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LAND USE FORECASTS AND COMMUNITY DESIGNATION

Purpose

Ramsey County supports land use and zoning that encourages inclusive, resilient and healthy communities. All land use and zoning decisions occur at the city-level, however Ramsey County will partner with cities and state agencies to support land use that encourages transit ridership, affordable housing and stewardship of natural resources. This chapter will focus on natural resource protection and the required elements of the Mississippi River Corridor Critical Area (MRCCA).

KEY THEMES:

- ▶ Land use and zoning decisions are made by municipalities rather than the county.
- ▶ Encourage greater intensity of use, infill and development through partnerships with cities.
- ▶ Prioritize the protection of Primary Conservation Areas via conservation-minded management decisions on county-owned property as well as coordination with local government units.
- ▶ Improve conditions and restore habitat on county-owned land within Primary Conservation Areas.
- ▶ Encourage the creation, connection and maintenance of open space, recreational facilities, and public access to the river.

LAND USE

VISION FOR LAND USE

Land use decisions are made by municipalities located within the county. Forecasts of population, housing and employment support Ramsey County in encouraging communities to maintain zoning flexibility and drive greater intensity of use as appropriate given community designations.

GOALS

- Well-Being through livability, walkability and protection of open space;
- Prosperity through economic development.

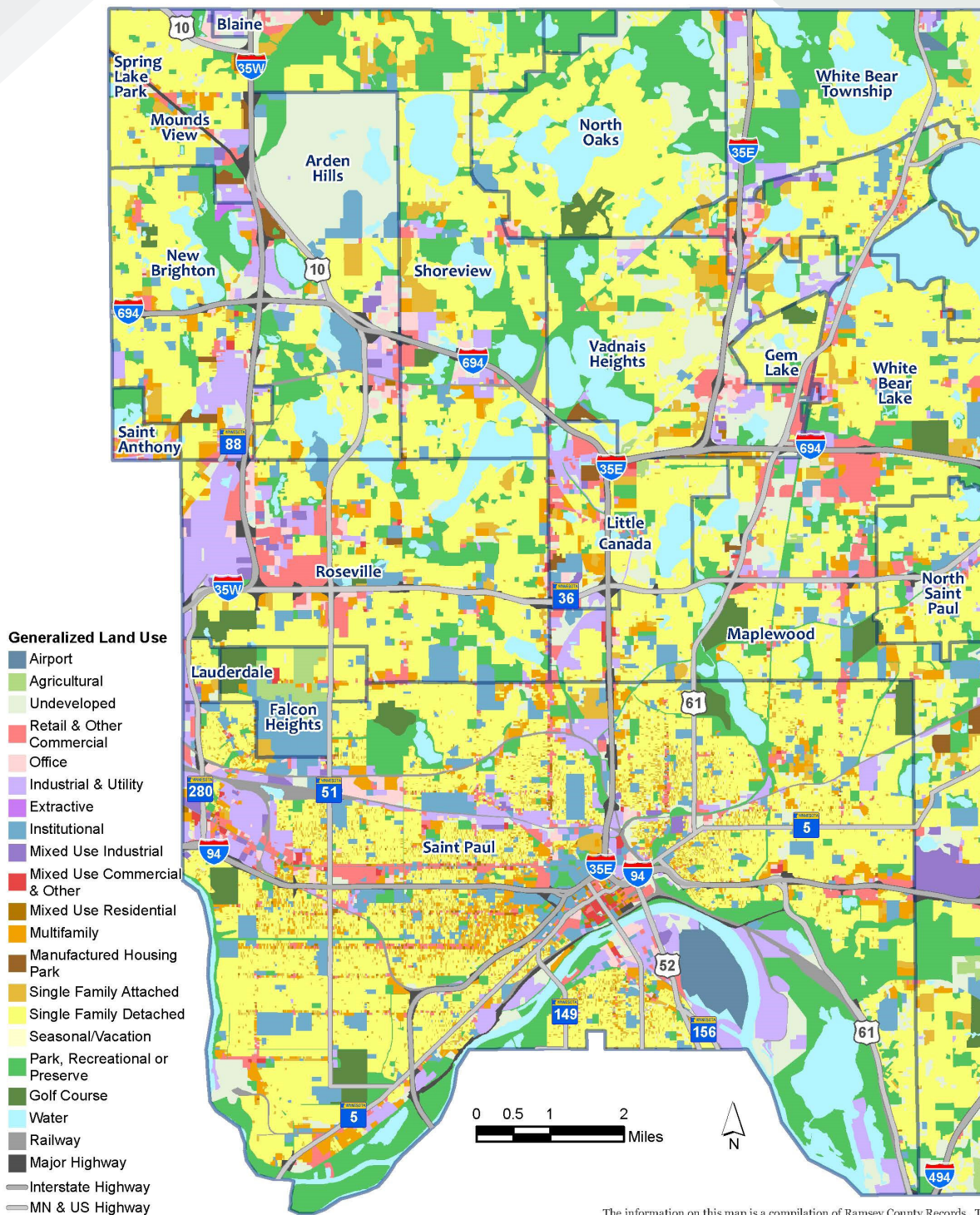
POLICIES AND ACTIONS

Partner with municipalities to support and encourage greater intensity of use, infill and redevelopment.

Figure 4

Land Use	Acres	Total Acres	Percent of Total
Agriculture	601	108,673	1 %
Seasonal/Vacation	13	108,673	0 %
Single Family Detached	39,895	108,673	37 %
Single Family Attached	4,021	108,673	4 %
Multifamily	3,360	108,673	3 %
Manufactured Housing Park	441	108,673	0 %
Retail and Other Commercial	4,180	108,673	4 %
Office	1,414	108,673	1 %
Mixed Use Residential	280	108,673	0 %
Mixed Use Industrial	848	108,673	1 %
Mixed Use Commercial and Other	244	108,673	0 %
Industrial and Utility	5,457	108,673	5 %
Extractive	27	108,673	0 %
Institutional	6,256	108,673	6 %
Park, Recreational or Preserve	14,754	108,673	14 %
Golf Course	1,846	108,673	2 %
Major Highway	4,125	108,673	4 %
Railway	1,007	108,673	1 %
Airport	567	108,673	1 %
Undeveloped Land	9,053	108,673	8 %
Open Water	10,285	108,673	9 %

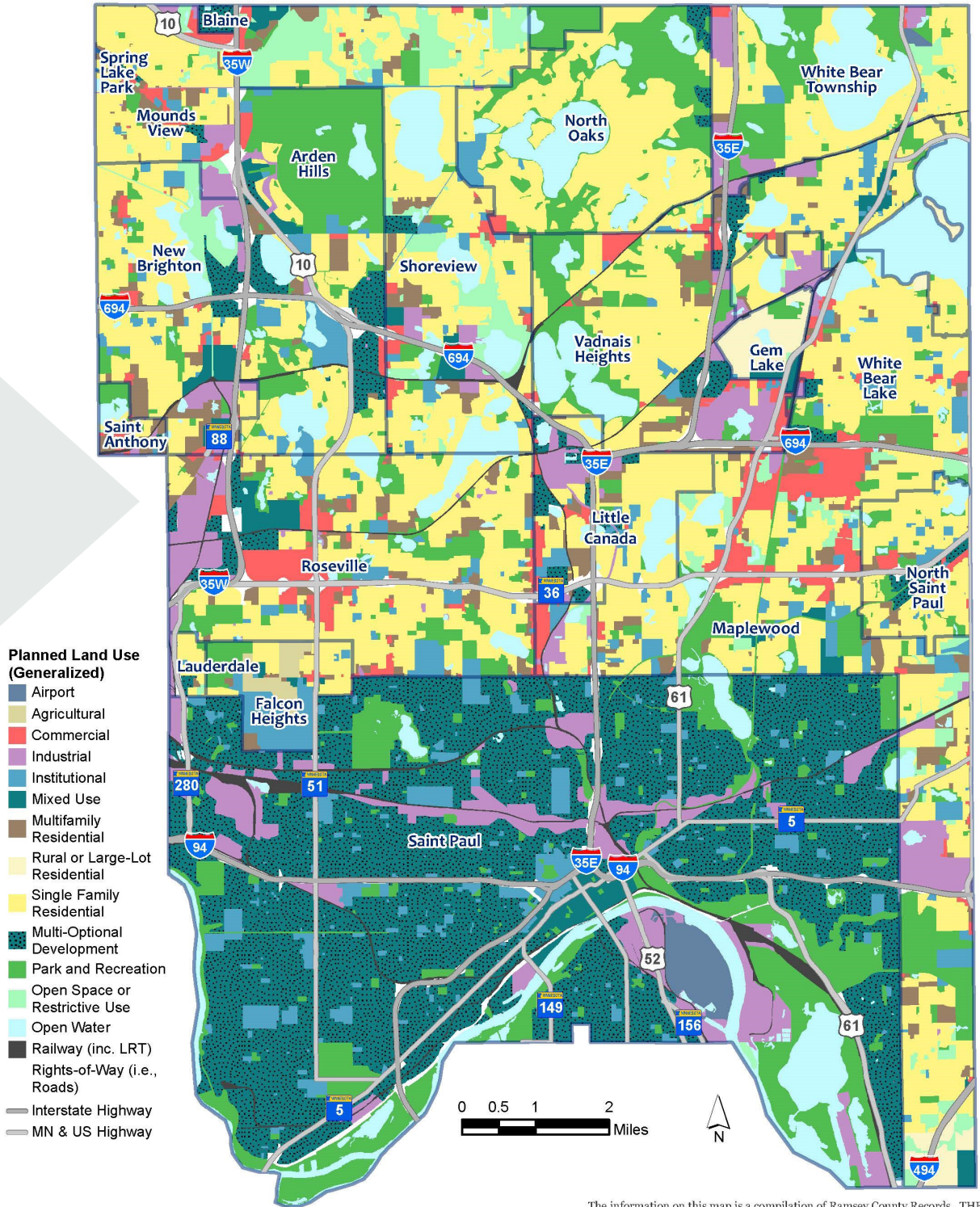
EXISTING
LAND USE



The 2016 Generalized Land Use Inventory dataset encompasses the seven county Twin Cities (Minneapolis and St. Paul) Metropolitan Area in Minnesota. The dataset was developed by the Metropolitan Council, a regional governmental organization that deals, in part, with regional issues and long range planning for the Twin Cities area. The data were interpreted from 2016 air photos, with additional assistance from county parcel data and assessor's information, Internet information, field checks, and community review.

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FUTURE
LAND USE



This dataset is the result of the compilation of interpreted planned land use for each community in the Twin Cities metropolitan area. Although the data is based on the locally adopted land use designations of each community, they represent those designations that have been submitted to the Metropolitan Council per the Metropolitan Land Planning Act of 1995 (Minn. Stat 473.964, Subd 2 and 473.175, Subd 1). Locally adopted planned land use designations and corresponding regional interpretations are subject to modification through comprehensive plan amendments. Amendment information will be updated quarterly. For more information regarding any locally adopted planned land use designation, contact the individual community.

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2040ComprehensivePlan_plannedlanduse

8/7/2017

LAND USE

Forecasts

The Metropolitan Council has prepared population, housing and employment forecasts for the region which suggest that Ramsey County will continue to grow and the density of its population and economic activity will continue to intensify. The table below shows actual population, housing and employment counts from Census 2010 and Metropolitan Council forecasts for each decade to 2040.

	2010 Census	2020 Forecast	2030 Forecast	2040 Forecast
Population	508,640	550,120	572,510	595,220
Households	202,691	224,260	236,890	246,850
Employment	316,937	356,130	375,220	393,070

Ramsey County relies on population, housing and employment projections to ensure development patterns meet the expected needs and plans for increased pressures growing populations put on land, open space, public facilities and infrastructure. Although the accuracy of Metropolitan Council forecasting has improved considerably over the years, previous predictions of the county's resident population have overestimated by as many as 32,000 residents. Conservative estimates indicate Ramsey County can expect a population in 2040 of at least 583,772 residents by 2040.

COMMUNITY DESIGNATION

Purpose

The Metropolitan Council assigns a community designation to each city and township informed by existing development patterns, common challenges, and shared opportunities. Although the characteristics of a community designation may not apply to every part of every community, the designation represents the dominant character of each community and may evolve as development patterns change.

Figure 4 shows the council's current community designations for the cities and townships in Ramsey County.

SAINT PAUL

is home to an estimated
56 percent
of Ramsey County's
population.

Saint Paul is the seat of state government and is well-connected to export markets by river, railroad, highway, and air travel. Investments in transit and amenities have strengthened Ramsey County's urban center as an attractive place to invest, live, work, learn, and play.

Ramsey County encourages development patterns which focus on infill development and redevelopment with forward-looking, innovative approaches to land use and public facility design. By supporting pedestrian-scale, walkable, mixed-use, mixed-income development, residents and businesses benefit from proximity by reducing environmental, safety, and road and vehicle maintenance cost impacts of short, frequent trips between employment centers, parks, and homes. Community designations provide communities in Ramsey County a guide to support resident-centered visioning of a healthy, equitable, prosperous, future.

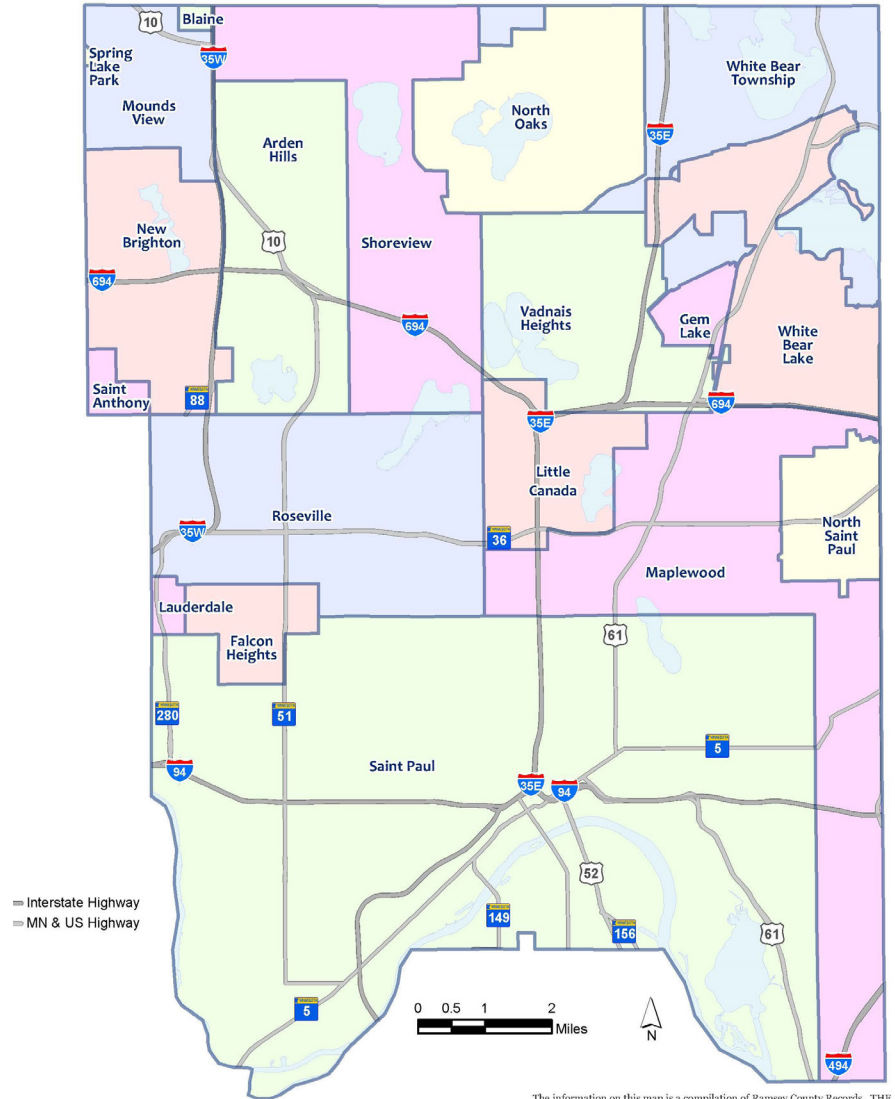
LAND USE

Municipalities

Ramsey County is home to all or part of 19 municipalities, including the following cities and towns:

- ARDEN HILLS
- BLAINE (PART)
- FALCON HEIGHTS
- GEM LAKE
- LAUDERDALE
- LITTLE CANADA
- MAPLEWOOD
- MOUNDS VIEW
- NEW BRIGHTON
- NORTH OAKS
- NORTH ST. PAUL
- ROSEVILLE
- SAINT ANTHONY (PART)
- SAINT PAUL
- SHOREVIEW
- SPRING LAKE PARK (PART)
- VADNAIS HEIGHTS
- WHITE BEAR LAKE (PART)
- WHITE BEAR TOWNSHIP

Figure 3 shows each municipality within the county's geographic borders.



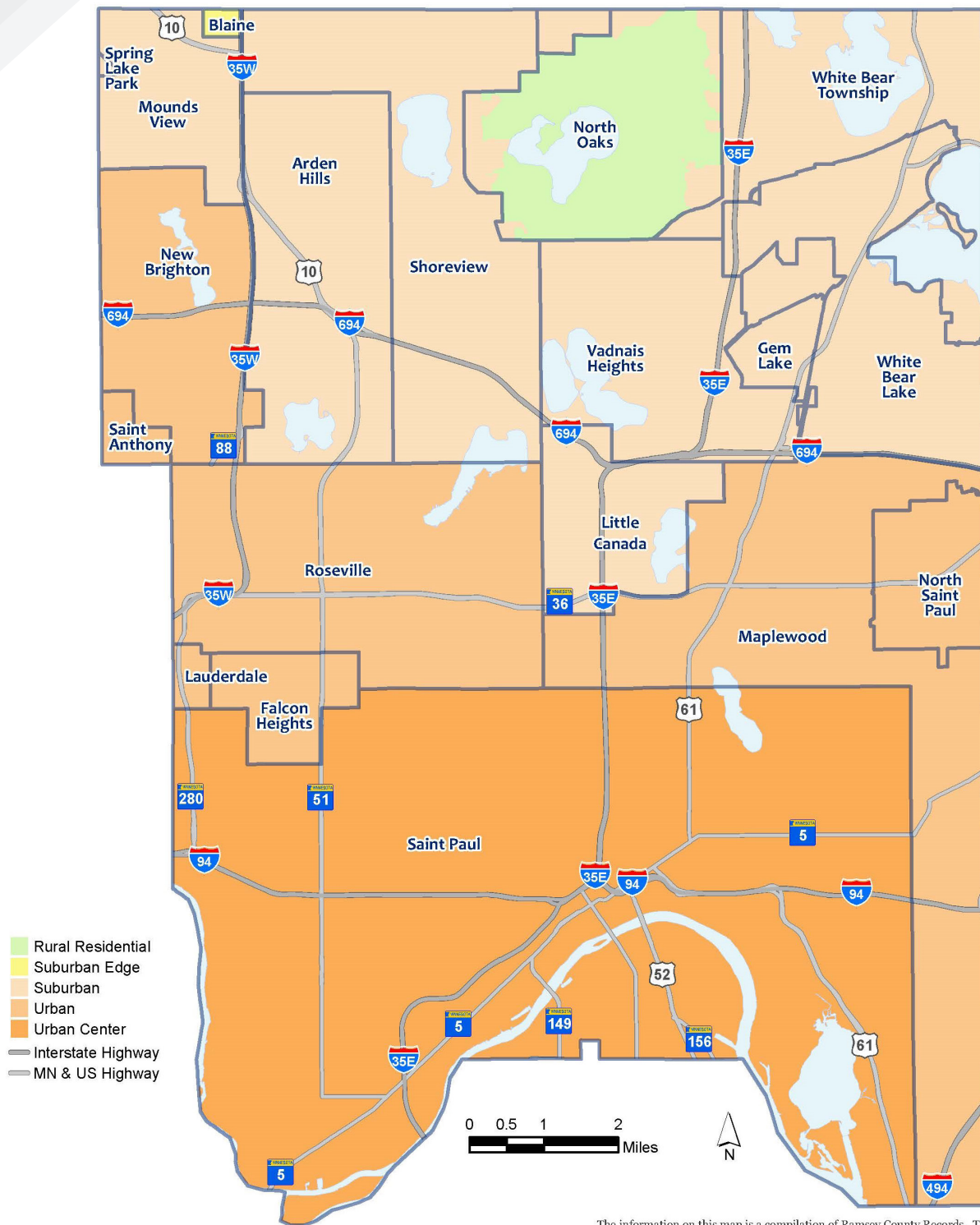
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2010ComprehensivePlan_municipal 8/2/2017

Land use jurisdiction falls within the domain of the municipalities within Ramsey County. Since Ramsey County has no land use planning authority, the comprehensive plan will have a section on land use which is brief compared with other jurisdictions with more descriptive than prescriptive content.

Table 4 compares population and household data from the 2010 Census with 5-year estimates from the Census Bureau's American Community Survey.

POPULATION AND HOUSEHOLD ESTIMATES, 2015				
	POPULATION		HOUSEHOLDS	
	2010 Census	2015 estimate	2010 Census	2015 estimate
Arden Hills	9,552	9,797	3,053	3,024
Blaine (part)	0	0	0	0
Falcon Heights	5,321	5,484	2,254	2,170
Gem Lake	393	465	161	161
Lauderdale	2,379	2,468	1,202	1,176
Little Canada	9,773	10,120	4,689	4,479
Maplewood	38,018	39,775	15,561	15,137
Mounds View	12,155	12,584	5,221	4,838
New Brighton	21,456	22,080	9,479	9,032
North Oaks	4,469	4,715	1,868	1,757
North St. Paul	11,460	11,966	4,822	4,809
Roseville	33,660	34,948	15,490	14,747
St. Anthony (part)	3,070	3,256	1,779	1,488
St. Paul	285,068	295,043	120,795	112,988
Shoreview	25,043	25,951	10,826	10,940
Spring Lake Park (part)	178	243	80	100
Vadnais Heights	12,302	12,968	5,243	5,505
White Bear township	10,949	11,270	4,409	4,518
White Bear Lake (part)	23,394	24,278	10,265	9,988
Ramsey County	508,640	527,411	217,197	206,857

Community Designation in Ramsey County.



The ThriveMSP 2040 Community Designations was adopted on May 28, 2014. This dataset reflects the agreed upon community designation between a community and the Metropolitan Council and is intended to supplement ThriveMSP 2040 - the planning guide for the 7-county Twin Cities metropolitan area of Minneapolis and Saint Paul, Minnesota.

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SPECIAL RESOURCE PROTECTION

MISSISSIPPI RIVER CRITICAL AREA PLAN

Introduction

For thousands of years before Ramsey County was established in 1849, the Mississippi River had been central to Native Americans who lived along its shores and recognized the spiritual significance of its provision. The river offered a transportation corridor and sustained a diverse and plentiful native plant community, which in turn provided habitat for abundant fishing and hunting.

The importance of these natural resources remain and the Mississippi River is one of the most treasured resources in Ramsey County. The Mississippi River is the source of most of the drinking water supply for Ramsey County and the two most populated cities in Minnesota—Saint Paul and Minneapolis. This great river winds through Ramsey County, allowing for transportation, recreation, and energy production for the community. It has striking limestone bluffs and provides a flyway for millions of birds. These elements add to the health and well-being for all in Ramsey County.

HISTORY AND OVERVIEW OF THE MRCCA

The Mississippi River Corridor Critical Area (MRCCA) was originally designated a critical area for the state in 1976, and it comprises 72 miles of the Mississippi River and 54,000 acres of surrounding land through the metropolitan area. This designation allowed for increased efforts to protect and preserve the unique natural, recreational, transportation, and cultural features of this section of the Mississippi River. In 2017 the MN State Legislature adopted the permanent rules for MRCCA under Minnesota Rule 6106. Statutes were then passed under Minn. Stat. 116G.15, Subd. 1 in order to:

- (1) protect and preserve the Mississippi River and adjacent lands that the legislature considers unique and valuable state and regional resources for the benefit of the health, safety, and welfare of the citizens of the state, region, and nation;
- (2) prevent and mitigate irreversible damages to these state, regional, and natural resources;
- (3) preserve and enhance the natural, aesthetic, cultural, and historical values of the Mississippi River and adjacent lands for public use and benefit;
- (4) protect and preserve the Mississippi River as an essential element in the national, state, and regional transportation, sewer and water, and recreational systems; and
- (5) protect and preserve the biological and ecological functions of the Mississippi River corridor.

In Ramsey County, the MRCCA is comprised of 17 miles of river with just over 7,000 acres of surrounding land and includes the cities of Saint Paul and Maplewood.

Within MRCCA lies a national park – the Mississippi National River and Recreation Area (MNRRA), which was created in 1988, several years after MRCCA was established. The geographic areas associated with these two designations are identical.

An updated State of the River Report was released in 2016 by MNRRA and the Friends of the Mississippi River, where 14 indicators of river health were identified. The report noted that populations of healthy bald eagle, native mussel, and fish populations have increased to indicate the river is providing a healthier habitat. Conversely, increased river flows were noted, which destabilizes the river system and continued impairments for excess sediment, bacteria and phosphorus, among other indicators, that press the need for continued water quality improvement efforts. The full report is linked in the Planning efforts and initiative section at the end of this chapter.

PROGRESS ON 2030 COMPREHENSIVE PLAN GOALS

Goals in the Ramsey County 2030 Comprehensive Plan have been achieved or are continuing to progress.

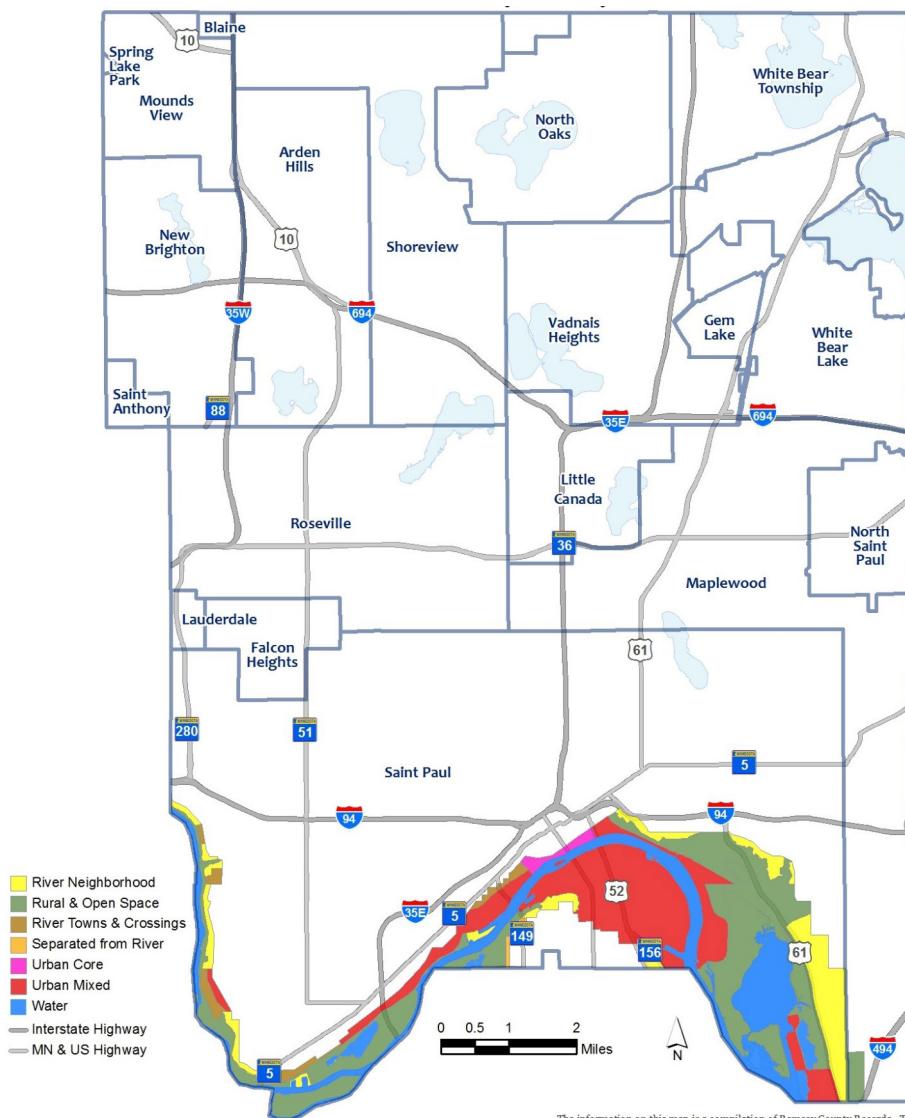
Complete projects include:

- Sale of the Ramsey County Government Center West building and Adult Detention Center
- Purchase and revival of the Union Depot as a regional transit hub following guidelines of the MNRRRA at the time of rehabilitation
- Connections for the Bruce Vento Trail continue to improve connectivity to the MRCCA
- Multi acre habitat restoration projects have been completed or continue along Battle Creek within Battle Creek Park
- Construction of 1.5 (.9 paved) miles of new trails at Battle Creek (2011-2013) is complete
- Fish Creek Trail was acquired and restored within Fish Creek Open Space (2017)
- Repaving and enhanced rip-rap on the Ford Parkway Bridge (2017) is complete

In progress projects include:

- Additional winter sports areas (snowmaking/ski trails) at Battle Creek Regional Park
- A new Battle Creek play area (set to be complete 2019-2020)
- Bike trail additions at Battle Creek set to be phased in (talks began spring 2018, no timeline)
- Pig’s Eye Lake habitat (2019) enhancement appears to be in the next stage of development with anticipated construction in 2020
- Plato Boulevard (2019) is to be resurfaced

*Mississippi River Corridor Critical Area
Location within Ramsey County borders.*

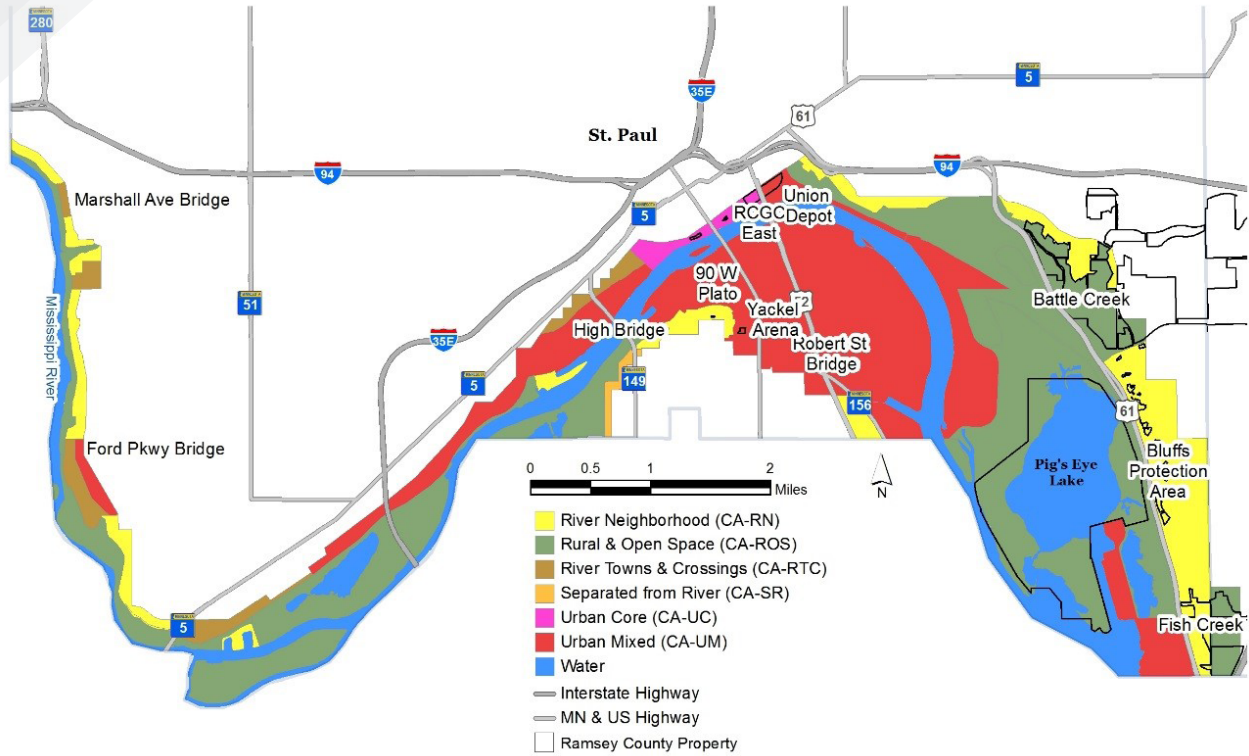
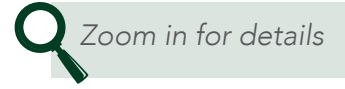


This map shows the Mississippi River Corridor Critical Area in the southern part of Ramsey County. The Districts were delineated as provided in Minnesota Rules, part 15.06.0100, subp 3 to distinguish between areas subject to different development restrictions. This spatial data was provided by the Minnesota Department of Natural Resources 1/04/2017.

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MRCCA Districts in south Ramsey County.



The MRCCA Districts Map utilizes data from the MNDNR dated January 4, 2017 to represent the Mississippi River Corridor Critical Area (MRCCA) districts as provided in Minnesota Rules, part 6106.0100, subp. 9

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2040ComprehensivePlan_MRCCA Districts

11/16/2017

Districts

The MRCCA rules (Minn. R. 6106.0050, subp. 53) identify six districts to assist with development of and set minimum standards for land use. Practically the districts will determine set back distances for structures from the water and bluffs and to regulate structure heights for new development. All six districts are present in Ramsey County.

Table 1: Acreage and Area for MRCCA Districts in Ramsey County

Ramsey County MRCCA		
District	Acres	Area %
CA-RN	1187.87	12.53%
CA-ROS	3172.26	33.45%
CA-RTC	232.71	2.45%
CA-SR	38.52	0.41%
CA-UC	93.68	0.99%
CA-UM	2568.42	27.09%
Water	2188.97	23.08%
TOTAL	9482.43	100.00%

LAND USE

MRCCA Districts

Rural & Open Space District (CA-ROS) – This district contains rural undeveloped land that is riparian or visible from the river and often contain tracts of high-quality ecological resources. Land in this area must be managed to protect and enhance habitat, parks and open space, public river corridor views and scenic views. This district has the most total area for Ramsey County and includes the sites listed below.

- Battle Creek Regional Park (including the Pig’s Eye section).
- Fish Creek Open Space.

River Towns & Crossings District (CA-RTC) – This district includes historic downtown and river crossing commercial areas, as well as existing institutional campuses are included in this district. Improvements to county owned or operated bridges and roads in this district are detailed in the transportation section of this chapter. The major river crossings included in Ramsey County are:

- Ford Parkway Bridge .
- Marshall Avenue Bridge.
- High Bridge.

Urban Mixed District (CA-UM) – This district includes commercial, institutional, and industrial mixed-use areas as well as existing/planned parklands. Ramsey County owned properties in this district include:

- 90 West Plato Building.
- Ken Yackel-West Side Arena.

Urban Core District (CA-UC) – This district includes Minneapolis and Saint Paul. For Ramsey County, this would represent all land from Kellogg Avenue to the river and east of the Lafayette Bridge and west of Eagle Parkway. This district relies on underlying zoning for MRCCA requirements to river setbacks and bluff impact zones. Bluff setbacks are 40’ unless the building is on the face or abutting the bluff in the CA-UC between Chestnut Street and Highway 52. Land north of Kellogg Avenue is outside of MRCCA, and development is excluded from MRCCA rules. Ramsey County properties included in the district are:

- Ramsey County Government Center-East.
- Union Depot / Concourse.

These lands and facilities enhance the purpose of each district through:

- Continued invasive plant removal and native species reestablishments in CA-ROS.
- Additional habitat redevelopment in the Pig’s Eye section in CA-ROS.
- Property acquisition in CA-ROS to maintain the low-density development patterns.
- Maintaining connections in CA-RTC, allowing for continued growth while ensuring walkable routes and public views.
- Providing office space, government services, and recreational spaces, adding opportunities for growth in CA-UM.
- Creating vital connections through a multi-modal transportation hub and government services critical to the commercial vitality in CA-UC.

These lands and facilities could potentially cause negative impacts or conflict by:

- Contributing to stormwater runoff through impervious surface in CA-ROS, CA-RTC, CA-UM, and CA-UC.
- Limiting public views of the river in CA-ROS, CA-RTC, CA-UM, and CA-UC.
- Future development and maintenance could impact Primary Conservation Areas in all districts.

Table 2: Dimensional Standards (from the DNR MRCCA Summary Report, October 2016)

	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.

Because the county is exempt from the land use planning requirements, it does not have a role in regulating land use by other jurisdictions or entities, nor does it have the ordinances, regulations or other authorities associated with land use planning. Ramsey County is a landowner within MRCCA and is subject to current MRCCA ordinances and will be subject to MRCCA ordinances established by the cities of Saint Paul and Maplewood once their respective plans are updated. The development of MRCCA is subject to review by the Metropolitan Council and final approval by the Department of Natural Resources (DNR). It must be submitted for review by September 2018.

PRIMARY CONSERVATION AREAS (PCAS)

Primary Conservation Areas are key natural and cultural resources and features that are important because of scenic value, flood protection, ecological/habitat value, erosion and landslide prevention, and cultural and historic significance (Minn. R. 6106.0050, subp. 53). These diverse areas are known collectively as PCAs throughout this section to highlight their priority consideration for protection per proposed rules as well as in local ordinances. Each category of PCA as it pertains to MRCCA within Ramsey County is mapped and described in further detail below.

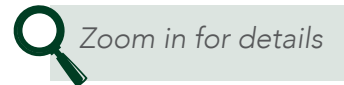
Shore Impact Zones (SIZ)

Eroding shorelines can lead to landslides and potential damage to buildings and infrastructure. Following erosion events, ecological and water quality concerns arise in water bodies due to increased turbidity and nutrient levels. Environmentally sensitive SIZs are protected buffer areas between the water’s edge and the area where development is permitted.

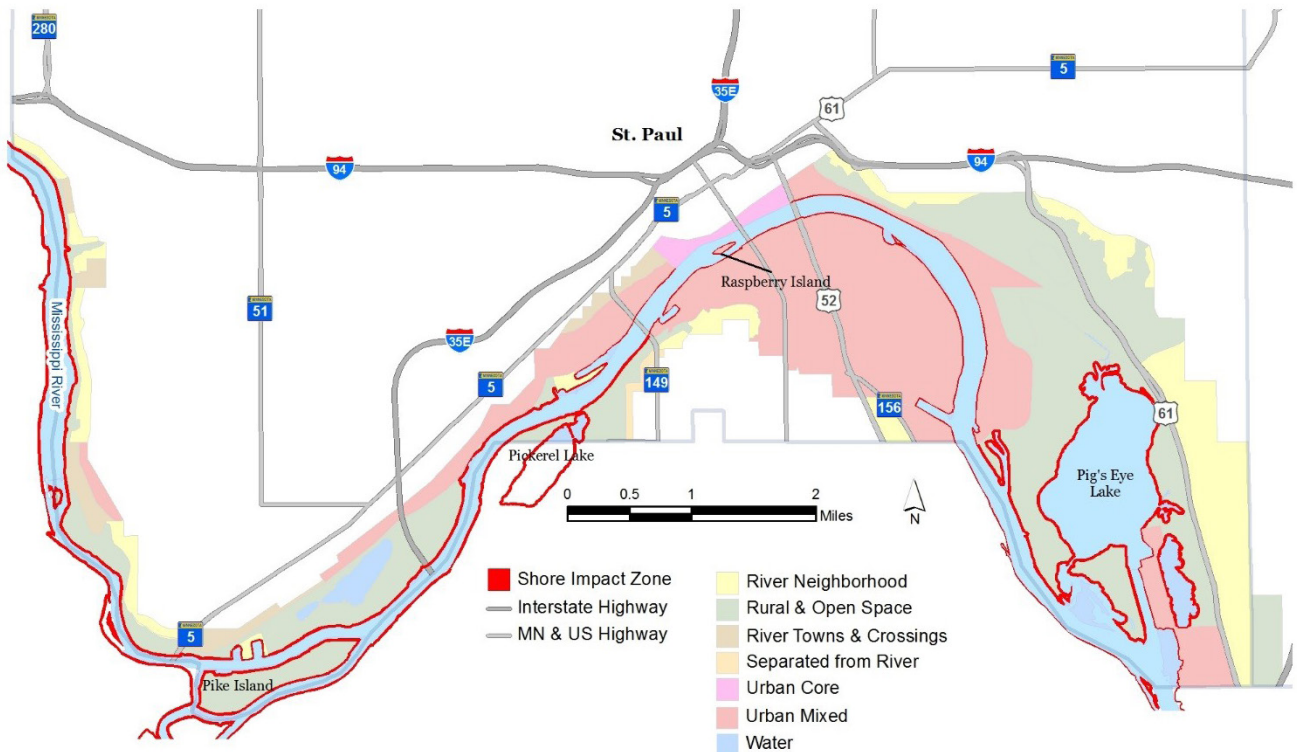
In Ramsey-County owned and operated areas of MRCCA, SIZs occur along:

- Mississippi River
- Pig’s Eye Lake

SIZ’s also occur around the islands and along the MN River and the water body south of Pig’s Eye. SIZs are defined as the protected land 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. The required structure setback varies depending on the MRCCA District (Table 2). For instance, in an CA-UM, where the river setback requirement is 50 feet, the buffer width is 25 feet from the high-water line. In an area districted as CA-ROS where the river setback requirement is 200 feet, the shore impact zone is 100 feet wide. No river setback distance is required for the CA-UC district in downtown Saint Paul, as reflected in the map (Shore Impact Zones).



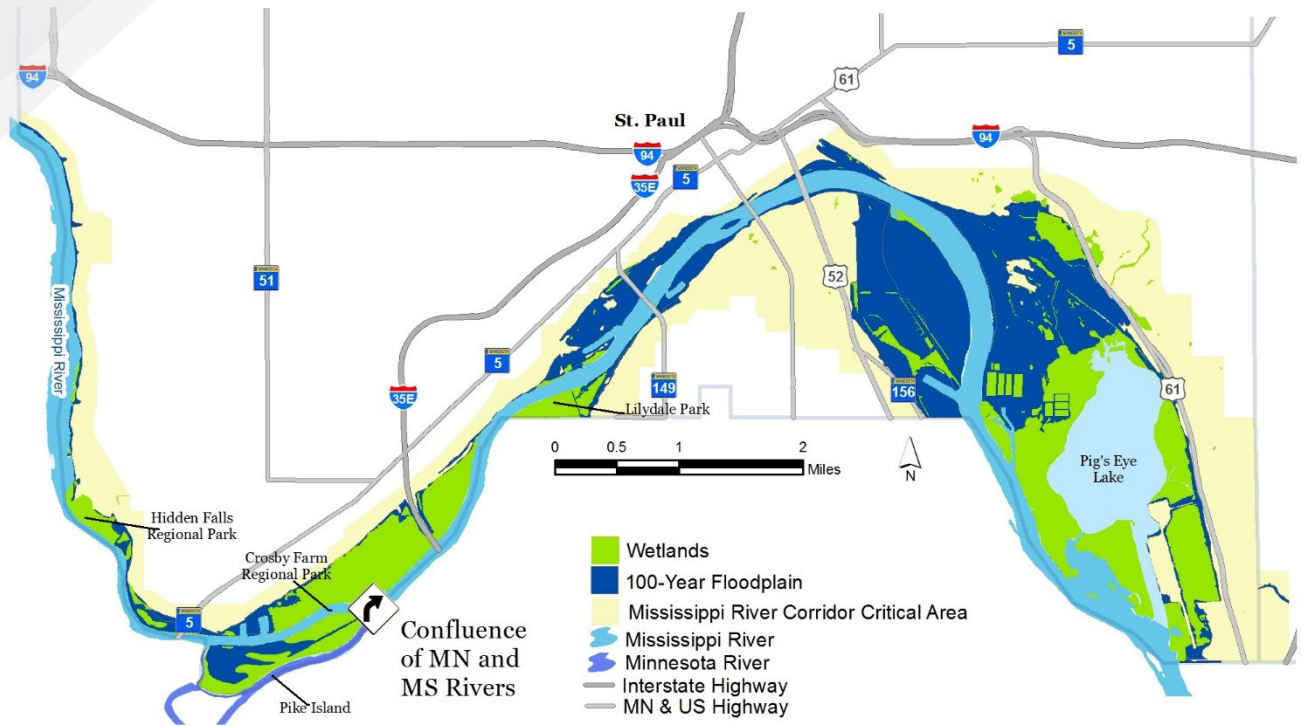
Shore Impact Zones within MRCCA Districts in south Ramsey County.



This Primary Conservation Area map utilizes data from the Minnesota Department of Natural Resources dated 1/4/2017. This shapefile delineates the Shore Impact Zones (SIZ) of the Mississippi River Corridor Critical Area (MRCCA) as defined in Minnesota Rules, part 6106.0050, subp. 68. The SIZ is defined as the land located between the ordinary high water level (OHWL) of public waters and a line parallel to it at a setback of 50 percent of the required structure setback.

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Wetlands, Floodplains and Areas of Confluence in south Ramsey County.



This Primary Conservation Area map is composed of Q3 Flood data derived from the Federal Emergency Management Agency (FEMA)'s 4/9/2015 Flood Insurance Rate Maps and the National Wetland Inventory's Circular 39 2009-2014 spatial data (ECMN_NWI_UTM dated 4/30/2015) from the Minnesota Department of Natural Resources.

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2040 ComprehensivePlan_Wetlands,Floodplain,andRiverConfluence

10/30/2017

WETLANDS, FLOODPLAINS, AND AREAS OF CONFLUENCE

WETLANDS

Wetlands are vital areas that act as natural sponges, absorbing and filtering runoff in times of heavy rain. If left intact in strategic areas, they reduce or prevent widespread flooding of nearby developed areas. Wetlands also provide numerous ecological benefits such as wildlife habitat, water quality improvement, and trapping sediment. Within this area of MRCCA, the largest wetland areas appear in and around Pig's Eye Lake and Battle Creek. Under MRCCA rules, permits will be required for development or vegetation removal within 50 feet of wetlands. Wetlands are also protected under the Wetland Conservation Act, the Buffer Law, and local government ordinances.

FLOODPLAINS

Floodplains are low-lying areas adjacent to the main channel of a river into which it periodically spills over during or following heavy rain events. Floodplains collect sediment loads and nutrients from swollen rivers and filter pollutants as they recharge groundwater when the water level recedes. The floodplain of the Mississippi River in Ramsey County is relatively narrow in the gorge northwest of Pike Island, but expands to a couple thousand feet in width around Pike Island and reaches its maximum width in the county of over 7,000 feet near Pig's Eye Lake. There, the floodplain encompasses much of the Pig's Eye section in Battle Creek Regional Park. In this map (floodplain), the floodplain was delineated by FEMA for flood insurance rate mapping and includes numerous developed areas, including housing and businesses in addition to the areas described above.

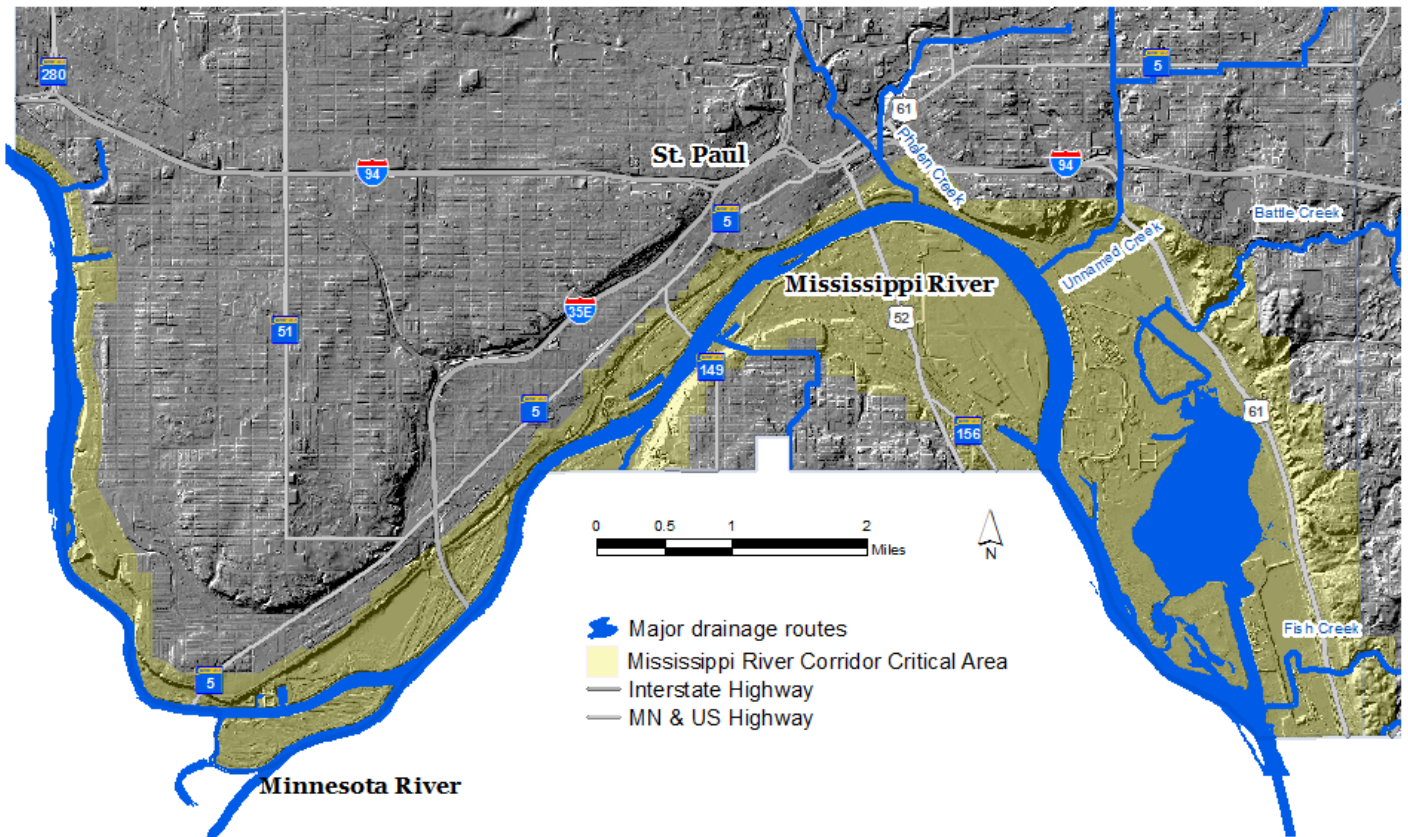
CONFLUENCES

At the border of Ramsey County and Dakota County, the Mississippi River and the Minnesota River converge, merging their respective water quality parameters such as temperature, chloride content, turbidity, nutrient loads, and contaminants, as well as species, including invasive species, for the rest of the reach of river passing through MRCCA.

DRAINAGE ROUTES

The major drainageway for Ramsey County is the Mississippi River, which forms much of the southern border of the county. The drainageway map shows hillshading which illustrates both the width of the floodplain and the steepness of the gorges and bluffs in MRCCA.

Natural Drainageways in south Ramsey County.



This Primary Conservation Area map is composed of "major river centerlines" and "stream routes" from the Minnesota Department of Natural Resources Division of Fisheries, dated 11/01/2013, Ramsey County water bodies, and the municipal boundaries of the cities within Ramsey County. The LiDAR hillshade layer is "dem_3m_hs" from MNDNR, published 6/26/2014.

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3040 ComprehensivePlan_NaturalDrainageways

8/29/2019

Bluff Impact Zones (BIZ)

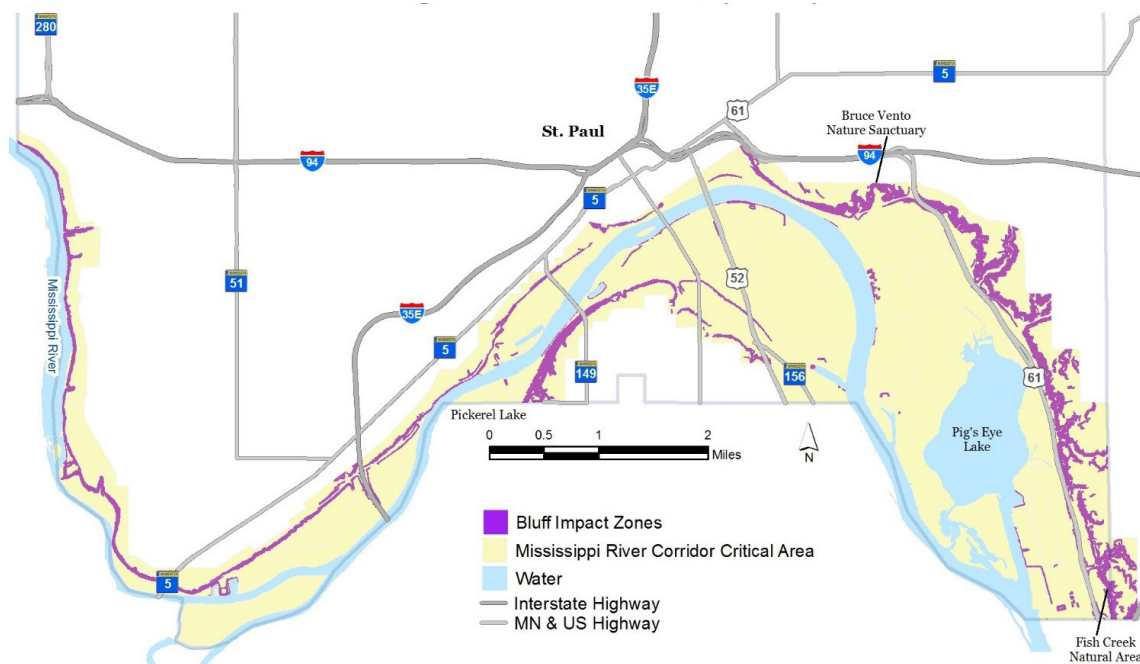
Bluffs are identified as natural topographic features with a vertical rise of at least 25 feet and an average slope of 18 percent or greater. Bluffs provide wildlife habitat and support native plant communities – there is a greater occurrence of native flora and fauna along bluffs and steep slopes than in surrounding areas. Due to their steepness, bluffs are prone to erosion and instability, and failure is a significant concern. Protection of bluffs is important to reduce erosion and slope failure within MRCCA, as well as to maintain habitat and native plant communities.

In the Ramsey County region of MRCCA, large ranges of bluffs are located:

- Along the east side of Hwy 61, including Fish Creek Natural Area and Battle Creek Regional Park.
- Between the river and Mississippi River Boulevard/Shepard Rd.
- In the Mississippi River Bluff Protection Open Space Area and the west portion of Fish Creek Open Space.

BIZs, as defined in Minn. R. 6106.0050, subp. 9, includes the bluff and a 20-foot buffer around it. The construction of structures, impervious surfaces, land alteration or vegetation removal within this highly sensitive area is prohibited. The bluff setback area extends 40 feet back from the bluffline which is the top of the bluff in all MRCCA districts except for CA-ROS, which has a setback distance of 100 feet from the bluffline. Development between the BIZ and the bluff setback line is restricted but does have exemptions such as for trails and water access facilities. Restrictions within the BIZ are important to protect the public and property from erosion of steep and potentially unstable slopes, to maintain the scenic quality of bluffs, and to protect the habitats and ecosystems of the corridor.

Bluff Impact Zones in south Ramsey County.



This Primary Conservation Area map is composed of bluff impact zones within MRCCA boundaries from the Minnesota Department of Natural Resources, with a content date of 1/04/2017. Bluff impact zones include bluffs and land within 20 feet of bluffs, as defined in Minnesota Rules, part 6106.0050, subp. 8 and 9. Bluffs are identified as natural features with an average 18% or higher slope over a horizontal distance of 25 feet.

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2040 ComprehensivePlan_BluffImpactZones

11/2/2017

Native Plant Communities

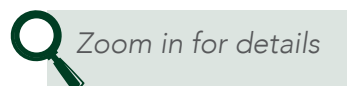
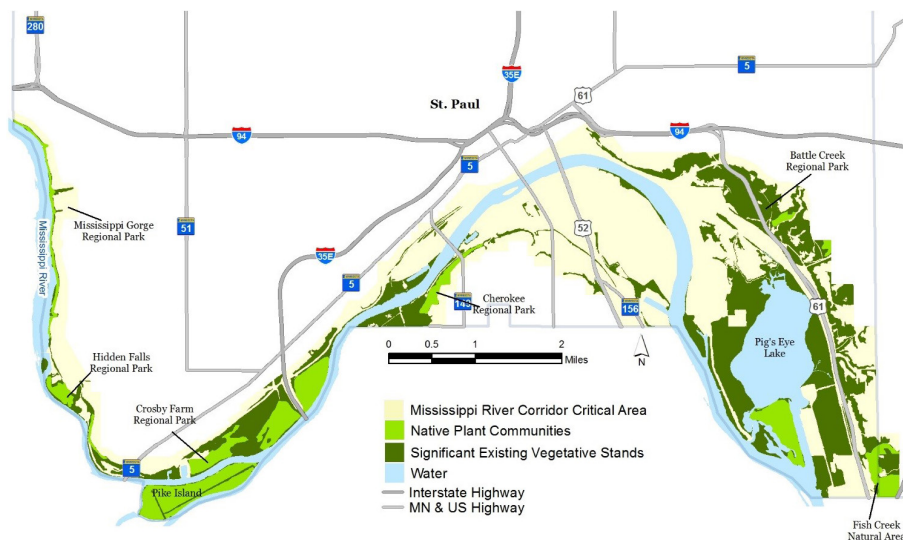
MRCCA rules include restrictions against removal of vegetation. It is important to identify significant vegetation stands and native plant communities for reference in the permit review process. Native plant communities provide habitat for fish and wildlife and protect against erosion and runoff-related water pollution while maintaining the scenic nature of MRCCA. Identification of plant communities was conducted by the Minnesota Biological Survey. Significant vegetation communities exist throughout MRCCA except for the immediate downtown area and the adjacent industrial sector, including Xcel Energy, the Saint Paul Downtown Airport and the Metro Wastewater Treatment Plant as well as a fringe of residential and mixed-use areas east of Mississippi River Boulevard.

Major Native Plant communities in Ramsey County-owned land were identified in:

- Pig’s Eye Island Heron Rookery Scientific and Natural Area
- Fish Creek Natural Area
- Battle Creek Regional Park

The “Significant Existing Vegetation Stands” spatial data, as mapped in 2012, was provided by the National Park Service. The following vegetation classes were considered “significant” in the survey: 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 “Native Plant Communities” spatial data was provided by Minnesota’s Department of Natural Resources. The areas identified represent the highest quality native plant communities remaining and include recognizable units, such as an oak forest, a prairie, or a marsh, that tend to repeat across the landscape.



Native Plant Communities and Significant Vegetative Stands in south Ramsey County.

This Primary Conservation Area map is composed of the Minnesota DNR "Native Plant Communities" spatial data from 7/11/2014 and the National Park Service's Vegetation Inventory Program "MRCCA Significant Existing Vegetative Stands" spatial data from 9/24/2012. Vegetation was identified using the U.S. National Vegetation Classification System.

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2040 ComprehensivePlan_NativePlantCommunities&SignificantExistingVegetativeStands 11/2/2017



Cultural/Historic Sites

The Saint Paul Union Depot is the lone Ramsey County-owned historic building in the National Register of Historic Places as designated by the National Park Service.

Gorges

The scenic gorge is located along the Mississippi River between downtown Saint Paul and Saint Anthony Falls of Minneapolis – the only natural waterfall along the Mississippi River. Thousands of years ago, the waterfall was located in Saint Paul, but as rushing melted glacial water eroded Saint Peter sandstone, it undercut and caused the collapse of the overlying Platteville limestone, which caused an upstream migration of the falls almost ten miles until they reached their present location. The NPS video “Disappearing Waterfall” illustrates this migration as the Mississippi River carved out the gorge (<https://www.nps.gov/miss/learn/nature/twingeol.htm>).

The gorge affords scenic views along this heavily-visited area, adding to the unique attractions of the Twin Cities. Pedestrian and bike trails along the top of both sides of the gorge are very popular for exercise, recreation, and non-motorized transport. The gorge area requires protection because the Saint Peter sandstone remains susceptible to erosion, particularly in the steepest areas, and the gorge is home to native vegetation communities and wildlife.



This Primary Conservation Area map was created by delineating the gorge as shown in the National Park Service video graphic “Disappearing Waterfall” which shows the migration of the St. Anthony Waterfall from St. Paul upstream to its present location. For more information, visit: <https://www.nps.gov/miss/learn/nature/twingeol.htm>

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Unstable Soils and Bedrock

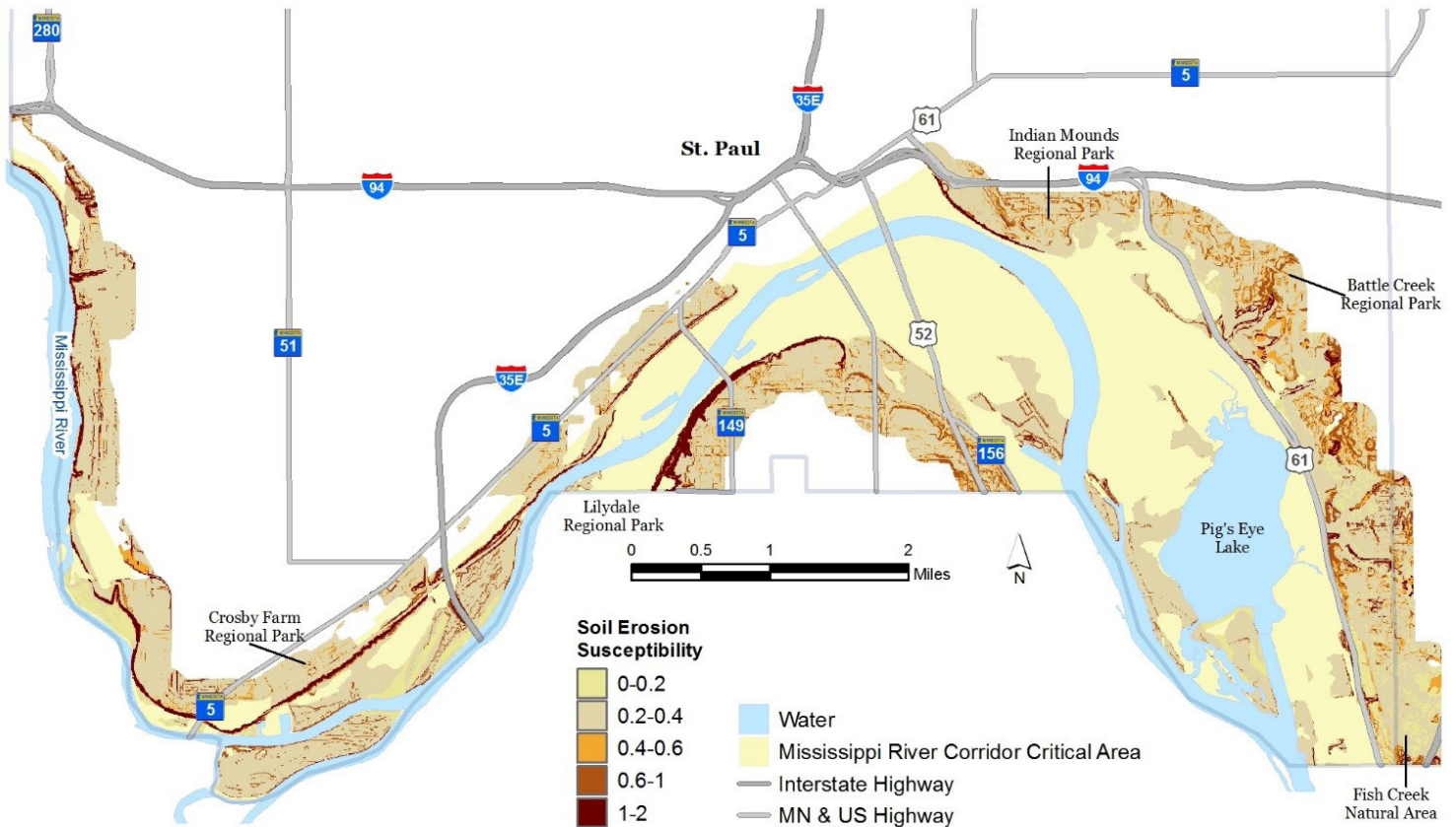
The geologic stability of an area is dependent on a combination of factors including steepness, soil texture, rock integrity, and level of disturbance. The map (Unstable Soils) of Soil Erosion Susceptibility is an indication of the potential for soils to erode based on the K-factor of the soil and the land's steepness, as of 2011 LiDAR elevation data. The map identifies high risk of erosion throughout the length of the gorge.

Some areas of observed landslides and/or ground instability in Ramsey County-owned land include:

- Battle Creek Regional Park
- Fish Creek Natural Area

While some of these areas have experienced relatively harmless gully formation or rockfalls, some have had more drastic landslides.

Unstable Soils and Bedrock in south Ramsey County.



This Primary Conservation Area map utilizes data from the Minnesota Department of Natural Resources dated 6/30/2017. This shapefile uses a soil erodibility index combining the K-factor (erodibility of a soil type) with the slope of the land. The K-factor is derived from the USDA-NRCS Soils Survey Geographic Database (SSURGO), and the slope is from a 2011 10-meter LiDAR Digital Elevation Model. The unitless index ranges from 0.02-1.96, with the highest number reflecting more erodible soils. It is sorted with Jenks

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LAND USE

POLICIES

Ramsey County strives to prioritize the protection of Primary Conservation Areas (PCAs) via conservation-minded management decisions on county-owned property as well as coordination with local government units over shared goals in the preservation of natural resources under their jurisdiction. In areas of known degradation within county-owned land, Ramsey County will work to improve conditions. Priority will be given to projects restoring PCAs, especially those which threaten public safety, such as unstable soils. MRCCA restrictions will be followed in future development on county property with consideration given to long-term conservation potential.

IMPLEMENTATION ACTIONS

Since Ramsey County does not have jurisdiction over land use policies in the cities of Saint Paul or Maplewood, implementation actions taken by the county will be with respect to enacting the above-mentioned policies on Ramsey County property.

PUBLIC RIVER CORRIDOR VIEWS (PRCV)

Residents and visitors alike, seek and enjoy the high-quality river environment. Communities along the corridor actively reorient their relationship with the river by welcoming vibrant opportunities, while at the same time work to preserve the legacies of those which already exist. The river corridor and areas primarily in southern parts of the county, contain some of the most iconic and appreciated views unique to Minnesota. The visual qualities of these communities provide a sense of individuality and ownership, setting them apart from other places, thereby contributing to their desirability, livability and value.

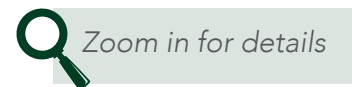
PRVCs pertain to scenic resources identified for their significance of place, unique visual quality and importance to residents within a community. It serves as a basis to develop community goals, policies and objectives for the preservation and protection of the visual and natural resources identified.

Ramsey County’s role stems from its ownership of property and its provision to enhance the management, use and protection of visual resources within the corridor for public use.

This section highlights a brief visual resource inventory, focusing on a few special views and visual features throughout the corridor for which preservation should be sought and maintained for public benefit – due to their significance within the corridor.

The examples illustrated include photographic documentation of site conditions and a description of the distinguishing aesthetic characteristics that contribute to the visual quality or experience of the viewer.

Each view is shown and described below, with numbered views corresponding to the mapped locations and angles of observation shown on the map (PRCV). Other communities may identify PRCVs on county property.



Public River Corridor Views in south Ramsey County



This map shows scenic views within the MRCCA as well as the direction of the photo. Numbers correspond to the section of the text where the photo is located, with descriptions. Photos were taken in October of 2017.

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VIEWS TOWARD RIVER FROM PUBLIC PLACES

Crosby Farms Regional Park:



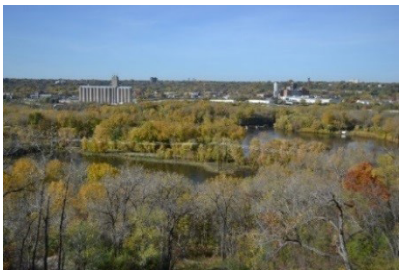
Located in a tranquil setting along the east bank of the Mississippi River in Saint Paul, guests are provided with access to Mississippi River shoreline views. One of the more prominent views spans the Mississippi's confluence with the Minnesota River. Crosby Farms Regional Park is the largest natural park in the Saint Paul parks system.

Hidden Falls Regional Park:



Situated below the Mississippi River Boulevard, the sheer contrasting elements of the exposed limestone bluffs frame the unique character of the post-glacial river system. Hidden Falls Regional Park is in the Saint Paul system of parks.

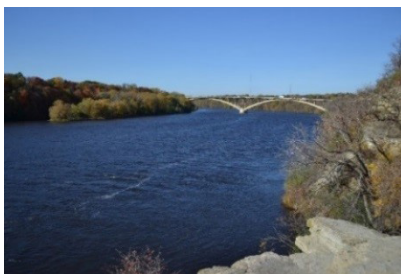
Lilydale Regional Park



The dichotomy of the county's landscape is expressed in this overlook from atop the bluffs, as utilitarian landmarks which reflect a proud urban history juxtapose the strong natural scene of the Mississippi River corridor. Lilydale Regional Park is in the Saint Paul system of parks.

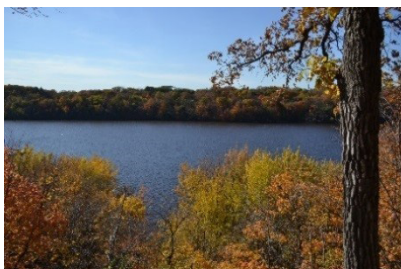
VIEWS TOWARD BLUFFS FROM RIVER

Mississippi River Gorge Overlook



An overlook along the Mississippi River Boulevard affords views of the Mississippi River gorge and limestone bluffs, while offering unobstructed views north toward downtown Minneapolis and south to the Ford Parkway bridge.

Mississippi River Overlook



Bluffs dominate this view through all seasons and remind us at each crossing, that we are located within the Mississippi River corridor. As with this view, many are accessible to pedestrians and motorists along the corridor.

LAND USE

Ford Dam Overlook



The Ford Dam, officially known as Lock and Dam No. 1, is a utilitarian icon. This scenic overlook provides residents and visitors alike with a unique piece of history situated between the bluffs of the Mississippi River corridor. Maintaining access and visibility to this icon is of significance to community residents.

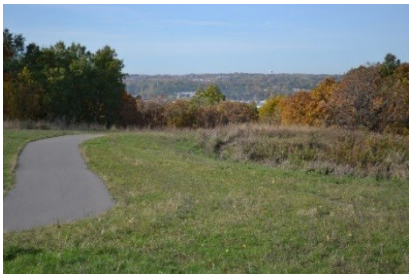
IMPORTANT VIEWS

Fish Creek Open Space – Fish Creek Segment:



Fish Creek Open Space – Fish Creek Segment:

The entire 1.5-mile length of Fish Creek flows through the open space area. The downstream segment of the creek has a large drop in elevation as it flows through a deep wooded valley with very steep side slopes. Continuing to maintain and manage this area as parkland is critical to securing its benefit in the long-term for public use.



Fish Creek Open Space – Fish Creek Bluff Segment:

There are dramatic topography changes throughout sections of the open space area, including the steep wooded bluff line of the Mississippi River parallel to Highway 61, and the 0.5-mile of bluff line south of Fish Creek. This site is located adjacent to the Mississippi River Bluffs Protection Open Space area.



Battle Creek Regional Park – Battle Creek Bluff Segment:

This section of the park includes approximately two miles of bluff land along the east side of the Mississippi River Corridor. One of the most prominent visual characteristics of this section of the park is the expansive view atop the wooded bluffline of the Mississippi River parallel to Highway 61, which offers panoramic views of Pig's Eye Lake and the approximately 1,100 acres of floodplain habitat and river valley.

Battle Creek Regional Park – Battle Creek Segment:

Battle Creek flows through a steep, wooded valley that varies in depth from 25 feet to over 150. The bluffs are significant in the development of the park as they provide a corridor and barrier, immersing park-goers into a splendor of natural seclusion. Battle Creek flows from east to west through the park on its way to the Mississippi River, exemplifying its essence as it cascades over several natural and man-made waterfalls. Continuing to maintain and manage this area as parkland is critical to securing its benefit in the long-term for public use.

The regional parks are important components in the greenspace network that protects the diverse resources of the 17-mile Mississippi River corridor through Ramsey County. For more developed areas, thoughtful re-zoning for future land use and restrictions on building heights should help prevent adverse impacts to public views along the river. Encroachment of high-rise commercial advertisements, water towers and powerline structures rising into the sightline above the horizon would degrade the panoramic quality of these scenic viewsheds.

Policies

The Ramsey County Parks and Recreation Commission, Parks and Recreation Department, and the Ramsey County Board of Commissioners coordinate on matters relating to the planning, development and operation of county-owned land utilizing Minnesota Rule Chapter 6106.0130 – General Development Standards for Public Facilities. These rules for development include:

1. Dimensional and minimal visibility standards for building and trail development
2. Avoiding PCAs, managing vegetation consistent with Chapter 6106.0150, leaving natural vegetation in place and replanting it where feasible, and minimizing the use of chemical control for vegetation where practical
3. Minimizing disturbance during spawning or nesting seasons
4. Giving priority to provision of scenic overlooks, safe pedestrian crossings, and access to public riverfront property

Ramsey County's planning process is also committed to accurately reflecting community desires and needs. It is hoped that the depth of participation and collaboration in the planning process continues to be an ongoing occurrence between the county, local government entities, communities and property owners. The identification of visual resources of significance will be a constant process of engagement in this important decision-making process. Public opinion surveys, open house meetings, committee meetings, work sessions and forums are tools utilized throughout planning processes. Also, Ramsey County encourages planning between all levels of government in the discussion of land that is open to the public, when evaluating the preservation of current and future visual resources, where feasible. Furthermore, Ramsey County supports the collaboration amongst partners and with adjacent communities to identify, plan for, and protect PRCVs and other visual resources that cross boundaries.

THE MISSISSIPPI RIVER CORRIDOR CRITICAL AREA (MRCCA) PROGRAM PRIORITIES FOR RESTORATION

General Overview

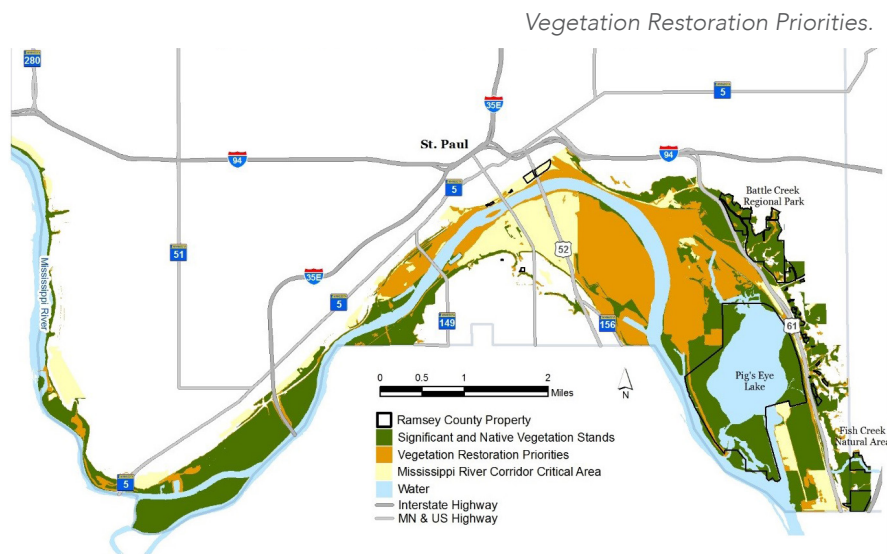
Restoration of degraded areas is an important strategy to avoid the loss of biodiversity and ecosystem services valued by communities. Due to large amounts of degraded areas, as well as the time and cost necessary to restore them, there is a crucial need to prioritize areas and set realistic restoration goals to optimize restoration efforts throughout Ramsey County. It is also necessary to identify constraints at the site, landscape, and regional scales when planning and prioritizing restoration actions. This maximizes efforts toward improving ecosystem services and benefits for natural resources in the long-term. In 2017, Ramsey County updated the natural resource management plan for the county. This plan works with local and regional partners to reclaim, conserve and enhance vital resources county-wide. However, for this section, the restoration priorities addressed will focus on the county-owned parkland and open space within the MRCCA.

County Restoration Priorities

MRCCA's goal is to protect and preserve the biological and ecological functions of the corridor. Restoration priorities set forth by the county are to sustain the unique oak savanna and woodland ecosystems, as well as to stabilize the steep hillsides along the county-owned bluff land within the MRCCA for the benefit of wildlife and public use. Over time, the bluff land areas have become highly degraded by invasive vegetative species. These introduced and undesirable species are out-competing native species, thereby reducing habitat quality and creating barren soil conditions which cause problems of slope instability and soil loss. Restoration of these areas will promote the desired regeneration of oak woodland species, improving the biodiversity of habitat, while also increasing the integrity of the soil conditions in areas with dramatic topographic relief.

Importance

The identified priorities are important to mitigate direct and adverse impacts to the county's natural resources. If conservation action is not taken, the environmental risks and cost of restoration will only increase. Furthermore, encroachment of invasive species will continue to degrade the desired ecosystems and their functions. In addition, prioritization promotes public stewardship for specific resources and their unique significance within the corridor, highlighting their value for public use. Public stewardship helps to strengthen citizen's relationships with the river corridor, as a direct part of our quality of life and legacy. The map (Veg Restoration) highlights in orange the restoration priorities for MRCCA. The map was derived by showing PCAs such as wetlands, erosion-susceptible zones, bluffs, and shorelines that are not covered in significant or native vegetation. are not covered in significant or native vegetation.



The Vegetation Restoration Priorities map highlights Priority Conservation Areas without vegetation that could be prioritized for restoration. It is composed of the Minnesota DNR "Native Plant Communities" spatial data from 7/11/2014 and the National Park Service's Vegetation Inventory Program "MRCCA Significant Existing Vegetative Stands" spatial data from 9/24/2012 (both in green) overlaid on the following Priority Conservation Area layers in orange: 100-year floodplains (FEMA, 2014); Gorge (DPS, 2016); Wetlands (DNR NWI, 2016); Bluff Impact Zones (DNR, 2017); Shore Impact Zones (DNR, 2017); and Soil Erosion Susceptibility (DNR, 2017).

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Zoom in for details

Policies

Ramsey County's role stems from its ownership of property and its provision to enhance the management, use and protection of natural resource quality within the corridor for public use. Ramsey County owns over 7,000 acres of parks and open space and manages it as a natural resource based park system. Furthermore, Ramsey County will continue to implement planned and on-going restoration projects within the identified priority areas, as well as survey other areas for inclusion. Identified areas will be included in the Ramsey County Parks and Recreation System Plan, Natural Resource Management Plan, and other relevant guiding documents. The county does not have a role in regulating land use by other jurisdictions or entities, nor does it have the ordinances, regulations or other authorities associated with land use planning. However, Ramsey County will assist in creating evaluation criteria for protecting PCAs when site contains multiple PCAs categories and the total area of PCAs exceeds the required set aside percentages. This evaluation criteria will be used in development of Ramsey County administered property. Furthermore, Ramsey County will evaluate and require restoration at proposed development sites under its administration for erosion prevention as well as bank and slope stabilization issues. Other policies Ramsey County will adopt include prioritizing restoration of removed vegetation of Native Plant Communities and natural vegetation in riparian areas and use of permanent protection measures such as public acquisition, conservation easement, and deed restrictions.

SURFACE WATER USES**General Overview**

Once a bustling fur trading post, the confluence of the Minnesota and Mississippi Rivers continues to be a hot spot for shipping goods in the modern industrial and commercial sectors. Much of the area's economy stems from local companies involved in river transport in this strategic location. Barges can carry larger loads using less fuel than trains or trucks, saving fuel, money, and carbon emissions. The Saint Paul Port Authority operates four barge terminals in Ramsey County, and there are dozens of barge fleeting areas in the corridor.

While Ramsey County does not own or operate any surface water uses, the river area also provides numerous surface water recreational opportunities in Ramsey County, including rowing clubs, a yacht club, a marina, a boat launch, riverboat tours, fishing, and park and historical spaces.

To maintain navigability for larger watercraft, water depth is managed through dredging and water level alteration using locks and dams, as managed by the U.S. Army Corps of Engineers. The environmental impacts of these alterations to the natural landscape to the river and its banks are documented by the Environmental Department of the Army Corps of Engineers, and management falls under federal jurisdiction. Little conflict between recreational users and commercial barges is reported, since large watercraft follow a designated channel, and most barge fleeting occurs east of the Robert Street Bridge, whereas recreational activities are largely west of the bridge. The U.S. Coast Guard regulates no-wake zones. The next section describes the surface water use in greater detail.

Surface Water Uses in south Ramsey County.



This map is compiled from various sources including the Port Authority of St. Paul (October 2017), Google Maps, and the 2010 Metro River Guide. Though it is not a comprehensive account of current surface water users, it attempts to convey the breadth and diversity of main surface water users in the Ramsey County section of the MRCCA.

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 Zoom in for details

Policies

Ramsey County's section of the Mississippi River is controlled by Lock and Dam number two, whose authorized purposes are navigation under the river and Harbors Act of 1930 (PL 71-250) and recreation under the Flood Control Act of 1944 (PL 78-534). To maintain a minimum depth of nine feet in the navigational channel, the Army Corps of Engineers artificially maintains water elevations that expose some natural shorelines upstream while flooding natural shorelines downstream, with occasional dredging where needed. While Ramsey County does not have jurisdiction over the river and its use, it promotes:

- Stabilization of shorelines that are impacted by wave action, especially in Pig's Eye Lake
- Environmentally sensitive management of the channel's dredging process and materials
- A working balance between commercial and recreational uses of the river
- Allowance for barge fleetings at levels that do not have significant negative impacts on other river users or the environment
- Enforcement of personal watercraft regulations, which states that personal watercraft must travel a maximum of 5 mph within 150 feet of shore, docks, moored boats, or non-motorized watercraft.

Water-oriented Uses

General Overview

Ramsey County does not own or operate any water-oriented land uses although Infrastructure does exist for water-oriented uses including barge terminals and recreational marinas. The city of Saint Paul was established in great part because of the shipping of freight along the Mississippi River. Ships have now been replaced by barges and the industry has experienced ups and downs, but currently five million tons of commodities are moved through the metro area annually (per the Port Authority).

In the Great River Passage Master Plan, the city of Saint Paul identified the potential to expand opportunities for tourism and river-oriented recreation such as developing a river trail for canoes and kayaks, as well as holding historical/cultural events. Although activities could greatly increase tourism and recreation in Saint Paul, they also present a challenge and potential conflicts in managing water-oriented uses. It will be essential to balance the industrial and commercial uses of the river with the recreational uses to ensure the safety and well-being of all river users.

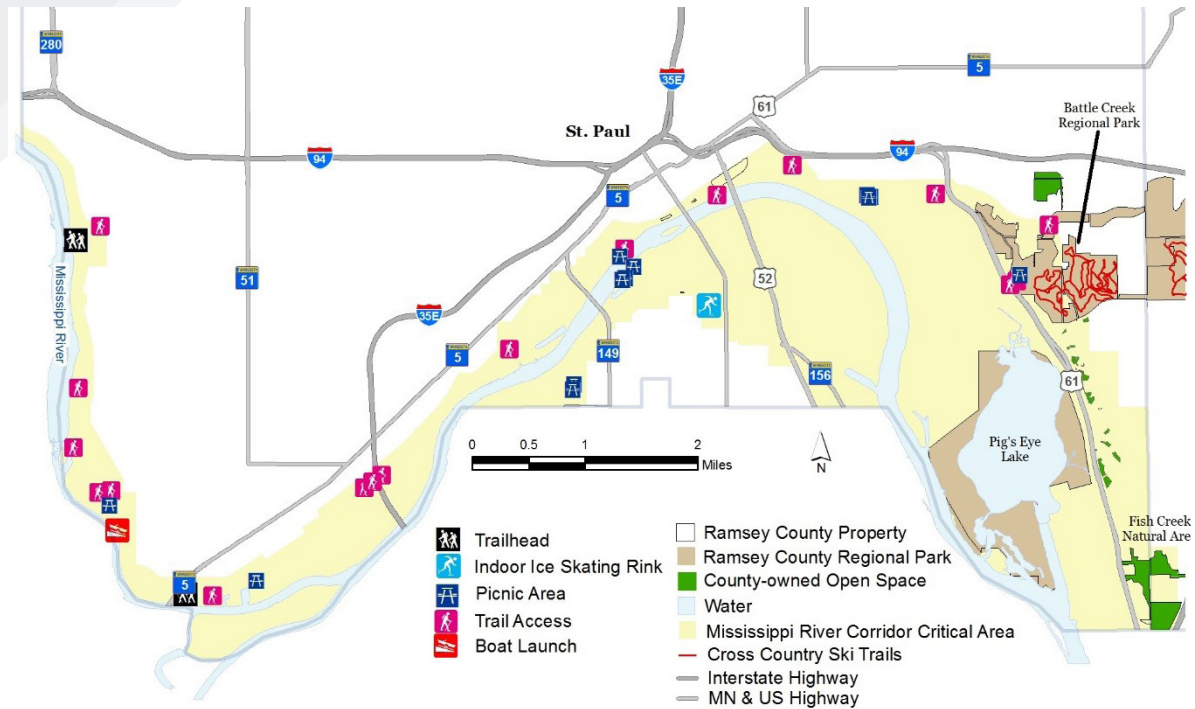
Open Space and Recreational Facilities

Vibrant cities require open space for quality of life. The scholarly research establishes that mental and physical health of citizens depends on access to outdoor spaces. Equity of access is key to ensuring Ramsey County is competitive in attracting a diverse citizenry. Federal, state, regional, and local governments have already made gains in ensuring that much of the MRCCA has a respectable level of accessibility. Ramsey County's role has been to focus on connecting greater Ramsey County to the MRCCA.

Description of Existing Facilities

Parks and Recreation areas in the southeastern area of the county include the Battle Creek, Pig's Eye sections of Battle Creek Regional Park, and Fish Creek. For a detailed description of these and all Ramsey County Park facilities see the Parks and Trails Section of this plan. The county has also acquired several properties for the Mississippi River Bluff Protection Open Space between Battle Creek and Fish Creek. MRCCA policies will be considered in developing activities within these areas.

Open Space and Recreational Facilities in south Ramsey County.



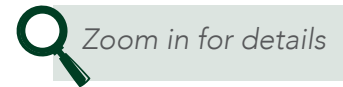
The Open Spaces Map was adopted in 2017. This map utilizes data from Ramsey County to represent existing Ramsey County public lands and designation of the land.

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2040 ComprehensivePlan_OpenSpaceRecreationalFacilities

11/6/2017

► Battle Creek Regional Park—Battle Creek segment



This is an 846-acre segment of the regional park whose most prominent visual characteristics are the steep, wooded slopes paralleling the Mississippi River and Battle Creek. The park includes approximately two miles of bluff land along the east side of the Mississippi River Corridor. Battle Creek flows through a steep, wooded valley that varies in depth from 25 feet to over 150 feet. The bluffs are significant in the development of the park as they provide a corridor, barriers, and panoramic views of the river valley. Battle Creek flows from east to west through the park on its way to the Mississippi River. Although the creek has been degraded and altered due to run-off from the surrounding development, it still maintains an overall positive aesthetic impact on the park. Improvements to the creek and upstream watershed area by the Ramsey-Washington Metro Watershed District have corrected some erosion problems and restored the creek as an asset to the park. Continued effort does need to be made on washouts caused by aging stormwater pipes. The existing development includes (Map open space):

- A large group picnic area and water park at the intersection of McKnight and Upper Afton Roads
- A system of paved pedestrian and bicycle trails throughout the park;
- Parking in the lower end of Battle Creek near Highway 61 and trails connecting to regional trails along the river (Map bicycles);
- Multi-purpose cross country skiing and mountain bike trails (Map bicycles);
- Non-development areas will be maintained and managed in a natural state including efforts to restore areas degraded by landfills, erosion, borrow pits or other intrusions.

A master plan amendment for Battle Creek Regional Park is planned for 2018, which will identify additional recreation development opportunities throughout the park. Potential future improvements

to Battle Creek Regional Park may include but are not limited to:

- Picnic Area Improvements within the large group picnic area
- Improvements to the existing Waterworks family aquatic center
- Development of a bluff top visitor center with interpretive/educational facilities
- Expansion of picnic facilities within the regional park
- Improvements and expansion of existing paved and natural surface trails
- Improvements and expansion to existing parking lots
- Improvements to the existing off-leash dog area
- Expansion of the Winter Recreation area such as snow-making equipment for cross-country, downhill skiing, snowboarding, sledding, and building infrastructure.
- Improvements and expansion on the existing off-road bicycle/cross-country ski trails.
- Habitat restoration of non-developed areas
- Other recreational opportunities addressed in the master plan update

► **Battle Creek Regional Park—Pig’s Eye Lake segment.**

This area of the regional park lies entirely within the floodplain of the Mississippi River. The lake covers approximately 500 acres and averages less than 10 feet of depth. The park includes 610 acres surrounding the lake. The area includes a major heron/egret rookery, bald eagle nesting, and extensive areas of floodplain habitat. The rookery is currently managed as a scientific and natural area (SNA) by the Minnesota Department of Natural Resources.

Future improvements to Pig’s Eye Lake segment are reflected in the Great River Passage plan. Conceptual designs include additions of parking areas, toilets, trails both within Pig’s Eye and between adjacent parks, and access to Pig’s Eye Lake. Improvements to natural areas include marsh and wetland restorations. Currently RCPRD and the United States Army Corps of Engineers are in the feasibility stage of creating islands for habitat and shoreline erosion mitigation. The goals of these improvements are to create access to the river while improving the ecological function of this area.

► **Fish Creek Protection Open Space**

This 130-acre site includes the entire 1.5-mile length of Fish Creek as it flows from Carver Lake west under Highway 61 and then into Pig’s Eye Lake. I-694 separates the area into two segments. The segment downstream of I-694 is a deep wooded valley with very steep side slopes. The creek has a large drop in elevation through this three quarters of a mile segment. The area also includes the steep wooded bluff line of the Mississippi River parallel to Highway 61 and half of a mile of bluff line south of Fish Creek. The segment upstream of I-694 has a much flatter creek gradient and lacks the deep valley. This part of the creek corridor includes a variety of wetlands, wooded slopes and grasslands.

Future improvements planned include trail system expansion to extend connections within the Fish Creek and Battle Creek Corridor interpretive/educational viewing overlooks, and a potential interpretive/education programming facility for additional recreational opportunities. Removal of invasive species with restoration of native plant communities will also be a priority. In relation to restoration activities, Ramsey County’s participation in a bluff restoration project with the Great River Greening Program is typical of the type of activities that are envisioned. This restoration project is a cooperative activity funded by MN Legislative Commission on Minnesota Resources and MNRRRA.

► **The Mississippi River Bluffs Protection Open Space**

This site is a 2-mile long narrow strip of steep sloped bluff line, paralleling the east side of Highway

61 between Battle Creek Regional Park on the north and Fish Creek Protection Open Space on the south. The site is a steep, wooded slope with an incline of more than 30 percent, and lies between residential properties at the top and bottom of the bluff. Ramsey County has acquired 69 platted lots in this area totaling 12 acres—about 25 percent of the total site—through tax-forfeiture or donations. The county will continue to acquire lots in this area through tax-forfeiture or donations. Due to the designation and environmental sensitivity of Ramsey County open space in the MRCCA, facility upgrades would be limited to bluff top trail connections. No other facility upgrades are planned at this time.

► Ken-Yackel Ice Arena

Ramsey County operates this facility in Saint Paul's West Side neighborhood. The arena, erected in the 1970's, continues to be a recreational asset. As it is the only Ramsey County owned ice arena in the MRCCA, it has the visibility to champion policies within the entire MRCCA. In the future, this arena is a candidate for repurposing to a use that will be determined through an extensive public process.

POLICIES

Maintenance of existing facilities

Ramsey County will encourage the creation, connection, and maintenance of open space and recreational facilities, including public access to the river. Ramsey County will provide continued funding to capital improvement and maintenance funds for the Ramsey County Parks and Recreation Department (RCPRD) to achieve MRCCA objectives. RCPRD will also seek regional funding opportunities through Metropolitan Council and other entities. RCPRD will continue to act as the Metropolitan Council's regional park operations and maintenance fund implementing agency at Battle Creek and Pig's Eye Segment. This includes maintaining the level of service currently available, restoration of ecosystem services, and exploring options for access to the river on county managed land in MRCCA.

Connections

A critical process in ensuring cost-effective development is encouraging planning between all levels of government and private organizations when acquiring land for parks and trails. Ramsey County will encourage continued regular meetings between all entities with public access in MRCCA. RCPRD will evaluate options for access to the river and pursue those where feasible. Ramsey County will also identify land holdings in the CA-SR District that have potential connections to existing and future open space. This includes right-of-way (ROW), easements, and current park space.

Land acquisition

It is currently a stated goal that RCPRD "builds, promotes, and improves pedestrian bike and trail systems that are accessible to all residents of Ramsey County and connect the county to other regional systems." (2016-17 budget: Goal 3, strategy B. P. 321).

When possible, Ramsey County will acquire land as park, open space, or trail corridors. The county will also partner with other government units, especially the city of Saint Paul, city of Maplewood, Metropolitan Council, and the State of Minnesota, to leverage adjacent lands. The county will encourage that land dedication requirements be used to obtain public river access.

RCPRD will continue to work with the Cities of Saint Paul and Maplewood to acquire land adjacent to existing open space parcels through subdivision requirements under their jurisdiction.

TRANSPORTATION AND UTILITIES

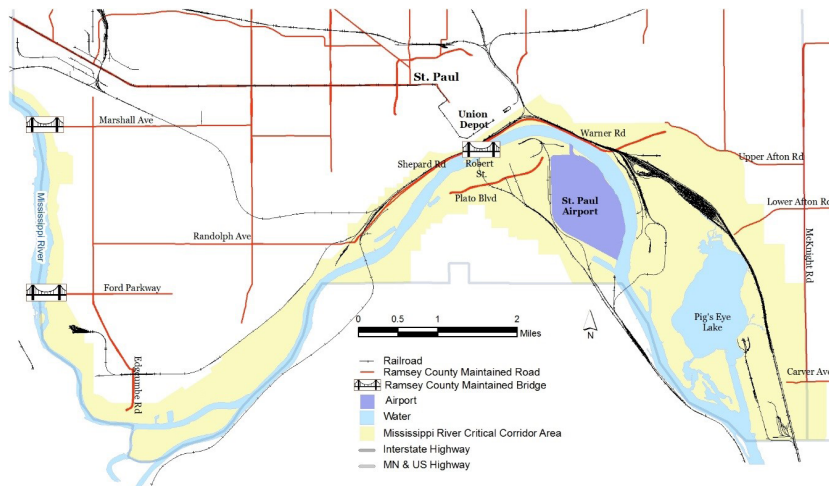
Transportation and utilities provide vital connections to communities. Infrastructure does not need to be a burden on environmental processes. When utilities and transportation do not consider effective siting concerns arise including excessive damage to the MRCCA with multiple construction sites, inappropriate obstructions of the viewshed, and continued clearing to maintain ROW. Proper siting and alternative routing can keep these out of view and limit their footprint in MRCCA. Impacts to public river corridor views and primary conservation areas must be avoided by adoption of policies that protect ecosystem services.

Description of Existing Facilities

The MRCCA within Ramsey County is heavily urbanized. Manmade infrastructure transects the area in many places. This offers unique challenges and opportunities to meeting requirements of MRCCA ordinances.



Air, Rail and Road Transportation in south Ramsey County.



The Rail, Air, and Road Transportation map utilizes "StreetSimple", "Railroad" layers from Ramsey County. The airport shapefile is derived from MNGeo "Airports" file created in 2010. Roads represent existing Ramsey County maintained roads. Rail and air transportation infrastructure not maintained or governed by Ramsey County are also shown as they affect Ramsey County.

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Roadways

The MRCCA corridor has numerous roadways that travel through or intersect it. Ramsey County has responsibility for many roads in this corridor (Table 2; Map transportation)

Table 2: Ramsey County roads and bridges within MRCCA

County Road Number	Road Name	River Crossings
35	Marshall Avenue	Marshall Avenue Bridge
35	Upper Afton Road	
36	Warner Road	
37	Shepard Road	
38	Randolph Ave	
39	Lower Afton Road	
40	Plato Boulevard	
42	Ford Parkway	Ford Parkway Bridge
46	Edgumbe Road	
43	Carver Avenue	
68	McKnight Road	

LAND USE

Improvements to these facilities are included in the Ramsey County Transportation Improvement Program documents.

- The concrete leading to the Ford Parkway Bridge was removed and replaced in the fall of 2017, along with riprap replacement.
- The Marshall Avenue Bridge will see repairs, with the deck milled and overlaid.
- Warner Avenue Bridge number 62531 will have maintenance completed in 2018.

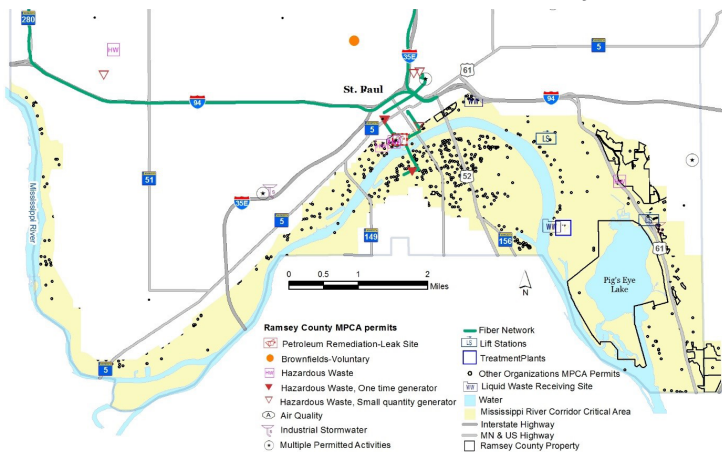
Other potential projects under initial discussion may affect the MRCAA and should be evaluated in the feasibility analysis.

- A Direct connection of Lexington Parkway to Shepard Road, via Elway Street is in early planning
- Access from Shepard Road to northbound I-35E and from southbound I-35E to Shepard Road via alteration of the I-35E/Shepard Road interchange is being studied.
- The joint MnDOT/Met Council Intersection Conversion Study identified Warner Road and Burns Avenue intersections as candidates for conversion to interchanges.

Utilities

Overhead powerlines, generation facilities, and even underground utilities have a visual impact on PRCVs. As can be seen in map (elec gen and utility infra) and Map (PRCV), there are many points of potential conflict, such as the electrical transmission lines bisecting Pig's Eye and the large number of Minnesota Pollution Control Agency permitted sites near Ramsey County Open Space. The confluence of infrastructure and natural areas has the effect of blocking views. Less often calculated are the issues of noise and light pollution from utilities. While it can be mitigated, sensory pollution is still of concern in siting new utilities and addressing existing ones. It should be recognized that underground infrastructure can have much of the same visual impacts and long-term evidence of disturbance. Construction requires disturbance of vegetation, continued ROW clearing, and maintenance which leads to visual scars on the viewshed of PRCVs. A balance must be struck in PCAs between the need for infrastructure and the preservation of key ecosystem services. Areas of existing conflict are readily present when utilities intersect PCAs including utility corridors being well known conduits for invasive species, the fracturing of habitat in critical areas, silting in of wetlands from erosion, and disturbance of soil structure. Infrastructure such as water outflows from both stormwater and sewer can be points of concentrated pollution that impact the quality and enjoyment of the river

Utility Infrastructure.

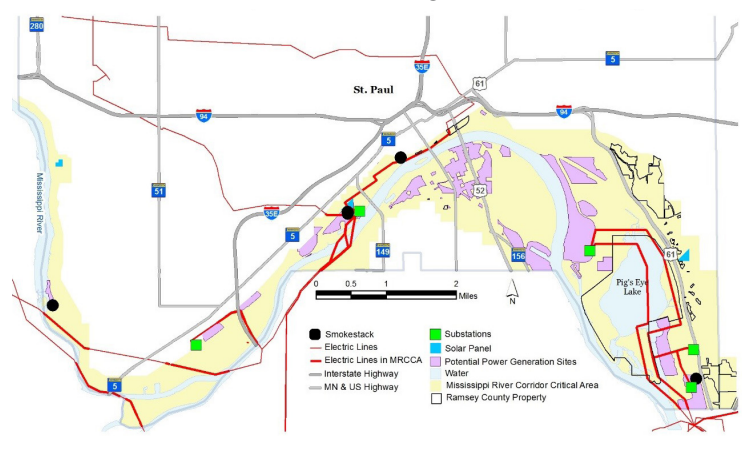


The Utility Infrastructure Map was adapted in 2017. This map utilizes data from Ramsey County and Minnesota Pollution Control Agency to represent existing Ramsey County owned sewer, stormwater, and permitted utility infrastructure.

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2017 Comprehensive Plan, Utility Infrastructure 8/17/2017

Electric Generating Facilities and Infrastructure.



The Utility Map was adapted between 2007-2016. This map utilizes data from Metropolitan Council, MN Pollution Control Agency, MN Department of Commerce, and Federal Department of Transportation. This represents existing and potential electrical generating utility sites including solar and wind generation.

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2017 Comprehensive Plan, Electric Power Generation Facilities 8/17/2017



Bicycle Routes

Ramsey County and the surrounding metro have been recognized as leaders in creating a safe and scenic bicycle network. Ramsey County in coordination with other municipalities in Ramsey County developed the Ramsey County Pedestrian and Bicycle Plan to provide an expansive pedestrian and trail network. Ramsey County maintains striped bike lanes on county roads. These bike lanes include portions of Marshall Avenue, Plato Boulevard, Warner Road, Upper Afton Road, and Lower Afton Road. The Mississippi River Trail travels through Ramsey County’s portion of the MRCCA. Ramsey County may have jurisdiction over these future bicycle routes; however, it is dependent on final agreements. Map (bicycle) shows the existing, proposed, and search corridors. Regional Bicycle Transportation Network (RBTN) corridors represent search areas for future connections while alignments represent existing and proposed routes. Bike trails are discussed in Battle Creek Regional Park paragraph in the open spaces section.

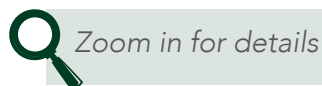
While there are no specific plans for updates or new bicycle lanes within MRCCA now, Ramsey County supports continued partnerships to connect this world class bicycle network. The Ramsey County-Wide Pedestrian and Bicycle Plan identifies areas of potential improvement in the MRCCA.

Existing and Proposed Bicycle Routes.



The Bicycle Routes Map was adopted in 2017. The map utilizes data from Ramsey County and Metropolitan Council to represent existing and planned Ramsey County bicycle trails. The Regional Bicycle Transportation Network (RBTN) spatial data from the Metropolitan Council dated 8/19/2015 includes "Alignments", which represents existing and proposed bicycle paths and "Corridors", which represents search areas for future expansion. "Bikeways," from Ramsey County data, are all bikeable routes - proposed and existing. There is some overlap with MetCouncil-identified RBTN Alignments. "Ramsey County Bicycle Routes" includes only those routes managed by the County.

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Rail Transportation

Ramsey County Regional Railroad Authority (RCRRA) has a highly visible presence within MRCCA (map Transport). In 2012 RCRRA's Union Depot transit hub was opened to the public. This serves several transit modes including Regional rail and bus, local bus and light rail, as well as bicycle. The Union Depot and many of the transit routes lie within MRCCA.

Expansion of mass transit opportunities is a central focus of RCRRA. Several transit corridor studies would have potential impacts within MRCCA. These impacts and potential mitigation will be discussed in feasibility studies. Projects specifically affecting MRCCA include the Riverview Corridor, Minnesota High Speed Rail, and Second Intercity Passenger Train.

Air Transportation

The Saint Paul Downtown Airport is located entirely within MRCCA boundaries (Map transportation). While the county maintains a limited role in airport matters, its MRCCA policies and goals will continue to encourage mitigation of any harmful impacts resulting from the airport's infrastructure and operation.

POLICIES

Ramsey County will adopt policies to site new trails, roads, and facilities outside of PCAs and PRCVs. If it is necessary to build transportation corridors, impacts will be minimized. This includes:

1. Mitigating stormwater discharge from impervious surfaces
2. Replacement of non-native vegetation with native plants
3. Designing for minimal visual impact in the landscape

Where Ramsey County has permitting or oversight authority, it will encourage utilities to site outside of PRCVs or mitigate the visual impact with all feasible remedies.

Policies outlined under Minnesota Administrative Rules Chapter 6106.0130 shall be adopted for work done by Ramsey County or work done by or for Ramsey County.

Protective Measures

Currently the RCPW's 2016-2017 budget has a stated goal of creating a "transportation program that is developed and implemented with the full engagement of communities to ensure transportation infrastructure optimizes a wide array of friendly, safe, accessible, environmentally sensitive mode alternatives for users of all abilities and incomes." (goal 1, strategy A. P.343)

RCPW shall utilize the voluntary utility coordination committee as set forth in section 1.05 of the Ramsey County Ordinances to enhance awareness of siting and disturbance mitigation guidelines in MRCCA.

RCPW shall not issue any permits that violate MRCCA policies for utility siting under the authority of Section 1.06 subd. 1. Of the Ramsey County Ordinances without a variance approved by the RCPW Director.

General

KEY ISSUES & OPPORTUNITIES

Battle Creek Regional Park, Fish Creek Protection Open Space, and Mississippi Bluffs Protection Open Space have many vegetation efforts in progress. Continual efforts to control invasive species, support native plant communities, and protect the health of Battle and Fish Creeks will need funding. This is especially true of stormwater infrastructure that requires upgrades within Battle Creek Park. Furthermore, land purchases on all three sites have been identified and funding should be made available as sales are negotiated. These sites are opportunities to showcase MRCCA policies in practice. As sites are developed for use, such as the Battle Creek Winter Recreation Area, attention will be paid to modeling best practices that balance use with natural resource protection.

IMPLEMENTATION ACTIONS

Education and Outreach

The city of Saint Paul and Maplewood will coordinate communication with landowners within MRCCA as Ramsey County has no zoning authority. Ramsey County may assist where necessary.

Capital improvements

- [BATTLE CREEK REGIONAL PARK MOUNTAIN BIKE SYSTEM](#)-Concept Master Plan. July 2017. Ramsey County Parks and Recreation.
- [Capital Improvement Program-2016-2017 Approved Budget-2016-2021 Plan.](#)
- [2016-2017 Biennial Budget.](#) December 15, 2015. Ramsey County.
- [Thrive MSP 2040-Transportation Policy Plan V 1.0. May 2014.](#) Metropolitan Council.
- [2015 System Statement-Ramsey County.](#) September 17, 2015. Metropolitan Council.
- [Regional Parks Policy Plan. Metropolitan Council.](#)
- [Ramsey County Public Works Department 2017-2021. Transportation Improvement Program.](#)
- [Alternative Transportation Plan-Mississippi River National River and Recreation Area.](#) National Parks Service.
- [RAMSEY COUNTY RIGHT-OF-WAY ORDINANCE FOR THE MANAGEMENT OF UTILITIES IN THE PUBLIC RIGHT-OF-WAY.](#) Section 1.05. Ramsey County.

Planning efforts and initiatives

- [Ramsey County-Wide Pedestrian and Bicycle Plan.](#) Ramsey County, 2015.
- [Ramsey County Natural Resource Management Plan.](#) Ramsey County Parks and Recreation. September 2008.
- [Great River Passage Master Plan.](#) City of Saint Paul. April 10, 2013.
- [State of the River. Friends of the Mississippi River and National Parks Service-Mississippi National River and Recreation Area.](#) 2016.
- [Ramsey County 2030 Comprehensive Plan.](#) November 2009. Ramsey County
- [Crosby Farm Park: Bluff Stabilization / Restoration Feasibility Study - St. Paul, MN. August 7, 2007. Soil and Water Conservation District of Scott County.](#)
- [Brickyard Area of Lilydale Regional Park Stormwater Management and Slope-Stability Study. City of St. Paul.](#)
- [Brickyard Area of Lilydale Regional Park.](#) City of St. Paul Department of Parks and Recreation. January 28, 2015.
- [Cherokee Heights Culvert Analysis and Erosion Control Feasibility Study.](#) Lower Mississippi River Watershed Management Organization. April 8, 2015.