

Project Maintenance and Land Management Program 2016 First Quarter Update

Introduction

This report will provide an update on the District's Project Maintenance and Land Management (PMLM) Program (formerly the Operations & Maintenance Program) activities in the first quarter of 2016 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 2016. If there are questions regarding any elements of this report, please contact Laura Domyancich at (952) 641-4582 / ldomyancich@minnehahacreek.org or Tiffany Schaufler at (952) 641-4513 / tschaufler@minnehahacreek.org.

The PMLM Program oversees:

- Installation and management of vegetation components for 8 current capital project sites
- Project management of new capital projects
- Contracted vegetation maintenance for 17 past capital project sites and lands under conservation easements
- Inspection of 70+ District projects and 25+ lands to identify maintenance needs
- Operating the Gray's Bay Dam
- Managing the inspection and contracted maintenance of 26 stormwater ponds
- Monitoring water levels, water quality, and vegetation establishment as needed for capital project permit requirements
- Coordinating restoration work on District properties and easements
- Managing Federal Emergency Management Agency (FEMA) funding and associated flood repair
- Developing new conservation easements with private property owners and developers
- Developing management plans for District properties
- Coordinating the development 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 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 program manual. PMLM staff contracted with Wenck Associates to perform an inspection of the dam gates, cables, gear boxes, stoplogs, and their associated seals. A report detailing needed maintenance and contractors equipped to perform the maintenance is expected within the next two weeks. Maintenance will be performed this fall when lake levels are typically low and the dam can be serviced without disrupting dam management.

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 2016 pond inspections this spring for the County Road 6 Pond, Excelsior Pond, Gideon Glen Pond, Glenbrook Pond, and the three Nokomis Ponds: Amelia, Gateway, and Knoll. Results of the sediment accumulation surveys showed that no ponds will require maintenance dredging in 2016, but the Glenbrook Pond, which is the maintenance responsibility of the City of Wayzata, has lost 44% of its wet volume capacity. This information will be coordinated with the City to incorporate into their stormwater infrastructure maintenance plans. The Nokomis Gateway Pond has lost 21% of its wet volume capacity since its installation in 2001. All other ponds were at or below a 16% wet volume capacity decrease.

Great River Greening Coordination

PMLM staff have coordinated with Great River Greening to receive \$115,000 in LCCMR funding to implement habitat restoration on the former Gould, Rye, Chute, Barkus, and Waldera properties. The District also plans to receive \$71,100 in Lessard-Sams Outdoor Heritage Council funding for the Minnehaha Creek Greenway properties. PMLM staff identified restoration needs on these properties, and Great River Greening recognized an opportunity to expand their reach into the west Metro and to implement some alternative strategies to invasive species and habitat management. Funding has been approved, and PMLM staff will be working with Great River Greening staff to apply management for the 2016 and 2017 growing season.

2016 Spring Inspections

Spring inspections were primarily focused on the condition of vegetation and their resiliency to the prolonged flooding of 2014. 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.

Following winter 2015-2016 stormwater pond maintenance of the Gleason Ponds, the site is revegetating quickly. Site restoration including grading, seeding, and straw mulching has been successful, and erosion control materials will be removed soon. PMLM staff will continue to monitor the site to ensure that it continues to stabilize and that the ponds are functioning well following maintenance.



Gleason Ponds, April 26, 2016

After the Wolner Field Pervious Concrete parking lot became damaged as a result of baseball field agricultural lime being tracked over the concrete during field maintenance, the City of Mound has coordinated efforts to utilize sweeping/vacuum equipment, compressed air tools, and pressure hydro washers to remove the material and restore the concrete's function and percolation. The concrete is now percolating correctly, and PMLM staff will be meeting with city staff to develop a procedure for coordinating future inspections and reporting on maintenance of the water quality improvement projects installed in Mound as past District capital projects.



Wolner Field Parking Lot, April 26, 2016



Cedar Meadows, June 7, 2016

Stormwater pond buffers impacted by prolonged high water in 2014 continue to revegetate with some minor weed issues. Vegetation management contracts over 17 sites, including 9 stormwater pond buffers, are targeting these weed issues to promote further re-establishment of native species in the buffers. Hybrid cattail, reed canary grass, and Canada thistle have rebounded on a few sites, but a very targeted approach with specific management is remedying the issues.

Contracted vegetation maintenance continues for the Headwaters and Long Lake shorelines, as well as, the larger sites of the County Road 26 Remeander, the Johnson – Rolling Hills Restoration, and Independence Wetland.

Vegetation management of the Six Mile Marsh Prairie Restoration is transitioning from its original construction warranty phase into long-term maintenance of vegetation. The site greened-up quickly after receiving a prescribed burn in November 2015 and will continue to be managed with spot mowing and limited spot herbicide application throughout 2016.



Active Capital Projects in Warranty Phase

Cottageville Park

- **Constructed:** 2015
- **Summary:** Project construction and installation of vegetation was completed in late summer 2015. The vegetation contractor for the project, Great Northern Landscapes, will maintain the landscape plantings through 2018.
- **Maintenance:** A number of trees, shrubs, and perennial plants were replaced through warranty by the contractor in the spring of 2016. It is possible that the plants failed because the irrigation system provided too much water for the primarily native plants. The site is now establishing well and has improved with good growing season conditions.



Cottageville Park, May 19, 2016

Long Lake Creek Wetland Restoration

- **Constructed:** 2014-2015
- **Summary:** Vegetation installation was completed in 2015 and initial maintenance began. Following the initial site disturbance, weed management has been the primary maintenance need, but replacement of some installed shrubs will be needed in 2016.
- **Maintenance:** PMLM staff are working with the installation contractor to complete shrub replacement and are also monitoring the site for any signs of wild rice establishing in the open water areas after seeding in fall 2015. The site has been spot mowed to reduce reed canary grass and Canada thistle and will receive spot herbicide applications and buckthorn re-sprout treatment later this fall.

Minnehaha Creek Reach 20 Restoration

- **Constructed:** 2013-2015
- **Summary:** Enhancement plantings were completed in 2015 in areas that were impacted by 2014 flooding. Vegetation on the site is continuing to establish as targeted vegetation management is allowing expansion of areas with desirable native vegetation. Interpretive signage was installed in 2015. Through monitoring required by the Army Corps of Engineers permit, staff has noted a



Reach 20, June 20, 2016

- **Maintenance:** Maintenance in 2016 will include selective spot spraying and mowing for invasive species to continue to promote the expansion of native plant populations. A maintenance plan detailing inspection and management responsibility for constructed project elements, as well as surrounding vegetation, has been drafted and is currently being reviewed by City of St. Louis Park staff.

Minnehaha Creek Reach 14 Streambank Restoration

- **Constructed:** 2013
- **Summary:** Replacement plantings installed to repair damage as a result of the 2014 flooding are establishing well and providing greater resilience, filtration, and erosion control for the streambanks.

- **Maintenance:** 2016 will be the final year of warranty maintenance for the project. After the 2014 flooding, the 2015 replanting effort will serve to improve the condition of the project prior to maintenance of the buffers being assumed by the individual homeowners.



Reach 14, June 7, 2016

Six Mile Marsh Prairie Restoration (SMMPR)

- **Constructed:** 2013
- **Summary:** This project is transitioning from its warranty period maintenance into regular vegetation management. The installation contractor is working to complete some minor tasks to meet performance standards, after which they will begin work under a new contract for regular management with reduced inputs.
- **Maintenance:** Spot mowing and spot spraying will be completed in areas with persistent weed growth. A prescribed burn of the uplands and wetland buffers in November 2015 has boosted forb growth and limited cool season grass growth.

Plant Installation Oversight for Capital Projects under Construction

Japs Olson Minnehaha Preserve Enhancement

- **Constructed:** 2015
- **Summary:** The upland portions of the basins were seeded in 2015, and the seed has germinated well. MCWD identified the need to enhance the basin vegetation with a plug planting to vegetate the basins themselves and installation of trees and shrubs in the upland areas to provide screening for future trail users.
- **Maintenance:** The site will receive mowing over the next two growing seasons to suppress weed growth and promote the establishment of seeded warm season grasses and forbs. The additional herbaceous planting is planned for later this summer, and the trees and shrubs will be installed this summer and next spring based on plant availability for species.