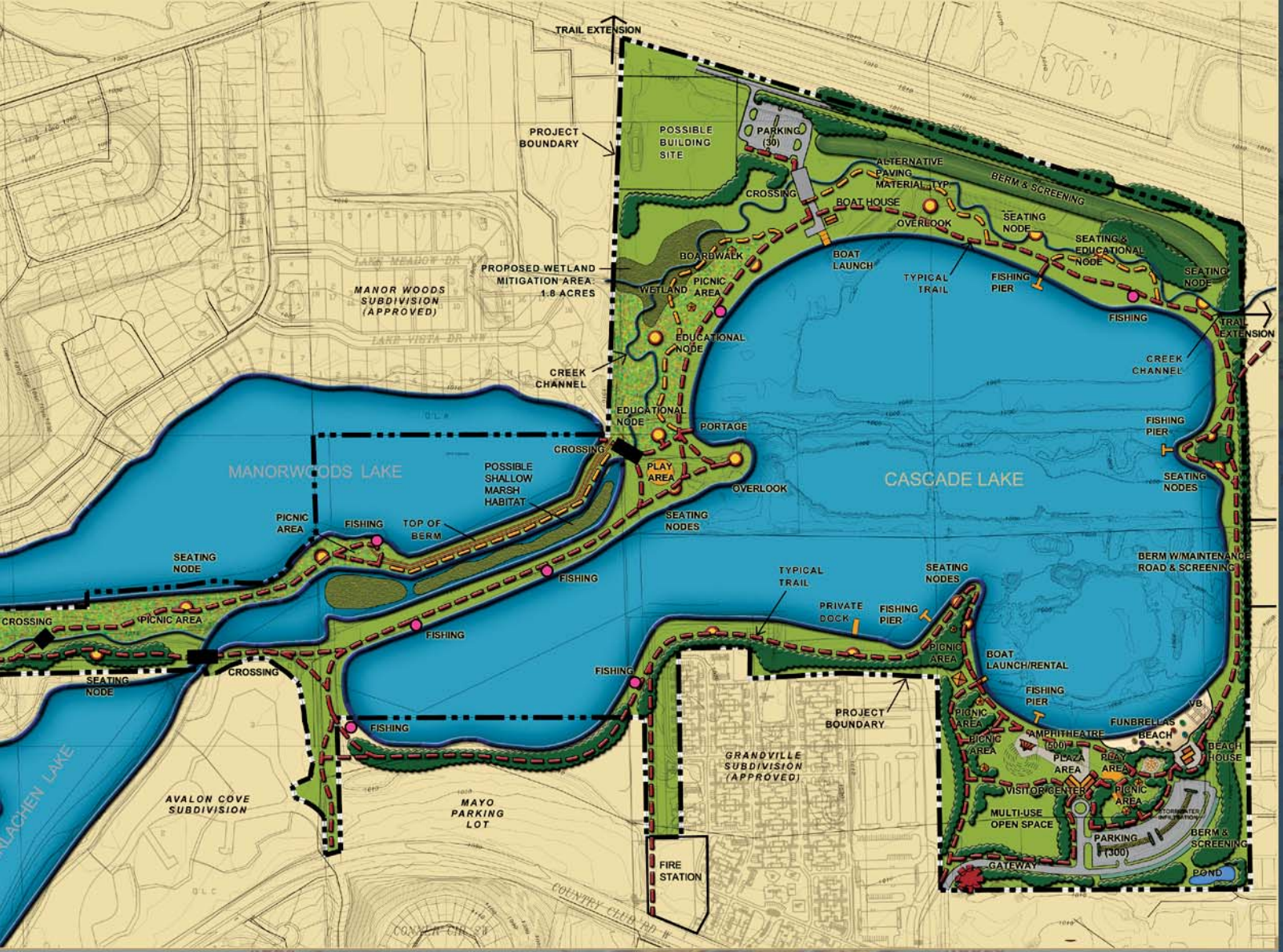

Park & Recreation
Rochester, MN

PARK MASTER PLAN
EXECUTIVE SUMMARY

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CASCADE LAKE

INTRODUCTION

The City of Rochester has developed a Master Plan to establish the framework by which the gravel mining areas along Cascade Creek can be transformed into Cascade Lake Park, expected to be a premier multi-use park. It portrays a vision for the future that builds on the area's water and natural resource features, its history as a mining site, and the network for movement to and from the future Park. This Executive summary provides a brief overview of the Master Plan, which should be consulted in its entirety for details.

The future Cascade Lake will be at the heart of recreational activities including hiking, picnicking, boating, fishing, and swimming. A re-directed and restored Cascade Creek will meander around Cascade Lake until it connects with the existing Creek channel northeast of the Park. This restored channel will help protect Cascade Lake from the high nutrient and sediment loads from upstream sources for most runoff events and will reduce high water / flooding problems in Manorwoods Lake and Interlachen Lake. Isolating Cascade Creek from Cascade Lake supports the vision for a lake with the best possible water quality to support a greater diversity of passive and active recreational and educational activities while simultaneously increasing flood protection in the community.

THE PROCESS

Over the past 10 years the City acquired the land needed to develop Cascade Lake Park. In 2003, the Mayor and City Council appointed two key advisory bodies to guide development of the Master Plan for the Cascade Lake recreational area. The first was the Citizen Advisory Group (CAG), comprised of 18 members representing diverse groups having a vested interest in the Park. The second was the Technical Advisory Committee (TAC), comprised of 8 staff representatives from various City, County and State agencies. Additionally, a Park Focus Group was formed with a diverse cross section of park users, city staff, and advisory group members to provide more detailed information on the actual park uses and amenities.

Between May 2003 and November 2004, 14 meetings were held with these advisory groups to help guide the development of the Master Plan, especially evaluating and selecting the Cascade Creek alignment alternatives and recommending the park features and layout. In addition to the work with the various advisory bodies, a public information meeting was held in June 2004 to collect comments from the community at large. Presentations were also made to the City Council, the Rochester Park and Recreation Board, the Rochester Planning and Zoning Commission, and the Committee on Urban Design and Environment (CUDE). The Master Plan document reflects the input received from the entire public process.

CAG members reviewing a draft version of the Master Plan.

THE MASTER PLAN

The Master Plan is the culmination of the public planning process. It is comprised of the Master Plan and its' supporting technical appendices. In its' entirety, the Master Plan details the Park vision, the planning process, and the considerations used to design the lake and park layout and select the park features, amenities, and recreational opportunities. A plan and schedule to implement the Master Plan is also included.

Numerous technical studies were completed to evaluate park needs and direct park functions. The results of each of these efforts are contained in the Technical Appendices. This information substantiates the decisions regarding the overall layout and features of Cascade Lake Park and the phased implementation plan and schedule. The studies include:

- Hydraulic and hydrologic modeling to determine storm event protection levels and flood storage capacity,
- Analysis of existing surface water quality and modeling of future lake water quality,
- Hydrogeologic assessment of surface water/ groundwater interactions and evaluation of groundwater movement,
- Evaluation of conceptual alternatives for the creek and lake configuration,
- Wind analysis to determine lake configuration ,
- Assessment of mineable deposits to determine lake depth and preparation of a mining and reclamation plan,
- Landscape analyses to develop a park layout plan and establish shoreline profiles needed to support safety, stability, recreational and aquatic habitat needs,
- Delineation of wetland areas to identify replacement needs and creation opportunities, and
- Completion of an Environmental Assessment Worksheet to describe environmental impacts that could potentially result from the project.

THE LAKE PLANNING CONSIDERATIONS

The size and depth of the lake, its water quality and flood protection levels, and the shoreline profiles were key elements that guided the lake configuration and layout of the associated parkland. The technical studies noted above provided the basis for the ultimate decisions. However, the primary driving factor for the project was future lake water quality. The identified solution for providing the best possible water quality in Cascade Lake was to minimize the input of poor quality surface water and let good quality groundwater be the main source of water to the Lake. The Park planning teams selected a lake and creek configuration that routes Cascade Creek around Cascade Lake, thereby excluding water loaded with unwanted nutrients and sediment from upstream agricultural land from the Lake, except during large storm events.

This decision results in a restored, ecologically-healthy creek channel, an enlarged floodplain for Cascade Creek to increase flood storage capacity, a peninsula extension

in Manorwoods Lake to improve its water quality, and a 90-100 acre Cascade Lake. The Lake is expected to have a mean depth of 15-18 feet and maximum depths of up to 40 feet, which will support aquatic habitat conducive to a warm-water fishery. The deepest area of the Lake will be in its southeast corner. The Lake will have at least 2 miles of shoreline, with over 85% in a natural condition to provide stability as well as fish and wildlife habitat.

Lake fed mostly by groundwater (July 2003)

Lake fed mostly by Cascade Creek (July 2003)

THE PARK PLANNING CONSIDERATIONS

Approximately 130 acres of upland comprise the Park area that will surround Cascade Lake, providing for a wide variety of passive and active recreational uses. Cascade Lake Park will be a large recreational area for the local neighborhoods west of downtown Rochester as well as a destination for the entire community. This Park will provide recreational uses not found in this sector of the City while also creating recreational and educational opportunities that are unsupported elsewhere in the City's park system or for which other parks are over-extended. In particular, this Park will extend the City's flood control project trail system, ultimately linking the Park to other recreational corridors and parks throughout the entire city.

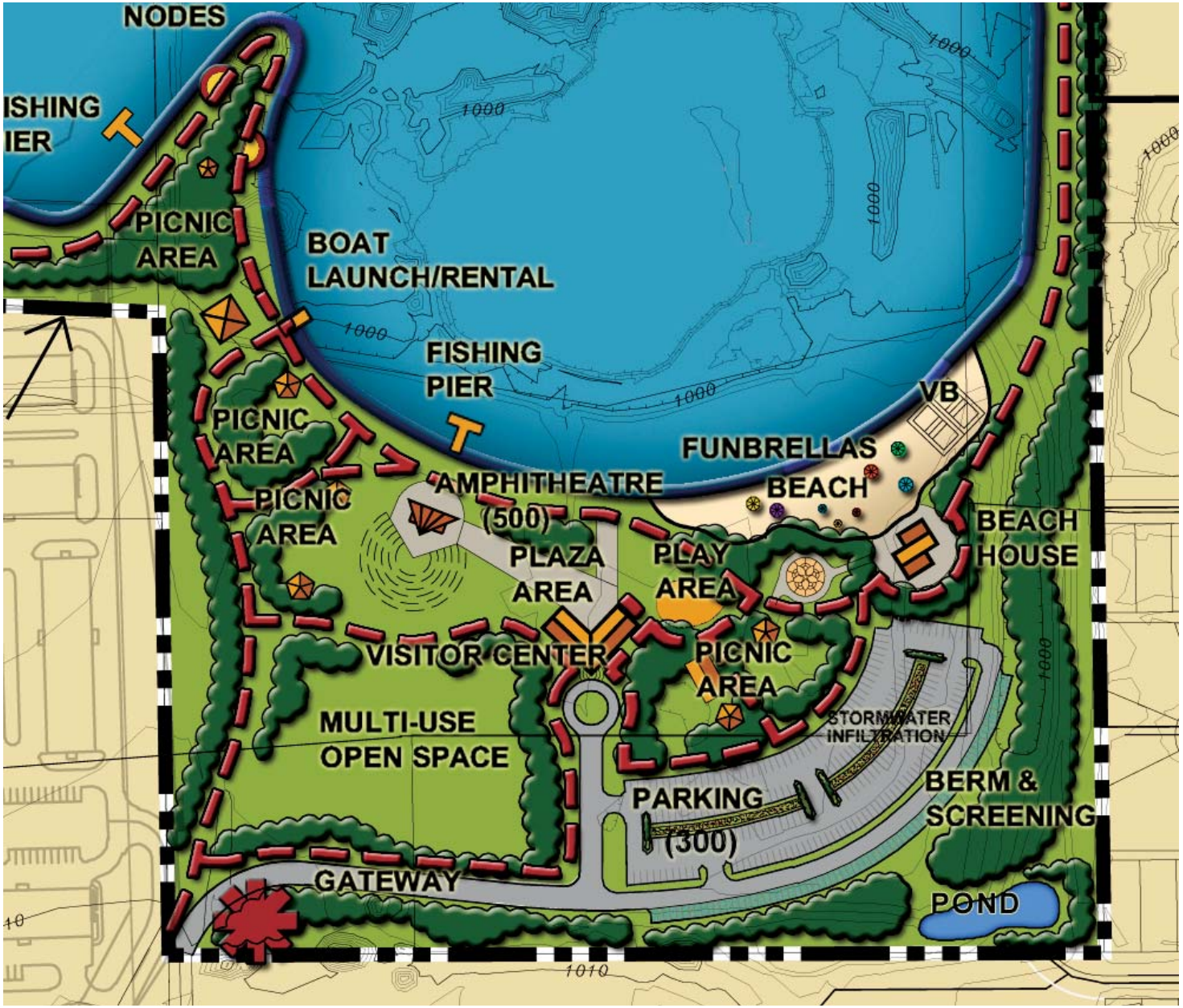
The advisory groups identified passive and active park features and uses to make a great park. The prioritized list of desired Park amenities they selected includes:

- Trails
- Boating (non-gasoline powered boating only)
- Fishing and aquatic habitat
- Shelters and picnic areas
- Educational features
- Wildlife habitat
- Swimming Beach
- Playgrounds
- Visitor center, amphitheater, and multi-use open space
- Gardens

The infrastructure necessary to support these functions will also be required. The relative locations of these amenities and their associated features (e.g., parking lots, boat launches, boat rental/storage facilities, educational kiosks, beach house, and fishing piers) are shown in Figure ES1. An enlargement of the predominately active use area in the southeastern corner of the Park is shown in Figure ES2.

FIGURE ES1


TRAIL EXTENSION
PROJECT BOUNDARY
POSSIBLE BUILDING SITE
PARKING (30)
ALTERNATIVE PAVING MATERIAL, TYP.
BERM & SCREENING
CROSSING
BOAT HOUSE
OVERLOOK
SEATING NODE
SEATING & EDUCATIONAL NODE
BOARDWALK
BOAT LAUNCH
TYPICAL TRAIL
FISHING PIER
SEATING NODE
PROPOSED WETLAND MITIGATION AREA: 1.8 ACRES
WETLAND
PICNIC AREA
MANOR WOODS SUBDIVISION (APPROVED)
LAKE MEADOW DR NW
LAKE VISTA DR NW
EDUCATIONAL NODE
FISHING
TRAIL EXTENSION
CREEK CHANNEL
CREEK CHANNEL
EDUCATIONAL NODE
PORTAGE
FISHING PIER
CROSSING
PLAY AREA
MANORWOODS LAKE
POSSIBLE SHALLOW MARSH HABITAT
OVERLOOK
CASCADE LAKE
SEATING NODES
PICNIC AREA
FISHING
TOP OF BERM
SEATING NODES
SEATING NODE
FISHING
TYPICAL TRAIL
SEATING NODES
BERM W/MAINTENANCE ROAD & SCREENING
PRIVATE DOCK
FISHING PIER
CROSSING
PICNIC AREA
FISHING
PICNIC AREA
BOAT LAUNCH/RENTAL
CROSSING
FISHING
FISHING PIER
SEATING NODE
FISHING
PROJECT BOUNDARY
PICNIC AREA
VB
FUNBRELLAS
BEACH
AMPHITHEATRE (500)
PICNIC AREA
PLAZA AREA
PLAY AREA
BEACH HOUSE
TRAIL EXTENSION
INTERLACHEN LAKE
AVALON COVE SUBDIVISION
MAYO PARKING LOT
GRANDVILLE SUBDIVISION (APPROVED)
VISITOR CENTER
PICNIC AREA
MULTI-USE OPEN SPACE
STORMWATER INFILTRATION
PARKING (300)
BERM & SCREENING
GATEWAY
POND
FIRE STATION
COUNTRY CLUB RD W
CASCADE LAKE
ROCHESTER
MINNESOTA
Bonestroo Rosene Anderlik & Associates
Engineers & Architects
MASTER PLAN CONCEPT


NODES
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PICNIC AREA
BOAT LAUNCH/RENTAL
FISHING PIER
PICNIC AREA
PICNIC AREA
AMPHITHEATRE (500)
PLAZA AREA
PLAY AREA
VB
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BEACH
BEACH HOUSE
VISITOR CENTER
PICNIC AREA
MULTI-USE OPEN SPACE
STORMWATER INFILTRATION
PARKING (300)
BERM & SCREENING
GATEWAY
POND
1000
1010

IMPLEMENTATION

As Cascade Lake Park develops over the next several years, active mining and subsequent reclamation will help form the lake shape and depth, shorelines, and major park landforms. The highest, near-term priority is to construct the new Cascade Creek channel and floodplain that will direct creek flows around the future Cascade Lake. The new channel needs at least one growing season to establish vegetation before it can carry water. In conjunction with construction of the creek channel, a berm will be built to visually screen Highway 14 from the Park and to reduce traffic noise.

Another early priority is to extend the peninsula that will separate Manorwoods Lake from Cascade Creek. Construction timing for this feature will depend on available funding and regulatory agency approval.

It is important to note that as these areas are shaped and graded to produce the major features of the park, the land will be shaped to accommodate other park features as well. This includes grading the pads for trails, bridges, observation areas, picnic areas, and parking lots. The actual finished features will be installed as resources are available, but establishing the appropriate vegetative ground cover and putting in the trails and the parking areas will receive priority. The construction of other park features will depend on when funding becomes available.

In summary, the City has a unique opportunity to convert industrial wasteland into a park. Cascade Lake Park will improve the natural condition of the area and provide improved flood protection, educational opportunities, and a diverse array of passive and active recreational uses that will make it the centerpiece of the City's park system.

TIMETABLE	
Milestone	Estimated Completion Date
Park Master Plan Adopted by Rochester City Council	January 2005
Construction Completed on Restored Cascade Creek Channel, North Shoreline of Cascade Lake	June 2005
Construction Completed on Peninsula Extension to Protect Manorwoods Lake	2006
Construction Completed to Re-Shape South Shoreline of Mayo Basin	2006
Mining Activity Completed in Project Area	2007-2008
Trails and Parking Lot Installation Completed	2008-2009
Other Park Features	To be determined