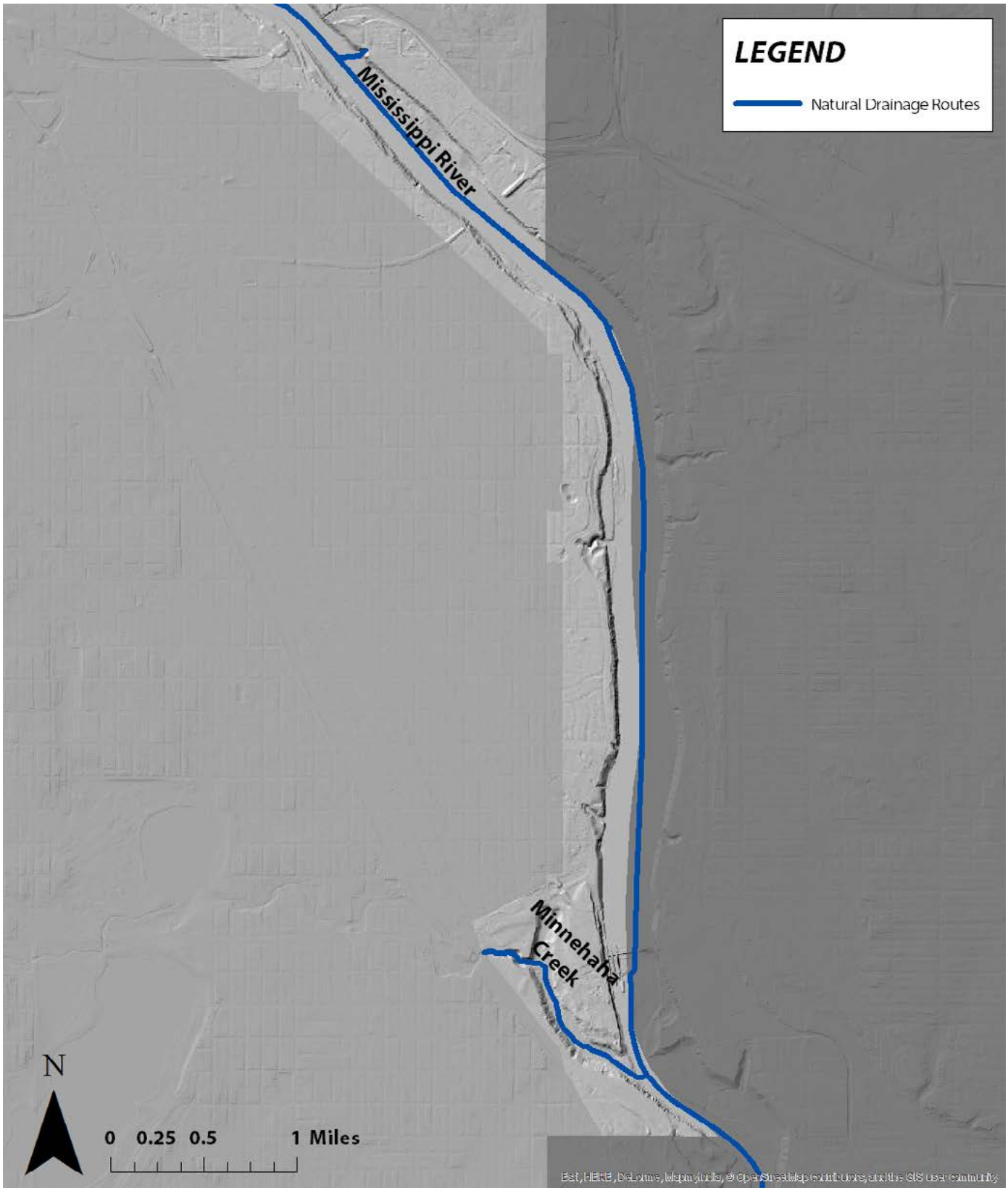


FIGURE 3-11: LOWER GORGE – NATURAL DRAINAGE WAYS.

BLUFF AND BLUFF IMPACT ZONES

MRCCA rules 6106.0050, Subp. 8 defines "Bluff" as a natural topographic feature having:

A. a slope that rises at least 25 feet and the grade of the slope averages 18 percent or greater, measured over a horizontal distance of 25 feet, as follows:

1. where the slope begins above the ordinary high water level, from the toe of the slope to the top of the slope; or
2. where the slope begins below the ordinary high water level, from the ordinary high water level to the top of the slope. See **Figure 3-12**; or

B. a natural escarpment or cliff with a slope that rises at least ten feet above the ordinary high water level or toe of the slope, whichever is applicable, to the top of the slope, with a slope of 75 degrees or greater.

MRCCA rules 6106.0050, Subp. 9 defines the "Bluff Impact Zone" (BIZ) as the bluff and land within 20 feet of the bluff. See **Figure 3-12**.

See **Figures 3-13** through **3-15** for bluff locations in Minneapolis. The identification and protection of steep slopes and bluffs is regulated by the SH Shoreland Overlay District and the MR Mississippi River Critical Overlay District in the Minneapolis Zoning Ordinance.

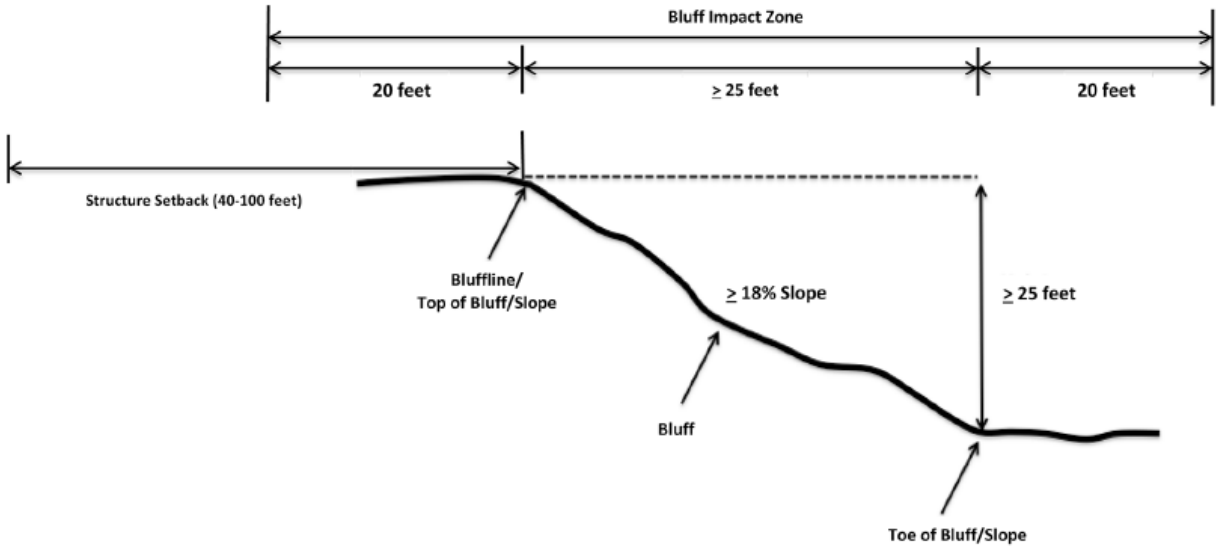


FIGURE 3-12: BLUFFS AND BLUFF IMPACT ZONES.

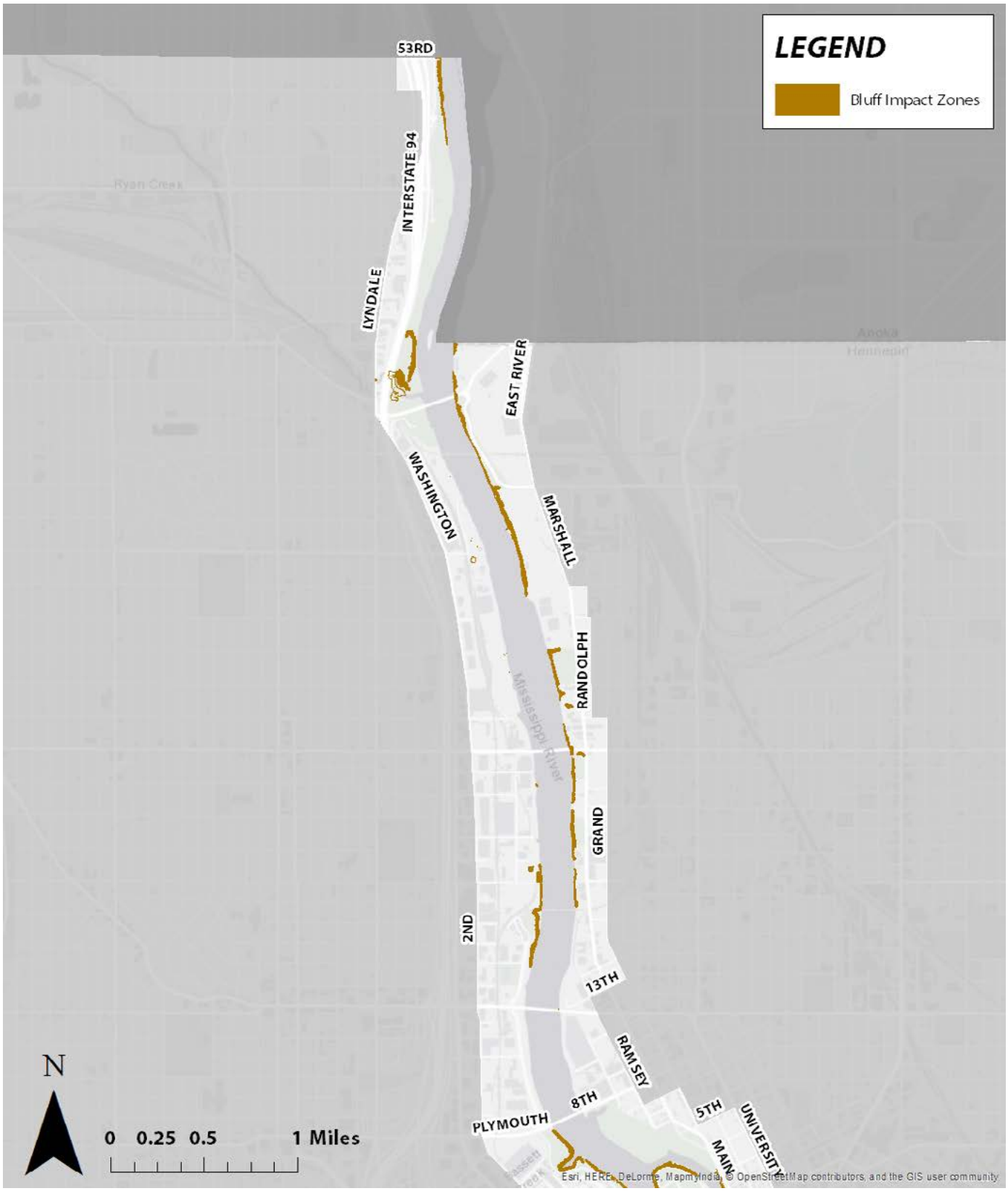


FIGURE 3-13: UPPER RIVER – BLUFF IMPACT ZONE.

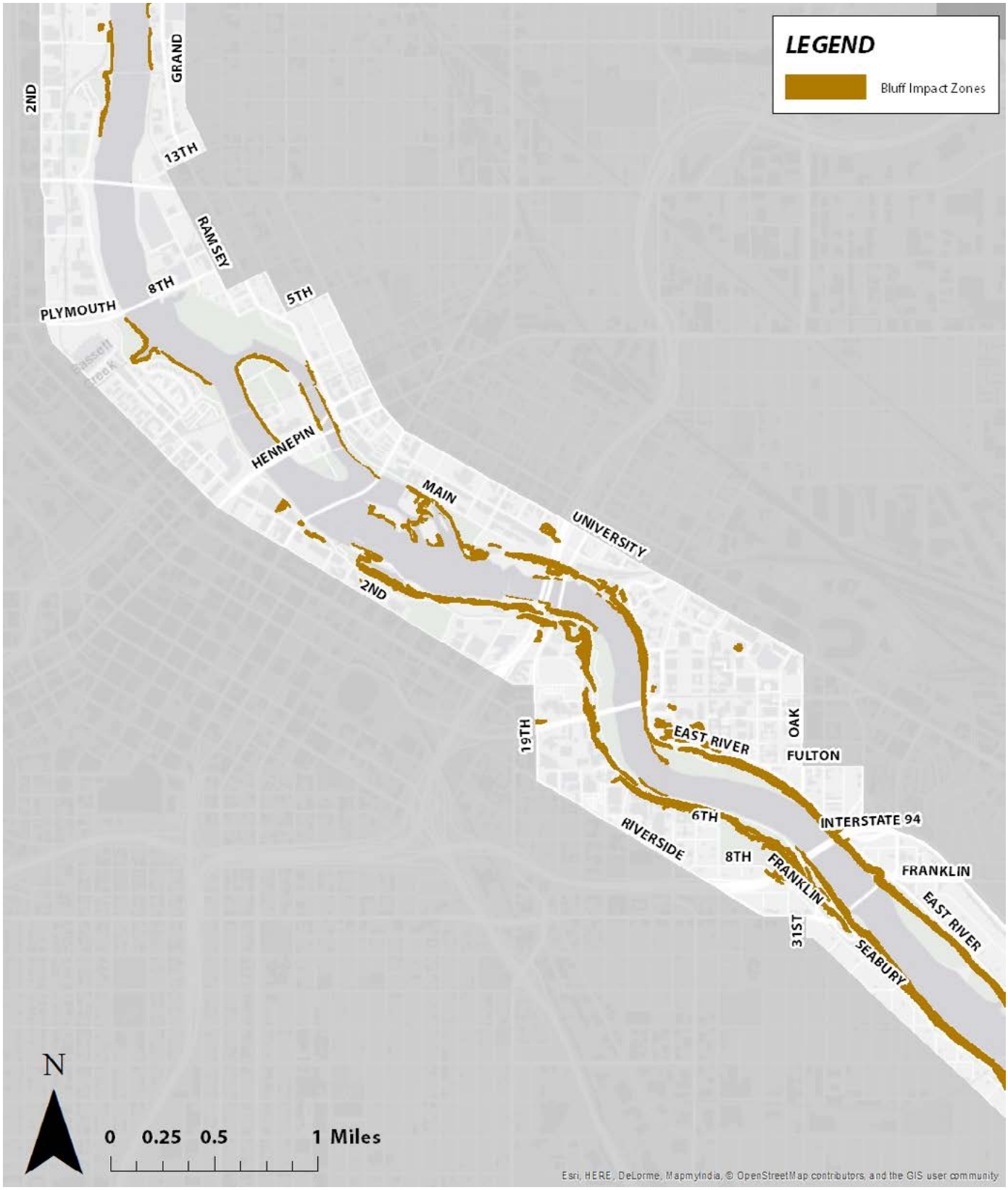


FIGURE 3-14: CENTRAL RIVER – BLUFF IMPACT ZONE.

FIGURE 3-15: LOWER GORGE – BLUFF IMPACT ZONE.

NATIVE PLANT COMMUNITIES & SIGNIFICANT EXISTING VEGETATIVE STANDS

MNative Plant Communities

Native plant communities are mapped by the DNR Minnesota Biological Survey (MBS) and identify sites that are 5 acres or greater and meet the criteria established by the MBS to qualify as a native plant community. The DNR describes native plant communities as follows:

> "A native plant community is a group of native plants that interact with each other and with their environment in ways not greatly altered by modern human activity or by introduced organisms. These groups of native plant species form recognizable units, such as oak savannas, pine forests, or marshes, that tend to repeat over space and time. Native plant communities are classified and described by considering vegetation, hydrology, landforms, soils, and natural disturbance regimes. Examples of natural disturbances include wildfires, severe droughts, windstorms, and floods.
>
> Sometimes referred to as native habitats or natural communities, native plant communities are named for the characteristic plant species within them or for characteristic environmental features.
>
> There are many kinds of vegetated areas that are not native plant communities. These include places where native species have largely been replaced by exotic or invasive species such as smooth brome grass, buckthorn, and purple loosestrife, and planted areas such as orchards, pine plantations, golf courses, and lawns. Other areas not considered to be native plant communities include areas where modern human activities such as farming, overgrazing, non-sustainable logging, and development have destroyed or greatly altered the vegetation."[1]

According to the DNR, native plant communities are important because:

> "Native plant communities provide a range of ecological functions that are increasingly recognized as valuable for the quality of life in Minnesota and even for human health and safety. Among these functions are water filtration, flood moderation, carbon storage, moderation of water-table level, local temperature moderation, erosion control, and development and enrichment of soil." In addition, they provide habitat for several thousand plant and animal species. They also played an important role in the development of Minnesota's cultural history and heritage."[2]

Appendix B, MRCCA Native Plant Communities, provides more detailed information on the identified Native Plant Communities.

Significant Existing Vegetative Stands:

The DNR identified a set of vegetation classes that were deemed significant for the purposes of the Mississippi River Corridor Critical Area (MRCCA), which shares the same boundaries as the Mississippi National River and Recreation Area. The Metropolitan Council describes significant existing vegetative stands as important because:

> "This vegetation provides high ecological value in addition to the water quality and scenic values of "natural vegetation." Ecologically, this vegetation provides species diversity, habitat for endangered and threatened plants (supporting 19 state-listed rare plant species and 15 state-listed rare animal species in the MRCCA), and a continuous corridor where plants and animals can naturally spread and disperse. This latter characteristic is especially important as habitat becomes more fragmented, climate change accelerates, and invasive species increase. In addition, these vegetation areas serve as living remnants of the original native communities that existed in the corridor, even though they do not meet the size and quality criteria to be classified as a Native Plant Community by the MBS."[3]

1 http://www.dnr.state.mn.us/npc/index.html

2 http://www.dnr.state.mn.us/npc/whyimportant.html

3 https://metrocouncil.org/Handbook/Plan-Elements/Land-Use/MRCCA/Files/PCAs.aspx

The DNR created mapping layers of significant areas based on a National Park Service inventory. Plant communities were considered significant when they were largely intact and connected and contain sufficient representation of the original native plant community to be identifiable as a distinct class.[4]

The following classes are considered significant:[5]

- Central Great Plains Tallgrass Prairie,
- Central Riverine Wetland Vegetation,
- Eastern North American Freshwater Aquatic Vegetation,
- Eastern North American Freshwater Marsh,
- Eastern North American Temperate Cliff,
- Eastern Temperate Wet Shoreline Vegetation,
- Laurentian & Acadian Pine - Oak Forest & Woodland,
- Laurentian-Acadian-Allegheny Alkaline Swamp,
- Midwest Wet Prairie & Wet Meadow,
- North-Central Beech - Maple - Basswood Forest,
- North-Central Oak - Hickory Forest & Woodland,
- Northern & Central Native Ruderal Flooded & Swamp Forest,
- Northern & Central Native Ruderal Forest,
- Northern & Central Ruderal Wet Meadow & Marsh,
- Riverine Mosaic Vegetation,
- Sand & Gravel Tallgrass Prairie,
- Silver Maple - Green Ash - Sycamore Floodplain Forest

The following classes are not considered significant:[6]

- Herbaceous & Woody Developed Vegetation,
- Herbaceous Agricultural Vegetation,
- Northern & Central Ruderal Meadow & Shrubland, Open Water (Non-USNVC), Woody Agricultural Vegetation

The removal of invasive plant species and replacement with native plantings is encouraged.

4 https://metrocouncil.org/Handbook/Plan-Elements/Land-Use/MRCCA/Files/PCAs.aspx
5 https://gisdata.mn.gov/dataset/biota-mrcca-vegetation
6 https://gisdata.mn.gov/dataset/biota-mrcca-vegetation

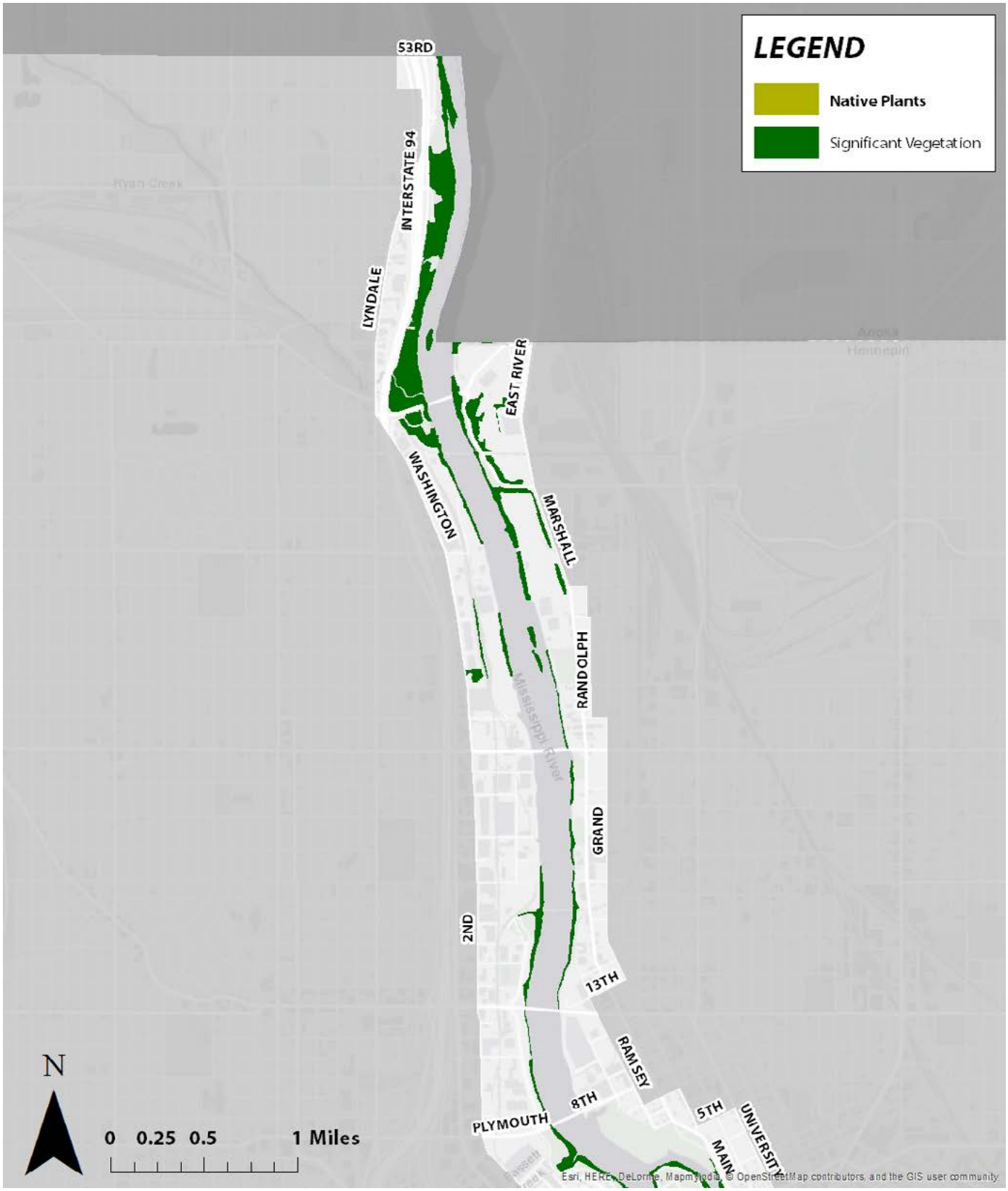


FIGURE 3-16: UPPER RIVER - NATIVE PLANT COMMUNITIES AND SIGNIFICANT EXISTING VEGETATIVE STANDS.

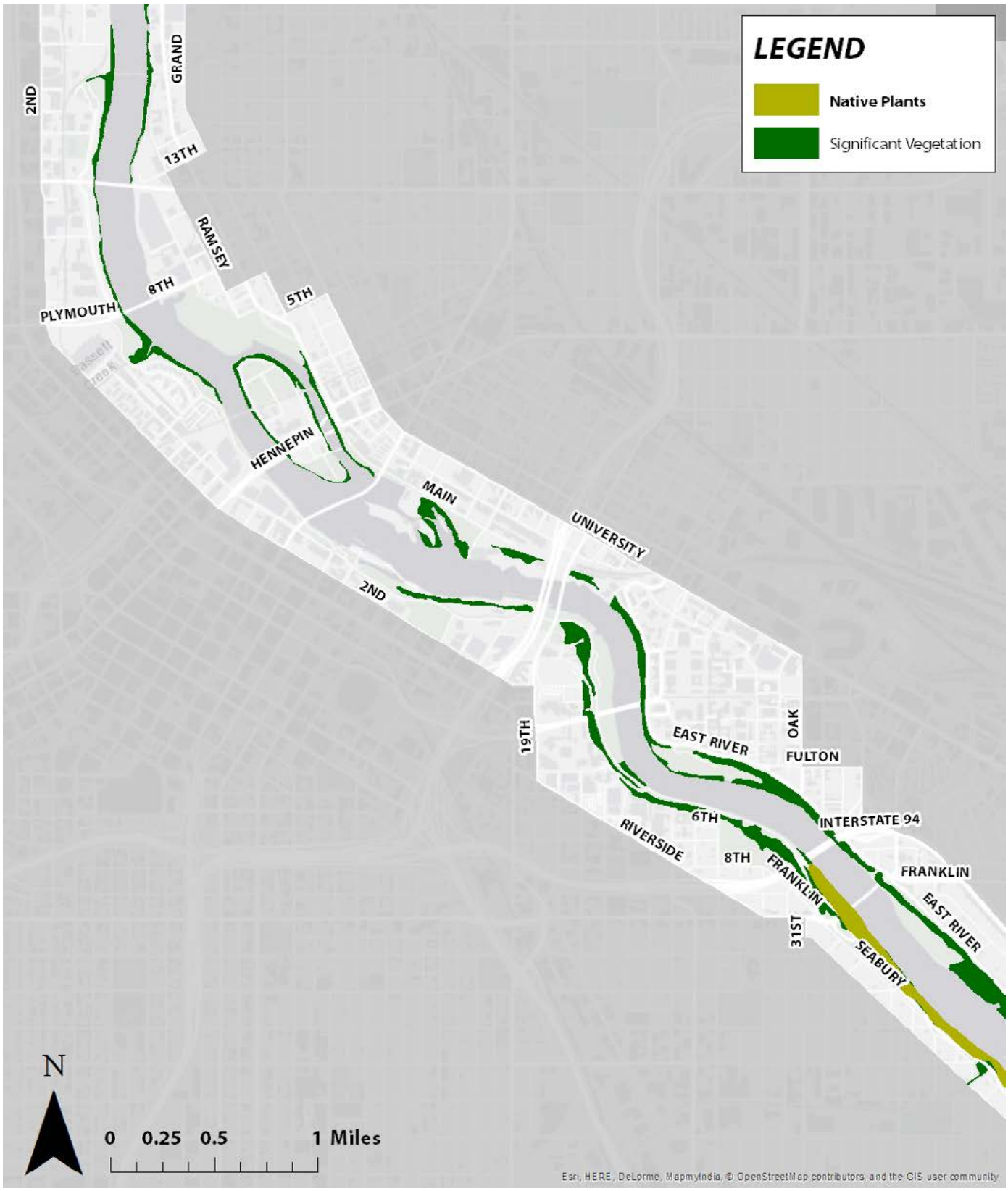


FIGURE 3-17: CENTRAL RIVER - NATIVE PLANT COMMUNITIES AND SIGNIFICANT EXISTING VEGETATIVE STANDS.

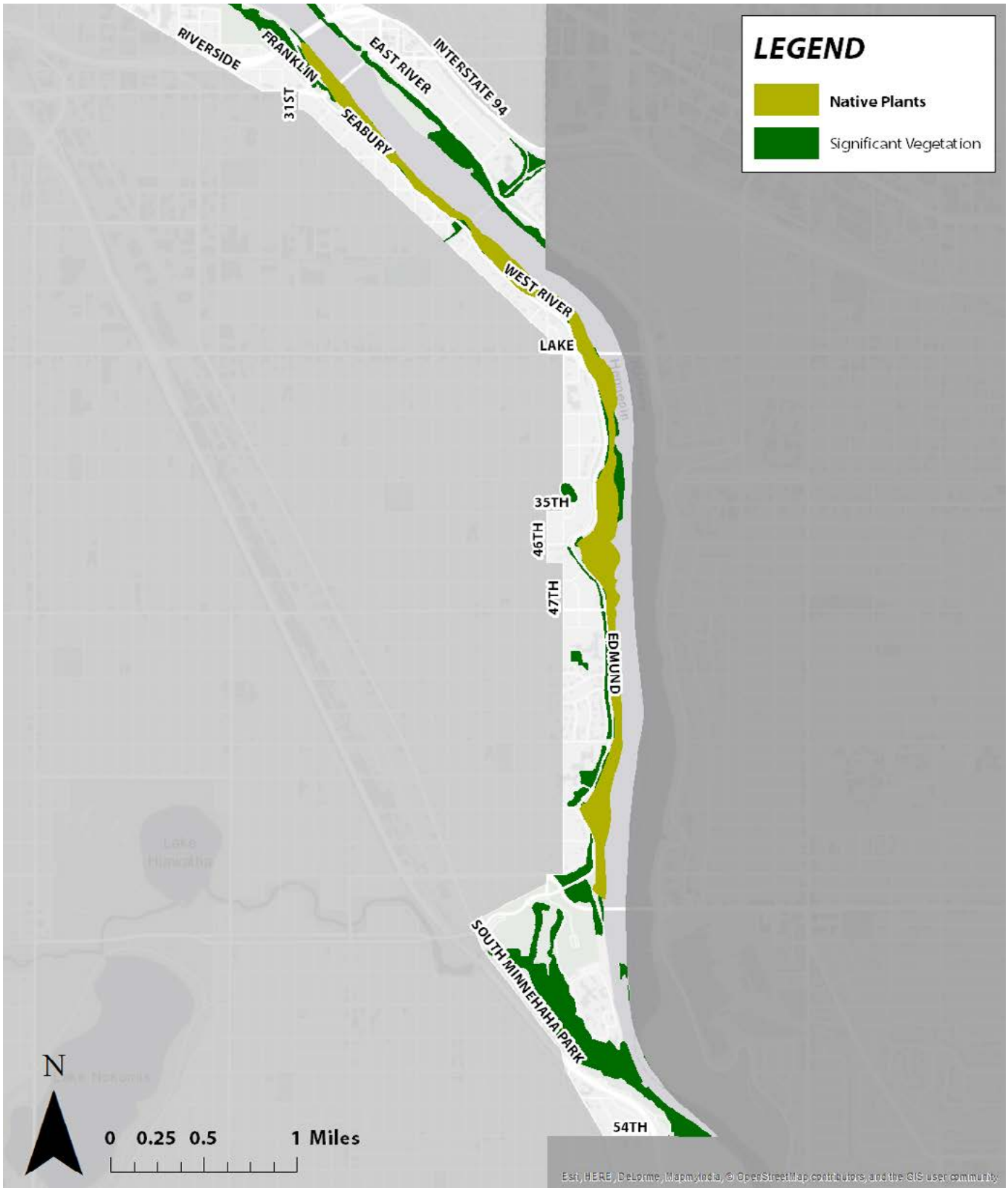


FIGURE 3-18: LOWER GORGE - NATIVE PLANT COMMUNITIES AND SIGNIFICANT EXISTING VEGETATIVE STANDS.

CULTURAL AND HISTORIC PROPERTIES

St. Anthony Falls has cultural and spiritual significance to the Dakota.[1] Near the banks of the Mississippi River are also many reminders of the settlement of Minneapolis. The river and falls had an important role in transportation and water power and they enabled the important lumber and flour milling industries. Thus, many historically-designated properties are located in the Central Riverfront.

National Historic Landmarks

- Pillsbury A Mill, 301 Main St. S.E.
- Washburn Mill Complex, S. 1st St. & Park Ave.

National Register of Historic Places

- Capellen Memorial Bridge (Franklin Ave. over the Mississippi River)
- Cedar Avenue Bridge (10th Ave. S.E. over the Mississippi River)
- Grace Evangelic Lutheran Church (234 Harvard St. S.E.)
- Grain Belt Beer Sign (4 Island Avenue West)
- Intercity Bridge (Ford Pkwy. over the Mississippi River)
- Lock & Dam No. 2 (Mississippi River north of Lake St.)
- Minneapolis (Grain Belt) Brewing Company (vicinity of Marshall St. & 13th Ave. N.E.)
- Minneapolis Fire Department Repair Shop (24 University Ave. N.E.)
- Minneapolis Warehouse Historic District (roughly bounded by River St., 1st Ave. N., 6th St. N., 2nd Ave. N., 5th St N., 5th Ave. N., 3rd St. N., & 10th Ave. N.)
- Minnehaha Historic District (roughly bounded by Nawadaha Blvd., Hiawatha Ave., Minnehaha Ave., W. 49th St., Minnehaha Creek & the Mississippi River)
- Minnesota Soldiers Home Historic District (roughly bounded by Minnehaha Pkwy., Minnehaha Creek & the Mississippi River)
- St. Anthony Falls Historic District (roughly bounded by 2nd St., 10th Ave. S., 6th Ave. S.E., University Ave., 3rd Ave. N.E., Main St. N.E., & Plymouth Ave.)
- Twin City Rapid Transit Company Steam Plant (12-20 6th Ave. S.E.)
- University of Minnesota Old Campus Historic District (roughly bounded by University Ave. S.E., East River Rd., Pillsbury Dr. S.E. & Church St. S.E.)

Local Landmarks and Historic Districts

- Capellen Memorial Bridge (Franklin Ave. over the Mississippi River)
- Florence Court (1022 University Ave. S.E.)
- Minneapolis (Grain Belt) Brewing Company (vicinity of Marshall St. & 13th Ave. N.E.)
- C.A. Smith Lumber Historic District (4401 and 4400-4430 Lyndale Ave. N.)
- Dinkytown Commercial Historic District (vicinity of 14th Ave. S.E. and 4th St. S.E.)
- Minnehaha Historic District (roughly bounded by Nawadaha Blvd., Hiawatha Ave., Minnehaha Ave., W. 49th St., Minnehaha Creek & the Mississippi River)
- St. Anthony Falls Historic District (roughly bounded by 2nd St., 10th Ave. S., 6th Ave. S.E., University Ave., 3rd Ave. N.E., Main St. N.E., & Plymouth Ave.)
- Warehouse Historic District (roughly bounded by 1st Ave. N., 2nd St. N., 4th Ave. N., 2nd Ave. N. & 6th St. N.)
- University of Minnesota Greek Letter Chapter House Historic District (roughly bounded by University Ave. S.E., 5th St. S.E., 10th Ave, S.E., Harvard St. S.E. & Delaware St. S.E.)

National Civil Engineer Landmarks

- Stone Arch Bridge of the Great Northern Railway (Mississippi River, south of St. Anthony Falls)

Potential Historic Resources

There are also other properties identified as potentially eligible for the NRHP or local designation within various environmental reviews, City files, small area plans, and historic studies or surveys of the City. Some properties that are not considered eligible at the time of writing of this document may be potential resources based on the passage of time or the identification of new information. As a part of the demolition and development review processes, buildings and sites are reviewed to determine if potential historic resources are present before any demolition or redevelopment.

1 http://www.ci.minneapolis.mn.us/www/groups/public/@cped/documents/webcontent/wcmsp-186155.pdf

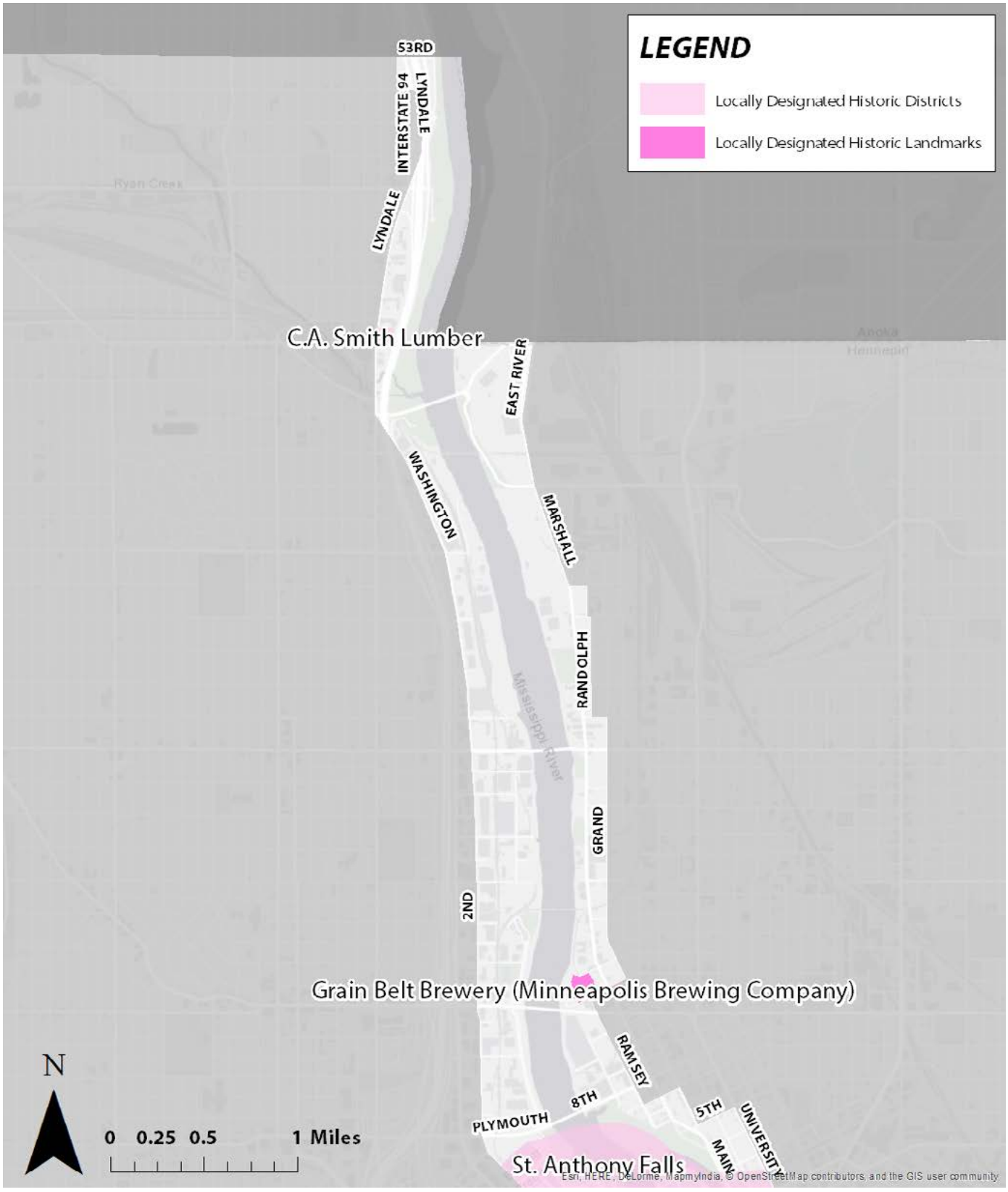


FIGURE 3-19: UPPER RIVER – HISTORIC DISTRICTS AND LANDMARKS.

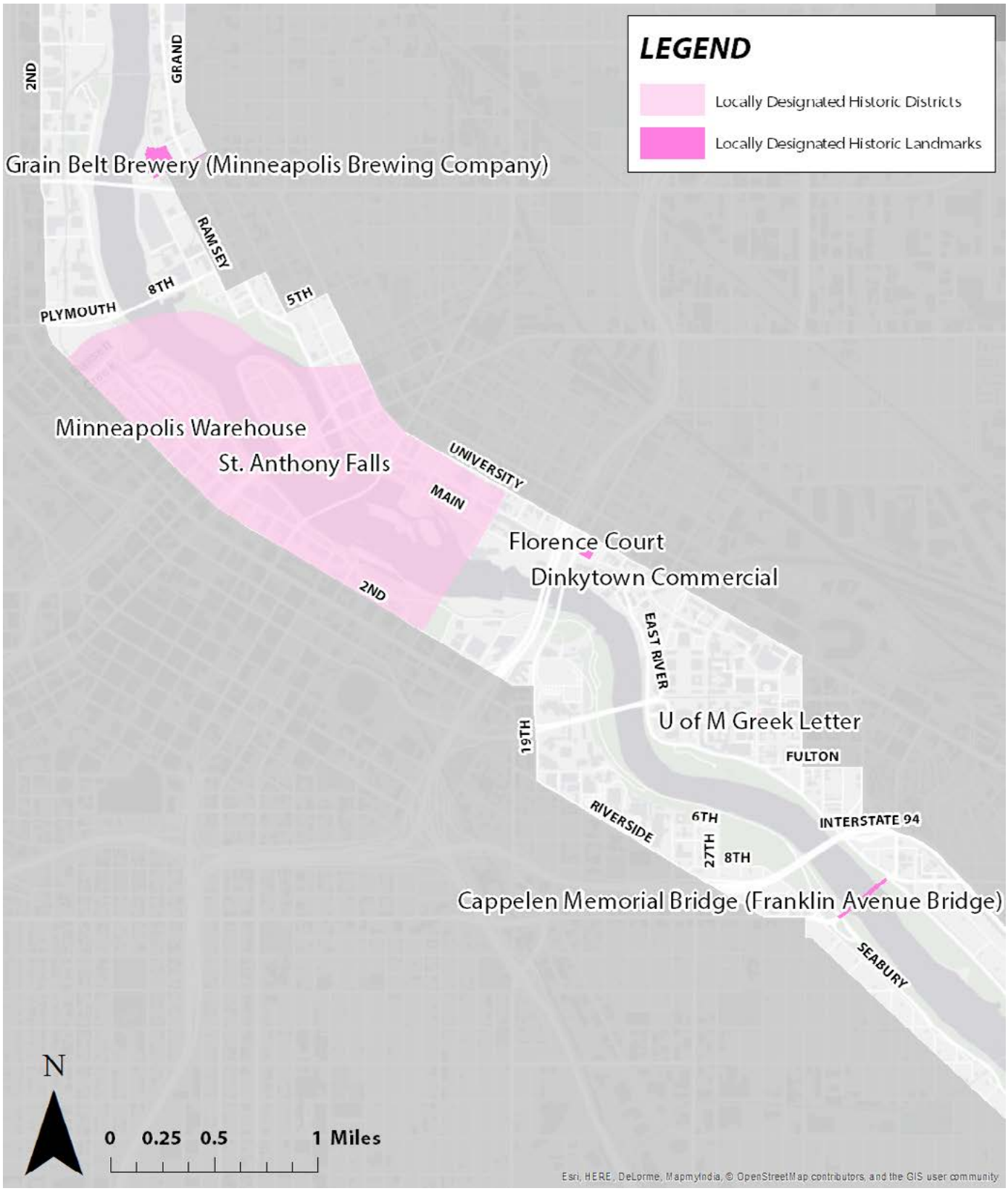


FIGURE 3-20: CENTRAL RIVER – HISTORIC DISTRICTS AND LANDMARKS.

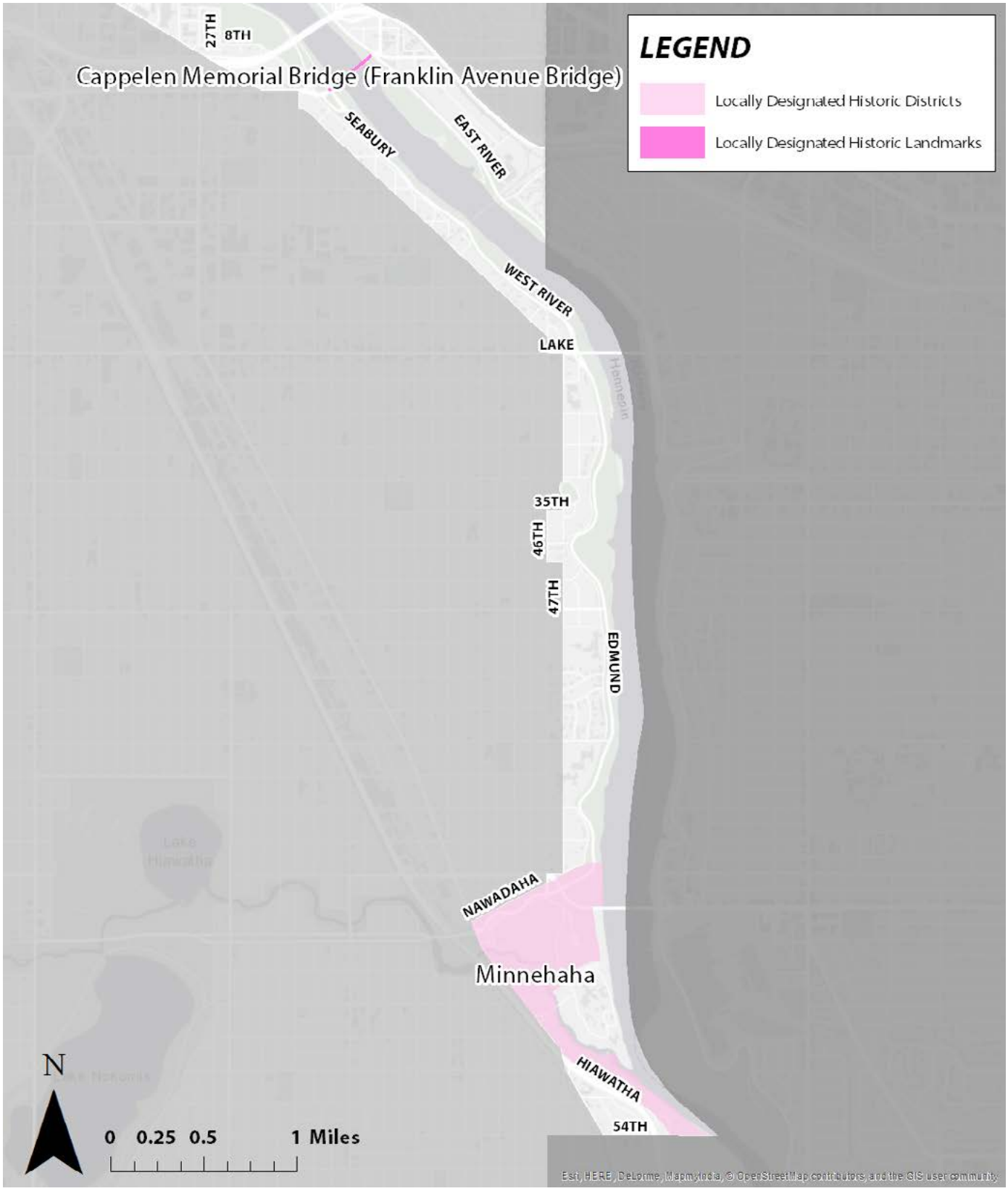


FIGURE 3-21: LOWER GORGE – HISTORIC DISTRICTS AND LANDMARKS.

GORGES

The Mississippi River Gorge is the only gorge on the entire length of the Mississippi River and was created by the retreating St. Anthony Falls over a period of 10,000 years. It runs approximately eight miles from Saint Anthony Falls in downtown Minneapolis to the Minnesota River confluence in Mendota, Minnesota (the lower gorge geographic area for the maps in this plan is generally between the Franklin Avenue Bridge and the southern city limits). Historically this area had an eight mile stretch of rapids, but for approximately the last century it has been impounded by locks and two dams that also produce hydropower.

The lower gorge is the least-changed section of the river, with limestone bluffs, natural springs, falls, oak savanna, and hardwood forests. Its steep, heavily wooded bluffs retain much of their original character. In fact, from the water it is difficult in some places to recognize that there is a major city just beyond view. It is an area of exceptional scenic beauty that is unique in the heart of the city. It has high-quality native vegetation and restored areas. It is an area of significant wildlife habitat and is a major migratory corridor for birds.

The West River Parkway runs along the river down to Minnehaha Park, and from there, a bicycle and pedestrian path extends along and below the bluff to Historic Fort Snelling State Park. Bohemian Flats, East River Flats, and Riverside Park are areas that provide easy access to the gorge. In other areas, access to the water is more difficult, but people have worn paths down the slopes. The area offers opportunities for hiking, birdwatching, canoeing and rowing, and photography. In the autumn the area can provide spectacular viewing as trees change colors.

In the Lower Gorge the prominent visual feature should be trees and bluffs. The district should continue to be managed to preserve and enhance those natural scenic qualities.

UNSTABLE SOILS & BEDROCK

Currently there is not a comprehensive inventory of all unstable soils and bedrock in Minneapolis. Some information can be found in the DNR report “Historical Landslide Inventory for the Twin Cities Metropolitan Area” (2016). The known historical landslides from this report located in the Minneapolis Critical Area are mapped in Figure 3-22. However, it is reasonable to assume that other areas with steep slopes could be unstable. For example, in June of 2014, there was a major landslide on the West River Parkway between Franklin Avenue and 4th Street South. This landslide required a major repair and closed the parkway until September of 2016. Therefore, development or alteration of terrain in or near those areas of steep slopes should be evaluated with regard to the possibility of unstable soils or bedrock. Further, stormwater management and drainage plans for development should consider the effect of stormwater and drainage on bluffs. Hennepin County has commissioned an atlas to identify known landslides. When this atlas is completed it will be a resource for the MRCCA in Minneapolis regarding unstable soils and bedrock.

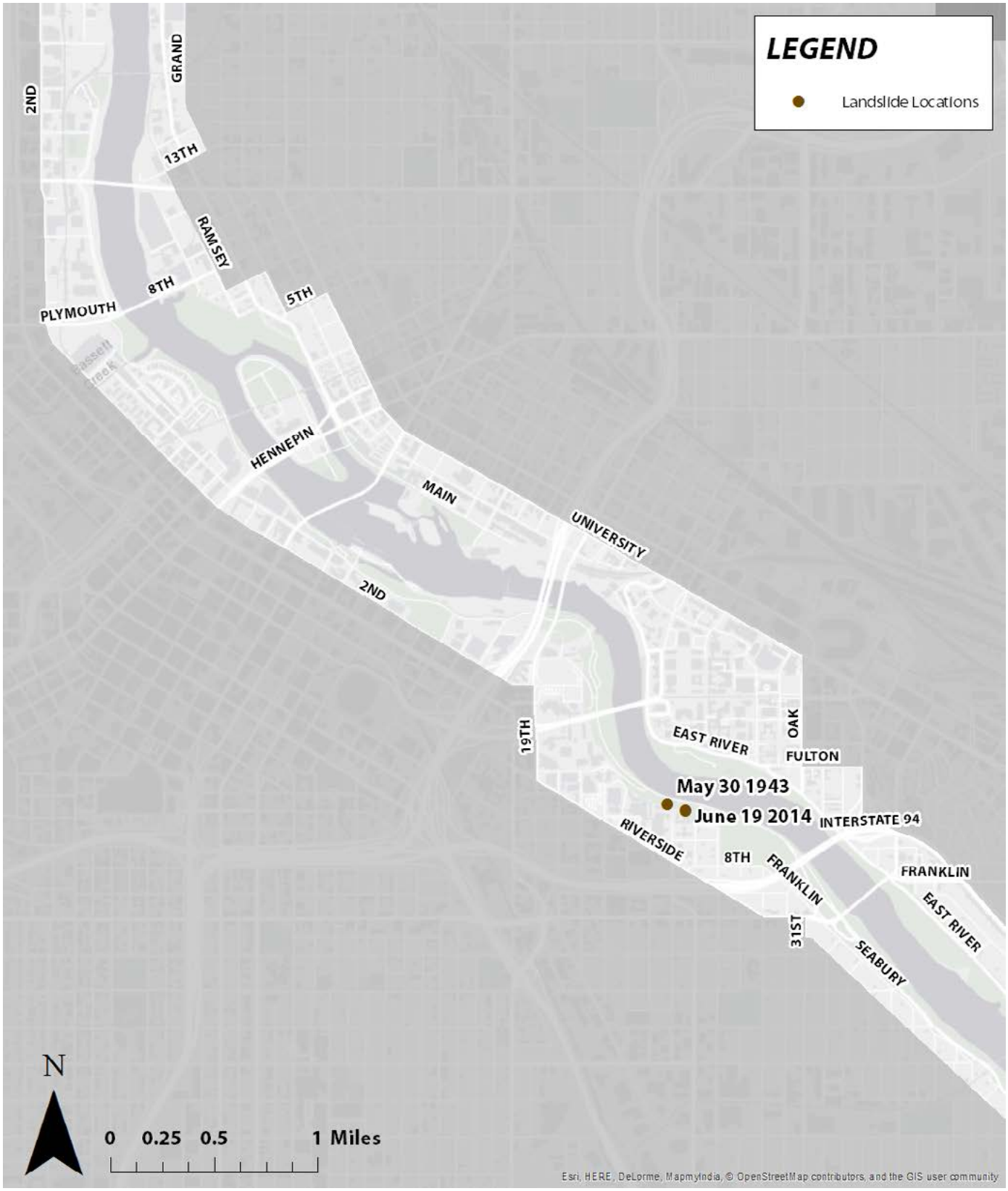


FIGURE 3-22: HISTORIC LANDSLIDES.

Chapter 4 - Public River Corridor Views

Protecting views of and from the river is an objective of the Critical Area Act. In addition, preserving or improving the appearance of urban development within the Critical Area will also enhance the experience of using the corridor and enjoying the river. Changes in the river corridor should complement the visual characteristics of the river. The first aspect of providing for visual quality along the river is to control and guide actions which might have adverse visual impact. However, this is not intended to prevent development in the MRCCA where shown as appropriate by adopted City plans and as regulated by the Critical Area districts and rules.

PUBLIC VIEW IMPACTS

Each of the three river sections has its own unique built and natural environments that feature prominently in its views. New development should support and highlight these characteristics, while minimizing negative impacts.

Upper Riverfront

The relatively low and gentle slopes that characterize the upper riverfront gave rise to the heavy industrial land uses on both banks. Views along this stretch (St. Anthony Parkway to Boom Island Park) are characterized by easy access to the river's edge and long views to downtown. As land uses diversify into residential and mixed uses, supportive and parallel uses specific to the river access, such as recreation and habitat restoration will complement the existing views and allow for new ones. Existing views could also be improved with overlook structures, stairways, piers, or shoreline walkways. Shoreline edges should focus on reducing erosion and restoring native habitat while occasionally allowing hard edges for direct water access at key locations.

In general, the Public River Corridor Views (PRCVs) do not prohibit development of buildings or structures visible from the river, as guided by the land use categories of the comprehensive plan and the MRCCA districts. Therefore, new development should be designed to improve views by providing a striking background to the river's shoreline through building and site landscape design. Care should be taken that views of downtown from prime locations are not significantly obstructed by larger buildings. Where there are street or right-of-way corridors leading to the river, development should not encroach into these areas and block views from the adjacent neighborhoods to the river. Tiering and tapering of buildings with landscaping and buffering, as described in Chapter 2, are important strategies for implementing development.

Uses or activities that may have a negative impact on visual quality, such as surface parking, outdoor storage, mechanical equipment, utilities, communication towers or antennas, transmission lines, large scale solar energy systems, and billboards are discouraged form locating in PRCVs. If allowed by the zoning ordinance or other applicable regulations and no other reasonable location is possible, they should be reduced in scale and scope and landscaped and screened from the river to the extent possible.

Central Riverfront

The central riverfront in downtown Minneapolis is a dramatic showcase of history, culture, infrastructure, architecture, and geology. Views here (Hennepin Avenue Bridge to East River Flats Park) often offer 360 degrees of breath-taking sights, drawing tourists and locals alike in all seasons. The current river edge conditions vary a great degree from a formal, European-style edge along West River Parkway near the Hennepin Avenue Bridge to the wild, untidy ruins at Father Hennepin Park. It can be difficult to access the river's edge in some areas, which is especially unfortunate given its unique potential for seeing and experiencing the power of the river. The central riverfront could be greatly improved with more and better access to the water, which could be accomplished

through structured river edges and new locations for unique downtown experiences along the riverfront, such as outdoor dining, strolling, boating, and places to sit and enjoy the views. Both the built and natural environments here offer a substantial degree of enclosure along the riverfront with tall buildings atop bluffs.

In general, the PRCVs do not prohibit development, as guided by the land use categories in the comprehensive plan. New development should respond to this context with a height, bulk, and form that is in keeping with a major metropolitan downtown and historic district, as this will reinforce and enhance the strengths of existing views.

Uses or activities that may have a negative impact on visual quality, such as surface parking, outdoor storage, mechanical equipment, utilities, communication towers or antennas, transmission lines, large scale solar energy systems, and billboards are discouraged form locating in PRCVs. If allowed by the zoning ordinance or other applicable regulations and no other reasonable location is possible, they should be reduced in scale and scope and landscaped and screened from the river to the extent possible.

Lower Gorge

The lower gorge's steep bluffs, wooded river bottoms, hidden sand beaches, and picturesque bridges offer a strong and quiet refuge in the heart of a major metropolitan area. The most dramatic views are from its bridges (Franklin Bridge to Ford Bridge), but there are also notable views from the river edges at the base of the bluffs, though access here is difficult. In order to accentuate its existing natural environment -- which contributes so prominently to the views -- native plant communities and bluffs should continue to be preserved and restored. Existing stairs and trails that access the river edge and existing overlooks should be maintained and improved for accessibility. Certain views would benefit from the thoughtful trimming of overgrown vegetation at key locations.

In the Lower Gorge the prominent visual feature should be trees and bluffs. The important PRCV is the gorge. Therefore, the district should continue to be managed to preserve and enhance those natural scenic qualities. From the I-94 Bridge to the southern city limits, the bluffs of the Mississippi River Gorge should be protected from development in the MRCCA that is visible from the opposite shoreline. Any development that removes vegetation of is visible from the river should be discouraged. However, where development is river dependent, such as parks and park facilities, or for necessary infrastructure where no reasonable alternative is possible, then the structures should be reduced in scale and scope to the extent possible and landscaping and screening should be utilized to mitigate the impact of the development. Given the gorge's unique qualities, buildings or structures situated close to the bluffs that tower over the tree line and feature prominently in identified views would negatively impact the area and should be avoided. From this vantage point, structures atop the bluff should not be readily visible above the tree tops as seen during the summer months. To that extent, the gorge area is within districts (CA-ROS and CA-RN) that have height limits of 35 feet. The exception to this is views of the University of Minnesota and the downtown skyline, which come into view upstream of Lake Street.

PUBLIC VIEW CORRIDOR IDENTIFICATION

The river corridor contains some of the most iconic and cherished scenic vistas in Minnesota and is one of the reasons the corridor was designated a critical area. PRCVs is a term defined in the Critical Area rules and used as a means to protect scenic views. The rules define PRCV as:

- Views toward the river from public parkland, historic properties, and public overlooks.
- Views toward bluffs from the ordinary high water level of the opposite shore, as seen during the summer months.

Guidance from the DNR and Metropolitan Council indicates that other scenic views that are valued by the community may be identified and that views from specific places that

are accessible to the public can also be mapped and described.

The PRCV in this plan include some views identified in City adopted plans and historic district guidelines. In addition, further view corridors toward the river were identified from public parks and property, historic properties, streets, and bridge overlooks. Also, views toward bluffs from the ordinary high water level of the opposite shore and from public parks and bridge overlooks were included. The views illustrated in this plan are not an exhaustive list of every public river corridor view and are intended to provide a representation of types of important views. In general, the types of views are organized into the following groupings:

Public Parks – Public Parks, while enhancing the beauty of the river, are also important areas for preserving public access to the river and views of the river corridor. This document shows views from several parks to emphasize policy support for maintain and improving viewing areas and the importance of public access to the river and views of the river. The omission of an identified view park in this document does not imply that it is not an appropriate place from which to view the river. The identification of a specific view in a park does not indicate that it is the only place in the park where there are river views.

Overlooks – Overlooks will most often be located in parkland or on bridges. They are important as public access points to allow views of the river corridor.

Bridges – Many existing bridges are important cultural or aesthetic elements of the corridor. This document shows views from several bridges to emphasize that bridge conversion, rehabilitation, or reconstruction should maintain, improve, or add opportunities for river views from the bridge.

Historic Properties – Where public viewing areas are added to historic properties the appropriate district or landmark guidance should be consulted.

Street Corridors – Streets perpendicular to the river provide corridors from the neighborhoods to the river. In some cases, such as 26th Avenue North, their termination at the river is planned for an overlook at the river bank. In other places the streets terminate at parkland. Therefore, vacations of these rights-of-way to allow for the construction of structures is strongly discouraged to prevent these view corridors to and from the river to be blocked.

Lower Gorge – In the Lower Gorge the important PRVC is the gorge. Therefore, this plan list some representative locations as PRCVs, but not every possible spot in the gorge, because at almost any place one has a PRCV toward bluffs from the ordinary high water level of the opposite shore, as seen during the summer months.

See **Figures 4-1** through **4-3** for locations of representative PRCVs listed in this plan. A narrative, map, and pictures are proved in **Figure 4-4**, MRCCA Public River View Corridors.

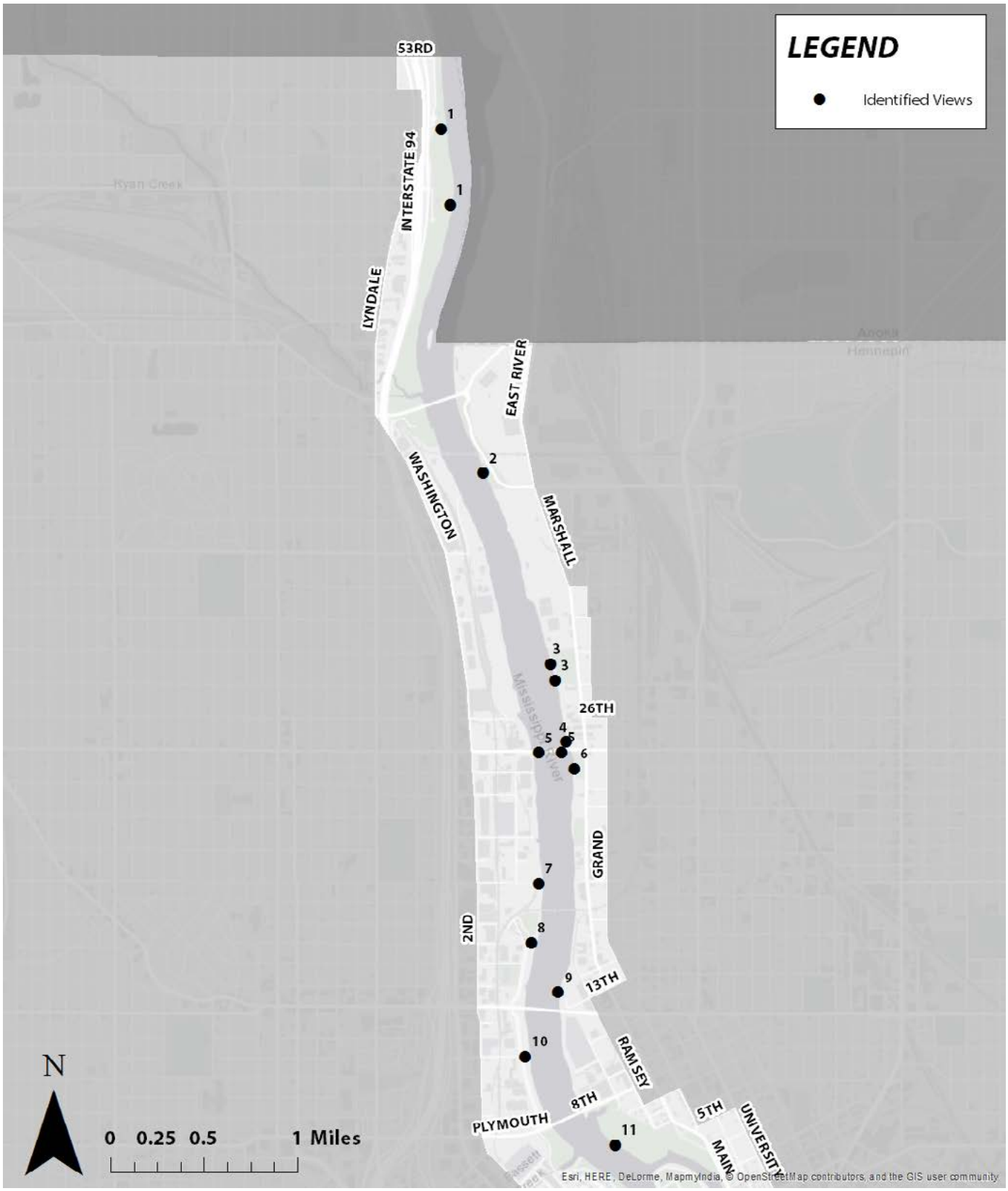


FIGURE 4-1: UPPER RIVER - PUBLIC RIVER CORRIDOR VIEWS.

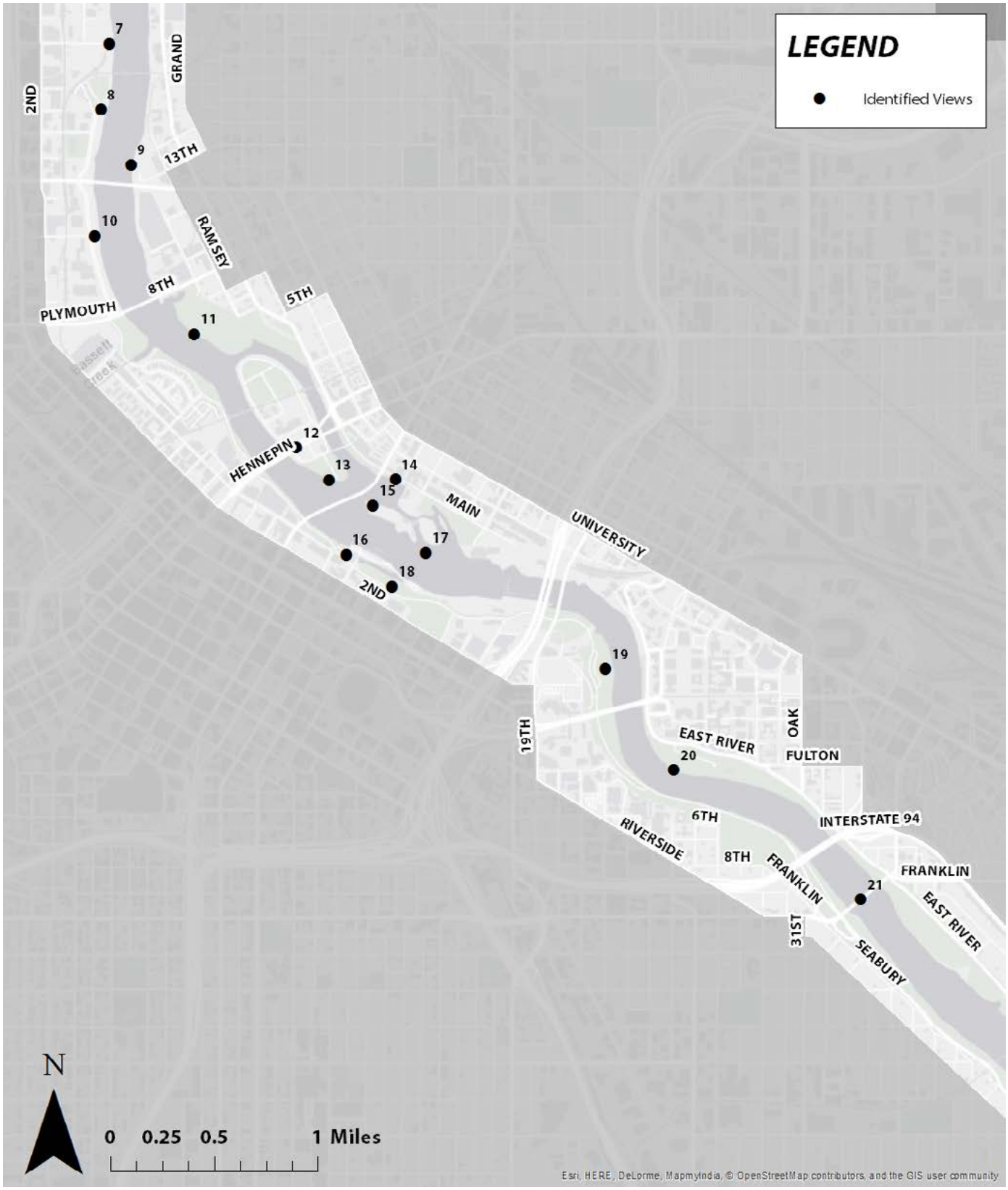


FIGURE 4-2: CENTRAL RIVER - PUBLIC RIVER CORRIDOR VIEWS.

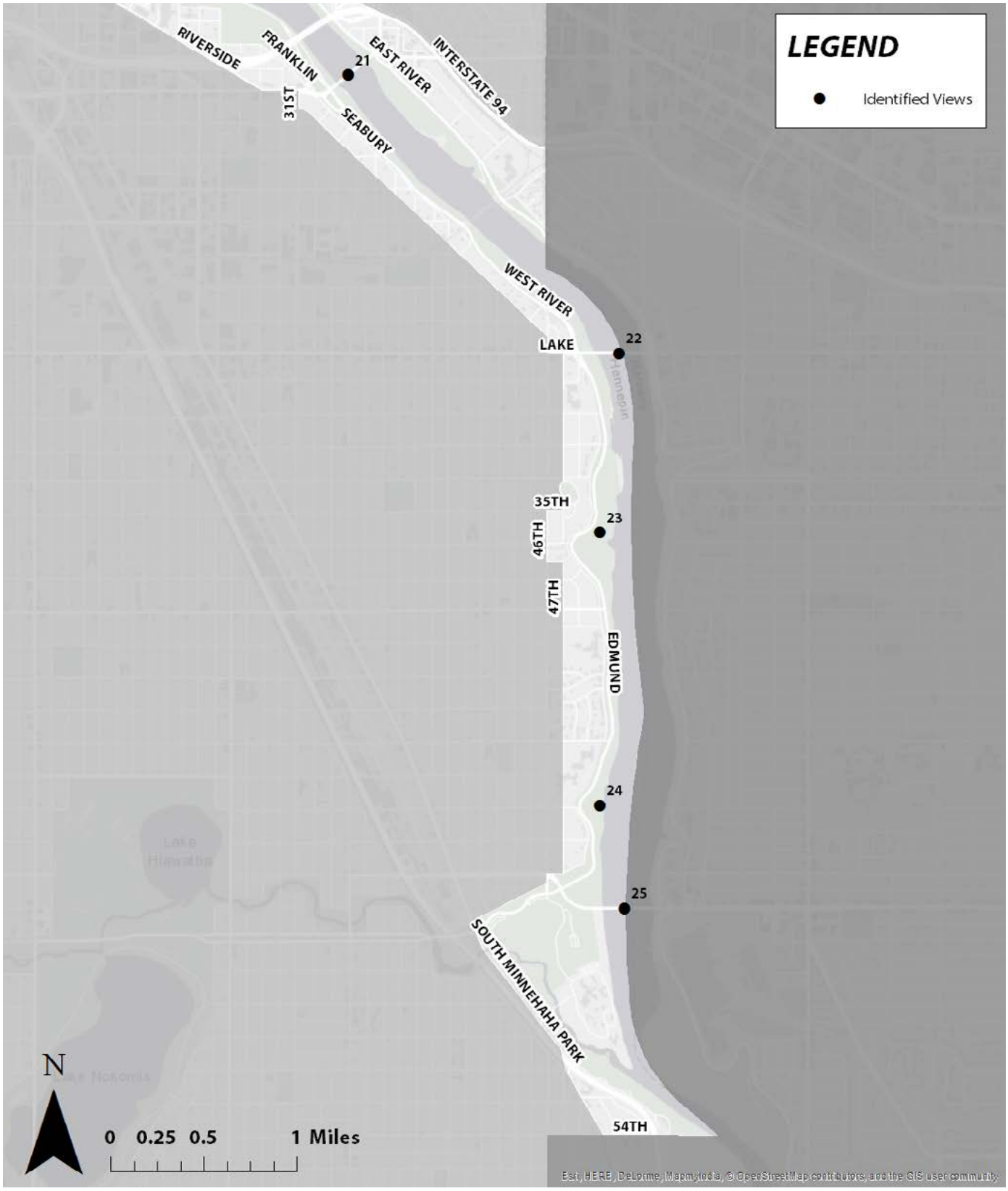


FIGURE 4-3: LOWER GORGE - PUBLIC RIVER CORRIDOR VIEWS.

FIGURE 4-4: MRCCA PUBLIC RIVER CORRIDOR VIEWS

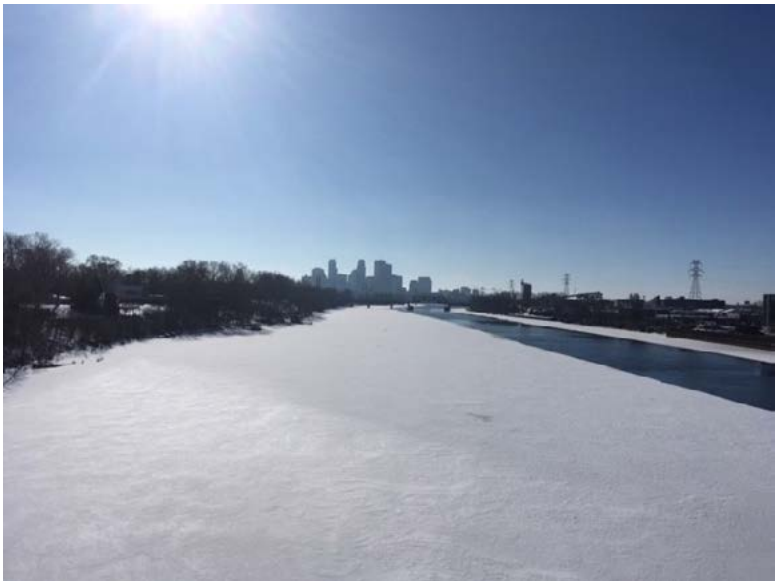
1. North Mississippi River Regional Park - The North Mississippi River Regional Park extends from just south of the Camden Bridge in Minneapolis north through Brooklyn Center and Brooklyn Park to the Coon Rapids Dam (north of 53rd Avenue North is outside of Minneapolis). The regional park provides a scenic view of the river's east bank including the Minneapolis water treatment and distribution facility in Fridley and several small islands. Example view locations are depicted at the Camden Boat Launch south of 42nd Avenue North and at the Kroening Interpretive Center.

2. St. Anthony Parkway - The Grand Rounds Trail along St. Anthony Parkway provides a scenic view of the river's west bank. Upstream is a view of an historic railroad bridge, while downstream is a unique scene which contains the downtown skyline, Lowry Bridge and visually-interesting structures at Upper Harbor Terminal. In warmer seasons these views may be hindered by the shoreline vegetation. The riverbank offers several locations for a prospective overlook or promenade along the river for public access..

3. Marshall Terrace Park - Views from Marshall Terrace Park were identified in the Above the Falls: Upper River Master Plan for Minneapolis due to its high banks and good observation points. The western border of the park offers expansive views, to the south is the downtown skyline and Lowry Bridge and to the north are views of the upstream islands. The islands are home to Blue Herons, Sandpipers and Peregrine Falcons adding an ecological element to the views. Marshall Terrace Park has existing infrastructure allowing the public access to the riverbank to enjoy the views and marking the park as a destination for birdwatchers.

4. Mississippi Watershed Management Organization (MWMO) - The Mississippi Watershed Management Organization (MWMO) provides the public a wonderful opportunity to learn about the health of the Mississippi River while accessing views of river. This location gives the public an up close and personal view of the Lowry Bridge, especially when the bridge is lit at night. A section of the downtown skyline can be viewed underneath the bridge while standing on the riverbank.

5. Lowry Avenue Bridge Lookout - The Lowry Avenue Bridge has four lookout spaces - two facing north and two facing south - which offer unobstructed elevated view corridors of the Mississippi River in both directions. Upstream are views of multiple bridges, parkland, Upper Harbor Terminal, the "bird sanctuary" islands and Betty Danger's famous Ferris wheel to the east. Downstream has a wide and central view of the entire downtown skyline. The banks on both sides of the river present opportunities for visual enhancements.



6. Edgewater Park - Adjacent to the Lowry Avenue Bridge, Edgewater Park grants the public clear views of the bridge and a slight view of downtown from its high bank outlook. In warmer seasons views of downtown are hindered by the overgrown shoreline vegetation. Pruning measures could improve the view shed in the future. Across the river, on the west bank are possible opportunities to create landscapes which add visual interest to the shoreline and enhance the view.

7. 26th Avenue North - Where 26th Avenue North terminates at the river is a location for a future overlook that would provide a scenic view of the river's east bank. The street has just been reconstructed as a bikeway stretching from With Park at the west end of the city across north Minneapolis connecting to the Mississippi River. Currently the land adjacent to the river in the area proposed for a future overlook is overgrown and not a welcoming area for viewing the river.

8. Orvin "Ole" Olson Park - Orvin "Ole" Olson Park has an expansive unobstructed view downstream of the entire downtown skyline. On the east bank the public has views of the shoreline, the landmark sculpture in Sheridan Memorial Park and the historic Grain Belt Towers in the distance. Although the view upstream is hindered, there is a direct view of the historic railroad bridge. The park's low elevation allows the public to hear the sounds of the river and feel close to the water. In the RiverFirst report, the potential Great Northern Greenway River Link along the west riverbank could possibly extend access of these views further upstream.

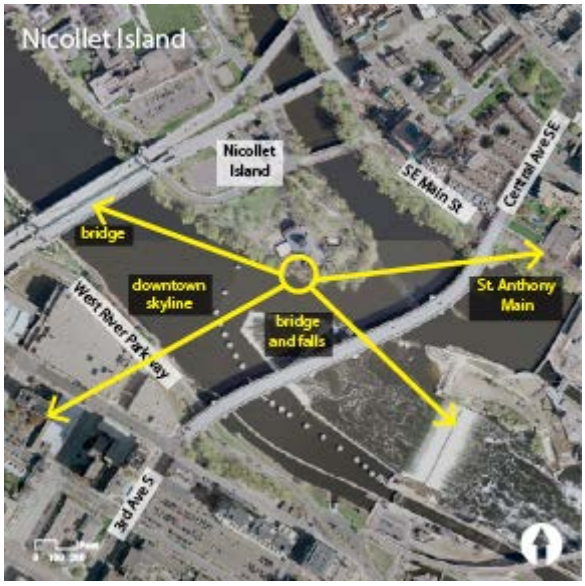
9. Sheridan Memorial Park/Hall's Island - Sheridan Memorial Park is home to a marvelous tribute to our city's fallen soldiers and lovely views of Mississippi River from the east bank. Serene views of the historical railroad bridge to the north, Orvin "Ole" Olson Park and the shoreline to the west and the West Broadway Bridge and downtown's skyline to the south are visible form this location. Sheridan Memorial Park's proximity and openness to the river allows visitors and its adjacent commerce community to connect to the river. Additional views will be provided in this area when access is added to the newly constructed Hall's Island (not depicted in the pictures below).

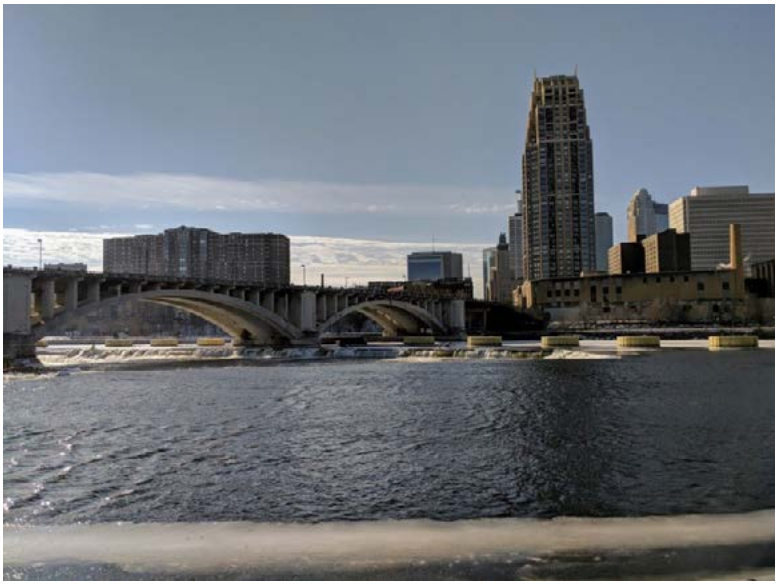
10. 17th Avenue North - 17th Avenue North is a main east-west connection that runs from Washington Avenue North to the West River Parkway. At its terminus there is a park and an overlook that provides views of the newly constructed Hall's Island and of downtown.

11. Boom Island Park - Boom Island Park was identified in the St. Anthony Falls Historic District Design Guidelines due to its expansive unhindered views of downtown Minneapolis. As with Sheridan Memorial Park, Boom Island also has close proximity and openness to the riverbank allowing visitors to fish or take photos from the outlooks. Boom Island is even home to a lighthouse at the northern portion of the park. To the north the public can view upstream, the lighthouse and Plymouth Avenue Bridge. To the west are views of the shoreline's floodplain forest and to the south is the entire downtown skyline with a railroad bridge in the background. The variety of visual features adds to the sightseeing experience at this location.

12. Hennepin Avenue Bridge - The Hennepin Avenue Bridge provides clear elevated views of the river's east and west banks, as noted in the St. Anthony Falls Historic District Design Guidelines. Upstream are views of Nicollet Island, the architectural frame of an old railroad bridge, natural vegetation along West River Parkway and the historic Grain Belt Beer sign towering over the natural riparian buffer. Downstream is a wide view of the entire downtown sector including the US Bank Stadium, the Guthrie Theater, the Horseshoe portion of St. Anthony Falls and 3rd Avenue Bridge.

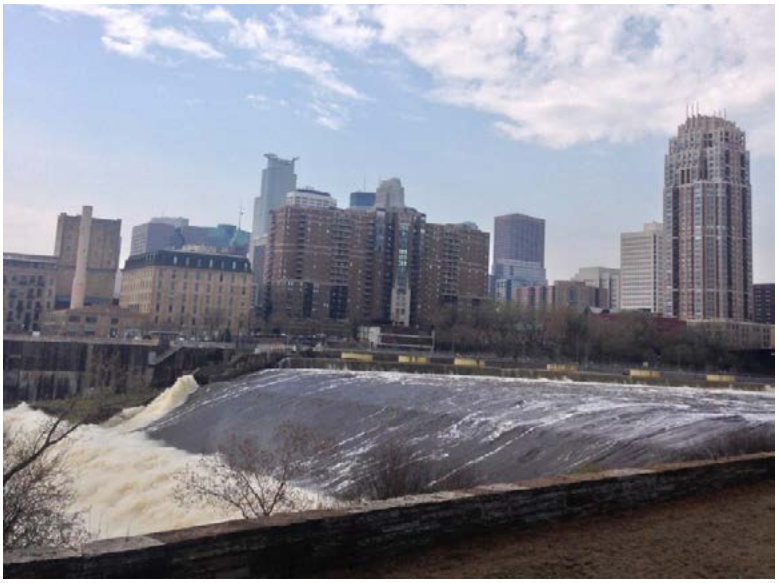
13. Nicollet Island - The southern tip of Nicollet Island was noted in the St. Anthony Falls Historic District Design Guidelines being a key view opportunity along the river. Located in the center of the Mississippi above St. Anthony Falls, this site provides a one of a kind experience to view the city and the Mississippi from the river itself. The public will get a human scale perspective of the Hennepin Avenue Bridge, the downtown skyline, St. Anthony Falls and commerce on St. Anthony Main. Likewise, looking south, the public will get an up close view of the architectural arches and details of the 3rd Avenue Bridge.





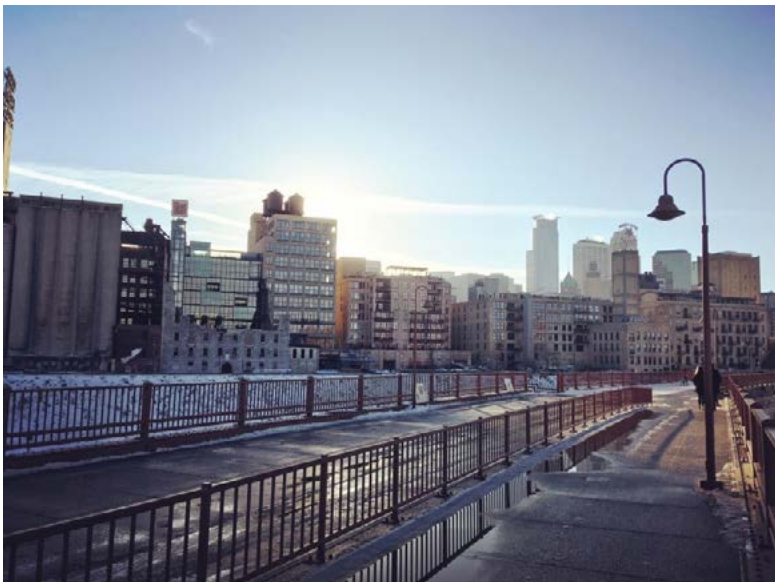
14. St. Anthony Main - The St. Anthony Falls Historic District Design Guidelines selected St. Anthony Main on the east riverbank as a key viewpoint site. Its openness to the river gives people strolling or dining on Southeast Main Street a tranquil scene of the west riverbank, filled with views of the downtown skyline, Water Power Park, Nicollet Island, Mill District, 3rd Avenue Bridge and the landmark Stone Arch Bridge.

15. Water Power Park - Water Power Park was identified in the St. Anthony Falls Historic District Design Guidelines due to views from Hennepin Island in all directions. The northern tip of Water Power Park provides the public with a rare, unobstructed, 360-degree views of the core of the city while located in the middle of the Mighty Mississippi River. The view highlights both the east and west banks of the river consisting of the downtown skyline, Mill District, the University of Minnesota campus, Stone Arch Bridge and St. Anthony Falls, the only natural waterfall on the Mississippi River.

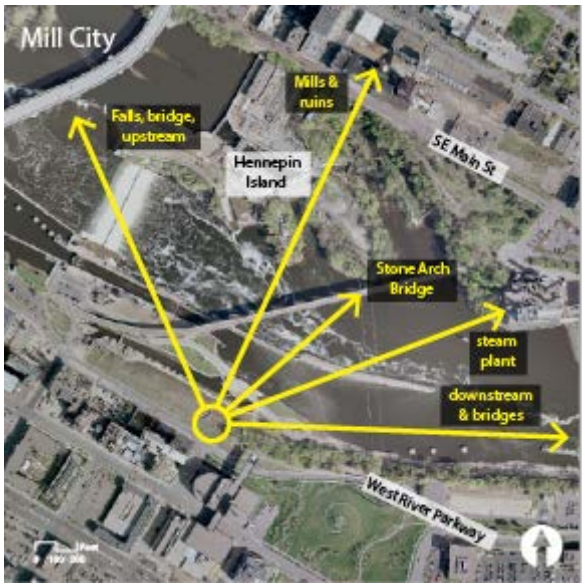


16. Downtown West Bank/Lock and Dam Visitor Center - The St. Anthony Falls Historic District Design Guidelines and RiverFirst Report acknowledged the Downtown West Bank as a critical location for river views. The future home of Water Works Park has a view shed of Nicollet Island, 3rd Avenue Bridge, St. Anthony Falls and Water Power Park, the east riverbank by St. Anthony Main, Hennepin Island, Stone Arch Bridge and the steam plant. Additional views closer to the river are available in this area at the St. Anthony Falls Lock and Dam Visitor Center.

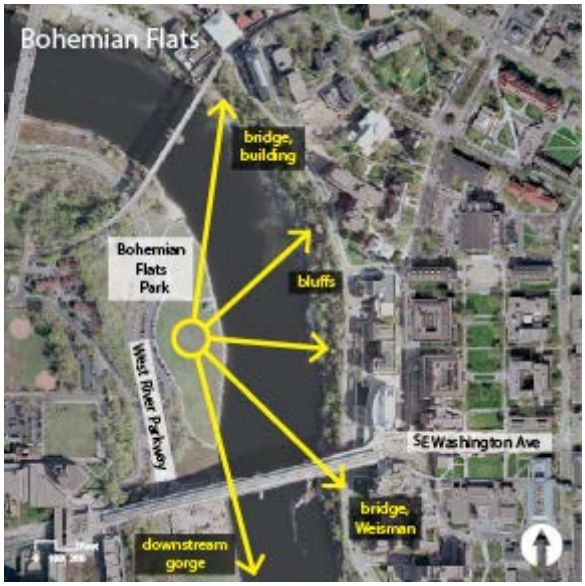
17. Stone Arch Bridge - The Stone Arch Bridge is a historic landmark in Minneapolis and its views were noted in the St. Anthony Falls Historic District Design Guidelines. The Stone Arch Bridge gives its visitors an elevated unobstructed view of the river from all angles, branding it as a city destination. It is the best place in the city to encounter the power of St. Anthony Falls and to see the natural beauty of Father Hennepin Bluff Park in one location. The river views of both the east and west banks consist of the Hennepin Avenue Bridge, the downtown skyline, Mill City District, Mills Ruins Park, the University of Minnesota campus, Water Power Park, Hennepin Island, Interstate 35 Bridge, Gold Medal Park, the steam plant and as noted St. Anthony Falls. In addition to an intimate view of the massive St. Anthony Falls' Lock and Dam which gives visitors a historic perspective of how the river has been altered over time.



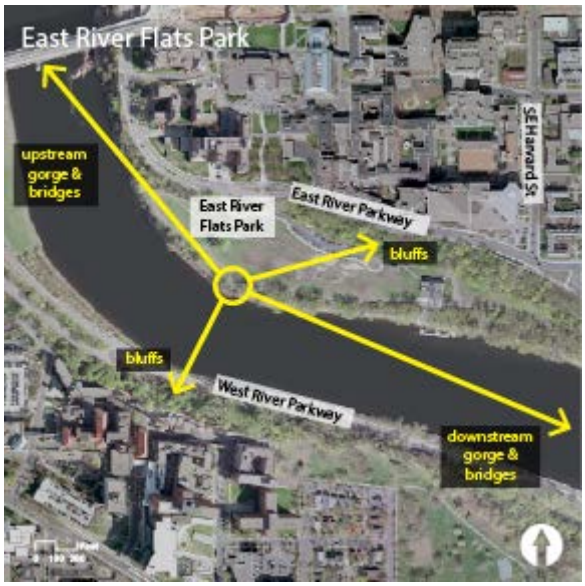
18. Mill City District - The Mill City District was identified in the St. Anthony Falls Historic District Design Guidelines due to its view shed of the river. In addition, there are views of the Stone Arch Bridge, St. Anthony Falls' Lock and Dam, Hennepin Island, and the University of Minnesota campus on the east riverbank. The site has a first-hand view of Mill Ruins Park which allows visitors to experience river history through the preservation an old mill site.



19. Bohemian Flats - Bohemian Flats Park offers the public an upfront and clear view of the towering bluffs on the east bank. The naturally vegetated landscape is crowned with the skyline of the University of Minnesota Medical Center East Bank campus. Upstream is the Northern Pacific Pedestrian Bridge and views of the campus. Downstream are views of the iconic Fredrick R. Weisman Art Museum, the gorge and the Washington Avenue Bridge. The park's location on the river- south of the falls and dams- allows for docking large boats which adds a unique element to the overall view.



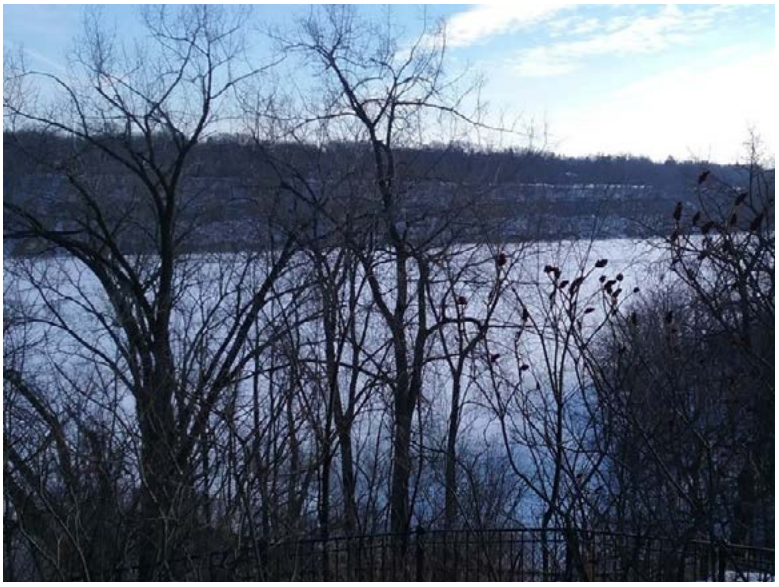
20. East River Flats Park - East River Flats Park is one of the few places in which the public has direct access to the river itself. Home to the University of Minnesota's Boathouse, the riverbank serves as a public launching spot for canoes, kayaks and rowboats. The park is surrounded by stunning vegetated bluffs to its east and across the river to the west. An expansive view shed includes multiple bridges and the gorge up and downstream.



21. Franklin Avenue Bridge - The Franklin Avenue Bridge marks the transition of the riverbanks shifting from a predominantly urban landscape to a natural intact character heading downstream. The divergent panorama includes an expansive view upstream of the city's bustling downtown and the University of Minnesota's campuses located on both sides of the river. Downstream reveals a peaceful view of the vegetated bluffs, exposed riverbanks and hiking trails.

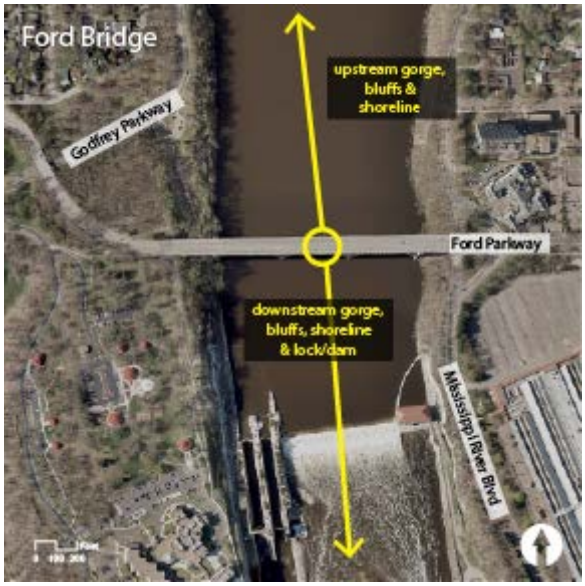
22. Lake Street Bridge - The Lake Street Bridge provides a broad 360-degree view of the vegetated shoreline and bluffs along the Mississippi River. Longfellow Beach, Ford Bridge and the depths of the Mississippi Gorge are seen downstream. Upstream views take in the architectural features of Franklin Avenue Bridge and the Minneapolis Rowing Club Building. Upon a closer look at the east bank, ruins of the old Meeker's Island Lock and Dam can be seen.

23. 36th Street Overlook - The 36h Street Overlook is a rare view due to its position to look down upon the concealed Mississippi Gorge. The views consist of gorge, bluffs and shorelines up and downstream along the east riverbank. Unlike further upstream the entire view across the river is intact vegetated landscape growing on the bluffs.



24. 44th Street Overlook - The 44th Street Overlook at Winchell Trail is an elevated outlook on top of the bluffs on the west riverbank. Similar to the 36th Street overlook, the viewer will see the gorge, bluffs and shoreline up and downstream along the east bank. Most of the landscape is unaltered and minimal views of development can be seen from this location. In warmer seasons these views maybe hindered by the bluff's vegetated canopy.

25. Ford Bridge - The Ford Parkway Bridge towers over the river showing wide and clear views downstream of the lock and dam, Minnehaha Regional Park, the Minnesota Veterans Home campus and the Ford steam plant. The vegetated bluffs are punctuated throughout with sights of rooftops and church steeples. Upstream is a charming view of unscathed and natural landscape on both sides of the riverbank, from the bluffs to shoreline.



VISUAL QUALITY AND SITE DEVELOPMENT

Preserving or improving the appearance of urban development within all areas of the Critical Area beyond PRCVs will also enhance the experience of using the corridor and enjoying the river. Any changes in the river corridor should complement the visual characteristics of the river. The first aspect of providing for visual quality along the river is to control and guide actions which might have adverse visual impact.

In addition to evaluating a proposed development for its environmental impact the City will also seek attractive and context-sensitive architectural design. Where development occurs on the bank close to the riverfront, structures should step back so that sunlight penetrates to the public areas. The total site and architectural design should contribute to creating a vibrant, interesting, and well-used riverfront and be consistent with adopted small area plans and the comprehensive plan.

When seeking and reviewing development proposals for land that the City owns along the riverfront, or when reviewing projects along the riverfront in the Critical Area to which the City is providing financial assistance, developments will be required to meet or surpass the standards for site design and architectural quality contained in the zoning code. Further, public facilities within the Critical Area by any agency of government should strive to attain a very high degree of visual design quality.

Uses or activities that may have a negative impact on visual quality, such as surface parking, outdoor storage, mechanical equipment, utilities, communication towers or antennas transmission lines and services, and billboards are regulated by the zoning code or other regulations. Beyond theses regulatory requirements and guidance adopted plans and polices, the MRCCA plan encourages that these uses be reduced in scale and scope where possible everywhere in the MRCCA. They should be landscaped and/or screened from the river if possible. Further guidance for some specific uses:

- **Transmission Services -** In general, transmission services (transmission lines and pipelines) are considered to have a negative visual impact in the Critical Area. The City, in conjunction with Xcel Energy, will strongly discourage any new corridors for high voltage transmission lines to run parallel to or, especially, across the river. Necessary river crossings should be designed and located to minimize their visual impact. For instance, towers for transmission lines in the Central Riverfront were previously designed as large-scale pieces of art to add to the urban visual interest of that area. The City will evaluate and, if feasible, pursue relocation away from the river any high voltage transmission line that exists along the river. All electrical, telephone, and cable television lines in the Critical Area should eventually be located underground when technically feasible. If overhead placement of utilities is necessary, utility crossings must be hidden from view as much as practicable. The appearance of structures must be as compatible as practicable with the surrounding area in a natural state with regard to height and width, materials used, and color (Minnesota Rules 61016.0130 Subpart 6)
- **Wind Energy Conversion Systems -** Freestanding and building mounted wind energy conversion systems are prohibited by the Minneapolis Zoning Ordinance in the Shoreland and Mississippi River Critical Area Overlay districts.
- **Billboards -** The City will continue to enforce the controls on billboards that exist in the zoning ordinance. Specifically prohibited are off-premises advertising signs and billboards that would be visible from the river, with the exception of signs designated by the Heritage Preservation Commission. The Minneapolis Heritage Preservation Commission must approve all signage in historic districts and on individually designated properties. In addition, no advertising sign or billboard shall be located within 300 feet of a parkway or a public park of three acres or more.
- **Parking and Storage -** New and existing riverbank parking, loading, service, and outdoor storage areas should be visually screened from the public thoroughfare, public open space, and residential areas. Landscaped buffer zones and screening of those areas should be required of new and existing industry that is adjacent to a residential area or park. Any new parking developed in the riverfront area (first 300 feet back from the river) should be internal to the development were possible, not along the river.
- **Existing uses -** When opportunities arise, the City will encourage or require property owners to screen visually intrusive structures or activities. Opportunities may include applications to the City for site plan review or some form of public assistance. Screening may involve planting trees and shrubs or erecting fences. It is acknowledged that not all visually intrusive developments may be able to be screened from view from the river or from other points of view.

A future implementation step will be to evaluate regulations in the zoning code regarding theses uses (where regulated by zoning) to ensure they implement the goals of the MRCCA plan and other applicable adopted plans as a part of the future zoning code update.

Chapter 5 - Restoration Priorities

Development and redevelopment activities and acquisition of property for parkland represent opportunities in the corridor to restore natural vegetation, prevent erosion, and stabilize slopes. Restoration activities will maintain and improve resource integrity and water quality. Opportunities to create connections between existing greenspaces, between wildlife habit areas, and also to connect greenspace and wildlife habitat areas to adjacent neighborhoods are important. Restoration priorities include, but are not limited to:

- Restoration of natural vegetation
- Erosion prevention
- Bank and slope stabilization
- Other restoration activities

RESTORATION OF NATURAL VEGETATION

The maps in **Figures 5-1** through **5-3** provide background information related to vegetation restoration priorities.[1] Existing native plants and areas of significant vegetation are represented by the green colors on the maps. Primary Conservation Areas (PCAs) including shore impact zones, bluff impact zones, gorges, wetlands, and floodplains, where there is no or limited natural vegetation and that are particularly sensitive to vegetation removal or risk of erosion.

The areas mapped in yellow serve as a starting point for restoration activities. They are candidates for the restoration of natural vegetation. Factors to consider when evaluation restoration activities and development include:

- Proximity to native plant communities
- Opportunities to connect development to existing and planned parks and trails
- Opportunities to enhance Public River View Corridors
- Areas of known erosion or bank failure
- Opportunities to connect fragmented habitat

1 https://metrocouncil.org/Handbook/Plan-Elements/Land-Use/MRCCA/Files/Vegetation-Restoration.aspx

Site specific evaluations are necessary to determine where on a specific site protection or restoration activities should occur. The areas identified for protection, replacement, or restoration of vegetation on **Figures 5-1** through **5-3** do not necessarily prohibit development, if they are allowed by the MRCCA rules and the zoning code, but assumes those restoration activities occur in conjunction with the development and in conformance with the policies of this plan.

EROSION PREVENTION

All development in the City is required to comply with the City's stormwater management and erosion control ordinances. In addition, it is important to protect existing vegetation and to restore it where it is removed. Where vegetation does not exist, development activities should seek to restore vegetation with native species. The removal of invasive species and replacement with native vegetation is encouraged.

BANK AND SLOPE STABILIZATION

Where the river edge has been altered, river bank restoration should occur. However, there are areas in the central riverfront, or Upper Harbor Terminal, where an existing hard edge to the river can be maintained. Currently there is not a comprehensive inventory of all unstable soils and bedrock in Minneapolis. It is reasonable to assume that areas with steep slopes could be unstable. Therefore, development or alteration of terrain in or near those areas of steep slopes should be evaluated with regard to the possibility of unstable soils or bedrock. Further, stormwater management and drainage plans for development should consider the effect of stormwater and drainage on bluffs.

OTHER RESTORATION ACTIVITIES

Other restoration activities could include wetlands restoration, wildlife habitat restoration, and the addition of pollinator and wildlife friendly native plantings. The removal of invasive plant species and replacement with native plantings is appropriate and encouraged.

RESTORATION AREAS

The restoration of natural areas and banks along the Mississippi River has been an ongoing effort. Some recent and underway activities include prairie restoration at Ole Olson Park, Nicollet Island woodland and prairie restorations, and the Hall's Island restoration. In general, the plan supports restoration activities everywhere in the corridor where necessary (and as guided by policies in this plan). Some key sites or categories that will be priorities, as listed in this section, (but this does not imply that a site omitted form the list does not have policy support for restoration activities to occur):

- As sites are developed or redeveloped (especially when there is new construction, vegetation removal, or land disturbing activities) restoration of the site should occur in conjunction with that development activity.
- Sites identified in MPRB plans for restoration and future MPRB acquisitions.
- The Upper Harbor Terminal as it is developed.

RESOURCES FOR RESTORATION ACTIVITIES

To facilitate restoration, it is important to engage key public partners. These include, but are not limited to, the City of Minneapolis, The Minneapolis Park and Recreation Board (MPRB), the Minnesota Department of Natural Resources (DNR), and the Mississippi River Watershed Management Organization (MWMO). These organizations have staff to assist with policy guidance, regulatory issues, and technical assistance. Further there are several plans, ordinances, and technical studies that can provided guidance related to restoration activities. They include, but are not limited to:

- City of Minneapolis Surface Waters and Sewers Division, including stromwater management and erosion control ordinances and information: http://www.ci.minneapolis.mn.us/publicworks/stormwater/index.htm
- MPRB adopted plans and policies: https://www.minneapolisparks.org/
- The MPRB is developing a natural resource inventory and management plan for all the park system's natural areas that can be a future resource for restoration activities when completed.
- MWMO studies, including Wetlands Assessment, Natural Resource Inventory, and Bank Stabilization and Bioengineering Manual: https://www.mwmo.org/management/watershed-assessment/
- The MWMO is currently developing a watershed habitat study to identify large swaths of habitat to protect and key gaps in the habitat to connect that can be a future resource for restoration activities when completed.
- Minnesota Biological Survey (DNR): https://www.dnr.state.mn.us/mbs/index.html
- Historical Landslide Inventory for the Twin Cities Metropolitan Area (DNR): https://files.dnr.state.mn.us/waters/watermgmt_section/shoreland/landslide-inventory.pdf
- Hennepin County has commissioned an atlas to identify known landslides that can be a future resource for restoration activities when it is completed.

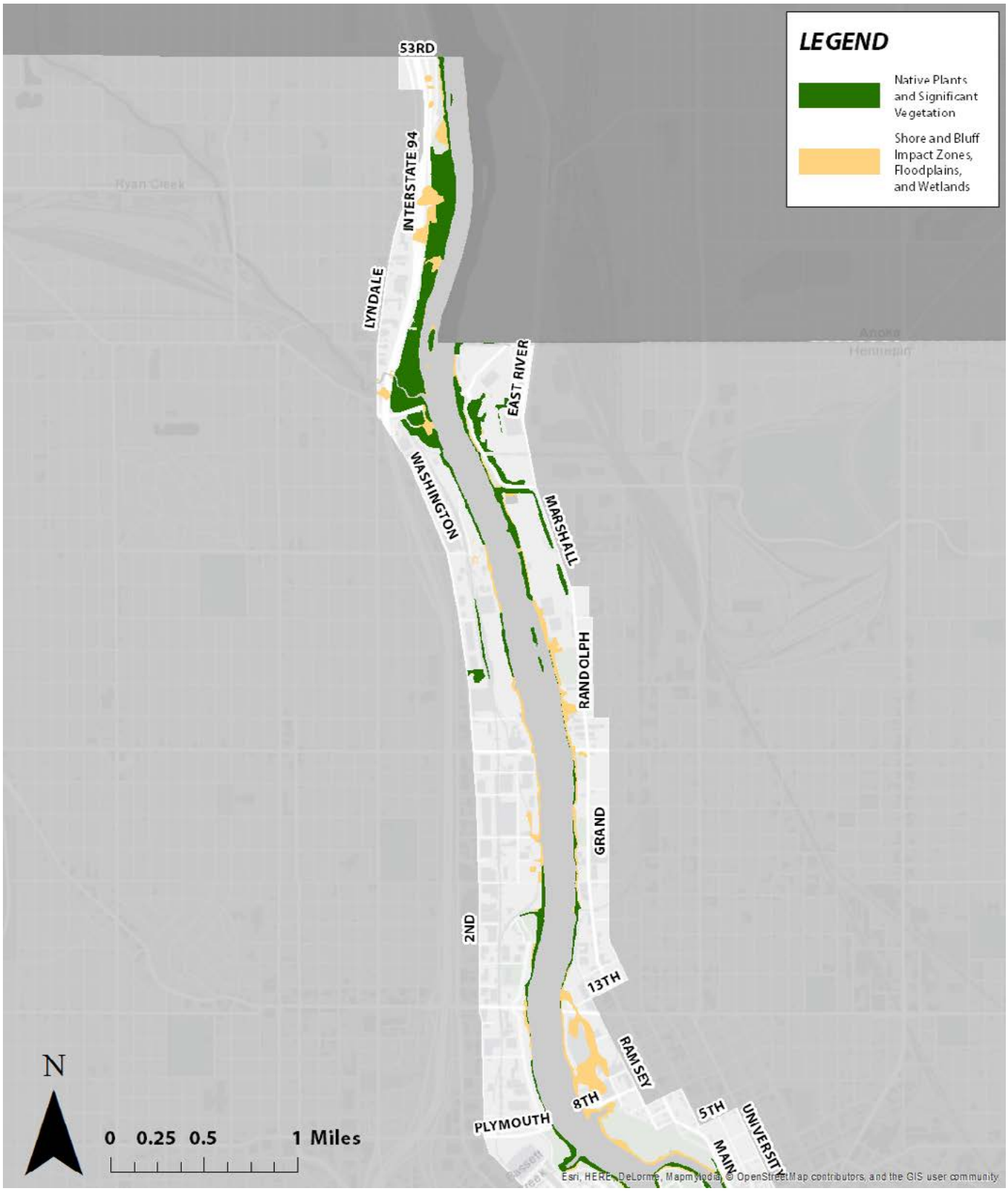


FIGURE 5-1: UPPER RIVER – VEGETATION RESTORATION PRIORITIES..

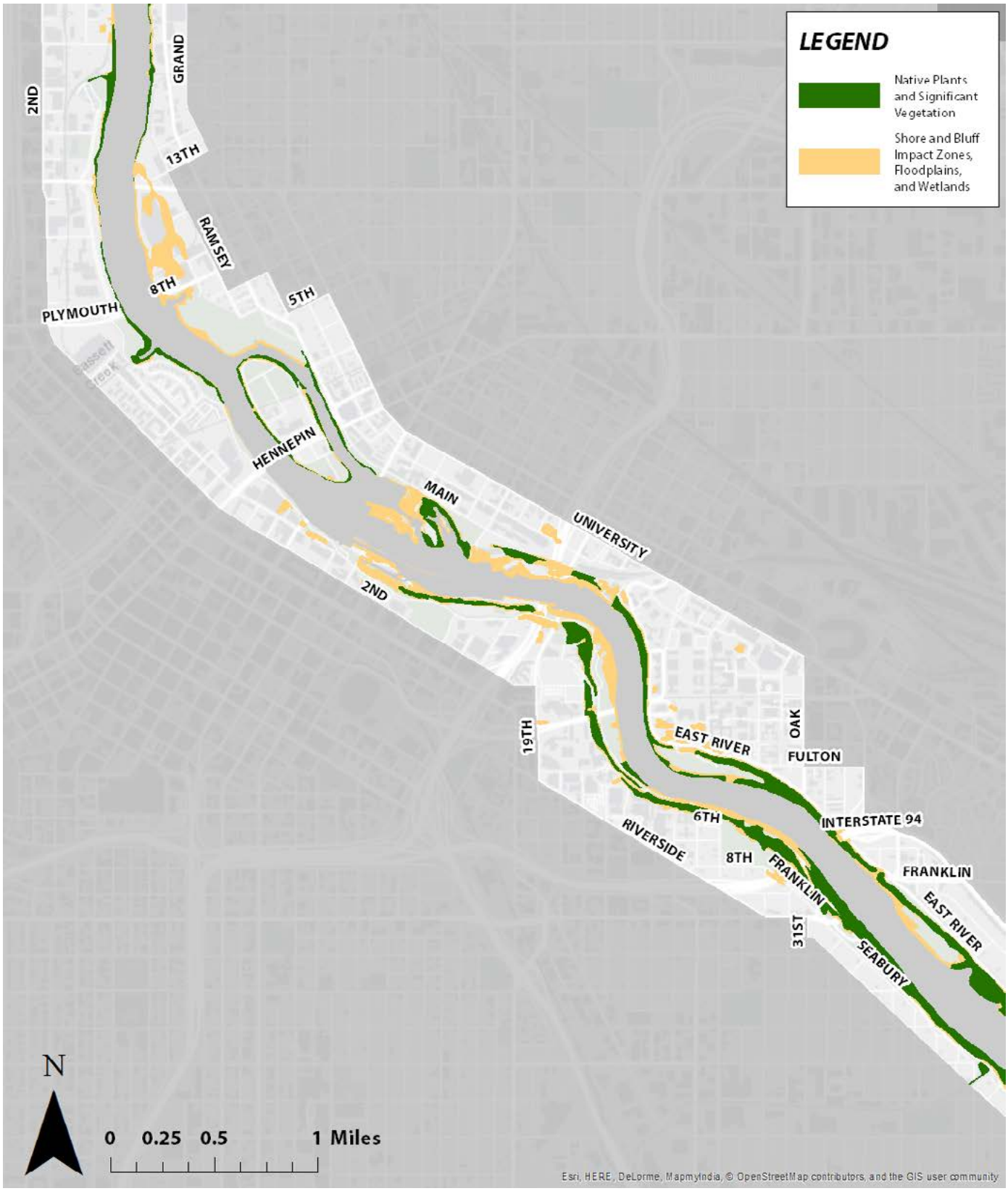


FIGURE 5-2: CENTRAL RIVER – VEGETATION RESTORATION PRIORITIES.

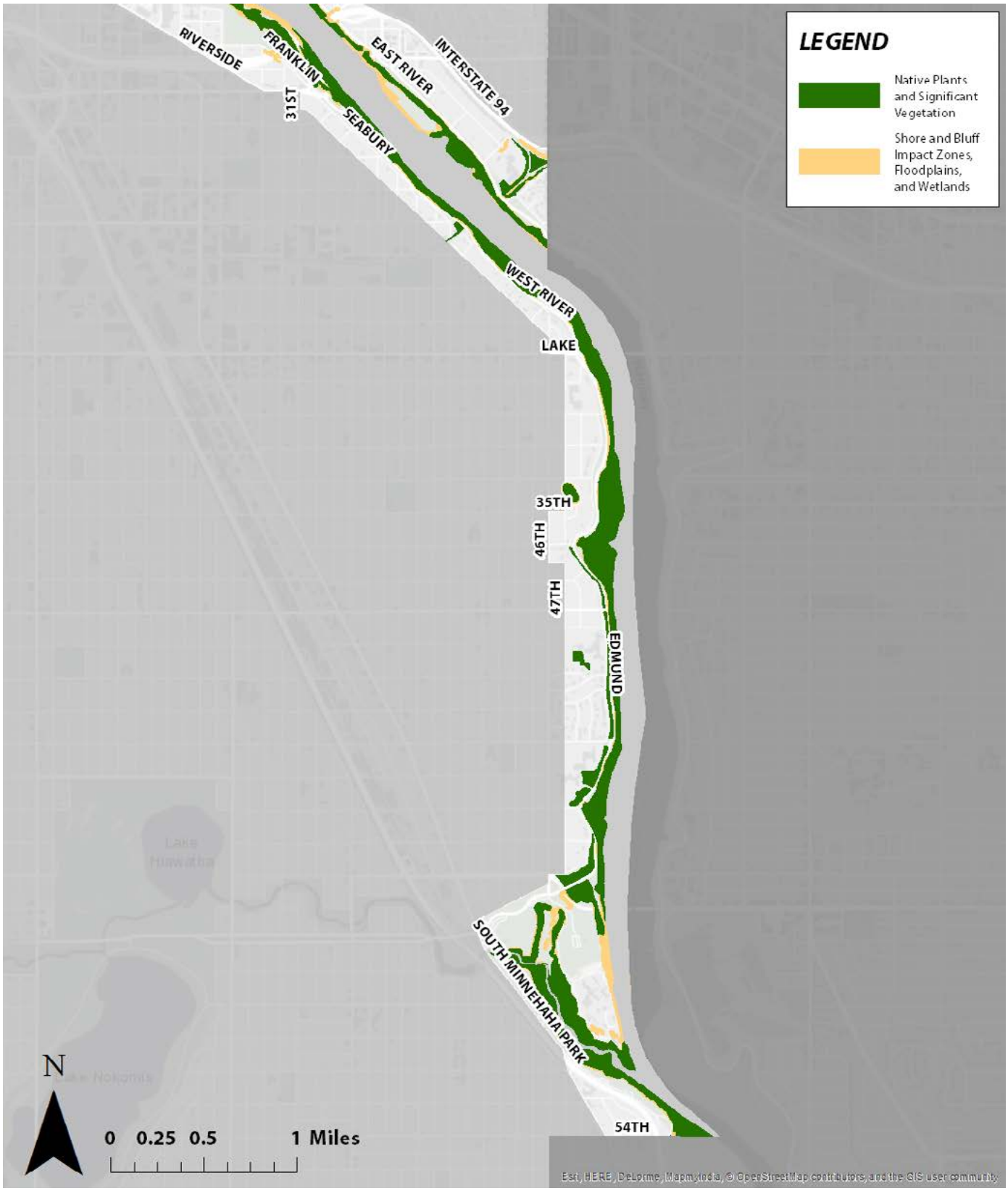


FIGURE 5-3: LOWER GORGE – VEGETATION RESTORATION PRIORITIES.

Chapter 6 - Open Space and Recreational Facilities

The potential of the Mississippi River in Minneapolis as a recreational resource was recognized early with the acquisition of Riverside Park in 1885, East River Road to Franklin Avenue in 1893, Minnehaha Park in 1887, and 455 acres for the Lower Gorge in 1905. Public land acquisition has continued, and parkways and linear parks have been built from Minnehaha Park all the way to Plymouth Avenue. North of Plymouth Avenue the linear park system has not yet been fully completed, but significant parkland exists that includes the North Mississippi Regional, Marshall Terrace, Edgewater, Gluek, Sheridan Memorial, and Olson parks.

Major adopted MPRB plans, and planning processes currently underway, for parks that are located in the MRCCA include:

- **Above The Falls Regional Park Master Plan** (not adopted 2013) – The Above the Falls (ATF) Regional Park was established in 2000 with the Above the Falls: A Master Plan for the Upper River in Minneapolis (2000 ATF Plan). The plan encompasses the area bordered by Plymouth Avenue North on the south end and 42nd Avenue North on its north end. See figure 6-4 for park boundaries. In 2007, MPRB implemented ATF Phase I on the west bank from Plymouth Avenue North to 22nd Avenue North.

  In 2012, MPRB approved the parks vision in RiverFirst, a 20-year vision for the upper river. The 2013 ATF Park Plan was created to reflect these plans and other evolving opportunities and priorities. The 2013 ATF Park Plan renews the vision of the original 2000 ATF Plan and integrates elements of ATF Phase I and RiverFirst, both of which share the original plan's focus on "developing the Mississippi riverfront into a regional park amenity." The revised plan includes long-term parks goals centered on an exceptional recreational and environmental resource – the Mississippi River. The ATF Regional Park will be a catalyst for the revitalization of the upper river area by creating a framework of recreation and restored ecological function. Eventually, the regional park boundary will encompass continuous public parks and trails, an extended West River Parkway, riverfront access points, significant park components and habitat and water-quality enhancements.

  Please note that the boundary shown in Figure 6-4 is from the Above the Falls Master Plan Update and is not the same as the regional park boundary. The City and MPRB are working cooperatively to resolve this difference.

- **Central Mississippi Riverfront Regional Park Master Plan** (adopted August 30, 2016) - The Central Mississippi River Riverfront Regional Park Master Plan (CMRRP) 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. See figure 6-5 for park boundary.

- **Mississippi Gorge Regional Park Master Pla**n underway 2018) – the Mississippi River Regional Park is approximately 132 acres of land area flanking both the east and west banks of the Mississippi River, from just south of Bridge No. 9 to the north edge of Minnehaha Regional Park. As of 2018 the MPRB is researching and developing a proposal for a master plan to map management strategies befitting this river-adjacent, ecologically rich regional park with the potential to see two very different river futures based on the future of the lock and dam structures nearby on the Mississippi River. See figure 6-6 for park boundary. The purpose of the CMRRP 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. There are several other MPRB planning and implementation processes underway that are relevant to MRCCA. Due to the comprehensive and changing nature of these projects, a complete listing is not provided in this chapter, but further information can be found at: https://www.minneapolisparks.org/park_care__improvements/park_projects/

The MPRB plans are used to guide their planning of facilities, to identify proposed acquisitions, and to inform the use of park dedications (fees or land). They are the primary source of information for existing and planned park and recreation facilities in the corridor and should be consulted for development and implementation strategies in the corridor on existing and proposed parkland. They should also be used to inform development of private property in the MRCCA, so that it can facilitate MPRB planning goals, where possible.

FIGURE 6-1: UPPER RIVER - EXISTING OPEN SPACE AND RECREATIONAL FACILITIES.

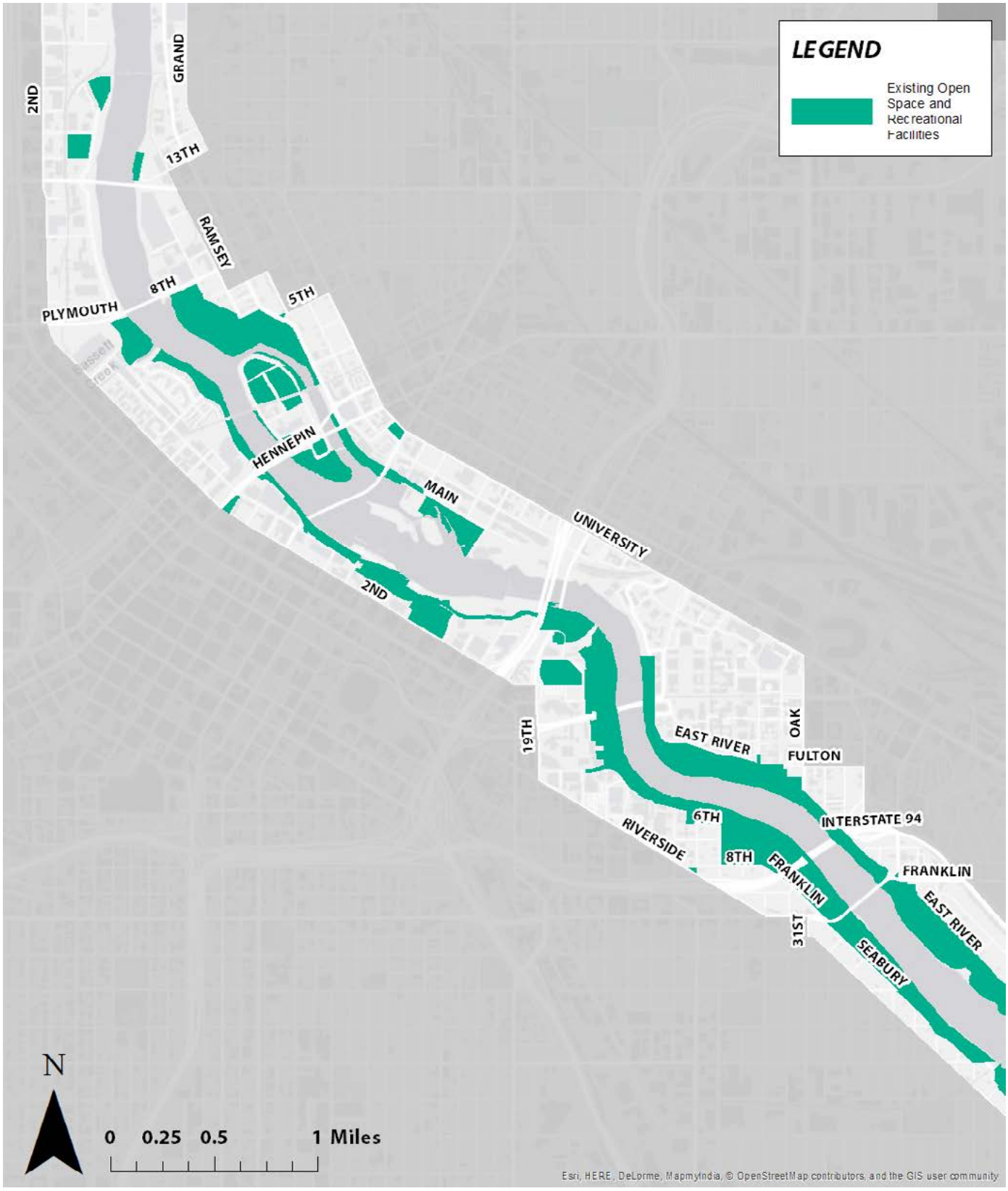


FIGURE 6-2: CENTRAL RIVER - EXISTING OPEN SPACE AND RECREATIONAL FACILITIES.

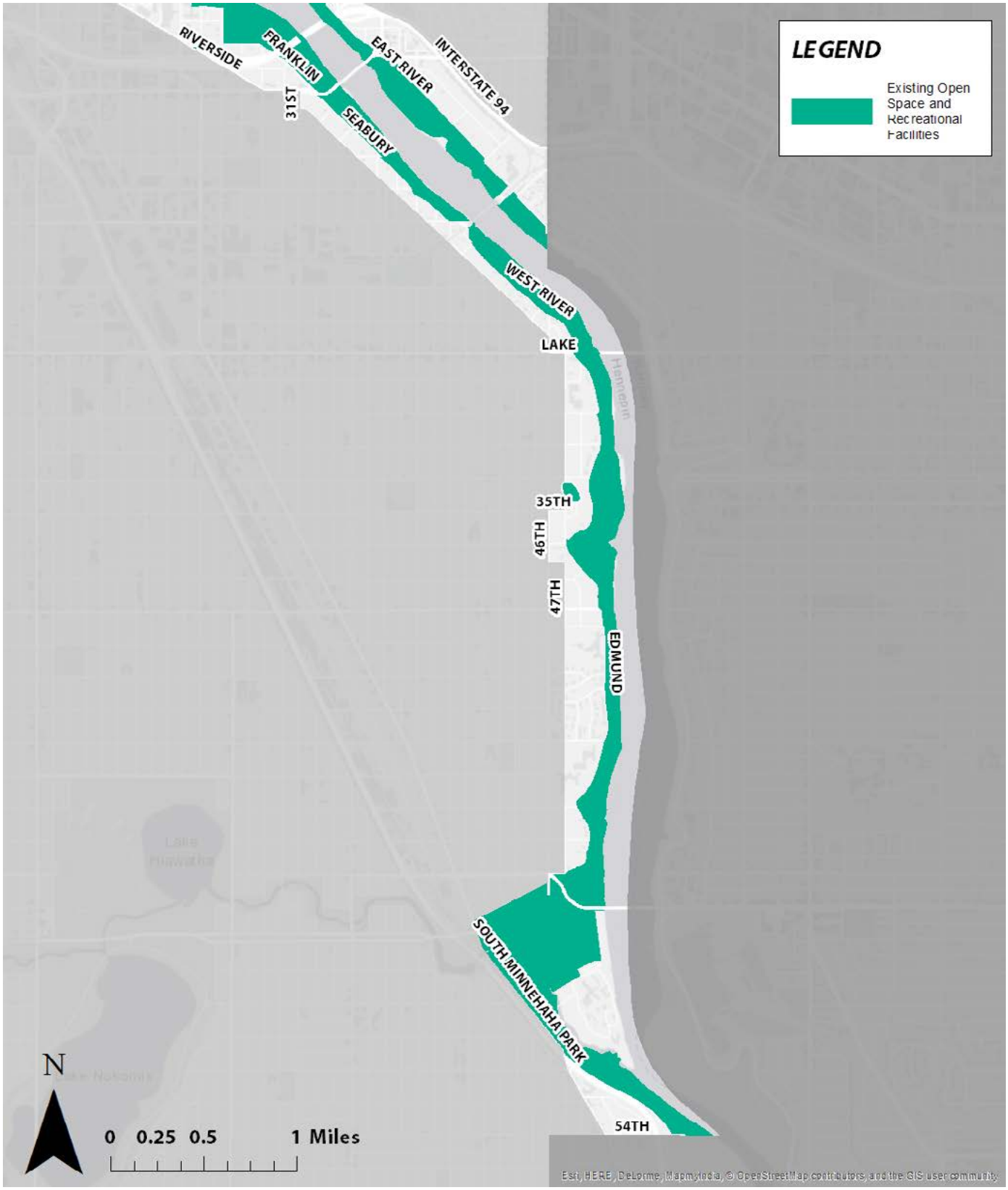


FIGURE 6-3: LOWER GORGE - EXISTING OPEN SPACE AND RECREATIONAL FACILITIES.

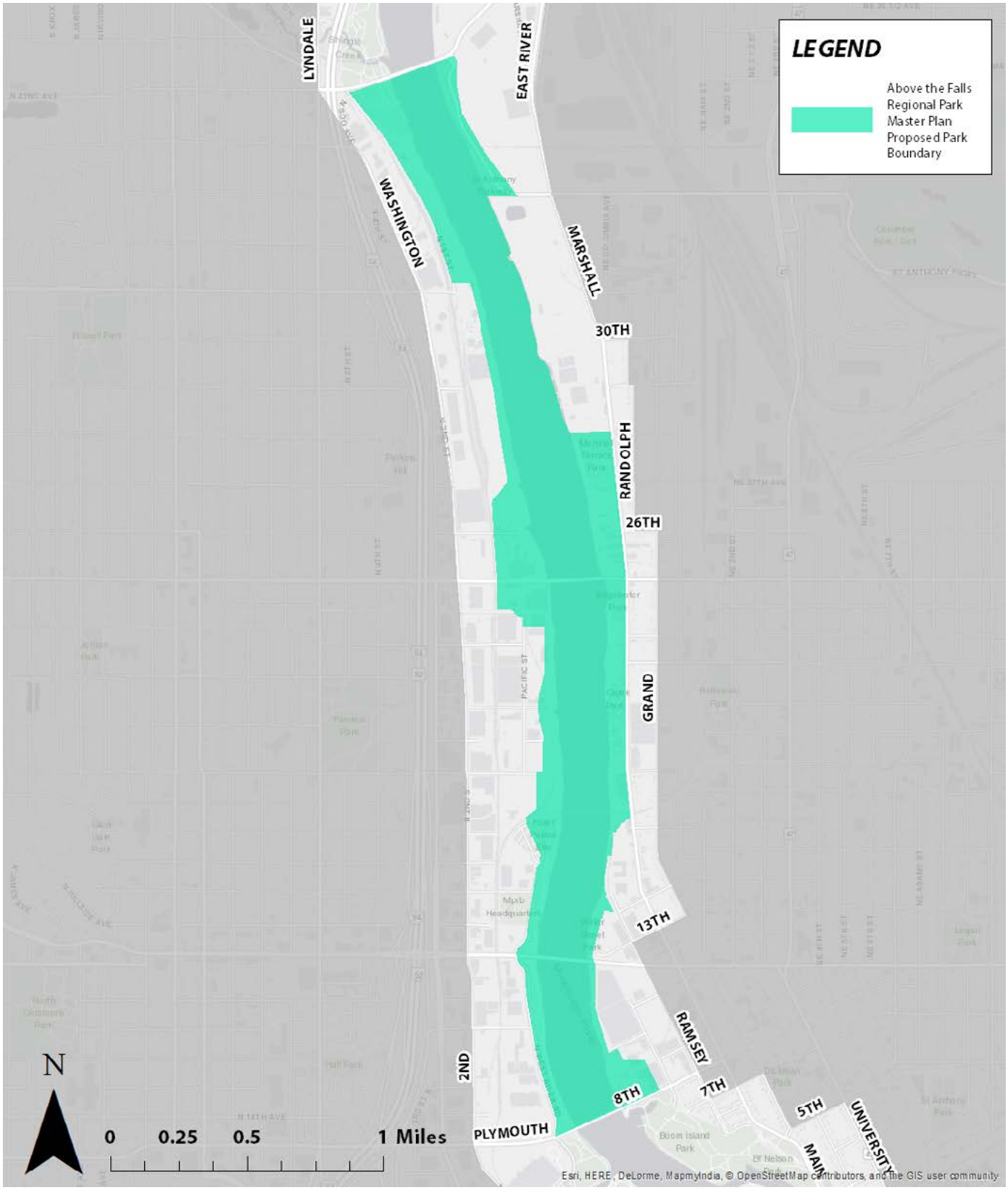


FIGURE 6-4: ABOVE THE FALLS REGIONAL PARK MASTER PLAN PROPOSED PARK BOUNDARY.

FIGURE 6-5: CENTRAL MISSISSIPPI RIVERFRONT REGIONAL PARK MASTER PLAN PARK BOUNDARY.

Chapter 7 - Transportation and Public Utilities

TRANSPORTATION

The city's transportation network intersects with the boundary of the MRCCA as shown in the maps on the following pages. Existing roadways are mapped on Figures 7-1 through 7-3. New streets will be built in conjunction with redevelopment of the Upper Harbor Terminal (Figure 7-4), with alignments and layouts to be determined. Planned additions to the city's bicycle network are shown alongside existing bicycle facilities in Figures 7-5 through 7-7, consistent with the City's Bicycle Master Plan. Existing and planned transit facilities are in Figures 7-8 through 7-10. The planned Orange Line BRT will terminate in downtown Minneapolis, just inside the MCCRA boundary. The Nicollet-Central streetcar is planned to cross the river on the 3rd Avenue bridge. And the Lake Street BRT line will cross the river on the Lake Street/Marshall Avenue bridge. This information is provided for background and context. The City's relevant plans should be consulted for more detailed information.

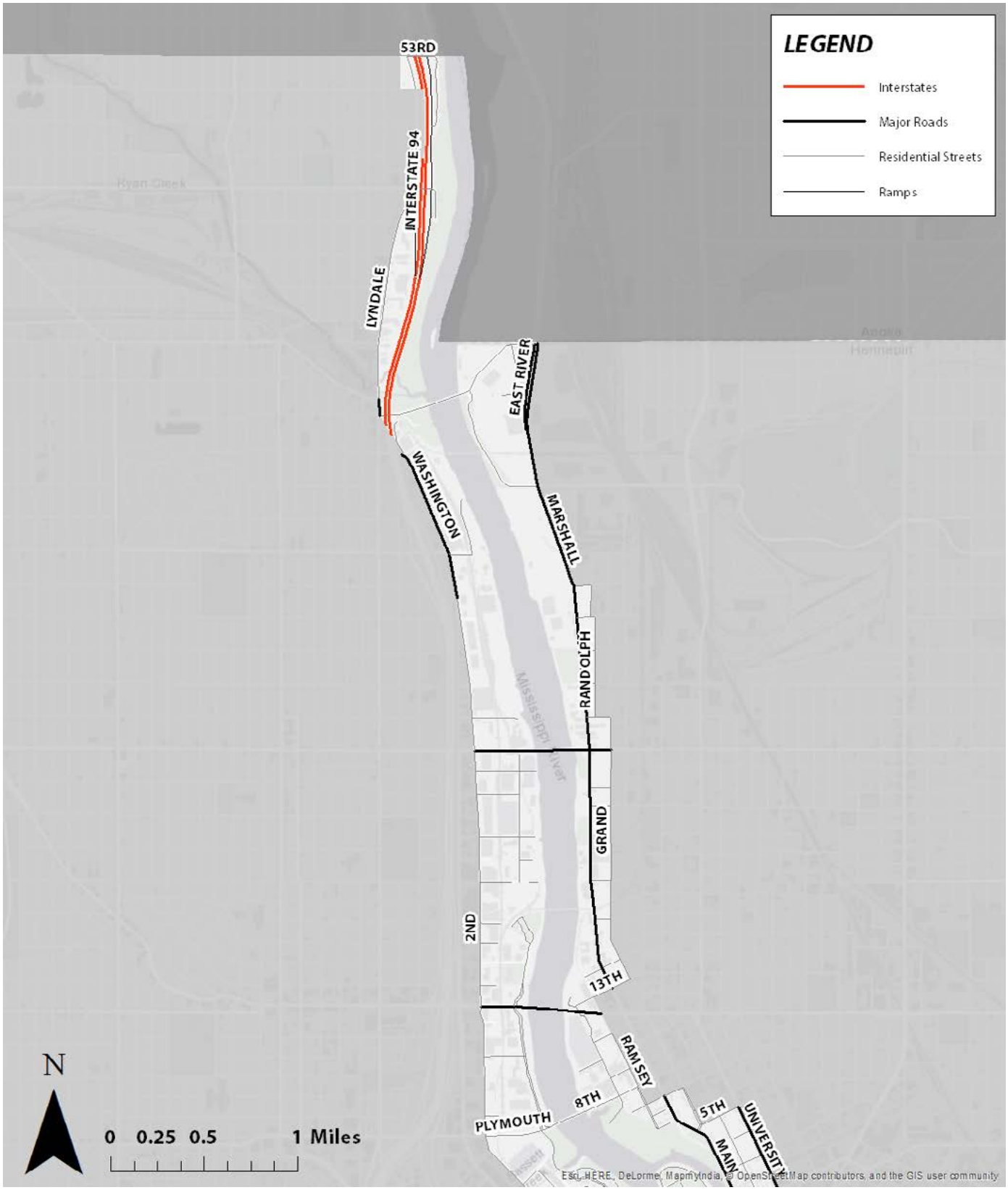


FIGURE 7-1: UPPER RIVER - EXISTING INTERSTATE, ROADS, AND STREETS.

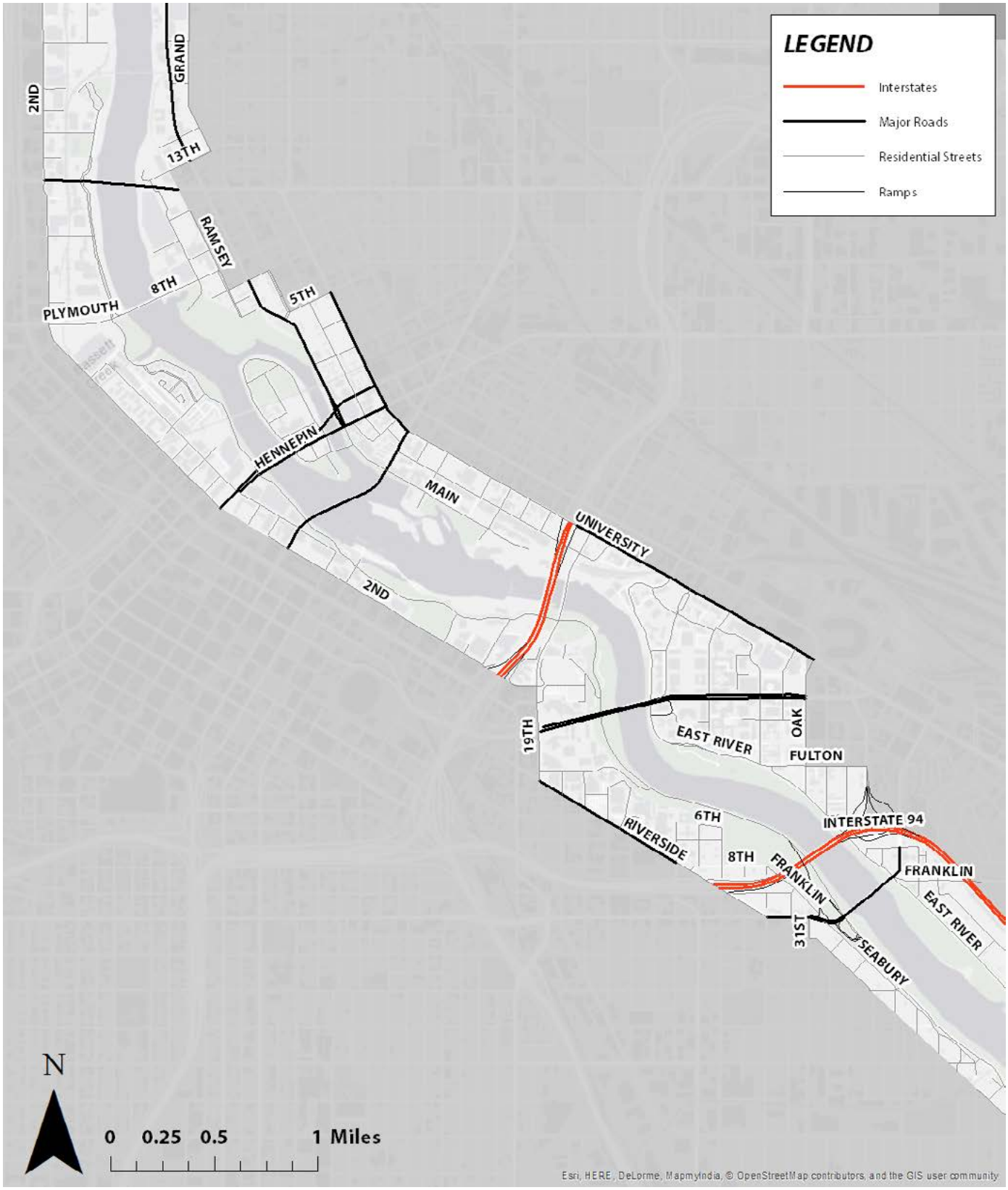


FIGURE 7-2: CENTRAL RIVER - EXISTING INTERSTATE, ROADS, AND STREETS.

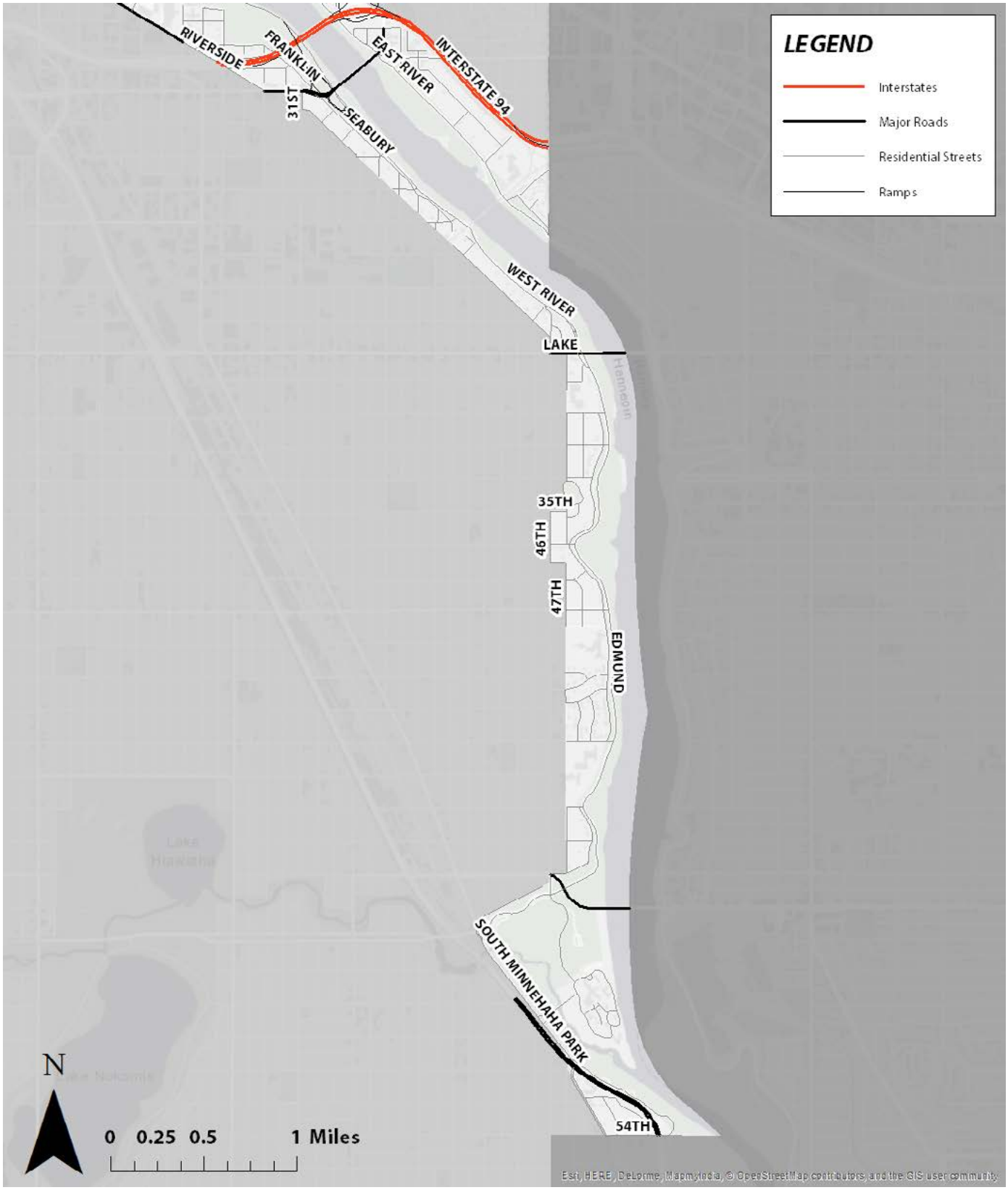


FIGURE 7-3: LOWER GORGE- EXISTING INTERSTATE, ROADS, AND STREETS.

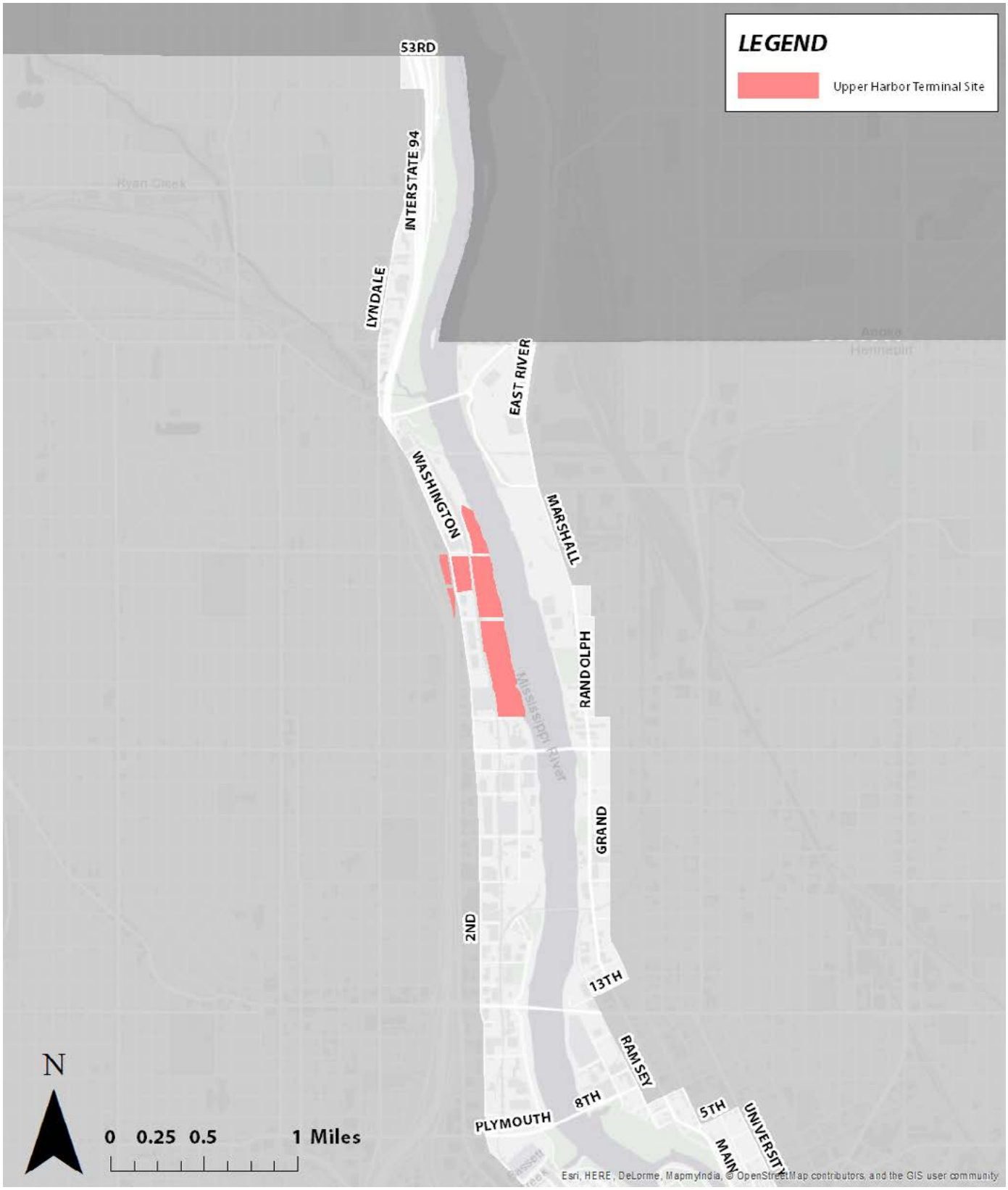


FIGURE 7-4: UPPER RIVER - FUTURE PLANNED ROADWAYS.

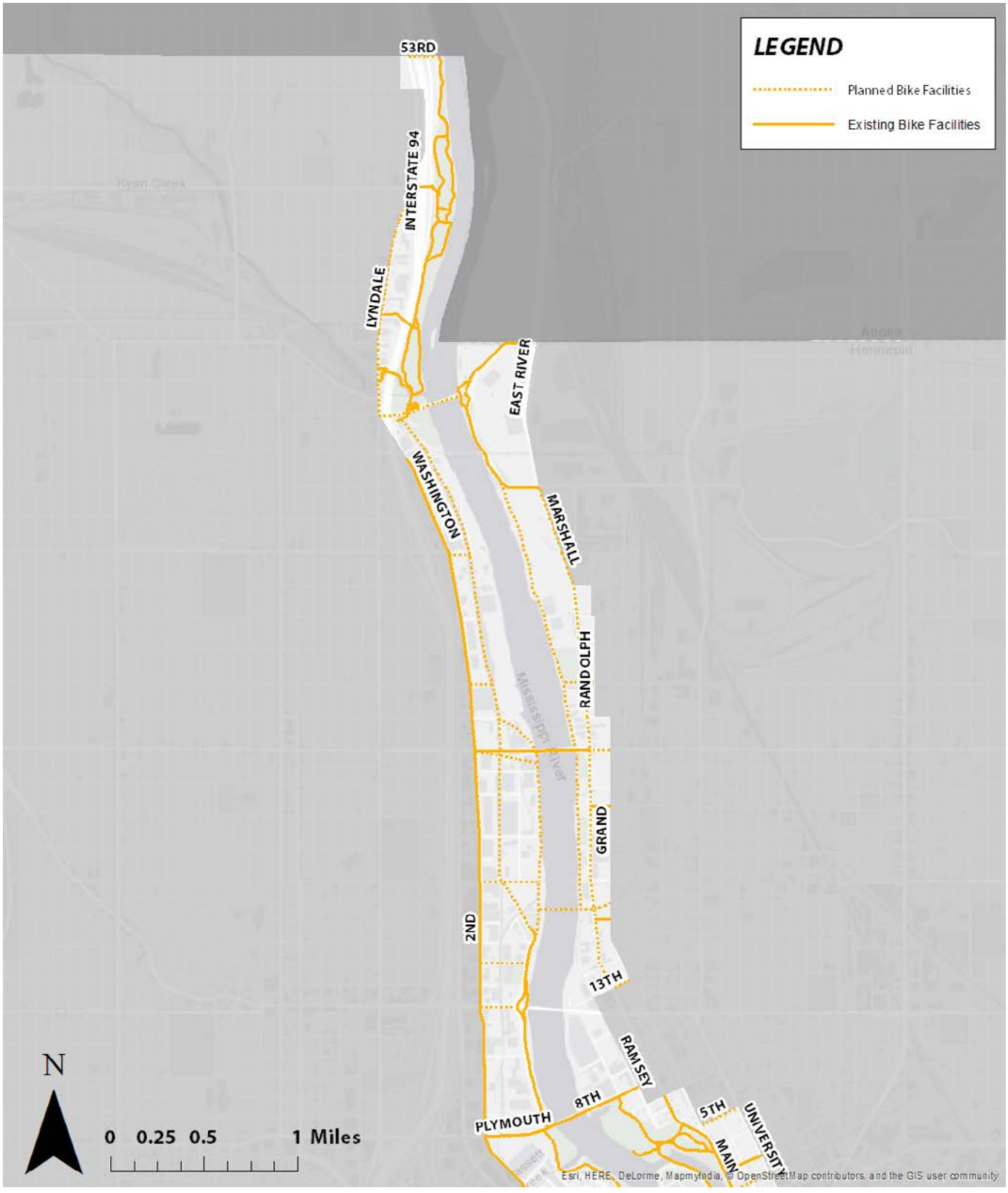


FIGURE 7-5: UPPER RIVER- EXISTING AND PLANNED BIKE FACILITIES.

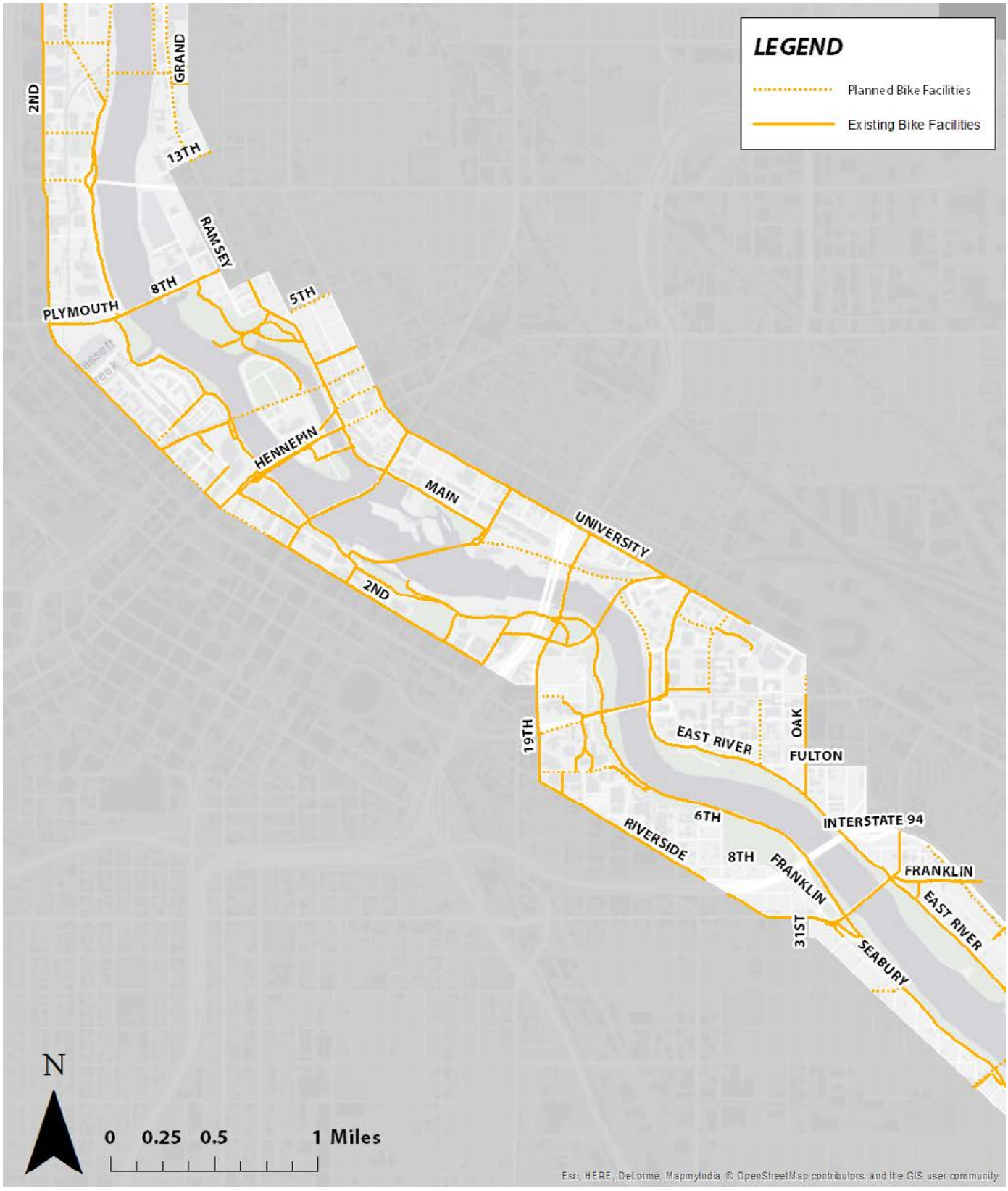


FIGURE 7-6: CENTRAL RIVER – EXISTING AND PLANNED BIKE FACILITIES.

FIGURE 7-7: LOWER GORGE – EXISTING AND PLANNED BIKE FACILITIES.

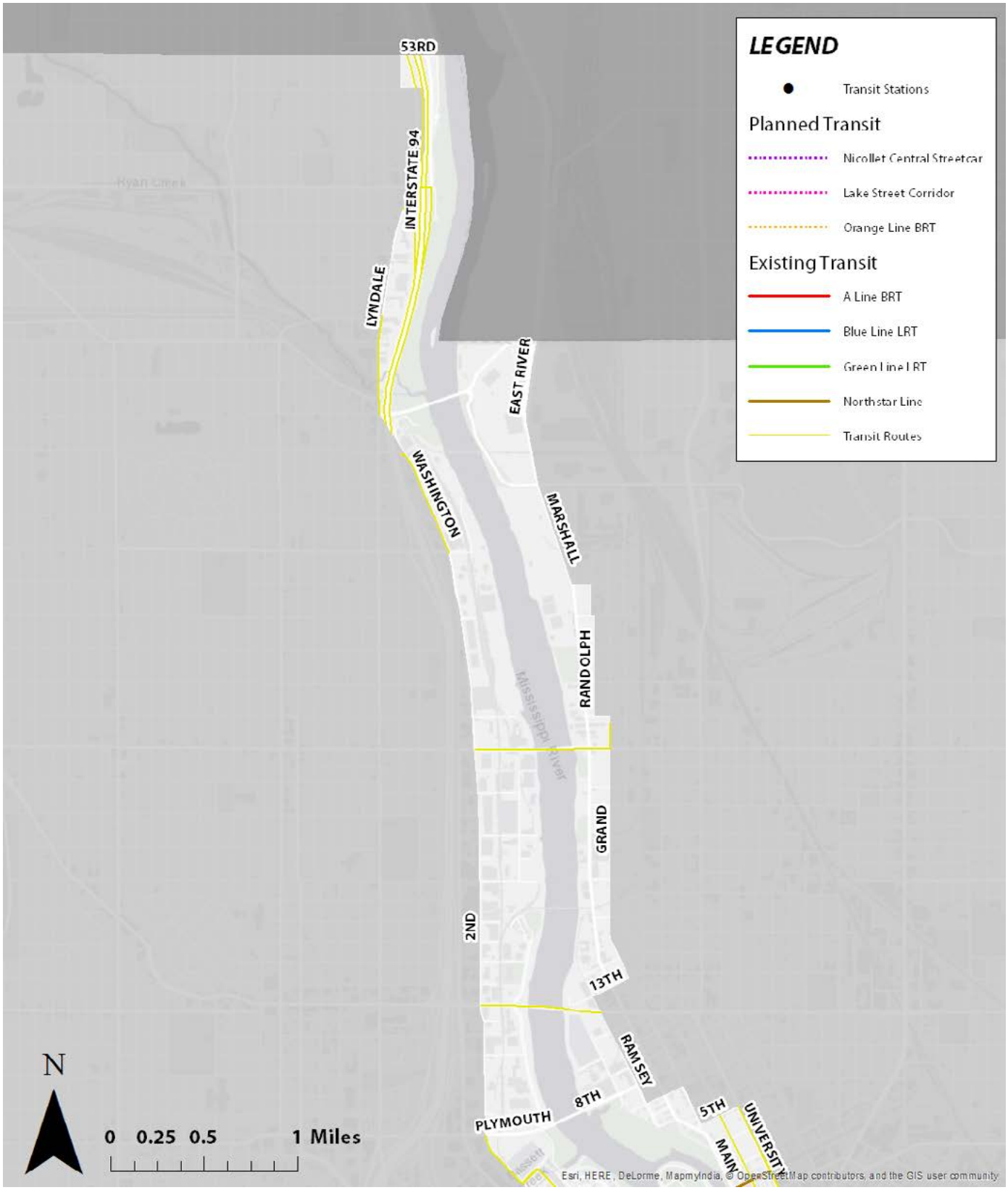


FIGURE 7-8: UPPER RIVER- EXISTING AND PLANNED TRANSIT FACILITIES.

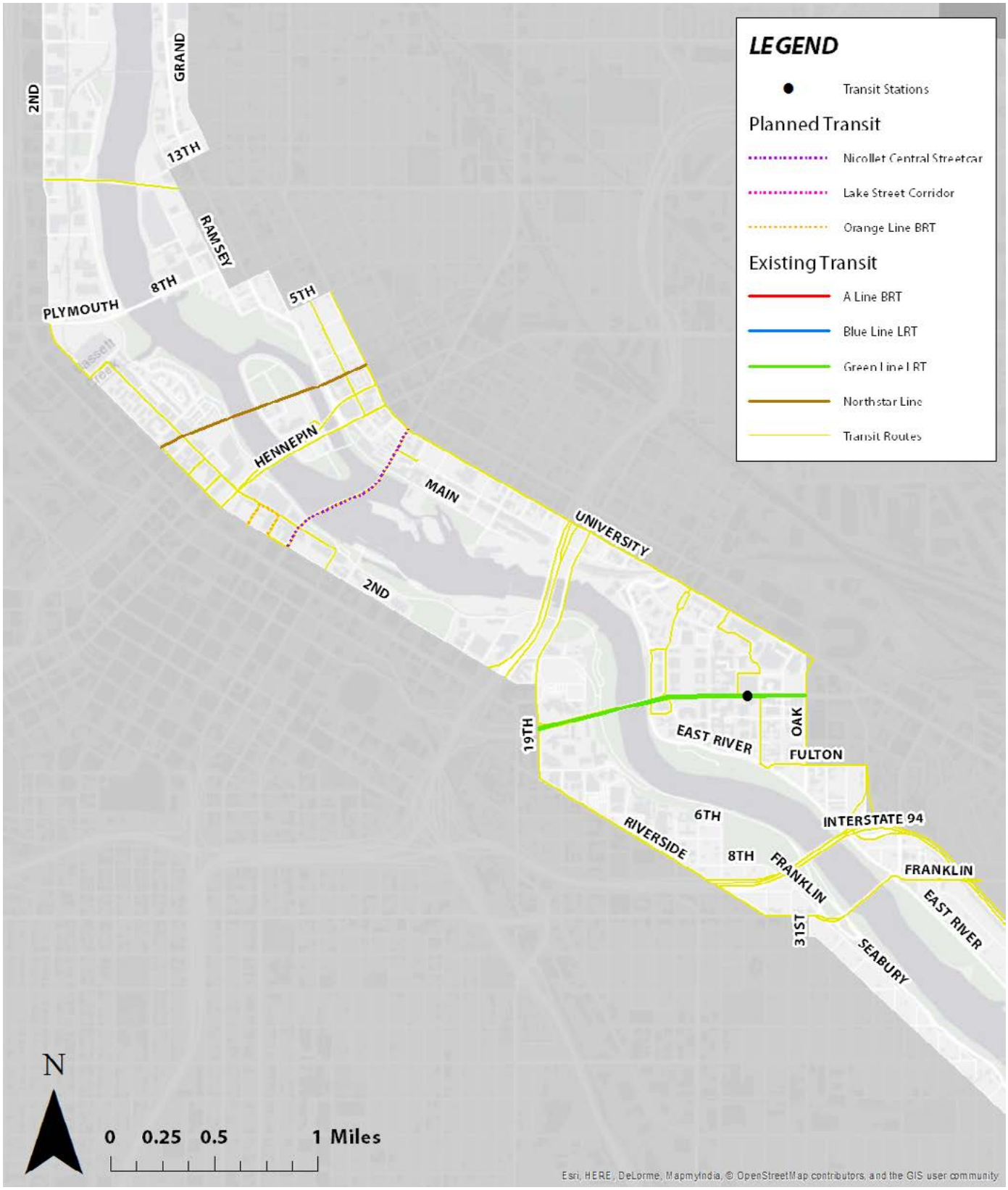


FIGURE 7-9: CENTRAL RIVER- EXISTING AND PLANNED TRANSIT FACILITIES.

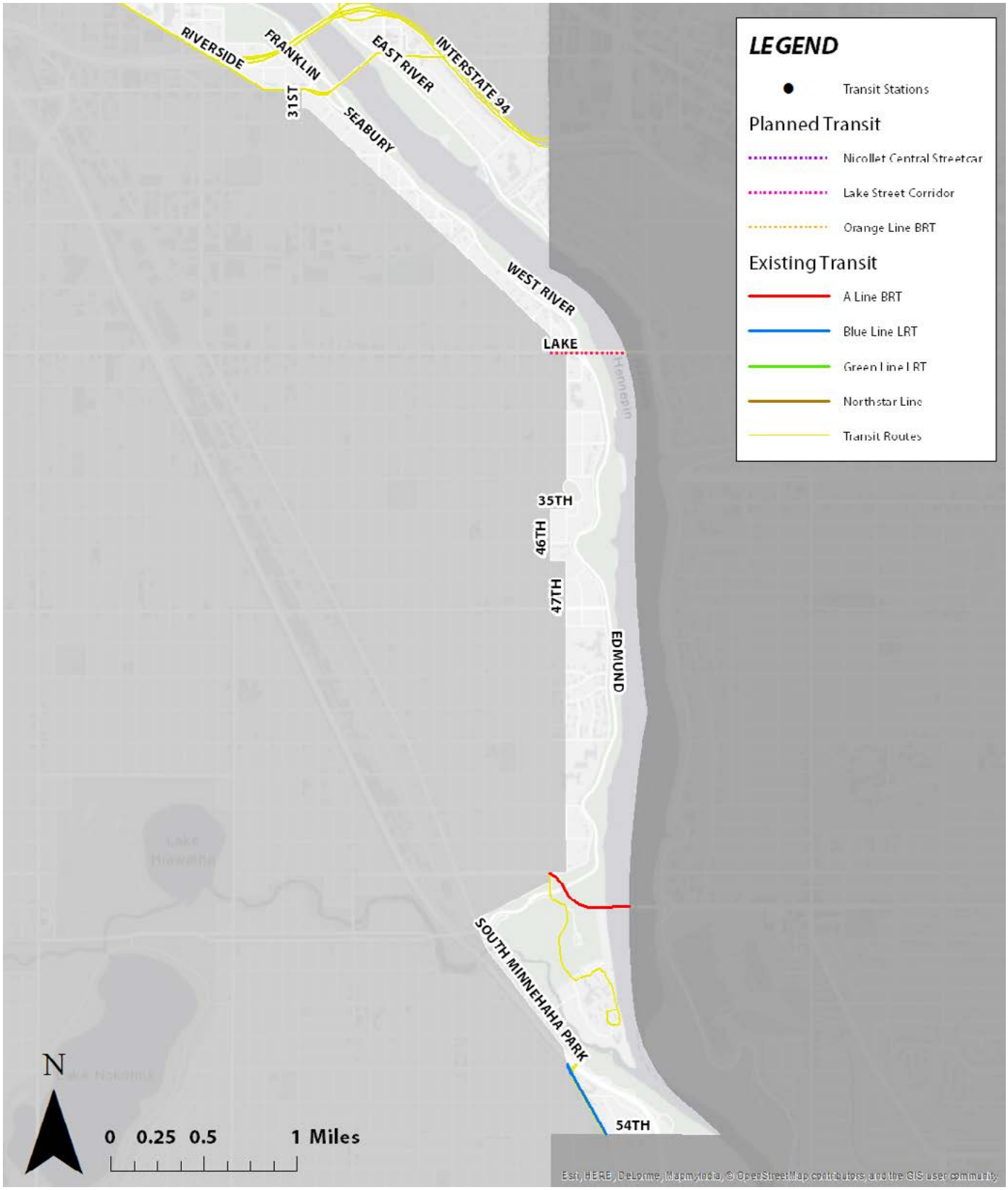


FIGURE 7-10: LOWER GORGE- EXISTING AND PLANNED TRANSIT FACILITIES.

UTILITIES

Utilities include water and sewer infrastructure, electric power facilities, essential services, and transmissions services. They are further defined in the MRCCA rules.

Major Utilities

Major utilities in the upper river include the Xcel Energy Riverside Generation, the CenterPoint Energy facility, and an Xcel Energy substation. Major utilities in the central river area include Xcel Energy St. Anthony Hydro, Center Point Energy, A Mill Hydro, and SAF Hydropower. See F**igures 7-11** and **7-12**. These facilities are existing and in general are located underground or are not located in PRCVs. In the case of the central riverfront, they are part of the existing urban development fabric. Continued improvement to the sites, such as the conversion of the Xcel Riverside Plant to natural gas and the associated elimination of outdoor storage of coal, is encouraged. While this plan does not identify any know negative effects on PCAs, the City will work with partner agencies and the utilities to continue to address issues should they be identified.

No new public utilities are proposed at this time. Where allowed by the policy guidance of the comprehensive plan and the zoning ordinance, new facilities should be reduced in scale and scope to the extent possible, avoid placement in PRCVs, avoid PCAs, and be designed to implement the goals of this and other plans and to mitigate any negative effects. Hydroelectric facilities should be evaluated for their effect on water flower over St. Anthony Falls.

Transmission Services

In general, transmission services (transmission lines and pipelines) are considered to have a negative visual impact in the Critical Area. The City, in conjunction with Xcel Energy, will strongly discourage any new corridors for high voltage transmission lines to run parallel to or, especially, across the river. Necessary river crossings should be designed and located to minimize their visual impact. For instance, towers for transmission lines in the Central Riverfront were previously designed as large-scale pieces of art to add to the urban visual interest of that area. The City will evaluate and, if feasible, pursue relocation away from the river any high voltage transmission line that exists along the river. All electrical, telephone, and cable television lines in the Critical Area should eventually be located underground when technically feasible . If overhead placement of utilities is necessary, utility crossings must be hidden from view as much as practicable. The appearance of structures must be as compatible as practicable with the surrounding area in a natural state with regard to height and width, materials used, and color (Minnesota Rules 61016.0130 Subpart 6)

Wind Energy Conversion Systems

Freestanding and building mounted wind energy conversion systems are prohibited by the Minneapolis Zoning Ordinance in the Shoreland and Mississippi River Critical Area Overlay districts.

Solar Energy Systems

Solar Energy Systems are allowed by the Minneapolis Zoning Ordinance. Larger scale building-mounted or freestanding systems could have a visual impact and are discouraged from locating in PRCVs. Where no reasonable alternative exists, they should be reduced in scale and scope and landscaped and screened from view of the river (to the extent that it does not block solar access).

Drinking Water System

The City uses the Mississippi River as the primary drinking water supply source. The Minneapolis Public Works water treatment and distribution facility is located in the City of Fridley on the east bank adjacent and north of the Minneapolis city limits.

Sanitary Sewer System

The City's sewer system was originally built as a combined system, to carry both sanitary sewage and storm water runoff. As the community grew, the normal volume of sewage also increased. The Minneapolis system conveys wastewater to the sewer interceptor pipes owned and operated by the Metropolitan Council. Minneapolis has worked for many years to separate its sanitary and storm

sewer systems so that during periods of heavy rain, sewage is no longer discharged into the river. The City of Minneapolis and the Metropolitan Council continue to work on removing clear water (inflow/infiltration) from their systems. The Water Resources Management Plan is an appendix to the Comprehensive Plan.

Future Land Use

Figures 7-13 and **7-14** show where the Minneapolis 2040 production and distribution land uses category is mapped in the MRCCA. Although the zoning code has not yet been updated to reflect Minneapolis 2040, it is anticipated that these are areas that would allow major public service and utility uses.

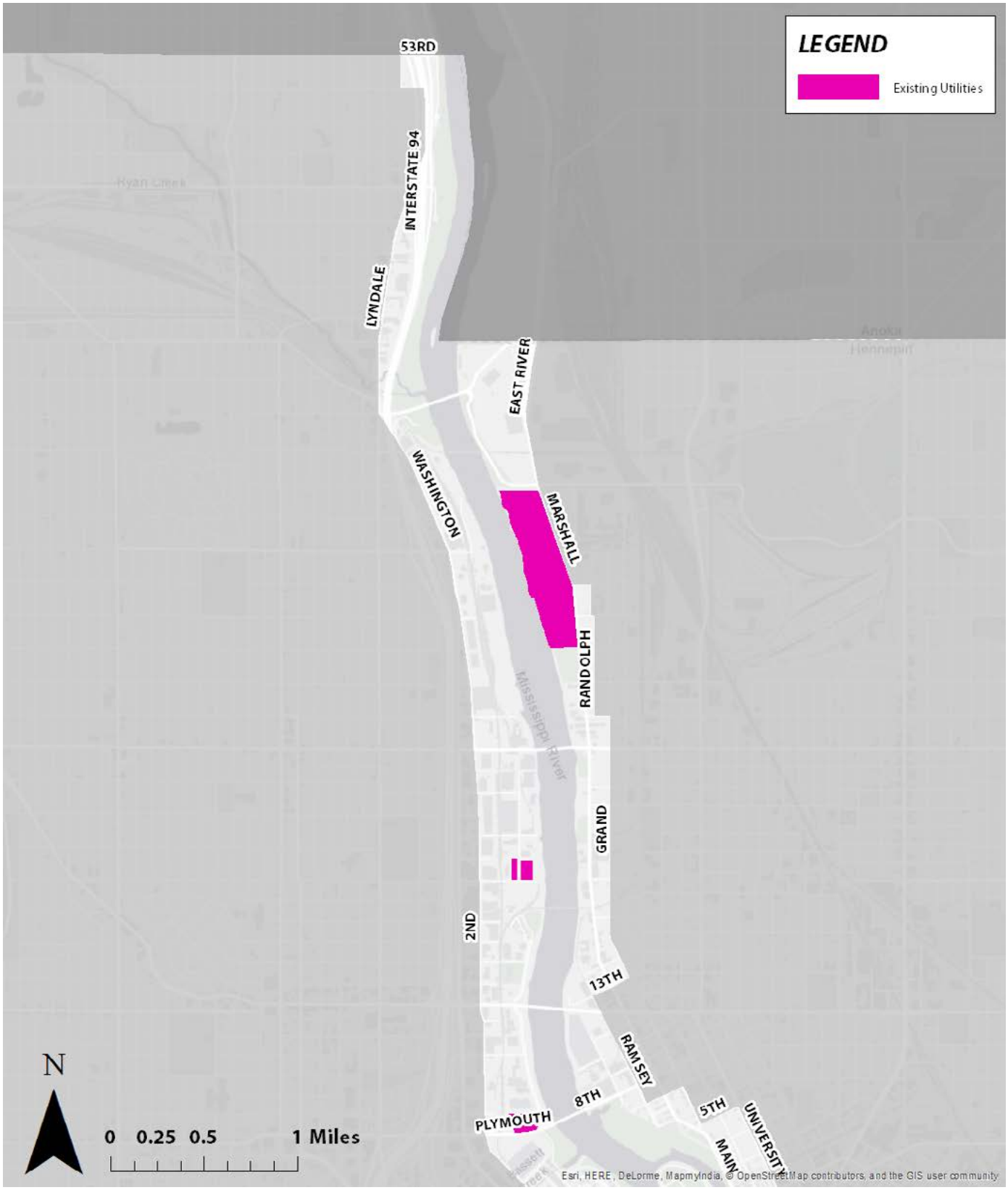


FIGURE 7-11: UPPER RIVER - EXISTING UTILITIES.

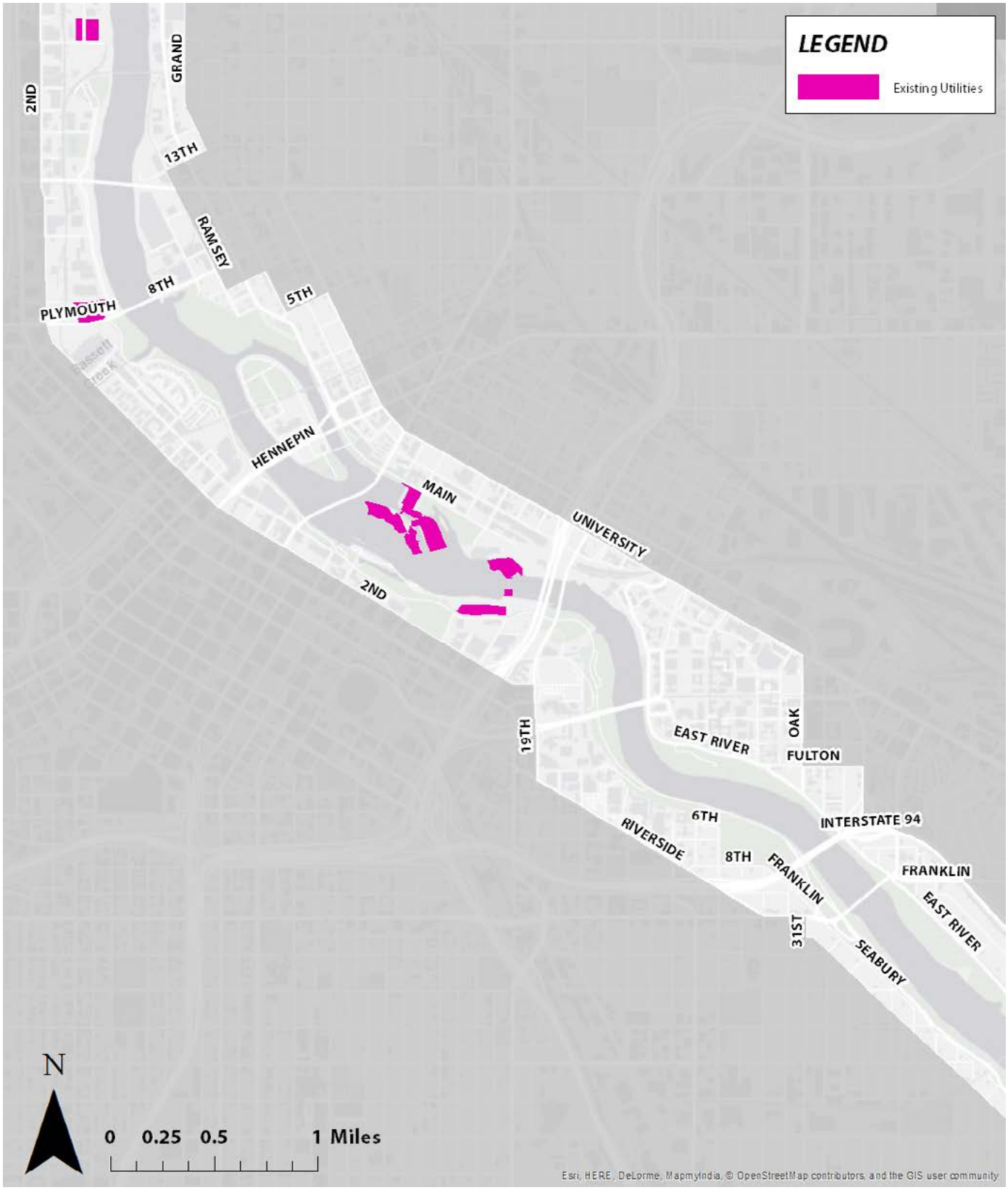


FIGURE 7-12: CENTRAL RIVER - EXISTING UTILITIES.

FIGURE 7-13: UPPER RIVER - MINNEAPOLIS 2040 PRODUCTION AND DISTRIBUTION GUIDED LAND.

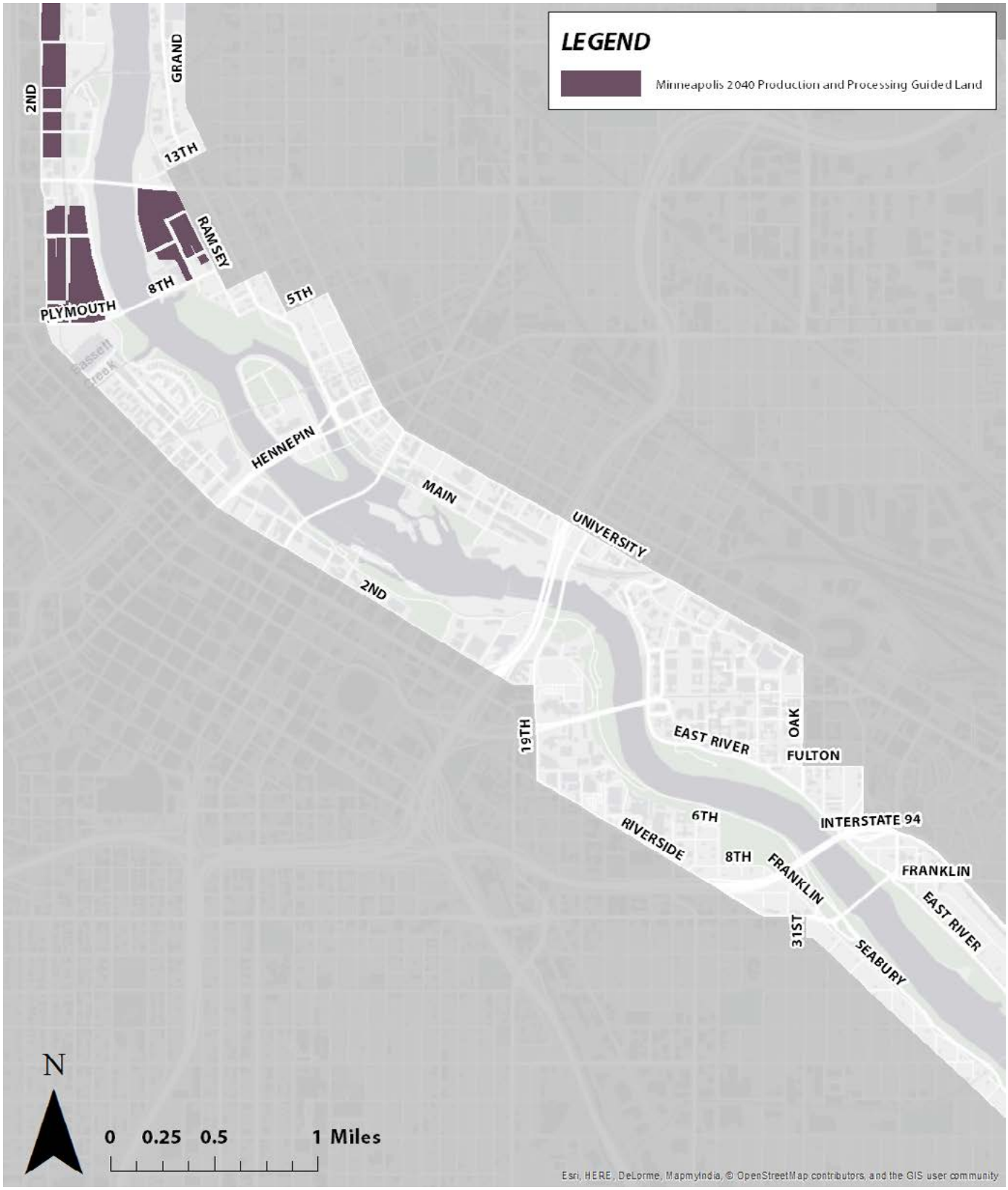


FIGURE 7-14: CENTRAL RIVER - MINNEAPOLIS 2040 PRODUCTION AND DISTRIBUTION GUIDED LAND.

Chapter 8 - Surface Water and Water Oriented Uses

Surface water uses include recreational boat traffic, barge fleeting and commercial riverboat tours. Water-oriented uses include parks, scenic overlooks, observation platforms, docks, fishing piers, water access ramps, marinas, and boathouses. Surface water and water oriented uses have economic benefits, but may cause negative impacts such as riverbank erosion. In addition, there could also be noise or visual impacts depending on the scale of the use. There could also be conflicts between motorized and non-motorized craft or other river uses.

The Water Resources Reform and Development Act of 2014 closed the Upper St. Anthony Falls Lock to navigation in June of 2015. Because of this closure commercial barge traffic no longer occurs on the Mississippi in Minneapolis. Larger recreational craft or river tour boats can still utilize the Lower St. Anthony Falls Lock to access the central river area, but can no longer reach the upper river. Smaller recreational craft can still operate on the upper and lower areas of the river in Minneapolis, but cannot pass between those two areas.

Currently the city does not have a good inventory of surface water uses or an ordinance specific to surface water uses. The City of Minneapolis will cooperate and work with St. Paul, other affected municipalities, Hennepin County, the Minnesota Department of Natural Resources, and the U.S. Government in developing regulations for watercraft surface uses on the Mississippi River. Water-oriented uses are regulated by the zoning ordinance.

Chapter 9 - Key Issues and Opportunities

HEAVY INDUSTRY

In the 1800's the central river developed with industries that utilized power from the falls. Lumber and flour milling were the predominant industries; both dependent on the falls for power. In later years as the lumber milling industry grew, it moved northward into North Minneapolis along the river and was supplanted by flour milling in the central river area. However, by 1919 the last sawmill on the river closed. Scrap yards became a predominant land use in parts of the upper river starting in the 1920s. Gravel storage and other industrial uses located in the central river as flower milling declined. The Lower St Anthony Falls Lock and Dam was completed in 1956, the Upper Lock in 1963 (moving the head of commercial navigation on the Mississippi River to the upper river), and the City opened the Upper Harbor Terminal in 1968.

Despite the efforts to move commercial navigation and industrial development to the upper river, Minneapolis historically has played a limited role in complex manufacturing. Rather, the City's original purpose was bulk materials processing – sawing logs and milling wheat. The capital accumulated by these early industries was subsequently reinvested, transforming the City's economy away from industry to other uses including office and high-technology businesses. The heavy industrial role of the river has diminished greatly with the advent of transportation alternatives, the loss of grain and lumber milling, the abandonment of direct water power, and the elimination of barge traffic.

Many millions of dollars of private and public investment have been invested in the central and upper river areas since industrial uses have declined. City of Minneapolis policies reflect recognition of the river's changing role and seek further benefits by improving it as a natural, cultural, and recreational resource. Consequently, many plans prepared by the City and the MPRB over the past

four decades have emphasized the reclaimed river as an economic catalyst for economic development.

While non-residential uses are still appropriate in areas of the upper river (as directed by the comprehensive plan and other small area plans) the trend will continue to move away from heavy industrial to cleaner job intensive production and processing uses, housing, mixed-use development, or parkland.

UPPER HARBOR TERMINAL OPPORTUNITY

Located along the Mississippi River in North Minneapolis, generally between the Lowry Avenue and Camden bridges, the Upper Harbor Terminal (UHT) site is the largest remaining single-owner development opportunity along the River in Minneapolis. It is an approximately 48-acre parcel of land owned by the City of Minneapolis. It operated since the 1960s as an inter-modal barge shipping terminal, but ceased operating as a barge terminal after the closure of the locks at St. Anthony Falls in 2014. The redevelopment goal is to transform the site from its historic use as a barge shipping terminal to a combination of riverfront park amenities and private development. Further, the UHT project also provides the opportunity to implement many of the goals of the MRCCA plan.

To facilitate this goal, the City of Minneapolis and Minneapolis Park & Recreation Board (MPRB) have completed a request for qualification process and selected a development team to work with them to pursue redevelopment of the City-owned Upper Harbor Terminal (UHT) site in North Minneapolis. Details regarding this process can be found at: http://upperharbormpls.com

FIGURE 9-1: UPPER HARBOR TERMINAL VIEWED FROM THE NORTH.

Chapter 10 – Policies

The following policies are intended to guide development and other activities in the MRCCA. They are not a comprehensive list of every regulation, policy, plan or study that would be applicable in the MRCCA. The policies found in Minneapolis 2040 and other adopted plans apply in the MRCCA.

General

- Maximize public access to and enjoyment of the river corridor, public appreciation of the river's many resources, and protection and enhancement of the river corridor's natural, scenic, and cultural resources.
- Protect and preserve a unique and valuable state and regional resource to benefit the health, safety, and welfare of the residents for the state, region, and nation.
- Prevent and mitigate irreversible damage to this state, regional, and national resource.
- Preserve and enhance its natural, aesthetic, cultural, and historic values for the public use.
- Protect and preserve the river as an essential element in the national, state, and regional transportation, water, and recreational systems.
- Protect and preserve the biological and ecological functions of the corridor.
- Work with the MPRB to create a continuous parkway system (or open space) along both sides of the river.

Districts and Land Use

- Appropriate land use is as guided by the comprehensive plan.
- Land uses should relate to their riverfront location in a manner that enhances the river environment. Land uses that are considered river enhancing will vary depending on location and context and as guided by adopted plans.
- Land use or activities which would have detrimental effects on a high quality river environment should not be allowed to locate or expand within the MRCCA.
- In general, structures within the Critical Area should be shorter when located closer to the river with height increasing as distance from the river increases. However, taller buildings can be considered closer to the river when the existing built character is similar or where measures are taken to provide significant landscaping and buffering of the structure. In addition, buildings should utilize tapered profiles as building height increases to allow views of and from the river and to avoid overly wide buildings that can create a wall along the riverfront significantly blocking views for other structures, development sites, and neighborhoods
- Physical development is regulated by the Minneapolis Zoning Ordinance to implement this plan and in accordance with the MRCCA rules.

PRIMARY CONSERVATION AREAS

General

Protect Primary Conservation Areas (PCAs) and minimize impact to PCAs from public and private development and land use activities.

Support mitigation of impacts to PCAs through the City's development review process (conditional use permits, site plan review, subdivisions, PUDs, variances, and other permits).

- Restoration of removed Native Plant Communities and natural vegetation in riparian areas is a high priority during development.
- Support alternative design standards that protect the identified PCAs, such as conservation design, transfer of development density, or other zoning and site design techniques that achieve better protections or restoration of primary conservation areas.
- Use permanent protection measures (such as public acquisition, conservation easement, deed restrictions, etc.) to protect PCAs.

Shore Impact Zone (SIZ)

- Structures and impervious surfaces must not be located in the SIZ and must meet the setback requirement from the ordinary high water level of the Mississippi River as specified for each district, except as otherwise allowed by the MRCCA Rules and the Minneapolis Zoning Ordinance.

- Where construction is allowed by the MRCCA rules and Minneapolis Zoning Ordinance, the activity should limit disturbance to minor grading and selective tree removal to the extent possible. New construction should appear as natural as possible through the use of design treatments, landscape treatments, and vegetative screening.
- Shoreline and native plants restoration is encouraged.

Floodplains and Wetlands

- The City will continue to implement its floodplain ordinance to guide development and redevelopment.
- The exact boundaries of any floodway or flood fringe will be determined by consulting the Federal Emergency Management Agency Flood Boundary (FEMA) and Floodway Map and comparing it to a topographic survey prepared by the applicant and submitted to the City.
- Where the City or Watershed Management Organizations have flood elevation data or other relevant information that is more current that the adopted FEMA maps, it should be utilized to guide development decisions by comparing it to a topographic survey prepared by the applicant and submitted to the City.
- Wetlands will be protected by adherence to state and federal wetland rules and procedures

Natural Drainage Ways

- Natural drainage ways that empty into the Mississippi River will be protected through the City's Shoreland Overlay Ordinance, Stormwater Management Ordinance, Erosion Control Ordinance, and other relevant regulations and policies.

Bluffs and Bluff Impact Zones (BIZ)

- Structures and impervious surfaces must not be located in the BIZ and must meet the setback requirement from the ordinary high water level of the Mississippi River as specified for each district, except as otherwise allowed by the MRCCA Rules and the Minneapolis Zoning Ordinance.
- The BIZ should be protected in its natural state (or restored with natural vegetation) New land disturbance along the bluff face is prohibited, except as otherwise allowed by the MRCCA Rules and the Minneapolis Zoning Ordinance.
- Where construction is allowed by the MRCCA rules and Minneapolis Zoning Ordinance, the activity should limit disturbance to minor grading and selective tree removal to the extent possible. New construction should appear as natural as possible through the use of design treatments, landscape treatments, and vegetative screening. Development shall comply with the Stormwater and Erosion Control Ordinances.
- Renovation or maintenance of existing parkways or trails or short connections of existing parkways and existing roads running down the bluff to the river (all of which are public) may be maintained in conformance with the MRCCA rules and Minneapolis Zoning Ordinance.
- Construction of new parkway segments which connect existing parkways may be permitted within the BIZ when no other alternative exists.
- The degree of slope on any proposed development site in the MRCCA will be determined through a topographic survey prepared by the applicant and submitted to the City.

Native Plant Communities and Significant Vegetative Stands

- Removal of native plant communities or significant vegetative stands (See Chapter 3, Figures 3-15 through 3-17 and Appendix B for locations) in the Critical Area Corridor is prohibited, except as otherwise allowed by the MRCCA Rules and the Minneapolis Zoning Ordinance and shall be done in conformance with the policies of this plan.
- Removal of vegetation, where allowed, shall expose the smallest practical area of soil for the least practical amount of time and protective erosion and sediment control measures shall be used.
- Development should be located in such a manner as to minimize the removal of vegetation and the alteration of natural topography.
- Development shall be located to preserve the natural features of the site and to preserve significant trees or plant communities (including remnant stands of native

trees or prairie grasses or plant communities that are rare to the area or of particular value). To the extent possible, trees with a diameter at breast height of 12 inches or larger shall be preserved.
- Clear cutting, the removal of an entire stand of trees, shrubs, and other vegetation, is prohibited except as necessary for native plant restoration, removal of invasive species, or for development allowed by the MRCCA Rules and the Minneapolis Zoning Ordinance, and when consistent with policies of this plan.
- Cutting of noxious, invasive, and exotic plants is allowed.
- The removal of invasive plant species and replacement with native plantings is encouraged.
- Selective removal of natural vegetation may be allowed, provided that sufficient vegetative cover remains to screen cars, dwellings, and other structures when viewed from the water.
- Where there is no feasible or prudent alternative to cutting trees on a site, tree density and ground cover should be restored to native vegetation appropriate to the ecology of the site.
- After any construction project is completed, natural vegetation shall be restored to the extent feasible to minimize surface runoff, soil erosion, and to provide screening.
- Adequate erosion protection measures such as trees and vegetation plantings on slopes shall be used to ensure that soil loss levels do not degrade the receiving water body.
- Where appropriate, trees and other native vegetation appropriate to the ecology of the site should be used to improve the appearance of the river corridor.
- Where appropriate, vegetation may be selectively pruned to increase visual contact with the river and to open up key scenic views except that such pruning shall not significantly alter the character or massing of the vegetation.
- Significant or unique vegetation such as native plant communities or remnant plant communities should be identified and preserved for educational, historic, and scenic values.
- The MPRB will continue to improve natural habitat and native vegetation along the shoreline, reduce soil erosion, and implement practices on its lands that minimize stormwater runoff and protect surface waters.
- The City will protect, manage, and maintain City-owned vegetated lands in the Critical Area, including publicly-owned embankments.
- The City will work with the MPRB and other partner agencies and organizations to encourage and support restoration of native plant communities, use of native plants for landscaping, and preservation of large beneficial tree species in the corridor.

Cultural and Historic Properties
- The City will continue to implement its heritage preservation plans, policies, and ordinance.
- The City will continue to coordinate with the St. Anthony Falls Heritage Board on interpretation of the history of the St. Anthony Falls Heritage Zone.

Lower Gorge
- In the Lower Gorge the predominant visual feature should be trees and bluffs. That district should continue to be managed to preserve and enhance those natural scenic qualities.
- In the Lower Gorge, the natural character of the wooded bluffs and shoreline will be preserved and enhanced while the public recreational experience is improved.

Land Disturbance Including Unstable Soils and Bedrock
- The City will work to control erosion through use of its regulatory tools including the zoning ordinance, erosion control and stormwater management ordinances, as well as other applicable ordinances and regulations. Compliance with all City ordinances and regulations are required for any improvements made by the MRPB.
- Development should be suited to the site and to the soil conditions.
- Erosion protection measures should make maximum use of natural in-place vegetation and additional planting of new native vegetation rather than the use of artificial devices on site as erosion control measures.

- Development shall minimize runoff and should not cause erosion, increase the net surface runoff rate, or decrease the net rate of storm water absorption on the site.
- The rate of runoff from parking lots, roads, bridges and trails near the bluffline will be minimized and controlled to prevent erosion. Techniques may include detaining water in a parking lot or creating a detention or retention facilities.
- Required erosion control measures should be maintained before, during, and after construction to ensure that gross soil loss levels do not degrade adjacent water bodies or water courses. Construction shall be sequenced to minimize the exposure of slopes to runoff and potential erosion. Implement phased erosion/sedimentation BMPs as needed. Disturbed areas shall be stabilized within 14 days. The MPCA Stormwater Manual shall be used as a guide for construction site best management practices.
- Artificial devices such as retaining walls should be allowed only as a last resort after consideration of all other best management practices such as native vegetative or bioengineering solutions for the sake of minimizing slope and erosion problems.

PUBLIC RIVER CORRIDOR VIEWS (PRCVS)

- PRCVs illustrated in this plan are not intended to be a blanket prohibition on all development in every instance where they are identified. The policies, goals, and information listed in the plan inform how to balance development and PRCVs.
- Protect and minimize impacts to PRCVs from public and private development activities.
- Protect and minimize impacts to PRCVs from public and private vegetation management activities.
- Protect PRCVs located within the community and identified by other communities (adjacent or across the river).
- River corridor development should be located and designed to minimize adverse effects on the natural or scenic views of the river.
- The City will prevent development that has a significant negative impact on key scenic views and encourages design which preserves, enhances, or creates key scenic views.
- Development should implement the visual quality goals of this plan (see Chapter 4).
- Development along the river should encourage reconnections of the traditional street grid pattern (some of the connections may be only pedestrian and bike connections) where that would enhance visual and physical connections to and from the river.
- The scenic quality of the shorelines should be improved by high quality urban design and site planning.
- The scenic quality of the shorelines should be improved by minimizing parking and outdoor storage of materials.
- Encourage and facilitate the rehabilitation or removal of obsolete and visually blighted structures.
- The City will strive to maintain views to and from the river by providing overlooks, river corridor parks, and view corridors between river corridor buildings. View should favor up or downstream vistas whenever possible for longer views of the river.
- Scenic overlooks and the associated improvements (signs, kiosks, etc.,) should be chosen and located so that they do not interfere with or obstruct key scenic views.
- Existing scenic overlooks should be marked and maintained by pruning for the health of the vegetation, removal of noxious exotic species, addition of native species that have mature heights which are below the sight line of the overlooks and as a last resort, selective cutting of vegetation to maintain views of the river.

RESTORATION PRIORITIES

- Protect native and existing vegetation during the development process, and require restoration if any is removed by development. Priorities for restoration shall include stabilization of erodible soils and riparian buffers and bluffs or steep slopes visible from the river.
- Restore native vegetation to protect and enhance public river view corridors identified in this plan where possible.
- Restore vegetation in restoration priority areas identified in this plan through the City's development review process (conditional use permits, site plan review, subdivisions, PUDs, variances, and other permits).

- Seek opportunities to restore native vegetation in areas where vegetative cover is not present.
- The removal of invasive plant species and replacement with native plantings is encouraged.
- Sustain and enhance ecological functions (habitat value) during vegetation restorations.
- Pollinator and wildlife friendly native plantings are encouraged.
- Evaluate proposed development sites for erosion prevention and bank and slope stabilization issues and require restoration as part of the development process.

OPEN SPACE AND RECREATIONAL FACILITIES

General

- Encourage creation, connection, and maintenance of open space and recreational facilities, including public access to the river.
- Identify and encourage connection of CA-SR district land to existing and planned parks and trails.
- Encourage that land dedication requirements be used where appropriate to acquire land suitable for public river access.
- The Central Mississippi Riverfront Regional Park should continue to improve its open space appropriate to an urban setting.
- In the Lower Gorge, the natural character of the wooded bluffs and shoreline will be preserved and enhanced while the public recreational experience is improved.
- Recreational activities on and along the Mississippi River should capitalize on the recreational opportunities that are river-oriented and compatible with the surrounding environment. Current recreation includes biking, walking, canoeing, boating, sight-seeing, historic interpretation, eating and drinking, picnicking and bird-watching.
- Active sports, especially those requiring highly delineated spaces and hard surfaces in which participants are not aware of the surrounding environment, should not be encouraged along the river's edge.
- Because of conflicts with boat traffic, river currents, and the fact that more appropriate water facilities are available, swimming, sailing, and ice skating are discouraged.
- Fishing should be encouraged along the river in designated areas which do not conflict with other recreation or transportation uses and when state water quality standards permit.
- Sculling, rowing, kayaking, and canoeing are encouraged everywhere in the River. Between Hennepin Avenue and I-35W consideration should be given to the activities can be done safely, due the falls and the lower lock and dam, before they are allowed.

Parkways

- A continuous parkway and trail corridor parallel to and along both sides of the Mississippi River should continue to be completed where possible to provide recreational opportunities for pedestrians, bicyclists, and motorists.
- Although the parkway may vary in distance from the riverbank in some areas, it should provide clear site lines to the river and river-related activities whenever feasible.
- In the upper river, the parkway should be extended along the west side from Plymouth Avenue to Webber Parkway near the Camden Bridge. This parkway may weave away from the riverfront where it is impractical to build near the river, or where guided by adopted plans.
- In the upper river, on the east side, Marshall Street NE may be improved with greatly improved sidewalks and bicycle lanes. Since Marshall Street NE would not be an element of the parkway system, it would continue to carry truck traffic.
- Redevelopment of the Upper Harbor Terminal may also result in a shared road or parkway that may allow truck traffic.

Trails

- Park and Trail Land Acquisition - As funding becomes available, the MPRB will acquire land for new river corridor parks or trails through purchase or dedication based on a comprehensive park system plan. Easements for public movement along the river's edge or from neighborhoods to the riverfront will be negotiated on a case-by-case basis. Public ownership of river corridor

park land is preferred over an easement. When property is subdivided, the City may require the subdivider to dedicate to the City either land (if the location is at a planned park) or cash in lieu of land, as provided by adopted ordinances.

- Regional trails in the City will serve transportation and recreation by providing access to major parks, linking those parks, and offering multipurpose trail activities such as bicycling, hiking, and cross country skiing. The bicycle paths along the Mississippi River should be linked to the regional system at the northern and southern ends, and via the Bassett Creek Trail, St. Anthony Parkway, the Franklin and 46th Street bridges, the Midtown Greenway, Minnehaha Parkway, and other lateral connections. They should be connected to the street network where appropriate.
- Trail routing should take advantage of natural features such as rivers, streams, and creeks or man-made features such as utility easements or railroad rights-of-way.
- Pedestrian, bicycle, and motor routes should be separated wherever feasible with the pedestrian path located nearest to the river, then the bicycle path, then the road.
- “Points of particular interest” or “nodes” should be developed along the river at points where adjacent neighborhoods have lateral entry to the river, to provide focal points or interesting stopping points along the way, and to provide parklands for recreation purposes.
- Wherever feasible, lateral access routes to the river should be developed in the upper river and central river areas to provide adjacent neighborhoods with physical and visual access. Vacation of public right-of-way that has the potential to provide, connect, or enhance these lateral routes is discouraged.
- There should be continuous bicyclist and pedestrian paths along both sides of the Upper River across parkland or, in limited instances, public easements.
- Access also should be added on the east bank to connect existing Main Street to East River Parkway at the University of Minnesota.
- In the lower gorge, pedestrian and bicycle trails should generally follow the East and West River Parkways with looped pedestrian trails at East River Flats, East and West Sand Flats, and Riverside Park to connect the upper bluffs with the lower shoreline.

TRANSPORTATION AND PUBLIC UTILITIES

- Minimize impacts to PCAs and PRCVs from solar and wind generation facilities, public transportation facilities, and public utilities.
- New or modified transportation facilities shall complement the planned land and water uses and shall not stimulate development incompatible with river uses. In planning and designing construction or reconstruction of public transportation facilities in the corridor, consideration shall be given to safe pedestrian crossings and facilities along the corridor, access to the riverfront in public ownership, provision of scenic overlooks, and reasonable use of land between the river and the transportation facility.
- Streets and Roads- The City and the MPRB will minimize creating roads, including parkways, that would be visible from the river surface or that would interfere with enjoyment of the river. Any road improvements will observe the policies of this plan for protection of vegetation, water quality, wildlife habitat, views to and from the river, public access to the riverfront, erosion control, and public open space.
- Bridges - Bridges are the most highly visible structures along the river. Additional river bridges should be discouraged. Historic bridge structures should be retained. Any changes to existing river bridges or streets near the river should be designed to enhance the scenic and historic qualities of the river corridor. The City will support replacement bridge designs that add to the aesthetic environment of the river. Bridge improvements should improve multi-modal access across the bridges, as there are limited opportunities for pedestrians and bicyclists to cross the river.
- Pedestrian and Bicycle Facilities - The City will continue to improve pedestrian and bicyclist movement to and along the river.

- Vacations of City right-of-way are discouraged as they may be used for future pedestrian and bicycle facilities to and along the river.
- Railroad Lines - The City will encourage duplicative or unneeded lines to be consolidated whenever possible. When tracks are abandoned, the MRPB will acquire (to the extent funding is available) for public trails or other public open space needs those it has targeted for possible acquisition through a system plan, particularly river bridges. The City will continue to monitor track abandonment and work with the Minnesota Department of Transportation to acquire targeted corridors.
- Railroad and Truck Terminal Locations - The City will continue to encourage the relocation of major freight shipping facilities out of the MRCCA to reduce conflict with other activities in the river corridor.
- Drinking Water Source - The City will continue to use the Mississippi River as the primary drinking water supply source.
- Upstream Treatment - The City will protect the quality of the raw water supply by supporting local and state efforts to improve the water quality of any point and non-point discharges.
- Water Conservation and Supply Plans - The City will continue to implement its plan for water conservation and alternative supply sources so as to reduce the need for treatment plant expansion and to guard against low river water flows during droughts.
- Sewer Separation - The City will continue to work to entirely separate sanitary sewers and surface water drainage sewers.
- Infiltration and Inflow - The City will maintain its sanitary sewers in such a condition so as to minimize infiltration of groundwater.
- Water Quality Management - The City will take measures to protect the quality of water flowing into the Mississippi River. At a minimum, the City's Stormwater Management and Erosion Control Ordinances will be used to regulate site development and watershed management. The City will continue to work with the Mississippi Watershed Management Organization to study the need for additional or different regulations.
- Flood Control - The City will implement floodplain controls so that new construction does not occur in areas of the City subject to periodic, localized flooding.
- High Voltage Transmission Lines - The City, in conjunction with Xcel Energy, will strongly discourage any new corridors for high voltage transmission lines to run parallel to or, especially, across the river. Necessary river crossings should be designed and located to minimize their visual impact. For instance, towers for transmission lines in the Central Riverfront were previously designed as large-scale pieces of art and actually add to the urban visual interest of that area. The City will evaluate and, if feasible, pursue relocation away from the river any high voltage transmission line that exists along the river. All electrical, telephone, and cable television lines in the Critical Area should eventually be located underground when technically feasible.
- It is recognized that power plants and electric lines provide a necessary service; while existing plants should be allowed to continue to operate, significant expansion should be discouraged.
- Electrical lines under 220 kilovolts will continue to be regulated under existing ordinances. Those regulations identify a number of considerations that must be taken into account in locating electrical lines including the potential for erosion and decreased water quality, visual impact (including the potential for locating them underground), ability to consolidate crossings, and limiting the chemical control of vegetation in the utility right-of-way.

SURFACE WATER USES AND WATER ORIENTED USES

- The City of Minneapolis will cooperate and work with Saint Paul, other affected municipalities, Hennepin County, Ramsey County, the Minnesota Department of Natural Resources, and the U.S. Government in developing regulations for surface watercraft uses on the Mississippi River.
- Water-oriented uses will be regulated by the MRCCA Rules and the Minneapolis Zoning Ordinance in conformance

with the goals of this plan, the comprehensive plan, and other adopted plans.
- The City and the MPRB will continue to evaluate opportunities to create boat launches, docks, and marinas on the Mississippi River.
- Seek to balance commercial and recreational surface water uses.
- Minimize potential conflict of water-oriented uses with other land uses.

Other Environmental

- Developments are required to comply with the city's Stormwater Management Ordinance and are encouraged to make environmentally friendly steps on their properties to reduce their stormwater management fees.
- The City will continue to work with the Minnesota Pollution Control Agency to achieve federal and state water quality standards. The City will continue to enforce along the river corridor as well as the balance of the community its adopted standards for the National Urban Runoff Program and the National Pollutant Discharge Elimination System Program.
- The City will continue to license underground oil and chemical tanks and continue its efforts to remediate contaminated sites throughout the City. In addition, the City will continue to require the reporting of oil and chemical spills and to clean up spills and assist with the disposal of waste which might pollute ground and surface waters. Existing control and review mechanisms to prevent contamination of public waters and erosion by surface runoff will continue.
- Dredge Material - Dredged material may be placed on the beaches along the river only in an emergency dredging situation or in response to development by the Corps of Engineers of a recreation beach management plan that is approved by its partner agencies.

St. Anthony Falls

- Every effort should be made to maintain St. Anthony Falls for aesthetic, recreation, and historical appreciation, after minimum flow requirements for public water supplies are met.
- Future alterations may be allowed which enhance aesthetic and recreational potential while being respectful of historic import.
- Prior to approval, proposals which would affect water flow should be reviewed and approved as applicable by the Metropolitan Council, Minneapolis City Council, MRPB, the Department of Natural Resources Public Waters and Appropriations Permits Program, and the U.S. Army Corps of Engineers.

Chapter 11 – Implementation Actions

The implementations steps listed below, including permitting requirements, are required by the MRCCA Rules, Metropolitan Council, and DNR.

General

- Submit the updated MRCCA plan to the Metropolitan Council and the DNR at the same time that the 2040 Comprehensive Plan update is due to the Metropolitan Council.
- Update the Zoning Ordinance, including the Shoreland and Critical Area Overlay Districts, to reflect goals and policies of this plan as well as any relevant requirements of federal and state legislation.
- Ensure that information on the new MRCCA districts, zoning requirements, PCAs, PRCVs, and restoration priorities, are available to property owners to help them understand which ordinance requirements apply to their property for project planning and permitting.
- The City of Minneapolis will continue to coordinate with the Minneapolis Park and Recreation Board, the City of St. Paul, and other applicable agencies in efforts to manage the resources of the river gorge.
- Continue to work on integration of the adopted plans and policies of the multiple jurisdictions with authority in the MRCCA.
- Evaluate implementation flexibility, as allowed by Minnesota Rules 6106.0070, Subp. 6, related to height and tiering requirements in the CA-UC and CA-UM districts during ordinance drafting and approval.

Districts

- Amend the MR Mississippi River Critical Area Overlay District compliant with the goals and policies of the MRCCA plan and with Minnesota Rules, part 6106.0070, Subp. 5 - Content of Ordinances.
- Update the zoning map to reflect new MRCCA districts.

Primary Conservation Areas

- Establish procedures and criteria for processing applications with potential impacts to PCAs, including identification of the information that must be submitted and how it will be evaluated, determining the appropriate mitigation procedures and methods for variances and CUPs, and establishing evaluation criteria for protecting PCAs when a development site contains multiple types of PCAs and the total area of those PCAs exceed the required set aside percentages.
- Develop administrative procedures for integrating DNR and local permitting of riprap, walls and other hard armoring.

Public River Corridor Views (PRCVs)

- Establish procedures for processing applications with potential impacts to PRCVs, including the identification of the information that must be submitted and how it will be evaluated and developing standards for conditional use permits and variances for additional height where allowed by the MRCCA rules and the Minneapolis Zoning Ordinance.
- Determine appropriate mitigation procedures and methods for conditional use permits and variances.

Restoration Priorities

- Establish a vegetation permitting process that includes permit review procedures to ensure consideration of restoration priorities identified in this plan in permit issuance, as well as standard conditions requiring vegetation restoration for those priority areas.
- Establish a process for evaluating priorities for natural vegetation restoration, erosion prevention and bank and slope stabilization, or other restoration priorities identified in this plan for the development review processes

Open Space and Recreation Facilities

- Continue system for reviewing, tracking, and monitoring open space dedication required as part of the subdivision process. https://www.minneapolisparks.org/park_care__improvements/park_dedication/

Transportation and Public Utilities

- Incorporate specific design and placement conditions that minimize impacts to PCAs and PRCVs into local permits for solar and wind generation facilities and essential and transmission services.

Surface Water and Water Oriented Uses

- Evaluate the need for adoption of surface water use regulations authorized under Minn. Statute, Chapter 86B (MR 6110.3000 – 6110.3800).
- Provide for water-oriented uses in the zoning ordinance.
- Develop an inventory of surface water uses and water oriented uses for inclusion in the MRCCA Plan

Attachment A

Minnesota Rules, Chapter 6106 (MRCCA Rules)

CHAPTER 6106

DEPARTMENT OF NATURAL RESOURCES

MISSISSIPPI RIVER CORRIDOR CRITICAL AREA

6106.0010 POLICY.

It is in the interest of present and future generations to preserve and enhance the natural, aesthetic, economic, recreational, cultural, and historical values of the Mississippi River corridor within the Twin Cities metropolitan area and protect its environmentally sensitive areas. In furtherance of the policies declared in Minnesota Statutes, chapters 116G, 394, 462, and 473, this chapter provides standards and criteria for the preservation, protection, and management of the Mississippi River Corridor Critical Area.

Statutory Authority: *MS s 116G.15*

History: *41 SR 799*

Published Electronically: *January 19, 2017*

6106.0020 PURPOSE; DESIGNATION.

The minimum standards and criteria in this chapter are provided for the subdivision, use, and development of land within the Mississippi National River and Recreation Area, established pursuant to United States Code, title 16, section 460k, which is designated the Mississippi River Corridor Critical Area, according to the purposes described under Minnesota Statutes, section 116G.15, subdivision 1.

Statutory Authority: *MS s 116G.15*

History: *41 SR 799*

Published Electronically: *January 19, 2017*

6106.0030 SCOPE; OTHER LAW.

Subpart 1. **Applicability.** The standards and criteria established in this chapter for the Mississippi River Corridor Critical Area pertain to public waters and to nonfederal public land and private lands within the river corridor boundary.

Subp. 2. **Government actions.** The state and all local governments, including councils, commissions, boards, districts, departments, and all other public authorities, must exercise their powers to further the purposes of this chapter.

Subp. 3. **State land.** Land owned by the state and its agencies and subdivisions must be administered according to this chapter.

Subp. 4. **Conflicting standards.** In case of a conflict between this chapter and any other rule or ordinance, the more protective provision applies.

Subp. 5. **Superseding standards.** Specific standards found in this chapter supersede parts 4410.8100 to 4410.9910 for management of the Mississippi River Corridor Critical Area.

Statutory Authority: *MS s 116G.15*

History: *41 SR 799*

Published Electronically: *January 19, 2017*

6106.0050 DEFINITIONS.

Subpart 1. **Scope of terms and measurement of distances.** For the purposes of this chapter, the terms used have the meanings given in this part. All distances, unless otherwise specified, are measured horizontally.

Subp. 2. **Access path.** "Access path" means an area designated to provide ingress and egress to public waters.

Subp. 3. **Adjacent.** "Adjacent" means having a boundary that physically touches or adjoins.

Subp. 4. **Agricultural use.** "Agricultural use" has the meaning given under Minnesota Statutes, section 40A.02.

Subp. 5. **Alternative design.** "Alternative design" means subdivision design methods such as conservation design, transfer of development density, or similar zoning and site design techniques that protect open space and natural areas.

Subp. 6. **Barge fleeting.** "Barge fleeting" means temporarily parking and securing barges on the river, on or off channel, while tows are assembled or broken up.

Subp. 7. **Biological and ecological functions.** "Biological and ecological functions" means the functions of vegetation in stabilizing soils and slopes, retaining and filtering runoff, providing habitat, and recharging groundwater.

Subp. 8. **Bluff.** "Bluff" means a natural topographic feature having:

A. a slope that rises at least 25 feet and the grade of the slope averages 18 percent or greater, measured over a horizontal distance of 25 feet, as follows:

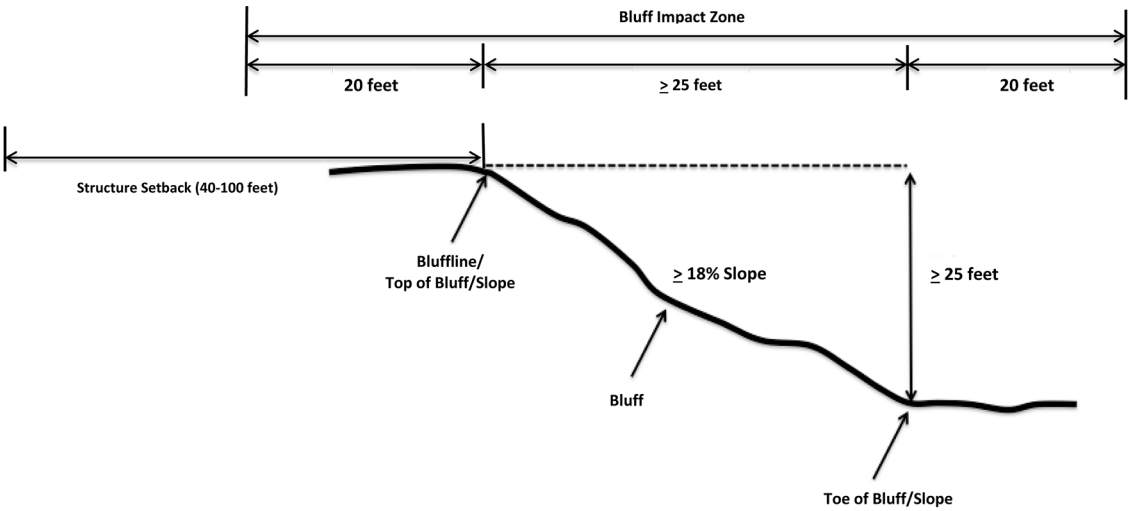
(1) where the slope begins above the ordinary high water level, from the toe of the slope to the top of the slope; or

(2) where the slope begins below the ordinary high water level, from the ordinary high water level to the top of the slope. See Figure 1; or

B. a natural escarpment or cliff with a slope that rises at least ten feet above the ordinary high water level or toe of the slope, whichever is applicable, to the top of the slope, with a slope of 75 degrees or greater.

Subp. 9. **Bluff impact zone.** "Bluff impact zone" means the bluff and land within 20 feet of the bluff. See Figure 1.

Figure 1: Bluff & Bluff Impact Zone



Subp. 10. **Bluffline.** "Bluffline" means a line delineating the top of the bluff. More than one bluffline may be encountered proceeding landward from the river. See also subpart 9, Figure 1, and subpart 78, "top of the bluff."

Subp. 11. **Buildable area.** "Buildable area" means the area upon which structures may be placed on a lot or parcel of land and excludes land areas needed to meet requirements for setback, rights-of-way, bluff impact zones, historic properties, wetlands, designated floodways, land below the ordinary high water level of public waters, and other areas restricted from development by local ordinance.

Subp. 12. **Building.** "Building" means a structure with two or more outside rigid walls and a fully secured roof and affixed to a permanent site.

Subp. 13. **Certificate of compliance.** "Certificate of compliance" means a document, written after a compliance inspection, certifying that the development is in compliance with applicable requirements at the time of the inspection.

Subp. 14. **Commissioner.** "Commissioner" means the commissioner of natural resources.

Subp. 15. **Conditional use.** "Conditional use" has the meaning given under Minnesota Statutes, section 394.22.

Subp. 16. **Conservation design.** "Conservation design" means a pattern of subdivision that is characterized by grouping lots within a portion of a parcel, where the remaining portion of the parcel is permanently protected as open space.

Subp. 17. **Conventional subdivision.** "Conventional subdivision" means a pattern of subdivision that is characterized by lots that are spread regularly throughout a parcel in a lot and block design.

Subp. 18. **Deck.** "Deck" means a horizontal, unenclosed, aboveground level structure open to the sky, with or without attached railings, seats, trellises, or other features, attached or functionally related to a principal use or site.

Subp. 19. **Developer.** "Developer" has the meaning given under Minnesota Statutes, section 116G.03.

Subp. 20. **Development.** "Development" has the meaning given under Minnesota Statutes, section 116G.03.

Subp. 21. **Discretionary action.** "Discretionary action" means an action under this chapter related to land use that requires a public hearing by local ordinance or statute, such as preliminary plats, final subdivision plats, planned unit developments, conditional use permits, interim use permits, variances, appeals, and rezonings.

Subp. 22. **Dock.** "Dock" has the meaning given under part 6115.0170.

Subp. 23. **Electric power facilities.** "Electric power facilities" means equipment and associated facilities for generating electric power as identified and defined under Minnesota Statutes, section 216E.01, and devices for converting wind energy to electrical energy.

Subp. 24. **Essential services.** "Essential services" means underground or overhead gas, electrical, communications, steam, or water distribution, collection, supply, or disposal systems, including storm water. Essential services includes poles, wires, mains, drains, pipes, conduits, cables, fire alarm boxes, traffic signals, hydrants, navigational structures, aviation safety facilities, or other similar equipment and accessories in conjunction with the systems. Essential services does not include buildings, treatment works as defined in Minnesota Statutes, section 115.01, electric power facilities, or transmission services.

Subp. 25. **Feedlot.** "Feedlot" has the meaning given for animal feedlot under part 7020.0300.

Subp. 26. **Floodplain.** "Floodplain" has the meaning given under part 6120.5000.

Subp. 27. **Hard-surface trail.** "Hard-surface trail" means a trail surfaced in asphalt, crushed aggregate, or other hard surface, for multipurpose use, as determined by local, regional, or state agency plans.

Subp. 28. **Historic property.** "Historic property" means an archaeological site, standing structure, site, district, or other property that is:

A. listed in the National Register of Historic Places or the State Register of Historic Places or locally designated as a historic site under Minnesota Statutes, chapter 471;

B. determined to meet the criteria for eligibility to the National Register of Historic Places or the State Register of Historic Places; or

C. an unplatted cemetery that falls under the provisions of Minnesota Statutes, chapter 307, in consultation with the Office of the State Archeologist.

Subp. 29. **Impervious surface.** "Impervious surface" means a constructed hard surface that either prevents or retards the entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development. Examples are rooftops, decks, sidewalks, patios, parking lots, storage areas, roads, and driveways, including those with concrete, asphalt, or gravel surfaces.

Subp. 30. **Intensive vegetation clearing.** "Intensive vegetation clearing" means removal of all or a majority of the trees or shrubs in a contiguous patch, strip, row, or block.

Subp. 31. **Interim use.** "Interim use" has the meaning given under Minnesota Statutes, sections 394.303 and 462.3597.

Subp. 32. **Land alteration.** "Land alteration" means an activity that exposes the soil or changes the topography, drainage, or cross section of the land, excluding gardening or similar minor soil disturbances.

Subp. 33. **Local government.** "Local government" means counties, cities, and townships.

Subp. 34. **Local park agencies.** "Local park agencies" means the Minneapolis Park and Recreation Board and the Three Rivers Park District.

Subp. 35. **Lot.** "Lot" has the meaning given under part 6120.2500.

Subp. 36. **Lot width.** "Lot width" means the shortest distance between lot lines measured at both the ordinary high water level and at the required structure setback from the ordinary high water level.

Subp. 37. **Marina.** "Marina" has the meaning given under chapter 6115.

Subp. 38. **Mooring facility.** "Mooring facility" has the meaning given under part 6115.0170.

Subp. 39. **Native plant community.** "Native plant community" means a plant community that has been identified as part of the Minnesota biological survey or biological survey issued or adopted by a local, state, or federal agency.

Subp. 40. **Natural-surface trail.** "Natural-surface trail" means a trail composed of native soil and rock or compacted granular stone, primarily intended for hiking, equestrian, or mountain bike use, as determined by local, regional, or state agency plans.

Subp. 41. **Natural vegetation.** "Natural vegetation" means any combination of ground cover, understory, and tree canopy that, while it may have been altered by human activity, continues to stabilize soils, retain and filter runoff, provide habitat, and recharge groundwater.

Subp. 42. **Nonconformity.** "Nonconformity" has the meaning given under Minnesota Statutes, section 394.22.

Subp. 43. **Nonmetallic mining.** "Nonmetallic mining" means construction, reconstruction, repair, relocation, expansion, or removal of any facility for the extraction, stockpiling, storage, disposal, or reclamation of nonmetallic minerals such as stone, sand, and gravel. Nonmetallic mining does not include ancillary facilities such as access roads, bridges, culverts, and water level control structures. For purposes of this subpart, "facility" includes all mine pits, quarries, stockpiles, basins, processing structures and equipment, and any structures that drain or divert public waters to allow mining.

Subp. 44. **Off-premise advertising signs.** "Off-premise advertising signs" means those signs that direct attention to a product, service, business, or entertainment venue that is not exclusively related to the premises where the sign is located.

Subp. 45. **Ordinary high water level.** "Ordinary high water level" has the meaning given under Minnesota Statutes, section 103G.005.

Subp. 46. **Overlay district.** "Overlay district" means a zoning district that is applied over one or more previously established zoning districts, establishing additional or stricter standards and criteria for covered properties in addition to those of the underlying zoning district. Overlay districts are often used to protect historic features and natural resources such as shoreland or floodplain.

Subp. 47. **Parcel.** "Parcel" has the meaning given under Minnesota Statutes, section 116G.03.

Subp. 48. **Patio.** "Patio" means a constructed hard surface located at ground level with no railings and open to the sky.

Subp. 49. **Picnic shelter.** "Picnic shelter" means a roofed structure open on all sides, accessory to a recreational use.

Subp. 50. **Planned unit development.** "Planned unit development" means a method of land development that merges zoning and subdivision controls, allowing developers to plan and develop a large area as a single entity, characterized by a unified site design, a mix of structure types and land uses, and phasing of development over a number of years. Planned unit development includes any conversion of existing structures and land uses that use this method of development.

Subp. 51. **Plat.** "Plat" has the meaning given under Minnesota Statutes, sections 505.01, subdivision 3, and 515B.2-110.

Subp. 52. **Port.** "Port" means a water transportation complex established and operated under the jurisdiction of a port authority according to Minnesota Statutes, chapter 458.

Subp. 53. **Primary conservation areas.** "Primary conservation areas" means key resources and features, including shore impact zones, bluff impact zones, floodplains, wetlands, gorges, areas of confluence with tributaries, natural drainage routes, unstable soils and bedrock, native plant communities, cultural and historic properties, significant existing vegetative stands, tree canopies, and other resources identified in local government plans.

Subp. 54. **Professional engineer.** "Professional engineer" means an engineer licensed to practice in Minnesota.

Subp. 55. **Public recreational facilities.** "Public recreational facilities" means recreational facilities provided by the state or a local government and dedicated to public use, including parks, scenic overlooks, observation platforms, trails, docks, fishing piers, picnic shelters, water access ramps, and other similar water-oriented public facilities used for recreation.

Subp. 56. **Public river corridor views.** "Public river corridor views" means views toward the river from public parkland, historic properties, and public overlooks, as well as views toward bluffs from the ordinary high water level of the opposite shore, as seen during the summer months.

Subp. 57. **Public transportation facilities.** "Public transportation facilities" means all transportation facilities provided by federal, state, or local government and dedicated to public use, such as roadways, transit facilities, railroads, and bikeways.

Subp. 58. **Public utilities.** "Public utilities" means electric power facilities, essential services, and transmission services.

Subp. 59. **Public waters.** "Public waters" has the meaning given under Minnesota Statutes, section 103G.005.

Subp. 60. **Readily visible.** "Readily visible" means land and development that are easily seen from the ordinary high water level of the opposite shore during summer months.

Subp. 61. **Resource agency.** "Resource agency" means a federal, state, regional, or local agency that engages in environmental, natural, or cultural resource protection or restoration activities, including planning, implementation, and monitoring.

Subp. 62. **Retaining wall.** "Retaining wall" means a vertical or nearly vertical structure constructed of mortar and rubble masonry, rock, or stone regardless of size, vertical timber pilings, horizontal timber planks with piling supports, sheet pilings, poured concrete, concrete blocks, or other durable material.

Subp. 63. **Riprap.** "Riprap" means coarse stones, boulders, cobbles, broken rock or concrete, or brick materials placed or constructed to armor shorelines, streambeds, bridge abutments, pilings, and other shoreline structures against scour or water or ice erosion.

Subp. 64. **River corridor boundary.** "River corridor boundary" means the boundary approved and adopted by the Metropolitan Council under Minnesota Statutes, section 116G.06, as approved and adopted by the legislature in Minnesota Statutes, section 116G.15, and as legally described in the State Register, volume 3, pages 1681 to 1691.

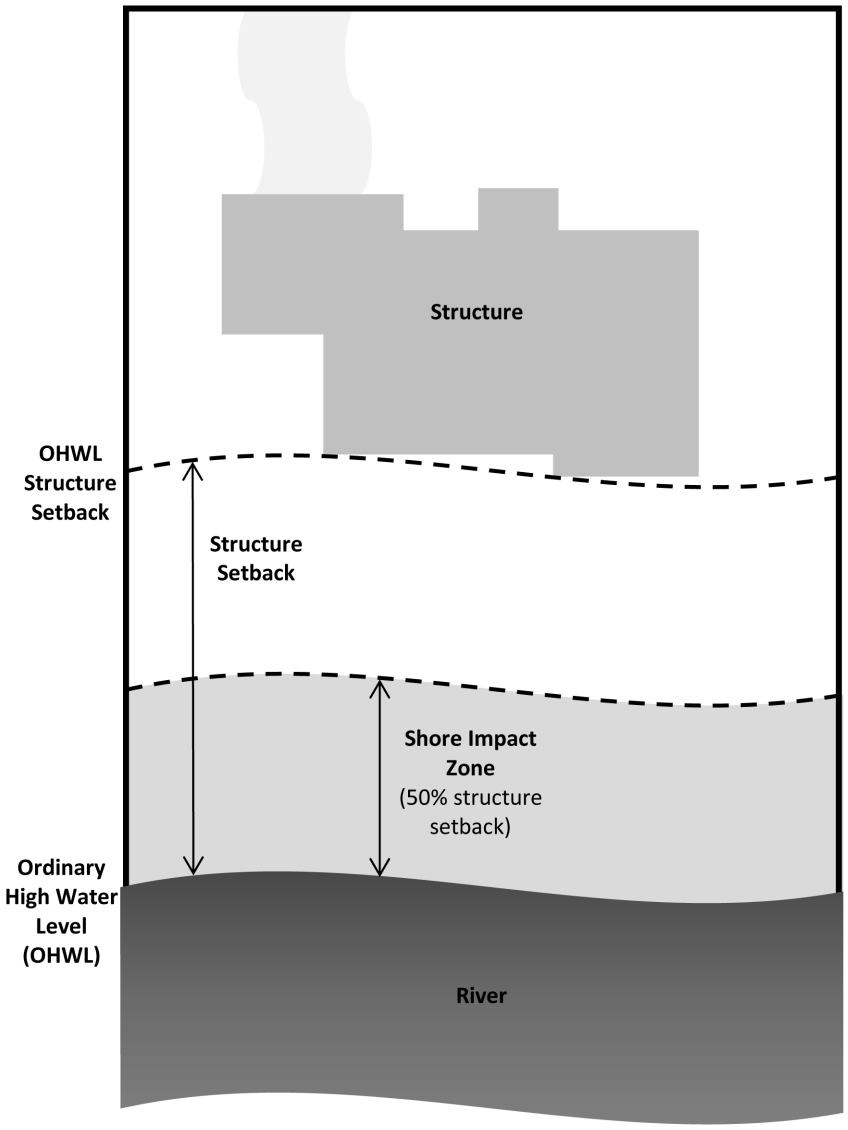
Subp. 65. **River-dependent use.** "River-dependent use" means the use of land for commercial, industrial, or utility purposes, where access to and use of a public water feature is an integral part of the normal conduct of business and where the use is dependent on shoreline facilities.

Subp. 66. **Selective vegetation removal.** "Selective vegetation removal" means removal of isolated individual trees or shrubs that are not in a contiguous patch, strip, row, or block and that does not substantially reduce the tree canopy or understory cover.

Subp. 67. **Setback.** "Setback" means a separation distance measured horizontally.

Subp. 68. **Shore impact zone.** "Shore impact zone" means land located between the ordinary high water level of public waters and a line parallel to it at a setback of 50 percent of the required structure setback or, for areas in agricultural use, 50 feet landward of the ordinary high water level. See Figure 2.

Figure 2: Shore Impact Zone



Subp. 69. **Shoreline facilities.** "Shoreline facilities" means facilities that require a location adjoining public waters for ingress and egress, loading and unloading, and water intake and outflow, such as barge facilities, port facilities, commodity loading and unloading equipment, watercraft lifts, marinas, short-term watercraft mooring facilities for patrons, and water access ramps. Structures that would be enhanced by a shoreline location, but do not require a location adjoining public waters as part of their function, are not shoreline facilities, such as restaurants, bait shops, and boat dealerships.

Subp. 70. **Special purpose unit of government.** "Special purpose unit of government" means the University of Minnesota; the St. Paul Port Authority; watershed management organizations established under Minnesota Statutes, chapter 103B; watershed districts established under Minnesota Statutes, chapter 103D; and any other unit of government other than those listed in subparts 33 and 71.

Subp. 71. **State or regional agency.** "State or regional agency" means the Metropolitan Airports Commission, Minnesota Historical Society, University of Minnesota, Department of Natural Resources, Department of Transportation, and Metropolitan Council and other state agencies.

Subp. 72. **Steep slope.** "Steep slope" means a natural topographic feature with an average slope of 12 to 18 percent, measured over a horizontal distance equal to or greater than 50 feet, and any slopes greater than 18 percent that are not bluffs.

Subp. 73. **Storm water.** "Storm water" has the meaning given under part 7090.0080.

Subp. 74. **Structure.** "Structure" means a building, sign, or appurtenance thereto, except for aerial or underground utility lines, such as sewer, electric, telephone, telegraph, or gas lines, and utility line towers, poles, and other supporting appurtenances.

Subp. 75. **Subdivision.** "Subdivision" has the meaning given under Minnesota Statutes, section 462.352.

Subp. 76. **Subsurface sewage treatment system.** "Subsurface sewage treatment system" has the meaning given under part 7080.1100.

Subp. 77. **Toe of the bluff.** "Toe of the bluff" means a line along the bottom of a bluff, requiring field verification, such that the slope above the line exceeds 18 percent and the slope below the line is 18 percent or less, measured over a horizontal distance of 25 feet. See subpart 9, Figure 1.

Subp. 78. **Top of the bluff.** "Top of the bluff" means a line along the top of a bluff, requiring field verification, such that the slope below the line exceeds 18 percent and the slope above the line is 18 percent or less, measured over a horizontal distance of 25 feet. See subpart 9, Figure 1.

Subp. 79. **Transmission services.** "Transmission services" means:

A. electric power lines, cables, pipelines, or conduits that are:

(1) used to transport power between two points, as identified and defined under Minnesota Statutes, section 216E.01, subdivision 4; or

(2) for mains or pipelines for gas, liquids, or solids in suspension, used to transport gas, liquids, or solids in suspension between two points; and

B. telecommunication lines, cables, pipelines, or conduits.

Subp. 80. **Treeline.** "Treeline" means the more or less continuous line formed by the tops of trees in a wooded area when viewed from a particular point. The treeline is determined during all seasons as if under full foliage.

Subp. 81. **Twin Cities metropolitan area.** "Twin Cities metropolitan area" is the area over which the Metropolitan Council has jurisdiction according to Minnesota Statutes, section 473.121, subdivision 2.

Subp. 82. **Variance.** "Variance" has the meaning given under Minnesota Statutes, section 394.22.

Subp. 83. **Water access ramp.** "Water access ramp" means a boat ramp, carry-down site, boarding dock, and approach road, or other access that allows launching and removal of a boat, canoe, or other watercraft with or without a vehicle and trailer.

Subp. 84. **Water-oriented accessory structure.** "Water-oriented accessory structure" means a small building or other improvement, except stairways, fences, docks, and retaining walls, that, because of the relationship of its use to public waters, needs to be located closer to public waters than the normal structure

setback. Examples include gazebos, screen houses, fish houses, pump houses, and detached decks and patios.

Subp. 85. **Wetlands.** "Wetlands" has the meaning given under Minnesota Statutes, section 103G.005.

Subp. 86. **Wharf.** "Wharf" has the meaning given under part 6115.0170.

Statutory Authority: *MS s 116G.15*

History: *41 SR 799*

Published Electronically: *January 19, 2017*

6106.0060 ADMINISTRATION OF PROGRAM.

Subpart 1. **Purpose, terms, and time frames.** This part establishes the roles, responsibilities, and authorities for administration of this chapter. For the purposes of this chapter:

A. "plan," "ordinance," and "plan and ordinance" mean Mississippi River Corridor Critical Area plans and ordinances, and updates or amendments to the plans and ordinances, prepared to implement this chapter; and

B. time frames are measured in calendar days.

Subp. 2. **Responsibilities and authorities.** The standards and criteria for the Mississippi River Corridor Critical Area established in this chapter apply to:

A. the commissioner for reviewing and approving plans and ordinances and reviewing discretionary actions;

B. the Metropolitan Council for reviewing plans and ordinances;

C. local governments when preparing, amending, and administering plans and ordinances and reviewing and approving discretionary actions and permits required under this chapter; and

D. state or regional agencies, local park agencies, and special purpose units of government for permit regulation, plan development, and management activities within their jurisdiction and to the extent they have jurisdiction.

Subp. 3. **Consistent plans and ordinances.** Local governments within the Mississippi River Corridor Critical Area must adopt, administer, and enforce plans and ordinances consistent with this chapter. Plans and ordinances must be submitted to the Metropolitan Council for review and must be approved by the commissioner before they are adopted as provided under part 6106.0070. For the purpose of this part, "consistent" means that each local plan and ordinance, while it may be structured or worded differently, meets the purpose, scope, and numeric thresholds and standards set forth in this chapter. Ordinances that are not consistent with this chapter require approval of flexibility from the commissioner according to part 6106.0070, subpart 6.

Subp. 4. **Greater restrictions.** Nothing in this chapter shall be construed as prohibiting or discouraging a local government from adopting and enforcing plans and ordinances that are more restrictive than this chapter.

Subp. 5. **Duties of commissioner.** The commissioner must:

A. consult with the United States Army Corps of Engineers, Minnesota Department of Transportation, National Park Service, and Metropolitan Council and other state or regional agencies, special purpose units of government, local governments, and local parks and recreation agencies to ensure that the Mississippi River Corridor Critical Area is managed as a multipurpose resource, according to Minnesota Statutes, section 116G.15, subdivision 2, paragraph (a);

B. provide advice and assistance to local governments in the Mississippi River Corridor Critical Area for development, adoption, administration, and enforcement of plans and ordinances, consistent with the purposes under part 6106.0020;

C. coordinate preparation, submission, review, and modification of plans and ordinances that are prepared by local governments as provided under part 6106.0070;

D. review and approve final draft plans and ordinances before adoption by a local government as provided under part 6106.0070; and

E. consult with those government units identified in subpart 1 that own or manage land within the Mississippi River Corridor Critical Area to ensure that they administer lands and programs under their jurisdictions consistent with this chapter.

Subp. 6. **Duties of Metropolitan Council.** The Metropolitan Council must:

A. incorporate the standards and criteria in this chapter into the council's planning processes;

B. work with local governments and the commissioner to ensure that the standards and criteria in this chapter are adopted and implemented; and

C. provide written comments and recommendations to the commissioner on all proposed plans and ordinances submitted by local governments as provided under part 6106.0070.

Subp. 7. **Duties of cities.** Cities must:

A. prepare or amend plans and ordinances to meet or exceed the minimum standards and criteria in this chapter and as provided under part 6106.0070;

B. submit proposed plans and ordinances that affect lands within the river corridor boundary to the Metropolitan Council for review and subsequent review and approval by the commissioner, before adoption as provided under part 6106.0070, subpart 3;

C. adopt, administer, and enforce plans and ordinances as provided under part 6106.0070, subpart 3;

D. send notice of public hearings to consider plans and ordinances, and amendments thereto, and other development requiring discretionary action affecting lands within the river corridor boundary to the following parties so that the parties receive the notice at least ten days before the public hearing:

(1) the commissioner, in a format prescribed by the commissioner;

(2) the National Park Service; and

(3) adjoining local governments within the Mississippi River Corridor Critical Area, including those with overlapping jurisdiction and those across the river, where buildings exceed the height limits specified in part 6106.0120, as part of the conditional use permit or variance process; and

E. send notice of final decisions for actions under item D, including findings of fact, within ten days following the final decision, to those parties listed under and in the manner prescribed by item D.

Subp. 8. **Duties of counties and townships.**

A. Counties must prepare or amend plans and may prepare ordinances consistent with this chapter under the authority of Minnesota Statutes, chapters 394 and 473, using the process set forth in subpart 7.

B. Townships must prepare or amend plans and ordinances consistent with this chapter under the authority of Minnesota Statutes, chapters 394, 462, and 473, using the process set forth in subpart 7. If a county has adopted ordinances under this part:

(1) a township's plan and ordinances must be consistent with and at least as restrictive as the plan and ordinances adopted by the county in which the township is located, as provided under Minnesota Statutes, section 394.33;

(2) a township must provide for administration and enforcement of Mississippi River Corridor Critical Area ordinances; and

(3) a township may adopt a county's ordinances by reference.

Subp. 9. **Duties of state or regional agencies and other government entities.** Any state or regional agency, local park agency, or special purpose unit of government that owns or manages lands within the river corridor boundary must manage the lands under its authority in a manner consistent with this chapter.

Statutory Authority: *MS s 116G.15*

History: *41 SR 799*

Published Electronically: *January 19, 2017*

6106.0070 PREPARATION, REVIEW, AND APPROVAL OF PLANS AND ORDINANCES.

Subpart 1. **Purpose.** The purpose of this part is to establish the process, responsibilities, time frames, content requirements, and evaluation criteria for preparation, review, and approval of plans and ordinances, in order to ensure an efficient process aligned with other regional and local planning processes.

Subp. 2. **Adoption of plans and ordinances.**

A. The commissioner, in consultation with the Metropolitan Council, shall notify local governments of the schedule for preparing or amending plans and ordinances consistent with this chapter. The schedule must align as closely as possible with the comprehensive plan update schedule under Minnesota Statutes, section 473.864.

B. All plans and ordinances adopted by local governments pursuant to Executive Order 79-19 that are in existence on January 4, 2017, remain in effect and must be enforced until plans and ordinances are amended consistent with this chapter, approved by the commissioner, and adopted by the local government as provided under subpart 3.

C. Where a local government has not adopted plans and ordinances pursuant to Executive Order 79-19, development must be governed by this chapter until such time as plans and ordinances consistent with this chapter are approved by the commissioner and adopted by the local government as provided under subpart 3.

D. The adoption of plans and ordinances consistent with this chapter does not limit or modify the rights of a person to complete a development that has previously been authorized as provided under Minnesota Statutes, section 116G.13.

Subp. 3. **Plan and ordinance review.**

A. Within one year of notification from the commissioner according to subpart 2, local governments must prepare or amend plans and ordinances consistent with this chapter. The commissioner shall grant extensions to local governments if requested in writing and if the local government demonstrates it has made a good-faith effort to meet the deadline specified in this subpart. The extension, if granted, must include a timetable and plan for completion of the ordinance.

B. Local governments must formally submit drafts of plans and ordinances to the Metropolitan Council and the commissioner for review, in a format prescribed by the commissioner.

C. If ordinances prepared under item B refer to standards in underlying zoning, then the underlying zoning documents must be submitted and considered in combination with the ordinance. Both the ordinance and underlying zoning standards must be consistent with this chapter. Ordinances not consistent with this chapter must be submitted as part of a flexibility request according to subpart 6.

D. The commissioner and the Metropolitan Council must review the plan or ordinance and communicate a decision to the local government as follows:

(1) within 45 days after receipt from the local government, the Metropolitan Council must review and comment on draft plans and ordinances for consistency with:

(a) this chapter;

(b) regional systems and policies, as specified in Minnesota Statutes, section 473.859; and

(c) the council's comprehensive development guide for the metropolitan area, as specified in Minnesota Statutes, section 473.145; and

(2) within 45 days after receipt of the plan and ordinance from the Metropolitan Council, the commissioner must review the draft plan and ordinance to determine their consistency with this chapter, with Minnesota Statutes, chapter 116G, and with the comprehensive plan adopted by a local government. The commissioner shall consider the comments submitted by the Metropolitan Council.

E. Upon completing the review, the commissioner must take an action under subitem (1) or (2) and provide a copy of the decision to the Metropolitan Council and the National Park Service:

(1) approve the draft plan and ordinance by written decision; or

(2) return the draft plan and ordinance to the local government for modifications, with a written explanation of the need for modification.

F. When the commissioner returns a draft plan and ordinance to the local government for modification, the local government must revise the draft plan and ordinance within 60 days after receipt of the commissioner's written explanation and must resubmit the revised draft plan and ordinance to the commissioner. Upon receiving the revised draft plan and ordinance from the local government, the Metropolitan Council and the commissioner must conduct the review as provided under item D.

(1) If a meeting is requested by the local government or the Metropolitan Council, a final revision need not be made until a formal meeting has been held with the commissioner on the draft plan and ordinance. The request extends the 60-day time limit specified in this item until after the meeting has been held.

(2) The commissioner must grant extensions to local governments if the local government requests an extension in writing and if the local government is making a good-faith effort to meet the submittal deadline. The extension, if granted, must include a timetable and plan for completion of the plan and ordinance.

G. Within 60 days after receiving the commissioner's approval of a draft plan or ordinance, the local government must adopt the commissioner-approved draft plan and ordinance. The local government must submit a copy of the final adopted plan and ordinance, with evidence of adoption, to the commissioner, the Metropolitan Council, and the National Park Service within ten days after the adoption.

H. Only those plans and ordinances approved by the commissioner have the force and effect of law.

I. Once in effect, the local government must implement and enforce the commissioner-approved plan and ordinance.

J. If a local government fails to prepare and submit a draft plan and ordinance within one year of notification as provided under item A, fails to incorporate necessary modifications as provided under item E, subitem (2), or fails to adopt the commissioner-approved plan or ordinance as provided under item G, the commissioner must:

(1) prepare a plan and ordinance consistent with this chapter within 90 days of the deadline for preparation or adoption of plans and ordinances as provided under items A to E or G or the end date of an extension of time approved by the commissioner as provided under item F;

(2) conduct a public hearing as provided by Minnesota Statutes, section 14.58, and other statutes as applicable;

(3) within 60 days after the conclusion of the public hearing, adopt by written order the plan and ordinance for the local government's portion of the Mississippi River Corridor Critical Area; and

(4) give notice of the adopted plan and ordinance to the affected local government, the Metropolitan Council, and the National Park Service.

K. Plans and ordinances that have been adopted by the commissioner under this subpart have the same effect as if adopted by the local government and must be administered and enforced by the local government.

L. Local governments may amend plans and ordinances at any time following the procedures under items C to I.

M. Plans must be updated regularly on the same schedule as other comprehensive plan elements according to Minnesota Statutes, section 473.864, and in a manner consistent with items C to I.

Subp. 4. **Contents of plans.**

A. The plan must be a component of the local government's comprehensive plan prepared according to Minnesota Statutes, section 473.859, and must be consistent with the purposes and scope of this chapter.

B. Plans must contain maps, policies, and implementation provisions to:

(1) identify and protect primary conservation areas;

(2) identify and protect those public river corridor views and other scenic views deemed important by the community;

(3) identify areas that are priorities for restoration of natural vegetation, erosion prevention, bank and slope stabilization, or other restoration activities;

(4) minimize potential conflict of water surface uses as authorized under Minnesota Statutes, chapter 86B;

(5) provide for commercial barge terminals, barge fleeting, and recreational marinas, if applicable;

(6) provide for future commercial and industrial uses that require water access;

(7) provide for and encourage creation, connection, and maintenance of open space and recreation facilities, such as parks, scenic overlooks, natural areas, islands, and wildlife areas;

(8) identify potential public access points and trail locations; and

(9) provide for transportation and public utility development in a manner consistent with this chapter.

Subp. 5. **Contents of ordinances.**

A. Local ordinances must be consistent with the standards in this chapter and must include:

(1) definitions consistent with part 6106.0050;

(2) administrative provisions consistent with part 6106.0080;

(3) districts consistent with part 6106.0100;

(4) minimum standards and criteria consistent with parts 6106.0110 to 6106.0180; and

(5) alternative design methods consistent with part 6106.0170.

B. The local ordinance must be structured as an overlay district. If a conflict exists with underlying zoning, the provisions of the overlay district govern. Where specific numeric thresholds or standards are listed in this chapter, those numeric thresholds or standards must be included in the overlay district.

Subp. 6. **Flexibility requests for ordinances.**

A. Local governments may, under special circumstances and with the commissioner's prior approval, adopt ordinances that are not consistent with this chapter, provided that the purposes of Minnesota Statutes, section 116G.15, are met and the ordinance is consistent with the plan prepared by the local government and approved according to this chapter. Special circumstances include the following situations:

(1) areas where existing urban, residential, commercial, or industrial development patterns have been in place since before the designation of the Mississippi River Corridor Critical Area and where the majority of the development does not meet the minimum state standards;

(2) areas managed under other water and related land resource management programs authorized by state or federal legislation with goals compatible with this chapter;

(3) existing or planned wastewater, storm water, water supply, or utility facilities and similar physical or infrastructural constraints make the use of particular minimum standards impractical; and

(4) areas where detailed modeling of visual, physical, or other resource impacts has been completed as part of a public planning process.

B. A local government requesting ordinance flexibility must submit a written request to the commissioner as part of the ordinance submittal required under subpart 3. The request must:

(1) be approved by the governing body with authority to approve the request;

(2) include the proposed ordinance and any associated maps;

(3) include a detailed description of the proposed alternative standards that are not consistent with this chapter, together with documentation that the alternative standards are consistent with the purposes and scope of this chapter;

(4) describe the special circumstances that justify the use of alternative standards;

(5) describe the potential impacts to primary conservation areas and mitigation actions proposed to address the impacts;

(6) include documentation of any input from adjoining local governments, including those with overlapping jurisdiction and those across the river, and from other potentially affected interests, including community members; and

(7) include any other supporting information, maps, and documents that the local government considers necessary to explain the request to the commissioner.

C. Within 60 days after receiving a complete request for ordinance flexibility as provided in item B, the commissioner must:

(1) make the request publicly available;

(2) evaluate the request based on:

(a) the extent to which the proposed alternative standards satisfy the purposes of Minnesota Statutes, section 116G.15, subdivision 1, and the purposes and scope of this chapter;

(b) the likely impact of the proposed alternative standards on primary conservation areas and public river corridor views;

(c) comments from adjoining local governments and other potentially affected interests; and

(d) the local government's identification of mitigation measures and its commitment to mitigate any adverse impacts resulting from the proposed alternative standards; and

(3) approve or deny the request, state in writing to the local government the reasons for the approval or denial, and suggest any alternative solutions or regulatory approaches that would be granted ordinance flexibility.

Subp. 7. **Plans and projects for parks and other public lands.** State or regional agencies, local park agencies, special purpose units of government, and local governments with parks or other public lands within their jurisdiction must comply with the standards and criteria in this chapter. The agencies and government entities must include the following elements in plans and project designs for parks and other public lands they own or manage within the Mississippi River Corridor Critical Area:

A. documentation of the location of the park or other owned or managed land within the Mississippi River Corridor Critical Area and recognition of the purposes of the Mississippi River Corridor Critical Area designation and this chapter;

B. standards for public utilities and facilities consistent with those in part 6106.0130; and

C. provisions for protection of primary conservation areas and public river corridor views.

Statutory Authority: *MS s 116G.15*

History: *41 SR 799*

Published Electronically: *January 19, 2017*

6106.0080 ADMINISTRATIVE PROVISIONS FOR ORDINANCES.

Subpart 1. **Purpose.** The purpose of this part is to identify administrative provisions that must be included in local ordinances to ensure that ordinances are administered consistent with the purposes of this chapter.

Subp. 2. **Variances.**

A. A local government must consider applications for variances in a manner consistent with Minnesota Statutes, sections 394.27, subdivision 7, and 462.357, subdivision 6. The local government's review must consider the potential impacts of a proposed variance on primary conservation areas, public river corridor views, and other resources identified in the local government's plan.

B. If a local government determines that a variance would negatively affect primary conservation areas, public river corridor views, or other identified resources, mitigation is required. Mitigation must be proportional to, have a relationship to, and offset the impact on the affected resource as provided in subpart 5.

C. The local government's findings of fact accompanying the issuance of any variance must include a finding and evidence supporting a finding that the requested variance is consistent with the purposes and scope of this chapter.

Subp. 3. **Nonconformities.**

A. The purpose of this subpart is to allow uses and structures that came into existence legally prior to January 4, 2017, and in conformance with then-applicable requirements to continue to exist and be put to productive use.

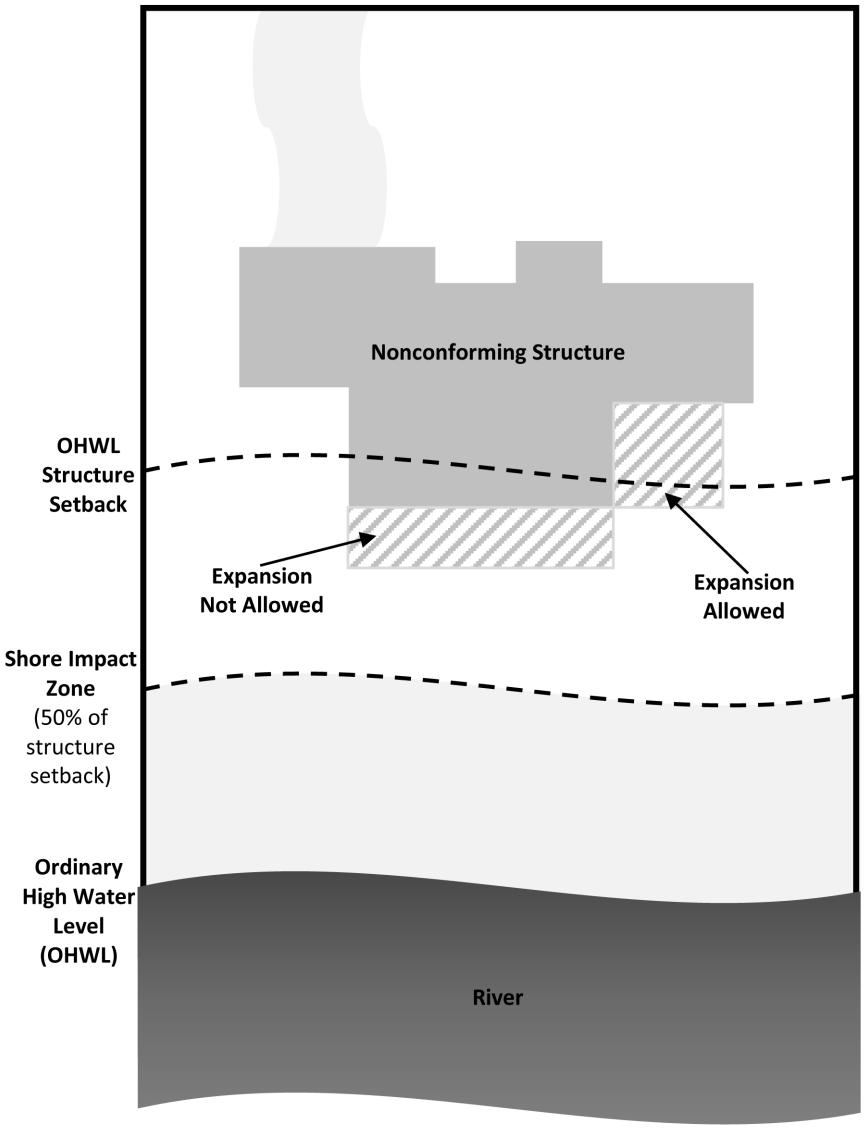
B. Nonconformities must be regulated by local governments in a manner consistent with Minnesota Statutes, sections 394.36 and 462.357, subdivision 1e.

C. Local governments may choose to allow lateral expansion of legally nonconforming principal structures that do not meet the setback requirements in part 6106.0120, provided that:

(1) the expansion does not extend into the shore impact zone or bluff impact zone or further into the required setback than the building line of the existing principal structure. See Figure 3; and

(2) the expanded structure's scale and bulk is consistent with that of the original structure and existing surrounding development.

Figure 3: Expansion of Nonconforming Structure within OHWL Setback



D. New structures erected in conformance with the setback averaging provisions of part 6106.0120, subpart 3, item D, are considered to be in conformance with local ordinance requirements.

E. Site alterations that were legally made prior to the effective date of local ordinances adopted under this chapter are considered conforming. Site alterations include vegetation, erosion control, storm water control measures, and other nonstructural site improvements. Expansion of site alterations must comply with this chapter.

Subp. 4. **Conditional and interim use permits.**

A. In addition to meeting the requirements of Minnesota Statutes, sections 394.301, 394.303, 462.3595, and 462.3597, a local government's review of conditional and interim uses must consider potential impacts of the conditional or interim use on primary conservation areas, public river corridor views, and other resources identified in a local government's plan.

B. When evaluation and assessment identify a negative impact under item A, issuance of a conditional or interim use permit must include conditions for mitigation according to subpart 5.

Subp. 5. **Mitigation.**

A. In evaluating a request for a variance or conditional or interim use permit, if a local government identifies a potential negative impact to primary conservation areas, public river corridor views, or other resources identified in the local government's plan, the variance or conditional or interim use permit must require mitigation.

B. Mitigation must be directly related to and must bear a rough proportionality to the impact of the project on primary conservation areas, public river corridor views, and other resources identified in the local government's plan.

Subp. 6. **Project information.**

A. An applicant must submit relevant information to the responsible local government to evaluate how any development that requires discretionary action or a permit under this chapter complies with the plans and ordinances adopted under this chapter.

B. In addition to local government requirements, project information must include the following, unless the responsible local government determines that the information is not necessary:

(1) a detailed description of the project; and

(2) scaled maps and plans, dimensional renderings, maintenance agreements, and other materials that identify and describe:

(a) primary conservation areas;

(b) public river corridor views;

(c) buildable area;

(d) existing and proposed topography and drainage patterns;

(e) proposed storm water and erosion and sediment control practices;

(f) existing and proposed vegetation to be removed and established;

(g) ordinary high water level, blufflines, and all required setbacks;

(h) existing and proposed structures;

(i) existing and proposed impervious surfaces; and

(j) existing and proposed subsurface sewage treatment systems.

Subp. 7. **Accommodating disabilities.** Ramps or other facilities to provide persons with disabilities access to the persons' property, as required by the federal Americans with Disabilities Act and the federal Fair Housing Act and as provided by chapter 1341, are allowed, subject to the following standards:

A. parts 6106.0120 to 6106.0180 must be complied with, except as provided in item B; and

B. when parts 6106.0120 to 6106.0180 cannot be complied with, the local government may issue an interim use permit to allow ramps or other facilities that do not comply with those parts. Upon expiration of the interim use permit, the ramp or other facilities must be removed.

Statutory Authority: *MS s 116G.15*

History: *41 SR 799*

Published Electronically: *January 19, 2017*

6106.0090 INCORPORATIONS BY REFERENCE.

The following documents are incorporated by reference as guidance for complying with the plans and ordinances adopted under this chapter. Unless specified otherwise, these documents are not subject to frequent change and are available through the Minitex interlibrary loan system:

A. The Minnesota Stormwater Manual, Minnesota Pollution Control Agency (2013 and as subsequently amended);

B. Conserving Wooded Areas in Developing Communities: Best Management Practices in Minnesota, Minnesota Department of Natural Resources (1999 and as subsequently amended);

C. Design Handbook for Recreational Boating and Fishing Facilities, States Organization for Boating Access (2006 and as subsequently amended);

D. Trail Planning, Design, and Development Guidelines, Minnesota Department of Natural Resources (2007 and as subsequently amended);

E. Native Vegetation Establishment and Enhancement Guidelines, Minnesota Board of Water and Soil Resources (2015 and as subsequently amended), available online at http://www.bwsr.state.mn.us/native_vegetation/;

F. Shoreline Alterations: Riprap, Minnesota Department of Natural Resources (2012 and as subsequently amended), available online at http://www.dnr.state.mn.us/publications/waters/shoreline_alteration.html; and

G. Best Practices for Meeting DNR General Public Waters Work Permit GP 2004-0001, Minnesota Department of Natural Resources (2014 and as subsequently amended), available online at http://www.dnr.state.mn.us/waters/watermgmt_section/pwpermits/gp_2004_0001_manual.html.

Statutory Authority: *MS s 116G.15*

History: *41 SR 799*

Published Electronically: *January 19, 2017*

6106.0100 DISTRICTS.

Subpart 1. **Establishment of districts.** For purposes of this chapter, six districts are established in the Mississippi River Corridor Critical Area, as described in this part, to protect and enhance the resources and features identified in Minnesota Statutes, section 116G.15, subdivision 3.

Subp. 2. **Purpose.** The six districts are established based on the natural and built character of different areas of the river corridor. All districts include diverse land uses, including parks and open space and scenic, natural, and historic areas.

Subp. 3. **Rural and open space district (CA-ROS).**

A. The rural and open space district (CA-ROS) is characterized by rural and low-density development patterns and land uses, and includes land that is riparian or visible from the river, as well as

large, undeveloped tracts of high ecological and scenic value, floodplain, and undeveloped islands. Many primary conservation areas exist in the district.

B. The CA-ROS district must be managed to sustain and restore the rural and natural character of the corridor and to protect and enhance habitat, parks and open space, public river corridor views, and scenic, natural, and historic areas.

Subp. 4. **River neighborhood district (CA-RN).**

A. The river neighborhood district (CA-RN) is characterized by primarily residential neighborhoods that are riparian or readily visible from the river or that abut riparian parkland. The district includes parks and open space, limited commercial development, marinas, and related land uses.

B. The CA-RN district must be managed to maintain the character of the river corridor within the context of existing residential and related neighborhood development, and to protect and enhance habitat, parks and open space, public river corridor views, and scenic, natural, and historic areas. Minimizing erosion and the flow of untreated storm water into the river and enhancing habitat and shoreline vegetation are priorities in the district.

Subp. 5. **River towns and crossings district (CA-RTC).**

A. The river towns and crossings district (CA-RTC) is characterized by historic downtown areas and limited nodes of intense development at specific river crossings, as well as institutional campuses that predate designation of the Mississippi River Critical Corridor Area and that include taller buildings.

B. The CA-RTC district must be managed in a manner that allows continued growth and redevelopment in historic downtowns and more intensive redevelopment in limited areas at river crossings to accommodate compact walkable development patterns and connections to the river. Minimizing erosion and the flow of untreated storm water into the river, providing public access to and public views of the river, and restoring natural vegetation in riparian areas and tree canopy are priorities in the district.

Subp. 6. **Separated from river district (CA-SR).**

A. The separated from river district (CA-SR) is characterized by its physical and visual distance from the Mississippi River. The district includes land separated from the river by distance, topography, development, or a transportation corridor. The land in this district is not readily visible from the Mississippi River.

B. The CA-SR district provides flexibility in managing development without negatively affecting the key resources and features of the river corridor. Minimizing negative impacts to primary conservation areas and minimizing erosion and flow of untreated storm water into the Mississippi River are priorities in the district.

Subp. 7. **Urban mixed district (CA-UM).**

A. The urban mixed district (CA-UM) includes large areas of highly urbanized mixed use that are a part of the urban fabric of the river corridor, including institutional, commercial, industrial, and residential areas and parks and open space.

B. The CA-UM district must be managed in a manner that allows for future growth and potential transition of intensely developed areas that does not negatively affect public river corridor views and that protects bluffs and floodplains. Restoring and enhancing bluff and shoreline habitat, minimizing erosion and flow of untreated storm water into the river, and providing public access to and public views of the river are priorities in the district.

Subp. 8. **Urban core district (CA-UC).**

A. The urban core district (CA-UC) includes the urban cores of Minneapolis and St. Paul.

B. The CA-UC district must be managed with the greatest flexibility to protect commercial, industrial, and other high-intensity urban uses, while minimizing negative impacts to primary conservation areas and minimizing erosion and flow of untreated storm water into the river. Providing public access to and public views of the river are priorities in the district.

Subp. 9. **District boundaries.**

A. The physical boundaries of each district are delineated in the Mississippi River Corridor Critical Area District Map, Minnesota Department of Natural Resources (2016 and as subsequently amended). The map is incorporated by reference, is not subject to frequent change, and is available on the department's Web site at www.dnr.state.mn.us/waters/watermgmt_section/critical_area/index.html. The commissioner must maintain the map and must amend the map as provided in item C.

B. The district boundary lines on the Mississippi River Corridor Critical Area District Map are intended to follow the center lines of rivers and streams, highways, streets, lot lines, and municipal boundaries, unless a boundary line is otherwise indicated on the map. Where district boundaries cross unsubdivided property, the district boundary line is determined by use of dimensions or the scale appearing on the map.

C. The boundaries of a district established under this part must be amended according to subitems (1) to (3).

(1) A local government or a state or regional agency must submit a written request to the commissioner requesting a district boundary amendment. The request must:

(a) be approved by the governing body with the legal authority to make the request for the state or regional agency or local government;

(b) specifically identify the proposed changes to plans and ordinances to address the proposed change;

(c) identify changes in land uses, infrastructure, or other conditions since January 4, 2017, that justify the proposed changes;

(d) identify those local comprehensive plans, regional system statements, state park and transportation master plans, and federal plans that apply to the area proposed for a district boundary amendment;

(e) address potential negative impacts of the proposed change to primary conservation areas, public river corridor views, and other resources and features identified in local governments' plans; and

(f) contain a summary of feedback from affected parties as provided under subitem (2).

(2) The local government or state or regional agency requesting the district boundary amendment must give notice of the proposed district boundary amendment to adjoining or overlapping local governments, the Metropolitan Council, the commissioner, the National Park Service, and property owners in the area directly affected by the proposed district boundary amendments and must conduct a public hearing.

(3) Upon receiving a complete request for a district boundary amendment as provided under subitem (1), the commissioner must consider the request and determine whether to initiate rulemaking to amend the boundary according to Minnesota Statutes, chapter 14. The commissioner must communicate the determination, in writing, to the local government or state or regional agency requesting the district boundary amendment within 60 days after receiving the request.

D. This subpart does not apply to the defined river corridor boundary.

Statutory Authority: *MS s 116G.15*

History: *41 SR 799*

Published Electronically: *January 19, 2017*

6106.0110 USES.

Subpart 1. **Underlying zoning.** Uses permissible within the Mississippi River Corridor Critical Area are generally determined by the local government's underlying zoning, with additional provisions for certain uses as specified by this part.

Subp. 2. **Agricultural use.** Where agricultural use is allowed by the local government, perennial ground cover is required within 50 feet of the ordinary high water level and within the bluff impact zone.

Subp. 3. **Feedlots.** New animal feedlots and manure storage areas are prohibited. Existing animal feedlots and manure storage areas must conform with chapter 7020.

Subp. 4. **Forestry.** Where forestry is allowed by the local government, tree harvesting and biomass harvesting within woodlands, and associated reforestation, must be consistent with recommended practices in Conserving Wooded Areas in Developing Communities: Best Management Practices in Minnesota, incorporated by reference under part 6106.0090.

Subp. 5. **Nonmetallic mining.** If allowed by the local government, nonmetallic mining requires a conditional use permit or interim use permit issued by the local government, subject to the following:

A. new nonmetallic mining is prohibited within the shore impact zone and bluff impact zone and within the required structure setback from the bluffline;

B. processing machinery must be located consistent with setback standards for structures as provided in part 6106.0120;

C. only one barge loading area, which must be limited to the minimum size practicable, is permitted for each mining operation;

D. new and, where practicable, existing nonmetallic mining operations must not be readily visible and must be screened by establishing and maintaining natural vegetation. The unscreened boundaries of nonmetallic mining areas are limited to only the barge loading area;

E. a site management plan must be developed by the operator and approved by the local government before new nonmetallic mining commences. Operations must be consistent with the site plan throughout the duration of operations at the site. The site management plan must:

(1) describe how the site will be developed over time with an emphasis on minimizing environmental risk to public waters;

(2) explain where staged reclamation may occur at certain points during the life of the site;

(3) address dust, noise, storm water management, possible pollutant discharges, days and hours of operation, and duration of operation; and

(4) describe any anticipated vegetation and topographic alterations outside the pit, and reclamation plans consistent with the stated end use for the land; and

F. existing and new nonmetallic mining operations must submit land reclamation plans to the local government compatible with the purposes of this chapter.

Subp. 6. **River-dependent uses.** River-dependent uses must comply with items A to C.

A. Structures and parking areas, except shoreline facilities and private roads and conveyances serving river-dependent uses as provided in part 6106.0180, must meet the dimensional and performance standards in this chapter, must be designed so that they are not readily visible, and must be screened by establishing and maintaining natural vegetation.

B. Shoreline facilities must comply with chapter 6115 and must:

(1) be designed in a compact fashion so as to minimize the shoreline area affected; and

(2) minimize the surface area of land occupied in relation to the number of watercraft or barges to be served.

C. Dredging and placement of dredged material are subject to existing federal and state permit requirements and agreements.

Subp. 7. **Wireless communication facilities.** Wireless communication facilities require a conditional use permit or interim use permit issued by the local government. In addition to the conditional use permit or interim use permit requirements under part 6106.0080, the following conditions apply:

A. the applicant must demonstrate that functional coverage cannot be provided through co-location, a tower at a lower height, or a tower at a location outside the Mississippi River Corridor Critical Area;

B. the tower must not be located in the bluff impact zone or shore impact zone; and

C. placement of the tower must minimize impacts on public river corridor views.

Statutory Authority: *MS s 116G.15*

History: *41 SR 799*

Published Electronically: *January 19, 2017*

6106.0120 DIMENSIONAL STANDARDS.

Subpart 1. **Purpose.** The purpose of this part is to establish dimensional standards that protect primary conservation areas and public river corridor views from impacts of development and ensure that new development is sited in locations consistent with part 6106.0020.

Subp. 2. **Structure height.**

A. Structures, including accessory structures as defined by local ordinance, must be no taller than the heights specified for each district:

(1) CA-ROS: 35 feet;

(2) CA-RN: 35 feet;

(3) CA-RTC: 48 feet, provided that tiering of structures away from the Mississippi River and from blufflines is given priority, with lower structure heights closer to the river and blufflines, and that structure design and placement minimizes interference with public river corridor views. Taller buildings are allowed by conditional use permit, as provided under item D, with consideration of the relationship of building height to the mature treeline, where present, and existing surrounding development, as viewed from the ordinary high water level of the opposite shore and from public river corridor views;

(4) CA-SR: height is determined by the local government's underlying zoning requirements, provided the structure height in the underlying zoning is generally consistent with the height of the mature treeline, where present, and existing surrounding development, as viewed from the ordinary high water level of the opposite shore;

(5) CA-UM: 65 feet, provided tiering of structures away from the Mississippi River and from blufflines is given priority, with lower structure heights closer to the river and blufflines, and that structure design and placement minimize interference with public river corridor views. Taller buildings are allowed by conditional use permit, as provided under item D; and

(6) CA-UC: height is determined by the local government's underlying zoning requirements, provided tiering of structures away from the Mississippi River and blufflines is given priority, with lower structure heights closer to the river and blufflines, and structure design and placement minimize interference with public river corridor views.

B. For the purposes of this subpart, height is determined by applicable local government zoning regulations, provided it is measured on the side of the structure facing the Mississippi River.

C. The height requirements in item A do not apply to those structures and facilities identified in part 6106.0180 as exempt from these requirements, but meeting the setback requirements of subpart 3.

D. In addition to the conditional use permit requirements in part 6106.0080, criteria for considering whether to grant a conditional use permit for buildings exceeding the height limits in item A must include:

(1) assessment of the visual impact of the proposed building on public river corridor views, including views from other communities;

(2) identification and application of techniques to minimize the perceived bulk of the proposed building, such as:

(a) placing the long axis of the building perpendicular to the river;

(b) stepping back of portions of the façade;

(c) narrowing the profile of upper floors of the building; or

(d) increasing the setbacks of the building from the Mississippi River or blufflines;

(3) identification of techniques for preservation of those view corridors identified in the local government's plan; and

(4) opportunities for creation or enhancement of public river corridor views.

Subp. 3. **Location of structures.**

A. Structures and impervious surfaces must not be located in the shore impact zone and must meet the following setback requirement from the ordinary high water level of the Mississippi River and other waters within the Mississippi River Corridor Critical Area, as specified for each district:

(1) CA-ROS: 200 feet from the Mississippi River and 150 feet from the Minnesota River and Vermillion River;

(2) CA-RN: 100 feet from the Mississippi River and 75 feet from the Rum River and Vermillion River;

(3) CA-RTC: 75 feet from the Mississippi River, Crow River, and Rum River;

(4) CA-SR: 75 feet from the Vermillion River;

(5) CA-UM: 50 feet from the Mississippi River;

(6) CA-UC: as specified in underlying zoning; and

(7) for all other public waters within the Mississippi River Corridor Critical Area, as specified in underlying zoning.

B. Structures and impervious surfaces must not be located in the bluff impact zone and must meet the following setback requirements from the bluffline as specified for each district:

(1) CA-ROS: 100 feet;

(2) CA-RN: 40 feet;

(3) CA-RTC: 40 feet;

(4) CA-SR: 40 feet;

(5) CA-UM: 40 feet; and

(6) CA-UC: 40 feet.

C. The requirements in items A and B do not apply to those structures and facilities listed in part 6106.0180 as exempt from these requirements.

D. Where principal structures exist on the adjoining lots on both sides of a proposed building site, the minimum setback may be altered to conform to the average of the adjoining setbacks, provided that the new structure's scale and bulk riverward or bluffward of the setbacks required under items A and B are consistent with adjoining development. No structures or impervious surfaces are allowed within the bluff impact zone or shore impact zone, except as specified under part 6106.0180.

E. Subsurface sewage treatment systems, including the septic tank and absorption area, must be located at least 75 feet from the ordinary high water level of the Mississippi River and all other public waters within the Mississippi River Corridor Critical Area.

Subp. 4. **Standards for new lots.**

A. Where lots are created after January 4, 2017, lot area and width standards must comply with the requirements of the underlying zoning, except the width of lots abutting the Mississippi River in the CA-ROS district must be at least 200 feet, unless alternative design methods are used that provide greater protection of the riparian areas.

B. New lots must have adequate buildable area to comply with the setback requirements in subpart 3.

Statutory Authority: *MS s 116G.15*

History: *41 SR 799*

Published Electronically: *January 19, 2017*

6106.0130 GENERAL DEVELOPMENT STANDARDS FOR PUBLIC FACILITIES.

Subpart 1. **Purpose and scope.** The purpose of this part is to establish standards for public facilities that are consistent with best management practices and that protect primary conservation areas. Public facilities serve the public interest by providing public access to the Mississippi River corridor or require locations in or adjacent to the river corridor and therefore require some degree of flexibility.

Subp. 2. **Definition of terms.** For the purpose of this part, "public facilities" means public utilities, public transportation facilities, and public recreational facilities.

Subp. 3. **General design standards.** All public facilities must be designed and constructed to:

A. minimize visibility of the facility to the extent consistent with the purpose of the facility;

B. comply with the dimensional standards in part 6106.0120, except as provided in part 6106.0180;

C. be consistent with the vegetation management standards in part 6106.0150, subpart 5, and the land alteration and storm water management standards in part 6106.0160, including use of practices identified in Best Practices for Meeting DNR General Public Waters Work Permit GP 2004-001, incorporated by reference under part 6106.0090, where applicable. State or regional agencies, special purpose units of government, local park agencies, and local units of government with parks within their jurisdiction are not required to obtain a vegetation management or land alteration permit under part 6106.0150 or 6106.0160, but must apply the standards and criteria that would be applied by local government, were a permit required;

D. avoid primary conservation areas, unless no alternative exists. If no alternative exists, then disturbance to primary conservation areas must be avoided to the greatest extent practicable, and design and construction must minimize impacts; and

E. minimize disturbance of spawning and nesting times by scheduling construction at times when local fish and wildlife are not spawning or nesting.

Subp. 4. **Right-of-way maintenance standards.** Right-of-way maintenance for public facilities is subject to the following standards:

A. vegetation currently in a natural state must be maintained to the extent feasible;

B. where vegetation in a natural state has been removed, native plants must be planted and maintained on the right-of-way; and

C. chemical control of vegetation must be avoided when practicable, but when chemical control is necessary, chemicals used must be in accordance with the rules, regulations, and other requirements of all state and federal agencies with authority over the chemical's use.

Subp. 5. **Crossings of public water or public land.** Crossings of public waters or land controlled by the commissioner are subject to approval by the commissioner according to Minnesota Statutes, sections 84.415 and 103G.245. The commissioner must give primary consideration to crossings that are proposed to be located within or adjoining existing rights-of-way for public transportation and public utilities.

Subp. 6. **Public utilities.** Public utilities must, at a minimum, comply with the following standards:

A. high-voltage transmission lines, wind energy conversion systems greater than five megawatts, and pipelines are regulated according to Minnesota Statutes, chapters 216E, 216F, and 216G, respectively; and

B. if overhead placement is necessary, utility crossings must be hidden from view as much as practicable. The appearance of structures must be as compatible as practicable with the surrounding area in a natural state with regard to height and width, materials used, and color.

Subp. 7. **Public transportation facilities.** Where public transportation facilities intersect or abut two or more of the districts established under part 6106.0100, the least restrictive standards apply. Public transportation facilities must be designed and constructed to give priority to:

A. providing scenic overlooks for motorists, bicyclists, and pedestrians;

B. providing safe pedestrian crossings and facilities along the river corridor;

C. providing access to the riverfront in public ownership; and

D. allowing for use of the land between the river and the transportation facility.

Subp. 8. **Public recreational facilities.**

A. Buildings and parking associated with public recreational facilities, except as provided under part 6106.0180, must meet the dimensional standards in part 6106.0120 and must not be placed within the bluff impact zone or shore impact zone.

B. Roads and driveways associated with public recreational facilities must not be placed in the bluff impact zone or shore impact zone unless no other placement alternative exists. If no alternative exists, then design and construction must minimize impacts to shoreline vegetation, erodible soils and slopes, and other sensitive resources.

C. Trails, access paths, and viewing areas associated with public recreational facilities and providing access to or views of the Mississippi River are allowed within the bluff impact zone or shore impact zone if design, construction, and maintenance methods are consistent with the best management practice guidelines in Trail Planning, Design, and Development Guidelines, incorporated by reference under part 6106.0090.

(1) Hard-surface trails are not allowed on the face of bluffs with a slope exceeding 30 percent. Natural surface trails are allowed, provided they do not exceed eight feet in width.

(2) Trails, paths, and viewing areas must be designed and constructed to minimize:

(a) visibility from the river;

(b) visual impacts on public river corridor views; and

(c) disturbance to and fragmentation of primary conservation areas.

D. Public water access facilities are subject to the following requirements:

(1) watercraft access ramps must comply with parts 6115.0210 and 6280.0250; and

(2) facilities must be designed and constructed consistent with the standards in Design Handbook for Recreational Boating and Fishing Facilities, incorporated by reference under part 6106.0090.

E. Public signs and kiosks for interpretive or directional purposes are allowed in the bluff impact zone or shore impact zone, provided they are placed and constructed to minimize disturbance to these areas and avoid visual impacts on public river corridor views.

F. Public stairways, lifts, and landings must be designed as provided in part 6106.0140, subpart 5, item C.

Statutory Authority: *MS s 116G.15*

History: *41 SR 799*

Published Electronically: *January 19, 2017*

6106.0140 GENERAL DEVELOPMENT STANDARDS FOR PRIVATE FACILITIES.

Subpart 1. **Purpose.** The purpose of this part is to provide design standards for private facilities within the Mississippi River Corridor Critical Area that are consistent with best management practices and that minimize impacts to primary conservation areas and other identified resources.

Subp. 2. **Definition.** For the purpose of this part, "private facilities" means private roads, driveways, and parking areas; private water access and viewing facilities; decks and patios in setback areas; and private signs.

Subp. 3. **General design standards.** All private facilities must be developed in accordance with the land alteration, vegetation, and storm water management requirements in parts 6106.0150 and 6106.0160.

Subp. 4. **Private roads, driveways, and parking areas.** Except as provided in part 6106.0180, private roads, driveways, and parking areas must:

A. be designed and constructed to take advantage of natural vegetation and topography so that they are not readily visible;

B. comply with structure setback requirements according to part 6106.0120; and

C. not be placed within the bluff impact zone or shore impact zone, unless exempt under part 6106.0180 and designed consistent with part 6106.0130, subpart 3.

Subp. 5. **Private water access and viewing facilities.**

A. Private access paths must be no more than:

(1) eight feet wide, if placed within the shore impact zone; and

(2) four feet wide, if placed within the bluff impact zone.

B. Private water access ramps must:

(1) comply with parts 6115.0210 and 6280.0250; and

(2) be designed and constructed consistent with the applicable standards in Design Handbook for Recreational Boating and Fishing Facilities, incorporated by reference under part 6106.0090.

C. Design and construction of private stairways, lifts, and landings are subject to the following standards:

(1) stairways and lifts must not exceed four feet in width on residential lots. Wider stairways are allowed for commercial properties and residential facilities held in common, if approved by the local government;

(2) landings for stairways and lifts on residential lots must not exceed 32 square feet in area. Landings larger than 32 square feet are allowed for commercial properties and residential facilities held in common, if approved by the local government;

(3) canopies or roofs are prohibited on stairways, lifts, or landings;

(4) stairways, lifts, and landings must be located in the least visible portion of the lot whenever practical; and

(5) ramps, lifts, mobility paths, or other facilities for persons with physical disabilities are allowed for achieving access to shore areas according to subitems (1) to (4) and as provided under part 6106.0080, subpart 7.

D. One water-oriented accessory structure is allowed for each riparian lot or parcel less than 300 feet in width at the ordinary high water level, with one additional water-oriented accessory structure allowed for each additional 300 feet of shoreline on the same lot or parcel. Water-oriented accessory structures are prohibited in the bluff impact zone and must:

(1) not exceed 12 feet in height;

(2) not exceed 120 square feet in area; and

(3) be placed a minimum of ten feet from the ordinary high water level.

Subp. 6. **Decks and patios in setback areas.** Local governments may allow decks and at-grade patios to encroach into the required setbacks from the ordinary high water level and blufflines without a variance, in compliance with parts 6106.0150 and 6106.0160, provided that:

A. the encroachment of the deck or patio into the required setback area does not exceed 15 percent of the required structure setback;

B. the area of the deck or patio that extends into the required setback area occupies no more than 25 percent of the total area between the required setback and the 15 percent allowance, using the formula below:

[required setback depth (feet) x 0.15 x lot width (feet) x 0.25 = maximum total area]; and

C. the deck or patio does not extend into the bluff impact zone.

Subp. 7. **Private signs.** Placement of signs is guided by the local government's underlying zoning, with the additional provisions in items A and B.

A. If the local government allows off-premise advertising signs, the signs must:

(1) meet all required setbacks and height limits standards of this chapter; and

(2) not be readily visible.

B. If the local government allows directional signs for patrons arriving at a business by watercraft, the signs:

(1) must be consistent with Minnesota Statutes, section 86B.115;

(2) if located within the shore impact zone, must convey only the location and name of the establishment and the general types of goods and services available;

(3) must be no greater than ten feet in height and 32 square feet in surface area; and

(4) if illuminated, must have lighting that is shielded to prevent illumination out across the river or to the sky.

Statutory Authority: *MS s 116G.15*

History: *41 SR 799*

Published Electronically: *January 19, 2017*

6106.0150 VEGETATION MANAGEMENT STANDARDS.

Subpart 1. **Purpose.** The purpose of this part is to establish standards that:

A. sustain and enhance the biological and ecological functions of vegetation;

B. preserve the natural character and topography of the Mississippi River Critical Corridor Area; and

C. maintain stability of bluffs and steep slopes and ensure stability of other areas prone to erosion.

Subp. 2. **Applicability.** This part applies to:

A. shore impact zones;

B. areas within 50 feet of a wetland or natural drainage way;

C. bluff impact zones;

D. areas of native plant communities; and

E. significant vegetative stands identified in local governments' adopted plans.

Subp. 3. **General provisions.**

A. Intensive vegetation clearing is prohibited, except for the following activities, which are allowed by local permit:

(1) clearing vegetation that is dead, diseased, dying, or hazardous;

(2) clearing to prevent the spread of diseases or insect pests;

(3) removal of invasive non-native species;

(4) restoration and erosion control management activities consistent with a plan approved by the local government or resource agency; and

(5) the minimum necessary for development that is allowed as an exception under part 6106.0180.

B. The following activities are allowed without a permit:

(1) selective vegetation removal, including removal for those activities listed under item A, subitems (1) to (3), and removal for other purposes provided that vegetative cover remains consistent with the management purposes of districts under part 6106.0100;

(2) maintenance of existing lawns, landscaping, and gardens;

(3) removal of vegetation in emergency situations as determined by the local government;

(4) right-of-way maintenance for public facilities meeting the standards of part 6106.0130, subpart 4; and

(5) agricultural and forestry activities meeting the standards of part 6106.0110.

C. Local governments must not restrict the height of ground cover vegetation in the areas listed under subpart 2, items A to E.

Subp. 4. **Permit process.**

A. Local governments must regulate intensive vegetation clearing activities identified in subpart 3, item A, through a permit process.

B. Local government may create a new administrative permit process or use an existing one for intensive vegetation clearing. Appeals of local government decisions on permits are subject to Minnesota Statutes, section 462.357, subdivision 6.

C. Local governments may delegate the permitting responsibilities described in this subpart to a resource agency or other qualified agent as determined by the local government.

D. Local governments must require permit applicants to submit information as needed to evaluate permits for consistency with the standards and requirements of this part and parts 6106.0080, subpart 6, and 6106.0160.

E. Local governments must grant the permit, deny the permit, or grant the permit with conditions necessary to achieve the purposes of this part, as provided under subpart 5.

Subp. 5. **Permit conditions.** In reviewing and approving permit applications, the local government must ensure through permit conditions that the following performance standards are met:

A. development is sited to minimize removal of or disturbance to natural vegetation;

B. soil, slope stability, and hydrologic conditions are suitable for the proposed work as determined by a professional engineer or resource agency;

C. clearing is the minimum necessary and designed to blend with the natural terrain and minimize visual impacts to public river corridor views;

D. any native plant communities removed are replaced with vegetation that provides equivalent biological and ecological functions. If replaced, priorities for restoration are stabilization of erodible soils, restoration or enhancement of shoreline vegetation, and revegetation of bluffs or steep slopes visible from the river;

E. all other vegetation removed is restored with natural vegetation to the greatest extent practicable. Priorities for replacement are the same as under item D;

F. any disturbance of highly erodible soils is replanted with deep-rooted vegetation with a high stem density;

G. vegetation removal activities are conducted so as to expose the smallest practical area of soil to erosion for the least possible time; and

H. other conditions as determined necessary by the local government to achieve the purpose of this part.

Subp. 6. **Vegetation restoration plan requirements.**

A. Reestablishment of natural vegetation is required:

(1) as a condition of permits under subpart 5, items D and E;

(2) upon failure to comply with this part; or

(3) as part of the planning process for subdivisions under part 6106.0170.

B. The vegetation restoration plan must:

(1) include vegetation that provides suitable habitat and effective soil stability, runoff retention, and infiltration capability. Vegetation species, composition, density, and diversity must be guided by nearby patches of native plant communities;

(2) be prepared by a qualified individual as defined by the local government; and

(3) include a maintenance plan that includes management provisions for controlling invasive species and replacement of plant loss for three years.

C. The local government must issue a certificate of compliance after determining that the restoration requirements of item B have been satisfied.

D. Vegetation management and restoration activities must be guided by Native Vegetation Establishment and Enhancement Guidelines, incorporated by reference under part 6106.0090.

Statutory Authority: *MS s 116G.15*

History: *41 SR 799*

Published Electronically: *January 19, 2017*

6106.0160 LAND ALTERATION AND STORM WATER MANAGEMENT STANDARDS.

Subpart 1. **Purpose.** The purpose of this part is to establish standards that:

A. protect water quality from pollutant loadings of sediment, nutrients, bacteria, and other contaminants; and

B. maintain stability of bluffs, shorelines, and other areas prone to erosion.

Subp. 2. **Definitions.** For the purpose of this part:

A. "fully reconstructs" means the reconstruction of an existing impervious surface that involves site grading and subsurface excavation so that soil is exposed. Mill and overlay and other resurfacing activities are not considered fully reconstructed;

B. "storm water management facilities" means facilities for the collection, conveyance, treatment, or disposal of storm water; and

C. "water quality impact zone" means land within the shore impact zone or within 50 feet of the boundary of a public water, wetland, or natural drainage way, whichever is greater.

Subp. 3. **Land alteration.**

A. Within the bluff impact zone, land alteration is prohibited, except for the following which are allowed by local government permit:

(1) erosion control consistent with subpart 6 and a plan approved by the local government or resource agency;

(2) the minimum necessary for development that is allowed as an exception under part 6106.0180; and

(3) repair and maintenance of existing buildings and facilities.

B. Within the water quality impact zone, land alteration that involves a volume of more than ten cubic yards of material or affects an area greater than 1,000 square feet requires a permit from the local government, meeting the standards in subparts 5 and 6.

Subp. 4. **Rock riprap, retaining walls, and other erosion control structures.**

A. Construction, repair, or replacement of rock riprap, retaining walls, and other erosion control structures located at or below the ordinary high water level must comply with parts 6115.0215, subpart 4, item E, and 6115.0216, subpart 2. The work must not proceed unless approved by the commissioner as meeting all requirements for work in public waters.

B. Construction or replacement of rock riprap, retaining walls, and other erosion control structures within the bluff impact zone and the water quality impact zone are allowed by local government permit provided that:

(1) if the project includes work at or below the ordinary high water level, the local permit is not approved until the commissioner has approved or permitted the project according to item A;

(2) the structures are used only to correct an established erosion problem as determined by the local government or resource agency;

(3) the size and extent of the structures are the minimum necessary to correct the erosion problem and are not larger than the following, except as specified under subitem (4):

(a) retaining walls must not exceed five feet in height and must be placed a minimum horizontal distance of ten feet apart; and

(b) riprap must not exceed the height of the regulatory flood protection elevation; and

(4) structures may exceed the height limits in subitem (3) only if a professional engineer determines that a larger structure is needed to correct erosion problems.

C. Repair of existing rock riprap retaining walls and other erosion control structures above the ordinary high water level does not require a local government permit, provided it does not involve any land alteration.

D. Nothing in this subpart shall be construed to waive any other permit requirements that are required by law.

Subp. 5. **Permit process.** Local governments must regulate activities identified in subparts 3 and 4 through a permit process consistent with subpart 6 and part 6106.0150, subpart 4.

Subp. 6. **Permit conditions.** In reviewing and approving land alteration permit applications, the local government must ensure that:

A. temporary and permanent erosion and sediment control measures retain sediment onsite consistent with best management practices in the Minnesota Stormwater Manual, incorporated by reference under part 6106.0090;

B. natural site topography, soil, and vegetation conditions are used to control runoff and reduce erosion and sedimentation;

C. construction activity is phased when possible;

D. all erosion and sediment controls are installed before starting any land disturbance activity;

E. erosion and sediment controls are maintained to ensure effective operation;

F. the proposed work is consistent with the vegetation standards in part 6106.0150; and

G. best management practices for protecting and enhancing ecological and water resources identified in Best Practices for Meeting DNR General Public Waters Work Permit GP 2004-001, incorporated by reference under part 6106.0090, are implemented where applicable, regardless of project type.

Subp. 7. **Storm water management.**

A. In the bluff impact zone, storm water management facilities are prohibited, except by local government permit if:

(1) there are no alternatives for storm water treatment outside the bluff impact zone on the site in question;

(2) the site generating runoff is designed so that the amount of runoff reaching the bluff impact zone is reduced to the greatest extent practicable;

(3) the construction and operation of the facility does not affect slope stability on the subject property or adjacent properties; and

(4) mitigation based on the best available engineering and geological practices is required and applied to eliminate or minimize the risk of slope failure.

B. In the water quality impact zone, development that creates new impervious surface, as allowed by exemption in part 6106.0180, or fully reconstructs existing impervious surface of more than 10,000 square feet requires a postconstruction storm water management permit from the local government consistent with the following:

(1) if a local government is covered by a municipal separate storm sewer system (MS4) general or individual permit from the Minnesota Pollution Control Agency, then the treatment requirements of the MS4 permit for postconstruction storm water management for new development and redevelopment projects apply;

(2) if a local government is not covered by an MS4 permit, then runoff from the new or fully reconstructed impervious surface must comply with the treatment requirements in the current national pollution discharge and elimination system program permit for construction storm water;

(3) local governments may adopt other treatment requirements approved by the Minnesota Pollution Control Agency instead of those specified in subitems (1) and (2); and

(4) multipurpose trails and sidewalks are exempt from subitems (1) and (2) if there is down gradient vegetation or a filter strip that is at least five feet wide.

C. In all other areas of the Mississippi River Critical Corridor Area, storm water runoff must be directed away from the bluff impact zone or unstable areas.

Subp. 8. **Development on steep slopes.** A local government may allow structures, impervious surfaces, land alteration, vegetation removal, or construction activities on steep slopes if:

A. the applicant can demonstrate that the development can be accomplished without increasing erosion or storm water runoff;

B. the soil types and geology are suitable for the proposed development; and

C. vegetation is managed according to the requirements of this part.

Subp. 9. **Compliance with other plans and programs.** All development must:

A. be consistent with Minnesota Statutes, chapter 103B, and local water management plans completed under chapter 8410;

B. meet or exceed the wetland protection standards under chapter 8420; and

C. meet or exceed the floodplain management standards under chapter 6120.

Statutory Authority: *MS s 116G.15*

History: *41 SR 799*

Published Electronically: *January 19, 2017*

6106.0170 SUBDIVISION AND LAND DEVELOPMENT STANDARDS.

Subpart 1. **Purpose.** The purposes of this part are to:

A. protect and enhance the natural and scenic values of the Mississippi River Critical Corridor Area during development or redevelopment of the remaining large sites within the corridor;

B. establish standards for protecting and restoring biological and ecological functions of primary conservation areas on large sites; and

C. encourage restoration of natural vegetation during development or redevelopment of large sites, where restoration opportunities have been identified in local plans.

Subp. 2. **Applicability.**

A. Except as provided in item B, this part applies to the following developments involving ten or more acres for parcels that abut the Mississippi River and 20 or more acres for all other parcels within the river corridor boundary, including smaller individual sites within the following developments that are part of a common plan of development but may be constructed at different times:

(1) subdivisions;

(2) planned unit developments; and

(3) master-planned development and redevelopment of land.

B. The following activities are exempt from this part:

(1) minor subdivisions consisting of three or fewer lots;

(2) minor boundary line corrections;

(3) resolutions of encroachments;

(4) additions to existing lots of record;

(5) placement of essential services; and

(6) activities involving river-dependent commercial and industrial uses.

Subp. 3. **Project information.** Local governments must require detailed project information and provide for preproject review of all proposed subdivisions, redevelopments, and planned unit developments as provided under part 6106.0080, subpart 6.

Subp. 4. **Design standards.**

A. Local government ordinances must contain provisions, including incentives, for alternative design methods such as conservation design, transfer of development density, or other zoning and site design techniques that achieve better protection or restoration of primary conservation areas.

B. Primary conservation areas, where they exist, must be set aside for protection as open areas as provided under item H. However, where primary conservation areas exceed the thresholds in subitems (1) to (4) as a percentage of a parcel, then only the percentage in subitems (1) to (4) must be set aside:

(1) CA-ROS: 50 percent;

(2) CA-RN: 20 percent;

(3) CA-RTC, CA-UM, CA-UC: ten percent; and

(4) CA-SR: ten percent, if the parcel includes native plant communities or provides feasible connections to a regional park or trail system, otherwise no requirement.

C. If the primary conservation areas exceed the maximum percentage established in item B, then the local government may determine which primary conservation areas are to be protected, with priority given to the protection of native plant communities and natural vegetation in riparian areas.

D. If primary conservation areas exist but do not have natural vegetation, then a vegetation assessment must be completed for the areas to be protected to determine whether vegetation restoration is needed. If restoration is needed, vegetation must be restored according to part 6106.0150, subpart 6.

E. If primary conservation areas do not exist on the parcel in question, the local government must determine whether any portions of the site have been identified as potential restoration areas in local plans, according to part 6106.0070, subpart 4. When such areas have been identified, vegetation must be restored consistent with a restoration plan according to part 6106.0150, subpart 6, and the restored area must be set aside as specified in item B.

F. Storm water treatment areas or other green infrastructure may be used to meet the requirements of this subpart if the vegetation provides biological and ecological functions.

G. Any land dedicated for public access or public facilities according to subpart 5 may be counted toward the set-aside requirements of this subpart at the discretion of the local government.

H. Areas that have been set aside under item B must be protected through:

(1) public acquisition by a government entity for conservation purposes;

(2) a permanent conservation easement, as provided in Minnesota Statutes, chapter 84C;

(3) a deed restriction; or

(4) other arrangements that achieve an equivalent degree of protection as determined by the local government.

I. Permanent protection methods under item H must ensure, within the areas set aside, the long-term management of vegetation to meet its biological and ecological functions, prohibit structures, and prohibit land alteration, except as needed to provide public recreational facilities and access to the river.

J. Protected open areas must connect open space, natural areas, and recreational areas, where present on adjacent parcels, as much as possible to form an interconnected network.

Subp. 5. **Land dedication.** Local governments that require dedication of land or equivalent amounts of cash for parks and open space under Minnesota Statutes, section 394.25, subdivision 7, or 462.358, subdivision 2b, must encourage dedication of lands suitable for riverfront access, parks, open space, storm water management, or other public facilities within the Mississippi River Corridor Critical Area.

Statutory Authority: *MS s 116G.15*

History: *41 SR 799*

Published Electronically: *January 19, 2017*

6106.0180 EXEMPTIONS FROM SETBACKS, HEIGHT LIMITS, AND OTHER REQUIREMENTS.

Uses and activities not specifically exempted under this part must comply with this chapter. All exemptions in the shore impact zone (SIZ) and bluff impact zone (BIZ) are also subject to the vegetation management standards in part 6106.0150 and the land alteration and storm water management standards in part 6106.0160. In the table, "E" means that the use is exempt; "(E)" means that the use is allowed only if no alternatives exist, and "N" means that the use is not exempt and must meet the standards in this chapter.

	Set-backs	Height limits	SIZ	BIZ	Standard (the use must comply with standard or referenced parts)
Industrial and utility structures requiring greater height for operational reasons (such as elevators, refineries, and railroad signaling towers)	N	E	N	N	Structure design and placement must minimize interference with public river corridor views
Barns, silos, and farm structures	N	E	N	N	
Bridges and bridge approach roadways	E	E	E	(E)	Part 6106.0130
Wireless communication facilities (towers)	E	E	N	N	Part 6106.0110, subpart 7
Chimneys, church spires, flag poles, public monuments, and mechanical service stacks and similar mechanical equipment	N	E	N	N	
Historic properties and contributing properties in historic districts	E	E	E	E	Exemptions do not apply to additions or site alterations to historic buildings or structures

Buildings and structures on the face of or abutting the bluff in the CA-UC district of St. Paul, between Chestnut Street and Highway 52	E	n/a	n/a	E	Height in the CA-UC district is governed by underlying zoning
Public utilities					
Electrical power facilities	E	E	E	(E)	Part 6106.0130
Essential services (other than storm water facilities)	E	E	E	(E)	Part 6106.0130
Storm water facilities	E	N	E	(E)	Part 6106.0160
Wastewater treatment	E	N	E	N	Part 6106.0130
Public transportation facilities	E	N	(E)	(E)	Part 6106.0130
Public recreational facilities					
Accessory structures, such as monuments, flagpoles, light standards, and similar park features	E	E	(E)	(E)	Part 6106.0130; within BIZ, only on slopes averaging less than 30 percent. Exemptions do not apply to principal buildings
Picnic shelters and other open-sided structures	E	N	(E)	N	Part 6106.0130
Parking areas	(E)	N	(E)	(E)	Part 6106.0130; within BIZ, only within 20 feet of toe of bluff; not on face of bluff; and must not affect stability of bluff
Roads and driveways	(E)	N	(E)	(E)	Part 6106.0130
Natural-surfaced trails, access paths, and viewing areas	E	N	E	E	Part 6106.0130
Hard-surfaced trails and viewing platforms	E	N	E	(E)	Part 6106.0130; within BIZ, only on slopes averaging less than 30 percent
Water access ramps	E	N	E	(E)	Part 6106.0130
Public signs and kiosks for interpretive or directional purposes	E	N	E	(E)	Part 6106.0130
River-dependent uses					

Shoreline facilities	E	N*	E	(E)	Part 6106.0110, subpart 6. Exemptions do not apply to buildings, structures, and parking areas that are not part of a shoreline facility
Private roads and conveyance structures serving river-dependent uses	E	N*	E	(E)	Part 6106.0110, subpart 6
Private residential and commercial water access and use facilities					
Private roads serving 3 or more lots	(E)	N	N	(E)	Part 6106.0140; in BIZ, only on slopes averaging less than 30 percent. Exemption does not apply to private roads serving fewer than 3 lots or to private driveways and parking areas
Access paths	E	N	E	E	Part 6106.0140
Water access ramps	E	N	E	N	Part 6106.0140
Stairways, lifts, and landings	E	N	E	E	Part 6106.0140
Water-oriented accessory structures	E	N	E	N	Part 6106.0140
Patios and decks	E	N	N	N	Part 6106.0140, subpart 6
Directional signs for watercraft (private)	E	N	E	N	Part 6106.0140; exemption does not apply to off-premise advertising signs
Temporary storage of docks, boats, and other equipment during the winter months	E	N	E	N	
Erosion control structures, such as rock riprap and retaining walls	E	N	E	(E)	Part 6106.0160, subpart 4
Flood control structures	E	N	E	(E)	Part 6106.0160

* River-dependent commercial, industrial, and utility structures are exempt from height limits only if greater height is required for operational reasons.

Statutory Authority: *MS s 116G.15*

History: *41 SR 799*

Published Electronically: *January 19, 2017*

Attachment B

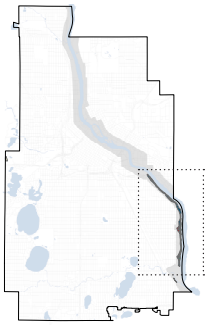
MRCCA Native Plant Communites

CITY OF MINNEAPOLIS

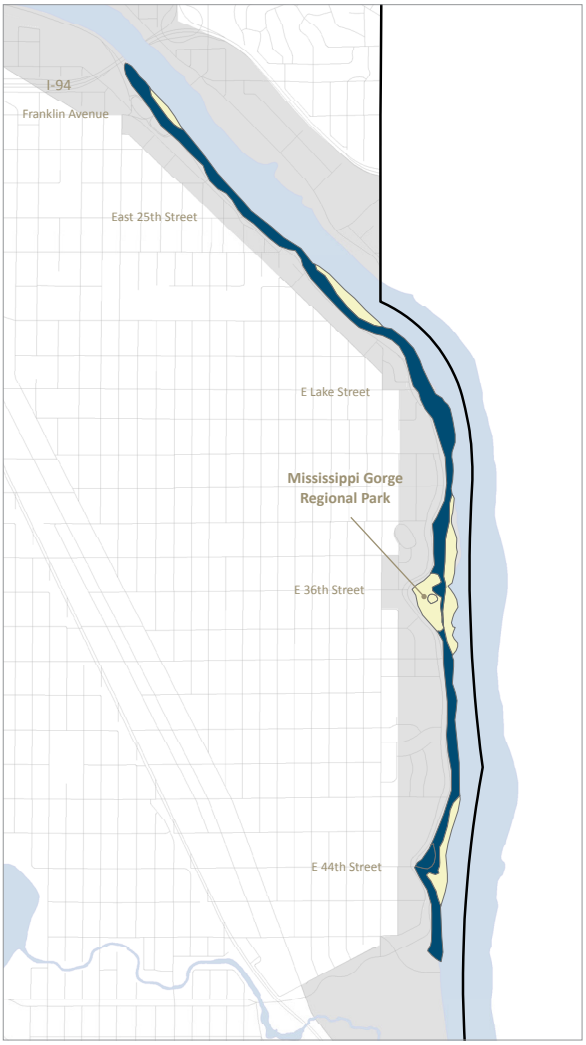
MRCCA NATIVE PLANT COMMUNITIES (NPC)

NPC - *MHs38c*- MAPLE-BASSWOOD FOREST (MB)

The Maple-Basswood Forest known for its presence of red oaks, suger maples, basswood and bitternut hickory trees, these plant communities are moist soils on glacial till or north-facing outwash slopes.



PLANT COMMUNITY SITES



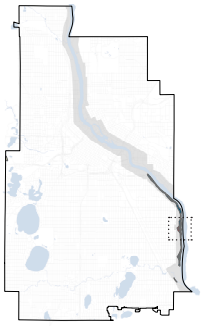
	LATIN NAME	COMMON NAME
TREES & UNDERSTORY	*Acer saccharinum*	Sugar Maple
	Fraxinus americana	White Ash
	Fraxinus nigra	Black Ash
	Fraxinus pennsylvanica	Green Ash
	Quercus rubra	Red Oak
	Tilia americana	Basswood
	Ulmus americana	American Elm
	Ulmus rubra	Slippery Elm
SHURB COVER	*Carpinus caroliniana*	American Hornbeam
	Carya cordiformis	Bitternut Hickory
	Cornus alternifolia	Pagoda Dogwood
	Dirca palustris	Leatherwood
	Ostrya virginiana	Ironwood
	Ribes spp.	Gooseberries
	Sambucus pubens	Red-berried Elder
	Staphylea trifolia	Bladder-Nut
GROUND COVER	*Allium tricoccum*	Wild Leek
	Aplectrum hyemale	Putty-Root
	Brachyelytrum erectum	Bearded Short-Husk
	Carex albursina	White Bear Sedge
	Dentaria laciniata	Toothwort
	Dicentra cucullaria	Dutchman's Breeches
	Erythronium albidum	White Trout-Lily
	Galium aparine	Cleavers
	Hydrophyllum virginianum	Virginia Waterleaf
	Hystrix patula	Bottlebrush Grass
	Isopyrum biternatum	False Rueanemone
	Solidago flexicaulis	Zid-Zag Goldenrod

CITY OF MINNEAPOLIS

MRCCA NATIVE PLANT COMMUNITIES (NPC)

NPC - *UPs23a* - MESIC PRAIRIE (MP)

The Mesic Prairie (Southern) plant communities are moist soils on sloping glacial till or outwash terrian.



PLANT COMMUNITY SITES

GROUND COVER

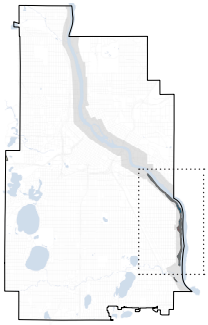
LATIN NAME	COMMON NAME
Amorpha canescens	Leadplant
Andropogon gerardii	Big Bluestem
Artemisia ludoviciana	White Sage
Asclepias ovalifolia	Oval-Leaved Milkweed
Asclepias speciosa	Showy Milkweed
Aster laevis	Smooth Aster
Astragalus crassicarpus	Ground-Plum
Cirsium flodmani	Prairie Thistle
Delphinium virescens	Prairie Larkspur
Echinacea angustifolia	Purple Coneflower
Galium boreale	Northern Bedstraw
Helianthus maximiliani	Maximilian Sunflower
Helianthus rigidus	Stiff Sunflower
Heuchera richardsonii	Alum-Root
Liatrisligulistylis aspera	Blazing Stars
Lilium philadelphicum	Wood Lily
Lithospermum canescens	Hoary Puccoon
Lycium barbarum	Wolfberry / Goji
Panicum leibergii	Panic Grass
Panicum virgatum	Switch Grass
Pedicularis canadensis	Wood-Betony
Petalostemon candidum	White Prairie Clover
Petalostemon purpureum	Purple Prairie Clover
Phlox pilosa	Downy Phlox
Potentilla arguta	Tall Cinquefoil
Prenanthes racemosa	Smooth Rattlesnake-Root
Prunus pumila	Sand Cherry
Psoralea esculenta	Prairie Turnip
Ratibida pinnata	Gray-Headed Coneflower
Rose arkansana	Prairie Rose
Salix humlis humlis	Prairie Willow
Schizachyrium scoparium	Little Bluestem
Solidago canadensis	Canada Goldenrod
Solidago missouriensis	Missouri Goldenrod
Solidago rigida	Stiff Goldenrod
Sorghastrum nutans	Indian Grass
Spartina pectinata	Prairie Cordgrass
Sporobolis heterolepis	Prairie Dropseed
Stipa spartea	Porcupine Grass
Vernonia faciculata	Ironweed
Viola pedatifida	Prairie Bird-Foot Violet
Zigadenus elegans	White Camas
Zizia aptera	Heart-leaved Alexanders

CITY OF MINNEAPOLIS

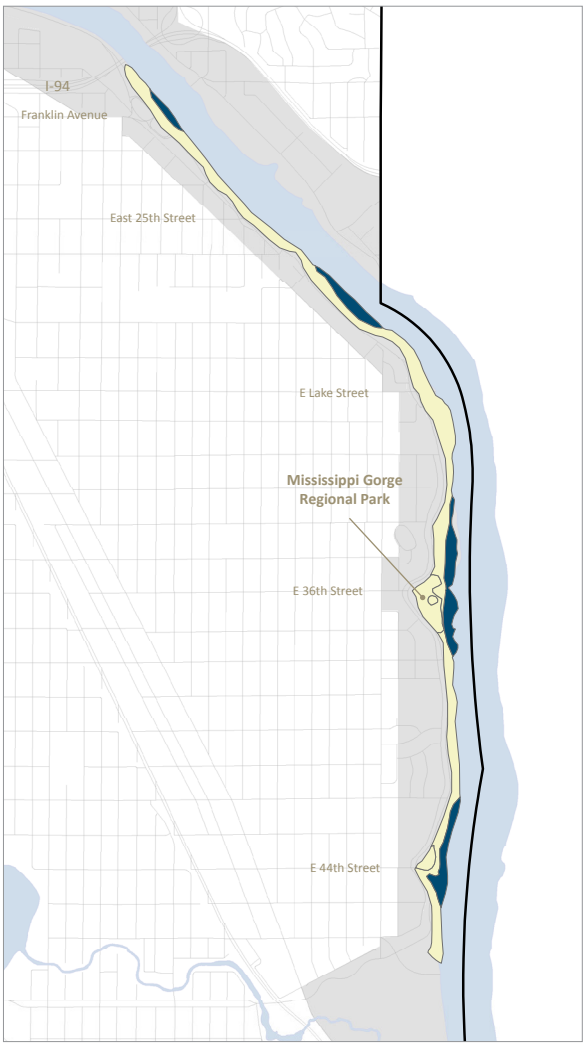
MRCCA NATIVE PLANT COMMUNITIES (NPC)

NPC - *FFs68a* - FLOODPLAIN FOREST (FM)

The Floodplain Forest identified by the presence of sliver maples and virginia creepers are lowland forest on seasonally flooded soils along the riverbed.



PLANT COMMUNITY SITES



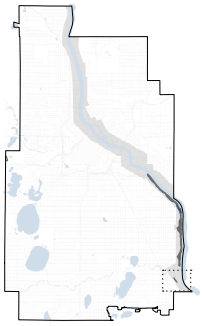
	LATIN NAME	COMMON NAME
TREE CANOPY	*Acer negundo*	Box Elder Maple
	Acer saccharinum	Silver Maple
	Betula nigra	River Birch
	Celtis occidentalis	Hackberry
	Fraxinus pennsylvanica	Green Ash
	Populus deltoides	Cottonwood
	Quercus bicolor	Swamp White Oak
	Quercus macrocarpa	Bur Oak
	Salix amygdaloides	Peach-leaved Willow
	Salix nigra	Black Willow
	Tilia americana	Basswood
	Ulmus americana	American Elm
	Ulmus rubra	Slippery Elm
GROUND COVER	*Amphicarpa bracteata*	Hog-Peanut
	Apios americana	Groundnut
	Boehmeria cylindrica	False Nettle
	Carex amphibola	Eastern Narrowleaf Sedge
	Cryptotaenia canadensis	Honewort
	Echinocystis lobata	Wild Cucumber
	Heracleum lanatum	Cow-Parnsip
	Laportea canadensis	Wood Nettle
	Leersia virginica	White Grass
	Pilea pumila	Clearweed
	Rudbeckia laciniata	Tall Coneflower
	Sicyos angulatus	Bur-Cucumber
	Vitis riparia	Wild Grape

CITY OF MINNEAPOLIS

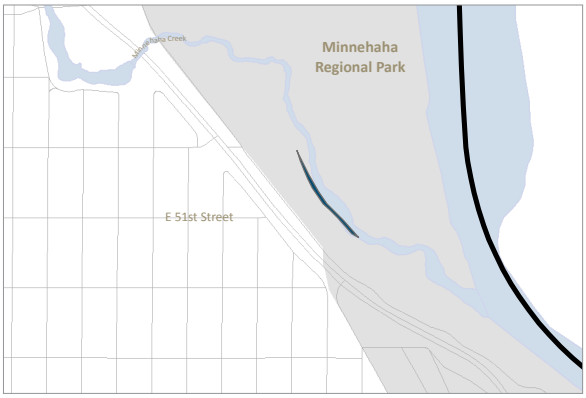
MRCCA NATIVE PLANT COMMUNITIES (NPC)

NPC - *WFs57a* - BLACK ASH SWAMP (BE)

The Black Ash Swamp identified by the presence of black ash and red maple trees, forested swamps filled with muck at the base of steep slopes.



PLANT COMMUNITY SITES



	LATIN NAME	COMMON NAME
TREES	*Acer rubra*	Red Maple
	Acer saccharinum	Silver Maple
	Fraxinus nigra	Black Ash
	Fraxinus pennsylvanica	Green Ash
	Tilia americana	Basswood
	*Ribes americanum**	Wild Black Currant
GROUND COVER	*Athyrium angustum*	Lady Fern
	Caltha palustris	Marsh Marigold
	Carex bromoides	Brome-Like Sedge
	Equisetum pratense	Meadow Horsetail
	Glyceria striata	Fowl Mannagrass
	Hydrocotyle americana	Water-Pennywort*
	Impatiens capensis	Jewelweed
	Iris versicolor	Blue Flag
	Mitella nuda	Naked Bishop's-Cap
	Osmunda cinnamomea	Cinnamon Fern
	Pilea pumila	Clearweed
	Poa paludigena	Bog Bluegrass*
	Symplocarpus fotidus	Skunk Cabbage

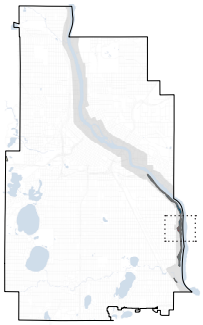
*Shrub cover category

CITY OF MINNEAPOLIS

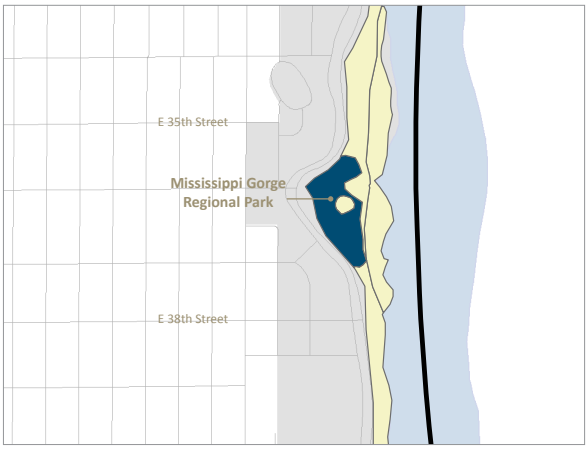
MRCCA NATIVE PLANT COMMUNITIES (NPC)

NPC - *MHs37b*- OAK FOREST (OM)

The Oak Forest known for its presence of red oaks, suger maples, red oak trees, these communities are also forested swamps with muck at the base of the slopes.



PLANT COMMUNITY SITES



	LATIN NAME	COMMON NAME
TREES	*Quercus alba*	White Oak
	Quercus ellipsoidalis	Northern Pin Oak
	Quercus macrocarpa	Bur Oak
	Quercus rubra	Red Oak
	Tilia americana	Basswood
UNDERSTORY	*Acer saccharum*	Sugar Maple
	Betula papyrifera	Paper Birch
	Carya cordiformis	Bitternut Hickory
	Ostrya virginiana	Ironwood
	Populus grandidentata	Big-Toothed Aspen
	Prunus serotina	Black Cherry
SHRUBS	*Cornus racemosa*	Gray Dogwood
	Corylus americana	American Hazel
	Prunus virginiana	Chokeberry
	Ribes spp.	Gooseberries
GROUND COVERS	*Amphicarpa bracteata*	Hog-Peanut
	Aralia nudicaulis	Wild Sarsaparilla
	Carex pensylvanica	Pennsylvania Sedge
	Cryptotaenia canadensis	Honewort
	Desmodium glutinosum	Pointed-leaved Tick-Trefoil
	Eupatorium rugosum	White Snakeroot
	Geranium maculatum	Wild Geranium
	Osmorhiza claytonii	Sweet Cicely
	Parthenocissus inserta	Virginia Creeper
	Phryma leptostachya	Lopseed