

EWM MITIGATION SUMMARY REPORT

NOVEMBER 2023

SALEM LAKES PRESERVATION ASSOCIATION

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WITH THANKS TO THE TOWN OF DERBY SELECTBOARD

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

Post-treatment observation and analysis show all native aquatic plants are healthy

The town's support was pivotal in making this treatment happen, benefitting the lake and its surrounding community

EWM MITIGATION



SLPA completed all requirements to get a State permit for ProcellaCOR treatment including an extensive long term EWM Mitigation Plan.

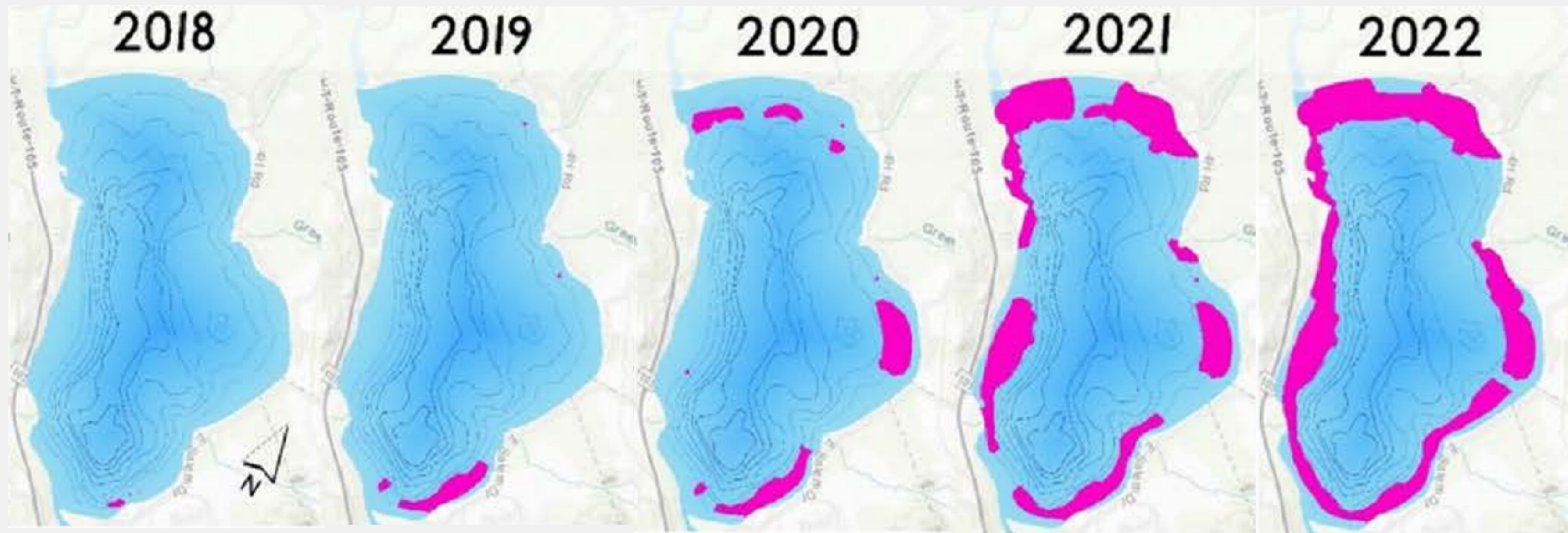
The permit process was a lengthy, complicated requirement.

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 Diver-Assisted Suction Harvesting (DASH), bottom barriers and hand harvesting.

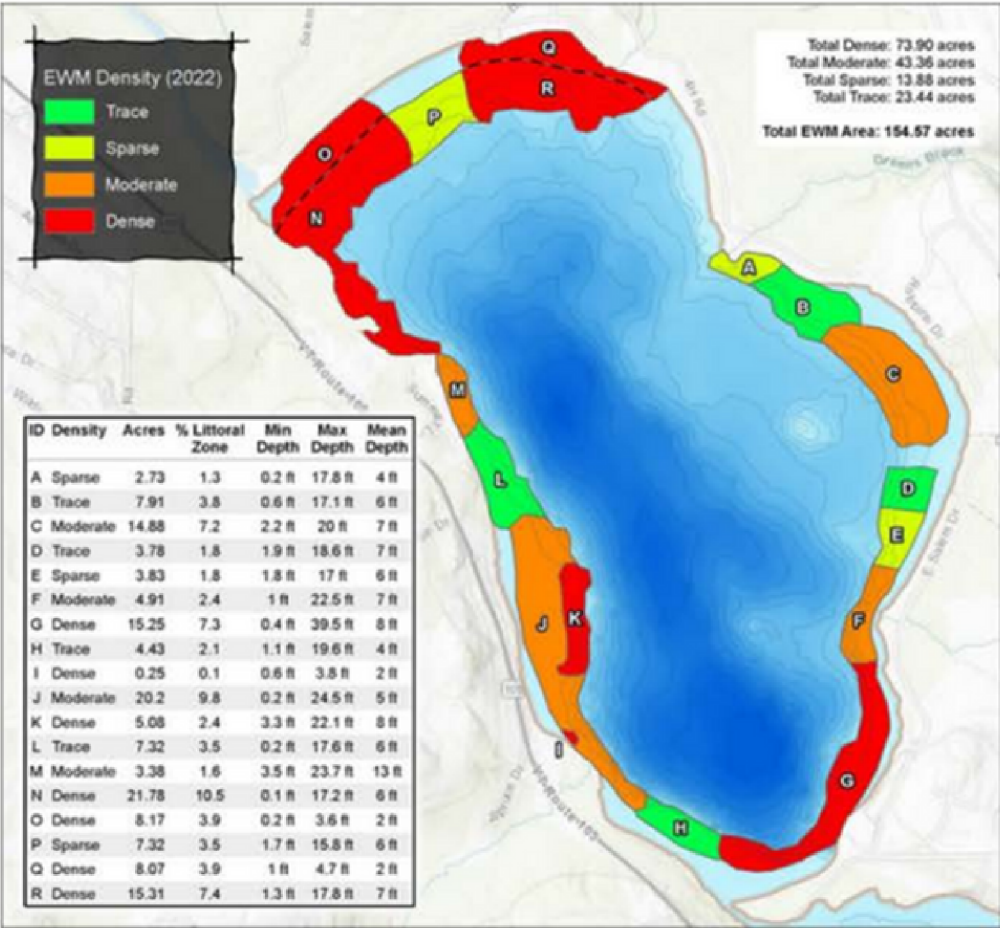
Thanks and congratulations to all.

PROGRESSION OF EWM INFESTATION BASED ON GPS PLOTTING.



Exponential EWM growth continued before ProcellaCOR Treatment

INFESTATION AND TREATMENT AREAS



EWM INFESTATION WAS EVIDENT IN 155 ACRES OF BIG SALEM.
(LEFT)

HERBICIDE WAS APPLIED TO JUST 78 ACRES AS PER PERMIT IN AUGUST.
(RIGHT)



INFESTATION AFTER HERBICIDE TREATMENT

Aquatic plant survey and volunteer searches show one remaining EWM patch near the inlet from Little Salem.

Approximately 0.13 acres. Sparse.

Volunteer hand harvesting to manage fragmentation.



FAR BETTER VS. ALTERNATIVES

WHAT WE DID IN THE PAST

EWM GREW EXPONENTIALLY FOR YEARS DESPITE DASH (DIVER-ASSISTED SUCTION HARVESTING), BOTTOM BARRIERS & HAND HARVESTING.

WHAT WE KNOW AFTER 2 MONTHS

EWM (155 ACRES OF IT) HAS BEEN VIRTUALLY REMOVED FROM BIG SALEM AFTER JUST ONE TREATMENT AND VERIFIED BY VISUAL INSPECTION AND THIRD-PARTY SURVEY.

POST TREATMENT OBSERVATIONS

With no public opposition, ProcellaCOR treatment occurred Aug 17, 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

Looking forward to post treatment Plant Survey results from Solitude Lake Management and Arrowwood Environmental

EWM ASSOCIATED EXPENSES

<u>Item/Task/Provider</u>	<u>Budgeted Expenses</u>	<u>Actual Expenses To Date</u>
RTE Permit (Arrowwood).....	\$451.25.....	\$451.25
Initial abutter notification.....	\$205.99.....	\$205.99
Management plan cost adjustment (Arrowwood).....	\$246.75.....	\$246.75
Final Abutter signs and printing.....	\$333.00.....	\$333.00
Abutter stamps.....	\$132.00.....	\$132.00
Permit cost.....	\$500.00.....	\$500.00
Bladderwort Survey (Arrowwood).....	\$3,702.80.....	\$2,701.41
Task 1: Assisting in Permitting (Solitude).....	\$750.00.....	\$750.00
Task 2: Herbicide Treatment (~78 acres) (Solitude).....	\$95,160.00.....	\$95,160.00
Post treatment water sample mailing.....	\$175.31.....	\$175.31
Task 3: Residue Sampling \$190.00 per sample, 10 samples estimated* (Solitude).....	\$1,900.00.....	\$1,900.00
Task 4: Post Treatment EWM plant Survey* (Solitude).....	\$900.00.....	\$900.00
Task 5: Summary Reporting (Solitude).....	\$850.00.....	Not Inv Yet
Fall comprehensive plant survey (Lake Rake Toss Sampling) (Arrowwood).....	\$2,250.00.....	\$2,250.00
Fall comprehensive plant survey (Final Write Up) (Arrowwood).....	\$4,220.00.....	Not Inv Yet
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Total.....	\$111,777.11.....	\$105,705.71

LOOKING FORWARD

Treatment permit requires a \$7,000 annual plant survey early each autumn

Total projected **2024** EWM mitigation expenses \$30,000

Total projected **2025** EWM mitigation expenses \$60,000

Any additional Town ARPA support will be very useful and greatly appreciated

Thanks again to the Town of Derby for all the support of this very effective treatment program