

METROPOLITAN COUNCIL
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DATE: November 23, 2009

TO: Metropolitan Parks and Open Space Commission

FROM: Arne Stefferud, Planning Analyst-Parks (651-602-1360)

SUBJECT: (2009-xxx) Amendment to Lilydale/Harriet Island Regional Park master plan regarding development at Lilydale portion of park, City of St. Paul (Referral Number 50001-1)

INTRODUCTION

In 1991, the Metropolitan Council approved the master plan for Lilydale/Harriet Island Regional Park. The City of St. Paul has submitted an amendment to that master plan that proposes changes in developing the Lilydale portion of the park. To summarize, the amended plan deletes overnight camping plus a swimming beach on Pickerel Lake and proposes instead group picnic areas overlooking the lake, wildlife viewing platforms and a fishing pier to the lake, plus an off-leash dog park. Elements from the 1991 plan that are still proposed in the amended plan include riverbank restoration, a group day camp, trails of which some are currently in place, and an interpretive area for fossils and other historical features located in the park.

This memorandum analyzes the master plan amendment against the criteria for reviewing regional park master plans. It recommends approving the master plan amendment because it is consistent with applicable portions of the *2030 Regional Parks Policy Plan*.

AUTHORITY TO REVIEW

Minnesota Statute 473.313, Subdivision 1 requires Regional Park Implementing Agencies to, “prepare, after consultation with all affected municipalities, and submit to the Metropolitan Council, and from time to time revise and resubmit to the council, a master plan and annual budget for the acquisition and development of regional recreation open space located within the district or county, consistent with the council’s policy plan.” (i.e., the *2030 Regional Parks Policy Plan*)

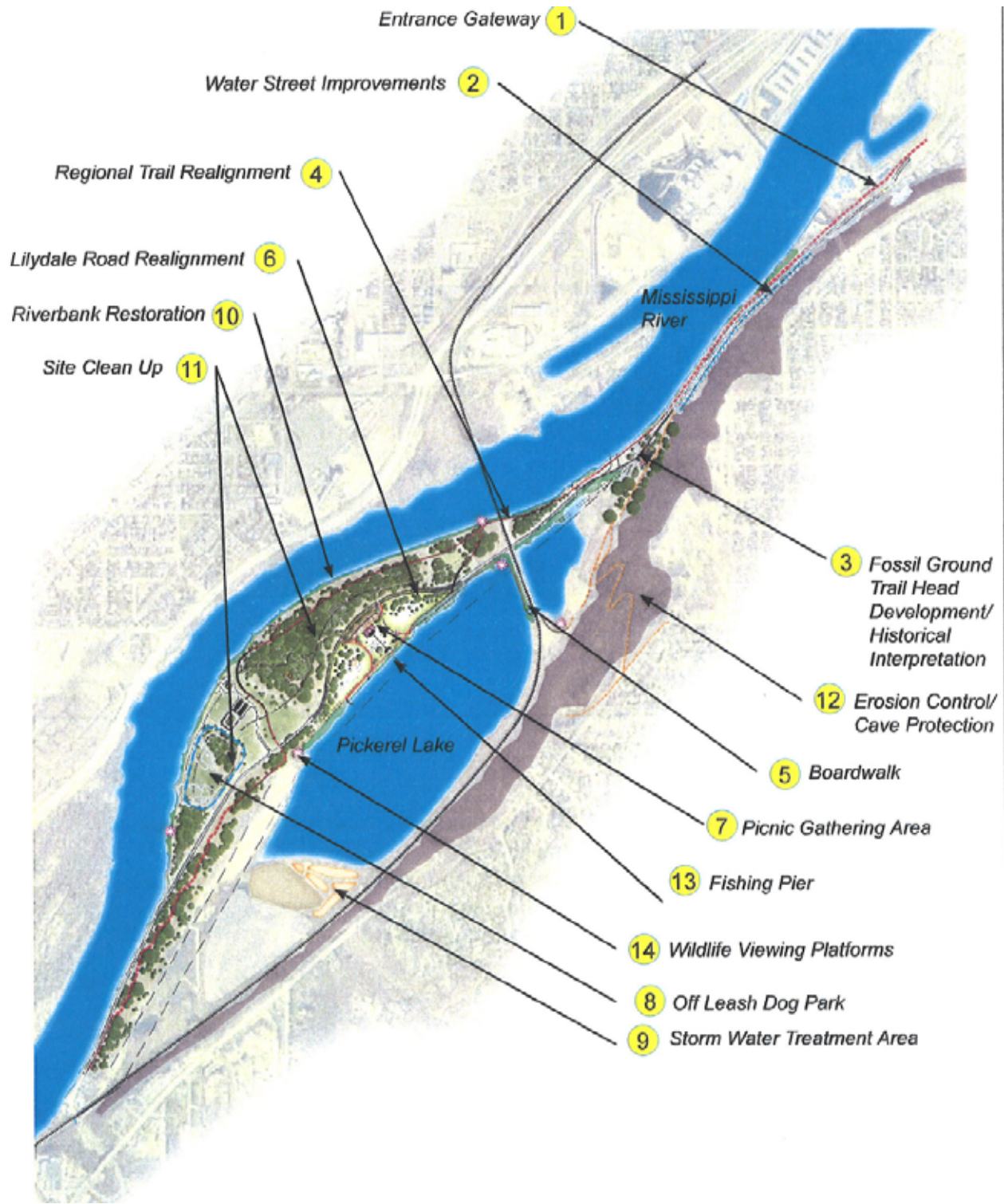
Minnesota Statute 473.313, Subdivision 2 authorizes the Metropolitan Council to review, with the advice of the Metropolitan Parks and Open Space Commission, master plans for the regional park system. Plans are reviewed for their consistency with the *2030 Regional Parks Policy Plan*. If a master plan is not consistent with Council policy, the Council should return the plan to the implementing agency with its comments for revision and resubmittal.

ANALYSIS

1. Boundaries and Acquisition Costs

The Lilydale portion of the park is comprised of 384 acres which includes the 100-acre Pickerel Lake and an additional 100 acres of wetland/marsh. It is bordered by the Mississippi River to the north, Highway 13 on top of river bluffs to the south, the Harriet Island portion of the park to the east and the Lilydale Pool and Yacht Club to the west. No additional land is proposed for acquisition in this portion of the park. A map of the park area showing proposed development in this master plan amendment is shown in **Figure 1: Lilydale portion of Lilydale/Harriet Island Regional Park-Proposed Development**

Figure 1: Lilydale portion of Lilydale/Harriet Island Regional Park –Proposed Development



2. Stewardship Plan

The City of St. Paul owns and maintains Lilydale Regional Park. It is currently partially developed with a bicycle/pedestrian trail running through it. There are no non-recreation uses of the park such as farmland rental. Consequently there is no non-recreation revenue being earned prior to the park being developed.

3. Needs Analysis

The 2008 visit estimate for Lilydale/Harriet Island Regional Park is 1,089,000. A third of those visits were from special events at the Harriet Island portion of the park. A special event is a permitted group or activity which attracts 300 or more visits.

The City of St. Paul conducted a community attitude and interest citizen survey in 2007-08, which indicated that walking and biking trails, picnic opportunities and additional restrooms were 3 of the top 17 improvements requested. These facilities along with the off-leash dog park are proposed in the Lilydale master plan amendment, along with fishing, boating, trail and nature interpretive facilities.

4. Development

The City of St. Paul obtained the land now known as Lilydale Regional Park through a land exchange with Ramsey County after the Village of Lilydale relocated out of the Mississippi River floodway. In addition to numerous homes, there were commercial operations including a brickyard, automobile salvage yard, a marina and a demolition landfill. Consequently, the proposed development in the park consists of phases which require restoration and clean up of parts of the park before developing recreational amenities. Some of the debris will be reused as structural fill for the proposed picnic shelter area to raise it 12 feet above the flood elevation. Native plant material would be installed after site clean up.

The costs of clean up and restoration are as follows:

Marina demolition site restoration (75,000 cubic yards)	\$ 995,000
Lilydale dump site restoration (70,000 cubic yards)	\$ 500,000
Riverbank restoration (2.5 miles)	\$ 2,000,000
Kamish dump site clean up (30,000 cubic yards)	\$ 500,000
Total clean up and restoration costs	\$3,995,000

In addition to the clean up and restoration costs shown above, \$1 million would be needed to install stormwater treatment ponds at the base of Ivy Falls. This would filter stormwater runoff before it entered Pickerel Lake.

Lilydale Regional Park is located in Ramsey and Dakota Counties. The roadway that runs through the park is called "Water Street" in Ramsey County and "Lilydale Road" in Dakota County. The next development phase would consist of diverting water runoff from nearby bluffs into a man-made creek to prevent deterioration of Water Street. Water Street would be realigned further away from the river's edge and an existing trail to eliminate trail and roadway conflicts. The street realignment will provide a direct connection to the entrance of the proposed fossil grounds interpretive area. A new portion of trail would be constructed to replace the current shared trail/traffic use of Water Street. The realigned trail would be closer to the river bank to create viewing/overlook opportunities. The realigned trail would reduce trail/roadway crossings from four to one.

About 2,600 lineal feet of Lilydale Road would be realigned away from Pickerel Lake to provide space for the proposed picnic area, lakeshore trail, some of the wildlife viewing platforms and fishing pier. Concurrently with the road realignments, 7,200 lineal feet of overhead powerlines are proposed to be buried along with sewer/water utilities needed for the picnic area restroom. Lighting as needed for traffic and park safety would be constructed at this time.

Costs associated with the road, trail and utilities described above are:

Design engineering and construction documents for picnic shelter and road realignment	\$ 700,000
Bury overhead power lines (7,200 lineal feet)	\$ 250,000
Road realignment with utilities and lighting, and vegetative median to slow traffic and treat surface runoff from road	\$ 4,000,000
Trail construction	\$ 215,000
Remove guardrail and replace with split rail fencing	\$ 375,000
Total	\$5,540,000

The remaining development proposed for the park is described below:

8.5 acre fenced off-leash dog park adjacent to existing Dept. of Natural Resources boat launch. A portion of the existing parking lot would be reconfigured to provide 24 boat-trailer parking spaces and 50 car spaces for the off leash dog park and trail users.	\$ 120,000
A gateway entrance to Lilydale Park from Harriet Island using local limestone and brick from the former Twin Cities Brick Company.	\$ 201,000
A trail head kiosk with interpretive signage and a map of unique features for the fossil ground area. Also construct a 20 car and 4 bus space parking lot in this location	\$ 450,000
Two picnic shelters that accommodate 6 to 8 picnic tables each plus restrooms, small lakeshore amphitheatre and 65 car parking lot. This is titled the lakeshore gathering area. Install rain garden to treat surface runoff from parking lot. This site is elevated 12 feet above the flood elevation using fill removed from the clean up phase.	\$ 1,750,000
Five wildlife viewing platforms with turf or mulched surfaced connecting trails and interpretive signage.	\$ 250,000
Boardwalk along the northeastern end of Pickerel Lake to link lakeshore gathering area and the fossil ground area. Boardwalk must be tall enough to allow non-motorized watercraft to pass underneath. Boardwalk will also include fishing access and wildlife observation points	\$ 275,000
Three group day camps	\$ 15,000
Fishing pier and canoe launch with 5 car parking lot	\$ 75,000 with \$25,000 available from MN Dept. of Natural Resources
Total	\$3,136,000

The total estimated cost of all phases is \$13.7 million. Metropolitan Council approval of the master plan does not obligate future funding from the Regional Parks Capital Improvement Program (CIP) to finance those costs. Plan approval only allows the City to seek funding for projects in the plan through the Regional Parks CIP.

A map illustrating the locations and design of the park is shown in **Figure 1** on page 2. In addition to that Figure, **Figure 2** illustrates the “Entrance Gateway”, and **Figure 3** illustrates the “Proposed Fossil Ground Trail Head and Water Street Improvements”.

Figure 2: Entrance Gateway drawings

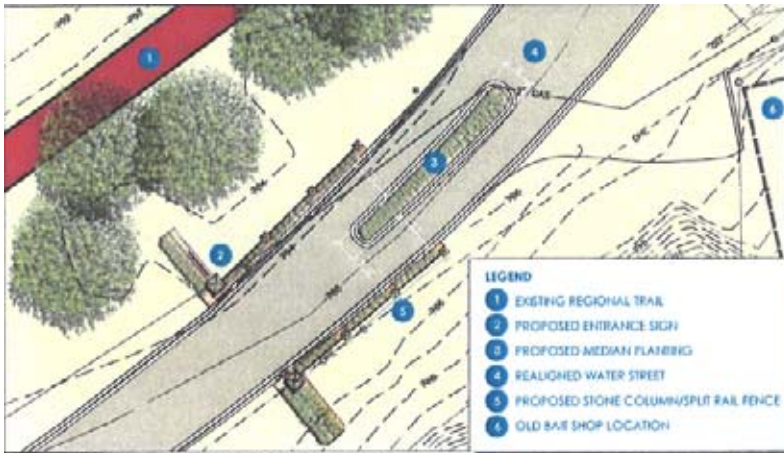


Figure C: Plan View of Entrance Gateway

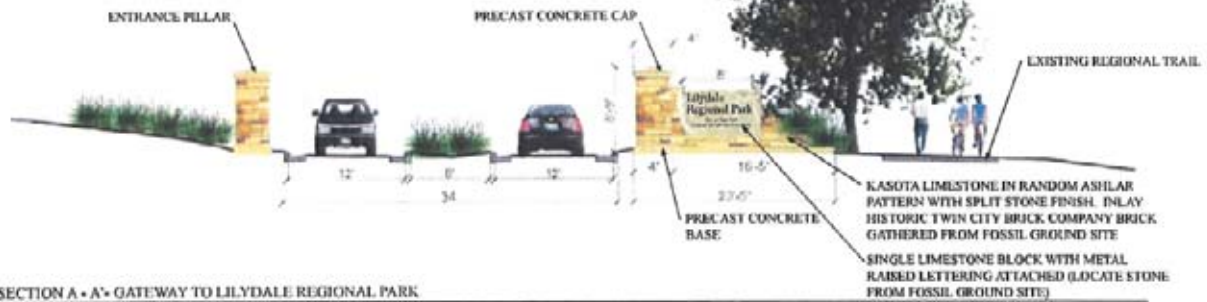


Figure D: Section of Entrance Gateway

Figure 3: Proposed Fossil Ground Trail Head and Water Street Improvements



Figure 4 illustrates the “Proposed Lakeshore Gathering Area” with the realigned Lilydale Road.



5. Conflicts

The only conflict listed in the plan is the resolution of turning back ownership/management of Water Street/Lilydale Road from Ramsey and Dakota Counties to the City of St. Paul. The premise for the turn back is to allow the City to control the speed limit and implement traffic calming measures in the park. A discussion between these entities is currently underway to resolve this issue.

6. Public Services

There are no public utilities within Lilydale Regional Park. The development section of the master plan proposed installation of water, sanitary sewer and electrical service for the picnic area restrooms and drinking fountains. That would be done in correlation with the realignment of Water Street/Lilydale Road by extending these utilities from Harriet Island.

The City of St. Paul would continue to provide police and fire protection services to the park. No public transit is proposed beyond what currently exists in this area.

7. Operations and Maintenance

The estimated annual costs to operate and maintain Lilydale Regional Park is \$51,176 based on an itemized list of activities in the master plan amendment. This includes maintenance of park amenities plus natural resource management activities.

8. Citizen Participation

A Design Advisory Task Force comprised of citizens and public agency staff provided input to the City in preparing this plan amendment. A public forum on the proposed off-leash dog park and a community open house sponsored by the West Side Citizens Organization was held to provide additional opportunities for citizen participation. Comments were also received via an internet web survey with 340 responses.

The plan amendment was approved under the following schedule:

Design Advisory Task Force	July 1, 2009
St. Paul Parks and Recreation Commission	July 15, 2009
Lilydale City Council	August 10, 2009
St. Paul City Council	October 21, 2009

9. Public Awareness

The “Friends of Lilydale” in association with the West Side Citizens Organization conduct an extensive outreach and public awareness of the park through volunteer programs. Friends of Lilydale offer guided fossil digging tours, and guided birding and hiking trips throughout the park. Lilydale is also part of the Mississippi National River and Recreation Area and subsequently has been the site of periodic river tours by National Park Service rangers.

10. Special Needs

Access to and within the park and associated trails will be designed in accordance with the Americans with Disabilities Act. There are no charges to use the trails and facilities proposed in the plan beyond what is currently required—such as a permit for fossil digging.

11. Natural Resources

Lilydale Regional Park is located in the Mississippi River floodplain. The majority of the park consists of floodplain forest of moderate quality comprised of large cottonwood trees with a sub canopy of elm, green ash, black walnut and black willow. There are also nonnative Siberian and Black Locust trees. The shrub layer of the forest includes sandbar willow, red raspberry, black raspberry, false indigo and non natives' Tatarian honeysuckle and European buckthorn.

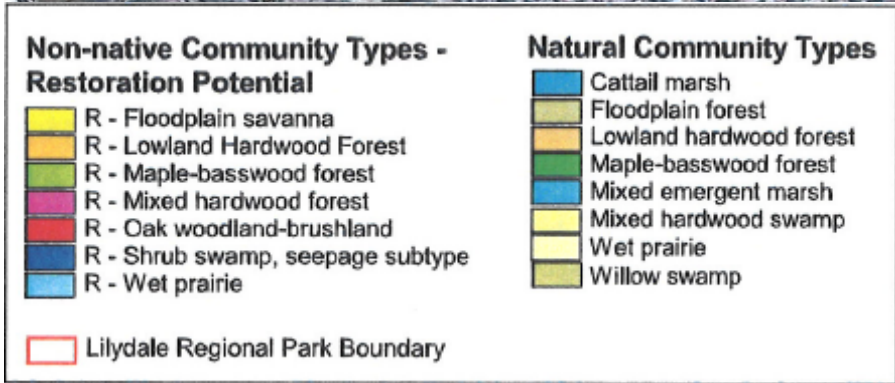
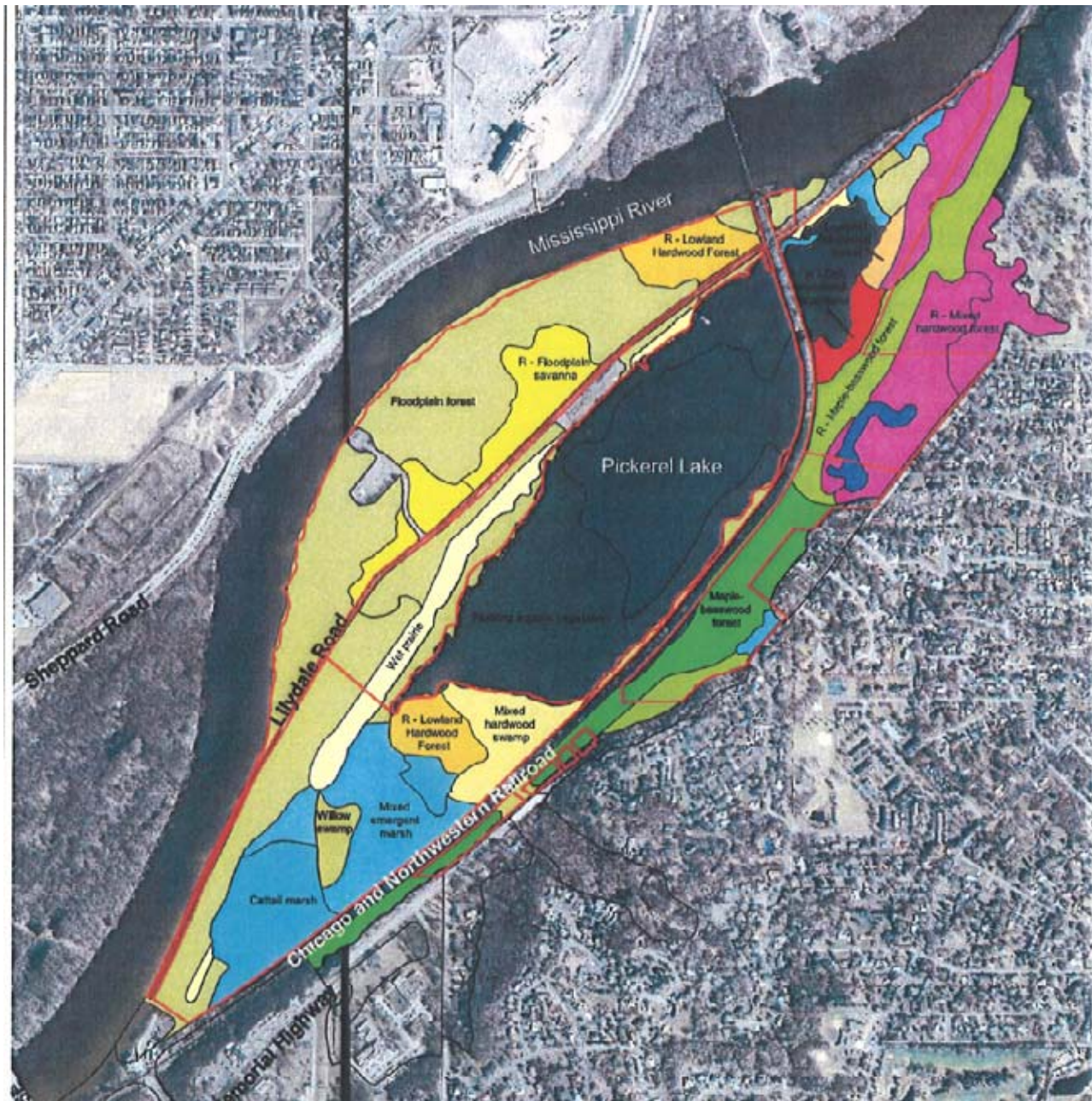
The emergent marsh plant community occurs on a fringe long Pickerel Lake. The quality of the marsh is variable.

Other plant communities in the park include: Maple-Basswood forest, mixed emergent marsh, cattail marsh, wet prairie, willow swamp and mixed hardwood swamp.

There has been disturbance of these plant communities from previous use as the former site of the village of Lilydale, plus mining activities. The management goals for all cover types and management areas include:

- Maintain and improve native plant communities
- Manage semi-natural cover types towards the dominance of native plant species
- Avoid or minimize impacts to existing natural areas during park development
- Plan for infrastructure that enables cost effective natural area management where trails can serve as firebreaks and/or access points for on-the-ground management
- Provide recreational and educational opportunities compatible with sustaining natural community function and integrity
- Carry out surface water and infrastructure planning both within the park and outside the park by engaging appropriate stakeholders to reduce erosion issues and for improved water quality.

Figure 5 illustrates the plant communities in the park and the targeted areas for restoration of non-native plant communities to native plant communities.



REVIEW BY OTHER COUNCIL DIVISIONS:

Environmental Services – (Kyle Colvin)

The proposed improvements will have no negative impact on the regional wastewater treatment system. The Metropolitan Council has no wastewater conveyance or treatment facilities in the vicinity of Lilydale Regional Park. The regional wastewater treatment system has adequate capacity to serve the proposed development in the park. Further review can be waived.

Environmental Services – (Jim Larsen)

In response to comments from Mr. Larsen (in Times New Roman Font) the City of St. Paul staff has revised portions of the plan shown in Arial font and italicized *Tahoma font*.

9--Storm water Treatment Area -

It's unclear from the text on page 9 or *Figure K - Existing Pickerel Lake Watershed Area* map on page 13 if the proposed stormwater (wetland) treatment area proposed at the base of Ivy Falls will reroute and accept all or only some of the current stormwater outfalls into Pickerel Lake or through the Park directly to the Mississippi River. It would be helpful to include in the Amendment, and therefore the Master Plan, a detailed map of existing stormwater outfalls that flow into or through the Regional Park, and clearly indicate which outfalls will be eliminated by the proposed treatment system.

Additionally, the text should be changed to identify the primary receiving basins in the proposed treatment system as stormwater treatment basins, and not wetlands. Secondary treatment basins may be identified as wetlands, if the primary basin(s) provide a sufficient level of treatment and both basins meet acceptable design criteria. Stormwater treatment basins and constructed wetlands perform different functions, and they both have distinct required design parameters.

Response

The text under 9 - Storm water Treatment Area on page 7 was revised to clarify the treatment area proposed. It now reads as:

Ninety percent (90%) of storm water enters Pickerel Lake from the surrounding neighborhoods via Ivy Falls. The storm water deposits phosphorus and other nutrients that threaten the water quality of Pickerel Lake. The storm water treatment area includes the re-alignment of Ivy Falls Creek channel creating a re-aligned stream channel that discharges directly into the storm water treatment basins created within the existing wetland area south of Pickerel Lake.

On page 15, under Water Resources, the opening paragraph was revised to read:

Water Resources

Ivy Falls Creek, as shown in blue on Figure K, provides 90% of the watershed input into Pickerel Lake from the surrounding neighborhoods of Mendota Heights, West Saint Paul, Saint Paul and Lilydale. The proposed Storm Water Treatment Basin will be located at the base of Ivy Falls to treat the high amount of sediment and pollutant loads entering Pickerel Lake.

12 – Erosion Control/Cave Protection

The document does not contain a specific cost estimate in the *Figure H Site Improvement Phasing Plan* on page 10 for this Plan component. Staff presumes that the \$15,000. cost figure listed in the text would fund preparation of the inventory, and that the actual cost of provision of stabilization measures would be much more. It would be helpful if the text indicated how much of this item was included in the Riverbank Restoration component. Additionally the final Plan should include a map identifying the location within the Park of significant existing erosion problems requiring stabilization measures at the present time.

Response

The City does not have a cost estimate for all erosion control/cave protection measures needed with Lilydale Regional Park. Without first having a preliminary inventory and evaluation, we are unable to develop a cost estimate as the cost of appropriate erosion measures will vary greatly depending on the extent of bio-engineering and/or piping required. The preliminary inventory will locate the areas of severe erosion and is estimated to be \$15,000.

Figure H Site Improvements Phasing Plan was revised to indicate the inventory and evaluation cost as a separate column and added a note indicating that additional costs will be associated with implementation of erosion control measures.

Metropolitan Council Transportation (Ann Braden) – No impacts.

CONCLUSIONS:

1. The amendment to Lilydale/Harriet Island Regional Park master plan regarding development at Lilydale portion of park, City of St. Paul (Referral Number 50001-1)
2. The estimated development costs to implement the master plan are \$13.7 million. Metropolitan Council approval of the master plan does not obligate future funding from the Regional Parks Capital Improvement Program (CIP) to finance those costs. Plan approval only allows the City to seek funding for projects in the plan through the Regional Parks CIP.

RECOMMENDATION:

That the Metropolitan Council approve the amendment to Lilydale/Harriet Island Regional Park master plan regarding development at Lilydale portion of park, City of St. Paul (Referral Number 50001-1).