



Item 6C.
BCWMC 2-16-17

Bassett Creek Watershed Management Commission

MEMO

To: BCWMC Commissioners
From: Laura Jester, Administrator
Date: February 8, 2017

RE: Aquatic Plant Management/Aquatic Invasive Species Recommendation

The BCWMC APM/AIS Committee met on six occasions between last June and this January. The committee included representation from the Commission staff, Commissioners, TAC members, lake organizations/residents (from Sweeney, Parkers, Medicine), Three Rivers Park District, Minneapolis Park and Rec Board, and Hennepin County.

The committee discussed a variety of issues regarding APM and AIS in the watershed, learned how other organizations are handling these issues (including park districts, cities, Hennepin County, and neighboring watershed organizations), and identified that only projects with the primary objective of 1) improving water quality, 2) improving habitat or overall ecology, or 3) protecting the function of the BCWMC Flood Control Project would be appropriate for Commission involvement.

The committee also spent considerable time considering various activities the Commission can or should be involved in and to what level. One area they recommended for Commission leadership includes conducting AIS inventories, pathways analysis, vulnerability assessments, and development of management or prevention plans. Unfortunately, the Commission was not successful at receiving a grant from Hennepin County for these activities in 2017.

Without grant funds, the committee should reconvene to further prioritize the work it recommends for the Commission in 2017 and beyond. However, the committee does have a time-sensitive recommendation for the Commission's consideration regarding management of curly-leaf pondweed in Medicine Lake.

RECOMMENDATION:

The committee recommends that the Commission partner with the City of Plymouth and Three Rivers Park District to perform herbicide treatments of curlyleaf pondweed (CLP) in Medicine Lake in 2017 and that the Commission contribute up to \$20,750 (not to exceed amount) from its APM/AIS Budget for the treatment.

Surveys completed by the City of Plymouth last fall estimate that there is likely to be 30 – 60 acres of nuisance CLP this summer. Herbicide treatment of 45 acres is estimated at \$25,000. Three Rivers Park District has committed to providing some funding for the herbicide treatment and performing necessary plant surveys to determine the amount and location of treatments (typically a \$5,000

expense). The Commission's contribution would pay for 83% of the treatment (of 45 acres), while the Park District would pay 17% of the treatment costs (which coincides with their ownership of 17% of the shoreline of the lake).

The committee further recommends that necessary components of this activity include the fact that an approved total maximum daily load study identifies curlyleaf pondweed control as a phosphorus-reducing activity, and that the Commission has funding partners. (This committee does not recommend that the Commission treat curlyleaf pondweed in lakes without an approved management plan or without funding partners.)

BACKGROUND:

The committee spent considerable time learning about how curlyleaf pondweed (CLP) has been treated in Medicine Lake over the years and why it's important to continue spot treatments:

- Medicine Lake historically had 300 acres of moderate to heavy nuisance growth of CLP.
- In 2004 – 2006, Medicine Lake was one of the first lakes in the state to get a variance for a whole lake treatment to control CLP. The project was a collaborative effort between the City of Plymouth, Minnesota Department of Natural Resources, Army Corp of Engineers, and Three Rivers Park District. The whole lake treatments occurred for three consecutive years from 2004 through 2006.
- Surveys in 2007 indicated there was still nuisance growth of CLP pondweed in some areas of the lake. It was recommended that spot treatments occur each year depending on the amount of nuisance growth in order to reduce internal loading of total phosphorus produced when the plant dies off in early July.
- Currently, the amount of nuisance growth of CLP varies from year to year. From 2008 – 2016, the acreage that was treated ranged from 15 to 80 acres.
- The City of Plymouth has been providing herbicide treatments on Medicine Lake since 2008 but does not have funding for this activity in 2017.
- While there has not been a significant change in water quality in Medicine Lake 2004 – 2016, CLP is estimated to contribute 12% of the total phosphorus load in the lake (25% of the internal phosphorus loading in the lake) (Medicine Lake TMDL). Best management practices and stormwater treatment projects in the watershed continue to reduce the external load to the lake.
- Three Rivers Park District staff, city staff, and Commission staff note the importance of keeping CLP to low levels to further reduce internal loading and to prevent the plant from “exploding” back to 300 acres in the lake.
- Continuing to address internal loading in Medicine Lake is a recommendation based on 2016 Commission monitoring (as noted in the water quality report in Item 6B).

You can find more information on CLP in Medicine Lake and meeting notes/materials for the APM/AIS Committee at <http://bassettcreekwmo.org/document/meeting-materials-minu>