



Project Maintenance and Land Management Program First Quarter Update – July 2017

Introduction

This report will provide an update on the District's Project Maintenance and Land Management (PMLM) Program activities in the first quarter of 2017 including work completed on projects that are in warranty phase, as well as past capital projects and their associated maintenance activities. The next update will occur in September 2017. If there are questions regarding any elements of this report, please contact Laura Domyancich at (952) 641-4582 or Tiffany Schaufler at (952) 641-4513.

The PMLM Program oversees:

- Installation and management of vegetation components for 5 current capital project sites
- Project management of new capital projects
- Contracted vegetation maintenance for 19 past capital project sites and lands under conservation easements
- Inspection of 70+ District projects and 25+ lands to identify maintenance needs
- Operation of the Gray's Bay Dam
- Management of the inspection and contracted maintenance of 26 stormwater ponds
- Monitoring water levels, water quality, and vegetation establishment as needed for capital project permit requirements
- Coordination of restoration work on District properties and easements
- Management of Federal Emergency Management Agency (FEMA) funding and flood repair
- Development of new conservation easements with private property owners and developers
- Development of new management plans for District properties
- Coordination of a revised PMLM manual and Maintenance Plan

Program Updates

In 2015, the PMLM Program identified the need for a revision of the existing Operations and Maintenance (O&M) Manual. Many capital projects and land acquisitions (fee and easement) have been undertaken since the manual was first written in 2000. Operations and maintenance of District lands and projects has advanced and grown accordingly, and the program's guiding document will be revised to reflect those changes. We anticipate finalizing the new manual later this year.

Gray's Bay Dam Inspection and Maintenance

Inspection and follow-up maintenance of the Gray's Bay Dam was a need identified in the process of drafting the updated O&M manual. PMLM staff contracted with Wenck Associates to perform an inspection of the dam gates, cables, gear boxes, stoplogs, and their associated seals. Wenck provided a report detailing needed maintenance and Blackstone Construction was selected to replace the seals on the dam gates and replace the cables and gear boxes. The steel veneers that indicate the width of the dam opening will also be improved. At this time, all gear boxes and cables have been replaced and the remaining repairs will be completed this summer. Wenck also included in their report specific maintenance intervals for the dam equipment. The gate cables and seals on the dam gates and stop logs will require maintenance again in 10 years. The gear reduction mechanisms and the width opening veneers should be serviced in 20 years.



Gray's Bay Dam, March 22

2017 Spring Inspections

Spring inspections were primarily focused on the establishment of vegetation within the 5 capital projects under warranty maintenance and sites sensitive to the higher water conditions this spring. Additionally, infrastructure was inspected to ensure good function and identify needs for maintenance. Overall, sites were in very good condition this spring. Vegetation associated with buffers and wetlands have benefitted from consistent spring rains. Overflow and inlet structures needed to be cleared of garbage, as is the usual case in the spring; this maintenance ensures that water is appropriately moving through the facilities.

Between March 31 and April 30, contractors for MCWD conducted prescribed burns at Gideon Glen in Shorewood, Independence Wetland, Minnehaha Creek Headwaters Shoreline in Minnetonka, Long Lake Ponds and Shoreline, Twin Lakes Park Ponds in St. Louis Park, and the Johnson-Rolling Hills property in Minnetrista. Spring prescribed burns are utilized to control cool season grasses and perennial broadleaf weeds, return nutrients to the soil, and favor growth of warm season grasses and forbs.



Independence Wetland during prescribed Burn, April 5 (above), and lake sedge after green-up, June 7 (below)



Stormwater Pond Surveys

Typically on a three-year rotation, the District inspects a total of 26 stormwater ponds, 19 of which are the District's responsibility to maintain. The District contracted with Wenck Associates to complete the 2017 pond inspections this spring for the Cedar Meadows Pond, Cell 1 of Southwest Calhoun Pond, Twin Lakes Pond, Long Lake Park North and South Ponds, and Swan Lake. Results of the sediment accumulation surveys showed that no ponds will require maintenance dredging in 2017, but it was determined that since it was last dredged in 2012, the Southwest Calhoun Pond has accumulated sediment to fill 38% of its built volume. It is anticipated that this pond will reach 50% capacity prior to its next scheduled survey in 2020. The District will re-survey the basin in 2018 to determine if additional sedimentation has occurred and evaluate the need for maintenance. This pond is first in a series of three, and regular maintenance is needed in the first basin to preserve capacity in those downstream.

Capital Projects Under Warranty Maintenance

Cottageville Park

Cottageville Park is in its second year of warranty maintenance. Continued coordination with the landscape subcontractor has led to improved vegetation condition and weed management. In 2018, this project will receive a third year of warranty maintenance under a bid alternate. Interpretive and informational signage was installed recently, and the City of Hopkins has completed the pavillion.



Cottageville Park, May 18

Long Lake Creek Wetland Restoration

The Long Lake Creek Wetland Restoration is in its third year of warranty maintenance. Native vegetation is establishing well, and hybrid cattail and reed canary grass, invasive plants that were once dominant on the site, were reduced during construction and are only minimally present now due to management efforts. Buckthorn has been eliminated from the site and neighboring residential properties to protect the investment the District made in establishing native trees and shrubs on the site. The remeandered streambank is stabilized with native plants, and the entire site has withstood heavy spring and summer rains with no damage.



Long Lake Creek Wetland Restoration, June 27

Highway 101 Causeway Shoreline Restoration Project

The Bushaway Road (Highway 101 Causeway) Shoreline Restoration project reached substantial completion in May with planting and hydroseeding of the soil slope being completed. Trees and shrubs are beginning to establish along with the seeded areas on top of the wall. The hydroseed applied to the soil slope itself has been slow to germinate. District staff met on site with the vegetation subcontractor, the project engineer, and the manufacturer of the wall material on July 6 to determine a method to provide for better germination of the native seed. It was determined that soil moisture availability is likely the limiting factor, so the vegetation subcontractor will extend the existing drip irrigation line to provide water to the soil slope and germinating seed. Plant cover will be assessed in September and next steps will be determined based on the vegetation condition at that time.



Hydroseeding the Bushaway Road soil slope, April 27

Jennings Bay Flood Mitigation and Wetland Restoration Project

The Jennings Bay Floodplain Mitigation and Wetland Restoration, which provided compensatory storage for the Bushaway Road Shoreline Restoration, reached substantial completion in April 2017. The as-built survey is currently being finalized and warranty period vegetation maintenance has begun on the site. The floodplain area handled early season rains well and the seeded and planted vegetation is establishing with weed control by the vegetation subcontractor.



Jennings Bay Floodplain Mitigation, May 31

Minnehaha Preserve Enhancement

The project elements of the Japs-Olson Minnehaha Preserve Enhancement are in the midst of both maintenance and construction. The infiltration basins are within their second year of warranty period maintenance. The upland and pond edge vegetation is establishing well despite the highly variable moisture conditions. The inlet of the second basin experienced some significant sedimentation and erosion and is currently being repaired.

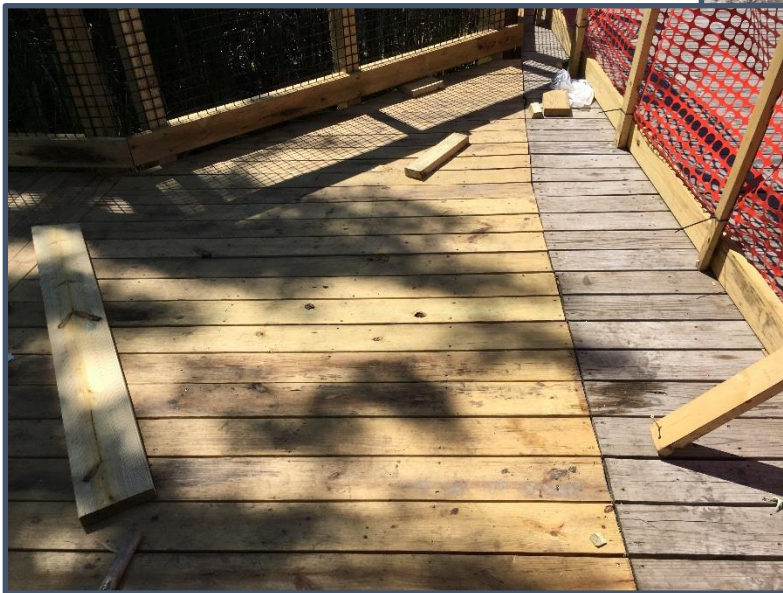


Japs Olson Filtration Basin, July 6

The trail connection and parking lot construction are nearing completion. The boardwalk sections over lower portions of the trail are complete as is the connection to the Preserve boardwalk. Concrete curbs have been poured, and the bituminous trail will be completed within the next several days. Trees and shrubs planted to provide screening to Excelsior Boulevard will be a final construction element. The 50th Anniversary Celebration Greenway Clean-Up scheduled for July 23 will include the area around the trail connection and will serve to remove accumulated litter in the vicinity.



Minnehaha Preserve Trail Connection Parking Lot, July 6



Minnehaha Preserve Trail Connection joining to Existing Boardwalk, July 6