

SDRA's Strategic Plan for Lake Management (adopted 10/2020)

SDRA'S MISSION: to provide stewardship to the lake and its community. Members come together to preserve, protect, & improve the quality of our environment here: our water & habitat, for recreation & tranquility, now and in the future.

GOAL: To support the attainment and maintenance of the Sand Dam Reservoir relatively free of invasive species, especially variable-leaf milfoil (VLM), through direct intervention, while protecting the plants, fish and other life that resides within the lake.

OBJECTIVES: *(See Attachment for details)*

- 1.0 To examine the health of the lake, with emphasis on invasive species.
- 2.0: To control VLM & other invasive species in shallow water areas and small patches via annual drawdown.
- 3.0 To control smaller patches of VLM in deeper waters by Diver-assisted Suction Harvesting (DASH).
- 4.0 To control VLM as needed by application of herbicides.
- 5.0 To minimize the introduction of invasive species from visiting boats by means of the SDRA Boat Greeter Program.
- 6.0 To implement a Property/Lake Interface Design Project, the Lake Smart Program, to inform & train landowners re: strategies & responsibilities to support a quality water environment.
- 7.0 To protect water quality.
- 8.0 To acquire funds to support LMP objectives.
- 9.0 To conduct educational and informational processes in support of Lake Management Program objectives.

WHAT THIS MEANS:

- Using “all the tools in the shed” to tackle aquatic invasive species, especially milfoil
- Gaining commitment from volunteers across the lake to participate in one or more strategies
- Broadening our horizons in terms of community outreach & partnerships
- Aggressively fundraising
- Strengthening information access & development of databases in support of our work

TARGET ACCOMPLISHMENTS by 2025

- A systematic framework for decision making to keep milfoil in check is established & functioning.
- One or more partnerships developed to aid efforts against milfoil.
- Water quality data that continues to support our methods & programs
- Funding systems in place to support the needs of SDRA to achieve its goal & objectives
- 20+ Lake Smart Visits completed
- 300 or more boats inspected; reports shared with STL & RI DEM

SDRA's LONG-RANGE LAKE MANAGEMENT PLAN (10/2020)

The mission of the Sand Dam Reservoir Association (SDRA) is to provide stewardship to the lake and its community. Members come together *to preserve the quality of our environment here: our water and habitat, for recreation and tranquility now and in the future.* The Lake Management Plan (LMP) focuses on strategies to support water quality and, more specifically, to address unwelcome species such as variable-leaf milfoil (VLM) weeds and, more recently, bladderwort and phragmites. The SDRA has relied upon the study and recommendations by ESS to better understand the nature and scope of challenges to our water quality and its recommendations. In addition, leadership members within the SDRA have strived to develop and incorporate additional strategies to those provided by ESS that enhance the long-range likelihood of preserving and maintaining a quality environment on the lake.

Major lake management recommendations from ESS are:

- To implement annually a **lake drawdown**
- To utilize diver-assisted suction harvesting (DASH) for controlling smaller patches of variable-leaf milfoil
- To implement **systemic herbicide application for short-term control of the extensive VLM beds in deeper water**
- To **hand harvest variable-leaf milfoil (and bladderwort) in wadable areas** near the shoreline

Additional recommendations of the SDRA are:

- To conduct a **Boat Greeter Program** to minimize transfer of unwanted plant species by visiting boats entering the lake
- To implement the **Lake Smart Program**, a property/water interface project, that informs landowners of responsibilities and strategies to support a healthy water environment
- To **monitor water quality**

Support recommendations include:

- To continue data acquisition and information management
- To continue the systematic flow of information to SDRA members
- To continue and expand fundraising

The SDRA long-range plan for 2020-2025 follows. As in any plan of this nature, it must have flexibility and be open to adjustments as needed.

LAKE MANAGEMENT GOAL: **To support the attainment and maintenance of the Sand Dam Reservoir relatively free of invasive species, especially variable-leaf milfoil (VLM), through direct intervention, while protecting the plants, fish and other life that resides within the lake.**

Objective 1.0 To examine the health of the lake, with emphasis on invasive species.

STRATEGIES	TIMELINES	RESPONSIBILITY	RESOURCES	RESULTS
1.1 Conduct annual	Mid-late June	Board, Lake	\$2500, including	Mapped areas and scope of

lake survey via professionals or self-survey		Management Team (LMT) leaders	DEM permit, for professional survey; if self-study, \$500 for DEM permit)	milfoil identified; other invasives also noted
1.2 Conduct comprehensive lake survey	Every 5th year, funds permitting; due in 2022	Board	\$5000	RFP issued; reviewed, vendor selected. Report provided to SDRA

Objective 2.0: To control VLM & other invasive species in shallow water areas and small patches.

STRATEGIES	TIMELINES	RESPONSIBILITY	RESOURCES	RESULTS
2.1 Implement water drawdown	Annually, Oct-March	Dam Master/Mike Benoit	\$200/year	Records kept with drawdown data X # acres of VLM exposed to frost
2.2 Support hand harvesting of milfoil	Annually, June-October	Board encouragement Property owners on lake		Training & information materials disseminated
2.3 Remove phragmites & invasive bladderwort, as identified	Throughout the summer	Board & Lake management team		Invasives removed

Objective 3.0 To control VLM in deeper waters by Diver-assisted Suction Harvesting (DASH).

3.1 Identify target areas	June/early July	LMT leaders, utilizing lake survey info		Mapped areas reviewed to select areas of focus
3.2 SH events planned (always weather dependent)	June 25-July 3			Teams & dates of work identified; paid divers employed if needed.
3.3 DASH implemented	July-Sept.	Aaron Colaluca & Art Searle; additional SDRA volunteer divers;	Average of \$100 for materials	6-15 DASH sessions conducted; large patches of milfoil removed and smaller

		professional divers if needed; harvester worker volunteers; & boaters/kayakers to capture VLM fragments	\$5000 bi-annually for professional divers	ones also addressed
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Objective 4.0 To control VLM as needed by application of herbicides.

4.1 Identify contractor to implement procedures for herbicide application as needed	December, initiate RFP activities; March, select vendor	Deb Silva, herbicides team & Board		Contract signed;
4.2 Obtain permits & approvals	March-May	Deb, Cleo & Board	\$500/year	Permits & approvals from DEM & Board obtained
4.3 Conduct lake survey to determine if VLM treatment needed	June	Contractor	\$2000/year	Board decision to apply herbicides or not; if YES, Board also decides which type of herbicides will be applied
4.4 Support and monitor contract for herbicides application processes	January-June		Estimate of an <i>average</i> of \$5000+, on average, annually	Information sent to lake residents and signs posted;
4.5 Report findings	Late June October	Contractor		Brief report to Board of Findings and recommendations

Objective 5.0 To minimize the introduction of invasive species from visiting boats by means of the SDRA Boat Greeter Program.

5.1 Update & replace written materials as needed	May	Judy	\$50	Distribution materials printed & organized
5.2 Coordinate with DEM, to identify dates of fishing tournaments scheduled for SDR	April	Judy		List of fishing tournaments prepared and distributed to SDRA volunteers
5.3 Select tournaments where boats & trailers will be examined for VLM	Late May - October	Judy & Volunteers		X # of boats examined; & # of boats &/or trailers identified with VLM; report prepared
5.4 Train additional	June-August	Boat Greeter Team		Keep records as in 3.3 above

volunteers & add non-tournament inspections		members		
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Objective 6.0 To implement a Property/Lake Interface Design Project, the Lake Smart Program, to inform & train landowners Re: strategies & responsibilities to support a quality water environment.

6.1 Participate in Lake Smart (LS) Training for RI	Spring	Janice Baker, Judy Colaluca & SDRA volunteers	Onsite training as visits are made; Maine Lake Smart webinars	SDRA members prepared to conduct visits
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6.2 Identify properties for LS visits	June/at Annual Meeting	Board & lake owner volunteer participants		Schedule of visits identified
6.3 Conduct 2-3 visits annually	July- September	Janice, Judy & team		Site visit reports prepared & submitted to Carolyn for review
6.4 Report results to volunteer properties	October	Janice		Summary Reports filed
6.5 Present awards	June at Annual Meeting	Janice or Judy		Awards made (2 signs given to each successful property for posting at the road & lake); Save the Lakes contributes the signs

Objective 7.0 To protect water quality.

7.1 Participate in URI Watershed Program	Summer, annually	Deb Silva	Private donation \$250	Measurements taken at various sites, on multiple occasions. Monitor results from URI to ascertain if problems exist
7.2 During drawdown, take periodic measurements of dissolved oxygen levels	Selected times between initiation of drawdown & lake refill	Rico		Data maintained and shared with State of RI, DEM
7.3 Work with town to eliminate trash blowing into lake from Gloucester Transfer Station	Ongoing	Judy , with Board & members support		Fence or other barrier enhanced to prevent the flow of trash into the lake
7.4 Work with Save the Lakes (STL) to promote	Ongoing	Judy, with Board		Legislation passed by 2024 allocating funds to lakes in support of water quality

water quality		support		
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Objective 8.0 To acquire funds to support LMP objectives.

8.1 Collect annual dues; and Seek to expand membership	June-Sept. Oct.-Dec.	Marissa; Elaine supports Board Directors		Dues collected 1-2 new memberships
8.2 Identify fundraising events for the year	Summer	Eric , Marissa & Board		List of events & key dates identified
8.3 Establish partnerships to support funding, such as Town of Gloucester, State of RI, Fishing Tournament Associations Pursue grants	Oct to Dec. Develop documents & strategies	Board with leadership from Judy, Connie, Deb, Janice: other volunteers		\$15000 dollars added, on average, every 3 years
8.4 Conduct fundraisers	year-round	Eric, Marissa, Deb & Cleo	\$3000/year to develop & run the fundraisers	Bella's/April; tee shirts; lake cards packets; volunteer donations, other

Objective 9.0: To conduct educational and informational processes in support of Lake Management Program objectives.

9.1 Conduct training for Lake Smart, Boat Greeter, SH Programs & hand harvesting	late Spring & early summer	Program Leaders: Carolyn, Judy, Aaron, Art	See above notes for monies required	Most training is conducted as part of each program
9.2 Provide newsletters at least 4X/year	Throughout the year	President &/or vice-president	\$100 Office Supplies	Members are informed in timely manner
9.3 Implement SDRA website	Throughout the year	Cleo, with support from Elaine	Annual fee of \$20	Ongoing postings of important information events; informative articles shared

