



## **Appendix to Aquatic Plant Management Dive Report for Lower Vermillion Lake**

This document provides additional site commentary and a map of the dive sites from APM's DASH work on Lower Vermillion in 2022.

### **NE Area**

The colony located in this part of the lake represented the densest EWM growth on the E side of the lake. Native aquatic plant growth did not impede DASH efforts at this site, and allowed for a clear view of the lakebed in the immediate vicinity of the colony. Divers did note some EWM fragments attempting to root in the area around the colony, but were able to remove them during the diving activities. DASH seems to be appropriate for this area.

### **SE Bay**

The EWM growth in the SE area of the lake was characterized by 2 small plant colonies along with several clumps of 10-25 EWM plants. Some EWM fragments were present on the lakebed, but were not present in high numbers. Due to the organic/sand substrate at the dive sites, coupled with the comparatively low native plant density, DASH is a suitable management technique for this part of the lake.

### **S Shore of W Bay**

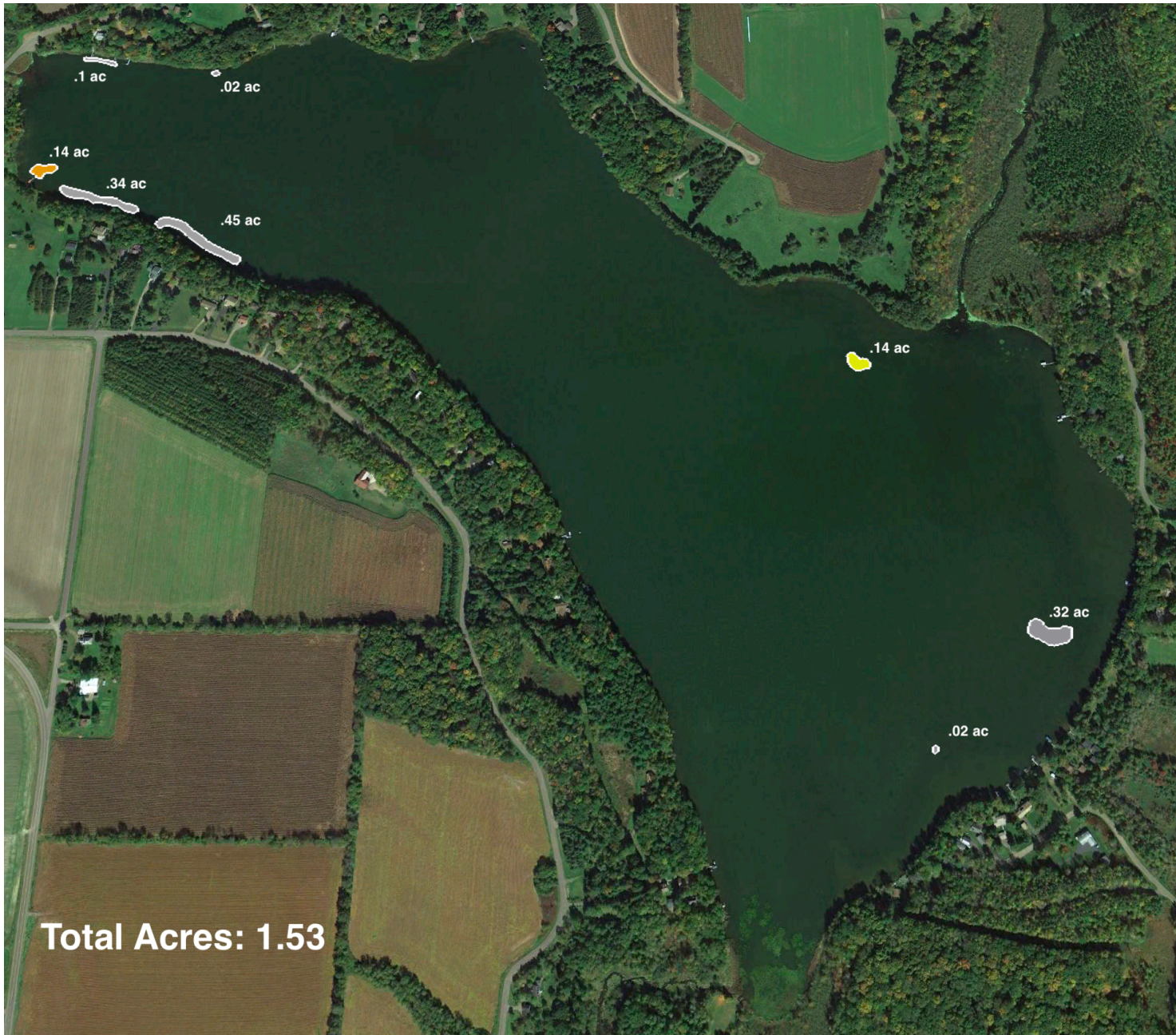
As the dive team worked their way E to W along the shoreline, there was a notable increase in both EWM and native aquatic plant densities. On the E end of the dive area, EWM growth was fairly scattered, with a relatively low number of fragments on the lakebed. As the team worked toward the W end, the number of fragments present increased proportionally with the EWM density. Many of the EWM fragments were obscured by a thick layer of algae on the lakebed, which likely resulted in some remaining post-management. The substrate in the dive area was conducive to DASH, however the dense native aquatic plant growth on the W end was less than ideal.

### **SW Shore of W Bay**

This area of the lake presented serious challenges to the dive team. This area contained the largest/densest EWM growth in the entire lake. The EWM growth was embedded within extremely dense native aquatic plant colonies, which greatly reduced the efficiency and effectiveness of the DASH efforts. There was a very high number of fragments present on the lakebed, scattered in and around the native plant growth. The native plant density prevented the dive team from being able to remove a significant amount of these fragments. Due to the obscured fragments, it is reasonable to assume that regrowth and possible expansion of these colonies in 2023 is likely. Overall, when considering the goal of year-to-year reductions in EWM density/distribution, DASH does not seem to be the most suitable management technique for this area of the lake.

### **N Shore of W Bay**

While this area did not contain the same EWM density as the SW shore of the W bay, it presented many of the same challenges. The EWM growth was composed of clumps of plants with scattered EWM between them. The high density of native aquatic plants prevented the dive team from removing a large number of the fragments on the lakebed, and likely obscured many more. The suitability of DASH for this area will be best determined by both the 2022 post-season AIS survey and 2023 pre-season survey.



**Density Ratings**

Orange Colony: Highly Dominant

Yellow Colony: Dominant

Gray Colony: Scattered