

Metropolitan Parks and Open Space Commission Report

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

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.

Summary of Committee Discussion/Questions

Colin Kelly, Planning Analyst, presented the staff report to the Metropolitan Parks and Open Space Commission at its meeting on April 1, 2021. He, Emmett Mullin (Parks Unit Manager, Metropolitan Council), Scott Yonke (Director of Planning and Development, Ramsey County Parks and Recreation) and Aaron Mcfarlane (Biologist, U.S. Army Corps of Engineers) responded to questions.

Commissioner Harris asked multiple questions. First, she asked why Ramsey County (County) was requesting the master plan amendment now when the project was really started back in 2015. Mullin responded that the Council directed the County to conduct a master plan amendment in 2019, after the County contacted the Council to determine what was needed from a planning perspective. Harris then asked for clarification around funding; that it appeared some additional funds would be needed for planning. Kelly responded that the island-building project is fully funded by the Corps and the Lessard-Sams Outdoor Heritage Council grant, but that other aspects of the master plan amendment – including additional natural resource restoration activities and planning for public protection and safety – may require additional funding. Harris then asked for clarification on the location of the former dump site and ash ponds and asked why cleanup or remediation would not occur before island building. Yonke oriented the Commission to the location of the former dump site and ash ponds and noted the Corps' Feasibility Study found the island-building project would not impact the cleanup process. Additionally, because all the funding is in place for the island-building project, Ramsey County felt it could move forward with that project first. Harris then asked whether the island-building project was mitigation for another Corps project elsewhere on the river, and Yonke responded that it was not.

Commissioner Dillenburg asked how the island-building project will benefit wildlife. Yonke noted that the islands will reduce wind fetch and turbidity and create additional habitat in the lake. Mcfarlane noted the Corps has a lot of experience with habitat

projects such as this, having managed an environmental restoration program on the Upper Mississippi River for about 35 years. Between the project site and St. Louis, Missouri, the Corps has built 56 floodplain habitat restoration projects and restored over 100,000 acres of habitat. The Mississippi River is an impounded river and these types of projects have led to significant increases in aquatic vegetation, improved water clarity, and healthier wildlife including fish.

Commissioner Peichel asked multiple questions. First, he asked what mitigation measures are planned to protect the investment in island creation once remediation of contamination occurs. McFarlane noted that most of the contaminated land is north of the lake and that remediation will likely not occur where the islands are being built, further south in the lake itself. The Corps worked closely with MPCA to ensure none of the island-building activities would impact any future remediation techniques or strategies. Peichel then asked what the average contamination levels are in Pigs Eye Lake and what the risk would be for people fishing or consuming fish from the area. McFarlane reiterated that it is the area to the north where higher contamination levels were found by MPCA and that areas in the lake are generally at lower levels and not harmful to aquatic life. Regarding fish specifically, McFarlane added the MDNR has issued fish consumption advisories for Pool 2, clarifying public health and safety information.

Commissioner Brown asked how the public was engaged in Ward 7 of the City of Saint Paul, both during the development of the Feasibility Study and the master plan amendment. Yonke reiterated how partners and the public were engaged during the development of the Feasibility Study, noting how the Corps and County followed the public review processes specified in the National Environmental Policy Act (NEPA) and Minnesota Environmental Policy Act (MEPA) respectively. The Feasibility Study was posted on the Environmental Quality Board (EQB) website – the standard protocol for such studies – and the County issued press releases and posted information on their website and via social media to notify the public. Yonke noted that public input was received during this time and that feedback is included in the Feasibility Study. This process occurred between 2015-2018. With regard to the master plan amendment, Yonke noted the County provided a 45-day public review period, shared information via the County's website, and hosted a virtual public meeting. Comments were also received from the public during this time and are documented in the master plan amendment. This process occurred 2019-2021. Brown sought clarification on how the County specifically engaged communities of color or any of the neighborhoods that have concentrated poverty that could possibly be affected. Yonke said the County tried to engage those communities as much as possible by using advocates in the community and by notifying District Councils of the opportunity to review and provide comment on the plan amendment.

Commissioner Harris noted Commission members recently received emails from individuals expressing concerns and asked why the City of Saint Paul (City) is not a partner on this project or did not submit a letter of support. Yonke responded that the City was a part of the agency task force that was a part of the Feasibility Study development, but that the City Councilmember representing the area felt the County's public engagement during the master plan amendment process was inadequate and therefore chose not pursue a letter of support from the full City Council.

Council Member Atlas-Ingebretson noted Council Members also received emails from individuals expressing concerns and one of the main issues raised was a perceived lack of engagement with underrepresented populations. Atlas-Ingebretson noted the Council's shared values of advancing equity and inclusion and suggested there is nothing that precludes implementing agencies from going beyond minimum engagement standards.

Commissioner Peichel asked whether the equity analysis requirement should be addressed here, recognizing this master plan amendment is focused on the island-building project and natural resources, primarily, or if it will be included in a future master plan amendment. Mullin responded that the equity analysis requirement was not adopted when the Council specified the required master plan amendment components to the County. Mullin added that the County has indicated the broader Battle Creek Regional Park Master Plan will include an equity analysis. It is anticipated that the County will bring this more comprehensive master plan forward for Council review later this year.

Commissioner Taylor asked multiple questions. First, he sought clarification around future public engagement around the Pigs Eye unit. Yonke noted this master plan sets up the framework for long-term remediation work, which will have a more robust community and agency engagement component. Taylor further clarified that this future engagement would fall under the guidance of the most recent *Regional Parks Policy Plan* update, which includes the equity analysis requirement. Mullin responded affirmatively. Taylor then asked whether there would be an element of programming that comes out of future planning processes. Yonke responded that the public safety component has to be implemented first, before any recreational amenities or programming can be considered. Mullin noted that a future master plan amendment would be needed to address recreation, access, and other topics.

Commissioner Moeller asked what the implications of extending public engagement for 60 to 90 days would be as it related to project timelines. Yonke responded the planning process for the island-building project is complete and that there are strict timelines for funding, both from the Lessard-Sams Outdoor Heritage Council and the Corps. Yonke added that extending public engagement and delaying the start of the island-building project could jeopardize those funds.

Council Member Lee referenced a letter from Saint Paul Audubon, asking whether the island-building project would impact the heron rookery. Yonke responded there are no anticipated impacts to the heron rookery and that construction activities will not occur during sensitive nesting times, and there will be no access to the scientific and natural area (SNA) during construction. McFarlane added the Corps has been working closely with the Minnesota Department of Natural Resources (MNDNR) and their Natural Heritage staff and SNA representatives to ensure there will be no impacts during construction.

Commissioner Kemery raised the topic of the City of Saint Paul choosing not to provide a letter of support and asked if there is any way for the City to voice its concerns. Yonke reiterated comments that the City was at the table during the Feasibility Study and that City staff have provided comments on it. Yonke added that the County would like to coordinate with the City as much as possible in future processes.

Commissioner Harris asked whether a proposed action could be added that would require the County to conduct a more robust community engagement process on any Pigs Eye unit-related topics in the future. Chair Yarusso responded that it is a possibility, and it is at the discretion of the Commission.

Commissioner Dillenburg noted that, regardless of the extent and depth of engagement in many planning processes, there are often people who will feel they were not adequately engaged. Dillenburg added that she thinks the project will improve wildlife and resources.

Commissioner Peichel made a motion to approve the proposed actions in the staff report. Commissioner Dillenburg seconded the motion. With one abstention, eight Metropolitan Parks and Open Space Commissioners voted in favor of recommending the proposed actions. No Commissioners voted to oppose the proposed actions.

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 abstract¹ 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.

¹ 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

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

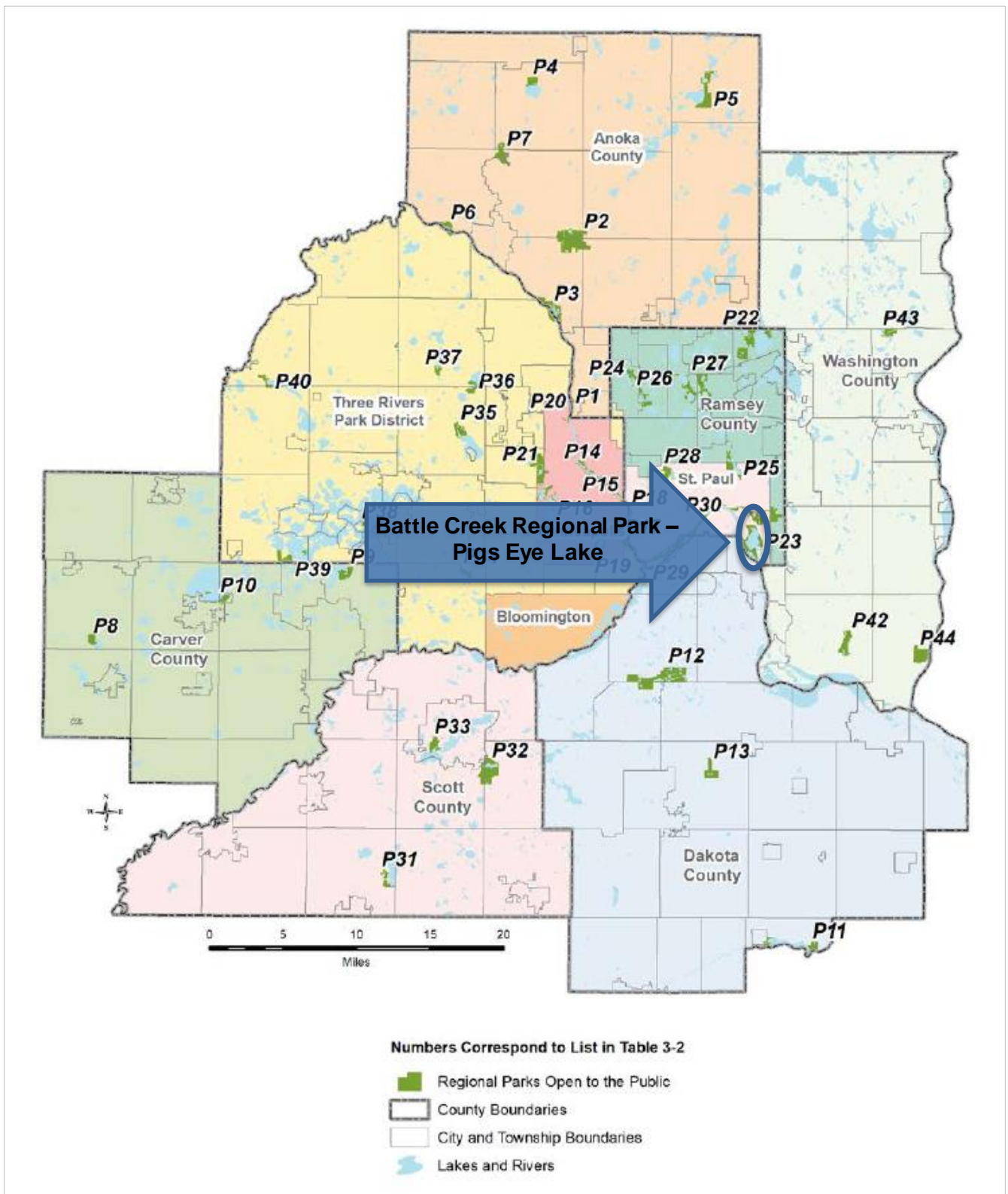


Figure 2: Regional Parks System, City of St. Paul, Ramsey County

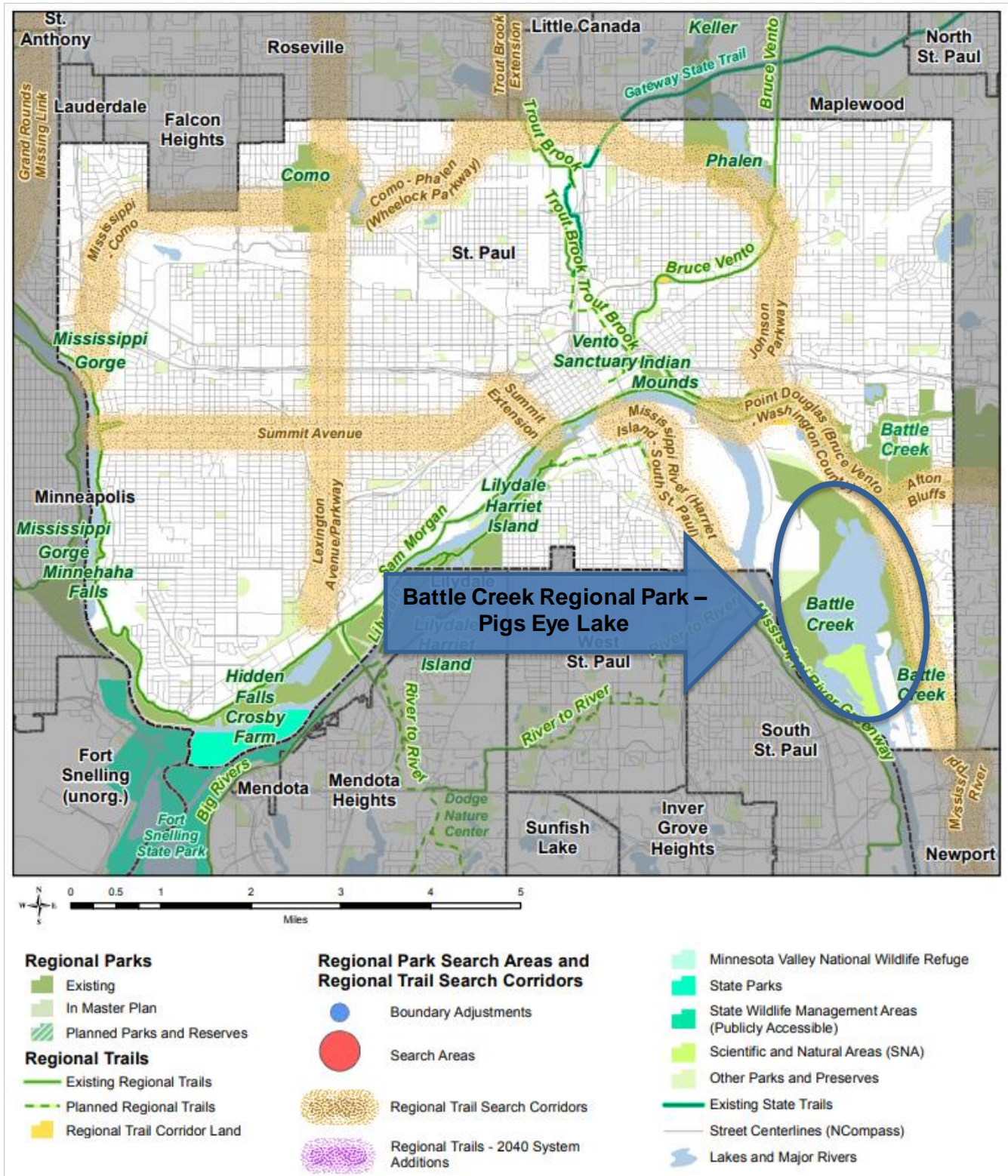
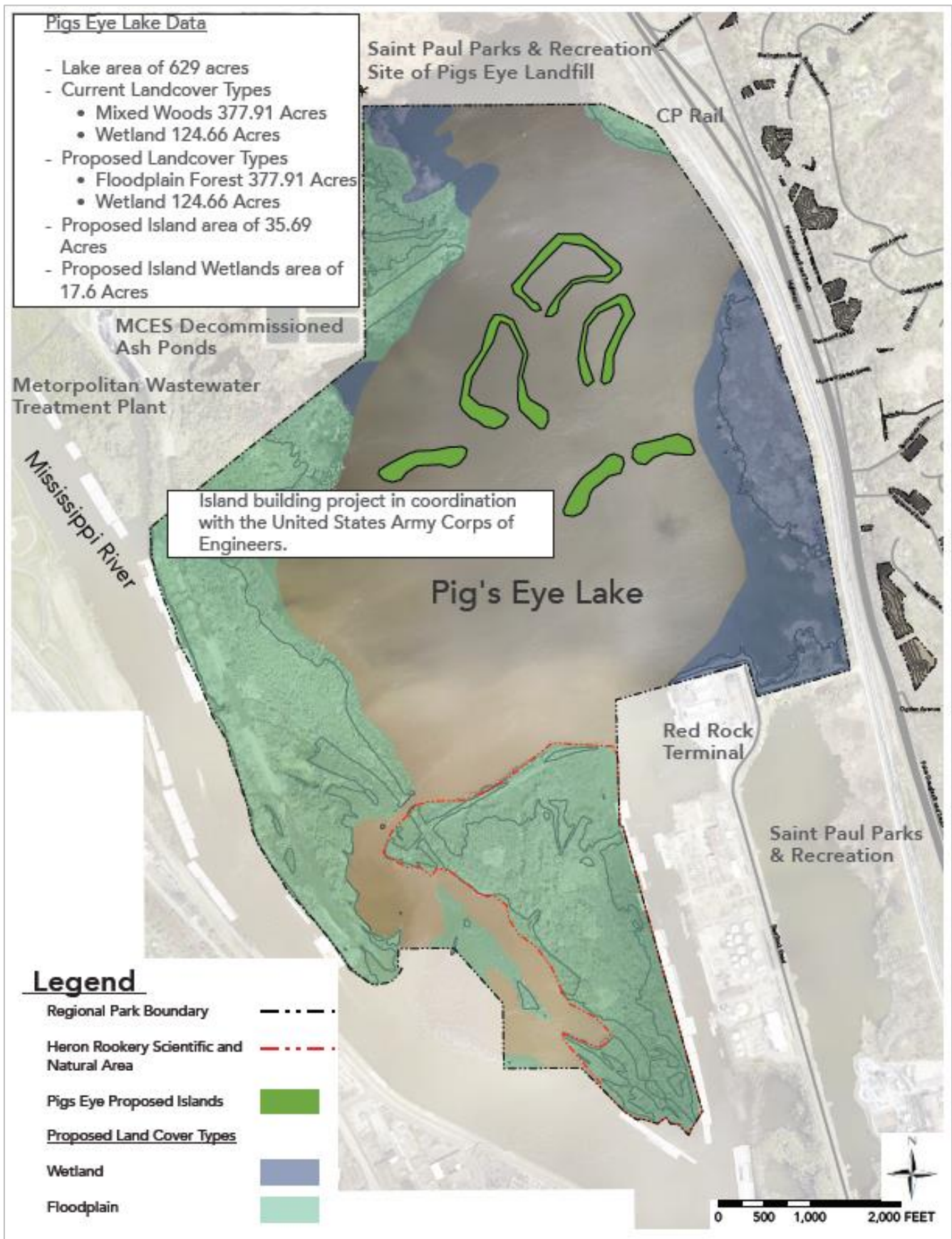


Figure 3: Pigs Eye Lake – Natural Resource Inventory Graphic (MP pg. 25) including six proposed islands



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.

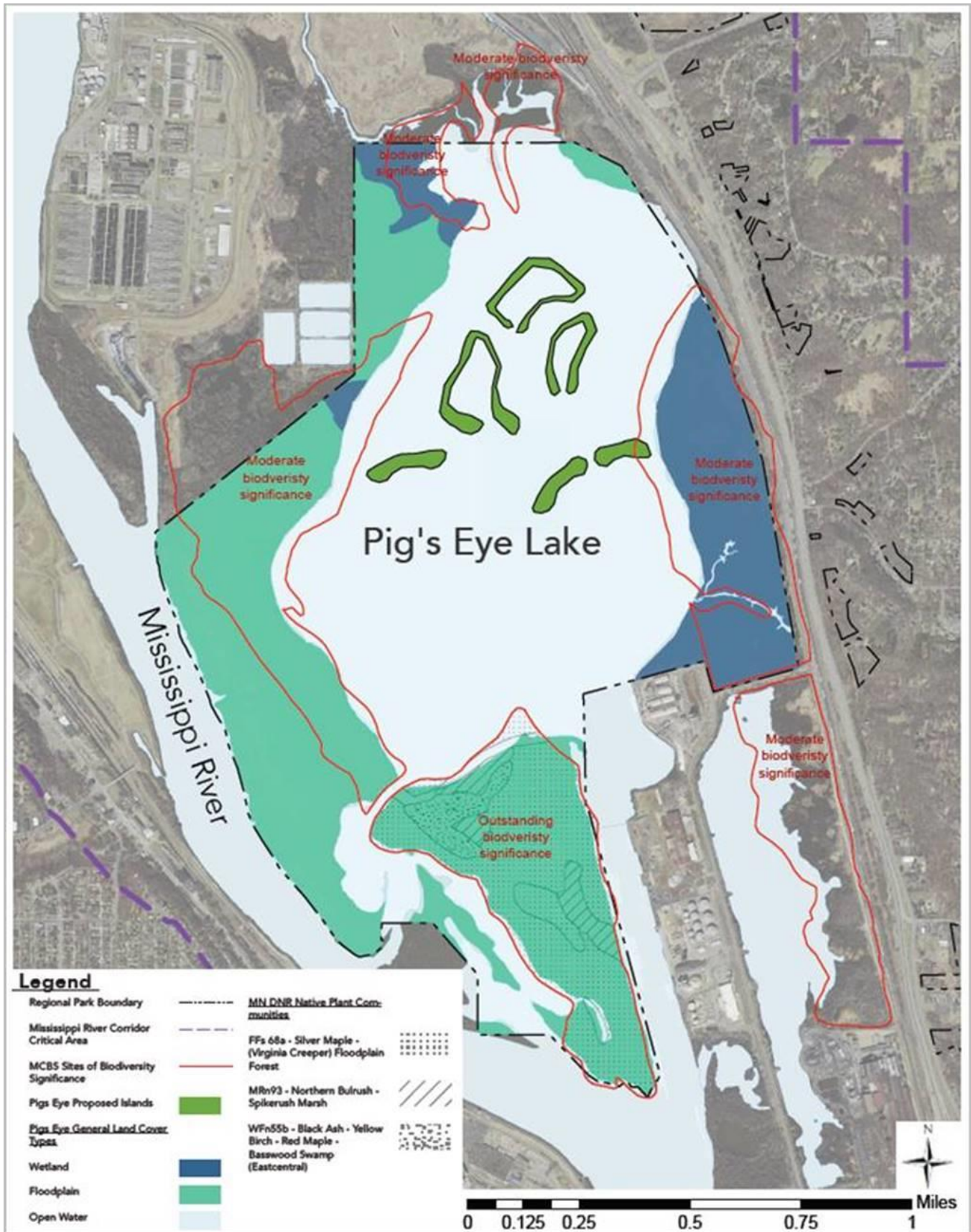
The Pigs Eye unit is within natural resource management Unit 10, as outlined in the 2018 System Plan. Natural resource projects and activities within the Pigs Eye section must be implemented in accordance with Mississippi River Corridor Critical Area (MRCCA) regulations. Pigs Eye natural resources projects 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.