From: ANR - WSMD Lakes
To: Jensen, Kimberly

Subject: FW: Act 57 ANC Study Committee Salem Lakes Preservation Association ProcellaCOR experience

Date: Friday, November 3, 2023 4:21:21 PM

Attachments: Act57Committee SLPA EWM Mitigation method effectiviness 11 2 23.pdf

Act57Committee SLPA Summary Report 10 31 23.pdf

Thank you,

Kelcie Bean (she/her)

You may now submit permit applications, compliance reports and fee payments through our online form to expedite its receipt and review: <u>ANR Online Intake Form</u>



Kelcie Bean (she/her), Environmental Technician

Vermont Agency of Natural Resources | Department of Environmental Conservation Watershed Management Division | Business & Operation Support Services (BOSS) 1 National Life Drive, Davis 3 | Montpelier, VT 05620-3522

802-490-6195 (o/c) | Kelcie.bean@vermont.gov

http://dec.vermont.gov/watershed

The Agency of Natural Resources supports telework, and I work primarily remotely. I am available to connect by phone and email.

Public Records Statement: Written communications to and from state officials regarding state business are considered public records and may be subject to public scrutiny.

From:

Sent: Thursday, November 2, 2023 12:04 PM

To: ANR - WSMD Lakes < ANR. WSMDLakes@vermont.gov>

Subject: Act 57 ANC Study Committee Salem Lakes Preservation Association ProcellaCOR experience

You don't often get email from

. Learn why this is important

EXTERNAL SENDER: Do not open attachments or click on links unless you recognize and trust the sender.

Hi Act 57 study committee, I'm sending 2 presentations one resending as I didn't have act 57 in the subject of the first email.

The first is specifically focused on Mitigation methods tried at Big Salem lake with effectiveness maps, and the other is a summary report of our experience with ProcelliCOR.

The Salem Lakes Preservation Association treated Big Salem lake with ProcellaCOR this past summer (2023). The treatment was very effective and native plants are healthy.

The process to apply and get a ProcellaCOR permit was long and complicated.

ProcellaCOR treatment was much more effective than other EWM mitigation methods experienced by SLPA.

ProcellaCOR treatment by a factor of 3-4 x was much less expensive than other EWM mitigation methods.

Attached is an initial summary report (PDF) including pre and post ProcellaCOR treatment maps that took place at Big Salem Lake.

Thanks for your attention,

(SLPA EWM committee chair)

Salem Lakes Preservation Association (SLPA) 2023 EWM Mitigation Summary Report

Effectiveness of ProcellaCOR

 The ProcellaCOR treatment of Big Salem Lake was very effective in Mitigating the widespread infestation of Eurasian Water Milfoil

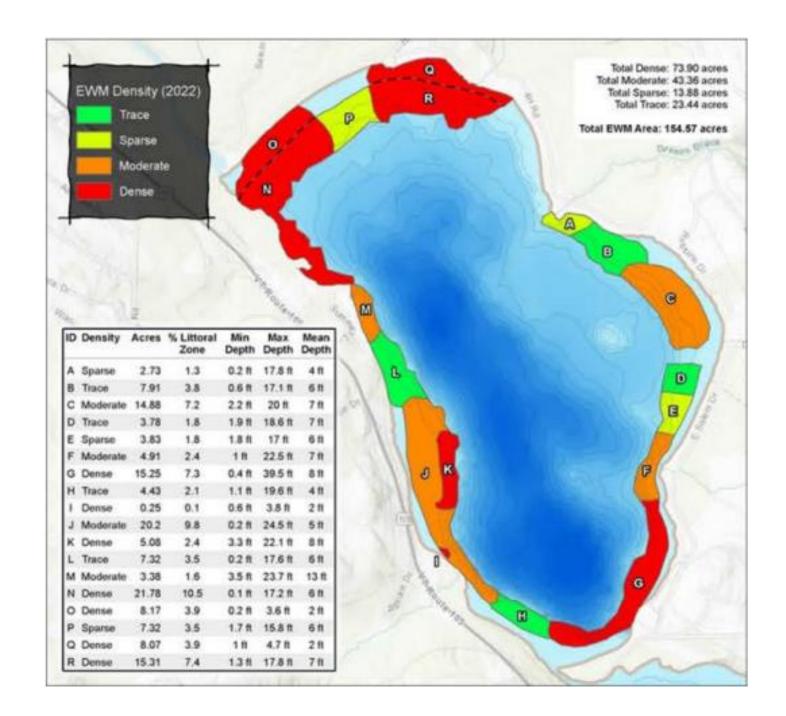
Post treatment observations show native aquatic plants are all healthy

EWM Mitigation

- SLPA completed all requirements to get a State permit for ProcellaCOR treatment including an extensive long term EWM Mitigation Plan
 - The process to get a ProcellCOR permit for the lake was long and complicated
 - The lake was treated with ProcellaCOR on 8/17/2023
- ProcellaCOR has proven to be far more efficacious than all other mitigation methods used to date

(hand pulling, bottom barriers, and DASH – Diver Assisted Suction Harvesting)

Pre-ProcellaCOR Treatment EWM Infestation Areas



ProcellaCOR Treatment Areas

(~78 Acres)



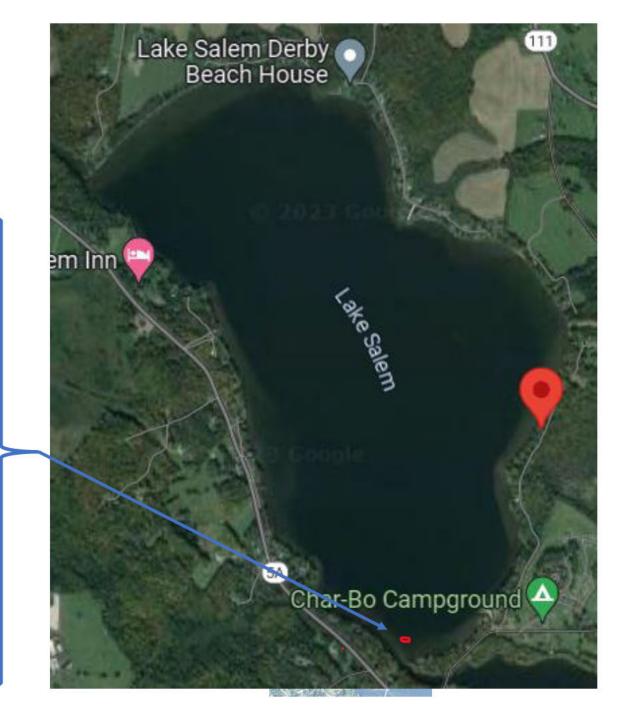
Post Treatment Infestation Map

Plant Survey and Volunteer Searches show one remaining EWM Patch

Size 0.06 Acres

Sparce

Volunteer Hand Harvesting to Manage Fragmentation



Post treatment Initial Observations

- With no opposition from the public, ProcellaCOR treatment took place on August 17th 2023
- Mandated 48 hour post treatment water sample results: ProcellaCOR was undetectable
- Since treatment Initial observations from volunteer inspectors and property owners around the lake are good
- After 3-4 weeks dead and decaying EWM plants could be seen on the bottom of the lake

SLPA Experience with EWM Mitigation Costs

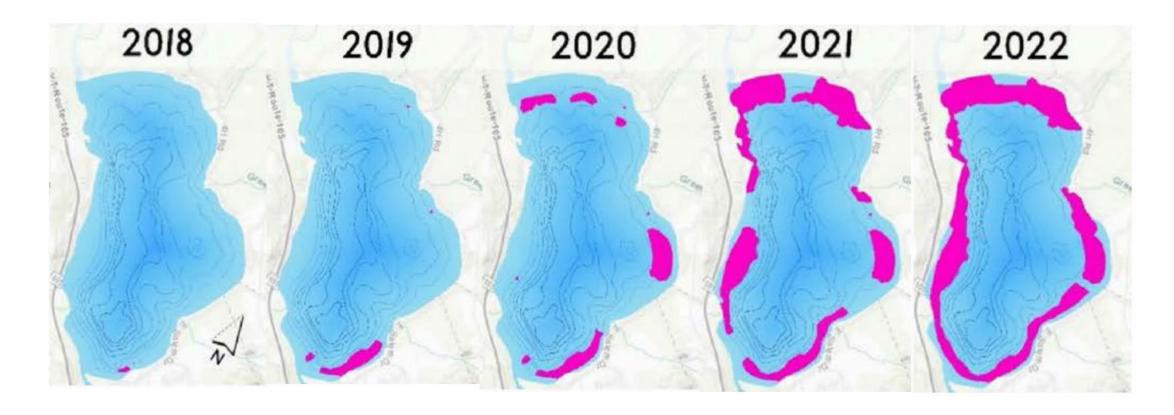
ProcellaCOR 3-4 x less expensive in moderate & dense abundance than all other methods

Estimated EWM Treatment cost per acre per year										
Page 0	nt Intertation Abundance	Signass estimation	Biomass estimation	DASHLO	an Cost Del as	de Cost per l	Scot Cost Det adre	Cost pet dides	A de per de la	age per year
0	No Plants	0	0	\$0	\$0		\$12,400	\$0	\$0	
1	Trace	.0001 - 2.000	0 - 17.9	\$350	\$1,400	\$1,200	\$12,750	\$0	\$54	
2	Sparse	2.001 - 140.000	17.9 - 1249.8	\$1,400	\$2,333	\$1,200	\$13,800	\$54	\$3,749	
3	Moderate	140.001 - 230.000	1249.8 - 2053.2	\$2,333	\$3,500	\$1,200	\$14,733	\$3,749	\$6,160	
4	Dense	230.001 - 450.000	2053.2 - 4017.2	\$3,500	\$7,000	\$1,200	\$15,900	\$6,160	\$12,052	
4	Dense (Vertical Wall)	Greater than 450,000	Greater than 4017.2	\$7,000	\$9,333	\$1,200	\$19,400	\$12,052	\$16,068	

ProcellaCOR treatment has demonstrated to be very effective, safe, and cost effective compared to other mitigation methods Salem Lakes Preservation Association (SLPA) EWM Mitigation Method Effectiveness Comparison

SLPA EWM Infestation Efficacy Experience with DASH, Bottom Barriers & Hand Pulling

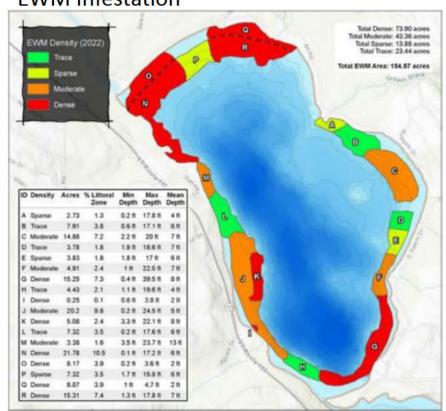
Exponential EWM growth continued before ProcellaCOR Treatment



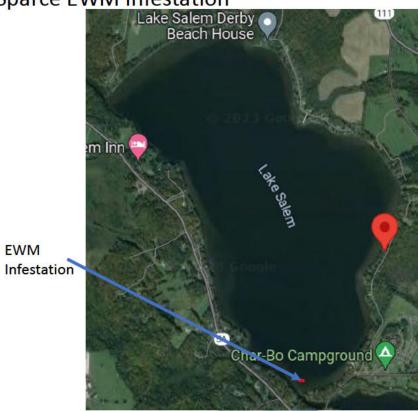
SLPA 2023 EWM Infestation Experience with ProcellaCOR

155 acres of EWM removed with one 78 acre treatment of ProcellaCOR

Pre-ProcellaCOR Treatment, 155 acres of EWM Infestation



Post-ProcellaCOR Treatment 0.06 acres of Sparce EWM Infestation



SLPA Experience Demonstrates the Effectiveness of ProcellaCOR is far better than all other alternatives used

- Exponential EWM growth continued for years using DASH, Bottom Barriers & Hand Pulling
- Two months after ProcellaCOR treatment 155 acres EWM has been virtually removed from the lake