



WSCAC Meeting

January 12, 2016-10:00 AM

Location: MWRA Facilities in Southborough

Members in Bold in Attendance:

Whitney Beals, WSCAC Chair, NE Forestry
Paul Lauenstein, NepRWA
Bill Fadden, OARS, Wild & Scenic Rivers
Terry Connolly, Town of Ware
Martin Pillsbury, MAPC
Elie Saroufim, Boston Water & Sewer

Michael Baram, BU & CLF
Martha Morgan, Nashua River Watershed
Kurt Tramosch, Wayland Wells
Gerald Eves, Trout Unlimited
Andrea Donlon, CRWC

Non –Members in Attendance:

Lexi Dewey, WSCAC staff
Stephen Estes-Smargiassi, MWRA

Heidi Waugh, WSCAC staff
Dave Coppes, MWRA

WSCAC Business

Whitney Beals called the meeting to order. Members and non-members introduced and identified themselves for the recording. Whitney made a motion to approve the December Meeting Summary as distributed. Members voted to pass the meeting summary.

Lexi provided the committee with several updates. In December, the MWRA Board of Directors granted Ashland another six month emergency water supply agreement. The Town of Ashland is preparing their final Environmental Impact Report with MEPA and then they will go to the Water Resources Commission for the Interbasin Transfer Act review process. Ashland will have a town meeting in March to vote on funding the admission price to join the MWRA. Lexi mentioned that she is gathering additional information on Ashland that will be brought to the Executive Committee and the full group in February.

Lexi then updated the committee on mountain biking in the Ware River Watershed. The Executive Committee asked Lexi to arrange a meeting with Senator Anne Gobi regarding this issue. The meeting is scheduled for Monday, January 25th at 11:00 AM at the Blue Meadow Conference Center. All members are welcome to attend. Stakeholders from several groups such as QWAC and the Swift River Historical Society will also be attending. The intent is to give Senator Gobi an opportunity to hear a number of perspectives on the issue.

Michael Baram asked if there are any maps in existence that indicate trails open to mountain bikers in the debated area. He wanted to know if mountain bikers were accommodated in any way. Whit replied that yes, there are maps and there are routes on Ware River Watershed land that are open to biking.

Steve Estes-Smargiassi added that the land in question was not paid for by citizens of the Commonwealth, but by rate payers. The land was purchased for the exclusive purpose of protecting the water source.

Martha Morgan said that a major issue with mountain biking is that the user group not only makes trails, but they make capillaries. The network is constantly expanding and some bike trails are strictly downhill.

Whit said he thinks we need to continue to stand up and speak for the watersheds and the committee looks forward to an update on the January 25th meeting.

Lexi updated the committee on the Brice-Lemon development and the recent Supplemental Environmental Impact Report (SEIR) issued for the project. Most of DCR's concerns continue to persist. In WSCAC's last comment letter on the project, Lexi discussed inadequate sewer capacity as well as the Town of Rutland's current Water Management Act permit. WSCAC does not believe the Town has the ability to serve the development. The SEIR states that the preference is municipal water, but individual private wells are likely. Lexi will continue to gather information and will be drafting comments to submit at the end of January.

Lexi then briefly explained that the concept of selling raw water from Wachusett Reservoir to Shrewsbury was a non-starter from the Advisory Board's standpoint. From a preliminary perspective, the money that would be generated from the sale is insufficient to garner interest. David Coppes added that the MWRA does not currently have a raw water rate.

Lastly, Lexi provided an update regarding WSCAC's November 2015 meeting. At the meeting, Fred Brandon discussed redundancy to the city tunnel. At the December Board meeting, Mr. Laskey brought up the point that the Authority needs to make a decision on whether to move forward with this large expenditure. Mr. Laskey stated that the topic needs to involve mayors and the Governor as it is an extensive and expensive project. Lexi was encouraged by his sentiments and informed the committee she would soon post portions of Fred Brandon's presentation on the WSCAC website.

Redundancy Projects at MWRA: Dave Coppes, Director of MWRA Waterworks

Dave began his presentation by providing a review of the Spot Pond Tank and Pump Station project, as the committee received a presentation on the project in January of 2015. Dave said he would then discuss the lessons the Authority has learned from operating and testing the project.

Dave explained that the project provides distribution storage at the end of the MWRA low-service system. The project replicates the Gillis Pump Station, which is on the shore of Spot Pond. The Bear Hill Service Area, the Fells Service Area, and the Northern Low Area are all served. Communities within these service areas include Everett, Malden, Medford, Melrose, Reading, Stoneham, Wakefield, and Woburn. The number of communities that benefit from this project, either through normal operation or emergency operation, is large.

Dave then showed the committee images of the new storage facility. He pointed out a detention basin that collects all of the surface drainage from the site. Water from the detention basin then goes down to Ravine Road and into Spot Pond Brook. The drainage is detained so that the surface water is not being released at a rate higher than it was before the MWRA began construction. He also explained that the storage tank site will eventually return to a meadow habitat. It is important to the Authority that the material used atop the storage facility drains well. There's an under-drain system below the soil that will collect the water as it percolates through; eventually that water ends up in the detention basin. The site does need to retain enough moisture to grow the meadow grass. The area will be open, and people will be allowed to walk through the area as it is adjacent to the Fells Reservation; dogs, biking, and sledding are not permitted.

The other half of the project, the pump station, was difficult to test, Dave said. He explained that there are many different program modes for operating the station. There are two pumps that pump to the Fells Service Area (Northern High Zone), two pumps that pump to the Bear Hill Service Area (the Northern Intermediate High Zone), and one pump in the middle that can do both. Now that the MWRA has completed testing, and has

learned how the pump station operates, they are determining how to balance the new operation with the existing Gillis Pump Station.

Whit asked how staff plans to minimize electricity use. Dave said that is a balance they are continually working on. The Authority has the ability to minimize usage, but at the same time, they need to expend adequate energy to ensure that the equipment will work in the event of an emergency.

Kurt asked what level of functionality there is during a power failure. How powerful are the backup generators? Dave said the Authority has a full backup generator that can run the pump station. Kurt asked if there is redundancy for the generator. Dave said no, there is one generator. Kurt asked where the fuel is stored for the generator. Dave said it is onsite, adjacent to the room that holds the engine. He added that part of the testing phase included running the pumps, cutting the power, and having the generator kick on to pick up the load and restart the pumps.

Dave then recounted several lessons learned during testing. One being that the system operates better when the water in the tank is low – a counterintuitive realization.

Dave explained that by design, the system was built to force all flow up through the tank and then out to the service area. What they found in practice was that a lot more flow was short circuiting the tank and heading right to service area. The Authority will be installing a new automated control valve that will give them the ability to force the water up through the tank. This will turn the water in the tank over and allow the water to be fresher. The Authority is in the midst of completing this aspect of the project which will ultimately improve the operation of the system.

Dave then turned to lessons learned on the pumping side of things. Spot Pond is the emergency service for the entire Northern High. MWRA has the ability to pump from Gillis Pump Station through the Fells grade-line to service the entire Northern High Area using the Fells to regulate pressure for that system. Now, the Authority has the exact same capacity at the Spot Pond Pump Station. They also have the ability to pump directly out of the Low Service System through the Spot Pond Tank to Fells and to Bear Hill. Currently, the Authority pumps out of the High Service System from Gillis Pump Station – except in the wintertime. During the winter, the suction grade-line is high enough at the pump station that they can flow by gravity directly to Fells. The Authority discovered that by motor operated valves, they could fill the tank without operating the pump and save energy. Current operation takes no energy at all in the wintertime. They must, however, run the pumps periodically and turn the water over in the Spot Pond Tank. The Authority will be able to strike a balance and conserve energy by alternating the operation of Gillis Pump Station and Spot Pond Pump Station.

Steve Estes-Smargiassi mentioned that the Spot Pond Project and lessons the Authority has learned, make the water system much more resilient.

Dave provided a broader overview of redundancy operations and projects throughout the MWRA system. The Wachusett Pump Station for example, is an upcoming redundancy project that the Board of Directors approved several months ago. The new pump station will lift the water from the Wachusett Aqueduct to the Carroll Water Treatment Plant so the MWRA will be able to take the Cosgrove Tunnel out of service for maintenance. The construction of the new pump station will take about four years, and then the Authority will have complete redundancy for that portion of the water system.

Paul stated that he was struck by the high level of sophistication and knowledge that surrounds the discussion of redundancy at MWRA. Paul asked if there are new recruits coming up through the ranks that understand the intricacies of the system. Dave said yes there are. He explained that classes and various training events are conducted periodically at the Authority.

Wachusett Field Exercise

Dave recounted the Wachusett emergency response field exercise and command post exercise conducted in October. Drill participants included DCR, DEP, PanAm Railways, and local response agencies. The drill was a derailment of a train and a spill; peat moss was used to simulate a spill. The presentation was provided to the Board of Directors, and Dave asked that the committee read through the presentation independently as he wanted to share drone footage clips.

MWRA considered the drill a success as all parties involved learned from it and developed a better working relationship. Moving forward, communication between the parties will continue to be a priority.

Michael Baram asked if the drill was a rehearsal of roles. Dave said yes. Michael asked if tension between agencies existed. Dave said it did, but the amount of tension was far less than the first time the groups got together. Each group involved in the exercise has a different focus and different priorities. The first tabletop drill was fundamental in exposing each of the different priorities and allowed the groups to constructively plan and train participants on the importance of public relations. About a year was spent on the development phase. Consequently, the field exercise went more smoothly. Dave said the value of this knowledge is immeasurable.

Kurt asked if there were any regulators or legislators present at the drill. Dave said yes, there were a number of regulators present. Lexi spoke to a legislative aide as well.

Michael commented that he thinks the emergency preparedness efforts are significant and that he hopes more can be done from the perspective of prevention.

The committee thanked Dave for his presentation.

MWRA Updates: Stephen Estes-Smargiassi, Director of Sustainability & Planning

Steve provided a brief summary of the topics he plans to discuss at the upcoming joint meeting with WSCAC and WAC on February 16th at the Waterworks Museum. He is creating a presentation on the “ins and outs” of water use in the MWRA system.

Steve then addressed the lead and copper issue in Flint, Michigan. He considers the issue a very serious problem. He explained that city officials made shortsighted decisions to save money and the consequence was a significant increase in lead levels in Flint’s drinking water. He believes this huge debacle will affect policy.

Whit commented that legal prosecution may follow. He asked Steve if some of the lead was in the service lines.

Steve replied that the principal source of lead in drinking water comes from lead service lines – the portion that runs from the street to a house.

Kurt asked if the MWRA has any lead distribution lines. Steve replied that within MWRA ratepaying communities, there are communities with lead service lines, but distribution lines are not made out of lead. Typically in water supply systems, very little lead is exposed to the water between the supply source and the distribution line.

Paul asked if there is a way for customers to determine if they have a lead service line. Steve said there are two things that can be done. First, you can perform a scratch test. On the MWRA website, there are photographs of what a lead service line looks like after a scratch test; the results of a scratch test look different on lead than on

copper. He also suggested contacting the local water department to check the records on the condition of community service lines.

<http://www.mwra.state.ma.us/04water/html/wat.htm>

The committee thanked Steve for his comments and insight.

**The next WSCAC meeting will be a joint meeting with WAC held on February 16th
at 10:30 A.M. at the Metropolitan Waterworks Museum in Boston.**