



Nine Mile Creek Discovery Point
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MEMO

TO: Nine Mile Creek Watershed District Board of Managers
FROM: Randy Anhorn
DATE: February 12, 2020
RE: Bush Lake Shoreline Vegetation Management

Background

Nine Mile Creek Watershed District has been partnering with the City of Bloomington managing the invasive species around Bush Lake since 2001.

Bush Lake is an exceptional lake within the District for a couple of reasons - first, its water quality is one of the best in the District, and second, the shoreline has the most vegetative diversity as well as the most continuous native plant community of any lake in the District as well as the entire Minneapolis-St. Paul metropolitan area. It is an ecological gem.

History

In 2000 the City of Bloomington petitioned the District for assisting with the installation of a low-level outlet (pump) to alleviate extremely high-water levels in this land-locked lake. Extensive vegetation death (trees as well as herbaceous plants) around the entire lake had occurred because of prolonged flooding.



Newly installed outlet pipe; 2000. Notice flood impacted vegetation.



Minnesota Land Cover Classification System (MLCCS) data are used to identify the "ecologically significant" areas around Bush Lake.

At the time a full restoration was requested to revegetate the extensive shoreline. Ecologist Fred Rozumalski noticed that there was some natural recruitment of native plants from the seedbank of the shoreline soils. It was determined to allow the shoreline to naturally revegetate and to manage the it for invasive species control.



Initial recruitment of native plants germinating from the existing seed-bank in 2001.

The integrity and diversity of the native plant community that emerged from the seed-bank was better than anticipated. Hundreds of species re-established, many of them extirpated from most lakes in the metro area. The Minnesota County Biological Survey (MN DNR) identifies one threatened plant species and one threatened animal species existing along the Bush Lake shoreline in 1998.



Left to right: prairie blazingstar, marsh milkweed, wild iris, golden ragwort.

At the time the Board of Managers recognized the uniqueness of this habitat and committed to managing the native plant community to prevent the establishment of invasive plant species. It has been managed ever since. The City of Bloomington has agreed to share 50% of management costs.



Bush Lake shoreline has been carefully managed to eliminate invasive species since 2001. Right photo: Great blue lobelia.

Future Lakeshore Vegetation Management

The current three-year vegetation management contract has expired and we are requesting the Board's approval to solicit three quotes for continuing the shoreline management. The lake's native plant communities are surrounded by invasive species and it is important to continue to protect this unique habitat for future generations.



The total cost for the 2014-2016 work by Minnesota Native Landscapes was for \$35,000, or just over \$11,500 a year. The 2017-2019 winning bid (and resulting total costs) by Landbridge was \$22,850 or roughly \$7,620 a year.

As part of the cooperative agreement with the City of Bloomington, the District bills the city for 50% of the annual cost at the end of the year, so in 2017-2019 it cost the District roughly \$3,800 a year.

Our current three-year cooperative agreement (2017-2019) with the City of Bloomington to continue the partnership is due to expire on June 30, 2020. In addition, our three-year agreement with Landbridge Ecological (formerly Wetland Habitat) also expired in 2019.



Request

Authorize the Administrator to re-enter into a cooperative agreement with the City of Bloomington to jointly continue the manage the invasive species around Bush Lake for 2020-2022 and solicit quotes for the continued work for 2020-2022. Received quotes will be brought back to the Board at a later meeting