

ZEBRA MUSSEL TASK FORCE (ZMTF)

DCR, 136 Damon Road
Northampton, MA

Meeting #1 – December 2, 2009

MEETING SUMMARY

Members present: Phil Griffiths (Chair), Dr. Joseph Larson, Mark Jester, Erik Kaplan, Jack Hickey, Lee Hauge, Anne Carroll, Jack Sheppard, John Pajak

DCR/EEA Staff: Mark Tisa, Jonathan Yeo

Facilitators: Bill Logue, Loraine Della Porta, Kurt Dettman, MA Office of Dispute Resolution & Public Collaboration (MODR)

Observers Present: Lew Cuylor

Welcome and Introductions

ZMTF Chair Phil Griffiths welcomed the ZMTF and thanked them for their commitment to this process. The ZMTF members, MODR team, and DCR staff introduced themselves.

I. Overview of ZMTF Process

Goals

Phil Griffiths noted the significance of the discovery of zebra mussels (ZM) in Laurel Lake. The challenge for the Commonwealth and stakeholders is to determine what can be done to minimize the impact and risk to Berkshire waterways. Phil suggested that the ZMTF consider using the Interim Action Plan DCR issued last year as the starting point to think about what needs to be done to prepare for the opening of the 2010 boating season (April 1, 2010). The goal of the ZMTF is to issue recommendations for concrete actions that can be taken during the upcoming boating season. The ZMTF will need to respect all recreational uses and the biological and ecological integrity of the lakes. Phil stated that he looked forward to frank, open and honest opinions from all the ZMTF members as they work toward recommendations.

Ground Rules

Bill Logue reviewed the ground rules that were proposed by the process facilitators. He noted that part of this process involved backing up from people's positions and identifying the underlying needs/interests and generating to meet those needs/interests. He also advised that this was the ZMTF's process and that the role of the MODR facilitators is to help the ZMTF have effective dialogue about the issues. The Task Force reviewed the proposed ground rules for group decision making and consensus. Bill noted how the ZMTF may handle points of disagreement. The goal of the process is to produce a set of recommendations that are a package which the participants recognize they can live with based on the recognition that the package balances all the interests around the table and may not meet each individual's set of most preferred solutions.

The ZMTF discussed Options 1 and 2 on public media coverage, ultimately opting for Option 1, with the Chair being the conduit of information to the public media only about the ZMTF process, rather than the content of its discussions. The ZMTF also discussed and agreed to disseminate meeting summaries; to post all shared information on the DCR web site; and to provide a dedicated email address for public inquiry and comment about the ZMTF process and recommendations. Phil Griffiths also noted that the recommendations would be opened up for comment before implementation. Bill Logue confirmed for the ZMTF that the plan was to have three task force meetings, this being the first one. He noted that initially the scope of the meetings would be sharing information, to be followed by a focus on options, followed by selection of options. This last part is often the most contentious. MODR will publish the ground rules as agreed to by the ZMTF.

Gap Analysis

The ZMTF discussed whether any specific perspectives were missing from the task force. ZMTF members noted that the ZM issues affected rivers and lakes in the Stockbridge area and that the municipal perspective should be voiced at the table. After discussion, the ZMTF agreed that Phil Griffiths should contact Dennis Regan and Jim McGrath to see if they would be willing to join the ZMTF. The ZMTF also discussed informing elected officials and agreed that they should be involved after the ZMTF's draft recommendations are issued.

II. Priority Concerns

The ZMTF members were asked to identify the two top priority concerns for each of them to be addressed in this process. The priorities included the following as listed on flip charts:

- Keep ZMs from spreading further
- Maintain public access—do not make the rules so restrictive that citizens cannot get access and make sure that the rules apply to everyone
- Prevent the spread of ZMs but balance the interests of all parties
- Ensure that all stakeholders participate in the process
- Ensure that there is a reasonable ability to implement the recommendations based on the resources available
- Educating people is the most important objective, especially boaters from out of state
- Having boat monitors present and funded so that towns don't close the boat ramps
- Need to change sense of inevitability about ZM spread so that people will have a reason to take positive steps to prevent their spread
- Prioritize the recommendations to get the "biggest bang for the buck"
- Ensure that the scientific basis of the problem is understood and taken into account in the options that are selected—the public needs to understand that ZMs cannot be eradicated and that there will be hard choices that have to be made to based on the record of what has worked and what hasn't worked to date in similar circumstances
- Goal should be to prevent the spread of all aquatic invasive species
- Make science based decisions—what are the risks and what does the science tell us about viable options to address those risks?
- Recognize that there are limited resources and that funding mechanisms must be identified

- Goal is to get compliance—the recommendations must take into account enforcement issues such as not making the process too onerous or infringing on constitutional rights—law enforcement experience is that about 85% of people voluntarily comply through education and publicity, about 10% comply through law enforcement presence, and about 5% require enforcement of the law through legal proceedings

The ZMTF discussed the issue of the roles and responsibilities of the various stakeholders. Questions included the authority and responsibility of state agencies (Dept. of Conservation and Recreation; Dept. of Fish and Game; Division of Fish and Wildlife; the Office of Fishing and Boating Access; the Board of Fish and Wildlife); municipalities or other agencies that controlled access to water bodies; and the various lake and pond associations. The ZMTF also discussed the issue of non-residents who own lake front property or visit the lakes and how this poses greater challenges in education and enforcement. Some members of the ZMTF noted that water bodies are classified differently under the law (for example, Great Ponds are supposed to be accessible for fishing and fowling under Colonial ordinances), water bodies are owned and/or controlled by different parties, and access is controlled by different parties at different locations (for example, the DFG Office of Fishing and Boating Access controls and regulates only state owned boat ramps). There was a general consensus that the roles and responsibilities of the various stakeholders as it relates to the affected water bodies need to be clarified as that will affect the options available and how they might be implemented.

Science Background

Mark Tisa of the Massachusetts Division of Fisheries & Wildlife was introduced and he opened by noting that whatever the regulatory framework, the recommendations will still need to be based on the best available science and that the outcome of this process may also have beneficial effects on the spread of other aquatic invasive species that threaten Massachusetts water bodies. Mark Tisa then made a presentation on the science and biology of the ZM.¹ Mark advised that ZM spread is most challenging when they are at veliger (larval) stage because the ZM larva are microscopic and can be carried on anything to which water adheres. Mark noted that ZM's required at least 5 days of dry exposure to die, but that that time period could be longer based on temperature and humidity. To date the largest ZM populations are in larger lake bodies that are well oxygenated, have clear surfaces, and a certain PH range and Calcium content. He noted that in Massachusetts the Hoosic and Housatonic watersheds were the most favorable environments for ZMs, but that the Housatonic was probably the minimum width for a river to support ZM colonies due to higher water velocity.

The ZMTF discussed the effect of draw downs (temporary winter reductions in lake water levels to expose and kill mussels) on ZM colonies.² Mark Tisa noted that draw downs have not been proven to completely eradicate ZM colonies and that before implementation there would need to be an assessment of whether there may be other harmful consequences to the organisms in the water body itself and downstream, including potential impacts to protected species. Mark advised that ZMs have multiple spawning during the season, the success of which is affected by temperature and available food resources for the larvae—some die-offs to date have been attributed to lack of food resources, but the colonies have rebounded. Mark also

¹ Mark Tisa's Power Point will be posted on the web.

² It is noted that in DCR's 2005 Rapid Response Plan for the Zebra Mussel in Massachusetts, at p. 8, one of the options discussed for control of infestations is drawdown and exposure of the ZMs. The Rapid Response Plan is available at http://www.mass.gov/dcr/waterSupply/lakepond/downloads/zm_rrplan.pdf.

discussed the possibility that wildlife might also be a vector for the spread of ZMs but that the public needed to understand that boat/people transmission was the most likely cause of substantial ZM spread. Phil Griffiths noted that the ZMTF recommendations could include further scientific studies if there were issues that current science knowledge cannot address.

Information Resources

Bill Logue noted the information shared among the task force prior to the meeting. These include: web sites, links on web sites to other resources, the review of other states' practices by the Lakes and Ponds Association, the Interim Action Plan and DCR's ZM Phase I Assessment (that had been released that day). The question for the ZMTF is whether there are any information gaps that need to be filled at this point.

Anne Carroll summarized the DCR Zebra Mussel Phase I Assessment done for the DCR Lakes and Ponds Program.³ The consultant (Biodiversity LLC) surveyed 20 lakes and the Housatonic River. ZMs were found in Laurel Lake, Laurel Brook and downstream in the Housatonic River—the other surveyed lakes were ZM-free. Based on the PH and Calcium levels the lakes were classified as low risk (7), medium risk (4) and high risk (10) for the formation of ZM colonies. The ZMTF complimented DFG/DCR on the Phase I Assessment. Joseph Larson noted, however, that the Phase I Assessment was a snap shot of then current conditions and a long term study is needed. The ZMTF also discussed whether monitors' reports could be put into a database and whether they could assist in any future studies. Phil Griffiths noted that the ZMTF needs to establish criteria to measure options—for example, is it feasible and are there resources to pay for it?

The ZMTF discussed the issue of whether there was information from the Environmental Police that would help determine the type and frequency of enforcement efforts and the availability of law enforcement resources. John Pajak of the Environmental Police reported that there was law enforcement data but that it would be difficult to draw general conclusions from it because each incident/response had its own features and circumstances. The allocation of staff and resources is often dependent on demands and calls to incidents so prior records may not reflect future assignments. He reported that his resources (police and monitors) reported 100% compliance with the self-certification process this past boating season. He also felt that local resident compliance would be higher than non-residents.

The ZMTF discussed whether there was usable data from the monitors' reports, such as who launched what boats when. With this information in hand, monitors and law enforcement resources could be deployed at the most appropriate times and places. Anne Carroll advised that DCR is updating its monitor reports and that they will consult with Jim McGrath, who designed the volunteer forms, and others who may have insights.

Jack Hickey reported on the Lakes and Ponds Association compendium of information from other states.⁴ LAPA put together a series of questions and then LAPA members gathered information from 6 states--CA, MN, NY, CO, PA and ME--as to how those states were addressing the ZM problem. The ZMTF noted that there was variability among the states on how they were dealing with the issue and that they were in different environments with different political and funding issues.

³ The Zebra Mussel Phase 1 Assessment will be posted on the web

⁴ The LAPA report entitled "A Review of Other States Zebra Mussel Programs", dated November 23, 2009, will be posted on the web.

The ZMTF discussed whether there should be an overall mission statement for the task force. Lee Hauge had drafted one and agreed to send it to the ZMTF for consideration—in essence it provides for reducing the risk of ZMs spreading and steps that can accomplish that goal.

III. Potential Approaches (How, Who, What, When)

A. Education/Outreach

The ZMTF agreed that education was an important priority and there were many avenues to accomplish that goal. The ZMTF brainstormed a broad array of options for public education and outreach which were recorded on flip charts:

- The ZM brochure needs to be updated to reflect any changes to the Interim Plan.
- Good signage needs to be placed at state owned ramps—and signs could be supplied to towns and lakes/ponds associations to post at other launch sites.
- Registered power boat owners have to renew every two years and ZM information could be mailed with the renewal—likewise, renewals done on line could include a requirement to go through a ZM page before getting to the renewal page.
- Boat dealers, repairers and marinas are licensed; live bait dealers have to obtain a Fish and Wildlife permit; fishing licenses are required; sportsmen's organizations need to get permits for fishing derbies and tournaments. Each of these permit renewals and licenses presents a possible conduit for ZM information. It was also noted that in 2010 there will be a new on-line registration system implemented.
- Other potential audiences for the ZM outreach are: lake/pond property owners (both MA residents and non-residents); tourists and renters; manufacturers of canoes and kayaks; sportsmen's organizations; regional organizations (for example, the Assoc. of Fish and Wildlife Agencies and the Northeast Aquatic Invasive Species Panel); local conservation commissions; law enforcement (conservation enforcement, harbor masters, environmental police, and state/local police); elected officials; Mass. Office of Travel and Tourism and MassDOT; and schools.
- Potential means of communication include: brochures; local signage; billboards; the Web (including registration/renewal sites for licenses and permits); Public TV; association and membership organizations; and public service announcements.

B. Prevention

The ZMTF discussed various options to stop or slow the spread of ZMs using a "Clean, Drain and Dry" approach. The options included:

- Cleaning with solutions (bleach/vinegar) and/or hot water (140° when water hits the surface).
- Drying the boat—it was noted that the drying time will depend on the temperature, humidity, and location of water (outside vs. inside boat).

The ZMTF discussed the need to reach a scientifically based consensus on cleaning methods, with a focus on Northeast-specific conditions since that is where most people travelling to the area would be travelling to/from. One of the items that the science members of the ZMTF were asked to consider was an assessment of the drying times developed by the 100th meridian group. Some members questioned whether the current brochure was consistent with current methodologies used by other states and whether

it was internally consistent. Another suggestion was whether the Mass. Aquatic Invasive Species Working Group could develop standardized language.

The ZMTF discussed where the cleaning is/should be taking place. The consensus was that most people cleaned and dried their boats in their driveways. Other options included portable wash stations at boat ramps or local car washes. The ZMTF discussed the disposal of wash water and noted that this is regulated by DEP and local agencies. The ZMTF also discussed what needed to be cleaned or dried, including boats (outside and inside), diving gear, boating equipment, trailers and vehicles.

B. Access

Loraine Della Porta reported that in some of the pre-meeting interviews one of the central issues was equitable access to lakes and ponds—who was permitted/not permitted access to the lakes and ponds at risk.

The ZMTF discussed the fact that there was a variety of opinions on this issue. Some members emphasized that there was an equity issue—some people observed that only the State owned and controlled ramps were shut down while private access was not affected, and that some water bodies were restricted at different times while others were not. Several members thought that while restrictions on access under certain requirements were acceptable, the restrictions should apply to all users of the water body, not just those accessing it via publicly owned ramps. There is also a question of who has the authority to shut down ramps—it was noted that last year the environmental police were asked to intervene on certain ramp closures because of confusion over who had the authority to do what in particular locations. LAPA representatives noted that LAPA had sent a letter to the Berkshire Eagle supporting access for all as long as infected boats were cleaned. LAPA agreed to share this letter with the rest of the members of the ZMTF. The ZMTF also noted that while boats in general were a likely vector, canoes/kayaks were an important subset that was virtually unregulated and harder to control through access restrictions. Members also noted the presence of private ramps and private marinas on some water bodies.

There was a general discussion about whether the approach should be shutting down the entire water body and then permitting access under certain conditions (for example, inspection/cleaning requirements) that would apply to everyone, or whether the ZMTF should identify from a science based standpoint the most likely vectors for transmission and then concentrate prevention efforts on the most likely vector(s). Stated another way, should the ZMTF focus on potential closure/restriction of the entire water body or just the ramps/access points? There was some disagreement on whether the public access ramps presented a greater risk than the private or municipal access points and whether and to what extent lake/pond owners presented less of a risk than non-owners using public ramps. One ZMTF member noted that in Worcester the Asian Long Horn Beetle was declared a “pest” and that quarantine was used to prevent its spread—the general consensus of the ZMTF is that solution went too far as regards the ZM.

The ZMTF agreed that the access issue was a core issue that the task force needed to tackle, but that it first needed to catalogue and understand what entities currently had the authority and responsibility for what. They agreed that at the next ZMTF meeting there should be a presentation on the statutory and regulatory framework that applied to the affected water bodies.

D. Next Steps

The ZMTF discussed the timing of the ZMTF process. Phil Griffiths advised that the plan was for three meetings, but that a lot of the work would occur between meetings. The general consensus was that the ZMTF recommendations needed to be completed by mid-February in order for there to be sufficient time for public input in advance of implementing the ZMTF recommendations in time for the beginning of the boating season on April 1, 2010. There was discussion about changing the location of the meeting to a larger facility and considering the possibility of holding at least one meeting in the Berkshires area. The ZMTF agreed on the following meeting dates:

- December 22, 2009
- January 20, 2010
- January 26, 2010 (snow date for January 20)

IV. Action Items

- Send out finalized Ground Rules (Logue)
- Send out draft agenda in advance of next meeting (Logue)
- Circulate meeting minutes for comment (MODR Team)
- Find alternative location for next ZMTF meeting (Griffiths)
- Establish dedicated space on EEA Website for ZMTF info (meeting notices, documents, presentations, etc. (Griffiths w/staff support)
- Establish dedicated e-mail address for public to send comments, suggestions, etc. (Della Porta)
- ZMTF members send documents to share to Loraine – will coordinate with Bill to PDF and disseminate to all and to insure posting on EEA ZMTF website (Logue/Della Porta)
- Share the following information with the ZMTF members: Appendix 2 to the ZM Phase I Assessment, when ready (Carroll); Lee Hague's draft mission statement (Hague); LAPA's July 2009 letter to the Berkshire Eagle (Hickey); confirmation of the number of registered boat owners (Pajak); and BRPC comments on the Interim Action Plan. Once received by the facilitators, these will be circulated to the entire group.
- At next meeting brief the ZMTF on the statutory/regulatory framework (Dettman)
- Develop science passed standards for cleaning and confirm what existing data bases can be relied upon for accurate information based on local conditions (Tisa)
- Contact Dennis Reagan and Jim McGrath about joining the ZMTF (Griffiths)
- Once confirmed, contact new ZMTF members and make sure they are briefed on progress to date and provided with copies of all materials (Della Porta)
- Circulate for review and comment prior to the next ZMTF meeting the Interim Action Plan so that ZMTF members will be prepared to suggest and discuss changes/updates to it at the next meeting (Griffiths)

Note: Meeting location for December 22nd has been changed to DAR's office in Amherst. Exact location and directions will follow.