

Introduction and Summary

The Vision

The Upper River Master Plan presents a bold vision for developing the Mississippi riverfront into a regional park amenity in north and northeast Minneapolis. The need for action is clear: heavy industry on the river continues to pose land-use conflicts, while adjacent neighborhoods struggle to provide a quality of environment that attracts new investment. The opportunity is also clear: ***There is only one Mississippi***, and the Upper River is the best potential large-scale amenity awaiting development in the City of Minneapolis.

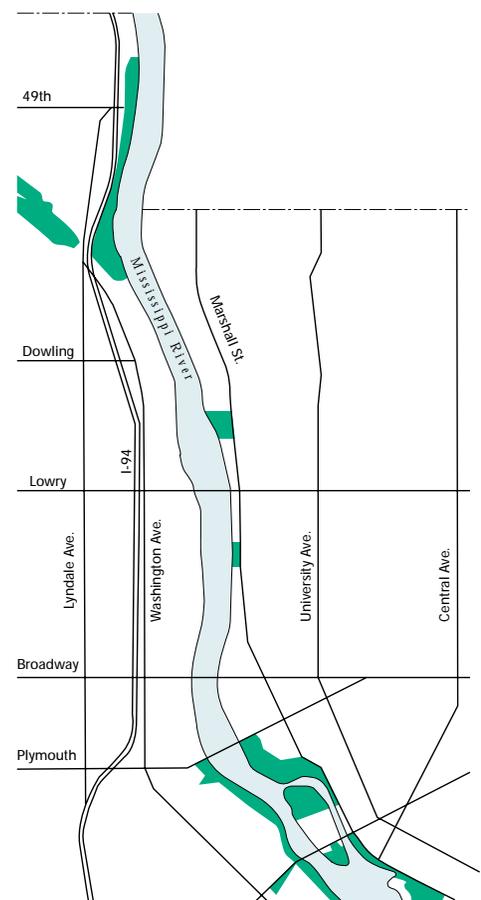
Over 50 percent of the linear riverfront along the Upper River is currently owned by public agencies. The Master Plan shows how these parcels can be linked into a continuous park system to create an amenity that will extend the intrinsic value of the river into local neighborhoods and the region, and provide new destinations for visitors that celebrate Minneapolis as a city on the Mississippi.

Master Plan Objectives

- ✓ Provide public access to river.
- ✓ Create a system of Riverway Streets
- ✓ Enhance the ecological function of river corridor.
- ✓ Link Upper River to Grand Rounds parkway system.
- ✓ Realize the area's potential for economic development.
- ✓ Establish urban design guidelines.

Major Benefits of Plan Implementation

- ◆ 90 acres of new park
- ◆ 15 miles of bike lanes and recreational trails
- ◆ 4 miles of restored riverbank
- ◆ 5.25 miles of parkway and boulevard
- ◆ 2,500 housing units in new riverfront neighborhoods
- ◆ 2,000 net additional jobs
- ◆ Over \$10 million in additional annual tax revenue



Upper River in Minneapolis

A New Era of Land Use

Land use in the Upper River corridor has been in a state of flux for the past 125 years, with a succession of bulk-material-processing and transport industries responding to market forces and rapid changes in available resources and technologies. This change can be understood by tracking the history of specific parcels of land. For example, the area along the west bank of the Mississippi north of Plymouth Ave. was used for saw mills, lumberyards, and foundries during the first era of the city's settlement. When the supply of trees declined, the vacant land became a railroad yard stretching up past Broadway. After the rail yard became unnecessary with conversion from steam to diesel engines, the MCDA developed the current West River Road, with riverfront open space on one side, and the other lined with light industries such as printing plants and laboratories.

Current City policies encourage light-industrial and parks development on the Upper River, while also supporting old-line, bulk-material-handling industries with subsidies to the City-owned Upper Harbor Terminal. The Upper River Master Plan explores the potential benefits to completing a continuous riverfront park system on both banks of the Upper River, leading a transition away from barging and heavy industry to a new, more stable era of land use.

The Plan seeks the highest and best use of land adjacent to riverfront parks, including the development of new residential communities. Riverfront living is gaining in popularity in Minneapolis, and the Upper River affords some of the most enticing sites with excellent river views and quick access to downtown. Two major redevelopment areas are proposed on the west bank, including a mixed-use urban promenade district south of Lowry Avenue and a new residential neighborhood north of Lowry. The development of residential neighborhoods will produce many benefits including a higher value tax base, move-up housing for area residents, increased park security, and an enlarged constituency seeking continued improvements to the ecology of the river corridor and communities of north and northeast Minneapolis.

River and Recreation

The basis of all the benefits outlined in the Upper River Master Plan flow from a system of continuous public parks and open space along the Mississippi north of Plymouth Ave. Recreation trails along both banks of the river are paralleled by an extended West River Parkway and redesigned Marshall Street. A Riverway Street System, with common streetscape elements such as pedestrian lighting and signage, will connect north and northeast Minneapolis neighborhoods to new riverfront parks.

In addition to recreational amenities, the aesthetics and ecology of the river corridor will be restored through bank stabilization and revegetation. Wildlife habitat and improved bank conditions will attract more recreational boaters to the Upper River, as will new riverfront hospitality destinations. Overlooks, fishing piers, and boat rental concessions are planned to offer opportunities for visual and physical interaction with the river.



Old Sash and Door Factory - 1st Era



Barge Terminal - 2nd Era



Light Industry and Open Space - 3rd Era



Riverfront Communities - 4th Era



Skyline view on Upper River



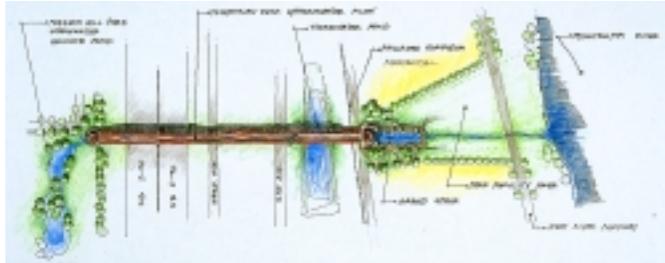
Restoration along West River Parkway



Landscape Restoration



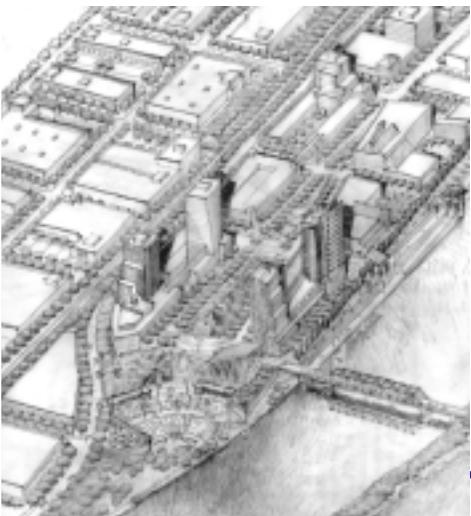
New Riverfront Neighborhood



Connections to Neighborhoods



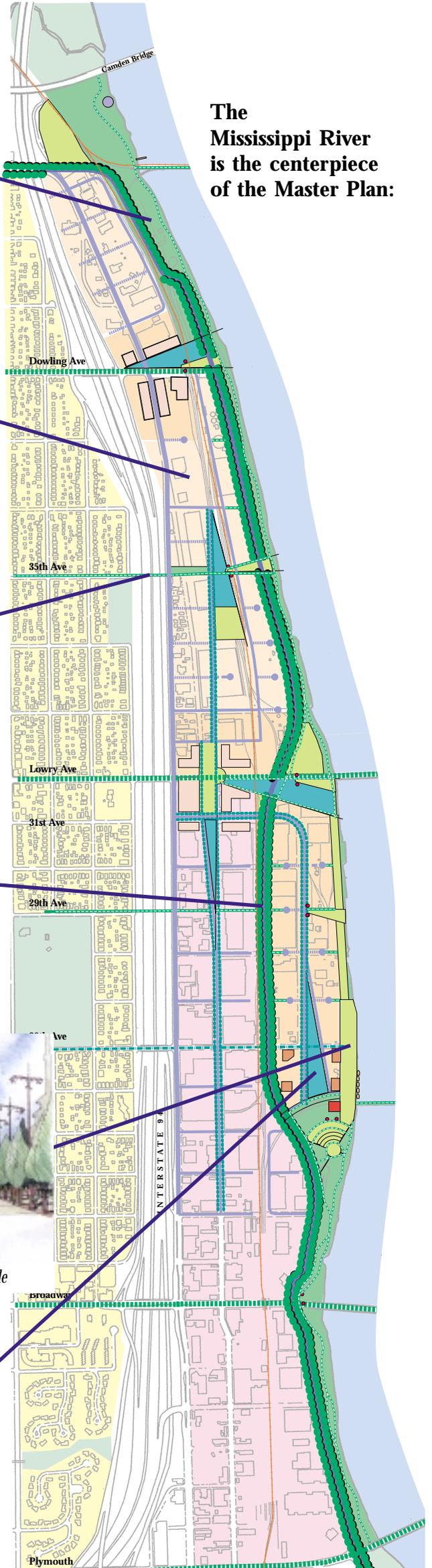
Extended West River Parkway



Urban Riverfront District



Riverfront Promenade



The Mississippi River is the centerpiece of the Master Plan:

Issues Addressed by the Master Plan

Parks and Parkways Development

- * Creation of a continuous riverside park corridor is a primary objective of the Plan.
- * Recommendations are given on specific park areas, size of open space, and programming.
- * A wide variety of experiences are included, from an urban promenade to park landscaping focused on habitat restoration.
- * An innovative parkway alignment is suggested to remove vehicular traffic from a portion of the waterfront and buffer different land uses.

Access to the River

- * Current lack of access to the river is addressed by the Plan with new parks and trails along both banks.
- * A Riverway Street System is proposed to parallel new riverfront parks and connect to existing neighborhoods.
- * Two pedestrian decks over the interstate are included making a direct connection from north Minneapolis to the river.
- * A railroad bridge is identified for conversion to a pedestrian and bicycle boardwalk, while overlooks and boating facilities offer visual and physical contact with the water.

River Ecology

- * The Plan gives specific recommendations for riverbank stabilization and restoration to improve the ecological and visual condition of banks along the Upper River.
- * Water quality ponds are a key feature, designed to meet current standards for retaining and filtering run-off in redevelopment areas.
- * Wildlife habitat in the river corridor is increased and connected through landscape restoration proposals.

Neighborhood Renewal

- * Existing neighborhoods will receive major benefits from the planned parks, redesigned streets, and associated economic development. A regional park is outlined, to give north and northeast Minneapolis communities a waterfront amenity equal to those found in south Minneapolis, but a facility that also recognizes the unique culture and opportunities of the Upper River area.
- * Realization of the plan will raise property values on the city's north side, while providing an incentive for current residents to stay in their community. Public projects will act as a catalyst to private investment in existing and new housing stock, as well as new business starts.

Marshall Street

- * As a major thoroughfare along the river, Marshall Street is a key concern to residents of northeast Minneapolis and adjoining communities.
- * The Plan calls for a new streetscape along Marshall—greener, less cluttered, and safer.
- * As the boundary to a new continuous park, reconstruction of Marshall is expected to spur long-term private redevelopment of housing facing the river.

Commercial Navigation

- * The Plan discusses barging from the perspective of land use, concluding that large areas devoted to open storage of bulk materials return little to the City in terms of jobs and tax revenue.
- * Economics of lock and channel maintenance are explored, showing that public subsidies are high on this last stretch of the Mississippi lock system, and difficult to justify given alternatives in the region.

Heavy Industry

- * Conflicts between some heavy industries and nearby properties are unavoidable given the nature of these operations.
- * While these businesses provide needed services to society, the Plan confirms that the Upper River is too valuable and too close to existing neighborhoods and the heart of the city for this land use to continue indefinitely.
- * A transition to light industry and other land uses is recommended.

Grain Belt

- * One of the great architectural and cultural resources of the Upper River is the former Grain Belt Brewery complex.
- * The Plan proposes a mixed-use development focusing on meeting, hospitality, and entertainment facilities.

Housing Development

- * In a radical departure from past land uses along the Upper River, the Plan captures the true potential of planned park and parkway development by proposing major new residential developments.
- * A new neighborhood is planned for the west bank, allowing a richer mix of land uses and guaranteeing that the new parks will be used and safe.
- * The Plan creates a new space in which the City of Minneapolis can meet Metropolitan Council growth objectives.

Traffic

- * With the recommendation to phase out intermodal terminals as a land use on the Upper River, the corridor will experience fewer trucks and rail cars moving through.
- * At the regional scale, new residential development along the Upper River, within minutes of downtown and easily accessed by transit or bicycle, will take thousands of daily commuter trips off expressways.

Employment

- * A move away from bulk-material-handling industries to light manufacturing, back office, and research facilities is promoted as an overall objective of the Plan.
- * Riverfront park amenities will attract business development to designated areas on the west bank, with higher job densities and quality structures.
- * In addition to light manufacturing and office employment, new areas for riverfront hospitality and entertainment venues will provide opportunities for job creation in the service sector.

Summary of Recommendations

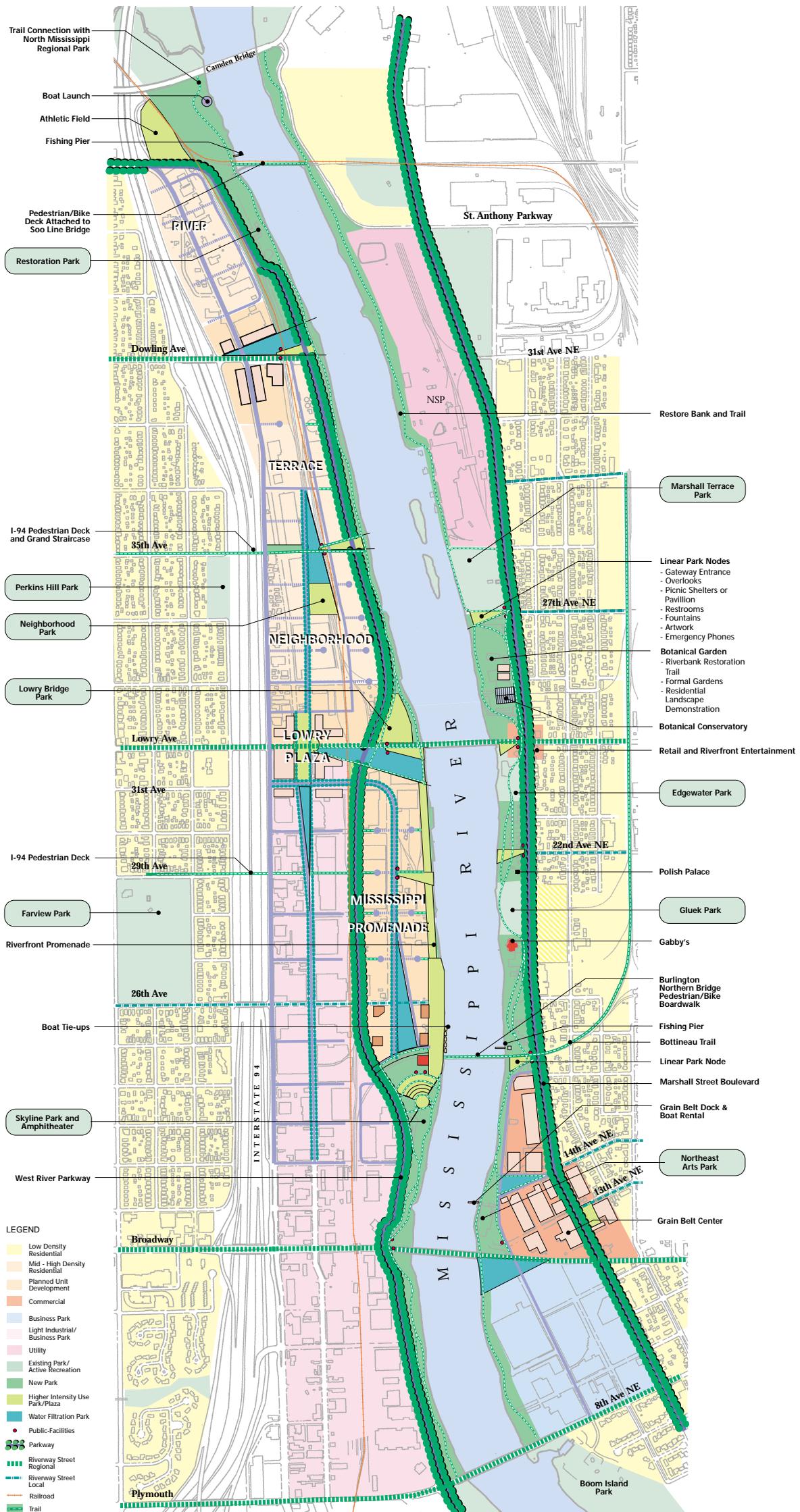
Parks, Urban Design, and Environmental Restoration

- Create a **continuous** and integrated riverfront **parks** and open space system long the Upper River.
- Construct recreational **trails along both banks** of the river.
- Provide space in parks for riverbank, landscape, and habitat **restoration**.
- Develop **waterfront features** in new parks, and **nodes** of interest at regular intervals along trails.
- Preserve **hospitality uses** within parks corridor.
- Establish a **Riverway Street System**, with common streetscape elements and signage that identify streets leading to and paralleling the riverfront.
- Designate no-build zones to hold **view corridors** to the river and downtown skyline.
- Construct a system of **area-wide water quality ponds** that meet the highest standards for stormwater retention and filtration.
- Extend **West River Parkway** to North Mississippi Regional Park.
- Convert the **BN Bridge** to a pedestrian and bicycle facility linking both banks.
- Reconstruct **Marshall Street** as a **boulevard**, with new landscaping and bicycle lanes.

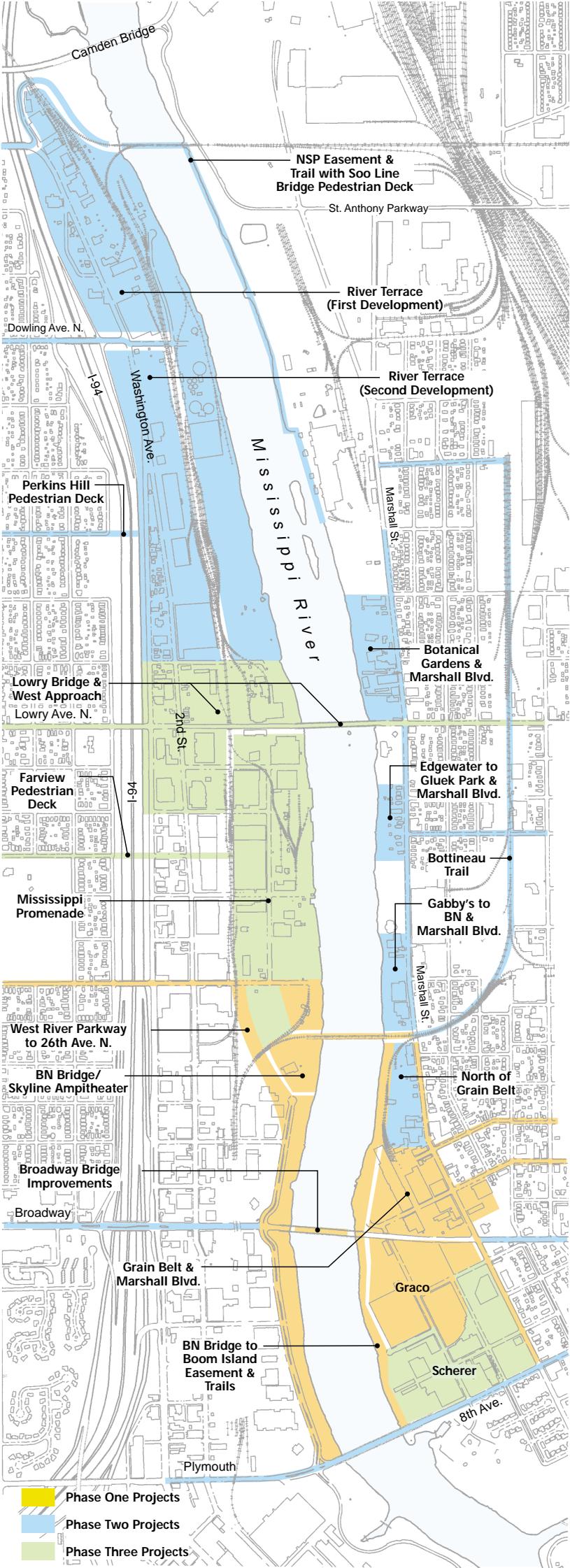
Land Use and Implementation

- Establish an **Upper River Development Corporation** as a non-profit entity with the sole purpose of implementing the Upper River Master Plan.
- **Rezone** property in accordance with the Upper River Land Use Plan.
- **Close the Upper Harbor Terminal**.
- **Phase out heavy-industrial** uses in Upper River corridor.
- Transition land use in corridor to a **mix** of parks, residential, light-industrial, and commercial uses.
- Develop new **riverfront residential** and mixed-use **communities** on west bank.

Upper River Master Plan



Implementation Projects and Phasing



Historical Inertia

When the last great tracts of old growth white pine were felled in the vales of the Mississippi in northern Minnesota, the cut logs stopped floating to the numerous saw mills that occupied the land above St. Anthony Falls. Interspersed with foundries, sash and door mills, cement and brick works, the sawmills along the Upper River in Minneapolis took advantage of large sites for open storage of lumber. Competing railways laid tracks along both sides of the river to transport raw materials and finished products. Housing for industrial workers was built between factories and in adjacent neighborhoods. Breweries tapped deep wells on the east bank, offering employment, impressive architecture, and beer gardens to a vibrant community. Extending cultural traditions with roots in Eastern Europe, distinctive neighborhoods with landmark churches grew in northeast Minneapolis. The river's role was set and unquestioned as a place of industry and work.

With the natural resource exhausted in the early decades of the twentieth century, many sawmills and lumberyards went out of business, leaving large tracts along the river open to new uses. Scrap metal dealers came to dominate much of the west bank south of Lowry Ave., continuing Minneapolis's regional role as a processor of bulk materials. While the power of the Falls of St. Anthony was the reason for the city's being and location, civic leaders in Minneapolis desired a new use for the river as grain milling declined only a few decades after lumber. A lock over the falls was planned. Putting aside the Army Corps of Engineers doubts about the costs and benefits, two locks were constructed at the Lower and Upper Falls. A new era of navigation above the falls opened in 1963, as two-by-two barges were lifted to the last mile of working river on the Mississippi.

But the promise that barging would spur construction of large manufacturing plants along the Upper River did not materialize. By the late 1960s other industrial centers such as Detroit, the Menomonee Valley in Milwaukee, the steel works of south Chicago, the Monongahela in Pittsburgh, were coming to be known as the "rust belt" —vast areas of industrial plant were abandoned, made redundant by new manufacturing techniques and global competition. Minneapolis, with its new locks taking nearly 15 years to construct, had misjudged the larger economic currents and what types of industries and levels of employment barging would bring.

Opening its own municipal barge terminal on the Upper River in 1968, Minneapolis sought to rival the traditional role of its twin city three locks down

stream. The Upper Harbor Terminal found a limited niche in the regional transport system, loading and unloading bulk commodities including grain, potash, salt, twine, fertilizer, and steel. Private terminals on the Upper River moved only scrap metals, concrete, and aggregate, important and necessary commodities, but far short of the manufacturing plants forecast to justify the locks. To pay for construction of the municipal terminal—its locomotive, tug boat, conveyor belts and storage sheds—local taxes subsidized the operation for 30 years.

Over those three decades much had changed in attitudes regarding the river. With successful efforts to clean the water, citizens organized around a new concept of *the river as an amenity* and called for an end to the historical inertia, set in City policy and regulations, that continued to place industry along the banks.

A New Vision Emerges

The City's master plan for its riverfront published as *Mississippi/Minneapolis* in 1972 proposed wide ranging and ambitious goals for redevelopment of the central riverfront in downtown, which at the time was only a shell of its former glory as the world capital of grain milling. Many of these redevelopment goals have since been accomplished. The 1972 plan also addressed the Upper River, proposing a high-employment manufacturing area with quality structures and river edge setbacks at non-barging sites, while also including significant open space, river access, and trail development goals. A major success has been the creation of the North Mississippi Regional Park and replacement of the Camden Bridge, yet almost all of the other suggestions regarding industrial character, employment levels, local access greenways, and a continuous trail along the east bank have not been realized.

“The extension of a public access greenway along the entire river edge of this district to Marshall Terrace Park is an important, if difficult, task”

— *Mississippi/Minneapolis*, 1972

Over a dozen plans since 1972 have addressed the Upper River in some manner, including "The Upper River in Minneapolis" (1985), "Mississippi Corridor Neighborhood Coalition" (1994), and "Gateways to the River" (1997).

The basic goals identified over a 25-year period of planning for the Upper River remain the same:

- Create continuous recreational trails along both banks of the river.
- Seek opportunities for public ownership of the riverbank.
- Enhance streets leading to and paralleling the river.
- Create locations for observing the river.
- Work toward a pattern of river-enhancing land uses.
- Revegetate the riverbanks.

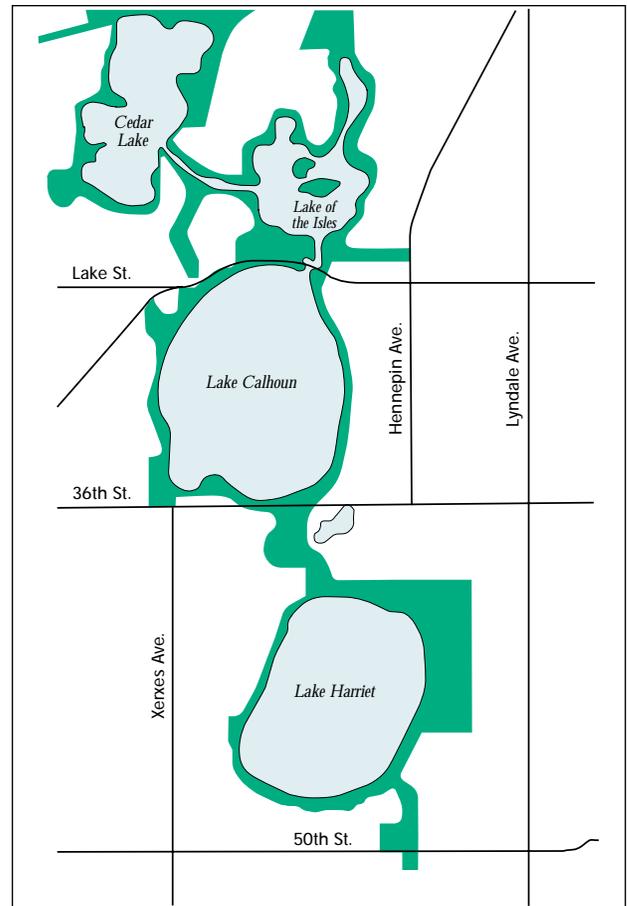
- Remove unneeded railroad spurs.
- Improve river ecology and water quality.
- Reduce or eliminate sources of air, noise, or water pollution.
- Develop a coordinated effort at all levels of government to implement goals.

Citizens of Minneapolis and residents of neighborhoods adjacent to the Upper River clearly have a strong desire to see substantial changes made to conditions along the river. Calls for action have increased in the 1990s, as bulk-material-handling businesses seek to expand operations on the riverbank, while north and northeast Minneapolis confront a broad array of social and environmental issues.

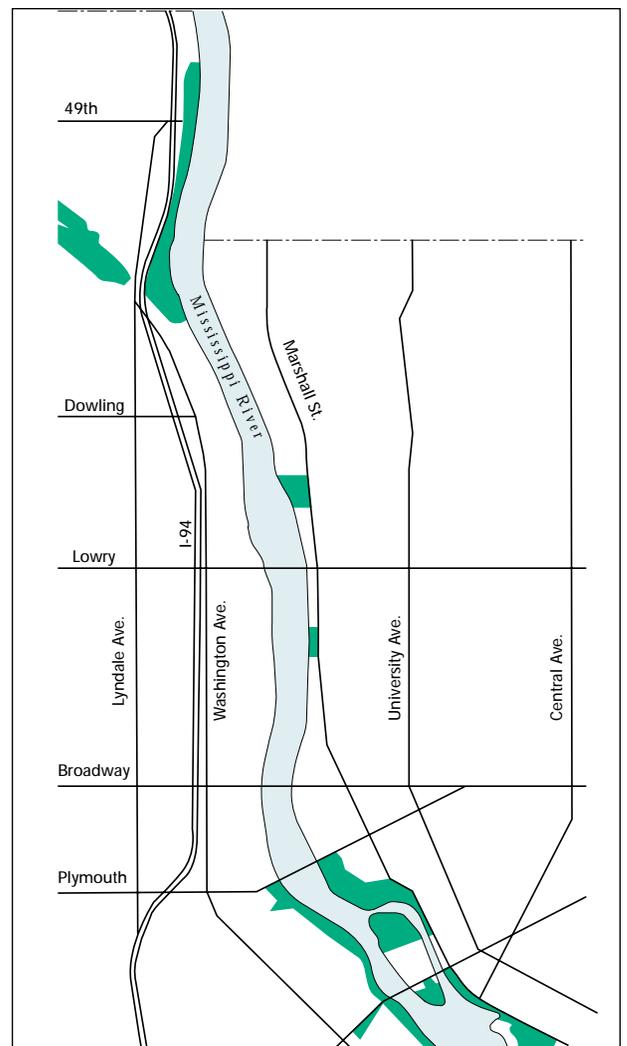
Northern sections of the city have frequently looked to the south side, with its Chain of Lakes and West River Parkway, and felt that their part of the city should have similar waterfront parks. The opportunities that the Upper River offers are tantalizing from vantage points such as the Grain Belt Brewery, Marshall Terrace Park, or the terminus of West River Road. And the need to develop new public amenities that will act as a catalyst for private reinvestment in north and northeast Minneapolis becomes critical, as housing stocks deteriorate and employment lags behind the robust growth in the rest of the city and overall metropolitan area. Indeed, the historical ties between the riverfront industrial areas and residents of adjacent neighborhoods have been loosened, if not broken altogether: in 1999 less than 10 percent of all employees in the Upper River area lived in adjacent neighborhoods, and only 33 percent lived in the City of Minneapolis. The automobile has freed most employees to live far from work, and neighborhood affiliation with local plants has declined. The location of Interstate 94, completed in 1982, was explained as a *buffer* between industry and north Minneapolis, but employment opportunities have not increased substantially for nearby residents and the interstate acts as a real *barrier* to any conception of north Minneapolis as a riverfront community.

Prelude to a Master Plan

By the time of completion of the "Gateways to the River" report and its acceptance by the City Planning Commission in 1997, the concept of the Upper River as the focus for parks, parkways, and trails had been thoroughly discussed. The citizens advisory committee appointed to develop the 1997 concept plan consisted of neighborhood delegates from each of the ten neighborhoods bordering the river north of Plymouth Ave. plus representatives from industrial, commercial, recreational, environmental, and hospitality interests. The committee met over a period of 16 months, assisted by an inter-jurisdictional staff from the City Planning and Inspections departments, Minneapolis Park and Recreation Board, Minneapolis Community Development Agency, and National Park Service. The "Gateways to the River" plan reiterated and refined goals expressed in previous plans, including the general desire for continuous parks and trails along the river. The issue of the



Chain of Lakes



Upper River

Comparison to scale of Chain of Lakes and Upper River. The Chain of Lakes has 10.5 miles of waterfront with trails, parkways, and parks creating the key amenity for south Minneapolis. The Upper River offers 4.5 miles of waterfront south of the Camden Bridge.

City's Upper Harbor Terminal was recommended for further study, as was the designation of Marshall St. N.E. as a truck route, and the potential for a marina.

In December of 1997 the Minnesota Department of Natural Resources executed an agreement approving a grant to the Minneapolis Park and Recreation Board from the Legislative Commission on Minnesota Resources "to develop a master plan addressing greenspace and trail development, riverbank restoration, and stimulation of river-oriented land uses within a corridor along the east and west banks of the Mississippi River from Plymouth Avenue north to the Minneapolis city limits." The master plan, as described in the project outline and request for proposals from consultants, was to be *comprehensive*. The primary goal was for a parks plan to "provide the final link in the Mississippi riverfront greenspace system," but the scope of study also included "neighborhood economic revitalization and sustainable development through a gradual shift in land use toward light industrial parks and residential neighborhoods in conjunction with greenways and riverfront trail systems," and "environmental questions regarding possible soil contamination by previous and current land uses and the restoration of the ecological integrity and stability of the riverbanks." This comprehensive master plan was not to be a strict feasibility study, nor a reexamination of possible goals for the area, but a plan that began where previous plans left off and answered questions of how parkways, parks, and trails might be configured, how the riverbank could be restored, and what might be the optimal urban design for adjacent lands—with a shift away from heavy-industrial use of the riverfront prescribed.

The Upper River—A unique place on the Mississippi

The Mississippi River in Minneapolis has three distinct geographical zones: the gorge below the falls, the Falls of St. Anthony, and the area above the falls; which have for planning purposes been correspondingly labeled the Lower Gorge, Central Riverfront, and Upper River. Plymouth Avenue and its bridge just north of Boom Island Park serves as the dividing line between the Central Riverfront and the Upper River. The Lower Gorge displays visible evidence of the falls collapse and recession over the millennia, as softer sandstone was undercut by the force of the water flowing over the harder limestone riverbed. The different geology of the gorge and falls areas from the Upper River is revealed in the geography above ground, with early accounts of the area before urbanization noting the clear distinctions in topography and vegetation.

Henry Schoolcraft, discoverer of Lake Itasca as the source of the Mississippi, noticed while making portage in 1820 that the Falls of St. Anthony were: ". . . in fact the precise point of transition, where the beautiful prairies of the upper Mississippi, are merged in the rugged lime stone bluffs which skirt the banks of the river from that point downward."



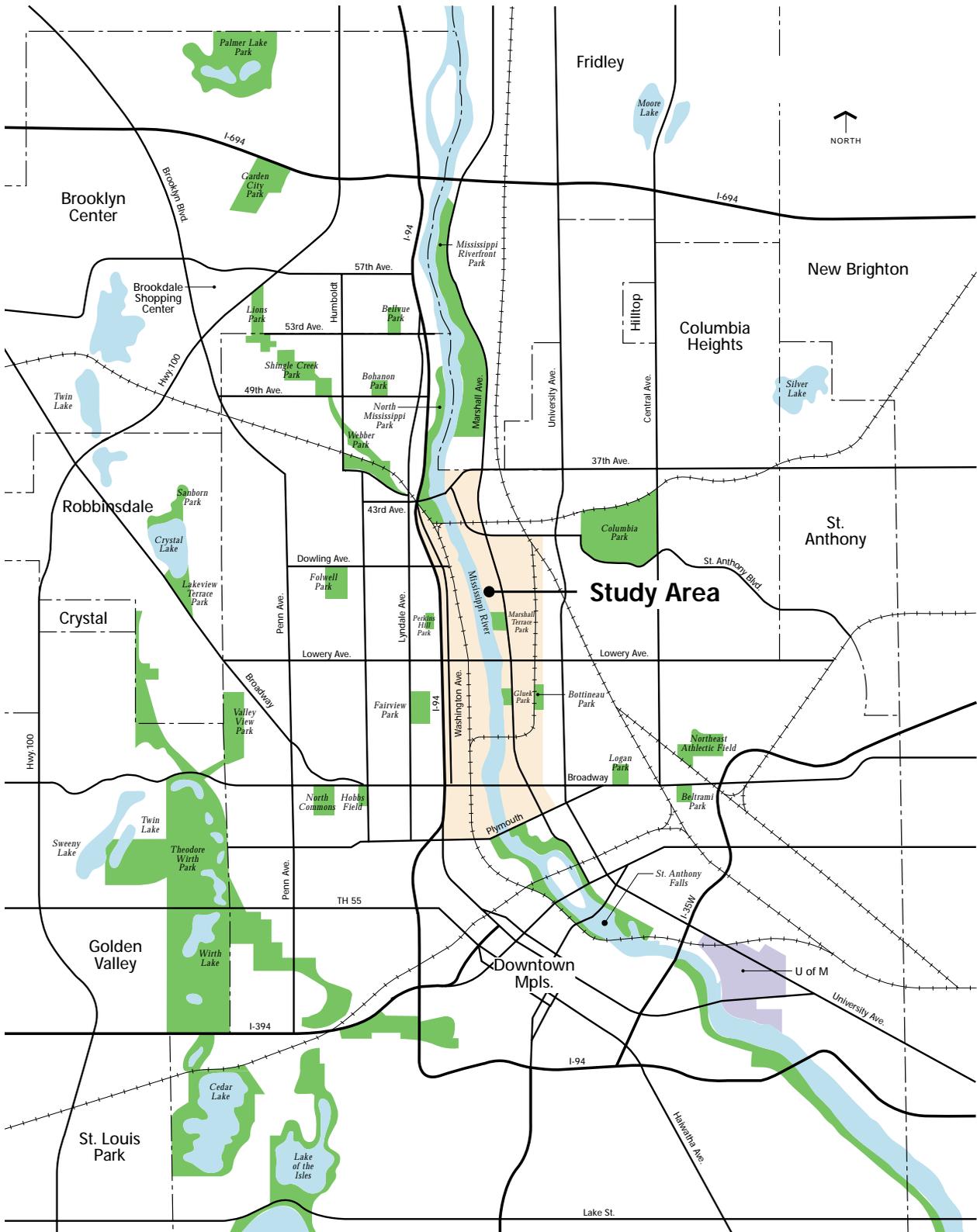
The Minneapolis Institute of Arts

" . . . and the eye embraces at one view, the copses of oaks upon the prairies, and the cedars and pines which characterize the calcareous bluffs. Nothing can exceed the beauty of the prairies which skirt both banks of the river above the falls. They do not, however, consist on an unbroken plain, but are diversified with gentle ascents and small ravines covered with the most luxuriant growth of grass and heath-flowers, interspersed with groves of oak, which throw an air of the most picturesque beauty over the scene. "

—Henry Schoolcraft, 1820. "St. Anthony Falls in 1848" by Henry Lewis.

Boundaries

Interstate 94 sets the western boundary of the study area. The eastern extent of the study area is the Burlington North railroad spur paralleling California St. N.E. Plymouth Ave. N. extending across the river to become 8th Ave. N.E. is the southern boundary of the Upper River area. The City limits at 53rd Ave. N. and 37th Ave. N.E. mark the northern boundary. Although part of the Upper River, North Mississippi Regional Park is being developed with its own master plan; therefore, the Upper River Master Plan uses the Camden Bridge as its northern limit for detailed study. Investigation of circulation and traffic patterns extends outside the study area for land use.



Geology and Landscape Features

A serendipitous irony of history is found in the underlying geology of the river in Minneapolis, for only a few hundred yards upstream from the present location of the falls, the limestone that forms the bluffs and falls gives out—if the collapse had been a bit faster, only a rapids would have been discovered by the first European explorers.

In contrast to limestone bluffs, the area above the falls is characterized by deep sand terraces, remnants of former channels and floodplains left from the time when the ancient river swelled with glacial melt. The topography of this terrace is most apparent on the west side of the river where the bank is low, only a few feet above the water, giving way to a mostly level plain that steps up to a glacial outwash west of the interstate. In most areas, the east bank is higher and the slope from the river steeper, up to 25 feet above the average water level, but also generally flat land above the bluff line. This difference in elevations shows the cut and deposit action of the river, with its slight meander to the east between the outfall of Shingle Creek and the Burlington Northern railroad bridge.

Shingle Creek and Bassett Creek enter the river from the west bank and mark important topographic boundaries for the Upper River. The Plymouth Ave. bridge was built just north of Bassett Creek, while Shingle Creek meets the Mississippi immediately north of the Camden Bridge. Downstream of Camden, the Soo Line Railroad bridge marks the end point of the dredged channel maintained by the Corps of Engineers. There are no surface streams on the east side in the study area, and no major creeks were documented at the time of European settlement.

Site alterations throughout the study area have included dredging, importation of fill to level and stabilize ground, as well as placement of bulkheads and other structures along much of the bank. With the exception of stands of cottonwood near the water, there are no remnants of the original patterns of vegetation. Four roadway and two railroad bridges span the Mississippi in the study area. Storm sewers carry surface runoff from north and northeast Minneapolis to 33 outfalls along the river.

- | Natural Features | |
|---|--|
|  | Wetlands |
|  | Woodlots |
|  | Grass & Scrublands |
|  | Exposed Water Features |
|  | Slopes |
|  | Depressions |
|  | Historic Ponds |
| Human Influenced Features | |
|  | Storm Drain Outlets Into The Mississippi River |
|  | Landscaped/Maintained Areas & Parks |
|  | Significantly Disturbed & Abandoned Areas |
|  | Potential Corridor |

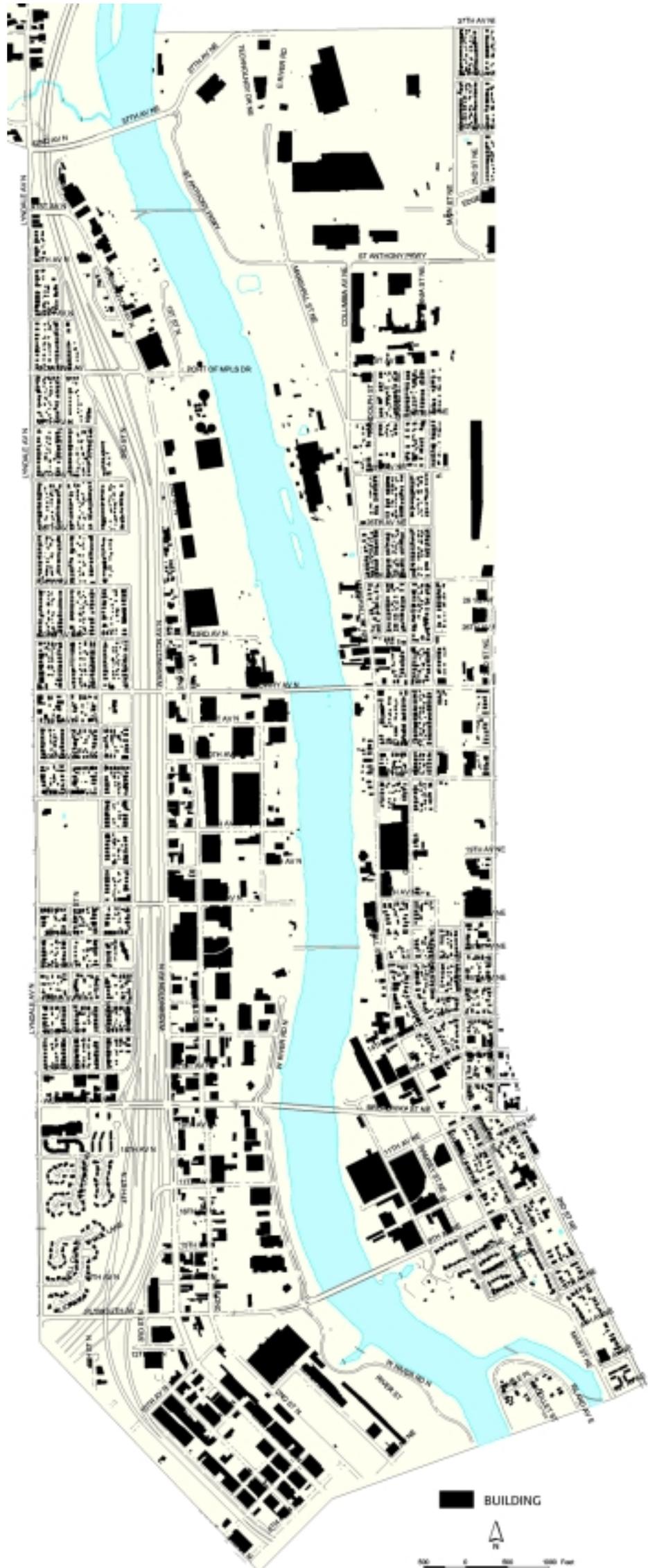


Figure-Ground Elements

The figure-ground diagram shows built structures, in black, set against the background of open land and water, in white and blue respectively. This type of diagram is useful to an understanding of the spatial characteristics of structures in relationship to each other and the pattern of underlying topography and infrastructure. Most telling are the large areas along the west bank that have no structures. These areas in white correspond directly with barge terminals. This relationship is created by the nature of the bulk-material-handling operations, where outdoor storage occupies the majority of land.

On the east bank, large areas of white along the river indicate existing park lands, including Marshall Terrace, Edgewater, and Gluek. The Northern States Power plant also stands out along the riverfront, with park open space to the south and a large open area to the north used to store coal.

The largest single feature that the figure ground indicates is the Mississippi River itself. Obviously, it contains no structures, but perhaps less obvious, the open space of the river creates long views to other parts of the city and also open views of the sky.



Existing Land Use

The parcel-by-parcel land-use depiction shows the west bank dominated by general-industrial uses on large sites. Along Washington, Broadway, and West River Road a more complex mix of commercial, office, residential, and vacant land is shown on parcels of a variety of sizes. On the east bank, parks are intermixed with general-industrial and residential uses. Residential neighborhoods of northeast Minneapolis extend right up to Marshall St. and the riverbank, while the communities of north Minneapolis are cut off from the river by the interstate (shown as a corridor of white) and the large area of industrial uses.



Circulation

The Upper River corridor is well connected to national, regional, and local transportation systems. Interstate 94 has exits at Broadway, Dowling, and 49th Ave. N. Truck routes mark regional highways and bridge crossings. High-traffic routes include Washington, Broadway, Marshall, and Lowry. Two railways own mainlines and yards in the study area, with Canadian Pacific Railway (CP Rail) servicing businesses with a spur down the west bank, and the Burlington Northern Santa Fe Railway (BNSF) extending a spur down through the residential neighborhoods of northeast Minneapolis to the BN Bridge and customers on both sides of the southern riverfront. Barge terminals lie on the last stretch of commercial navigation on the Upper Mississippi.

