

**LAKE MINNETONKA CONSERVATION DISTRICT (LMCD)  
2006 Eurasian Watermilfoil (EWM) Final Harvesting Report**

**A. Harvesting season data and harvesting condition summary:**

1. Harvesting Season- The 2006 season consisted of approximately nine weeks starting on Friday, June 9th, and ending on Thursday, August 10th. There were three days of harvesting cancelled due to weather and the July 4th holiday. The length of the season, factoring in for cancelled days, was 41 working days. This was similar to the 43-day season in 2005. The crew operated the three LMCD harvesters and high-speed transport barge five days a week for eight hours during the 2006 season.
2. Water Level- Lake levels during the course of the 2006 season were similar compared to 2005. The lake level on the first day of the 2006 season was 929.53' compared to 929.80' in 2005. The highest lake level during the 2006 season was 929.64' on June 19th and 21st, compared to a highest lake level of 929.81' on June 16th during the 2005 season. Prior to the 2006 season, the LMCD declared a "High Water Emergency" on May 4th because of higher lake levels. This "High Water Emergency" was terminated on June 1st. It appears that the cooler weather and higher precipitation that took place during the month of May had an impact on milfoil growth in 2006. This was reflected in the "Harvester and Truck Loads" statistics detailed below.
3. Acres Harvested- Total acreage harvested in 2006, including second harvests, was 267 acres (see attached map for further details). This compares to 395 acres harvested in 2005, 478 acres harvested in 2004, and 437 acres harvested in 2003. The acreage computed during the 2003-2006 seasons was estimated by the EWM and Assistant Site Supervisors utilizing a Global Positioning System (GPS).
4. Harvester and Truck Loads- The total number of harvester loads in 2006 was 195.25, which generated 122.00 truck loads or 2.98 truck loads per day. This compares to a total number of harvester loads of 320.50 in 2005, which generated 175.00 or 4.07 truck loads per day. Attached are spreadsheets that provide further details of this statistical information. In 2006, the total number of harvester loads decreased by approximately 39 percent and the total truck loads decreased by 30 percent compared to 2005. There appears to be three primary contributing factors to these significant decreases. First, it appears that the cooler weather and higher precipitation during May had a significant impact on early season milfoil growth. This contributing factor was confirmed by anecdotal feedback by the harvesting crew supervisors. Second, the 2006 Milfoil Demonstration Project was a contributing factor because the "Public Treatment Areas" selected in Carmans, Grays, and Phelps Bays were not harvested in 2006 and they have historically contributed significantly to harvester and truck load statistics. Third, there was an extraordinary amount

of down time due to necessary repairs by Curfman Trucking and Repair. Further summary of the larger repairs is detailed below under "Equipment Operation and Maintenance".

**B. Operating Highlights**

Harvesting priorities were based upon impediment to public boat navigation on the open water, with higher priority given to areas of the lake that were matted. Although there were some areas of the lake with significant milfoil growth that was not aesthetically pleasing, we generally did not harvest them unless they were impeding public boat navigation (i.e. Grays Bay along the 101 Causeway).

The LMCD has assembled a rotating harvesting schedule for Lake Minnetonka (see attached spreadsheet for further details). In 2006, the Lower Lake North Option was planned. However, the harvesting crew deviated from the Lower Lake North Option because of the lack of milfoil in the bays early on the schedule. Similar to past seasons, a combination of clear-cutting and channel-cutting was utilized to address harvesting priorities. 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 in general was encouraging, with a limited number of telephone calls from the public. Harvested milfoil was mainly composted at the University of Minnesota Landscape Arboretum, with occasional loads composted either at the Leuther Farm or Gale Woods Park. These three sites are a convenient distance from Lake Minnetonka, generally less than 10 miles from most offload sites.

**C. Personnel**

Judd Harper served his sixth year as Project Manager in 2006. Jeff Schmidt returned in 2006 for his fourth year with the program and first year as Site Supervisor. To assist Schmidt, Jon Septer returned for his third year with the program and first year as Assistant Site Supervisor position. An additional six employees were hired to round out the four seasonal crew positions for the 2006 season, with a mixture of new and returning seasonal employees. Overall, the supervisors and harvesting crew should be commended for their efforts and a number of them have communicated an interest in returning to the program in 2007.

**D. Equipment Operation and Maintenance**

The LMCD contracted with Curfman Trucking and Repair, Inc. for their sixth year for maintenance of the EWM harvesting equipment. In 2006, there was a 440 percent increase in downtime of the harvesting equipment for repairs (144 hours in 2006 vs. 32.75 hours in 2005). Some of the repairs that contributed to this significant increase included: 1) hydraulic problems on the paddle wheels on harvester #5, which required specialty mechanic assistance, 2) two shafts that

needed to be replaced on harvester #5 due to overloading, 3) a major leak in one of the pontoons on harvester #7, and 4) a hydraulic motor problem on one of the paddle wheels on harvester #7. LMCD staff hopes that this was just one of those years where there was more downtime than an average harvesting season. In the previous five harvesting seasons, the efforts made by Curfman Trucking and Repair, Inc. have resulted in improved efficiency and decreased downtime of the harvesting equipment.

**E. Status of EWM Harvesting Equipment**

In 2006, the harvesting equipment consisted of three paddlewheel harvesters and a used high-speed transport barge purchased from Aquarius Systems in 2003 to improve the efficiency of the program. The three paddlewheel harvesters were purchased prior to the 2000, 2003, and 2005 seasons. The 2006 season was the first year that the used high-speed transport barge was available to support the transporting of vegetation from the harvest site to the off-load site. Although the statistics in 2006 do not support improved efficiency from a quantitative standpoint, anecdotal feedback from the supervisors support this on a qualitative standpoint. Further analysis of the long-term viability of the used transport barge needs to take place in 2007.

**F. 2006 EWM Harvesting Program Budget Analysis**

The overall budget for the 2006 EWM Harvesting Program was \$107,000. Expenses incurred through mid September are approximately \$94,000. There are a number of other expenses that were incurred during the 2006 season in which invoices have not been received and paid. These should likely be resolved in the next 30 to 60 days.

**H. Conclusions**

The 18th year of the EWM Harvesting Program represents an accomplishment that was only envisioned as a fond dream back in 1988. The investment in equipment and personnel has put the LMCD in the forefront of managing milfoil. Mechanical harvesting has earned its place as an effective milfoil control method. The LMCD Board is to be credited for its active support of the harvesting program in the face of periodic skepticism or outright objections. The member cities are to be credited for their commitment and funding of the program all these years. Additionally, the MN DNR, the Three Rivers Park District, the U of M Division of Fisheries, and the U.S. Army Corps of Engineers are to be recognized for their cooperative partnership since the inception of the milfoil harvesting program on Lake Minnetonka.

