

Mystic River Water Quality Science Workgroup Meeting

**EPA NE - Regional Laboratory, Pemigewasett Conference Room
11 Technology Drive, North Chelmsford, MA
1:00 PM to 4:15 PM**

Invitees: Open to public and posted on EPA Mystic River website. Sent to MADEP, Tufts, USGS, MyRWA, MWRA and EPA.

Attendees: Marcus (Chris) Waldron (USGS), Kelly Coughlin (MWRA), Roger Frymire, Patrick Herron (MyRWA), Patty Passariella (Weston & Sampson), Todd Borci (EPA), Tom Faber (EPA), and Leah O’Neill (EPA).

Meeting Agenda

Introductions

1:00 – 1:15 Work group - Purpose, structure, and members (15 min)

1:15 – 2:30 Stormwater sampling locations EPA, MyRWA and others (1hr 15 minutes)
-Discuss river/watershed segments (according to MyRWA’s baseline locations) delineate areas of concern and coordinate response
-Data compiling and display-Sonde placement & parameters
-Outfall labeling

Break- EPA monitoring buoy tour

2:30 – 3:45 Cyanobacteria monitoring EPA, MyRWA and others (1hr 15 min)
-Buoy monitoring location and coordinated sampling at this location
-MyRWA's and Roger's sampling locations
-DPH monitoring locations
-Coordinated monitoring with UNH

Meeting Notes

1:00 Tom: Call meeting to order & Introductions

Work group first meeting - Purpose, structure, and members
General overview of all the committees. The Steering Committee and goals (dual track; water quality and open space) for the coming year. This workgroup works with the Mystic River Science Subcommittee. The work group is a smaller group of those directly involved in monitoring. This smaller group can collaborate and work together efficiently on monitoring.

(Handout on Workgroup – some excerpts below)

-The work group's goal is to work collectively to understand and improve water quality in Mystic River Watershed.

Action Items

1. Determine format for communities submitting data for uploading to a database. Excel format to submit data. Work with Muni-subcommittee)
2. Compile all watershed data and outfall pictures to central location (database). Determine the best database to use.
3. Set up meeting for database and coordinated naming of outfalls/sample locations
4. EPA to post stormwater monitoring data on web.
5. EPA to deploy monitoring buoy in upper watershed (Wedge Pond).
6. USGS/MyRWA may deploy additional monitoring sonde in lower watershed
7. Follow-up with nutrient management and loading with in the watershed.

- The work group (or some members of the work group) will continue to collaborate with on-going projects such as: stormwater monitoring and enforcement, stormwater monitoring data compiling, and cyanobacteria monitoring.
- The workgroup will work with individuals or groups of individuals from the larger water quality science meeting, particularly those who have expressed interest in specific areas, when necessary.
- This work group will gather information and ideas from the discussions that take place at the annual Water Quality Science Meeting.
- The work group may work collaboratively on proposals or on reviewing data sets.
- The work group will work to help set the agenda for the annual Water Quality Science Meeting and other meetings deemed necessary.
- The work group will provide guidance to the Mystic River Steering Committee and may be asked by this committee to set priorities, review proposals, or develop strategies.

1:20 EPA/MyRWA & others: Stormwater sampling locations.

Discuss river/watershed segments (according to MyRWA's baseline locations) delineate areas of concern and coordinate response.

Started by going over the Mystic River Watershed baseline monitoring data. Data behind river grade at report card events.

According to the 2009 data, the two worst locations in the Mystic Watershed are Winns Brook in Belmont and Mill Brook in Arlington. Consistent elevated dry weather sampling data throughout year. Suggested that we work through the sanitary system and end of pipe to determine source. Need to parse dry weather sampling first because that is always present. Look at Wellington Brook, as well as Winns Brook.

Need to determine which communities may have septic tanks that could be impacting the system. Update on other river sections and enforcement effort.

We need to compile all watershed data and information in one central repository for coordination. Not sure which database or format to use... and display information in a useable manner. This should be done to help better communicate with municipalities on their MS4 annual requirements for reporting/sampling.

Need to establish unified outfall/pipe labeling to better identify locations and coordinate effort. GPS points are not often as helpful as a picture. Should have a picture of each outfall for comparison.

Coordinate with superfund auto-sampling locations for additional information along river.

USGS has on-line tools for calculating sub-watershed for each baseline site. If needed, Chris Waldron is willing to help on this.

Chelsea update (Patty)

Have identified a few illicit connections and are working to disconnect them from the stormwater system. Making progress on Mill creek and the Island End area. Chelsea is hoping to have all of its outfalls renamed in the next 6 months.

2:40 EPA: Monitoring buoy tour

Two buoys will be deployed this summer; one in the Mystic Watershed and the other in Charles Watershed. They will transmit real-time data to a secure website. The goal of the system is to see

cyanobacteria blooms developing, and then the hope is to be able to predict blooms before they happen.

3:00 EPA, MyRWA and others: Cyanobacteria Monitoring

Hope to have buoys installed by the end of May or as soon as possible. Need to find a location that is susceptible to blooms and have high recreation. Wedge Pond may be a good location for buoy placement. Since Wedge Pond, Spy Pond and Ell Pond all had elevated levels last year.

For maintenance, EPA is hoping to visit the buoys once a week, at least initially, to check on their status and to clean the probes.

USGS or MWRA may have additional multi-probe units for deploying. Blessing of the Bay boat house dock may be a good location for an additional sonde.

Determine how we are going to use this nutrient data.

May coordinate cyanobacteria monitoring with UNH. UNH is interested in aerosolization of cyanobacteria (microcystin)

MyRWA has weekly sampling at Shannon Beach, Blessing of the Bay, Spy Pond, Wedge Pond and Ell Pond for chlorophyll A, phycocyanin, dissolved oxygen, temperature, conductivity, and cell counts on higher values. Fit in a few other sites along the river periodically as appropriate. Where are DPH monitoring location at Spy Pond?

Looking to establish herring monitoring near dam, seeking funding.

Need more information on nutrient loading to Horn Pond and Wedge Pond.

Need to contact city for placement of buoy. Patrick will make initial contact

See action items for closing.

4:15 Adjourn