



Lower Vermillion Lake EWM Removal Report 2022

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Lower Vermillion Lake EWM Removal Summary 2022

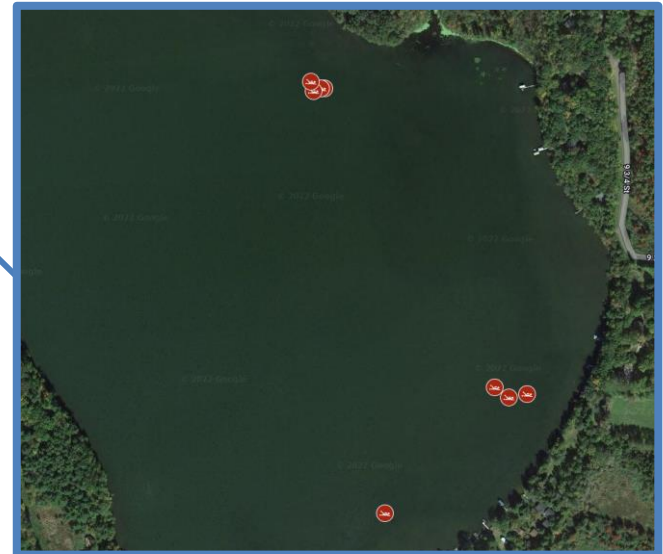
Dive Background: From July 11th – 14th, Aquatic Plant Management LLC (APM) conducted four (4) days of Diver Assisted Suction Harvesting (DASH) for Eurasian Watermilfoil (EWM) on Lower Vermillion Lake in Polk County, WI. The team focused their efforts at 4 main sites prioritized by the Vermillion Lakes Association. In total APM was able to remove **460.5 cubic feet of EWM** from Lower Vermillion Lake.

Date	Weather Conditions	Water Temp (F)	Underwater Dive Time (hrs)	AIS Removed (cubic ft)
7/11/2021	Periods of rain	75	3.3	75.0
7/12/2022	Partly Cloudy	75	6.8	101.5
7/13/2022	Cloudy	75	6.8	96.5
7/14/2022	Sunny	75	6.7	187.5
Grand Total			23.5	460.5

Dive Location	Avg. Water Depth	# of Dives	Underwater Dive Time	AIS Removed (cubic feet)
SE Shoreline	6.4	4	3.4	76.5
W Bay N Shore	6.8	4	1.9	34.5
W Bay S Shore	6.8	17	13.8	260.5
W of Channel	8.0	5	4.4	89.0
Grand Total	6.9	30	23.5	460.5

Dive Highlights and Recommendations: The dive team spent ~60% of their time and removed ~60% of the AIS biomass from the south shoreline of the west portion of the lake. DASH was an effective method of removal due to the dense nature of the EWM infestation at all of the dive sites. Overall, Lower Vermillion Lake should continue to take an Integrated Pest Management (IPM) approach and evaluate different strategies to manage the EWM population on the lake. Continued monitoring and management efforts are important to prevent the spread of EWM throughout Lower Vermillion Lake.

Map of Lower Vermillion Lake Dive Sites





Detailed Diving Activities

Date	Dive Location	Latitude	Longitude	Underwater Dive Time (hrs)	AIS Removed (cubic ft)	AIS Density	Avg Water Depth (ft)	Native Species	Native By-Catch	Substrate Type
7/11/2021	W of Channel	45.51327	-91.95714	0.92	23.0	Dominant	8.0	Coontail	1.5	Organic/Sand
7/11/2021	W of Channel	45.51327	-91.95720	1.17	22.0	Dominant	8.0	Coontail	1.0	Organic/Sand
7/11/2021	W of Channel	45.51327	-91.95720	1.17	30.0	Dominant	8.0	Coontail	3.5	Organic/Sand
7/12/2022	W of Channel	45.51324	-91.95731	0.50	7.0	Clumps	8.0	Coontail	1.5	Organic/Sand
7/12/2022	W of Channel	45.51335	-91.95736	0.67	7.0	Clumps	8.0	Coontail	2.5	Organic/Sand
7/12/2022	SE Shoreline	45.50986	-91.95391	1.08	22.0	Small Plant Colony	6.5	Coontail	1.0	Organic/Sand
7/12/2022	SE Shoreline	45.50982	-91.95420	0.42	7.0	Clumps	6.5	Coontail	1.0	Organic/Sand
7/12/2022	W Bay S Shore	45.51494	-91.96918	0.42	7.0	Clumps	6.5	Coontail	1.0	Organic/Sand
7/12/2022	SE Shoreline	45.50853	-91.95618	1.42	37.0	Small Plant Colony	6.0	Coontail	3.0	Organic/Sand
7/12/2022	W Bay S Shore	45.51473	-91.96858	0.50	4.0	Clumps	4.5	Coontail	0.5	Organic/Sand
7/12/2022	W Bay S Shore	45.51522	-91.96965	0.50	4.5	Clumps	6.0	Coontail	0.5	Organic/Sand
7/12/2022	W Bay S Shore	45.51494	-91.96918	1.25	6.0	Clumps	6.0	Coontail	0.5	Organic/Sand
7/13/2022	W Bay S Shore	45.51526	-91.96995	0.67	4.0	Scattered	7.5	Coontail	1.0	Organic/Sand
7/13/2022	W Bay S Shore	45.51516	-91.97002	0.92	10.5	Scattered	7.5	Coontail	1.5	Organic/Sand
7/13/2022	W Bay S Shore	45.51542	-91.97059	0.42	10.0	Scattered	6.0	Coontail	1.0	Organic/Sand
7/13/2022	W Bay S Shore	45.51542	-91.97064	1.08	9.0	Clumps	6.5	Coontail	1.5	Organic/Sand
7/13/2022	W Bay S Shore	45.51555	-91.97095	0.58	9.5	Clumps	6.5	Coontail	2.5	Organic/Sand
7/13/2022	W Bay S Shore	45.51556	-91.97133	0.67	6.5	Scattered	6.5	Coontail	1.5	Organic/Sand
7/13/2022	W Bay S Shore	45.51563	-91.97153	0.42	6.0	Scattered	6.5	Coontail	1.0	Organic/Sand
7/13/2022	SE Shoreline	45.50993	-91.95443	0.50	10.5	Clumps	6.5	Coontail	1.5	Organic
7/13/2022	W Bay S Shore	45.51568	-91.97180	0.50	11.5	Clumps	7.5	Coontail	1.5	Organic
7/13/2022	W Bay S Shore	45.51571	-91.97188	1.08	19.0	Dominant	7.5	Coontail	2.5	Organic
7/14/2022	W Bay S Shore	45.51600	-91.97215	2.00	78.0	Dominant	7.5	Coontail	10.0	Organic
7/14/2022	W Bay S Shore	45.51494	-91.96918	1.08	60.0	Dominant	7.5	Coontail	8.0	Organic
7/14/2022	W Bay S Shore	45.51595	-91.97247	0.75	7.5	Clumps	7.5	Coontail	4.0	Organic
7/14/2022	W Bay S Shore	45.51598	-91.97245	0.92	7.5	Clumps	7.5	Coontail	3.5	Organic
7/14/2022	W Bay N Shore	45.51762	-91.97180	0.50	13.0	Clumps	7.5	Coontail	5.0	Organic/Sand
7/14/2022	W Bay N Shore	45.51763	-91.97165	0.42	8.5	Clumps	7.5	Coontail	5.0	Organic/Sand
7/14/2022	W Bay N Shore	45.51758	-91.97134	0.42	8.5	Clumps	7.5	Coontail	3.0	Organic/Sand
7/14/2022	W Bay N Shore	45.51742	-91.96934	0.58	4.5	Clumps	4.5	Grasses	0.5	Sand
Total	30			23.53	460.5					