

**LAKE MINNETONKA CONSERVATION DISTRICT (LMCD)
2014 Final Eurasian Watermilfoil (EWM) Harvesting Program Report**

A. Harvesting season data and conditions summary:

1. Harvesting Season- The 2014 season consisted of approximately seven weeks starting on Tuesday, July 8th, and ending on Friday, August 22nd. The length of the season was 33 working days. This was significantly more than the 26 day season in 2013. The season was planned to start on the week of June 16th; however, it was postponed until July 7th due to the low early season EWM growth and high water. The plan for the 2014 season was to have the crew operate three LMCD harvesters and transport barge four days a week, 10 hours a day. With the late start of the season, the crew worked five days a week for the majority of the season. Some Fridays were at a reduced staffing level because of scheduling.
2. Water Level- Lake levels during the course of the 2014 season were at record levels and significantly higher when compared to 2013. In fact, the LMCD initiated an emergency high water ordinance (entire lake minimum wake restrictions) from 6/6/14 to 7/25/14. The high lake levels contributed to the low EWM growth in the beginning of the summer of 2014.
3. Acres Harvested- Total acreage harvested in 2014 was 391. This compares to 267 in 2013, 412 in 2012, 268 in 2011 and 384 acres harvested in 2010. Acres harvested during a season have been calculated since 2003 utilizing Global Positioning System and Geographic Information System software. In 2014, there were eight bays identified for whole bay/large scale herbicide treatments. These bays included Phelps, Carmans, Grays, Gideons, St. Albans, North Arm, Carsons and St. Louis Bays. Mechanical harvesting was not conducted in some of these areas due to the herbicide treatments. Staff worked with Lake Minnetonka Association (LMA) to coordinate harvesting within the bays that have been or would be chemically treated. Improved communication and coordination with the LMA is needed in the future.
4. Harvester and Truck Loads- The total number of harvester loads in 2014 was 308.5, which generated 162 truck loads or 4.91 per day. (see attached spreadsheet for further details). This compares to a total number of harvester loads of 203.25 in 2013, which generated 114 truck loads or 4.38 per day.

B. Operating Highlights

Harvesting priorities were based upon impediment to boat navigation on the lake, with higher priority given to areas of the lake where EWM has matted. Although there were some areas of the lake with significant EWM growth that was not aesthetically pleasing, we generally did not harvest them unless they were impeding boat navigation. There was a high emphasis in recovering EWM fragments. This was done through utilizing one of the harvesters as a skimmer at times. Another technique that was used was emphasizing tandem cutting and returning to areas the following day and skimming the areas with the harvesters.

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The LMCD has assembled a rotating harvesting schedule for Lake Minnetonka (see attached schedule for further details). In 2014, the Lower Lake North Option was implemented. Throughout the season, the LMCD communicated with the LMA to ascertain if harvesting was appropriate in bays that were involved in coordinated herbicide treatments. The LMA requested that the LMCD not harvest in certain bays. There were some bays that the LMA advised the LMCD could harvest if warranted. (St. Louis, Carsons, Phelps and North Arm).

Similar to past seasons, a combination of clear-cutting and limited channel-cutting was utilized to address harvesting priorities. This year there was a high emphasis on tandem cutting when possible. All areas that dictated the need for harvesting were cut at least once, with high growth areas harvested twice as time permitted.

Public response to the harvesting was encouraging, with a limited number of telephone calls from the public. Harvested EWM was mainly composted at two Three Rivers Park District (TRPD) sites. LMCD staff has worked closely with TRPD staff to utilize Gale Woods Farm and Noerenberg Gardens as compost sites because of the close proximity to Lake Minnetonka. The recent change to utilize Noerenberg Gardens has improved trucking efficiency. With the discovery of Zebra Mussels on Lake Minnetonka, LMCD staff decided to no longer use the University of Minnesota Landscape Arboretum as a compost site to reduce the risk of the spread of zebra mussels to uninfested water bodies. Prior to 2010, the Arboretum was used as the primary compost site.

C. Personnel

Judd Harper served his 14th year as Project Manager in 2014. Tom Elmer served as the EWM Site Supervisor for the first year in 2014. An additional five employees were hired for the 2014 season, which included two returning and three new seasonal employees.

D. Equipment Operation and Maintenance

The LMCD contracted with Curfman Trucking and Repair, Inc. for their 13th year providing maintenance of the EWM harvesting equipment.

E. 2014 EWM Harvesting Program Budget Analysis

The overall budget for the 2014 EWM Harvesting Program was \$95,000. Estimated expenses incurred through September are approximately \$89,000. There will be other expenses incurred for post season work in which invoices have not been received and paid. Funding for this program comes from a combination of levies from the 14 member cities and a grant of \$30,000 from the MN DNR.

F. Overview of 2014 Issues

Issues

2014 Corrective Actions

• Condition of Lot where equipment is stored

1. Excess equipment
(2 floating & shore conveyors)

Worked with Tom Niccum to remove equipment & scrap

2. Parts & Equipment

Organized & removed equipment & parts

3. Lot Grade

Worked with Hennepin County & Gabriel Jabbour to Grade the lot

4. Storage of Harvesters

Worked with Gabriel Jabbour to devise an improved procedure to launch and store the harvesters. Purchased 24 new stands

• Underwater utilities

1. Identification of underwater utilities

Researched and worked with the state to get info. Submitted a modified Gopher State One Call locate request for location information from 41 organizations. Collected location information and worked with utilities to interpret and refine info.

• Harvesting and Herbicide applications

1. Lake Minnetonka Assn. program

Coordinated with LMA concerning harvesting within bays that have coordinated herbicide treatment programs. (Improvements needed in 2015)

• Shoreline Fragments

1. Fragments as a result of LMCD harvesting equipment

Tandem cutting and skimming with a harvester utilized to minimize fragments

2. Fragments not as a result of LMCD harvesting equipment