# **MEMORANDUM**

**To:** MCWD Board of Managers

From: Becky Christopher

**Date:** March 5, 2018

**Re:** Taft-Legion Project Update

## **Purpose:**

At the March 8, 2018 Operations and Programs Committee (OPC) Meeting, staff will provide an update on the Taft-Legion Lake Improvement Project and discussions that are underway with the City of Richfield regarding project performance.

## **Background:**

#### Project Background

During the 2010 distribution of the District's Capital Improvement Plan, the City of Richfield requested that an improvement project for Taft and Legion Lakes be included. A project proposal was developed that outlined details of a partnership between MCWD and the City of Richfield to improve water quality within the two lakes through a combination of project elements including the following:

- Infiltration systems that draw water from Taft Lake and the ponds draining to Legion Lake and direct it to underground infiltration systems in the adjacent park land
- A flocculation treatment system that treats water withdrawn from Taft Lake, removing dissolved pollutant loads, before it is discharged back into the lake
- Native lakeshore buffers established in select areas surrounding Legion Lake
- Pre-treatment of runoff to Legion Lake by redirecting pipes to expanded sedimentation ponds to remove pollutant loads prior to being discharged into Legion Lake

In September 2012, following adoption of a major plan amendment, the Board ordered the project and authorized staff to enter into a cooperative agreement with the City of Richfield under which the City would construct, maintain, and finance the project, and the MCWD would make payments to the City on a 20-year payment schedule to cover the costs of design,

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construction, bond issuance and interest. The total storm water utility charges payable by the MCWD are summarized below.

Design and Construction: not to exceed \$2,700,000

Bond Issuance Costs: \$61,462 Interest: \$704,662

Annual payments range from approximately \$168,000-\$178,000 and began on February 1, 2014.

#### **Project Performance**

The City completed construction of the infiltration systems, buffers, and Legion pre-treatment in fall of 2015 with construction of the flocculation system completed in fall of 2016. Since that time, the City has been operating and monitoring the performance of the systems and providing annual reports to the District, as required under the cooperative agreement.

To date, the systems have been significantly underperforming as compared to the original estimates. The feasibility study estimated that the project would achieve a total phosphorus load reduction in the range of 167-413 lbs/year and a volume reduction ranging from 134-280 acreft/year. In 2016, the systems removed only 16.39 lbs and 75.4 acre-ft. The 2017 report has not yet been completed (due June 30, 2018 per the cooperative agreement), but the City has indicated that it was another year of low removals.

The City has identified a number of reasons for the underperformance. Some are operational issues that can be fairly easily addressed (e.g. mice in the equipment, electrical shorts, chemical feed issues). Others are more challenging and may not be possible to address (e.g. DNR appropriations permit limits, issues with pump capacity, wet weather limiting infiltration capacity). The City has also measured lower in-lake phosphorus concentrations in recent years than were assumed in the feasibility report, resulting in lower removal rates.

The City has indicated that, even with some of these issues addressed, they do not believe the project will be able to achieve the level of treatment that was originally estimated. Staff has had preliminary discussions with legal counsel regarding the District's ability to cease or reduce payments based on underperformance and has let the City know that it is exploring these options.

District staff and the District Engineer met with the City on February 13, 2018 to discuss these issues and determine a path forward. At that meeting, staff requested that the City provide a report summarizing:

- Identified issues and limitations affecting performance
- Proposed actions and timeline to address issues
- Revised performance estimates based on system limitations
- Plan for ongoing monitoring and reporting

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## **Next Steps:**

Staff is in the process of reviewing as-built plans from the City and has requested additional information, including water quality monitoring data and estimates of 2017 project performance. Staff is proposing to coordinate with legal counsel to draft a letter to the City documenting discussions to date and establishing clear expectations for corrective actions and timeline.

If there are questions in advance of the meeting, please contact Becky Christopher at 952-641-5412 or bchristopher@minnehahacreek.org.

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