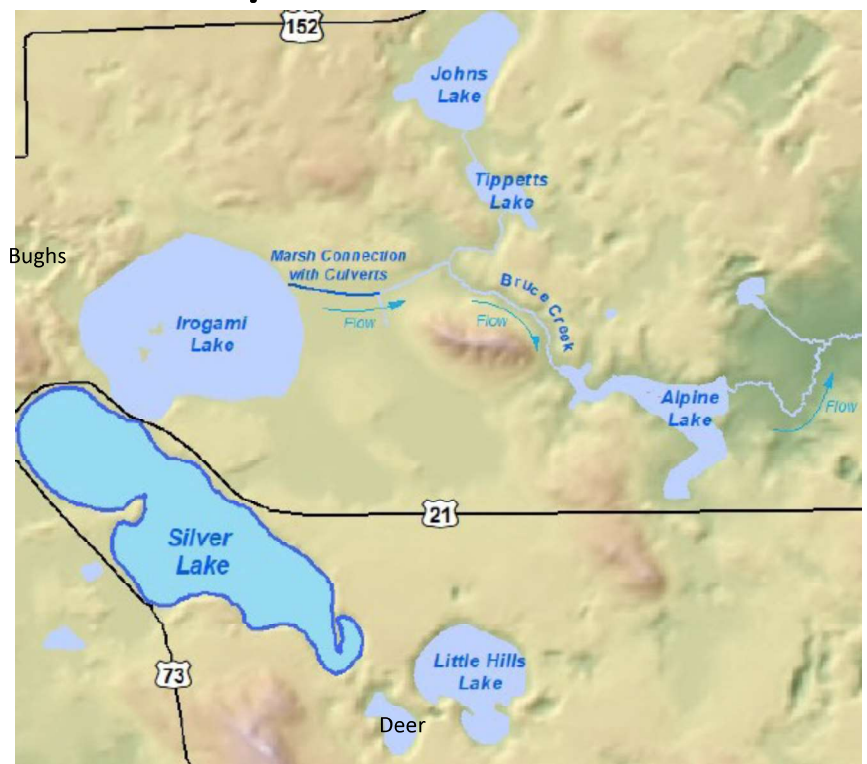


Silver Lake, Waushara County

- Seepage Lake, 2 main inflow sources
 - Neighboring Irogami Lake, Hwy 21 culvert
 - Booths Marsh, west of Hwy 21/73 landing
- 360-400 Acres
 - Max Depth 50'
- Oligotrophic lake
 - Secci disk averages 18-20 feet
 - Plant growth to 30'
- Invasive/Exotic Species
 - Eurasian/Hybrid Water Milfoil
 - Zebra Mussels
 - Banded mystery Snail
 - Curly leaf pondweed
- Silver Lake Sanitary District & Sewer
 - Encompasses 5 lakes, Silver, Irogami, Little Hills, Bughs, Deer and Town of Wautoma
 - Built/established 1989

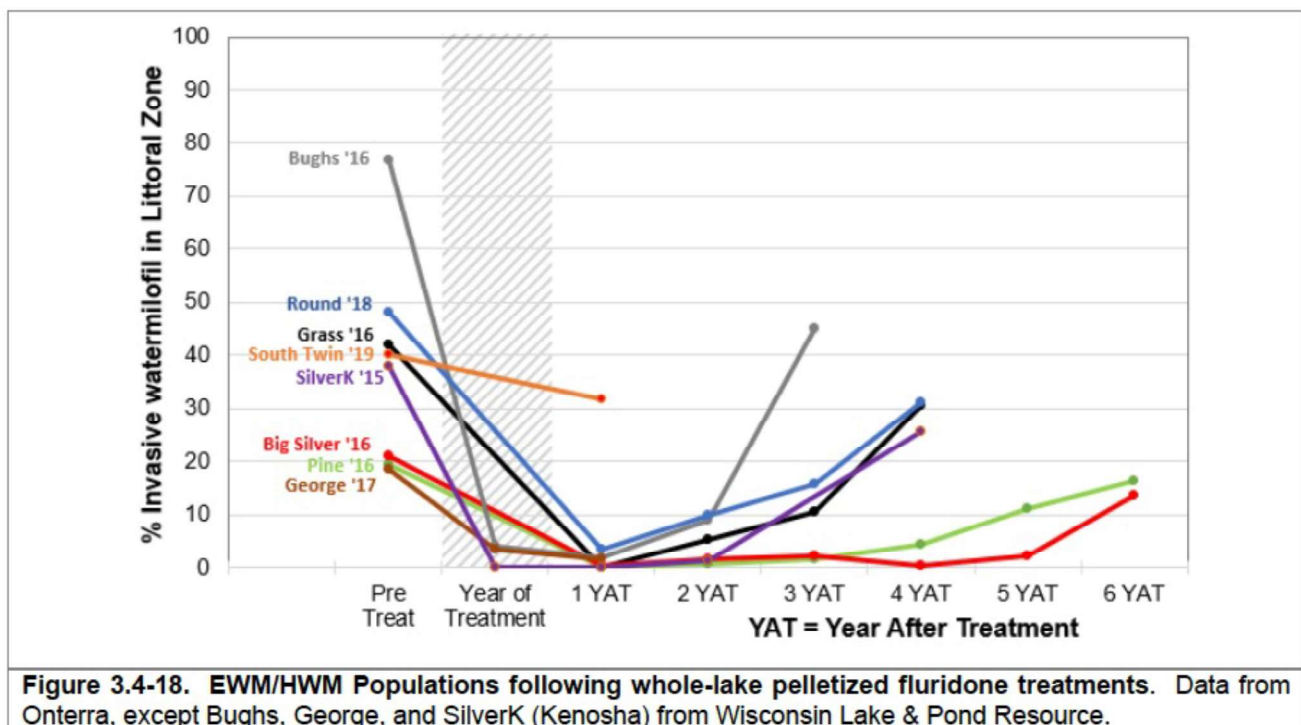


EWM/HWM Management, 2003-2022

Year	EWM/HWM Mgmt Method	Acres	Concentration	HWM, %, Littoral Zone	EWM/HWM harvested Cu yards
2003	Navigate, Granular 2.4-D	18			
2005-2006	Navigate, Granular 2.4-D	25-36			
2007	No spot treatment				
2008-2011	Navigate, Granular 2.4-D	20-33			
2012	Navigate, Granular 2.4-D	48		25.3 %	2012, treated 48 acres
	Navitrol, Liquid Triclopyr	3.5	1.5 ppm		
2013	Renovate, Granular Triclopyr	8.9	2.5 ppm	33.3 %	
2014	Renovate, Granular Triclopyr	260	2.5 ppm	7.0 %	Whole Lake treatment
2015	Captain/Tribune	2	1.5 ppm	20.7 %	Spot Navigation lane
2016	Sonar One/Fluridone	260	4 ppb		Whole Lake treatment
7/21/16	Bump treatment		2 ppb		Fluridone present
9/1/16	Bump treatment	Dive Time	2 ppb		for 407 days
2017	Diver Assisted Suction Harvesting	40 hrs	1400 plants	0.2 %	
2018	DASH	78	23 cu yds	1.7 %	
2019	DASH, suspend within Fox Tail Bay	213	46 cu yds	2.3 %	
2020	DASH	172	20 cu yds	0.2 %	
2020	ProCELLA COR EC	17	3.5 pdu		Fox Tail Bay
2021	DASH	184	104 cu yds	2.1 %	
2022	DASH	276	200 cu yds	13.6 %	

Reference:
Compiled by
Onterra, Inc from
WI DNR, Aquatic
Plant Mgmt, and
applicator data

EWM/HWM populations, % of littoral zone, 8 lakes treated with pelletized Fluridone





Diver Assisted Suction Harvesting (DASH)

Aquatic Plant Management,
Minocqua WI

2 divers in water, 1 person topside,
2-3" suction hoses discharge into
mesh bag
stainless grate assembly

EWM/HWM percentage of plant littoral zone

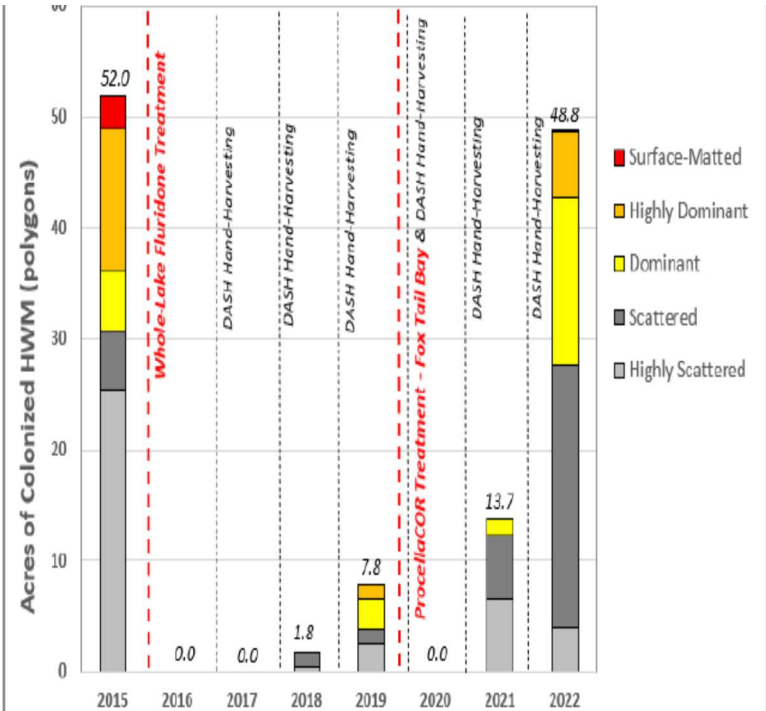


Figure 3.4-17. Acreage of colonized HWM in Silver Lake from 2015-2022. Created using data from Onterra late-season AIS mapping surveys.

Dominant, 40 sq ft colony, Highly dominant 40' dia colony

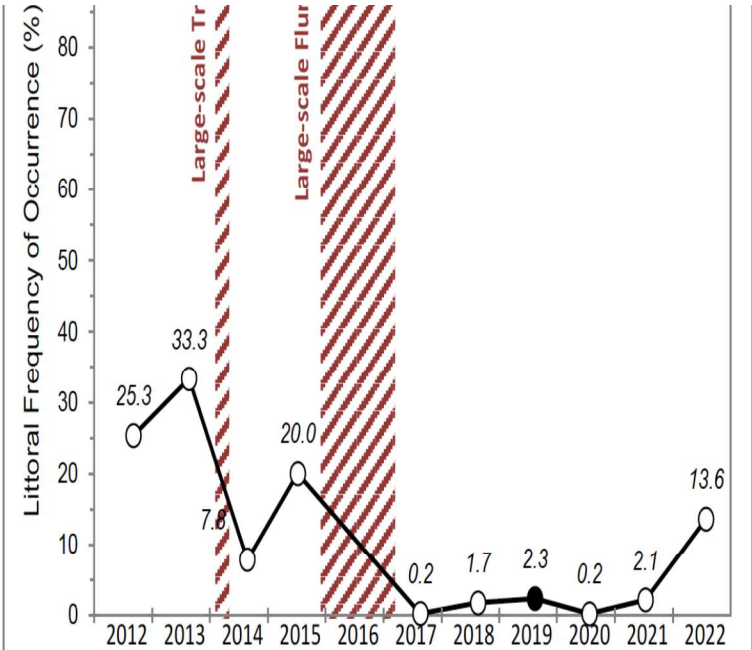
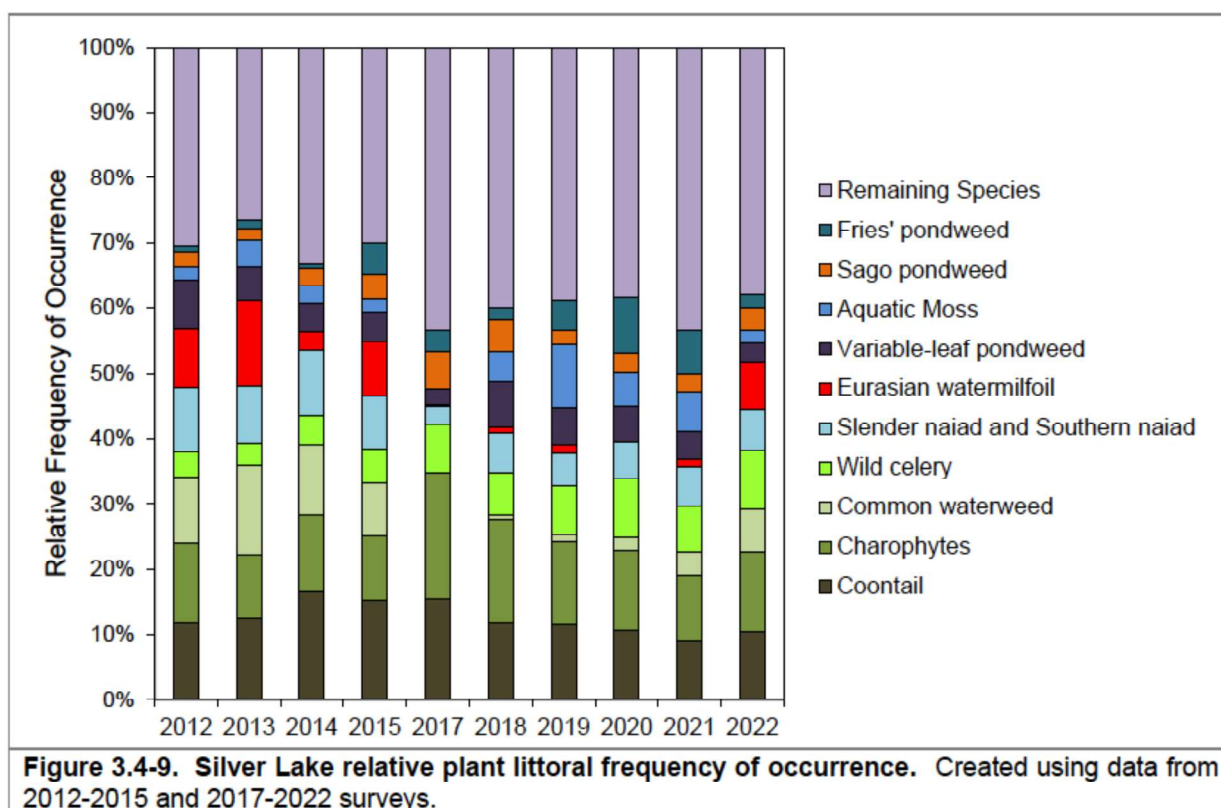
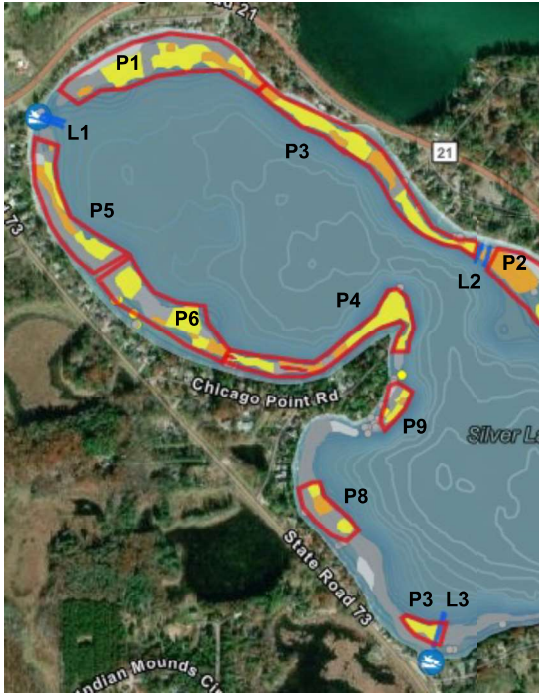


Figure 3.4-16. Littoral occurrence of HWM in Silver Lake. Created using data from whole-lake point-intercept surveys.

Effects of whole lake treatment on native plants



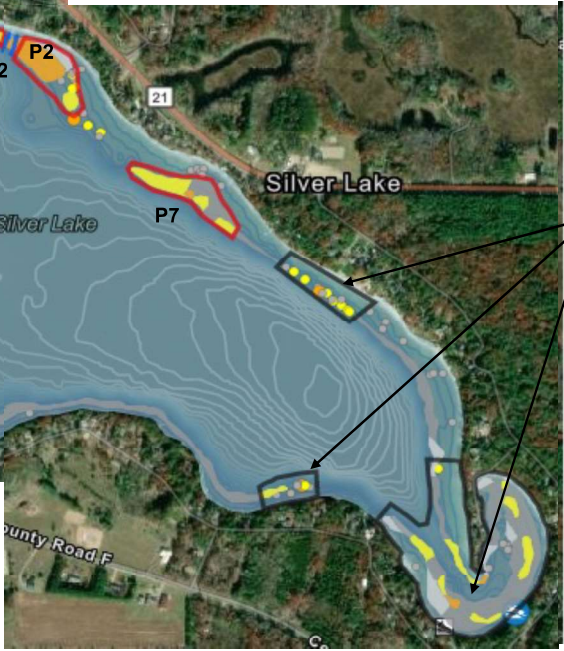
Reference:
Compiled by
Onterra Inc



Navigation Lanes: (Perpendicular to shore)
 L1 Hwy 21/73 landing
 1 20' wide lane out to 15'
 1 20' wide lane by patrol boat/dock to 15' depth
 L2 – Silvercryst
 1 20' wide lane out to 15' depth
 2 20' wide lanes to beach bar out to 15' depth
 L3 Hwy 73 landing, 1 20' wide lane to 15' depth

2023 Silver Lake, Invasive Eurasian Milfoil Harvesting

From	To	Areas	From	To	Areas
Wenninger Cutting			APM Cutting		
6/12	6/16	L1, L2, L3, P1, P2, P3, P7	6/26	6/30	P4, P5, P6, P9
7/10	7/14	L3, P3, P8, P9	7/17	7/21	L1, L2, L3, P1, P2, P3, P7
8/14	8/18	P4, P5, P6, P8			



2023 Mechanical Harvest Plan

- Polygon
- Lane 6/12-16, 7/17-21
- DASH 6/19-29, 7/10-14

2022 EWM polygons

- Highly Scattered
- Scattered
- Dominant
- Highly Dominant
- Surface Matting
- Other

Silver Lake, EWM/HWM Management summary

- Partnership, working relationship with established lake biologist and WI DNR
- Multi-pronged approach
 - No one tool for effective EWM management
 - DASH effective maintenance, years after whole lake treatment
- Multiple yearly surveys
 - Fall Point Intercept survey
 - Spring meandering survey, updates mechanical harvesting permit from fall results if necessary
- Yearly Aquatic Plant Management reports/results
 - Shared with district and WI DNR

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4/10/23, Vers 1.2