

Mystic River Watershed Summit
Flooding Breakout Group Notes
April 10, 2008

AM Session

Will Brownsberger from Arlington, Belmont, Cambridge – Citizens often look to the state DCR, MDC, MWRA, DEM for solutions to flooding problems. After the 1996 floods, DCR did some work that did help. They opened up the channels, plan to rebuild the Craddock Locks, and drop the levels at the Earhart dam before a rain storm. This work has helped.

Bill Gode, DCR - DCR has been working to rehabilitate the Upper Mystic Lake dam. This will give DCR a better capability to draw down the lake, which means less water downstream and positive effects for the Malden River, Mystic River, and Alewife areas. Inclusion of a fish passage will improve water quality all the way up the watershed.

Clarissa Rowe, Tri-community flood group – Pervious surfaces are a problem. The flooding has gotten wider on the roads than in the past.

Zed McLarnon, Hanover Street Coalition – Problems with flooding in Malden. David Mendelsohn to talk to him off-line and help.

DCR work on the Earhart dam will get the upper lake brought down quickly and safely with a rain storm. Winchester, Woburn, and MA DCR work together when a large storm is anticipated to draw down the lake. Now DCR can open the gate to send water into the lower lake, and also pull the flashboards. Requires about 48 hours lead time prior to a storm. The triggers vary on the conditions – whether it is summer and has been dry, or is spring with a snow melt. They typically try to pull all the logs prior to a storm event because it is hard once water is flowing.

- Cambridge would like the triggers and plan written on paper so that they know how things are handled.

Woburn is the first to release water during storms. Communication of lowering water before storms is helping. But it doesn't help downstream because the lakes are lowered. There is regular communication between Winchester and Woburn. Horn Pond is dropped monthly, which has helped Winchester – Winchester is willing to notify communities downstream when water is lowered.

Somerville, Arlington, Cambridge have a communication system.

FEMA Flood insurance maps are preliminary. All part of a national map modernization process.

A 100-year flood means that there is a 1% chance of that flood in any year
A 500-year flood has a 0.2% chance in any year

Flood is defined as over land flooding, does not cover stormwater backups.

Winchester has a flood mitigation plan. Currently in MEPA. Wants to collaborate with other towns. FEMA reminds towns to file a Letter of Map Amendment (LOMA) if any development will affect the flood plain so that FEMA updates the maps.

Stephen Kaiser – worried of the Winchester plan. It could be pouring more water on lower communities. This concern is shared by the lower communities.

Looking for additional university interest in flooding in Mystic communities. Tufts did a project with EPA HQ. Somerville did a project with an EPA intern. Paul Kirshen at Tufts is looking into flooding and its relation to climate change.

Harvard, Tufts, BU, Wentworth involved in a variety of projects.

A need: Interagency Communication

Intermunicipal coalition (Arl, Belmont, Camb) – how does it work? It's good to have engineers from towns. It's a forum for them to talk and a chance for advocates to bring concerns. It is not a funding mechanism. Three towns contribute to the gauge on Alewife Brook, they don't always agree. They would like to get Somerville involved. Belmont has issues, Arlington has issues, etc. They are realizing that they share issues:

- Need to work with DCR to keep the river clear.
- Work with MWRA to handle CSOs, etc.

PM Session

Brainstorming:

- Dredging in Alewife Brook and Mystic
- Mystic dredging – Lower lake to Alewife. Data to be made public and gauge calibrated
- Gauges – need more and need them calibrated
- Regional approach to regulations
 - Both land use and stormwater
 - Increase groundwater recharge thru phase 2 permit.
- Funding list for improvements – MWRA, FEMA, etc.
 - Stormwater utilities
- Increase channel maintenance
 - Especially at Alewife Brook
- Maintenance in municipal systems (TSS removal)
- Stormwater management in municipalities
- Increased political commitment
- Sedimentation issues – source? Testing, money
 - Quantity measurements – Alewife, Belmont
 - Quality

- MWRA involvement in flooding issues
 - Legislative changes
- Alewife Pump Station Problem
- Data and Measurements – correct annual records
 - Municipalities to come up with key areas of where to measure after each storm.
 - Photo documentation, compilations
 - Possible use of picture posts (Fresh Pond, Menotomy Rocks Park)
 - Staff gauges
- Public Education – children, shared curriculums
- Referee – who will make the final decisions between communities
- FEMA process – greater resources
- Website coordination and improved resources
- Legislative changes – add 100-year flood to wetland mitigation laws
- Transparency in the MEPA process.
- Quantity – Ecology, Recreational, Low Flow
- Land Use – Impervious cover
- Public Health and Flooding
- Definition of how Flood Waters differs from Stormwater
- Address sewer charging below lower Mystic Lake along Mystic Valley Parkway (SSO issue)
- Regional inventory of problem areas/hot spots (flooding)
- Flap gates on all CSO pipes (duckbills)
- Renewed political commitment from MA EOEEA
- Better and more detailed connection between flooding and water quality issues
- Sediment impairment of water bodies – depth of water/sediment
- Flooding and flow problems at Craddock Locks

Notes:

Six towns are all in the same boat – information sharing and flood maps would be helpful. FEMA maps take two years to become final. Cambridge has a really good website, but can't share because of IT complications and differences in towns.

Final Report Out:

1. Maintenance Actions
 - a. Channel maintenance
 - b. Dredging of Alewife Brook and some Mystic
 - c. Local maintenance of Structures
2. Regional Approach
 - a. Coordinated maintenance
 - b. Recommended legislative action
 - i. Add mitigation to 100-year wetland
 - ii. Increase MWRA scope to include flooding

- iii. Weakness in environment joint powers act
 - c. Shared information of data
 - d. Sustainable land use of stormwater regulations
 - e. Advocate for funding for DCR, MWRA, FEMA, MyRWA for maintenance, infrastructure, data collection
 - f. Multi-agency cooperation
 - g. Repository for information that is easily accessible
 - h. Who is the referee
3. Flooding is a Public Health issue and dependent on land use policies