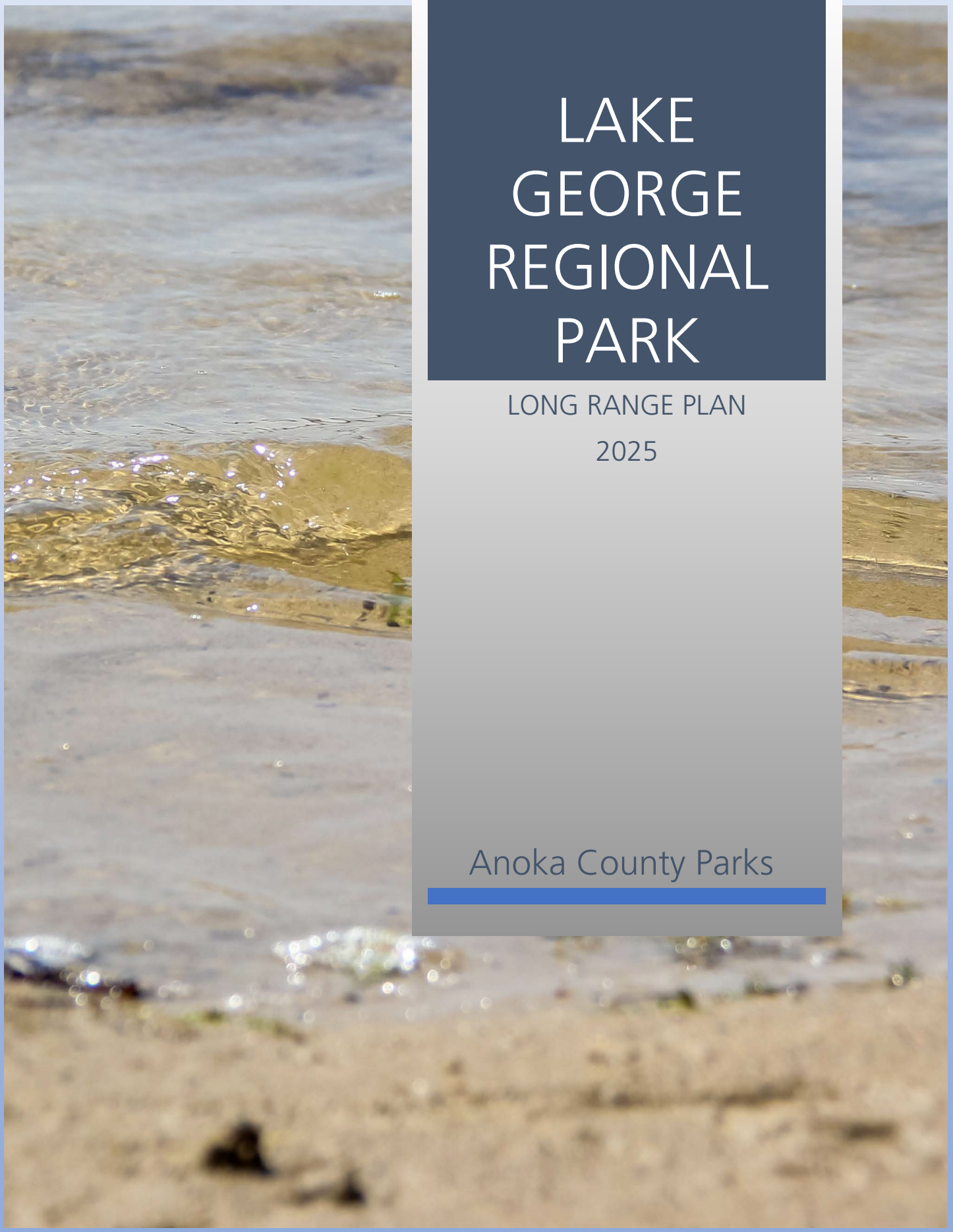


LAKE GEORGE REGIONAL PARK

LONG RANGE PLAN

2025

Anoka County Parks

Introduction

Lake George Regional Park is in the northwest corner of Anoka County in the City of Oak Grove. The park contains 260 acres of uplands and wetlands on Lake George, a 488-acre lake, known for its largemouth bass fishing. The lake is rather shallow along the shoreline with a 32-foot depth near the center of the lake. The water is clear despite the heavy use and surrounding single family residential housing. The park provides access to Lake George, a swimming beach, a boat launch, picnic pavilions, a playground, restrooms, trails, and a day camp facility.

Kids enjoying the water

Lake George Regional Park
Existing Park Context

Brief History

Lake George was formed thousands of years ago following the retreat of the Laurentide Glacier Ice Sheet and drainage from the melt waters. According to the Lake George Conservation Club, Lake George was formed some 20,000 years ago as a block of ice broke off from a receding glacier. That ice melted and formed what we know as Lake George. Today, Lake George is a beautiful recreational lake surrounded by residential areas and natural landscapes. Its geological history, shaped by ancient rocks, glacial activity, and post-glacial processes, contributes to the scenic beauty of the region and the lake itself.

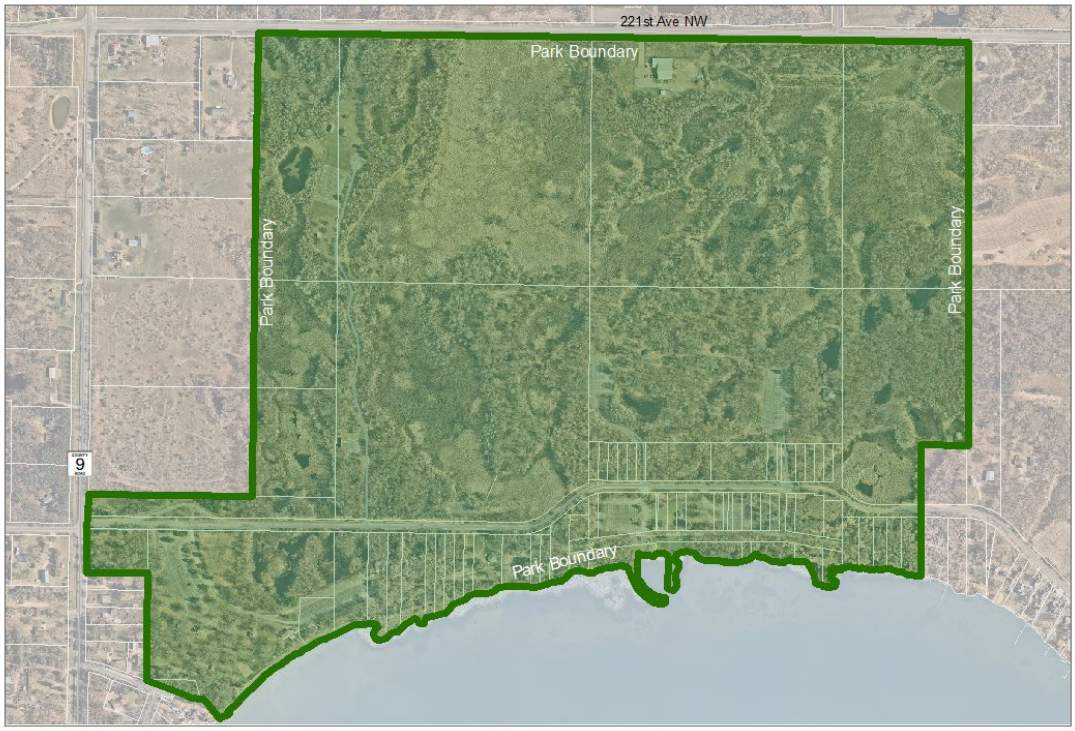
The area has a rich Native American history with the Ojibwe migrating into central and northern Minnesota late in the 17th century. It is believed that the Ojibwe made camp on the south shores of Lake George taking advantage of the wild rice and game birds. There are several burial mounds locate around the lake and in the general area, so visitors should be aware these are sacred ancestral sites and should be shown respect as they would for their own ancestor's graves.

As European settlement expanded, white settlers began acquiring land around the lake. Lake George became a popular hunting and fishing location and as transportation advanced, more and more people came to the lake for the resorts.

Today, Lake George is a popular recreation lake for residents of the surrounding area and visitors.

Park Boundary

Lake George Regional Park is 260 acres of beachfront, uplands, and wetlands. The park is bounded by 221st Avenue to the north and the highly popular Lake George to the south. There are no parcels proposed for acquisition with this plan and therefore no acquisition costs proposed.



Stewardship Plan

Lake George Regional Park is a highly used regional facility in Anoka County and as such, the County will continue to manage it as regional recreational park land. With 260 acres, the park provides numerous outdoor activities and amenities for visitors. Visitors can utilize picnicking facilities to gather with family and friends, use the trails for exercise or enjoyment of nature, allow children to release some energy at playground, enjoy the sun and water at the beach, launch a boat for fishing and other water recreation, or just relax and enjoy the scenery. In the winter months, visitors can use the plowed and multi-use trails within the park or go off trail with their snowshoes. The boat launch also allows access for winter ice fishing.

Expenses generated from the park are related to the maintenance and operations of the park and amenities. Park expenses are partially offset through revenues generated through daily and annual vehicle passes, rental fees and special use permit fees in the parks general operating budget. The remaining funds used to offset operations and maintenance are provided by the Metropolitan Council's O&M grant program, the Lottery in Lieu of program and the local tax levy.

There are no non-recreational services within the park boundary.

Anoka County believes the stewardship plan for the park to be sustainable with assistance from the Metropolitan Council as outlined above.

Demand Forecast

According to the Metropolitan Council's 2023 update to the Regional Forecast estimates, the Twin Cities metropolitan area will become more racially and ethnically diverse over the next 30 years and that by 2050 the region's population of color will be about 45% of the total population. In addition, of the estimated 3.8 million people in 2050, 22% will be age 65 or older.[1] These shifting demographics require changes to the way the County operates and manages the park system and its amenities.

The Met Council's 2023 visitor count data shows that Lake George has had more than 300,000 people visit the park consistently for the last 5 years. Population growth in the County and the region is expected to increase demand as well, with a forecasted population in the County to increase from 363,887 in 2020 (actual) to 437,768 in 2050[2]. By 2050, 45 percent of the population are anticipated to be Black, Indigenous, People of Color (BIPOC) as compared to 29 percent in 2020[3]. The demand will increase as

[1] The-Regional-Forecast-Update-2023.aspx (metrocouncil.org). Accessed Nov 02, 2024

[2] Metropolitan Council – Proposed Local Forecasts V2.0 (08/12/2024)

[3] Metropolitan Council Regional Forecast – Population and Employment growth to 2050, April 5, 2023

the share of the BIPOC community increases among younger age groups as well, with 53 percent of regional residents younger than age 18 anticipated to be BIPOC in 2040[4], making it more important than ever to connect youth to the outdoors to increase equitable access and provide for the future stewardship of the parks and trail systems. The Met Council's Parks Equity Tool shows that the population immediately around and adjacent to the park under the age of 15 is between 17 and 24%. That is a significant number of future stewards for the park.

According to the Metropolitan Council's, 2016 Regional Parks System Visitor Study Report, BIPOC populations are significantly more likely to participate in fishing, special events and picnicking activities than Caucasians. Enhancements or improvements to those facilities already existing in the park would likely increase demand and therefore use. In addition, the Metropolitan Council's 2014 Regional Park Use Among Select Communities of Color Report, showed that Asian Immigrant/Asian American focus groups identified their top three preferred activities as walking, fishing and rest or relaxation; African Immigrant groups were playground use, walking and being with family; African American groups were barbecuing, biking and basketball; Hispanic/Latinx groups were picnicking, celebration events and being with family. Lake George offers almost all those types of activities and amenities and as those population groups grow, demand will increase with it.

In addition, according to the Met Council's 2021 Visitor Study, the top activities for all demographic groups were hiking and/or walking. The second and third top activities include relaxing or doing nothing, biking, dog walking, family and/or friend meet ups and observing nature. Lake George offers all those types of activities and amenities and as the population and diversity grow, recreational demand will increase as well.

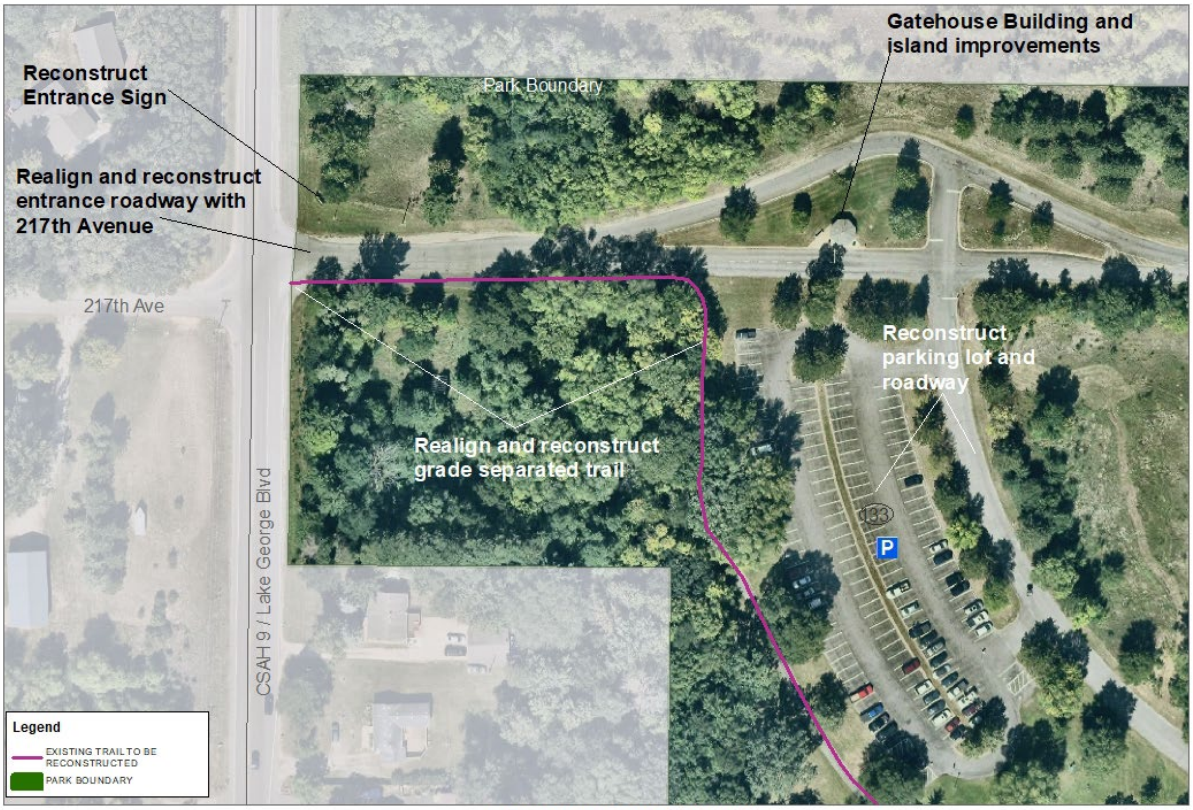
[4] *Adventure Close to Home* - Youth in Parks Report 2021, Metropolitan Council

Development Concept

The overall development concept for the Lake George long-range plan is intended to improve and redevelop park facilities for a better user experience. The park has not had major improvements in a while and this plan proposes to update all facilities and provide new facilities, amenities, and programs. The development concept is following and is outlined by general park area.

Park Entrance

At the park entrance, the proposed improvements include realigning the entrance road with 217th Avenue for safety as recommended by the County's Transportation Division and separating and realigning the trail to be off-road. The current trail runs along the road entrance separated from vehicle traffic by only road striping. Additional improvements for the entrance include a new digital entrance sign, improved lighting, gatehouse building improvements and the addition of irrigation to the gatehouse island. In addition, the existing roadways and parking lot will be reconstructed and reconfigured to increase parking efficiencies and reduce the amount of impervious surfacing where possible. The number of parking stalls will remain approximately the same around 133. These improvements are anticipated to occur within the next 10 years, depending on funding availability.



Lake George Regional Park
Entrance Road Development Concept

Beach Area

The beach area is the highest use area of the park and as such will see a substantial amount of improvement. Due to the high traffic volumes at the beach, the County is proposing to reduce the amount of parking stalls available to limit the number of users at the beach. This is proposed in part for safety to reduce unruly behavior that happens with large numbers of users in a relatively small area and to reduce overcrowding to improve user experience.

Other improvements to the beach area include removing two old metal picnic shelters and replacing it with one larger 100–150-person capacity shelter. Since shade is a hot commodity at the beach, the County proposes to add a few hammock-stands in shady areas that will allow people to bring their own hammocks and enjoy the out of doors. ADA improvements for water access is proposed using a beach mat down to the water and a docking facility with an accessible canoe/kayak launch that will provide space for boats to dock and access the beach and allow easy access to the water by non-motorized boats. In addition, a self-serve rental station for canoes, kayaks and stand-up paddleboards is proposed to increase access for those without this type of equipment. These improvements are proposed to occur in 5-10 years.

In addition, the existing facilities, such as the restroom building, picnic pavilions and beach area will need some sort of rehabilitation within the next 10-20 years. It is anticipated that the playground will need to be reconstructed around 2034, depending on parts availability. When reconstructed the County is proposing to change the surfacing to be a poured in place soft rubberized surfacing for ease of access.

Lake George Regional Park
Beach Development Concept

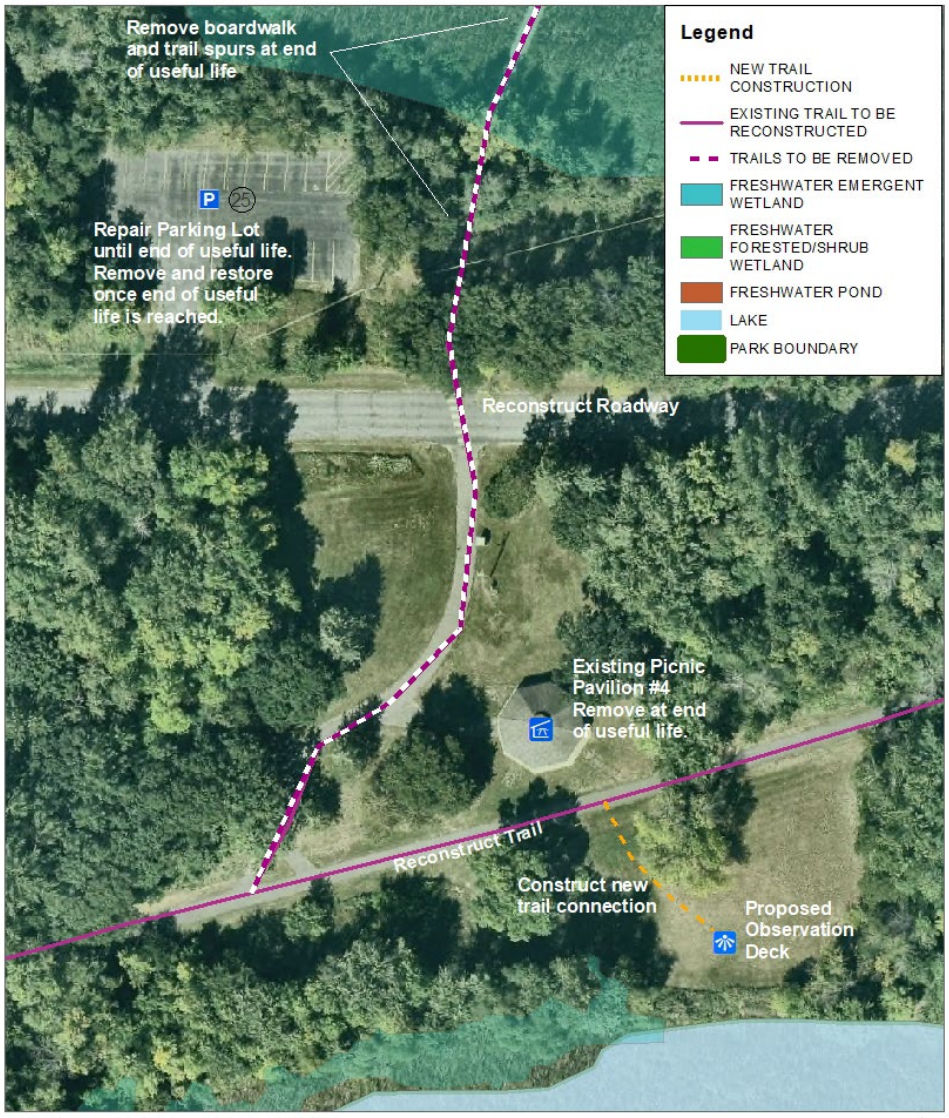
0 75 150 300 Feet

N

Date: 11/18/2024

Pavilion 4 Area

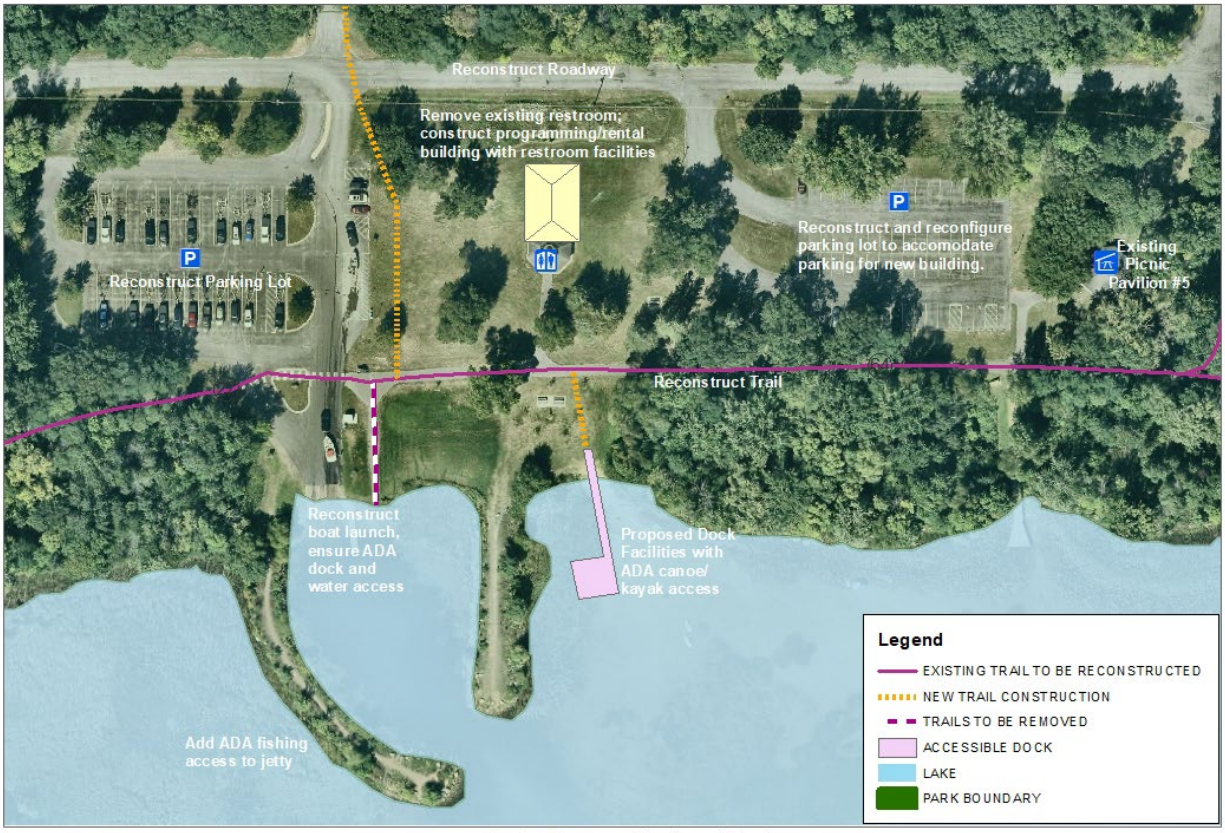
The facilities in and around Pavilion #4 (50-person capacity) will eventually be removed at the end of its useful life. Rental of the existing pavilion is minimal as there are no restroom facilities nearby and parking is located on the other side of the road. Removal would include the pavilion, the small parking lot and the north/south trail and boardwalk connection. Upon removal, the County proposes to restore this area to a more natural state. But, while the existing facilities are proposed to be removed, the County is proposing to construct a short, paved trail to a small observation deck with seating for visitor use to relax and enjoy the lake views. These improvements are anticipated to occur in the next 5-10 years.



Boat Launch Area

The County is proposing updates and improvements to the boat launch area. First, the boat launch parking lot will be reconstructed to improve efficiencies, reduce impervious surfaces where possible. The existing number of parking stalls will remain approximately the same at 28 vehicle/trailer stalls and 4 vehicles only stalls. The improvements will accommodate the existing aquatic invasive species removal area but provide some additional shade trees for DNR Inspectors to get out of the sun. The existing double boat launch will be reconstructed based on the MN Department of Natural Resource best management practices and an accessible dock will be built for ease of access. The existing fishing pier located south of Pavilion 5, is proposed to be removed. The pier has suffered continual damage from the ice heaving and pushing the foundation piles year after year. To counter the pier removal, the County is proposing to improve the existing jetty at the boat launch by widening the access path and creating a few accessible fishing spots on the jetty. In addition, an additional dock will be provided to the east of the launch, outside the jetty area to give canoers and kayaks a safe way to access the lake, without needing to mix with the motorized boats.

The existing restroom building is proposed to be removed and replaced with one multi-purpose visitor center type building that offers gathering space, office space, rental space, storage and restrooms accessible from both the interior and exterior. The proposed capacity of the building is 100. In addition, the parking lot for Pavilion 5 is proposed to be reconfigured and reconstructed to accommodate the additional parking needs with a capacity of 60-70 parking stalls. Pavilion 5 is proposed to be upgraded and improved as necessary as it ages. This work will occur in 10-15 years.

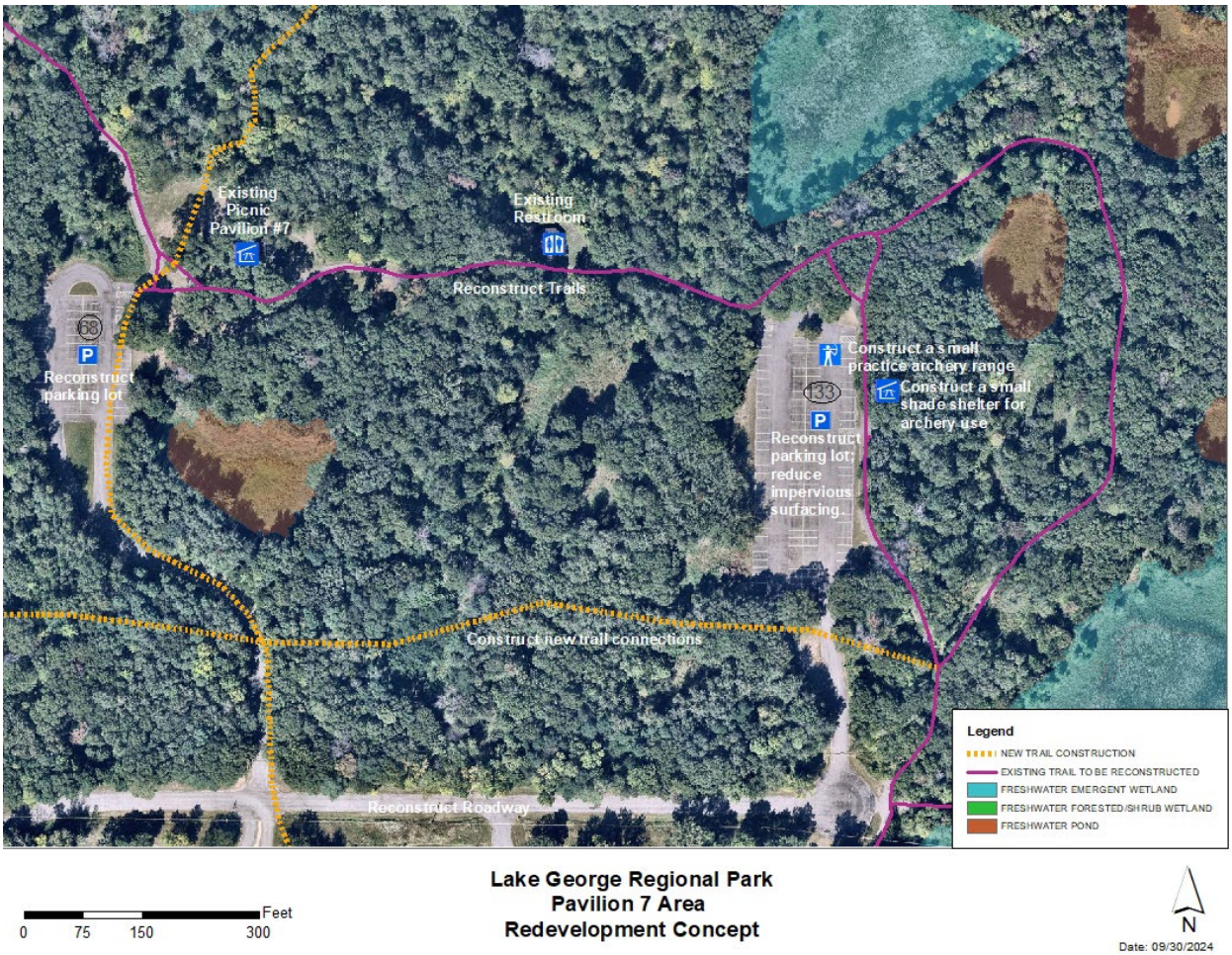


Lake George Regional Park
Boat Launch/Shelter 5 Area
Development Concept

Pavilion 7 Area

Due to the remote location in this area and lack of use, the proposed development concept is to remove the existing facilities. These areas would be restored back to a natural state. The western parking lot would remain as a trailhead, but the lot size would be reduced by about half and reconfigured to reduce impervious surfaces. The reconfigured size would be about 30 stalls.

The goal for the easternmost parking lot is the same. Reduce and reconfigure to minimize impervious surfaces with approximately 50 parking stalls. It is anticipated that this area would be converted to a small archery facility that would include 5-8 practice lanes and a small structure for shade with a capacity of 10-12 people. Other uses in the area would include development of a variety of interpretive information and amenities to accommodate the needs of the Indigenous Community, such as a medicinal garden, gathering area or space for native games. This development will require additional input from the indigenous communities as to their wants and needs when redevelopment occurs. The timeframe for these improvements is approximately 5-10 years.



Lake George Regional Park
Pavilion 7 Area
Redevelopment Concept

Date: 09/30/2024

Day Camp Facilities

This area is proposed to remain as a programming space but will be expanded and improved. The County not only proposes to continue the use of this area for recreational, environmental, and interpretive based camps and programs, but also to expand and enhance the space by creating an overnight group camp

Lake George Regional Park
Programming/Camp Area

Feet
0 75 150 300

N

Date: 09/25/2024

facility. To do this, the County proposes to construct a multi-functional building that will serve as a gathering space that has the functionality to be enclosed or open depending on the weather. The building will have a kitchen, dining room, restrooms, and shower facilities as well as a fire pit. Office and storage space will be included within the building as well. In addition, the County is proposing to construct four to five camper cabins with capacities of about 4-6 people and two bunkhouses with a capacity of 15-20 people. This will also allow a wide variety of education focused organizations, such as 4H, opportunities for overnight group camps. The proposed multi-functional structure is proposed to have a capacity of approximately 100 people and could be used as a rentable gathering space when not utilized by groups, camps, or programs.

Until the structure can be built, the existing restroom building will need to be renovated and rehabbed as it is aging from use. Improvements needed include a new roof and some interior renovations. The existing shelter will be removed once the new structure is in place. The existing amphitheater will also be removed and those uses will be incorporated into the new structure.

Existing programming elements, just as the archery shelter, gaga pit, etc., are proposed to be reconstructed and improved to extend the remaining useful life of the facilities.

The existing parking lot with a 62-stall capacity will be reconfigured to create a better drop off/pick up area and allow for more efficient parking. The intent would be to reduce the amount of impervious surfacing for the lot if possible.

South of the camp area is an existing parking lot and building that is currently used for storage. This building will remain used for storage until the end of its useful life and at which time the building and the parking lot will be removed, and the area restored with native vegetation. This work is anticipated to occur in 10-15 years.

Trails

Anoka County is proposing to repave existing trails, create new trails and remove a few trail links with this long-range plan. First, the existing paved trails in the park have aged and need repair and reconstruction, therefore the County is proposing to reclaim and repave those trails. A portion of the existing trail at the park entrance will be realigned and moved away from the vehicle entrance drive. This will separate bikers and pedestrians from vehicles entering and leaving the park. In addition, based on input received from the public, the County is proposing to create a few new trail segments within the park to provide additional walking loops and to make a safer trail connection to Oak Grove's The Ponds Park, just north of the regional park. This trail would also serve as a maintenance access to and from the Parks Department's North Maintenance Shop, which is located on the north side of the park on 221st Avenue. This crossing was identified in the 2014 Rum River Regional Trail Long-Range Plan. The

Lake George Regional Park
Trail Redevelopment Concept

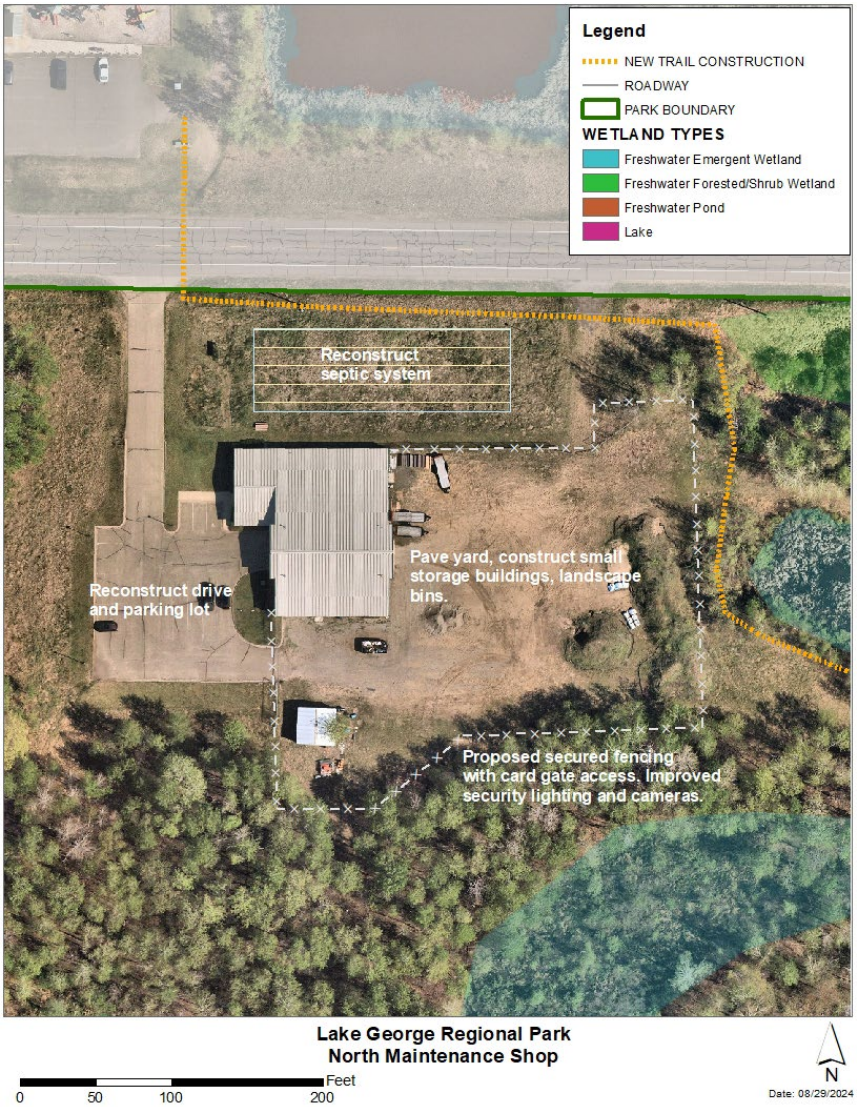
crossing is proposed to have a high intensity activated crosswalk beacon or some other appropriate traffic control to enhance pedestrian safety while crossing 221st Avenue since this is a mid-block crossing and there is no controlled intersection nearby. The intent would be to have the pedestrian activate the flashing beacon, alerting drivers that pedestrians need to cross the road and to stop. Once the pedestrians are through the crosswalk and safely on the other side, the indicators will go black allowing motorists to proceed. This will allow safe access between the regional park and the local park, golf course, and large residential area to the north. This crossing is proposed to occur sometime in the next 6-8 years, but has the potential to be completed earlier if funding becomes available earlier. In the meantime, the County is proposing to build an aggregate trail as an interim solution for a cost estimated to be about $300,000.

The County is also proposing to remove a few sections of trail and restore those area's back to native vegetation. One section of trail is discussed in the Pavilion 4 Area section. This area doesn't get a lot of use due to lack of restroom facilities and the current trail uses a dated "homemade" boardwalk to cross a wetland. The boardwalk is deteriorating and is not accessible to people with disabilities. To reduce existing impacts to the wetland, the County is proposing to remove this segment at the end of its useful life. The second trail segment to be removed is on the north side of the park, north of the day camp area. This trail connects directly to 221st Avenue. This causes anyone using that access to use the shoulder of a 45-mph road, creating an unsafe condition. Because the County is planning on building a new trail connection near the North Maintenance Shop with a safer road crossing, the County will be removing and restoring this connection once the new trail connection is made. The remaining trail work is anticipated to occur within 5-10 years.

Examples of Pedestrian Crossing Signals

Maintenance Facility

The Parks Department Maintenance Shop for the area is within the Lake George Regional Park boundary but is located on the north side of the park off 221st Avenue. This serves as the northern hub for the maintenance and operations needs of the regional parks and trails in the north half of the County. The current configuration and size of this building is sufficient for the current uses, but improvements are needed for security and improved lighting. Security enhancements proposed to be installed, include card access for the gates and security cameras. The yard is proposed to be paved, a few small storage sheds and landscape bins are proposed to be built. In addition, the existing drive and parking lot are also proposed to be reconstructed. The shop is located outside the MUSA line and as such, will require a new septic system be installed as the existing system is aging. These improvements are anticipated to occur in the next 5-10 years.



Park Signage

The wayfinding plan for the park will provide the public with location and orientation information to access amenities and services within the park. Wayfinding typically includes the following:

Trailhead Signs

These types of signs are provided at trailhead locations where parking lots and restrooms are provided. These signs give park patrons a view of the overall park and trail amenities, along with local trails that can be accessed from the park. These signs also include the standard hours, rules, and etiquette reminders.

Example of Trailhead Sign

Intersection/Directional Signs

These types of signs are located at intersections where a decision is to be made. They provide much of the same information as the Trailhead signs, but in a smaller format and on a single post. These signs also contain a location marker for easy map orientation and directional arrows for quick reference.

The County will partner with a variety of organizations to develop an interpretive and educational sign plan throughout the park. More information on wayfinding can be found in the Appendix of this plan.

Example of Intersection Sign

Interpretive Signs

Typically, within a park, there are interpretive and educational signs in addition to the wayfinding sign. During the engagement process, the County received a variety of suggestions for those types of signs. These suggestions fell under a couple different categories for consideration. The first category was Native American History. Engagement for this showed that Native American history, languages, and land use are important. A land acknowledgement was also suggested. Another category is the identification of plant and animal species within the park. This information should be in multiple languages, including Native American languages and should include information on invasive species and how they can be addressed to minimize their impacts on the land. Some of this information is already addressed at the boat launch with the Aquatic Invasive Species information and inspections that occur.

While the interpretive sign program is outlined in the long-range plan, additional planning and public engagement will occur as this sign program is implemented with proposed improvements.

Iron Enhanced Filter

A 2018 study, conducted by the Anoka Conservation District in conjunction with the Lake George Improvement District (LGID) and the Lake George Conservation Club (LGCC), analyzed the lake-shed to determine causes and potential solutions to the declining water clarity and quality in Lake George. As a result, an iron enhanced sand filter was proposed to be located within Lake George Regional Park. The project would need an engineering feasibility study and partial design to determine potential costs prior to moving forward. It is anticipated that this would be partnership project between the Anoka Conservation District, the Upper Rum River Watershed Management Organization, LGID, LGCC and Anoka County.

Conceptual image – Iron Enhanced Sand Filter

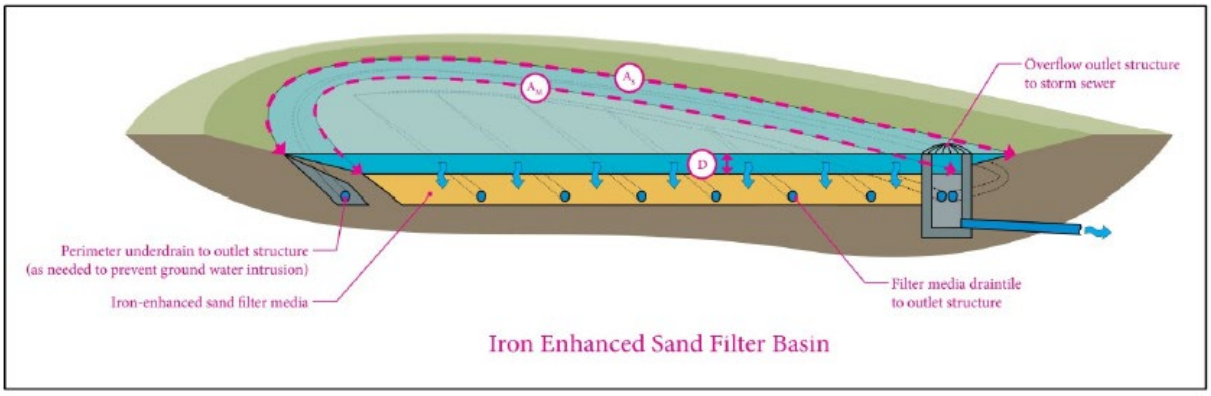


Figure 44 Cross-section of a conceptual iron enhanced sand filter (Types of Iron Enhanced Sand Filter 2016)

Development Concept Cost Estimate

The development concept cost estimate is anticipated to be approximately $26M.

Proposed Lake George Regional Park Development Concept Cost Estimate	
Description	*Total*
Design/Engineering/Project Management	*$2,975,260*
Archaeological Survey	*$100,000*
Wetland Delineation & Mitigation	*$75,000*
Topographic Survey/Construction Staking	*$150,000*
Geotechnical Survey	*$150,000*
Construction	*$19,835,067*
Natural Resource Restoration	*$200,000*
Site Furnishings	*$75,000*
Sub-Total	*$23,560,327*
Contingency (10%)	*$2,356,033*
Total	***$25,916,360***

Natural Resources

As part of the master planning process, the existing natural resources within the park are examined. Anoka County has maintained a strong commitment to preserving and restoring natural resources within its park, trails, and open space system. The expansive 11,000-acre park system contains a diverse system of wildlife species and natural areas including upland forests, deciduous woodlands, upland prairies, forested wetlands, shrub wetlands and open wetlands. The existing land cover for the park, consistent with the Minnesota Land Cover Classification System, can be found in the Appendix of this document. To manage the natural resources and maintain the parks and trail's identity, Anoka County will provide for:

- The protection, restoration and enhancement of native plant and animal habitats throughout the park.
- Protection and improvement of water and soil resources.
- Increase public awareness regarding the diverse natural resources in the area.
- Sustainable practices related to park development, operations, and maintenance.

Protecting, restoring, and enhancing natural resources help to ensure enjoyment of those resources in the future.

General natural resources management strategies include identifying and assessing remnant plant and animal communities, monitoring rare species, controlling invasive species, ecologically restoring native plant and animal habitat, controlling detrimental insects and disease, wildlife management, enhancing water quality, erosion control and cooperative land stewardship.

A sustainable development framework is utilized in all new park and trail development and redevelopment to ensure ecologically sound land stewardship with an emphasis on maintaining the longevity of the facilities for public benefit.

The following natural resource management components are an integral part of Anoka County's planning efforts associated with the development and redevelopment of Lake George Regional Park:

Anoka County's Natural Resources Unit will be directly involved with the design, construction, and monitoring of the proposed park projects. A concerted emphasis will be placed on avoiding and minimizing any adverse impacts to the plant and animal habitat, as well as to the lakes and wetlands. In addition, Anoka County will focus on incorporating local native seed and plant material that will complement the ecology and function of the surrounding native plant communities.

Protection of wetlands and surface water resources will be a top priority for these projects as Lake George is an identified impaired water and contains a significant number of wetlands within the park boundary. A wetlands inventory can be found in the Appendix of this document. The lake is impaired for aquatic consumption with Total Maximum Daily Load (TMDL) for Mercury in fish tissue. Anoka County will work very closely with the City of Oak Grove, the Upper Rum River Watershed Management Organization, the Minnesota Department of Natural Resources, the

Minnesota Pollution Control Agency (MPCA), and the Metropolitan Council to ensure that the standards and requirements for resource protection are met as these projects proceed. Storm-water management within the park is typically managed on site through vegetated swales and infiltration basins. The County utilizes MPCA's best management practice recommendations in the design and incorporation of storm water pollutant and runoff flow reduction measures constructed in conjunction with park improvements.

The MPCA best management practices guidance documents can be found at: Construction stormwater program - Minnesota Stormwater Manual.

The County has also been working with the Minnesota Department of Natural Resources on an annual basis through a Delegation Agreement to provide inspections of water-related equipment to prevent aquatic invasive species (AIS) from spreading. The County currently monitors 18-21 of the 38 public access points through this program. The program provides funds to staff launches on a random basis to ensure boat owners are complying with the state laws and regulations as related to AIS. Lake George is one of the locations inspections occur.

View of Lake George

The overall vegetation management goal for Anoka County is to identify restoration needs and to define and implement adaptive management strategies that will sustain the biological diversity, production, and function of native plant communities. Vegetation management within the park will focus on preserving native plants, introducing local native plants, eradicating invasive species, maintaining water quality within the watershed and providing for plant and wildlife corridor connections.

Considering that ecosystems are dynamic and continually changing over time and space, an adaptive management approach and framework fits very well with the County's practice of ecological restoration and stewardship. In the context of ecological restoration, the following adaptive management principles will guide the stewardship plan for Lake George Regional Park:

- Problem Assessment:

  Define the scope of degradation to the site, synthesize the existing knowledge about it, and explore the potential outcomes of alternative restoration actions.

- Design:

  Design a restoration plan and monitoring program that will provide reliable feedback and information about the effectiveness of restoration methods.

- Implementation:

  Effective restoration is usually a multi-step process, requiring not only installation, but many years of maintenance and monitoring.

- Monitoring:

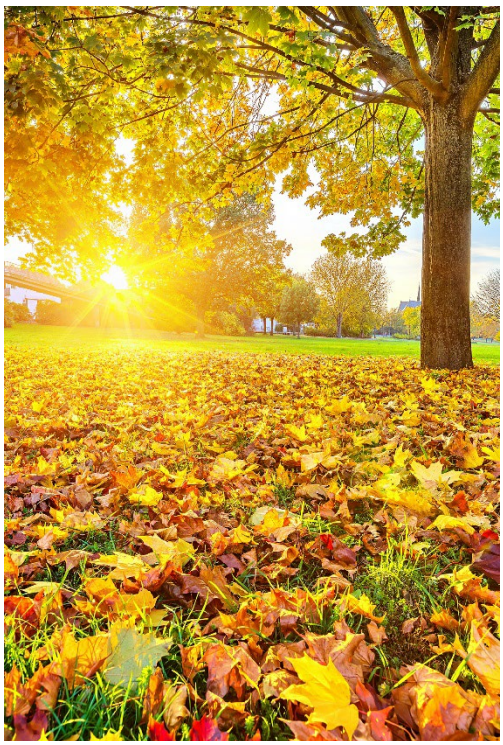
  Biological indicators are monitored to determine how effective the restoration methods are in meeting the project objectives.

- Evaluation:

  The actual outcomes are compared to the anticipated outcomes. In addition, the reasons for the underlying differences are interpreted.

- Adjustment:

  Practices, objectives, and models used during the restoration process may lead to reassessment of the problem, new questions, and new options to try in a continual cycle of improvement for a given project.



Fall Colors

Management and stewardship practices for natural resources maintenance in the park will include periodic mowing, prescriptive fire management, invasive species surveys, hazard tree assessments, seed collection and propagation, invasive species removal, turf management, brush and tree maintenance, erosion control, forest health assessments and maintenance, wildlife surveys and management as needed, and interpretive signage. Maintenance and stewardship practices also include regular pruning of trees and vegetation along roadways, trail corridors, park facilities and structures.

Priority projects for natural resources within the park will focus on the following native community restorations:

Higher Quality Wetland Complexes

Higher Quality Woodlands through diversification

Diversify tree canopy in maintained turf areas.

Incorporate more native plantings into the landscape to promote habitat.

These projects will be conducted in an on-going basis with an average annual cost of $25,000.

Review of the Natural Heritage Information System (NHIS) conducted by the Minnesota Department of Natural Resources (DNR) revealed that there is one known occurrence of Emydoidea blandingii, Blanding's Turtle, which is a threatened species within the park. Prior to implementation of these projects, a flora and fauna survey will be conducted to ensure rare features are located and protected. Examples of the guidance and practices recommended by the Minnesota Department of Natural Resources are included in the Appendix. For projects where avoidance of a rare or threatened species is unavoidable, the County will work closely with the DNR to mitigate any impacts that could potentially be incurred by the species.

The natural resources contained within the 260-acre park varies providing different habitats for flora and fauna to take advantage of. The land is predominately wetlands and differing mesic forests, with a variety land cover classification type. The National Wetlands Inventory Data for the park the varied land cover

Flora & Fauna within the park

classifications are shown in the Appendix. There are no high-quality native plant communities within the park.

The lack of high-quality plant communities offers Anoka County a chance to improve and restore some of the land cover types to improve habitat and provide a more pleasing park atmosphere. Any future construction plan will include information and best practices to avoid or minimize impacts.

Conflicts

Conflicts related to the park development will be kept to a minimum through the proper planning and community engagement. See additional information regarding engagement in the Public Engagement and Participation section of this document.

There are no conflicts anticipated with any of the existing surrounding land uses, which is mostly large lot rural residential. Planned land uses propose rural residential for the existing undeveloped land around the park. Refer to the Appendix for the planned land uses in the area.

Conflicts between pedestrians and vehicular traffic will be kept to a minimum by reducing the number of trail and road crossings within the park and by working with the local cities and the County Highway Department to ensure safe crossings at road intersections or mid-block crossings if needed. Treatments for these areas may include signing, striping and signalized pedestrian crossings. In addition, signs within the park will alert users of potential conflict areas, i.e. street crossings, driveway crossings, pedestrian cross-traffic, etc., and will provide way-finding and interpretive information.

The biggest conflicts raised during the public engagement process were concerns about boating behavior on the lake, which falls outside of the Parks Department's jurisdiction. The Parks Department will continue to work closely with the Sheriff and the Department of Natural Resources Conservation Officers on education and enforcement. Other noted conflicts regarded large number of teenagers at the beach and foul language, which is a common occurrence at any beach during the hot summer months. The Parks Department will continue to monitor social media, analyze on-line communications, evaluate complaints, educate park visitors, and provide enforcement if necessary.

Public services

There are no nonrecreational related public services and facilities proposed for the park. The public services are already provided at Lake George Regional Park. The restrooms and drinking fountains in the park are currently served by wells and septic systems. The park is currently outside the Metropolitan Urban Service Area (MUSA) boundary and as of 2024, future planning shows the park will remain outside the MUSA boundary through 2040. The park is also outside of the any regular transit routes, so must be accessed by either Transit Link Dial-A-Ride service, by vehicle, biking, or walking.

Operations

Anoka County Ordinance #2018-01, Revision July 23, 2024, regulates the parks and trails under the jurisdiction of Anoka County and is enforced by the Anoka County Sheriff's Department. The County's Park Service Specialists provide an in-park staff presence to assist guests in a variety of ways, including customer service, education on park amenities and use, enforcement of policies and ordinances, and monitoring facilities for cleanliness and proper use.

Annual operations and maintenance costs for the park are estimated to be about $75,000. This includes all daily operations including the picnicking areas, boat launch, and gatehouses as well as the general routine maintenance within the park, such as mowing, sweeping, plowing, debris removal, sign maintenance, etc. Expenses are typically offset by revenue generated through daily and annual park pass sales, picnic pavilion rentals, programs, special events and the parks operating budget. Additional supplementary funding is provided through the Regional Park Operations and Maintenance Grant Program.

Enjoying the water

Anoka County employs a remote building automation system that saves the department money annually compared to traditional energy systems by realizing energy reductions in heating, cooling, lighting, and domestic water during unoccupied and off-peak periods. The program enables staff to monitor, adjust, and troubleshoot building mechanical systems at all the wide-spread park facilities from wireless devices, aiding in prompt management and adjustment or repair. The County has been utilizing LED technology for lighting to reduce energy demands and the Maintenance and Parks Services Unit's vehicle fleets includes several electric powered vehicles. Irrigation systems employ "rain sensor" technology to avoid using valuable water during periods of precipitation. The County has always encouraged employees to go to reduce the amount of paper in the workplace by going "digital". This is done by utilizing portable laptop computers and cellular phones and other devices. In addition, vehicle miles driven, and gas consumed have gone down with the advent of the virtual meeting format.

In additional, the County, through the Recycling & Resource Solutions Department employs a refuse and recycling program that requires recycling of paper, plastics, etc. Additionally, recycling of compostable materials has been added to the County's recycling opportunities. Refuse that cannot be reused or recycled is collected and disposed of consistent to applicable laws.

Anoka County will continue to consider available opportunities to reduce operating costs while improving asset longevity and meet guest demands.

Partner Engagement

Anoka County worked with the Upper Rum River Watershed Management Organization, Minnesota Department of Natural Resources, the City of Oak Grove, the local Lake Association, and the local conservation club during the beginning planning process to gain input on the parks and their desires for the park. The draft long-range plan was submitted to these organizations prior to going out to the public initially.

Public Engagement and Participation

Equity Analysis

Equity analysis is an examination of the public engagement process and outcomes for stakeholders by race, ethnicity, national origin, income, ability, age, and other pertinent characteristics.

Project Data:

Scope of boundaries and demographics of the public engagement area, which can include neighborhoods adjacent to the park or trail, travel sheds, and agency/regional boundaries.

Boundaries:

Public engagement boundaries considered for this long-range plan include adjacent neighborhoods in Oak Grove to communities up to five miles away, such as Bethel, East Bethel, St. Francis and Nowthen, along with a few communities Isanti County and all of Anoka County.

Overall, Minnesota Compass reports that Anoka County's population is more than 350,000 with most of the population being between 25 and 64 years of age. People of Color make up only 20% of Anoka County's population and people with disabilities make up only 12% of the population. That demographic information shows who should be engaged for feedback on this plan; those under 25 and over 65, people of color and people with disabilities.

In looking at the demographic information closer to Lake George Regional Park and using the Regional Park Equity Tool, Anoka County was able to identify population groups to engage for feedback on the Master Plan. Within a 3-mile radius around the park, those under 25 comprise of about 33.5% of the population and those over 65 make up about 11.1%, for a total of 44.6% of the population. That's a substantial number of future stakeholders who should be engaged in the planning process. 9.2% of the population are People of Color and 8.8% of the population are people with disabilities, with the relatively low population in the area, these stakeholders should be engaged to provide the County a better understanding of their needs and wants for parks and recreation.

Context:

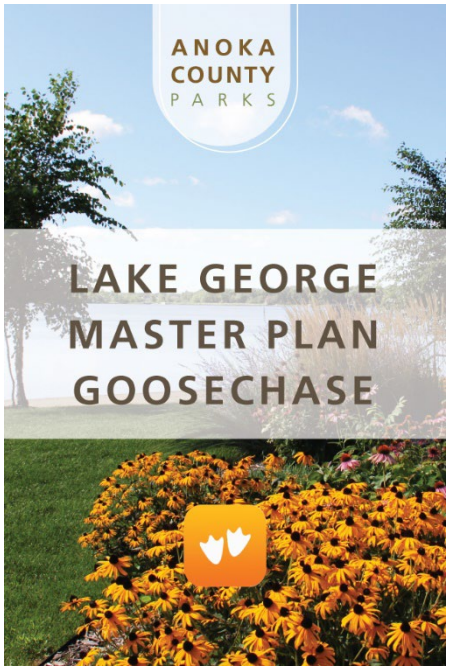
The context outlined below illustrates what is known about future stakeholders, underserved populations, and how the region's history may have created present-day inequitable outcomes.

To ensure the legacy and stewardship of parks, trails, and open space, it is important to provide memorable experiences for the younger population that can carry forward with them throughout their lives. Other stakeholders and underserved populations may not feel welcome in the parks, or they may not know what to do in the parks. This is likely caused by a history of systemic racism prevalent within the metro area. Reaching out to and engaging with underserved populations and seeking dialogue with them regarding parks, trails and recreation can provide an introduction the Regional Park System and the activities and opportunities that it provides. This also allows for

changes and improvements to those parks, trails and recreation activities that would make them more welcoming and inviting to underserved populations. This makes it more important that Lake George Regional Park be welcoming and inclusive.

Public Engagement and Participation:

Below outlines which stakeholders contributed to the planning effort. The following list is illustrative of stakeholders considered including youth, Black, indigenous, and people of color communities, people with disabilities, low-income populations, populations age 60 and over, and neighborhood/regional groups that participated as planning staff, community advisory committee members, outreach liaisons, and the public.



Stakeholders:

For public engagement for this long-range plan, the County was able to connect and meet with a variety of organizations, such as the St. Francis American Indian Education Advisory Committee, St. Francis Elementary School PTA, ISD 15 Community Education, Lake George Lake Improvement District, the Lake George Conservation Club, and the City of Oak Grove's Park Commission. These meetings provided input from people over 65, People of Color, neighborhood residents, and community advisory committee members. We also conducted a Goose Chase mission at the park during the summer months and sent out a survey through social media to get input from the public.

Engagement:

Engagement, outreach, and communication that was conducted for the identified stakeholders is outlined below. The level of public impact based on the *International Association for Public Participation's* Public Participation Spectrum and strategies for stakeholder groups are also outlined below. This engagement was conducted with the consideration that the County should consider culturally competent and community representative staffing, training, locations, times, public awareness, and input approaches.

Using the *International Association for Public Participation's* Public Participation Spectrum, the County's approach for public engagement was to inform and consult with the public.

According to the spectrum, this allows the County to listen to and acknowledge concerns and aspirations about the park and keep the public informed as to how their feedback influenced the plan. Engagement occurred in a variety of ways, such as in-person meetings, virtual meetings, community newsletters and information/surveys disseminated via social media.

Public Participation Results:

Following is a summary of input and advice received from the engagement efforts.

Stakeholders provided a variety of comments that helped inform the Long-Range Plan for the park. These include:

Equity

The American Indian Education Group looked at the planning process as a whole and stressed the importance of equity in the decision-making process and wanted to see more diversity in county staff to reflect the overall population demographics better. They also suggested the County hire a Native American consultant to work on the project or that the County work with the Mille Lacs Band of Ojibwe. Survey respondents thought putting money into improving trails, providing interpretive info along trails, and having rental equipment would help provide better equitable access. This is an excellent example of why the public engagement process is important in the planning process.

Historical/Cultural Heritage

One of the themes that emerged through the public engagement process from all groups was the importance of providing historical and cultural heritage information about the land, park, and lake. This could be done by including a land acknowledgement sign and interpretive information sharing the history of the area, educating visitors on how indigenous peoples used the land/park and lake and sharing information about the flora and fauna using native languages. The County can also work with indigenous partners to provide indigenous focused programs, such as basket-making, syruping, a medicine garden, or native games.

Safety

Several groups and survey respondents were concerned about safety in the park and on the lake, citing fights, unruly behavior, and boat speeds as the top complaint. The overall assessment was that the County and our Park Service's Unit need to work closely with the DNR Conservation Officer's and Sheriff's office to provide education and enforcement of rules and regulations within the park and on the lake.

Another safety issue brought up was trail access to and from the park. Concerns of needing more paved trail connections to the park and constructing trail gaps in the Rum River Regional Trail were also expressed. While some of the trail access to the park would be the responsibility of the local agency, Anoka County is willing to help coordinate those types of projects with the local agency.

The Conservation Group identified a safety issue at the beach with boaters mooring their boats at the beach and the hazard that causes between the boaters and swimmers. To address this issue, the County is proposing to install a marina type dock system separate from the swim area that will provide boats access to the beach, but with a separate facility that will keep swimmers safe.

Programming/Education

With the YMCA closing their day camp during the Covid 19 pandemic, the County now has a large gap in their programming and education offerings and during the public engagement process, the County heard loud and clear from all groups that the community would like to see programming with recreational and environmental education programs to remain within the park. In response to this, the County has implemented day camp programs in the park and will continue to do so. The development concept allows for a potential expansion of camp facilities as well.

Trails

Trails were another important amenity to all groups and survey respondents who were engaged. Trails are one of the top three most popular amenities within the park with requests for more paved trail connections to/from the park and the surrounding area. One location pointed out

specifically was to ensure a safe crossing where the Rum River Regional Trail crosses 221st Ave on the north side of the park. This is already planned for in the Rum River Regional Trail Long-Range Plan and briefly mentioned within this long-range plan.

Evaluation Summary

As part of the engagement process, a review of the process that outlines the transparency, accountability transparency, awareness and accessibility of the plan is completed.

Transparency:

Transparency in the equity analysis process examines questions such as how public participation impacted decisions and policies in the plan that considered input that advances, supports, coincides, and diverges from the long-range plan.

Public participation provided valuable information and helped influence proposed improvements within the long-range plan. Several of the improvements are a direct result of the engagement, such as the day camp facilities/programs, additional trail loops and safety improvements at the beach to reduce conflicts between swimmers and boaters. Some of the programs and interpretive information included in the plan are also a direct result of engagement with the American Indian Education Group and Conservation Club. As engagement on this plan continues, additional information will be incorporated into the finalized long-range plan.

Accountability:

The public engagement and planning efforts try to create a long-range plan that provides a more welcoming and inclusive regional park. The park should draw people locally as well as from the region and provide them with a unique park experience. The long-range plan, once approved, will be shared with the public and the specifically identified groups the County worked with. The planning process anticipates better outcomes since several of the proposed improvements are a direct result of public engagement with these groups. The engagement process allowed the public to learn how the County plans its parks and that their input matters. The County will continue to work with the public and groups as resources become available and implementation of the improvements occur. The intent is that by seeing the improvements as they are implemented, the public can feel a sense of ownership of those improvements and know that the County is open to listening and responding to public input.

Public awareness

Public awareness is an important component of the regional parks and trails system. The County will continue to work with the Metropolitan Council's regional parks and trails system program to create awareness of the regional system through public information maps, websites, social media, publications, and brochures. Community engagement activities will continue throughout the year to receive feedback on long-range plans and provide information on park amenities and recreational opportunities throughout the Anoka County Parks and trails system. The Anoka County Parks website will also host transit route information for easy access into the regional parks and trails.

Accessibility

A plan that addresses accessibility, affordability, and other measures designed to ensure that the facility can be used by people with limited mobility. All new and updated master plans for the Regional Parks System must address compliance with ADA. As stated in Chapter 7, Recreation Activities and Facilities,

regional park implementing agencies are encouraged to use U.S. Access Board guidelines for Outdoor Developed Areas as a minimum standard of accessibility on all new or substantially altered capital projects within the Regional Parks System.

Anoka County continually strives to provide equal access to all residents of Anoka County and the region. The regional parks do have a nominal daily fee for vehicle entry, which can be applied to an annual permit of $35 if desired. The County offers a discounted rate on the second and third annual permits of $25 if purchased at the same time as the $35 annual permit. Walkers and bikers can enter for with no permit or fee needed. The second Tuesday of the month is the County's free entrance day, so no vehicle permits are required, in addition to #OptOutside Day the day after Thanksgiving.

Transit is limited in the Oak Grove area, but Traveler Transit Link and Metro Mobility dial-a-ride services can provide transportation for a minimal fee to those that require transit. Transit Link will pick up and drop off passengers anywhere there is an address or cross street provided the vehicle does not have to back up. Currently all the vehicles are equipped with bike racks so passengers wishing to bike to regional parks could use Transit Link and preschedule a trip.

The County is currently undertaking an update to the Parks ADA Transition Plan, with the intent to ensure that any new development along the trail will eliminate existing barriers, to the extent feasible, and ensure that the regional parks, trails, and any facilities and amenities will conform to or surpass the standards mandated by the Americans with Disabilities Act. In this plan, all the proposed improvements will increase ADA access, and any other issues found within the Transition Plan will be addressed when reconstructed. The ADA Transition Plan is expected to be completed by the end of 2025.

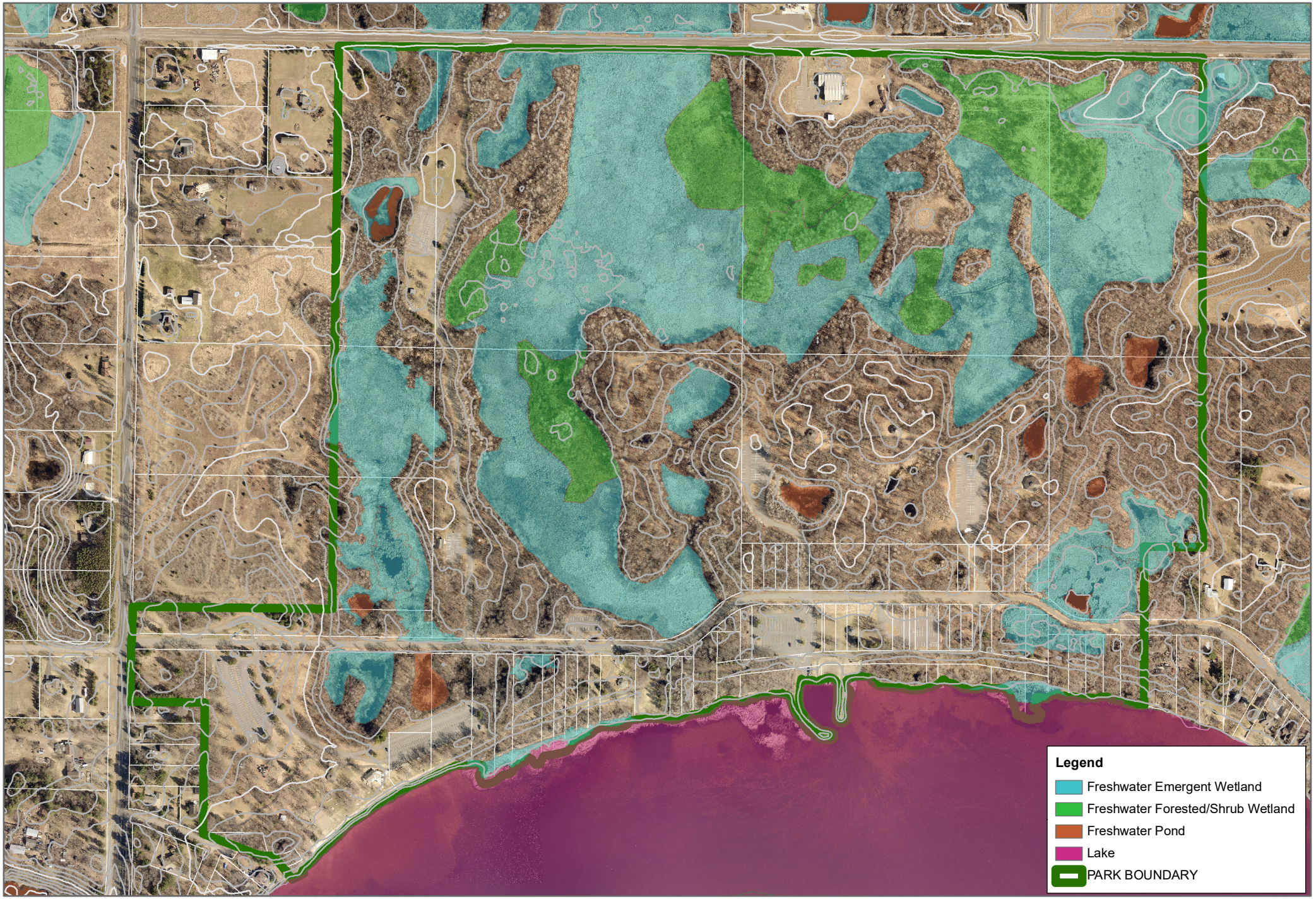
Appendix

Lake George Regional Park
Wayfinding Sign Plan

0 250 500 1,000 Feet

N

Date: 10/29/2024

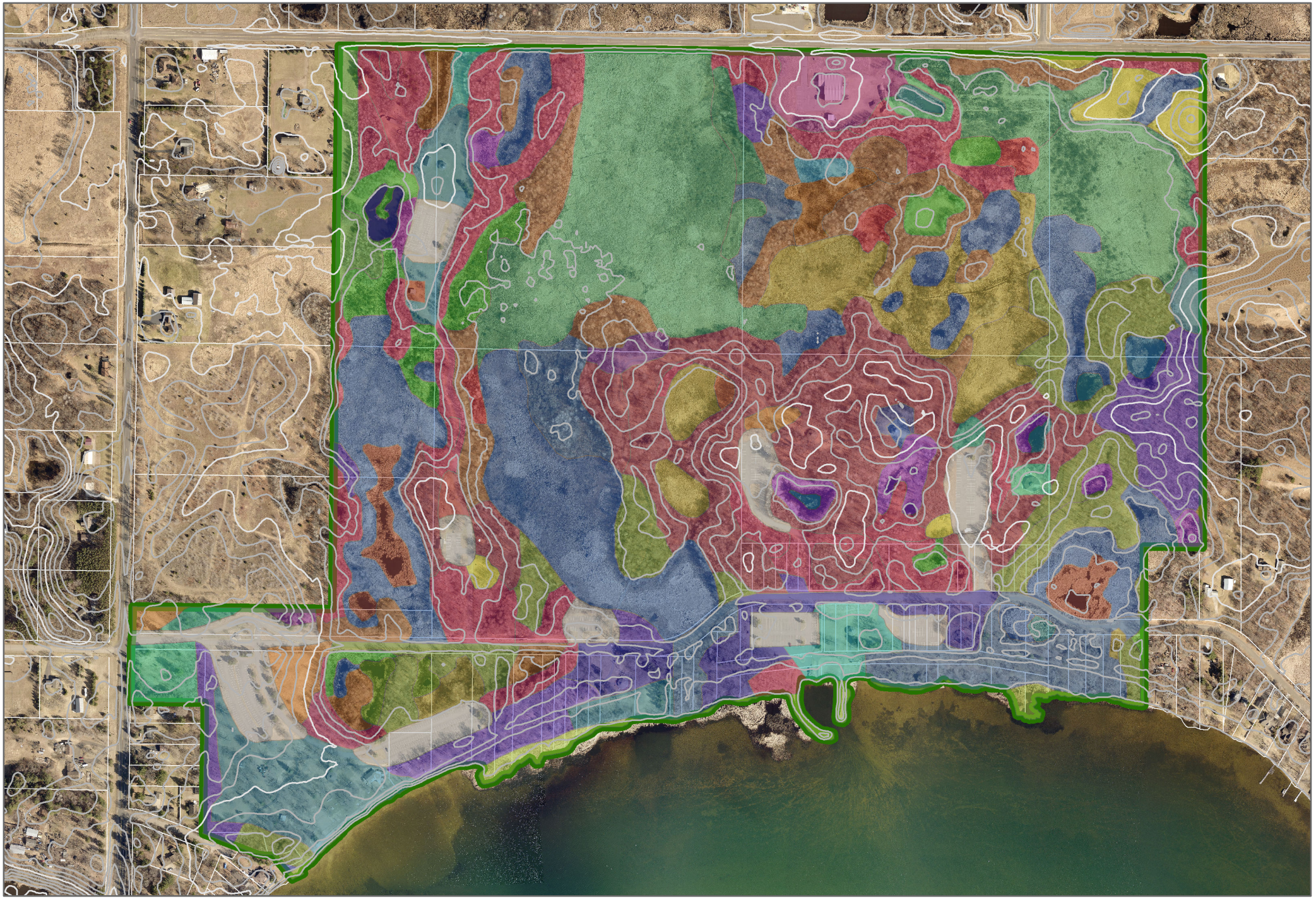


0 500 1,000 Feet

National Wetlands Inventory Data
Lake George Regional Park

Date: 12/28/2021

N



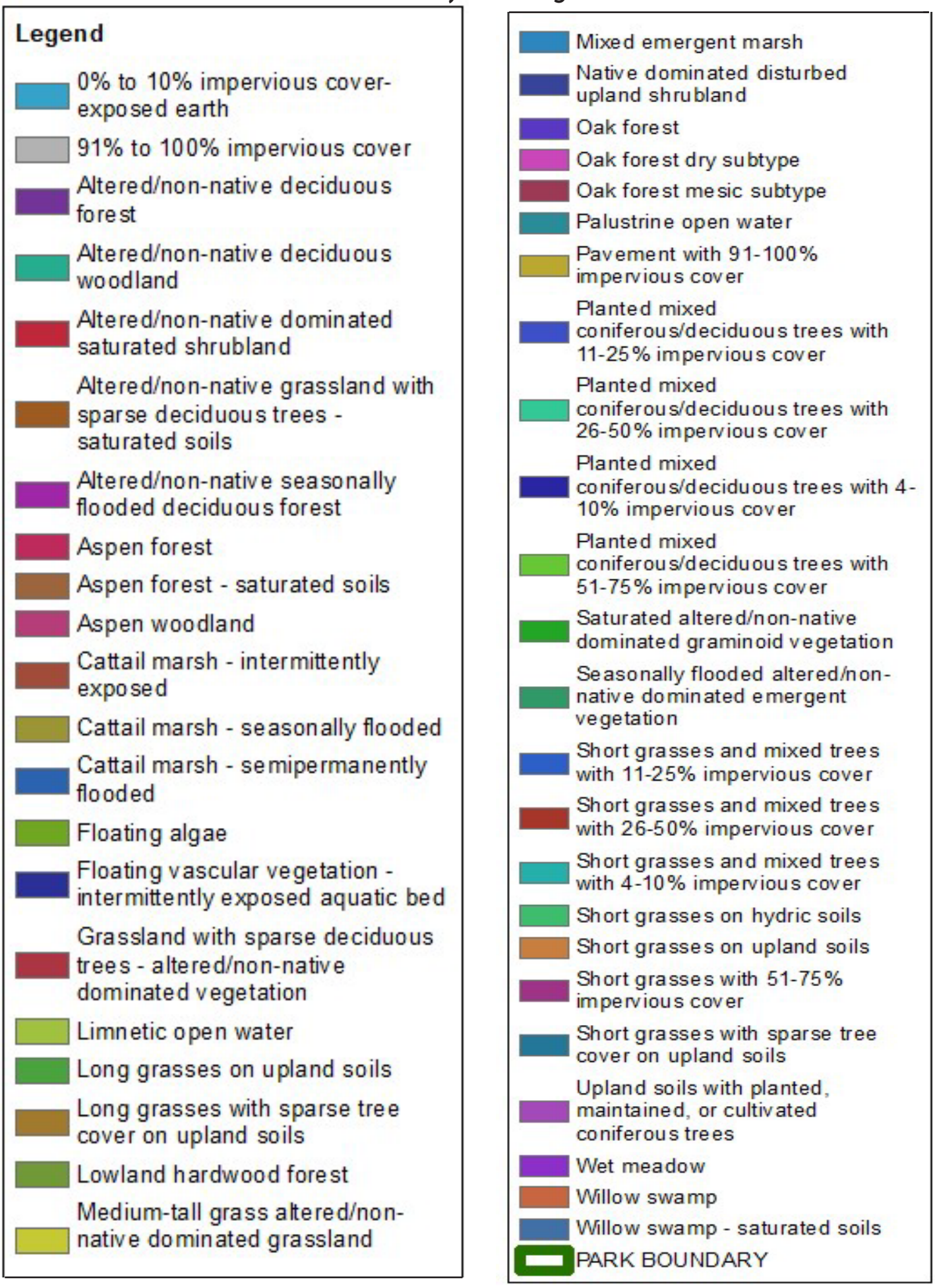
0 500 1,000 Feet

MN Land Cover Classification
Lake George Regional Park

N

Date: 12/28/2021

Minnesota Land Cover Classification System Legend



CAUTION

BLANDING'S TURTLES

MAY BE ENCOUNTERED IN THIS AREA

The unique and rare Blanding's turtle has been found in this area. Blanding's turtles are state-listed as Threatened and are protected under Minnesota Statute 84.095, Protection of Threatened and Endangered Species. Please be careful of turtles on roads and in construction sites. For additional information on turtles, or to report a Blanding's turtle sighting, contact the DNR Nongame Specialist nearest you: Bemidji (218-308-2653); Grand Rapids (218-327-4518); New Ulm (507-359-6033); Rochester (507-206-2820); or St. Paul (651-259-5772).

DESCRIPTION: The Blanding's turtle is a medium to large turtle (5 to 10 inches) with a black or dark blue, dome-shaped shell with muted yellow spots and bars. The bottom of the shell is hinged across the front third, enabling the turtle to pull the front edge of the lower shell firmly against the top shell to provide additional protection when threatened. The head, legs, and tail are dark brown or blue-gray with small dots of light brown or yellow. A distinctive field mark is the bright yellow chin and neck.

BLANDING'S TURTLES DO NOT MAKE GOOD PETS
IT IS ILLEGAL TO KEEP THIS THREATENED SPECIES IN CAPTIVITY

SUMMARY OF RECOMMENDATIONS FOR AVOIDING AND MINIMIZING IMPACTS TO BLANDING'S TURTLE POPULATIONS

(see Blanding's Turtle Fact Sheet for full recommendations)

- This flyer should be given to all contractors working in the area. Homeowners should also be informed of the presence of Blanding's turtles in the area.
- Turtles that are in imminent danger should be moved, by hand, out of harm's way. Turtles that are not in imminent danger should be left undisturbed to continue their travel among wetlands and/or nest sites.
- If a Blanding's turtle nests in your yard, do not disturb the nest and do not allow pets near the nest.
- Silt fencing should be set up to keep turtles out of construction areas. It is critical that silt fencing be removed after the area has been revegetated.
- Small, vegetated temporary wetlands should not be dredged, deepened, or filled.
- All wetlands should be protected from pollution; use of fertilizers and pesticides should be avoided, and run-off from lawns and streets should be controlled. Erosion should be prevented to keep sediment from reaching wetlands and lakes.
- Roads should be kept to minimum standards on widths and lanes.
- Roads should be ditched, not curbed or below grade. If curbs must be used, 4" high curbs at a 3:1 slope are preferred.
- Culverts under roads crossing wetland areas, between wetland areas, or between wetland and nesting areas should be at least 36 in. diameter and flat-bottomed or elliptical.
- Culverts under roads crossing streams should be oversized (at least twice as wide as the normal width of open water) and flat-bottomed or elliptical.
- Utility access and maintenance roads should be kept to a minimum.
- Because trenches can trap turtles, trenches should be checked for turtles prior to being backfilled and the sites should be returned to original grade.
- Terrain should be left with as much natural contour as possible.
- Graded areas should be revegetated with native grasses and forbs.
- Vegetation management in infrequently mowed areas -- such as in ditches, along utility access roads, and under power lines -- should be done mechanically (chemicals should not be used). Work should occur fall through spring (after October 1st and before June 1st).

Compiled by the Minnesota Department of Natural Resources Division of Ecological and Water Resources, Updated August 2012
Endangered Species Review Coordinator, 500 Lafayette Rd., Box 25, St. Paul, MN 55155 / 651-259-5109

Environmental Review Fact Sheet Series

Endangered, Threatened, and Special Concern Species of Minnesota

Blanding's Turtle

(*Emydoidea blandingii*)

Minnesota Status:	Threatened	State Rank[1]:	S2
Federal Status:	none	Global Rank[1]:	G4

HABITAT USE

Blanding's turtles need both wetland and upland habitats to complete their life cycle. The types of wetlands used include ponds, marshes, shrub swamps, bogs, and ditches and streams with slow-moving water. In Minnesota, Blanding's turtles are primarily marsh and pond inhabitants. Calm, shallow water bodies (Type 1-3 wetlands) with mud bottoms and abundant aquatic vegetation (e.g., cattails, water lilies) are preferred, and extensive marshes bordering rivers provide excellent habitat. Small temporary wetlands (those that dry up in the late summer or fall) are frequently used in spring and summer -- these fishless pools are amphibian and invertebrate breeding habitat, which provides an important food source for Blanding's turtles. Also, the warmer water of these shallower areas probably aids in the development of eggs within the female turtle. Nesting occurs in open (grassy or brushy) sandy uplands, often some distance from water bodies. Frequently, nesting occurs in traditional nesting grounds on undeveloped land. Blanding's turtles have also been known to nest successfully on residential property (especially in low density housing situations), and to utilize disturbed areas such as farm fields, gardens, under power lines, and road shoulders (especially of dirt roads). Although Blanding's turtles may travel through woodlots during their seasonal movements, shady areas (including forests and lawns with shade trees) are not used for nesting. Wetlands with deeper water are needed in times of drought, and during the winter. Blanding's turtles overwinter in the muddy bottoms of deeper marshes and ponds, or other water bodies where they are protected from freezing.

LIFE HISTORY

Individuals emerge from overwintering and begin basking in late March or early April on warm, sunny days. The increase in body temperature which occurs during basking is necessary for egg development within the female turtle. Nesting in Minnesota typically occurs during June, and females are most active in late afternoon and at dusk. Nesting can occur as much as a mile from wetlands. The nest is dug by the female in an open sandy area and 6-15 eggs are laid. The female turtle returns to the marsh within 24 hours of laying eggs. After a development period of approximately two months, hatchlings leave the nest from mid-August through early-October. Nesting females and hatchlings are often at risk of being killed while crossing roads between wetlands and nesting areas. In addition to movements associated with nesting, all ages and both sexes move between wetlands from April through November. These movements peak in June and July and again in September and October as turtles move to and from overwintering sites. In late autumn (typically November), Blanding's turtles bury themselves in the substrate (the mud at the bottom) of deeper wetlands to overwinter.

IMPACTS / THREATS / CAUSES OF DECLINE

- loss of wetland habitat through drainage or flooding (converting wetlands into ponds or lakes)
- loss of upland habitat through development or conversion to agriculture
- human disturbance, including collection for the pet trade* and road kills during seasonal movements
- increase in predator populations (skunks, racoons, etc.) which prey on nests and young

*It is illegal to possess this threatened species.

RECOMMENDATIONS FOR AVOIDING AND MINIMIZING IMPACTS

These recommendations apply to typical construction projects and general land use within Blanding's turtle habitat, and are provided to help local governments, developers, contractors, and homeowners minimize or avoid detrimental impacts to Blanding's turtle populations. **List 1** describes minimum measures which we recommend to prevent harm to Blanding's turtles during construction or other work within Blanding's turtle habitat. **List 2** contains recommendations which offer even greater protection for Blanding's turtles populations; this list should be used *in addition to the first list* in areas which are known to be of state-wide importance to Blanding's turtles (contact the DNR's Natural Heritage and Nongame Research Program if you wish to determine if your project or home is in one of these areas), or in any other area where greater protection for Blanding's turtles is desired.

List 1. Recommendations for all areas inhabited by Blanding's turtles.	**List 2. *Additional* recommendations for areas known to be of state-wide importance to Blanding's turtles.**
GENERAL	
A flyer with an illustration of a Blanding's turtle should be given to all contractors working in the area. Homeowners should also be informed of the presence of Blanding's turtles in the area.	Turtle crossing signs can be installed adjacent to road-crossing areas used by Blanding's turtles to increase public awareness and reduce road kills.
Turtles which are in imminent danger should be moved, by hand, out of harms way. Turtles which are not in imminent danger should be left undisturbed.	Workers in the area should be aware that Blanding's turtles nest in June, generally after 4pm, and should be advised to minimize disturbance if turtles are seen.
If a Blanding's turtle nests in your yard, do not disturb the nest.	If you would like to provide more protection for a Blanding's turtle nest on your property, see "Protecting Blanding's Turtle Nests" on page 3 of this fact sheet.
Silt fencing should be set up to keep turtles out of construction areas. It is critical that silt fencing be removed after the area has been revegetated.	Construction in potential nesting areas should be limited to the period between September 15 and June 1 (this is the time when activity of adults and hatchlings in upland areas is at a minimum).
WETLANDS	
Small, vegetated temporary wetlands (Types 2 & 3) should not be dredged, deepened, filled, or converted to storm water retention basins (these wetlands provide important habitat during spring and summer).	Shallow portions of wetlands should not be disturbed during prime basking time (mid morning to mid- afternoon in May and June). A wide buffer should be left along the shore to minimize human activity near wetlands (basking Blanding's turtles are more easily disturbed than other turtle species).
Wetlands should be protected from pollution; use of fertilizers and pesticides should be avoided, and run-off from lawns and streets should be controlled. Erosion should be prevented to keep sediment from reaching wetlands and lakes.	Wetlands should be protected from road, lawn, and other chemical run-off by a vegetated buffer strip at least 50' wide. This area should be left unmowed and in a natural condition.
ROADS	
Roads should be kept to minimum standards on widths and lanes (this reduces road kills by slowing traffic and reducing the distance turtles need to cross).	Tunnels should be considered in areas with concentrations of turtle crossings (more than 10 turtles per year per 100 meters of road), and in areas of lower density if the level of road use would make a safe crossing impossible for turtles. Contact your DNR Regional Nongame Specialist for further information on wildlife tunnels.
Roads should be ditched, not curbed or below grade. If curbs must be used, 4 inch high curbs at a 3:1 slope are preferred (Blanding's turtles have great difficulty climbing traditional curbs; curbs and below grade roads trap turtles on the road and can cause road kills).	Roads should be ditched, not curbed or below grade.

ROADS cont.	
Culverts between wetland areas, or between wetland areas and nesting areas, should be 36 inches or greater in diameter, and elliptical or flat-bottomed.	Road placement should avoid separating wetlands from adjacent upland nesting sites, or these roads should be fenced to prevent turtles from attempting to cross them (contact your DNR Nongame Specialist for details).
Wetland crossings should be bridged, or include raised roadways with culverts which are 36 in or greater in diameter and flat-bottomed or elliptical (raised roadways discourage turtles from leaving the wetland to bask on roads).	Road placement should avoid bisecting wetlands, or these roads should be fenced to prevent turtles from attempting to cross them (contact your DNR Nongame Specialist for details). This is especially important for roads with more than 2 lanes.
Culverts under roads crossing streams should be oversized (at least twice as wide as the normal width of open water) and flat-bottomed or elliptical.	Roads crossing streams should be bridged.
UTILITIES	
Utility access and maintenance roads should be kept to a minimum (this reduces road-kill potential).	
Because trenches can trap turtles, trenches should be checked for turtles prior to being backfilled and the sites should be returned to original grade.	
LANDSCAPING AND VEGETATION MANAGEMENT	
Terrain should be left with as much natural contour as possible.	As much natural landscape as possible should be preserved (installation of sod or wood chips, paving, and planting of trees within nesting habitat can make that habitat unusable to nesting Blanding's turtles).
Graded areas should be revegetated with native grasses and forbs (some non-natives form dense patches through which it is difficult for turtles to travel).	Open space should include some areas at higher elevations for nesting. These areas should be retained in native vegetation, and should be connected to wetlands by a wide corridor of native vegetation.
Vegetation management in infrequently mowed areas -- such as in ditches, along utility access roads, and under power lines -- should be done mechanically (chemicals should not be used). Work should occur fall through spring (after October 1st and before June 1st).	Ditches and utility access roads should not be mowed or managed through use of chemicals. If vegetation management is required, it should be done mechanically, as infrequently as possible, and fall through spring (mowing can kill turtles present during mowing, and makes it easier for predators to locate turtles crossing roads).

Protecting Blanding's Turtle Nests: Most predation on turtle nests occurs within 48 hours after the eggs are laid. After this time, the scent is gone from the nest and it is more difficult for predators to locate the nest. Nests more than a week old probably do not need additional protection, unless they are in a particularly vulnerable spot, such as a yard where pets may disturb the nest. Turtle nests can be protected from predators and other disturbance by covering them with a piece of wire fencing (such as chicken wire), secured to the ground with stakes or rocks. The piece of fencing should measure at least 2 ft. x 2 ft., and should be of medium sized mesh (openings should be about 2 in. x 2 in.). It is ***very important*** that the fencing be **removed before August 1st** so the young turtles can escape from the nest when they hatch!

REFERENCES

[1]Association for Biodiversity Information. "Heritage Status: Global, National, and Subnational Conservation Status Ranks." NatureServe. Version 1.3 (9 April 2001). http://www.natureserve.org/ranking.htm (15 April 2001).

Coffin, B., and L. Pfannmuller. 1988. Minnesota's Endangered Flora and Fauna. University of Minnesota Press, Minneapolis, 473 pp.

REFERENCES (cont.)

Moriarty, J. J., and M. Linck. 1994. Suggested guidelines for projects occurring in Blanding's turtle habitat. Unpublished report to the Minnesota DNR. 8 pp.

Oldfield, B., and J. J. Moriarty. 1994. Amphibians and Reptiles Native to Minnesota. University of Minnesota Press, Minneapolis, 237 pp.

Sajwaj, T. D., and J. W. Lang. 2000. Thermal ecology of Blanding's turtle in central Minnesota. Chelonian Conservation and Biology 3(4):626-636.

Endangered, Threatened, and Special Concern Species of Minnesota

Protecting Blanding's Turtle Nests

(See also Blanding's Turtle Fact Sheet)

TURTLE NEST PREDATION

Often, as many as 80% of turtle nests can be lost to predators such as raccoon, skunk, fox, and opossum. Although predators may find and destroy nests at any point during the egg's development, most predation on turtle nests occurs within 5 days after the eggs are laid, and especially during the first 48 hours. As time passes, there is less scent associated with the nest, and it is more difficult for predators to locate the nest.

HOW TO PREVENT NEST PREDATION

Nests more than a week old probably do not need protection, unless they are in a particularly vulnerable spot, such as a yard where pets may disturb the nest. If you believe a nest on your property is in danger from predators or other disturbance, there are several methods you can use to protect the nest. These methods are designed either to attempt to prevent predators from digging up the nest, or to prevent predators from finding the nest.

❶Nests can be covered with a piece of wire fencing (such as chicken wire), centered over the nest and secured to the ground with stakes or rocks.* The fencing should be at least 2 ft. x 2 ft. Mesh openings should be about 2 in. x 2 in.** ➔

←❷A covered cylindrical or cone-shaped cage can be centered over the nest and anchored with hooked stakes*. Take *great care* to avoid piercing the nest cavity with the stakes! The cage should be at least 20 in. across and 10 in. high. Mesh openings should be about 2 in. x 2 in.**

All fencing around and over a nest **must be removed before August 1st** so the young turtles can escape from the nest when they hatch! If desired, the wire fencing and cages can be removed after only 30 days, as it is unlikely that a predator will find the nest at this point.

*Wire should be fastened down very securely with heavy rocks or long (8 -10 in.) stakes, to prevent predators from pulling it up.
** Mesh size should not be much larger than 2 in. x 2 in., as predators can reach through larger mesh and dig to the nest.

HOW TO PREVENT NEST PREDATION (cont.)

❸Nests can also be covered **temporarily** with plywood to provide short-term protection. The plywood ***must* be removed within five days** or the shading of the nest will cool the soil and prevent proper development of the eggs.

❹Masking the odor of the nest may prevent predators from finding it. You can try sprinkling the area with water, or putting a 1 in. layer of fresh sand over the nest location in an attempt to disguise the turtle smell.

HOW TO TELL IF TURTLES HAVE HATCHED

Eggshell fragments scattered near an unearthed nest indicate that the nest has been destroyed by predators. When eggs hatch successfully, the eggshells are left underground in the nest cavity. Successful eggs typically hatch between mid-August and early October, depending on when the eggs were laid and how warm the summer has been (turtle eggs are incubated by the heat of the sun). The hatchlings emerge through a small burrow they dig from the nest to the surface. If you cannot find the hole or burrow the hatchlings used to exit the nest, it could mean that the eggs failed to hatch. However, some turtles may hatch from the egg and then spend the winter in the nest, and not emerge until the following spring. This means that even if you do not see young turtles emerge from the nest in the fall, the nest still may have been successful.

SHARE YOUR STORY

If you would like to share the story of your nest protection efforts with us, please send details (and photos, if possible) to "Attn: MBS Herpetologist" at mbs.report@state.mn.us or Minnesota Biological Survey, 500 Lafayette Rd., Box 25, St. Paul, MN 55155; or contact the DNR Nongame Specialist nearest you: Bemidji (218-308-2641); Grand Rapids (218-328-8811); New Ulm (507-359-6033); Rochester (507-206-2820); or St. Paul (651-259-5772).

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