

MEADOW LAKE WATERSHED ASSOCIATION
Lake Management Plan
Revised February 2018

VISION STATEMENT

To preserve and improve the quality and natural beauty of Meadow Lake, its wildlife and the Meadow Lake Watershed:

- Promote and encourage education for residents, students and visitors in the best management practices, stewardship, enjoyment and preservation of the Lake and the Watershed.
- Endeavor to raise funds and work with other public and private organizations, government agencies and researchers with like objectives.
- Promote friendship and cooperation among residents and public entities within the Watershed.
- Contribute to the restoration of the natural processes and functions of Meadow Lake in order to further reduce nutrient and sediment loads.
- Increase the health and quantity of aquatic plants and shoreline coverage.
- Attract year-round water recreation activities.

GOALS		OBJECTIVES
1. Health of Lake		1. Health of Lake
A. Short term	1. Act against invasive plant and animal species above and below the water line.	<ul style="list-style-type: none"> • Develop action plan for eliminating invasive species and adding native plants. Include timing and cost in plan.
	2. Work to reduce and prevent nutrients and contaminants from flowing into the lake (e.g., fertilizers, herbicides, insecticides, animal feces and vehicle washing).	<ul style="list-style-type: none"> • Publish total phosphorus, Secchi transparency and chlorophyll-a (algae) results: historical, current and goals and how they impact Meadow Lake. Note timing and placement of grit chambers. • Identify the route precipitation takes on its way to the lake (called the hydrology of a watershed). • Identify hard surface runoff that could be purified before entering the lake (parking lots, steep slopes).
B. Long term	1. Improve the quality of water impacting the impaired lake status to meet state water quality standards.	<ul style="list-style-type: none"> • Reduce phosphorus concentration from 250 µg/L in 2005 to the state standard of 60 µg/L. • Reduce Chlorophyll-a (algae) from a 2005 result of 68 µg/L to the state standard of 20 µg/L • Improve water clarity, as measured by Secchi depth, from 0.45 meters in 2005 to 1.00 meter. • Install homemade goose defense on all interested lakeshore properties. • Identify the appropriate food chain required to make Meadow Lake a non-impaired lake.
	2. Reduce phosphorus concentration and algae.	<ul style="list-style-type: none"> • Identify and prioritize phosphorous producers from outside and inside the lake. One pound of phosphorous can generate up to 300 or more pounds of aquatic plants.
	3. Reduce sediment accumulation from the Watershed by slowing down or reducing the flow into Meadow Lake.	<ul style="list-style-type: none"> • Identify hard surface runoff that could be purified before entering the lake (parking lots, steep slopes).

GOALS		OBJECTIVES
2. Nature		
A. Short term	1. Improve conditions that attract beneficial aquatic organisms	<ul style="list-style-type: none"> • Research feeding needs of desirable animals and insects (e.g., turtles, dragonflies, amphibians, fish).
	2. Improve conditions that attract beneficial terrestrial organisms	<ul style="list-style-type: none"> • Post sightings on web-site. • Research feeding needs of desirable animals and insects (e.g., bees, butterflies, hummingbirds and small mammals). •
B. Long term	1. Increase waterfowl in terms of types, quantities and nesting availability.	<ul style="list-style-type: none"> • Survey areas of cattail, bulrush and wild rice along the shoreline, which provide both feeding and nesting areas for wildlife. • Develop program to provide year two members a choice of one of three types of bird houses.
	2. Improve conditions for migratory waterfowl.	<ul style="list-style-type: none"> • Identify ideal conditions that attract migratory waterfowl.
	3. Promote biodiversity	<ul style="list-style-type: none"> • Gather and communicate information regarding native plant and tree options which support biodiversity. • Promote plantings of drought resistant species.
3. Shorelines		
A. Short term	1. Encourage all lakeshore property owners to create and maintain buffer zones.	<ul style="list-style-type: none"> • Conduct shoreline restoration workshops for residents. • Develop a shoreline best practices guide
	2. Deter growth of invasive species along the shoreline.	<ul style="list-style-type: none"> • Collect and distribute information about invasive shoreline species.
B. Long term	1. Create and maintain a portfolio of shoreline plantings on the MLWA website.	<ul style="list-style-type: none"> • Post on MLWA website DNR plant listing from “Restore Your Shore” CD.
	2. Educate and enlist new property owners to help them maintain their shoreline buffer zones.	<ul style="list-style-type: none"> • Contact all new lakeshore property owners and provide them shoreline best practices information.

GOALS		OBJECTIVES
4. Meadow Lake Watershed Community Participation		
A. Short term	1. Maintain MLWA website	<ul style="list-style-type: none"> • Post web-site information.
	2. Provide educational opportunities and workshops.	<ul style="list-style-type: none"> • Hear from diverse interests and perspectives to improve likelihood of success. • Communicate a sense of urgency and motivational reasoning for making lake improvements: 1) enhanced property values; 2) value of positive relationships within the community; and 3) promotion of safety and security within the community. • Perform a survey to include feedback from those not living on the lake. Is there a perceived issue with Meadow Lake? Gather attitudes, actions, opinions, number of nesting structures, restoration projects, awards/recognition (Jean and Carol), list of wildlife occurrences (see if patterns can be identified). Be sure to list a contact for thoughts or ideas they have after the survey visit.
	3. Develop a relationship with Meadow Lake Elementary School	Identify a contact at Meadow Lake School. Identify our goals and learn about their goals.
	4. Engage golf course management to improve water quality	Identify a contact at the golf course. Identify our goals and learn about their goals.
	5. Participate in New Hope's Storm Water Pollution Plan (SWPPP) in 2010	Identify a contact at SWIP. Identify our goals and learn about their goals.

GOALS		OBJECTIVES
	6. Develop relationships with other lake associations	<ul style="list-style-type: none"> Identify appropriate contacts and learn about diverse interests and perspectives to improve likelihood of success. Associations such as other lake associations.
	7. Increase MLWA membership	<ul style="list-style-type: none"> Develop a membership drive to recruit new and renewing members
	8. Respond to community concerns regarding in association with the lake	<ul style="list-style-type: none"> Determine appropriate actions as needed.
	9. Identify on- and off-lake barriers to membership.	<ul style="list-style-type: none"> Develop a plan to address barriers.
B. Long term	1. Develop a marketing plan that engages the support of city, state and private organizations.	Partners <ul style="list-style-type: none"> Ducks Unlimited EPA City of New Hope DNR Minnesota Pollution Control Agency Minnesota Board of Water and Soil Resources Authors of the TMDL (Total Maximum Daily Load) for Meadow Lake Shingle Creek Watershed Management Commission
	2. Develop a program for outreach to the entire Watershed	<ul style="list-style-type: none"> Regularly publish a newsletter
5. Meadow Lake Park		
A. Short term	1. Work cooperatively with the City (e.g., Public Works, golf course, Parks and Recreation) to develop best practices in managing Meadow Lake Park.	<ul style="list-style-type: none"> Identify a contact at the City. Identify our goals and learn about their goals.
	2. Raise public awareness of Meadow Lake Park	<ul style="list-style-type: none"> Develop a campaign e.g., medallion hunt
B. Long term	1. Develop a site to demonstrate small best management practices	<ul style="list-style-type: none"> Establish Meadow Lake Park as a community classroom
	2. TBD	

GOALS		OBJECTIVES
6. Financial		
A. Short term	1. Create a financial plan	<ul style="list-style-type: none"> • Create five year budget. • Membership incentives: year 1 (2010)-free goose defense, year 2 choice of bird house. Collect dues at installation/delivery.
	2. Identify funding sources	<ul style="list-style-type: none"> • Identify government agencies and non-profits that can provide resources and technical assistance • Develop a relationship with Shingle Creek Watershed
B. Long term	1. Research organizations that provide grants	<ul style="list-style-type: none"> • Develop and submit grant proposals, as appropriate
	2. Continue a partnership with the City and work together to secure funding sources	<ul style="list-style-type: none"> • Partner with the City to identify and secure funding for the TMDL implementation