

Staring Lake: EWM Early Detection & Rapid Response

Hennepin County, MN (#27-0078)

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Background

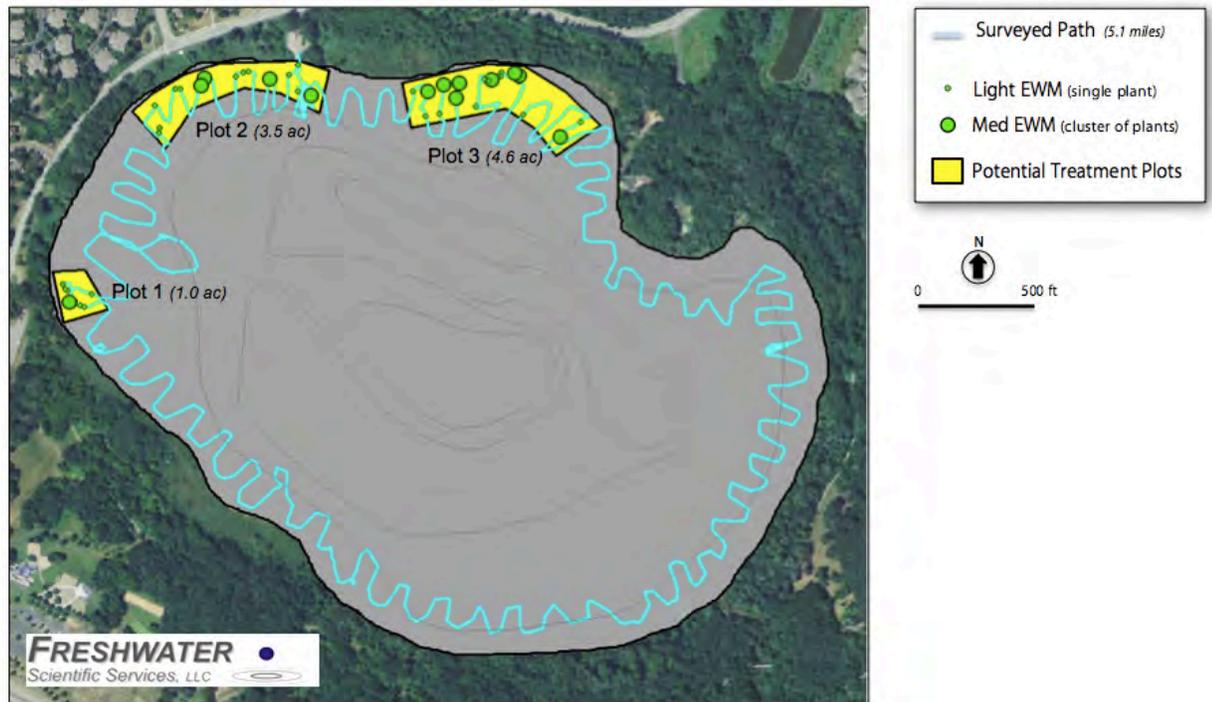
EWM Discovery & Assessment

Eurasian watermilfoil (*Myriophyllum spicatum*, henceforth referred to as EWM) was recently found growing in Staring Lake by staff from the University of Minnesota. The Riley Purgatory Bluff Creek Watershed District hired Freshwater Scientific Services (FWSS) to conduct a detailed survey of the lake to determine the current extent of infestation and delineate any beds of EWM to help guide management decisions (Fig 1).

Figure 1. Map showing the results of the Sept 2015 EWM survey of Staring Lake.

Staring Lake

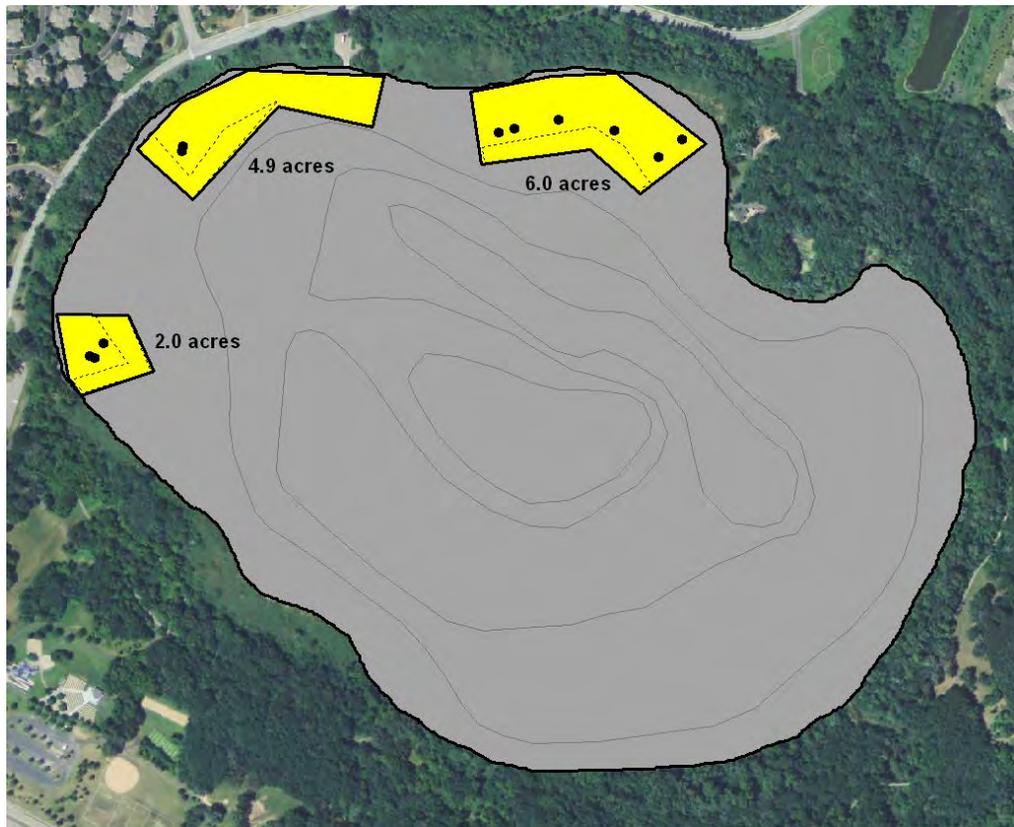
Delineation of Eurasian Watermilfoil: September 2015



Preliminary Rapid Response

On Oct 2, staff from FWSS, RPBCWD, and the University of MN hand-pulled the majority of EWM plants located during the survey. However, many of the plants had already produced numerous fragments and several plants in deeper areas were not completely removed (Fig 2). Consequently, we are proposing herbicide treatment of the areas where EWM was found in Oct 2015 to prevent the establishment and growth of these fragments and remaining rooted EWM plants. We have used this strategy of hand-pulling followed by fall herbicide treatment to successfully control new infestations of EWM on Weaver Lake (Hennepin Co.) and Lake Charlotte (Wright Co.)

Figure 2. Map showing the location of EWM plants that were not completely removed during hand pulling (black dots), and the areas proposed for herbicide treatment in Oct 2015.



Ongoing Monitoring & Rapid Response

2016 Monitoring Plan

In 2016, the RPBCWD should plan to monitor the entire nearshore area of Staring Lake in the early summer (June) and again in the late summer (Sept) to assess whether additional control is needed. These surveys should follow the same methodology as used for the fall 2015 survey, with additional focus on the areas where EWM was found in 2015.

2016 EWM Control (*contingent upon monitoring results*)

If the 2016 surveys find any EWM, the RPBCWD should immediately schedule additional hand-pulling. If only a few individual plants are found, the surveyor may be able to hand-pull the plants during the survey and a follow-up herbicide treatment may not be necessary. However, if a substantial number of new EWM plants, EWM regrowth from denser patches in deeper areas, or production of autofragments is observed, hand-pulling should be immediately followed by a herbicide treatment using an auxin-mimic herbicide (2,4-D or triclopyr). These herbicides are fairly selective for EWM, but also damage some native plants; namely water lilies and native milfoils.