



WSCAC Meeting

November 10, 2015-10:00 AM

Location: MWRA Facilities in Southborough

Members in Bold in Attendance:

Whitney Beals, WSCAC Chair, NE Forestry
Dona Motts, MA League of Women Voters
Bill Fadden, OARS, Wild & Scenic Rivers
Dolores Randolph, Boston Water & Sewer
Martin Pillsbury, MAPC
Elie Saroufim, Boston Water & Sewer
Martha Morgan, Nashua River Watershed

Michael Baram, BU & CLF
Paul Lauenstein, NepRWA
Kurt Tramposch, Wayland Wells
Terry Connolly, Town of Ware & TU
Andrea Donlon, CRWC
Gerald Eves, Trout Unlimited

Non –Members in Attendance:

Lexi Dewey, WSCAC staff
Eileen Simonson, Former Executive Director of WSCAC
Rubie Hubley, First Chair WSCAC/NCAC
Alice Clemente, BRUC
Andreae Downs, WAC

Heidi Waugh, WSCAC staff
Stephen Estes-Smargiassi, MWRA
Fred Brandon, MWRA Engineering
Karen Golmer, NEWIN

WSCAC Business

Whitney Beals called the meeting to order. Members and non-members identified themselves for the recording. Whit announced that Dona Motts is retiring from WSCAC. He commended Dona for her many years of service on the committee and recounted the numerous leadership positions Dona has held in the environmental community. He thanked Dona for serving faithfully for so long.

Eileen Simonson, previous WSCAC Co-Director, stated that the committee's loss of Dona's institution memory mustn't be allowed. She encouraged members to pursue Dona with any questions because though Dona is quiet, she holds the heartbeat of all of the major issues that WSCAC has dealt with. Eileen recalled that Dona organized the Massachusetts League of Women Voters to make a resolution opposed to the diversion of the Connecticut River. She said that Silvio Conte, Massachusetts Congressman at the time, was so impressed with the concise language and thrust of the resolution that he brought it to Congress and voted it. Eileen concluded by saying that she cannot say enough for the work Dona has done.

Alice Clemente shared several memories about working with Dona as Presidents of the League of Women Voters. Alice was voted President of the Northampton League when Dona was voted President of the Amherst League so they joined forces. Although Alice left that position shortly thereafter, Dona continually called her back to service – first as the MA Chair of the Connecticut River Watershed Council and then as the Chair of WSCAC. Alice said that Dona was her mentor and inspiration through all of it.

Dona then shared several thoughts about her time on the committee. She began by saying that in regards to the resolution opposed to the CT River diversion, she and Alice were truly a team. She recalled that she became

interested in WSCAC because Marge Sackett, the Executive Director of the Committee at the time, was a major resource in drafting the resolution. Dona said that when she came on in 1983, Eileen was stepping down as a member of the League of Women Voters to become a co-director of WSCAC with Robie Hubley and Alexandra Dawson. One of the goals the committee had at that time was changing the way people thought about water. Historically Dona said, whenever Boston believed they needed more water, they would move just a little bit further west; when the city proposed the CT River Diversion, the west said “enough.” WSCAC’s goal was to reduce demand and increase conservation, rather than increase the supply. Dona said that fortunately, MWRA was willing to pick up the gauntlet and initiate an exceptional program of leak detection and repair, and metering. Dona recalled that MWRA exceeded WSCAC’s expectations.

Dona said that she loved being a member of WSCAC. One of the greatest benefits of being on the committee was meeting all of the smart and dedicated people working on water supply protection. Dona concluded by saying that the real gift was working with the WSCAC staff – it was an adventure every day. She wished the committee continued success.

As a celebratory cake was distributed, Whit announced that two sets of meeting minutes required a vote: the September Meeting Summary and the October Meeting Summary. He entertained a motion to approve both sets and both were unanimously approved.

Whit then initiated the election process for the WSCAC Chair and Executive Committee. He announced that Lexi had contacted each of the current members holding positions and they all wished to continue serving. Whit asked if there were any nominations from the floor. As there were no nominations, he entertained a motion to vote the slate of the existing Chair and Executive Committee members as one ballot. The motion was seconded and all voted in favor. Whit will serve another term as Chair and the Executive Committee includes Michael Baram, Andrea Donlon, Jerry Eves, Paul Lauenstein, and Kurt Trampusch.

New England Water Innovation Network- Karen Golmer

Karen Golmer, the Executive Director of the New England Water Innovation Network (NEWIN), began by saying that she was honored to be at the meeting and impressed by the people sitting around the table. She found their recollections and work to be very inspiring and thanked the committee for inviting her.

Karen explained that NEWIN was formed to bring together different perspectives in the water industry. When NEWIN was created, water clusters had begun to form throughout the United States and globally. Karen explained that the nonprofit works to pull people together to solve the water problems that face us all.

NEWIN recognizes the need for new technology and believes there is also a need to accelerate new technology. As new technology is NEWIN’s focus, they work a great deal with start-ups and universities. Karen said New England is home to a significant amount of new water technologies and the region has the brain power to take it to the global market.

Karen provided an overview of NEWIN’s cornerstone event, Symposium for Water Innovation (SWIM). She recalled that Governor Patrick was very supportive but Governor Baker has not identified water as a top priority yet. Karen discussed the leadership conference NEWIN held in 2014. She noted that MWRA was supportive at that event and stated that a major point of focus were the barriers water municipalities face in the context of technological innovation. NEWIN realized that if municipalities were going to be called upon to use new technologies, those technologies needed to be thoroughly vetted. As a result, the Test Vet Network was formed: A network of resources to test, pilot, and demonstrate new water technologies. NEWIN’s testing process makes it possible for new technologies to be vetted before they reach the customer – a critical component of accelerating new technologies in the commercial realm.

Karen discussed upcoming NEWIN events, such as Water Pitch Night. Start-up companies and existing companies come together to informally pitch their new technologies. Companies win by garnering the most applause from the crowd. The event provides an opportunity to promote new technologies while also offering companies the chance to interface with industry representatives.

Kurt Tramposch asked how NEWIN is addressing agricultural users in New England. Karen replied that currently, agricultural use is not a primary focus, but she thinks it should be. She believes NEWIN needs government support in order to bring this issue to the forefront.

Paul Lauenstein asked Karen to provide an example of an exciting technology that she has seen. Karen provided an overview of advanced water desalination membranes by a start-up company called [Anfiro](#). This new technology provides a 35% reduction in energy use.

Andreae Downs recommended that committee members make an effort to attend the next Water Pitch Night. Karen agreed and reiterated how energetic and inspiring the water innovation community can be.

The committee thanked Karen for her presentation.

System Redundancy at MWRA- Fred Brandon

Fred Brandon, the Assistant Director of Engineering at MWRA, introduced himself to the committee and provided a brief summary of his experience working with previous WSCAC directors. Presently, Fred's work focuses primarily on pipeline rehabilitation, system redundancy, and working with water regulations.

Fred explained that his presentation would focus on system redundancy, specifically in the metropolitan area. The MWRA's goals for system redundancy are as follows:

- Provide a reliable drinking water supply
- Eliminate single points of failure within the system
- Enable the MWRA to take segments of the system offline for service and maintenance purposes

Fred reviewed several completed redundancy projects before he began his discussion on upcoming projects. He told the committee the Authority plans to add a motorized roller gate at Shaft 12 – the intake at the Quabbin Reservoir. Currently, there are only stop blocks in place; the motorized roller gate would allow the MWRA to remotely shut off flow to the Quabbin Aqueduct for maintenance or in the event of an emergency.

Fred then discussed the Cosgrove Tunnel. The tunnel flows from the Wachusett Reservoir to the Carroll Water Treatment Plant. The Wachusett Aqueduct parallels the Cosgrove Tunnel, but the aqueduct provides water at a lower pressure than the tunnel. If MWRA needed to shut down the Cosgrove Tunnel, they would have no way to get water from the aqueduct to the treatment plant. The MWRA is awarding a project next week to build a pump station at Wachusett Aqueduct in order to remedy this situation.

Fred then addressed the Metropolitan service area of the system. He explained that the MWRA could not shut down the Metropolitan tunnel system without interrupting supply. He provided a thorough overview of the tunnel system and explained that if there was an emergency, MWRA would have to revert back to their old system of open reservoirs. They could pump water out of Spot Pond and Chestnut Hill, for example. The reservoirs however, would have to be replenished. Steve Estes-Smargiassi added that it would take several days to a week for the system to be back in service.

Fred stated that the MWRA has been studying redundancy in the Metropolitan system for a long time. In 2010, they presented several projects to the Board of Directors that are currently funded in the Authority's capital improvement program. One of the proposed projects focused on the Weston Aqueduct Supply Main #3

(WASM) – it proposed a potential aqueduct that could bring water to the north if MWRA lost its tunnel system. The Authority decided to replace the aqueduct with a larger pipe instead to give the system the capacity for redundancy. This pipeline however, runs through the center of Waltham and the construction aspect of replacing the pipe would be disruptive. The project would also be disruptive to the town of Belmont. Fred explained that the existing WASM pipeline is only a few feet deep in the ground, and shares the ground with other utility lines, such as gas lines. It is shallow compared to the MWRA’s preference of installing pipelines at a depth of five feet.

Kurt asked if the gas lines have presented any serious problems for maintenance of the water supply system. Kurt asked if the disrepair of the gas line system is pushing the need for MWRA to install water pipelines deeper in the ground. Fred said no, that is not the driving force. MWRA’s reasoning for lower pipeline placement is simply general protection. Fred said that they work hard to maintain a substantial buffer between MWRA pipes and other utility lines. In the WASM case, MWRA is looking at a fifteen to twenty foot trench in order to avoid existing sewer lines.

Fred continued that the MWRA is currently in the middle of exploring different tunnel alternatives that would supply water to the north and the south. The Authority has an immediate plan to resolve redundancy issues and a long-term plan to bring tunneling all the way up to the end of the city tunnel extension that would provide a seamless transition if the city tunnel system were to fail.

Eileen asked how that would impact pressurization. Fred said that no one would notice any change in the water pressure.

Michael asked if Fred has encountered town created moratoria on construction and reconstruction of streets. Fred said it is primarily tied to their pavement programs. He stated that the MWRA tries to conduct maintenance of their system before scheduled paving projects take place. Michael was surprised that towns had the ability to hold off utility companies and Fred responded that they work with the towns as best they can.

Kurt asked if the MWRA conducted a post-analysis on the community impact of constructing the MetroWest Tunnel. Fred said there was concern surrounding the noise from the blasting of shafts. There was also the issue of trucking the muck out of the construction sites. Fred said his understanding is that there were not many surprises because matters were well vetted and mitigated during the EIR process. Fred said the Authority conducts a great deal of technical work in advance to minimize impact.

Fred returned to his discussion of redundancy and reviewed each of the tunnel options that are currently being considered by the MWRA. Fred hopes to brief the Board of Directors this winter and gain authorization to move forward with a more detailed plan.

Eileen questioned the cost and timeframe surrounding this project. Fred replied the project cost would be around one billion dollars. In terms of time, Fred believes it would take five years for planning, design, and completing the EIR. Construction would take seven to twelve years and so in total, fifteen to twenty years.

Kurt asked if there are any lessons from New York City and their tunneling. Steve replied that one lesson is to just go ahead and do it – and don’t make it last several decades. New York is experiencing generational issues based on the way they funded their projects: Work that has been paid for hasn’t been completed.

Fred concluded his presentation by revealing that redundancy projects similar to the concepts being discussed today by the Authority were actually proposed in 1937. The committee was surprised by the history and thanked Fred for his informative presentation.

MWRA Updates: Steve Estes-Smargiassi

- Spot Pond Pump Station is being tested – it is operable. The second cell had a leak, but that has been repaired. The tank has been disinfected and is being refilled.
- The Wachusett railroad drill had over 200 participants and went very well. Steve said lots of lessons were learned and drilling is a worthwhile activity.

The committee thanked Steve for his updates.

Member Updates

Bill Fadden informed the committee of his involvement with the Wild and Scenic River Stewardship Council. He announced that this summer, the Sudbury River reached record low flows. He said that the council has asked Guy Foss and John Scannell about the possibility of augmenting river flow with Framingham reservoirs one and two. Bill stated that Guy referred the matter to planning. He asked if it was referred to Steve.

Steve said that on average, over the course of a few days, everything that goes into the Sudbury River comes out. In the event of a flood, the MWRA holds water back; therefore the Authority enhances for the flood protection side of things. On the low flow side of things, the MWRA is required to release a minimal flow into the Sudbury every day..

Bill said he got feedback from MWRA lawyers that they do not feel there is a minimal flow anymore. In 1984 the law changed. Steve replied that every day they still make the flow. Bill replied that it is still there, but it is not a requirement. Bill mentioned that he would like to have a discussion with MWRA and DCR regarding the drawing down of reservoirs one and two to augment the river flow. Bill believes the minimal flow requirement is inadequate. Steve stated that before they engage in a long conversation, he will need to read the most recent materials.

Whit thanked everyone for attending and the meeting was adjourned.