2023 HYBRID/EURASIAN MILFOIL MANAGEMENT SUMMARY

The growth and spread of invasive Hybrid Water Milfoil (HWM) fast outpaced the Diver Assisted Suction Harvesting (DASH) efforts during the summers of 2022 and 2023. Silver Lake experienced large surface mating HWM colonies in 2023 comparable to 2015. The following 2 figures (from Onterra, Inc) show the progression of HWM within the lake during the prior years. A whole lake herbicide treatment was not possible for 2023 while the district works through the completion of DNR requirements. A 2024 herbicide treatment is subject to WI DNR review and approval.

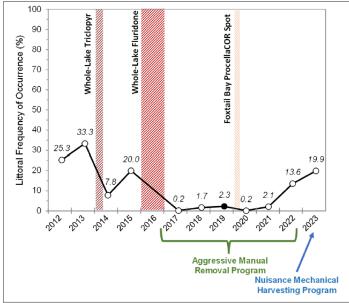
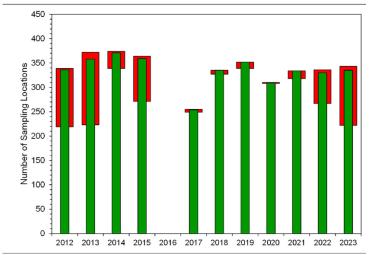


Figure 3.1-3. Littoral frequency of occurrence of HWM in Silver Lake. Open circle represents statistically valid change from previous survey (Chi-Square $\alpha = 0.05$).

RED indicates HWM/EWM at sampling points compared to native plants (21 species). 64 acres of HWM of which 3 acres were surface matted and 26 acres of highly dominant colonies



ure 3.1-4. Littoral frequency of occurrence of native plants and HWM fr npleted in 2012-2023 in Silver Lake. Dashed line represents whole-lake flur

The explosive growth of HWM during the summers of 2022 and 2023 was not unique to Silver Lake and occurred statewide. The lower water levels and relatively dry weather led to ideal conditions for aquatic plant growth. Numerous options for 2023 were reviewed since the September fall Point Intercept Survey (PIS) results. One option was do nothing and wait for approval of the 2024 whole lake herbicide treatment. No board member was in favor of this approach. The HWM strategy for 2023 consisted of a combination of HWM colony cutting and very limited DASH harvesting. 2023 largely served as a bridge year between the end of the previous HWM population control project and implementing a whole-lake ProcellaCOR treatment in spring 2024. Mechanical harvesting was able to restore a degree of recreation and navigation activities in 2023. Dominant and Highly Dominant HWM colonies were cut a minimum of 2x, some areas experienced 3 passes. In total, 2,200 cubic yards of HWM cuttings (115-20 yard dumpsters) were removed by 2 contractors during summer od 2023. It was clear to the district that mechanical cutting was not a long-term solution to meet their expectations for the condition of Silver Lake. On a positive note, SLMD experienced a successful 5-year period of managing HWM via Diver Assisted Suction Harvesting (DASH) following the 2016 herbicide treatment. Native plants rebounded one year after herbicide treatment to pre-2016 levels. The district hopes to repeat this success in the coming years with an updated strategy.

For the full detailed Aquatic plant management report, please refer to the Silver Lake district web site www.wautomasilverlake.com, Detailed Topics, Aquatic Plant Management, Yearly Aquatic Plant Management Activity, Silver Waushara 2022 2023HWM MgmtMonitorReport Jan31-2024.pdf.

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