Mystic River Watershed Steering Committee September 10, 2020 10 AM – 12 PM

Theme: Trash Free Mystic

Meeting Summary

Meeting in Brief

On September 10, 2020, the Mystic River Watershed Steering Committee met online via Zoom to discuss the issue of trash pollution in waterways and to hear presentations about current trash-free initiatives at the national, regional, and local levels. Slides from the presentations can be found at https://www.epa.gov/mysticriver/mystic-river-watershed-initiative#MeetingsEvents and https://mysticriver.org/epa-steering-committee. A list of meeting participants can be found at the end of this document. For more information about the steering committee and current efforts to restore the Mystic River watershed, please visit www.epa.gov/mysticriver.

Next Meeting

The next steering committee meeting will take place online on December 3.

Welcome and Introductions Mel Coté (EPA)

Mel Coté welcomed everyone and noted that trash is an important and timely topic that this group has not discussed extensively before. Many of the techniques and concepts applied to other quality issues, including bacteria and nutrients, apply to trash as well. Patrick Herron emphasized that trash is an important issue in the Mystic River, and that people's impression of the river is tied to trash and aesthetics just as much as it is about bacteria and water quality. Ona Ferguson then describe the agenda, which consisted of five brief presentations followed by small group discussions. She also noted that this discussion of the Trash Free Mystic project is the beginning of a larger effort on this topic.

Moving Toward a Trash Free Mystic: Presentations on national, regional and local initiatives to reduce trash in the Mystic

Caitlyn Whittle (EPA Region 1) provided some framing for the more specific presentations. She noted that aquatic trash pollution is both an aesthetic issue that affects appreciation of the river as well as a threat to wildlife, and that the same stormwater issues that lead to nutrient pollution also bring trash from the land into the river and then into the ocean. She then introduced the four presentations described below, and especially a new EPA stakeholder engagement process currently underway in partnership with MyRWA and CBI.

Andy Hrycyna (Mystic River Watershed Association) spoke about what a watershed organization can contribute to this issue, which is a global problem with local solutions. Most trash in the oceans (the global problem many people are aware of) comes from rivers, and that most trash in rivers comes off the land (local). Plastic waste generation has increased dramatically in recent decades, with the vast majority of plastic ending up in the waste stream. Andy emphasized what others have noted: the most trash is introduced into waterways through stormwater infrastructure. MyRWA's board is excited to

endorse this work, but warned the staff against exclusively doing cleanups – which are important for engagement and education – without also addressing root causes that will to regional-scale reduction of trash in waterways. MyRWA is now focused on identifying the policies and best management practices that will significantly reduce trash to the river in order to advocate for those solutions.

In the past few years, working with volunteers, MyRWA conducted a trash survey to identify areas on land with more trash pollution and found that when this was mapped, multi-family residential, industrial, and commercial areas had the highest levels of trash pollution. These findings weren't surprising, but it was helpful to have data-backed evidence. These findings can also help focus remediation strategies; for example, intensive street-sweeping could happen just in these areas, rather than in lower-density residential neighborhoods. A second project comes out of a North American Wetlands Conservation Act grant, part of which will fund a trash boom on the top of the Malden River, to be deployed soon. This will capture floating material and prevent it from flowing downstream, not only reducing trash pollution in the watershed overall but also making the Malden River more appealing for recreation. The boom can also help MyRWA quantify the trash problem, since so much trash will be collected, originating from a large land area, through the stormwater network. By using trash booms in different locations, MyRWA will be able to identify land areas that contribute more or less trash to the river, allowing for more focused interventions, and a MyRWA donor designed and purchased materials for a portable trash capturing device, to be deployed in the fall.

Andy then described the stakeholder meetings that Caitlyn mentioned earlier, in which CBI has asked municipal representatives about their priorities related to trash. Key takeaways have been that unified messaging across municipalities about the collective effort will be valuable, as will supporting leaders within towns in their efforts, identifying the right decision-makers within each community. Andy then recognized Karen Buck of Friends of the Malden River, who has been organizing volunteer cleanups during Covid, a remarkable effort.

Layne Marshall (EPA ORISE Fellow with the Trash Free Waters Program) introduced the EPA's Trash Free Waters (TFW) program, a non-regulatory partnership program that works with federal, state, and local stakeholders to reducing trash inputs into waterways. EPA Administrator Andrew Wheeler has also identified marine litter as a top priority. EPA has convened public private partnerships in locations around the country to do this work, and is also providing educational opportunities and resources. TFW projects can be headquarters-led, led by geographic program offices, or conducted regionally. Since TFW began in 2013, it has provided support to over 200 place-based projects around the US as well as pilot projects internationally, and they are excited to support the work happening in the Mystic.

Lise Marx (MWRA) noted that floatables control is part of MWRA's CSO control plan, and includes source controls, in-system controls, and end-of-pipe controls. For CSOs, the most significant source control is simply reducing the frequency of CSO discharges. As others have noted, most trash comes from the stormwater system, and many municipalities are using catch basins that prevent trash from entering the system, allowing it to be removed when catch basins are cleaned. MWRA has evaluated different types of in-system controls, doing a study of different types of technologies in 2000, and recommended underflow baffles as an effective technology, allowing floatables to stay in the system until they can be removed, rather than traveling through the system with the water. MWRA uses different types of screens at different facilities; Lise described several. They have opted not to employ end-of-pipe controls (netting systems, booms) because they are labor-intensive, costly, and trash disposal can be complicated. MWRA does not track changes in trash volume over time, so can't report on that, but it could be possible to track this at a specific facility (ie Somerville Marginal) in the future.

Ellie Hunt and Zayn Yousuf (Medford High School students) are part of the Center for Citizenship and Social Responsibility, a community service organization at Medford High School. Ellie and Zayn have both been part of planning socially-distanced cleanups this summer, a good option for outdoor service during Covid-19. To date, the group has done eight cleanups. They promoted widely, and required preregistration to keep groups small. They borrowed tools and equipment from Medford DPW. Ellie and Zayn described how the volunteers worked, and how they maintained social distancing during the events. They noted that the covid restrictions have limited the amount of work they can accomplish and the range of people they can engage, but they are hopeful they can expand this work in the future.

Discussion: Trash Reduction Work in the Mystic

Participants broke into four small groups to discuss the presentations and their own perspectives on Trash Free work, responding to three questions. A summary of some key points from the small groups and the discussion following them is below:

What stands out to you from the presentations we just heard? – both in terms of the problems and current trash reduction strategies.

- Source reduction is a key to reducing trash in the river all presenters discussed this.
- Consideration of elements of source reduction beyond trash collection and street sweeping: plastic bag bans, working with retailers on packaging reduction, covering trash barrels, baffles that prevent items from getting into the storm drain. What else?
- Education and volunteer efforts are important for engagement, though not necessarily the key to meaningful reduction of trash in the river. People still do not understand that trash in the streets ends up in the water.
- MWRA's work at its facilities is impressive; how can this be applied to individual municipalities that don't have control over such large-scale infrastructure?
- MyRWA's work mapping where trash is coming from is important.

What other projects or initiatives are currently happening to reduce trash pollution in your community?

- Curbside composting (Cambridge, on hold due to Covid)
- Plastic bag and polystyrene bans (Medford)
- Recycling education (Malden)
- Street sweeping can happen in the winter if there's no snow on the ground. (Medford) This has benefits for reducing nutrients and the need for catch basin cleanouts as well as for picking up trash. However, benefits are limited if cars are parked on the street, since most trash is at the curb.

Where could collaboration or support be helpful in reducing trash that ends up in the Mystic River?

- Bring together trash, recycling, rodent control, and stormwater people in each community they don't always talk to each other.
- Mystic Stormwater Collaborative could be a good venue for discussion.
- Identify funding opportunities for this type of work (Clean Water Act funding for solid waste?)
- Look into whether MyRWA's research matches findings from larger studies/on a national level
- Using MyRWA's work as an example, consider more volunteer-gathered data collection
- Businesses are a natural partner for this kind of work, as both the source of trash and beneficiaries from cleaner business districts
- Schools are good partners students need service projects; trash is easy for kids to understand.

• We could bring back a municipal subcommittee for the purposes of talking about these issues, including trash and street sweeping.

Announcements, Updates, and Funding Opportunities

- After the June steering committee focused on the Mystic phosphorus study, two more virtual presentations were conducted with similar content. EPA, MassDEP, MyRWA, and other partners are now moving forward with some additional webinars on specific topics related to phosphorus reduction and stormwater management, based on the learning that has happened with the six communities that have begun to implement phosphorus reduction strategies in partnership with EPA and MassDEP.
- There is a video from a meeting between MyRWA and MWRA about MWRA's efforts to detect Covid outbreaks in the Boston area by monitoring levels in wastewater. The video can be found at https://www.youtube.com/watch?v=CMw9EgyE8iM&feature=youtu.be.
- Groundwork Somerville will be hosting a paddling program for families on September 26-27 in a covid-safe way.
- Tomorrow, GreenRoots will be hosting mural painting on the banks of Chelsea Creek.
- The next steering committee meeting will take place on December 3 and is planned to focus on wastewater and Covid.

Wrap Up and Next Steps

- Trash Free Mystic conversations will continue in several forms: through the current CBI/EPA stakeholder meetings, through MyRWA's ongoing project, and perhaps through municipal collaboration as well.
- It is impressive and rare to see coordination like this across a watershed, and it's heartening to see so many people invested in issue of trash in the river. The conversation will continue in this venue and in others.

Participant List:

- 1. Todd Borci, EPA Region 1
- 2. Karen Buck, Friends of the Malden River
- 3. Wayne Chouinard, Town of Arlington
- 4. Elizabeth Cooper, CBI
- 5. Mel Cote, EPA Region 1
- 6. Ona Ferguson, CBI
- 7. Rona Gregory, Friends of Alewife Reservation
- 8. Patrick Herron, Mystic River Watershed Association
- 9. Andy Hrycyna, Mystic River Watershed Association
- 10. Alicia Hunt, City of Medford
- 11. Ellie Hunt, Medford High School

- 12. Layne Marshall, EPA Headquarters
- 13. Lise Marx, MWRA
- 14. Darya Mattes, Mystic River Urban Waters ambassador
- 15. Tony Rodolakis
- 16. Laura Schifman, MassDEP
- 17. Michael Skorker, Medford High School
- 18. Kathy Vandiver, MIT
- 19. Elaine Vreeland, Town of Winchester
- 20. John Walkey, GreenRoots Chelsea
- 21. Caitlyn Whittle, EPA Region 1
- 22. Catherine Woodbury, City of Cambridge
- 23. Zayn Yousuf, Medford High School