Presentation of Mystic River Watershed Assessment and 303(d) listed waters
(Rick McVoy, MassDEP)

- The comment period on the 2010 integrated report closed on Friday. 2008 and 2010 are the same for the Mystic. Latest assessment was not done in time to get into the integrated report. The causes listed in the handout can be used for prioritization.
- Either Category 3 – not assessed/old information; Category 5 – impaired; or not listed for places never visited.
- Listed segments are where the state has been or can get data from another source. Some data are historic, but don’t have any new information, so category 3. If it isn’t assessed, then it hasn’t been for this round. Anything without a segment designation is not assessed, or category 3.
- Assessment is a point in time. Not compared to history. The listing decisions are compared to previous listings to integrated report, 303(d) or 305 list. Causes may have come from last WQ assessment (2002) as part of a Boston Harbor report. There are some legacy causes that go way back that aren’t in a report of any kind. Once it gets on a 303(d) list it doesn’t come off without new data, moving it into another category (TMDL), if original listing methodology was incorrect; or water quality standards change.
- Look at impairments as cumulative over time. 2010 Assessment might be things that are added to what is already there. You can also see which uses are impaired. It may appear that something is improved because of the uses.
- Trying to update the causes codes. There is a 5-year review of watersheds. If you see things listed in 2008/2010, it will be the old terminology – general – metals or nutrients. It isn’t very helpful if you are trying to prioritize. In the last few lists, DEP has started to map over the old terms into the new terms. Revision is ready for the final version, but it isn’t available in draft.

Comments and Discussion:
- How important it is that certain segments are being left off the 303 list? What value is being missed if upper mystic lake is not assessed – category 3? How is information being used to meet requirements of the CWA? Is it being use to prioritize actions? How hard should groups be pushing for missing segments?
- It’s always good to push. Upper Mystic Lake is going on in 2012. A waterbody has to go thru the assessment period… it can also go in the comment period.
- How do we push the Mystic to the top of the TMDL list?
- Last priority list was done in 1998. With limited staff, there is focus. The way to change the focus. Right now, watershed-wide bacterial TMDLs. Trying to do a generic one for every watershed in the state. There is a focus on doing nitrogen in embayment’s in the southeast. No sense of what is next. There may not be public input into the process.
Sediments in upper mystic lake are pretty contaminated. Looking at the list, there is nothing about sediments in upper mystic lake listed. Where is the disconnect?

Used to have one person from each watershed to go out and get DEP data and also mine data from watershed groups to identify the impairments. If data does not get to DEP then it doesn’t get into the report. At a time of public comment, nothing was submitted. Do review data quality. There are standard criteria used to accept data for this purpose and if it didn’t meet those, then it wouldn’t be used.

Sediment data would have come from John Durant.

There is now about one person to do the entire state. They are done every five years. Data has been collected in 2009 that hasn’t been looked at yet.

Can the comment period be extended based on this meeting allowing for an additional comment?

Would need to speak with Rick Dunn. The comment period was closed last Friday. Could always submit something now to keep in the warehouse.

On the DEP’s website there is a draft of the Mystic for a TMDL for pathogens. Is it still in play? Yes.

Will the statewide pathogen TMDL focus on mystic stuff? Yes. Can we find out where it is in the queue?

Fish advisories are used for the fish consumption issues. Based on individual fish. If there is an advisory from DPH then it would be an impairment.

DEP collects fish data that are shared with DPH and then DPH issues the fish advisory.

Entire mystic would be listed for PCBs, but it would be a fish advisory. In the Assessment report it does directly link to DPH advisories.

EPA does look at these lists as we take regulatory actions. If you have a TMDL it will be more clear what the contributions are and what the allocations can be. We do look at these lists beyond just prioritizing for a TMDL.

In general we don’t have good information about sources. This kind of thing can be built into the TMDL process. Many of the grant programs will look at these lists too if you are going for grant funds.

NPDES permit writers – in many cases you don’t know where the inputs are, and it seems the lists aren’t accurate or complete, so how do you go about writing the NPDES permits?

For NPDES permits we know what major facilities are point source contributors. And they do an analysis to see if the sources will cause or contribute to existing impairments. They may talk to the state and/or enforcement folks.

What do you with the incompleteness of the impairment list?

We do approve the lists-have they included all available data? We are focused on de-listing if there are data that show the impairment has gone away. Given resource shortfalls, I am not sure we’ve made the effort and had the resources in every state to plug every gap. Each state does it the way they can with their resources. There is no uniform criterion. A lot of discretion is given on the state.

The light will come on if we are trying to permit a source on an impaired water body.

Mystic groups will send something to DEP even though the comment period is over and copy EPA.

Work with the state. There have been a lot of cutbacks.
Is there a consistent nation-wide way that EPA is dealing with nonpoint sources when writing permits? When looking at the data, etc.

Monitoring in the stream and then it’s hard to trace back the allocation stream and who is contributing. If you monitor in the stream you can figure out the stream water quality, but you don’t know what is from each point and/or stormwater. In certain situations there are models, but there is no necessarily uniform criterion.

In the TMDL process they account for nonpoint source by breaking it out separately. Some pollutants are easier than others. DEP started a process of doing bacteria source tracking. It was about two or three years. It was beginning to show successes – tracking sources down – but unfortunately we’ve lost 5 of those 6 people.

What are the criteria for delisting pollutants?

Things have been delisted if an improper method was used. A lot of lakes were put on because they had dense aquatic macrophyte populations. A naturally high population of plants isn’t necessarily an impairment. More common is when there are new data that say that it is no longer a problem. EPA requires as much data to take it off as you had to put it on. Some things went on years ago with a single data point and can be taken off with two data points.

Do you consider dry weather/wet weather?

EPA looks at dry and wet weather as the same. At one time DEP tried to make the case for having a separate list for dry and wet weather.

If there is a P TMDL on the Charles, are there any efforts to move the Mystic along without a TMDL to look at nutrients. It will take too much time to develop separate TMDLs for each watershed in the state. The bacteria TMDL is a good example in trying to create a general TMDL.

Most the nutrient ones have been carried forward thru a grant for that purpose. There is no master plan for going after nutrients, like there is with the pathogens.

Two years ago the state stormwater regs were going to attack nutrients…

The state is still focusing on stormwater and there is a chance that the stormwater regs will still come out.

Do you have a sense of DEP perspective of what the most pressing challenges are? People mentioned bacteria, nutrients, sediments…

Nutrients stood out and then the estuarine areas stood out.

Still wondering where on the expanded list that cyanobacteria is. Not a plant, not algae….

There is a longer list. The list handed out was general and what is being mapped over to. Excess algal growth does include cyanobacteria. There are categories for cyanotoxins. They don’t show here because they were never listed in the past. They have the separate code of their own.

Would it be helpful for groups collecting data at the end of the year for them to send the data to DEP?

Yes, always. Send it to Rick and he’ll send it to the right people. There is an SOP and fact sheet that gives guidelines about what we’re looking for. Usually helpful beforehand.

Discussion/Prioritization (all)
- Go back and look at MyRWA plan. There may be parts of it that need to be updated and looked at.
- New approach would be to look at all four and then go from there.
  - Phosphorus
  - Cyanobacteria
  - Bacteria
  - Legacy pollutants
- What top two or top one would it go into that bin first?
- Not a decision we can make today. Would want to look at the sources and source overlap. You can prioritize by going thru that analysis.
- There needs to be some priority somewhere.
- Should pollutants be based on risk? Which one gets the most bang for the buck. Would you consider cost into this?
- Four pollutant types, identify sources, and then identify strategies. We’ll find that there is some geographic pieces. Might be one segment where it makes sense to do two or three or four. There may be other segments that don’t. It might address some of the issues.
- Or a segment where you are trying to enhance a use.
- It is going to have to be subjective, but you have to start somewhere. It is an iterative process and change as we go.
- We can come up with short-term and long-term things and make a big difference really quickly. We should come up with things we can sink our teeth into that we can start on quickly. We need to keep the Steering Committee moving and cranking. We need to go back to them with a plan and feeding them things to work on quickly and other long-term things that will take more time.
- We made it simple. We came up with four pollutants. On the source level – is that a pie chart? Point, nonpoint, etc. Look at categories and make some gross generalizations. Someone should come up with source pies for the pollutants we are looking at.
- If we know what, then we know who.
- Part of it is choosing long-term goals. There is no nutrient goal nor fishable/swimmable. Do we mean everywhere? That will have a big influence on where we prioritize the work to achieve the goal. This becomes a matrix associated with waterbodies and pollutants and uses. How much is it the goal to be able to swim in Chelsea Creek? Absolutely. The CWA. It is important to get the feedback coming back from the community. Maybe we do mean fishable/swimmable in every part of the waterbody.
- Maybe it would be best to make it swimmable at all the public swimming beaches in existence.
- Yes, but we also want to be able to put our canoe and kayak in and be safe doing that.
- If we are to report back to the Steering committee next month – what are we working toward? A four pollutant matrix, but we aren’t sure of where we’d get the source pies. We might have GIS tools. We can figure out where the sources are without quantification.
- Is that a science committee task?
- Everyone here on the science committee is out doing work now. How can the science committee to address questions coming from this group?
• Step by step. Let’s put out the list of pollutants. Matrices can get in the weeds and not very productive. We should take pollutants and work at sources and then short-, medium-, long-term actions. Keep it simple and based on that, what type of GIS products you need.
• There are a lot of things you don’t need to quantify.
• There are a lot of good things already on the list.
• In the strategy we need to do some creative thinking.
• Maybe look at MyRWA plan and then look at this list.
• Are we setting out goals for pollutants of concern?
• Four pollutants – then sources – short-, medium-, long-term strategies. Who is the side- arm to develop the strategy?
• It is important for folks to identify reachable short-term goals to keep momentum going. Need to get them organized and in effect.
• At some point, take a segment or geography and do a bunch of things in that place.
• Talked about data capacity and data sharing and the capacity to know what each group doing work is doing. Data sharing capacity will help to model the data that we have and it helps to identify gaps. It might be a stepping stone to understand what the strategies are going forward.
• The science workgoup is working on this.
• Like the four pollutants, but we might find there is a source doing something else, so we will need flexibility if it turns out there is something else going on.
• In terms of the process, each group or agency is going to continue to do a lot of things on this list. The framing needs to be what the group is going to work collectively on.

Follow-up Actions
• Need to develop an outline and refocus the list here and the MyRWA action plan with four pollutants and identify the sources. Leave blanks for the ‘who’ and the ‘time frame’. Then come back, people may feel more comfortable picking some suite of strategies.

Volunteers:
Lise Marx  Stephen Perkins
Mike Celona  Rafael Mares
Patrick Herron  Gene Bensen

• Have document in advance of Steering Committee meeting to take to the larger group so there is room for folks to give feedback.
• Look at MyRWA plan, DEP handouts, 303(d) map.
• Send out email to volunteers of early draft of priorities for review before call.
• The next Water Quality Call will be on Thursday, July 8 at 3pm to check-in.
• Ready to report out and share a rough outline with at next Steering Committee meeting July 21
• Work towards deciding what we should work on together over the next two years
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