



Date: March 2, 2016

To: Mayor and City Council

From: Jessica Van Der Werff, Water Resources Coordinator

Subject: Mill Pond – aquatic vegetation management policy review

Action Requested:

Provide direction on proposed changes to service level, assessment district, and Lake & Pond Policy.

Information / Background:

In 1980, residents petitioned the City to manage the aquatic vegetation in the Mill Pond. The initial harvesting of aquatic vegetation was funded in part by the City, resident pledges, and the Watershed District. The arrangement continued in 1981 and City Council recommended that future aquatic vegetation improvements be treated as an assessment with all benefitted properties paying a share of the cost. By 1982, the Watershed District declined to fund the project and the cost was assessed equally to 63 properties (see Appendix A) with the City contributing \$1,500. The assessment district of 63 properties and the City contribution of \$1,500 have remained unchanged since then.

At the special assessment public hearing on October 21, 2014, Council heard from a resident who testified that properties across the street from the Mill Pond should not be assessed at the same rate as those who were directly adjacent to the pond. Council decided not to make changes to the 2014 assessment and asked staff to evaluate the methodology for determining the assessment district. The Council directed staff to seek comments from all assessed property owners who would be affected and provide information on the impacts of potential assessment district changes. Council also noted favor of the association structure noted in the Lake & Pond Policy that was adopted earlier in 2014, in which Mill Pond was not included. The new policy stipulates that formal associations be organized in order to be eligible for elective services, which includes submerged aquatic vegetation management.

Staff also sought to evaluate the quality and value of the current service to address complaints and seek opportunities for improvement.

In the summer of 2015, all properties in the assessment district were mailed a 'Frequently Asked Questions' fact sheet and a survey to gauge quality and value of the current service, and satisfaction with the overall aquatic vegetation management strategy and City outreach (Appendix B). An invitation was subsequently sent for a community meeting to discuss survey results, assessment district boundaries, and formation of an

association (Appendix D). The outreach was intended to inform residents of potential changes and how they might be affected. It also was intended to gather feedback that would be used to improve the current service and be shared with City Council to inform future aquatic vegetation management decisions in Mill Pond.

Aquatic Vegetation Management and Permits

Aquatic vegetation in Mill Pond is managed by mechanical harvesters, large machines that cut aquatic plants several feet below the water's surface. Plants are then removed from the water by a conveyor belt system and stored on the harvester until they can be transferred to a truck, then composted off-site.

Harvesting can quickly create open areas of water for recreation and fishing access, but it is similar to mowing a lawn; the plants grow back and may need to be harvested several times during the growing season.

Minnesota Statute, section 84.091, subdivision 1, establishes that aquatic plants growing in public waters belong to the state. The Minnesota Department of Natural Resources (DNR) has permitting authority for the management of aquatic plants, outlined in MN Rules 6280. Any destruction or transplanting of aquatic vegetation in public waters must be authorized by the Commissioner of the DNR. Although the rule was adopted into Minnesota Statute in 1993, regulations for aquatic plant management had been in place as early as 1945 through Commissioner's Orders. The rules are intended to provide a balance between protecting aquatic plants for fish and wildlife and also allowing access and use of public waters. Removing aquatic plants where they do not interfere with swimming, boating, or other recreation is not allowed.

Permits for aquatic vegetation destruction are required for the following control methods;

- Destruction of any emergent vegetation (for example, cattails and bulrushes).
- Cutting or pulling by hand, or by mechanical means, submerged vegetation in an area larger than 2,500 square feet.
- Applying herbicides or algaecides.
- Moving or removing a bog of any size that is free-floating or lodged in any area other than its place of origin in public waters.
- Transplanting aquatic plants into public waters.
- Use of automated aquatic plant control devices.
- Physical removal of floating-leaf vegetation from an area larger than a channel 15 feet wide extending to open water.

There are cases where a permit is not required. If a shoreline property owner wants to maintain a swimming or boat-docking area, they may cut or pull submerged vegetation without a permit under certain conditions:

- First, the area to be cleared must be no larger than 2,500 square feet.
- Second, the cleared area must not extend more than 50 feet along the shoreline or one-half the length of the shoreline, whichever is less.
- A boat channel up to 15 feet wide, and as long as necessary to reach open water, may also be cleared, through submerged vegetation. The boat channel is in addition to the 2,500 square feet

allowed. Cut or pulled weeds must be disposed of properly. This channel can also be maintained through floating-leaf vegetation (except for the yellow lotus, a protected wildflower).

Mechanical harvesting of the Mill Pond requires a permit from the DNR. The permit stipulates the following;

- **50% maximum removal:** The rule limits mechanical removal to up to 50% of the total vegetation. The limit was set as a compromise between total prohibition of plant removal and total lack of regulation. The 50% limit is not new; it was codified into Minnesota Rules in 1993 as a result of legislation that required the DNR to use the rule-making process when making regulations, but it had been established in previous versions of the rules.
- **The removal extent must stay the same year to year:** The area allowed for control must remain in the same location each year. This is stated so that the rules are not used to destroy all vegetation along the shoreline piecemeal a year at a time.
- **Invasive species removal:** The City of Edina applied for and received an invasive species permit in 2014. Invasive species permits do not have a permit fee. Any removal of invasive species counts toward the 50% removal maximum.
- **White Water Lily (*Nymphaea odorata*):** The White Water Lily is a blooming native plant. The DNR recommends that it be left alone but allows for a channel to be cleared for boat access.
- **Chemical treatment:** Mill Pond is part of Minnehaha Creek. Chemical treatments are not allowed in moving water and past chemical treatment permit applications have been denied by the DNR.

Current Practices and Constraints

Each summer the City hears feedback about quality and value of the aquatic vegetation harvesting service related to harvesting areas, frequency, and vendor. The City strives to provide a high level of service while also considering the legal constraints spelled out by the DNR permit, the physical constraints of the harvesting equipment, and administrative constraints.

Mill Pond is typically harvested twice per year; in early summer (about June) and late summer (about August). The contractor uses professional judgment to determine the optimum time to conduct harvesting. During each visit, the contractor receives a directive from the City to harvest 7 acres (of 14 total acres) according to the DNR permit which allows for up to 50% of the pond to be harvested. The current strategy has been to target a center channel plus 50% of each property's shoreline twice/year. Removal of invasive species counts toward the 50% limit and native white water lilies have some protections that allow only a boat access channel. Additionally, Minnehaha Creek runs through Mill Pond which limits the control methods that may be used; the DNR rules do not allow chemical treatments in streams.

Millpond is 3-5 feet deep, with a couple deep areas that extend to 6 feet deep. There are also shallow areas along the shore and in much of the upstream end (see Appendix E, page 19) that are less than 2 feet deep. Harvesting equipment requires about 2 feet of water depth to operate.

Budgets for mechanical harvesting are set the previous year which does not allow for adjustments due to variability in vegetation density and water level in any given growing season. Additionally, few bids are received from contractors each year. There is usually one or two to choose from.

Service Quality and Value Evaluation

A survey was sent to owners of properties that are in the special assessment district to gauge the quality and value of the service as well as gather general comments. Of the 63 surveys sent out, 38 were returned (60% return rate).

Residents were asked;

1. What are your primary activities on Mill Pond?
2. How would you rate the overall **value** of the service compared with the price paid?
3. How would you rate the **quality** of the harvesting work?
4. How would you rate your level of **satisfaction** with the overall aquatic vegetation management strategy?
5. How would you rate your level of **satisfaction** with the overall contact between you and the City regarding management of Mill Pond?
6. Which **level of service** (regarding frequency) would you be in favor of?

The original survey and returned surveys are shown in Appendices B and C. Specific data related to each question are shown in Appendix E, pages 11-16.

In general, the data showed mixed uses and activities on the pond that continue year-round. Ratings for value and quality of service were low and satisfaction with the overall management strategy and City outreach were mixed, with no real apparent pattern. Lastly, the majority of respondents indicated they were willing to pay more for increased frequency of harvesting, such as three times per year. In some surveys, it was apparent that residents were requesting more harvesting in a spatial sense to some areas, however, harvesting equipment is limited in very near shore where it is shallow and harvesting is already being conducted to the legal maximum extent under the DNR permit.

Much of the conversation at the community meeting and the feedback from the survey and submitted comments were related to the 50% vegetation removal limit imposed by the DNR permit. The overall message from the feedback was frustration that more couldn't be removed, especially in light of the invasive species presence in Mill Pond. Staff has communicated extensively with the DNR on this matter and has gotten clear direction that Mill Pond is not a unique situation with regard to vegetation density and that a variance to the 50% removal rule would be difficult to acquire.

Staff recommends increasing harvesting frequency to three times per year.

Although the spatial extent cannot be expanded, the frequency of harvesting may be increased. Based on resident feedback, staff is recommending increasing the frequency of harvesting to three times per year.

when seeking bids. The area of harvesting would remain the same for each of the three harvesting events, per the DNR permit requirement.

Assessment District

The cost of the improvement, less the city share, is currently assessed equally among all 63 properties in the assessment district with each property being assigned a 1.0 residential equivalent unit (REU). Appendix A shows the properties included in the current assessment district.

Feedback regarding the assessment district was gathered from the community meeting, surveys, and direct comments via e-mail, phone, and in-person correspondence. Participants at the community meeting commented that the assessment district seemed fair, but would support a decision to make a change as long as it was objective. The general consensus among meeting participants seemed to be that if properties have a view of the pond, they should be included but perhaps not at a full REU. Several surveys and submitted comments also addressed the assessment district. Some echoed a similar sentiment that was expressed among the community meeting participants – that properties with a view benefit from the improvement and should be included at some level. Others that live on Browndale Avenue, across the street from the pond, stated that their share should be reduced or eliminated completely because they do not have an equal benefit as those directly adjacent to the pond. Properties on the northern end of Browndale Avenue are across from Browndale Park and properties on the southern end have views that are almost completely obstructed by woody vegetation. There are four properties on Sunnyslope Rd E that are across the street from the pond.

Comments from property owners in the shallow upstream areas also expressed a sense of inequity and were frustrated that they were paying an equal share, yet didn't perceive an equal benefit. Sixteen properties in the upstream portion of the pond are adjacent to a section of the creek that has been historically and consistently more shallow. These sixteen properties were identified with input from the owner of the harvesting company who had worked on the creek for many years and noted the area that is historically shallow and inaccessible in dry years. A share of less than a full REU would ensure that those properties contribute to the improvement in normal years while recognizing that the shallow area may not get equal service if water depth prohibits access in dry years. In dry years when the water is low, this section of the pond is inaccessible with the harvester equipment.

In any case, shoreline property owners may remove additional vegetation (by pulling or cutting) under the DNR general permit, given certain conditions. For areas that are too shallow for the harvester to access in any given year, residents may still manage the aquatic vegetation along their shoreline. The work may be contracted out or may be performed by the property owners themselves.

The assessor's office was contacted for feedback on the matter. One idea from the community meeting to objectively approach the assessment district was to include only properties that were classified as 'lakeshore residential' on the tax rolls (properties that are classified as 'lakeshore residential' are taxed at the same rate as non-lakeshore properties). This approach was unproductive because none of the properties along the Mill Pond are classified as lakeshore, even those that are directly adjacent to the water, because a pond on a creek doesn't fit the assessor's definition of lakeshore. The assessor's office seemed to support assessing only those directly adjacent to the water. The hypothetical question raised was, "What if owners are

assessed for a view across the park, then a tree grows in the park and obstructs views?" Views are screened by vegetation that presently exists or could exist in the future, and those areas are owned and managed by others. Property owners that are not directly adjacent to the pond have limited ability to maintain their view. In the case of the two properties on the southern end of Browndale Avenue (4905 and 4909) views are completely obstructed by vegetation during the growing season. Furthermore, maintaining vegetation in this particular area is important for stabilizing the steep slope.

Four properties on Sunnyslope Road E are also across the street, but have a more clear view of the pond. These properties have minimal vegetation obstructing their view, unlike the properties on the southern end of Browndale Avenue (4905 and 4909) which have a dense vegetation screen.

Resident feedback, landscape characteristics, and pond depth constraints have been carefully considered. A map of the proposed assessment district is shown in Appendix G.

Staff recommends the following changes to the Mill Pond assessment district;

- Two properties on the southern end of Browndale Avenue (4905 and 4909) be removed from the assessment district
- Four properties on the northern end of Browndale Ave be reduced to 0.33 REU
- Four properties on Sunnyslope Rd E be reduced to 0.33 REU
- Sixteen properties in upstream shallow area be reduced to 0.66 REU
- Remaining properties maintained at 1.0 REU

Lake & Pond Policy and Forming an Association

An association is a voluntary organization made up of people who own land on or near a body of water and is often formed by land owners who are concerned about issues regarding the quality or use of the body of water and want to deal with them in an organized manner. According to the City Lakes & Ponds policy, adopted in 2014, lake and pond groups must organize as an association in order to be eligible for elective city-coordinated activities (such as mechanical harvesting). Mill Pond wasn't originally included in the policy, but could be added. The approved Lake and Pond Policy is included in Appendix H.

Currently, there is no structure for regularly obtaining feedback from the Mill Pond community as a whole to ensure that decisions represent the majority. City staff attempt to balance requests for service and competing values based on feedback from a relatively small subset of property owners. Organizing an association empowers the community to play a larger role in the decision making process and encourages a more representative voice.

Based on feedback from the community meeting and submitted comments, the participants seemed mostly neutral, with a small group speaking in favor of organizing an association. Many commented that they didn't see the added value of forming and that it seemed like another component to manage. City staff noted that an association is required among other lake and pond groups in order to be eligible for elective services, including submerged aquatic vegetation management.

Staff recommends that Mill Pond be included in the Lake & Pond Policy which would require residents to formalize as an association in order to be eligible for elective services. A proposed amendment to the Lake and Pond Policy is included in Appendix I.

Appendices

Appendix A: Mill Pond Assessment District

Appendix B: Mill Pond Survey Packet_20150812

Appendix C: Mill Pond Surveys_raw

Appendix D: Mill Pond Meeting Invitation_20150930

Appendix E: Mill Pond Aquatic Vegetation Management Presentation

Appendix F: Mill Pond Resident Comments

Appendix G: Proposed Assessment District

Appendix H: Lake and Pond Policy

Appendix I: Proposed Lake and Pond Policy Amendment