

## Metropolitan Parks and Open Space Commission

Meeting date: April 1, 2021

For the Community Development Committee meeting of April 19, 2021

For the Metropolitan Council meeting of April 28, 2021

**Subject:** Battle Creek Regional Park – Pigs Eye Lake Master Plan Amendment, Ramsey County, Review File No. 50010-2

**MPOSC District, Member:** District G, Anthony Taylor

**Council Districts, Members:** District 13, Chai Lee

**Policy/Legal Reference:** Minn. Stat. § 473.313; *2040 Regional Parks Policy Plan* Planning Policy – Strategy 1

**Staff Prepared/Presented:** Colin Kelly, AICP, Planning Analyst (651-602-1361)

**Division/Department:** Community Development/ Regional Planning

### Proposed Action

That the Metropolitan Council:

1. Approve Ramsey County’s Battle Creek Regional Park – Pigs Eye Lake Master Plan Amendment.
2. Require Ramsey County to continue to coordinate with the Army Corps of Engineers and the Metropolitan Council during the development and implementation of the island monitoring plan.
3. As represented by Ramsey County, acknowledge the Corps’ responsibility for monitoring and determining ecological success for the restoration projects it constructs for up to 10 years following project completion, including financial responsibility.
4. Require Ramsey County, prior to initiating any development of the regional park unit, to send preliminary plans to the Environmental Services Assistant Manager at the Metropolitan Council’s Environmental Services Division.

### Background

Battle Creek Regional Park is located in the southeast corner of Ramsey County in the cities of Saint Paul and Maplewood (Figures 1 and 2). The park is made up of four units: Indian Mounds, Fish Hatchery, Pigs Eye, and Battle Creek. In accordance with the 1981 joint master plan, the City of Saint Paul owns and operates the Indian Mounds and Fish Hatchery units of the park. Ramsey County owns and operates the Battle Creek and Pigs Eye units. The focus of this master plan amendment is the Pigs Eye unit owned and operated by Ramsey County, specifically Pigs Eye Lake (Figure 3).

The Pigs Eye unit of Battle Creek Regional Park is within the City of Saint Paul and consists of Pigs Eye Lake – a backwater of the Mississippi River – and surrounding land which is a mixture of floodplain and upland areas. The entire Pigs Eye unit is within the Mississippi River Corridor Critical Area (MRCCA), which shares a boundary with the Mississippi National River and Recreation Area (MNRRA).

Ramsey County is requesting a focused master plan amendment to the 1981 Battle Creek Regional Park Master Plan to address natural resource and public safety improvements to the Battle Creek Regional Park – Pigs Eye unit consisting of:

- Pigs Eye Lake island building project,

- Other natural resource restoration activities and projects, and
- Pigs Eye Lake public protection.

This master plan amendment does not address park acquisition, boundary adjustments, recreational infrastructure, programming, or access to or within the Pigs Eye unit of Battle Creek Regional Park. These components will be addressed in a future amendment to the Battle Creek Regional Park Master Plan. This master plan amendment is intended to act as a separate natural resource guiding document for the Pigs Eye section.

In 2015, funding became available through the United States Army Corps of Engineers (Corps) Continuing Authorities Program (Section 204, Beneficial Use of Dredged Material) to develop a Feasibility Study Report with Integrated Environmental Assessment (Feasibility Study) for the implementation of islands within Pigs Eye Lake. The Corps, in collaboration with Ramsey County, initiated an agency-wide planning effort comprised of federal, state, and local agencies under the National Environmental Policy Act (NEPA) and Minnesota Environmental Policy Act (MEPA).

The Feasibility Study was completed in 2018 and indicated islands within Pigs Eye Lake were the best method for achieving the overall project goals of improving aquatic habitat, improving the quantity and quality of habitat for migratory bird species, and maintaining or enhancing the quantity of shoreline habitat. The 330-page Feasibility Study and its appendices are included within the submitted master plan amendment. The Council provided comments on this Feasibility Study at the time (Review File No. 21896-1) and identified issues related to project feasibility, ongoing maintenance, and monitoring that would be needed for this project, in addition to the regional park's issues.

In 2018, Ramsey County applied for grant dollars from the Lessard-Sams Outdoor Heritage Council (LSOHC) and was awarded funding. The project abstract<sup>1</sup> states: "Ramsey County and the U.S. Army Corps of Engineers propose to enhance and restore habitat in Pigs Eye Lake by building islands and marsh to benefit migratory birds, waterfowl, and fish. Island construction would restore wetland habitat and functions that have been lost in the 640-acre backwater due to erosion and degradation and enhance the surrounding area by reducing turbidity, preventing further erosion, and increasing habitat diversity. The project would protect areas of biodiversity significance and improve the Mississippi River wildlife corridor in the heart of the St. Paul metropolitan area."

More information on funding and the LSOHC may be found in the Funding and Partner Engagement sections.

A multi-level engagement process was utilized for the development of the master plan amendment from 2015-2020, with a focused public engagement effort in 2020. Both partner engagement for agency coordination and involvement and community engagement for general participation by the public was completed for feedback.

### **Rationale**

This master plan amendment is consistent with the requirements of the *2040 Regional Parks Policy Plan*, including Planning Strategy 1, Master Planning, and other Council policies, as described in the Analysis. It also sufficiently addresses the concerns that Council staff raised in review of the associated Feasibility Study in 2018.

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<sup>1</sup> Lessard-Sams Outdoor Heritage Council, Laws of Minnesota 2019 Accomplishment Plan, Pig's Eye Lake Islands Habitat Restoration and Enhancement project [https://www.lsohc.leg.mn/FY2020/accomp\\_plans/5n.pdf](https://www.lsohc.leg.mn/FY2020/accomp_plans/5n.pdf)

## **Thrive Lens Analysis**

This master plan amendment advances the Thrive outcome of Stewardship by protecting and enhancing our region's natural resources.

## **Funding**

The total estimated cost for constructing the project is \$15.6M. The Corps' Operation and Maintenance budget would provide \$3.2M toward the project. The remaining \$11.3M would be cost-shared by the Section 204 program (\$8.1M) and Ramsey County (\$4.3M). To offset the local share cost, Ramsey County submitted a LSOHC application for the Pigs Eye Lake island building project. In September 2018, Ramsey County received preliminary LSOHC grant approval in the amount of \$4,377,000 and in the 2019 Minnesota Legislative session, Ramsey County received final approval.

Additional habitat restoration efforts in the Pigs Eye unit include transitioning the mixed forest to floodplain forest, mainly through the removal of invasive species, with an estimated cost of \$380,000 and ongoing maintenance cost of \$90,000 every three years. The Corps is responsible for monitoring and determining ecological success for the ecosystem restoration projects it constructs for up to 10 years following project completion. Monitoring tasks and project evaluation reports will be the Corps' responsibilities for that timeframe.

No acquisition is proposed in this master plan amendment.

## **Known Support / Opposition**

The Ramsey County Board of Commissioners unanimously adopted Resolution B2021-042, approving the Battle Creek Regional Park – Pigs Eye Lake Master Plan Amendment and authorizing its submission to the Metropolitan Council, on February 16, 2021.

Supporting letters and resolutions included in the master plan amendment's appendices include those from the National Parks Service, Ramsey County Board of Commissioners, Ramsey County Parks and Recreation Commission, Saint Paul Parks and Recreation, and the Friends of the Mississippi River.

As part of the agency support process, a request was sent to the City of Saint Paul for support of the master plan amendment. Due to concerns with the public engagement process related to the island building project, the City of Saint Paul stated that it would not be providing a letter or resolution of support.

The master plan amendment includes an appendix focused on correspondence and coordination, documenting comments from the September 17, 2020 virtual public meeting, and individual emails and letters voicing both opposition to and support for the island building project.

More information on partner and public engagement may be found in the Partner Engagement and Public Engagement and Participation sections.

Figure 1: Regional Parks Open to the Public (2020), Battle Creek Regional Park – Pigs Eye Lake location

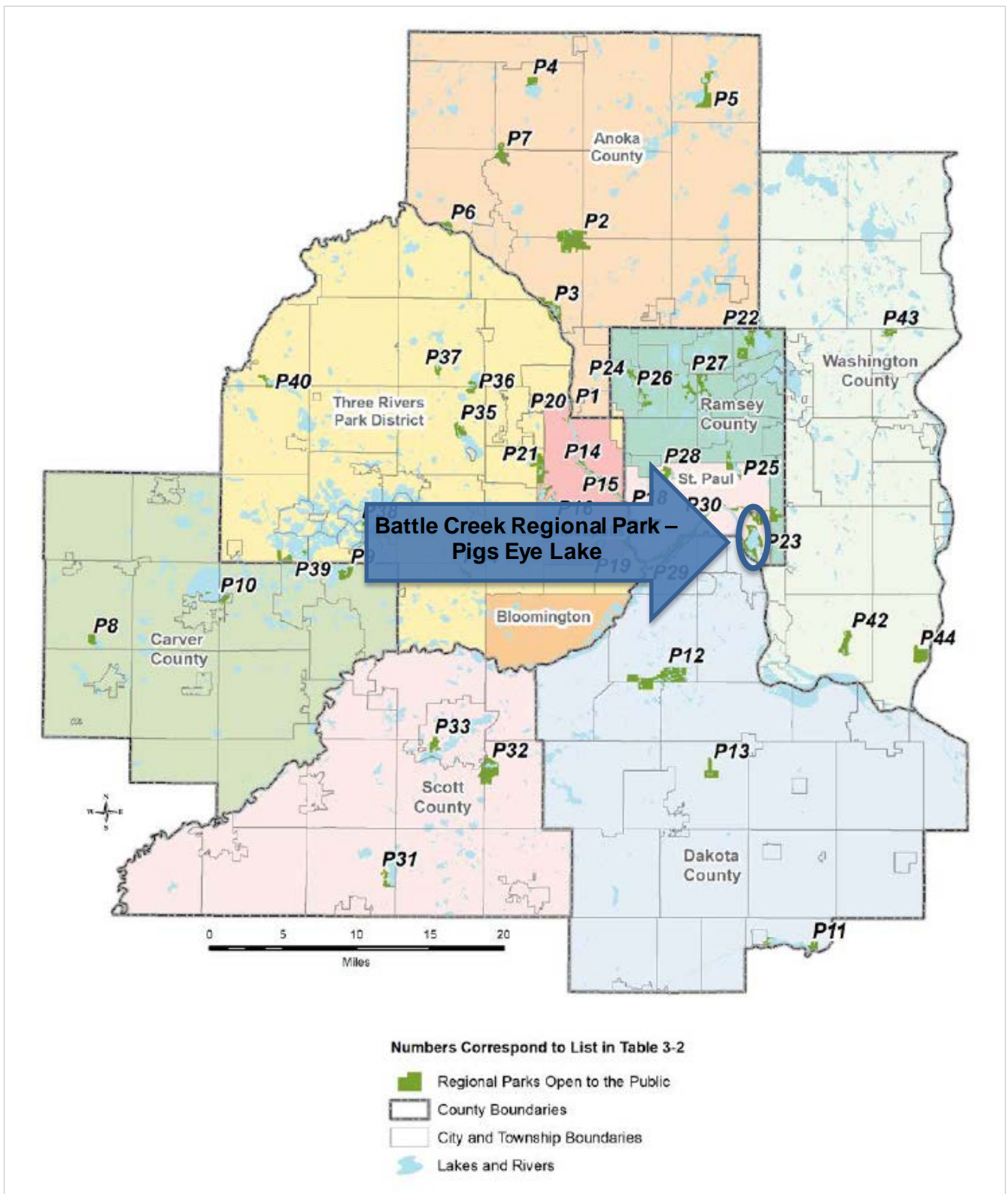




Figure 2: Regional Parks System, City of St. Paul, Ramsey County

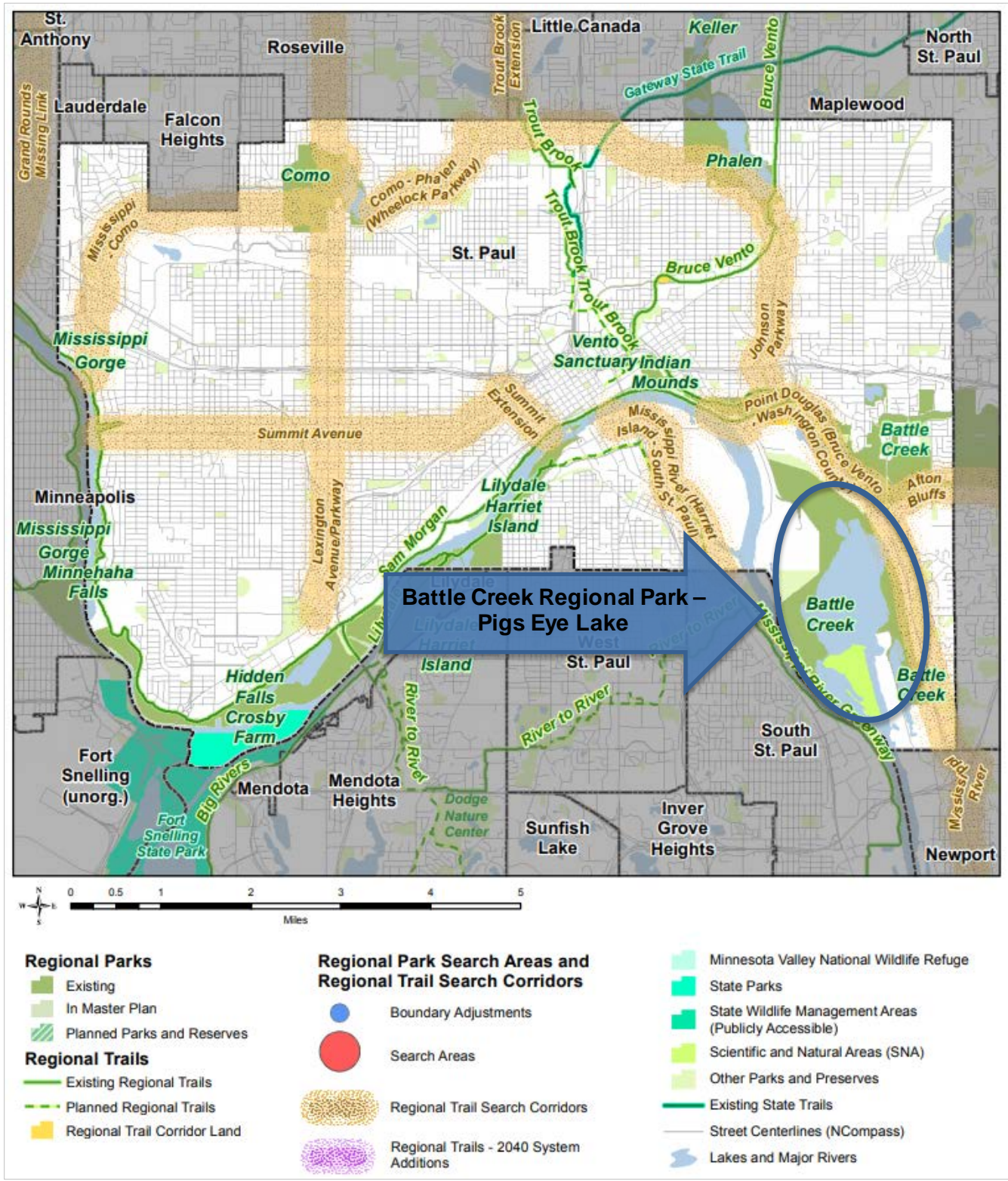
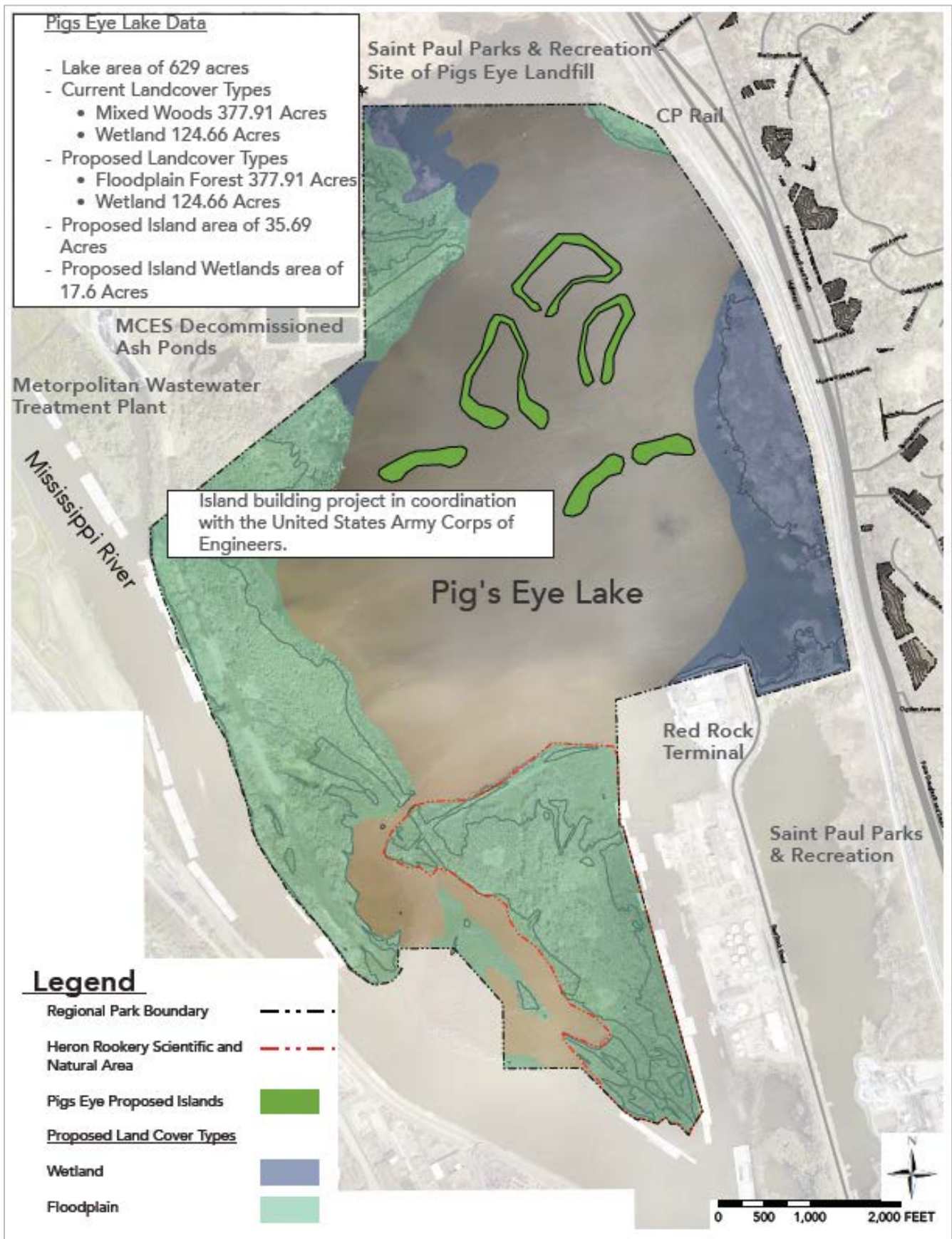




Figure 3: Pigs Eye Lake – Natural Resource Inventory Graphic (MP pg. 25) including six proposed islands



## Analysis

Planning Strategy 1 of the *2040 Regional Parks Policy Plan* outlines the requirements for regional park and regional trail master plans. In September 2019, Council staff met with Ramsey County staff to define the requirements for the current natural resource-focused plan amendment, which is more limited in scope than an amendment that includes recreational plans.

### *Partner Engagement*

Throughout the development of the Feasibility Study, there was extensive agency coordination efforts consisting of federal, state and local agencies including the Corps, National Park Service, U.S. Fish and Wildlife Service, Minnesota Department of Natural Resources (MNDNR), Minnesota Pollution Control Agency (MPCA), Minnesota Department of Transportation, Metropolitan Council, Ramsey-Washington Metro Watershed District, Ramsey County, and the City of Saint Paul. Coordination notices seeking engagement were also sent to the Shakopee Mdewakanton Sioux Community of Minnesota.

Additionally, non-governmental organizations including the Friends of the Mississippi River, Friends of Pool 2, the Friends of the Parks and Trails of Saint Paul, and Ramsey County were also included in the review and approval process of the Feasibility Study.

There was broad agency support from government agencies and non-profit organizations for the Pigs Eye Lake Master Plan Amendment. Agencies and organizations also noted a need for additional long-term planning around public safety measures, recommended use of climate resilient vegetation, and encouraged continued partnership and collaboration in Pigs Eye Lake related efforts.

The Feasibility Study was also presented to the LSOHC as part of the process to obtain local funding for the project. The 12-member council was created by the legislative branch in 2008 and consists of eight members of the public appointed by the House of Representatives (two members), the Senate (two members), and Governor (four members); two members of the House of Representatives; and two members of the Senate.

The LSOHC ensures recommendations are consistent with the Constitution and state law, and take into consideration the outcomes of the Minnesota Conservation and Preservation Plan that directly relate to the restoration, protection, and enhancement of wetlands, prairies, forests, and habitat for fish, game, and wildlife, and that prevent forest fragmentation, encourage forest consolidation, and expand restored native prairie.

Due to the project's significance and potential benefits, the LSOHC and State Legislature approved project funding and a grant agreement for the implementation of islands in Pigs Eye Lake.

During the development of the master plan amendment, Ramsey County Parks and Recreation met with Metropolitan Council Environmental Services (MCES) staff on multiple occasions to discuss projects and initiatives identified in the plan. MCES identified a need for further collaboration and participation to mitigate potential impacts to the Metropolitan Wastewater Treatment Plant (Metro Plant). The plan amendment notes that the primary issues for MCES are security, future recreation improvements including access, and the development of a monitoring plan.

The Metro Plant follows the strategic guidance specified in the National Infrastructure Protection Plan for security of critical infrastructure. As such, additional coordination between Ramsey County and MCES will be required before any future access to the Pigs Eye unit is planned. It should be emphasized that no public access or recreation improvements are proposed in this plan amendment.

MCES staff made clear that public access to, and recreational improvements within, the Pigs Eye unit should not be considered until any needed environmental cleanup and remediation is addressed.

Similarly, additional collaboration between the Corps, Ramsey County, and MCES should occur during the development and implementation of the Corps' 10-year island monitoring plan.

### *Public Engagement and Participation*

Public engagement for the Feasibility Study was completed with two concurrent 30-day public review periods for both NEPA and MEPA processes to allow general feedback from the public.

The project feasibility report was made available for public review and was open for comment from March 12, 2018, through April 12, 2018. A public comment period was conducted by the Corps under NEPA requirements and Section 404 of the Clean Water Act. Ramsey County published and requested comments concurrently as part of MEPA requirements and the project was published in the Minnesota Environmental Quality Board (EQB) Monitor. Public notices for this review were listed on the EQB website and were also sent out to the public through press releases and identified in the local newspaper, Ramsey County website, and on Ramsey County social media outlets regarding public feedback. All comments received from both the 30-day public comment periods were reviewed, and responses were prepared for development of an EAW Record of Decision.

Additional public engagement related to Battle Creek Regional Park and the Pigs Eye unit occurred during the development of Ramsey County's Park and Recreation System Plan (System Plan) in 2018 and the initiation of a planning process to update the overall Battle Creek Regional Park Master Plan in 2019.

The System Plan community engagement process was conducted using two methods, primarily; pop-up meetings and an online survey. Nine pop-up meetings were conducted at various libraries, community centers, and ice arenas across the county. An online survey was launched in July 2017 and remained active until February 2018, with nearly 1,000 responses received.

Currently, there is a separate, larger master planning effort being conducted for the overall Battle Creek Regional Park. A robust public participation process for this effort was launched in the spring of 2019 and included several pop-up events, stakeholder discussions, community forums, a design workshop, and an online survey. Public engagement on the master plan continued in 2020, predominantly using online or virtual approaches due to the COVID-19 pandemic. The overall Battle Creek Regional Park Master Plan is likely to come before the Council later in 2021.

Public engagement for the focused master plan amendment was intended to reach a wide audience and it focused on gathering information both from residents who live near the regional park and countywide as well. As part of the focused Pigs Eye Lake Master Plan Amendment process, Ramsey County held a 45-day public review period between August 17 and September 30, 2020. Notification of the public review period occurred through multiple channels including a press release (Pioneer Press), Ramsey County Parks and Recreation website updates, social media posts, and email. Email notifications were also sent to federal and state agencies, the City of Saint Paul, and non-profit organizations like the Friends of the Mississippi River.

During this focused planning process, the public was consulted several times. This was the primary form of engagement. At the "consult" level of participation, the goal, as described by the International Association of Public Participation's *Spectrum of Public Participation*, is "to obtain public feedback on analysis, alternatives and/or decisions." The promise to the public is, "we will keep you informed, listen



to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.”

Because in-person public meetings were not an option at the time due to the COVID-19 pandemic, a virtual public meeting was hosted on September 17, 2020, to allow for additional public comment.

There was mixed support from the public regarding the Pigs Eye Lake Master Plan Amendment, particularly related to the island building project. Thematically, most of the comments and questions focused on project need, planning and public participation, construction, timing, and effectiveness. Specifically, some commenters stated that existing pollution concerns should be addressed before other actions are taken; public participation opportunities during the development of the Feasibility Study were not well communicated or advertised; or they raised questions about how other Corps-implemented island building projects impacted fish species. Other commenters referenced the opportunity for the Friends of the Mississippi River, the University of Minnesota, and others to use the islands to study different plant species in the context of a changing climate or expressed support for the project.

Future master planning for the Pigs Eye unit that relates to public safety, to protection, or explores access or future recreational infrastructure improvements will reengage local residents and community members.

### *Conflicts*

Overall, the majority of Pigs Eye Lake and the riparian area surrounding it is owned by Ramsey County. Land adjacent to the regional park consists mainly of park and industrial land uses. The north end of the lake and adjacent riparian land is owned by the City of Saint Paul. Land northwest of the lake is owned by MCES for operation of the Metro Plant. A portion of MCES land contains four decommissioned wastewater ash ponds from which MCES has removed ash sludge. The Saint Paul Port Authority owns portions of the lake and riparian land on the southern tip of the lake around the outlet of Pigs Eye Lake into the Mississippi River and maintains Red Rock Terminal. The Canadian Pacific Railway is near Highway 61 and the east edge of Pigs Eye Lake.

Past land uses on the north side of the lake merit additional attention. To the north of Pigs Eye Lake is the former Pigs Eye dump on City of Saint Paul property, which was used for the disposal of mixed municipal, commercial, and industrial waste beginning in the mid-1950s until 1972, and for disposal of incinerated sludge ash from 1977 to 1985.

As a result of the various types of waste dumped at the site over the years, the dump site is currently listed on the United States Environmental Protection Agency’s Comprehensive Response, Compensation, and Liability Information System (CERCLIS) and is a Minnesota Superfund site addressed by the MPCA Superfund Program. The MPCA is responsible for coordinating cleanup activities at the dump site, as required by the Minnesota Superfund Program.

The MPCA, Minnesota Department of Health (MDH), and MNDNR have been working to understand the presence and levels of Per- and Polyfluoroalkyl Substances (PFAS) in Minnesota’s environment, especially surface and groundwater. MPCA, MDH and MNDNR identified PFAS in Pigs Eye Lake as a concern from a recent discovery of PFAS foam. The extent of PFAS in Pigs Eye or sources of PFAS entering Pigs Eye Lake is unknown at this time however, a site assessment is being conducted by the MPCA to identify the source of the chemicals and potential clean-up options. Some PFAS compounds may have impacts on human health and the environment. Additional planning activities and assessments may need to be conducted, especially in Pigs Eye Lake to determine the extent of PFAS,

sources, and whether remediation or other efforts are needed to implement long-term goals and outcomes to protect the environment and human health.

Additional planning and agency coordination will be required to develop a plan to address environmental concerns at Pigs Eye Lake. Outcomes of planning activities will determine the extent and actions required but if remediation is necessary it is anticipated funding will need to be a coordinated effort across agencies and include public interests.

### *Development Concept*

This focused master plan amendment addresses natural resource improvements to the Pigs Eye unit of Battle Creek Regional Park managed by Ramsey County. This plan amendment does not address recreational improvements, but rather sequencing of natural resource improvements for the Pigs Eye Lake island building project, other natural resource activities, and public protection for the Pigs Eye unit.

The recommended plan for island building was developed to address the following:

1. Improve aquatic habitat – Create depth and habitat diversity in Pigs Eye Lake. Increase acreage of aquatic vegetation. Incorporate structural habitat features to promote fisheries.
2. Improve the quantity and quality of habitat for migratory bird species – Create suitable habitat for migratory birds such as dabbling ducks within Pigs Eye Lake.
3. Maintain or enhance the quantity of shoreline habitat – Protect existing floodplain forest and marsh habitat along the shoreline of Pigs Eye Lake from wind and wave erosion.

The development design includes six islands with sand benches with the objective of improving aquatic habitat, terrestrial habitat, and reduction of shoreline erosion by reducing lake wind fetch and water turbulence (Figure 5). Three of the islands would utilize a “split” design that would establish sheltered areas in the centers of the islands, allowing for the creation of approximately 17.6 acres of protected wetland habitat. The other three islands will be constructed as full islands with the addition of a perpetually submerged berm for improved wind fetch and water turbulence control.

A variety of fill material including rock, sand, and topsoil will be used for island construction. The rock will be clean and sourced from a quarry. The sand and topsoil will consist primarily of material generated from dredging in the southern portion of Pool 2 of the Mississippi River; the portion of the river between Lock and Dam No. 2 in Hastings and Lock and Dam No. 1 (Ford Dam) in St. Paul.

According to the plan amendment, the Corps has been successful using dredge material on past island construction projects in the Mississippi River. Dredged material is often used for habitat enhancement projects. Reuse of this material can provide substantial cost savings and is considered an environmentally beneficial way to construct islands. Approximately 413,329 cubic yards of sand and topsoil is anticipated for island construction. The Corps tested all dredged material for this project per MPCA guidelines and the material was approved per MPCA testing standards for placement in water for habitat creation. MPCA guidelines have been developed specifically to protect wildlife that use these habitats.

After offloading material from a temporary placement island, material will be transported via barge approximately 12 river miles up the main channel of the Mississippi River through the access channel of the Red Rock Terminal to a staging location at the southern end of Pigs Eye Lake. Additional coordination will continue with businesses utilizing the Red Rock Terminal prior to project construction.

The typical construction process of habitat island building on the Mississippi River starts with the placement of a sand base via the use of either hydraulic or mechanical dredging equipment. Following

the sand base construction, rock vanes will be placed at locations along the outer edges of the islands to prevent erosion. After rock vanes are in place, topsoil material will be spread on top of the sand bases, followed by seeding and planting of natural vegetation (Figure 4).

Figure 4: Island Construction Steps (MPA pg. 6)



Island vegetative cover will consist of native grass and shrubland plantings. Where feasible, there may be opportunities to experiment and/or implement climate-adapted native vegetation to provide greater diversity in a changing climate. To do so, the Corps and Ramsey County would work in partnership with other governmental agencies and non-profit organizations like the University of Minnesota and the Friends of the Mississippi River, providing the opportunity to apply different habitat restoration approaches within Pigs Eye Lake.

The construction of the islands in Pigs Eye Lake is anticipated to be completed by the fall of 2024.



Figure 5: Pigs Eye Lake – Island Building Graphic, U.S. Army Corps of Engineers (MPA pg. 2)



### *Stewardship Plan*

The Pigs Eye Lake island building project will provide needed wildlife habitat within the lake, prevent further erosion to the lakeshore, compliment the surrounding natural resources, and is intended to benefit the entire Pigs Eye Lake ecosystem.

The natural resources within the Pigs Eye unit will be restored and managed according to the 2018 System Plan. Restoration and maintenance of restored areas will be a priority throughout the Pigs Eye unit to carry out the mission of providing adequate sustainable habitats to support populations of native wildlife species. Some examples of projects listed include the conversion of mixed woodland to floodplain forest, mainly through the removal of invasive species.

Public protection identified in the plan amendment is meant to provide a high-level summary of public safety components for the Pigs Eye unit. Ramsey County acknowledges the need to address public health protection for the Pigs Eye unit due to surrounding past and current land uses, existing land conditions, and contamination. Public safety components will need to be addressed before any recreational and access improvements can be implemented in the Pigs Eye unit.

Additional planning and agency coordination will be required to develop a plan for any long-term environmental cleanup for Pigs Eye Lake. It is anticipated that Ramsey County would take a lead role within the Pigs Eye unit for engaging a multi-agency planning study to identify the project scope, objectives, coordination, stakeholders, agency and public engagement, funding strategy, and process for developing a long-range plan. Outcomes of planning activities will determine the extent and actions required, but for successful outcomes it is anticipated any remediation activities and funding will need to be a coordinated effort across agencies and include public interests.

Next steps, as identified by Ramsey County:

- Secure funding for planning activities.
- Initiate an agency-wide planning team to determine project scope, objectives, coordination, stakeholders, agency and public engagement, funding strategy, and process for developing a long-range plan for any remediation.
- Initiate an agency and public engagement process.
- Initiate additional site assessments and testing to determine the extent of contaminants within Pigs Eye Lake and surrounding areas.
- Develop an agency wide monitoring and stewardship plan.
- Other required planning activities as required dependent on outcomes from long-term planning.
- Secure funding for any remediation.

An additional public safety component may be included within the agency-wide public safety planning process or initiated as a separate planning process following any remediation. This process will be a critical step for additional planning, evaluation, and coordinating potential long-term recreational and access improvements after any remediation is completed.

### *Natural Resources*

The Pigs Eye unit consists of a 629-acre lake – a backwater of the Mississippi River – surrounded by 378 acres of land to the west and 125 acres of wetlands to the east and northwest of the lake, which is in the floodplain (Figure 6). Pigs Eye Lake water levels fluctuate with the river, and the land within the park boundary is often inundated with water for varying lengths of time. The Pigs Eye unit also contains one of the largest heron rookeries in the state of Minnesota and is designated as a state Scientific and Natural Area (SNA) by the MNDNR. The Pigs Eye unit is also defined as an Environmental Natural Area within the 2018 System Plan, which warrants additional protection and preservation.

Most of the Pigs Eye unit land cover consists of mixed woods located on a peninsula of land that separates the lake from the main channel of the Mississippi River. This peninsula of land is historically a floodplain forest but is presently defined as a mixed woods. The wooded peninsula consists of typical floodplain trees such as cottonwood, silver maple, green ash, willows, American elm, and some swamp white oak, however several invasive tree species have encroached into this area, including buckthorn and boxelder. The area is also prone to flooding creating a relatively open understory with few shrubs or saplings. Ground cover consists of forest pools, mucky depressions, bare silt or sand, and dense patches of wood nettle or impatiens, which can shift due to the movement of water. The wetlands within the park consist of native vegetation, such as prairie cord grass, and various rushes and sedges. Invasive cattails and reed canary grass also dominate a lot of the wetland edges.

The majority of Pigs Eye will remain a natural area to provide benefit to wildlife. The south portion of the peninsula will remain a SNA for the protection of the heron rookery. Wetlands will remain protected under the State and Federal Wetland Conservation Act.

The Pigs Eye unit is within natural resource management Unit 10, as outlined in the 2018 System Plan. Natural resource projects and activities within the Pigs Eye section must be implemented in accordance with Mississippi River Corridor Critical Area (MRCCA) regulations. Pigs Eye natural resources projects and activities will be coordinated by Ramsey County and will include ongoing protection in coordination with partnering agencies, site inventories, and restoration of the land and lake resources.

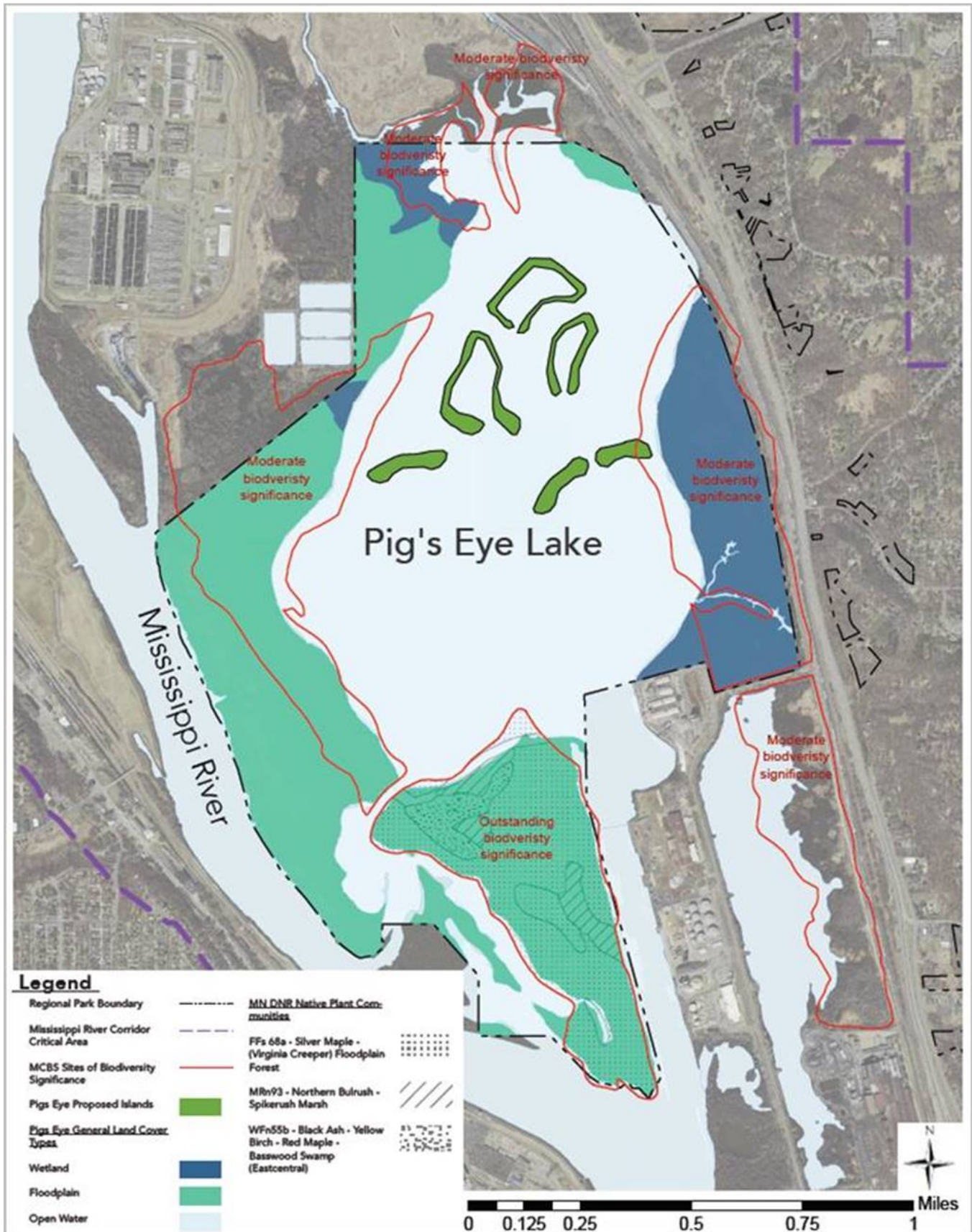
Additional natural resource preservation projects include:

- Conversion of mixed woods to floodplain forest (i.e. reforestation of native floodplain tree species)
- Continued enhancement of existing wetland
- Removal of invasive species
- Revegetation of the existing shoreline
- Introduction of climate resilient vegetation

Surveys of the Pigs Eye area will need to be completed prior to any restoration work to gather more information about the current state of the area. Additional natural resource surveys will include wildlife, plant, and shoreline surveys and will focus on determining restoration needs for shoreline erosion, invasive plant species removal, and transition of landcover habitats. Anticipated natural resource preservation project costs are estimated at \$380,000, however actual costs may vary depending on the outcomes of surveys completed within the Pigs Eye unit.



Figure 6: Pigs Eye Lake – Natural Resources Inventory Graphic (MPA pg. 25) with proposed islands



## **Mississippi River Corridor Critical Area**

The Mississippi River Corridor Critical Area (MRCCA) Program is a joint state, regional, and local program that provides coordinated land use planning and zoning regulations for the 72-mile stretch of the Mississippi River through the seven-county metropolitan area covering 54,000 acres of land in 30 local jurisdictions. The MRCCA shares a boundary with the Mississippi National River and Recreation Area. Any development within the MRCCA in Battle Creek Regional Park would need to adhere to the standards and criteria for the preservation, protection, and management of the Mississippi River Corridor Critical Area under Minnesota Statute 6106.

Per Minnesota Statutes, section 116G.15, subd. 1, the purpose of the designation is to:

1. Protect and preserve the Mississippi River and adjacent lands that the legislature finds to be 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.

This master plan amendment does not propose the implementation of any public facilities at this time as defined by Minn. Rules 6106.0130 such as, public utilities, public transportation facilities, or public recreation facilities. However, the master plan amendment recognizes that the design and construction of future park facilities must comply with the standards contained in Minn. Rules 6106.0130 and will need further evaluation and planning with the public, adjacent landowners, and public agencies. This process will be a critical step for coordinating and implementing potential park facility improvements after public safety improvements are completed as defined in the master plan amendment. Further, any future park facilities and/or projects must be planned, designed, and constructed in a manner that protects primary conservation areas and public river corridor views identified by local units of government in their comprehensive plans.

The MRCCA was designated in 1976 to protect its many unique natural and cultural resources and values. These resources and values are protected through development standards and criteria implemented via local land use plans and zoning ordinances.

The MRCCA is home to a full range of residential neighborhoods and parks, as well as river-related commerce, industry, and transportation. Though the river corridor has been extensively developed, many intact and remnant natural areas remain, including bluffs, islands, floodplains, wetlands, riparian zones, and native aquatic and terrestrial flora and fauna.

### ***Operations***

The Corps is responsible for monitoring and determining ecological success for the ecosystem restoration projects it constructs for up to 10 years following project completion. Monitoring tasks and project evaluation reports will be the Corps' responsibilities for that timeframe. Close-out of monitoring tasks would occur when the level of success of the project is determined adequate or when the maximum 10-year monitoring period has been reached. The level of success will be based on the extent to which the project objectives have been met based upon site conditions. After the 10-year monitoring period, Ramsey County will assume maintenance and operation activities for the islands.

Monitoring activities will consist of water quality sampling, bird counts, vegetation surveys, elevation surveys, and Geographic Information Systems analysis of the lake's shoreline. The Corps intends to partner with other federal agencies like the National Park Service for some monitoring activities such as bird counts.

Active adaptive management actions by the Corps for the project may include tree, wet prairie, or marsh replanting, and herbivory and weed control. Specific adaptive management strategies will be based on the landscape plan and vegetation monitoring activities. In extreme events, adaptive management for vegetation replanting is estimated to be approximately \$120,000 depending on the level of impact.

Management of Pigs Eye natural resources will be coordinated by Ramsey County and will include ongoing protection in coordination with partnering agencies, site inventories, and restoration of the land and lake resources. Within the 2018 System Plan, habitat restoration of Pigs Eye includes information on the transition of the mixed forest to floodplain forest, mainly through the removal of invasive species, with an estimated cost of \$380,000 and ongoing maintenance cost of \$90,000 every three years.

### **Consistency with Other Council Policies and Systems**

**Community Development – Local Planning Assistance** (Patrick Boylan 651-602-1438) – The proposed is consistent with the City of St. Paul's 2040 Comprehensive Plan.

Regional policy directs Urban Center Communities like Saint Paul to plan for and program local infrastructure needs and implement local comprehensive plans.

*Thrive MSP 2040* directs Urban Center designated communities to integrate natural resource conservation and restoration strategies into the comprehensive plan and in local infrastructure projects where appropriate. Thrive policy also directs Urban Center communities to contribute towards the restoration of natural features and functions.

Ramsey County's plan for Pigs Eye Lake does not interfere with the land use component for the City of Saint. Paul and helps the City implement regional policy at the local level.

**Environmental Services – Engineering** (Mark Lundgren 651-602-1868) – At the time of plan amendment review, Council staff find that Ramsey County Parks and Recreation sufficiently addressed our concerns that were raised during the public comment period.

**Environmental Services – Sewer** (Roger Janzig 651-602-1119) – Require Ramsey County, prior to initiating any development of the regional park, to send preliminary plans to the Engineering Services Assistant Manager at the Metropolitan Council's Environmental Services Division for review in order to assess the potential impacts to the regional interceptor system.