

Turtle Project Needs and Priorities Next Steps - 5 Year Work Plan (2023 – 2027)

Staffing/Contracting Needs

- **Data collection.** Retain Ecologist on contract to collect data for Finding section of Report for a 5-year total effort and as a professional consultant for management recommendations implementation and nest protection efforts. (through 2025) (\$20,000/year).
- **GIS mapping of turtle habitat and management areas.** Hire a GIS Analyst Intern to work with Ecologist for 4-6 months (summer 2023) to map turtle habitat and identify areas for specific recommended management strategies within the park system (in coordination with Ecological Systems Plan, Natural Areas Plan, potential Shoreline Management Plan, etc.). (2023) (\$15,000).
- **Interpretive signage.** Hire consultant to evaluate, design and fabricate interpretive signage (individual nest boxes, nest sanctuary locations, etc.). (2023) (\$8,000).
- **Road crossing signage.** Hire consultant to design permanent and temporary turtle crossing signage for installation. (2023) (\$20,000 – creation of design specs only).
- **Permanent turtle crossing signage.** Based on data, hire consultant to fabricate permanent turtle crossing signage infrastructure and designs for installations. Infrastructure is permanent and signage is interchangeable with seasons and messaging. (2024-2026)
 - Install permanent turtle crossing signage along stretch between Cedar Meadows and Cedar Lake (2024) (\$20,000 – signs, graphics on parkway, speed bumps, curb cuts)
 - Install permanent turtle crossing signage in Wirth Park (at Birch Lake and between Wirth Beach wetland and wetlands to the south on Golden Valley Road) (2025) (\$25,000)
 - Install permanent turtle crossing signage along east side of Lake of the Isles Parkway (2026) (\$20,000)
 - Install permanent turtle crossing signage along Lake Harriet Parkway (2027) (\$15,000)
 - Other locations based on findings and data results
- **Youth employment.** Identify portion of youth employment funding to support turtle management and research efforts. (2023)
- **Wildlife management staff.** Hire staff for management and coordination of wildlife resources and volunteer efforts within the park system. (by 2024)

Research Priorities

- Collect and monitor data yearly from ReportATurtle. (Ecologist)
- GIS map priority shoreline areas with management recommendations. (2023-2024) (hire GIS Intern)
- Review data yearly to determine locations for additional prototype nesting sanctuary sites in the park system including beach creep areas, and ideal non-beach turtle nesting habitat shoreline sites. (on going) (Ecologist, MPRB staff)
- Obtain MPRB organizational license for the DNR Observational Database to collect Minneapolis wildlife data. (2023) (no cost to government organizations)

- Improve *Report A Turtle* form for consistency of reporting volume, species identification and increased reporting of identified data gaps. (Ecologist and MPRB staff time)
- Partner with University of Minnesota or other institutions of higher education to assess turtle population health and trends through research projects and studies. (start outreach in 2023) (~\$5,000)

Nest Protection Needs and Priorities

- **Temporary turtle nest sanctuary sites.** Continue installation of temporary nest sanctuary sites at Bde Maka Ska Thomas Beach and Lake Harriet Main Beach for a minimum of 5 years to obtain long term data on nesting success, predation, hatchling success rates, park user interest and education opportunities. (ongoing) (\$4,000/year/site - material and staff/consultant time)
- Develop nesting sanctuary monitoring, maintenance, and evaluation protocols to establish consistent management, data collection and identification of the pros and cons of nesting refuges. (2023) (MPRB staff and volunteer time)
- Develop turtle education curriculum and naturalist programming to accompany nesting sanctuary sites and naturalist led programs. (starting 2023) (MPRB staff time)
- Develop individual nest protection and staff response protocols for consistency and volunteer programming. (2023) (MPRB staff and volunteer time)
- **Permanent beach nesting sanctuary.** Based on the data, potentially install a permanent beach nesting sanctuary with permanent fencing, education pieces and programming. (by 2025) (~\$10,000 – fencing, signage, etc)
- Develop and adopt event protocol and permit language to include turtle nest protection. (2023)

Road Crossing Needs

- Planning guides/design specifications. Establish planning guides/design specs for new parkway surmountable curb construction specifications, policy, and implementation. (by 2025)
- **Highway 55 wildlife underpass and wildlife guide structure.** Partner with MNDOT to create wildlife crossing under Hwy 55 between Wirth Lake/Park and Wirth Golf Course and/or wildlife guide structures. (2024-2025 design, secure partners and funding; 2026 construction) (1-2 million – partnership in funding)

Volunteers / Community Science Priorities

- Identify staff and funding for wildlife management effort and to coordinate volunteers for community science data collection, nest sanctuary monitoring and maintenance, individual nest protection. (by 2024)
- Develop and pilot Community Science volunteer program and BioBlitz efforts. (programs established by 2025)

Turtle Species and Habitat Protection Management Priorities

- Review existing City and MPRB ordinances that impact turtles and other wildlife. Identify gaps, update, and clarify language to reflect current data. (by 2025)

- Develop policy language for basking infrastructure in design, forestry, maintenance practices to include but not limited to (by 2026):
 - Basking infrastructure in stormwater BMP wetland designs
 - Retrofitting stormwater BMPs with basking infrastructure
 - Leaving fallen trees in place in lakes
 - Including basking infrastructure to Master Plan designs
- Alter design specs for construction work such as dredging, parkway and parking lot redesign, new construction. (by 2025)
- Develop design specs for parkways to benefit turtle crossing. (by 2025)
- Incorporate identified turtle protection and habitat recommendations into MPRB guidance documents (Ecological Systems Plan, Natural Areas Plan, Shoreline Management Plan, BMP Maintenance Plans, Master Plans). (by 2025)