



Environment Committee Report

Eurasian Water Milfoil: Strategic Management Plan

ORALB Annual General Meeting

May 21, 2025



The Dream Team: Environment Committee

1. Kevin Radford
2. Karen Pero
3. Trish Tilley
4. Jennifer Brown
5. John Asselin
6. Gerry Yemenski
7. Mike Ketcheson
8. Carrie Ault
9. Linda Radford
10. Marilyn Hanley
11. Alain Marcil
12. Paul Warriner
13. Jim Clarke
14. Dean Frappier

Observers: Rob Perrins, Jeff Stubbins (ORALB President)



Eurasian Water Milfoil (EWM) SMP Principles:

Transparency: All significant SMP actions/investments will be reviewed/discussed with ORALB's membership at the AGM;

Financial Due Diligence: all significant investments will be understood by the members as well as the financial impact/risk associated with the intervention (e.g. environment risk, habitat risk, etc);

Adaptability: the SMP will remain a 'living' document that is adaptable to changes in the evolving research/methodologies or changing circumstances associated with the effective mitigation/elimination of EWM;

Operationalized: the SMP will outline proactive actions to 'operationalize' the EWM mitigation strategy. These actions will be reviewed annually by the ORALB membership;

Understanding/Communications: the SMP will describe actions in a manner that is easily understood, precise, memorable and easily communicated to, and expressed by, all members of ORALB so all members can speak clearly to our SMP and associated yearly programs/actions; and

Consequence: EWM poses a significant threat to our lake's water quality, wildlife, leisure activities, and land value. As such, violators who conduct any unlawful activity, willingly or otherwise, could be reported to the appropriate authorities at the discretion of ORALB.





• Why we must act: Canal Lake Example

EWM:

- Forms dense surface mats that block sunlight, up to 300 plants/m²
- Out competes native aquatic plants, reducing biodiversity
- Alters water chemistry and oxygen levels
- Provides poor habitat for native fish and invertebrates
- Increases decomposition, possibly leading to more algae blooms
- Spreads easily by stem fragments caught on boats and trailers
- Establishes rapidly in disturbed or nutrient-rich areas
- Eradication is nearly impossible once established
- Long-term management is costly and labor-intensive

As a result, a single powered boat passing through milfoil can create 1000's of fragments and therefore new plants in minutes

- Source: Smith & Barko, 1990; Ontario Invasive Plant Council, 2016
- Source: Washington State Department of Ecology, 2015; Ontario Ministry of Natural Resources



EWM – the impact and the cost.

ORALB – 3 studies of EWM: a 580% increase in 10 years:

2011 – 185,000m²

2015 – 525,000m²

2021 – 1,100,000m² or 110 hectares of a total 682 Hectares

2030? – 3,000,000m²

The Prevention and Fight Against Eurasian Milfoil, support guide 2023, states; “Some lakes in Quebec are reporting losses between 19-25%” in property values.

Lac Bernard property owners would have a conservative loss of between \$45M and \$60M in property value (19% and 25% x \$600K average property value x 400 cottages)

Costs:

- 1. ProcellaCOR: 110 hectares x 2.47acres x (\$600 - \$3000/acre) x 3 treatments = \$489K-\$2.43M*
- 2. Burlap (large application): 110 hectares x 10000m² x \$3-\$5/m² = \$3.3M – \$5.5M (assuming total coverage vs high traffic)*
- 3. Personal benthic mats for cottage waterfront swim area: = 200 units x \$600/unit = \$95K (discounted on volume)*
- 4. Personal Silt/Muck Pellets: 80 (25lbs) units of pellets x 485/unit = \$39K*
- 5. Personal Aeration Systems (oxygen pumped into lake to reduce silt): 3 units at \$3000/unit = \$9K (10% for over 50 units).*



EWM SMP 2025 Actions: Multi-pronged Approach

Major Interventions being studied:

- 1. Large Scale Burlap application**
- 2. ProcettaCOR**

Ongoing Mitigation:

- 1. Benthic Mats + Hand Pulling**
- 2. Yellow Buoys Marking**
- 3. Tributary Management**
- 4. Boat Washing Stations**
- 5. Oxygenators**





EWM SMP: Action Plan 5.1 2025 Benthic Mats and Hand Pulling

Action 2025: (EC)

- a. install 3 BMs in Regatta Bay at the swimming area to support regatta (directly in front of Regatta property) in June 2025;
- b. install 2 BMs in test areas TBD (e.g. Paddy's Bay, South Mitchell Bay or North West Bay)
- c. install aeration systems at each test site, including Muck bacterial pellets under the mat.
- d. Assess the effectiveness of BMs, Aeration and Bacterius at Regatta (early Aug) – demonstrate removal of BMs at Regatta and assess effectiveness and re-usability;
- e. Demonstrate movement of BMs and REBAR in Regatta Bay at Regatta to extend EWM remediation footprint in Regatta Bay;
- f. Organize a removal team to remove BMs and REBAR in Regatta Bay mid-September;
- g. Arrange a demand list for ORALB members to acquire BMs and REBAR from suppliers at discounted prices. Coordinate and assess the best price for ORALB members and finalize the list of purchasers by September 2025;

Coordinate the delivery of BMs and REBAR for ORALB members in the fall of 2025. Store BMs in the shed and REBAR on the site of the Regatta Bay property for bulk delivery savings.



EWM SMP: Action Plan 5.1 2025 Benthic Mats and Hand Pulling (continued)

Action 2025: (EC)

Quote from Canadian Pond:

20% discount for Benthic Mats: 200 units at \$599 for a 10'x50' mat = total 96K

BMUCK – no discount – bacteria that is placed under mat to control bacteria: 200 units at \$204 = total 40K

Aeration – 3 units at \$3097 = 9K (asked for quote for 50 units (1/8 cottages)

Note 2 other companies will be sought for quotes/discounts (Biobac and WeedsBeGone).

Opportunity:

Cottagers could share mats, aeration systems and start to control muck/silt.

Cottagers could create pathways out of thick EWM areas for their boats over time and then expand.

*Note that difference between 'tarps' and Benthic Mats is that Benthic Mats are breathable and allow benthic layer on bottom of lake to 'breathe'.



EWM SMP: Action Plan 5.2 2025 Herbicide Treatment

Action 2025: (EC)

- a. Organize discussion with ProcellaCOR to determine when/if applicability/approvals will be available for distribution/application in QC;
- b. Continue to research the applicability and effectiveness of herbicides in NA; and
- c. Invite ProcellaCOR rep to Special General Meeting, Aug 2025

- d. Note: we have discussed with 2 distributors of ProcellaCor and are trying to find a third to develop estimates and plans for our lake.
 - a. All distributors indicate it will be at least 2 years before any chemical solution to EWM will be authorized, “likely much longer”.



EWM SMP: Action Plan 5.3 2025 Burlap Treatment

Action 2025 (EC):

- a. Find a source for burlap and provide it as an option to purchase for members of ORALB. Note that the ORALB has five poles with ropes to support laying burlap.
- b. Strike a subcommittee of the ORALB EC to research and lobby the Government of Canada Department of Fisheries and Oceans to understand the feasibility of Lac Bernard receiving a Ministerial waiver to leverage local sand and/or gravel for an extensive, mechanized application of burlap on Lac Bernard over 3 years;
- c. If a waiver is obtained, formulate a plan and solicit funding for a Proof of Value on Lac Bernard for the mechanized application of large-scale burlap in high-traffic areas and significant areas of affected areas on Lac Bernard.

*Note: Discussions have begun between ORALB/Block Aid with ABVdes7 to lobby the provincial government for funding to support a broad/large burlap application using mechanized burlap application. Major issue is leveraging sand/pea-stone gravel to lay burlap. Broad application would require new study of our lake, and broad application to major boat traffic areas and areas of deep infestation.



EWM SMP Action 5.4 2025 Yellow Buoy Program



© Copyright 2021. All rights reserved. ABVdes7

— depict yellow buoy placement.

- Cottagers in areas of heavy milfoil are encouraged to work together to purchase benthic mats/screen to allow safe boat passage through heavy areas of EWM
- Cottagers in heavy areas can work with vendors in the spring for silt removal, EWM collection and aeration



EWM SMP: Action Plan 5.5 2025 Tributaries

Action 2025 (EC)

- a. Investigate and consider options for a 'net' to be installed at the inlet entrance to trap milfoil clippings/seeds at the inlet;
- b. Work closely with the Lac Notre Dam to ensure that their practice of threshing does not interfere with our EWM mitigation program on Lac Bernard or does not put it at risk. Consider the appropriateness of legal action;
- c. Work with the owners of the outlet property to seek permission for four members (EC) of the ORALB to enter the property as 'guardians'.
- d. Install cameras at the outlet to monitor trespassing and capture unauthorized movement of debris/rocks, etc, from the outlet;
- e. Send video evidence and notice to the government QC of any violations to 'd' above.
- f. Purchase and install lake level indicators at key points of the lake so residents/members can track levels.



EWM SMP: Action Plan 5.6 2025 Boat Wash Stations

Action 2025 (EC)

Investigate the costs and effectiveness of installing Wash Stations at Boat Launches

*Note: Most research indicates that lakes investing in EWM mitigation also ensure that boats coming into and leaving the lake are EWM-free. Lac Sinclair has installed a washing station at their boat launch. Their lake is EWM-free.





EWM SMP: Action Plan 5.7 2025 Oxygenators

Action 2025 (EC)

Purchase and distribute 3 (up to 5) oxygenators from 2 suppliers to test the effectiveness of this solution.





EWM SMP: Action Plan Resourcing

Resources:

Professional Assistance:

The EC is working with ABVdes7 currently at no cost to pursue funding for a large-scale burlap application on Lac Bernard. The EC will update at the AGM and Fall General Meeting on Progress. In addition, several academic professionals will participate in this 'EWM mitigation Pilot' on Lac Bernard.

ProcellaCOR:

The EC is working with 2 distributors of ProcellaCOR and attended a meeting with the Provincial Ministry over the winter. The intent is to develop 2 to 3 estimates for our lake and to host a dedicated virtual meeting on this mitigation and potential costs for all members of ORALB in Aug.

Funding:

\$10,000 is requested in the Budget to support the purchase of cinderblock anchors for Yellow Buoy distribution, benthic mat rebar and 3-5 oxygenators for the EWM mitigation trials.