

Lake Massapoag Advisory Committee
Kick-off of MVP Action and DEP 604b Grants
Meeting of October 3, 2023
Minutes of Zoom Meeting

Attendees: Laura Henze Russell, Chair, Debbie Tatro, Vice Chair, Colin Barbera, Eman Lasheen, and Dan Lewenberg. Gary Bluestein and Ken Hyman arrived later in the meeting.

Guests: Meghan Selby of MassDEP, Hillary King of EAA, Margaret O'Brien of TRC, Ian Cooke of NepRWA, Annie Yie of NepRWA, Nancy Fyler of NepRWA, Rory McGregor from Sustainable Sharon Coalition (also NepRWA Board and WMAC Committee), Susie Peck from Massapoag Yacht Club (former BOH member), Jamie Pickles from Camp Everwood, and Seema Ravendale an intern from DEP. Kevin Davis, Assistant Town Engineer, and Jana Katz, Conservation Secretary were also present.

Laura welcomed everyone to the meeting to discuss the MVP Action Grant and the DEP 604b Grant, the 25 year timeline shaping the proposals (2025-2050), and the necessity to address the growing intensity of rain and weather events throughout the country and in New England.

For Action/Vote:

12:02 PM APPROVAL of MINUTES

Motion: To approve the minutes from the September 29th meeting. Colin moved, Laura seconded. Votes: Colin yes, Debbie yes, Dan yes, Eman yes, Laura yes.

12:03 PM Approve Update to Bathymetric Map of South Cove

Laura informed everyone that data showed fluctuating PH levels in the lake after the alum treatment was administered. TRC suggested updating the bathymetric map of the South Cove as the depth may have changed. Members voted on a proposal to add \$750 to the current TRC contract to add the mapping to sediment core sampling. Increased information will help members decide whether or not to pursue future treatments. Motion: To approve adding \$750 to the TRC contract. Dan moved, Laura seconded. Colin yes, Eman yes, Debbie yes, Dan yes, Laura yes.

MVP Action/604b Grant Kick-off Meeting:

12:04 PM MVP Action/604b Grant Kick-off Meeting

Laura introduced Meghan Selby of MassDEP and Hillary King of EEA, inviting them to discuss the framework for watershed based plans and what makes municipalities successful.

Megan shared her screen to show a copy of the Provisional Checklist Acceptance, identifying the nine elements the EPA requires applicants include in proposals (which are listed alphabetically below).

- A) Cause of impairment and pollution sources
- B) TMDL Calculations to achieve water quality goals
 - a. Laura asked for clarification on TMDL. Meghan explained that it is the maximum input pollutant level a water body can sustain while maintaining surface water quality standards. The threshold can serve as a benchmark for efforts restoring healthy water quality in impaired water bodies.
- C) Best Management Practices (BMPs)
 - a. Structural examples: a grain garden
 - b. Nonstructural examples: increased street sweeping
- D) Anticipated technological and financial assistance over the 25 year period
- E) Public Education
- F) Measurable milestones within the 25 year period to assess if the goals are reachable and allow for plan adjustment as necessary
- G) Evaluation and monitoring criteria

Megan described how plans can serve as a guide for other funding opportunities as well. For example, a Water Implementation Plan is required to qualify for 319 Implementation Funding. BMP implementation projects allocate \$1-\$3 million from the EPA annually for construction projects with minimal design components.

Ian from the NEPRWA praised Meghan's presentation, the 604b and 319 application and allocation process. Sharon received funding a few years ago.

The meeting continued with Hillary King from EEA discussing the MVP grant programs. Since 2017 under Executive Order 569, six regional grant administrators have worked with communities throughout the state in identifying climate hazards, assessing vulnerabilities, and making action plans. Programs prioritize local climate resilience outreach and engagement campaign, and green infrastructure construction projects rooted in natural systems utilizing the best available climate change data. Public engagement includes testing and assessment to identify pollution sources and put plans in place to address: stronger storms, increases in precipitation, hotter summers and their effects on the lake. Examples of projects are: planting vegetation and removing pavement. Municipalities can be awarded up to \$3 million and \$5 million for regional projects. With about \$20 million in annual locations, it is well-funded, competitive program. Meghan praised the work the town has done so far.

Laura introduced Rory McGregor, NepRWA Board Member and Steering Committee Representative from the Sustainable Sharon Coalition. She noted LMAC member Ken Hyman would be coming to the meeting and that he had sent a photo of a cyanobacteria bloom at the boat launch from today. Laura and Jamie Pickles from Camp Everwood talked about the low dose alum treatment performed at the end of July which prevented localized blooms for only three weeks. Laura emphasized the importance of addressing the inflows bringing excess nutrients into the lake and the legacy of what is at the bottom of the lake.

Assistant Town Engineer Kevin Davis, and Hillary discussed the possibility of utilizing grant money to assist homeowners in installing innovative septic systems. Engagement and outreach would fit the criteria better. Later in the meeting Kevin informed attendees about the town-run, state-funded loan program that lends low-interest loans for septic repair and replacement projects. Laura will be doing a presentation for the Sharon Men's Club with Conservation Administrator, Josh Philibert, and would like to include information about that program. The LMAC is also working on a database of septic system's status in the watershed with the goal of completing it by the end of the grant year.

Bringing up the idea of pursuing legislative action, Laura shared two ideas for consideration. First, the Legislature made it so the Cape and Islands are permitted to regulate the use of fertilizer at the local level. She wonders if that could be expanded to include other areas in the state. Additionally, she mentioned the idea of tax incentives/deferrals tied to septic system upgrades and replacements.

Hillary continued explaining some of the grant allocation procedures.

- 1) The grant is 100% reimbursable.
- 2) All grant funds must be spent by the end of the FY
- 3) All work must be done per contract which must end on June 30th
- 4) Monthly progress reports track money spend, tasks, match time
- 5) Case study documentation for other municipalities to learn from:
 - a. Describe project
 - b. Lesson learned
 - c. Different ideas for next time
 - d. What worked well

Later in the meeting, Meghan described the similar reporting process for grants administered through MassDEP. She suggested combining efforts to comply with each grant's respective reporting requirements. Differences include:

- 1) Reimbursements do not require work to be 100% complete
- 2) The grant contract is a 2 year period
- 3) Quarterly reports cover:
 - a. Summaries
 - b. Numbers to date
 - c. Match forms if you're matching
 - d. DPE forms tracking funding to disadvantaged vendors
 - e. Every three months invoices from vendors or receipts (purchase orders not accepted) are reimbursable

LMAC member Eman Lasheen and Hillary discussed mitigation case studies and retrofitting solutions for source pollution which may be a better fit for other grant opportunities. Examples of environmental justice and equity issues include: access to transportation, community

composition (lower income, POC, elder, children), and ability to respond to climate hazards. Later in the meeting, Laura noted that the LMAC works with GNL Labs which is recognized by the state as being a minority and women-owned business.

Next Quality Assurance Project Plans (QAPPs) were reviewed. QAPPs ensure data collection methods are consistent. EPA funded grants (604b and 319) for data collection or data use require a QAPP in place beforehand. There was a question about timing. Laura may work with Hillary to reconfigure the testing timeline and funding sources to ensure a QAPP is in place before certain testing begins in November.

Also discussed: submitting data to the Watershed Planning Board which monitors and assesses waterbodies' impairment throughout the state. Information would be greatly appreciated by the limited number of staff, and a QAPP would need to be in place. QAPPs are valid for 5 years. Minor plan changes/updates on sites lists and testing frequency are allowed.

The topic changed to plans for education and outreach at the camps this summer (Everwood and Wonderland) noting funds could not be used into the next FY.

Margaret O'Brien from TRC and Laura discussed starting the sediment testing in November or early December to avoid the lag time at the labs around the holidays. Lake and inflow testing will resume May and include stormwater runoff and sample surface flow. A separate survey will determine the amount of groundwater seeping into the lake and the ratio to surface flow. A feasibility analysis based on the input data will help determine the best course of action.

Margaret described the process of securing the devices which are like bags and half barrels into the ground and over time the groundwater will inflow into the bag. Measuring amounts over time will also include groundwater and septic source sampling. Typically, target sites around the lake include: upstream, downstream, developed, and undeveloped shorelines to get a variety of representations.

Laura asked if there was a way to assess what nutrients and phosphorous amounts may be entering the lake with sand loss from the planting/rain garden channels which have greatly eroded with storms, causing significant movement of sand from the beach into the lake. Margaret said she would talk with Matt if the committee was interested in exploring testing possibilities. The data could potentially correspond to the beach and boat launch blooms and may be useful in the future for design projects.

Ian then described collaborations with the LMAC in four projects: 1) Educational newsletters and distribution in collaboration with the town's Water Department 2) Educational campaigns targeting lawn care practices that may affect lake phosphorous levels 3) catchment analysis and reconnaissance around the lake to identify tributaries, pollutant load estimates from stormwater and surface runoff sources, and 4) identify potential stormwater BMP retrofit opportunities. Field investigations and data sharing with regional parties are also planned. Laura asked how increased amounts of rainfall will impact TMDL calculations. Ian agreed it was

an area of interest. Increases in winter precipitation and increased amounts in short periods of time add to the residential impacts on waterways. Ian described a scenario where an existing rain guard's capacity based on old data would not capture the same percentage of rainfall as previously calculated.

DEP is updating the wetland program handbook but it is unclear when it will be released. New data sets for calculating storm events and new BMP designs are anticipated. It was supposed to be out last summer. A new lake management manual will also be released at some point.

Laura discussed educating residents at events like Sharon Day and Men's Clubs meetings. Kevin also described a new permitting process all landscapers working in Sharon must complete for any size projects (raking leaves, applying pesticides, etc.). Future action might include additional BOH regulations on phosphorous and nitrogen loading. Plans to reach out to DEP circuit rider to see if there is data from other municipalities were discussed. Hillary sent a link to a landscape guide download, part of a project Bolton and Clinton started last year. It involved a series of meetings targeting three audiences: muni staff, landscaping professionals, and homeowners/recreational gardeners.

There are state provisions that prevent municipalities from implementing their own bylaws and regs to regulate phosphorous in lawn care. This may be a topic for legislative outreach/advocacy. Sending messages to landscaping companies strongly suggesting fertilizer that doesn't include phosphorous or nitrogen is a possibility in the meantime. Licensed applicators are required to apply certain pesticides or treatments in town.

Laura provided a recap of last year's Select Board goals regarding LMAC priorities: reduce excess nutrients and promote accelerated transitions to update septic systems. She suggested that this year's goal could be to create a watershed based plan to provide a foundation and more data to underscore the need for those actions.

Committee members and guests decided to create a SharePoint folder or other shared server for storing and sharing information.

NEPRWA's QAAP was briefly discussed: it monitors 41 sites around the watershed for phosphorous, etc. but it is would be too simple a plan to paste into a QAPP for the lake. NEPRWA's QAAP is DEP approved but not EPA approved. NEPRWA and LMAC have a Sucker Brook monitoring site in common. A LMAC QAAP including lake, inflow, seepage, wet weather runoff, storm drain outfall, and beach data will be completed for DEP plans.

The next meeting will take place on Tuesday, October 31st from 12-1:30 PM. Alum monitoring reports and recommendations and botanist reports on endangered species will be discussed.

1:30 PM Motion to Adjourn

Motion to adjourn. Ken moved. Dan second. Dan yes, Ken yes, Gary yes, Debbie yes, Laura yes.