



WSCAC Meeting

November 6, 2014-10:00 AM

Location: MWRA Facilities in Southborough

Members in Bold in Attendance:

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

Andrea Donlon, CRWC
Gerald Eves, Trout Unlimited
Michael Baram, BU & CLF
Paul Lauenstein, NepRWA
Martin Pillsbury, MAPC

Non –Members in Attendance:

Lexi Dewey, WSCAC staff
Jane Fadden, OARS
Kurt Tramosch, NEWWA Groundwater Committee
Stephen Estes-Smargiassi, MWRA
Terry Connolly, PVTU

Heidi Waugh, WSCAC staff
Travis Ahern, MWRA Advisory Board
Joel Zimmerman, DCR-DWSP
Jim French, DCR-DWSP

WSCAC Business

Whitney Beals called the meeting to order. Members and non-members introduced and indentified themselves for the recording.

Whit stated that the September and October meeting summaries required approval. He entertained a motion to accept the summaries as distributed. The summaries were approved.

Whit announced that there was an item of business not listed on the agenda: to approve the appointment of Kurt Tramosch to the committee. Whit noted that Kurt has been to several committee meetings and that he has a great background in a variety of fields including sustainable landscape management, raising landscape plants, and public health. Whit referenced an email that Lexi Dewey had distributed to the committee that documented Kurt's excitement to join the committee and commented that Kurt would be a great addition.

Kurt stated that if he was able to help the committee and act as a participating member he would very much enjoy it. He added that he was honored to be considered. Whit commented that Kurt has already been very helpful in many ways and cited a report on ethanol transport in the Commonwealth that Kurt had made available to committee members.

Whit asked for someone to make a motion to approve Kurt as a new member of the committee. Paul Lauenstein made a motion. Whit seconded the motion and the committee approved Kurt's appointment. Following applause, Whit stated that Kurt would be filling a gap in the committee's public health slot. Rick Cedar, he continued, had filled the role for many years but had left the committee due to health issues; Whit noted that the committee missed Rick's participation. After stating a formal welcome to the committee, Whit called on Joel Zimmerman, DCR Regional Planner, to begin the meeting's featured presentation.

Twenty Years of Implementing the Watershed Protection Act by Joel Zimmerman

Joel introduced himself as the Planning Coordinator in the Boston office of DCR, Division of Water Supply and Protection. He stated that he and Jim French work throughout the entire system, as opposed to one watershed within the water supply system. Joel then began his presentation on the Watershed Protection Act which was to include the nuts and bolts of the act, a report on how it has been working, tribulations that have been faced, and the technical assistance portion of the Act.

Joel displayed an image of the watershed system to begin his historical account of westward development. He gave a plug about the work of Sean Fisher, DCR archivist, Rebecca Kenny, MWRA, and Boston Public Library's Commonwealth Archives. Through the use of Digital Commonwealth, they have created a website with images from the construction of the Sudbury and Wachusett Reservoirs; there are almost 9,000 images on the website and the blueprints have also been digitally archived. Joel apologized for not having the website, but stated they would be publicizing it soon.

Joel continued his presentation by discussing the creation of the MWRA in 1985. A wonderful working relationship was created between MWRA and DCR (originally MDC) in respect to the watershed system. In 2004, MDC was merged with DEM to become DCR. He then highlighted the role the Safe Water Drinking Act played in bringing issues of treatment and source water quality to the forefront. The big question focused on whether to use filtration or not. In 1991, the first watershed protection plans were written for Wachusett and Quabbin Reservoirs. The plans were done separately, but each dealt with land acquisition, septic systems and sewers (particularly in Wachusett Reservoir), and the idea of land use regulations to try to get a hold of development in the watershed system. Joel took a moment to recognize WSCAC's role in advocating for the regulations.

Paul Lauenstein asked Joel to clarify a point he had made about the watershed protection plans. Paul questioned whether the plans were the same as the Watershed Protection Act. Joel responded that they were not. Stephen Estes-Smargiassi commented that as part of their decision making process, under the Surface Water Treatment Rule, about whether to filter or not filter, they jointly, between two agencies, undertook a set of plans. He recounts that there were a number of issues pointed out and a lot of data collection. At that time, they were also working in parallel on the Watershed Protection Act for the so called "Cohen Bill." The draft of the reports happened in 1991, and by the time they had finalized the reports in 1993, the bill had passed.

Joel stated that at the onset of the MWRA, there were no written plans, except for forestry plans. The MWRA decided that instead of writing a management plan for the entire watershed system, to separate plans between Quabbin/Ware, because they knew it would be unfiltered, and Wachusett, because it was unknown whether it would be filtered or not. With the latest iteration of the Watershed Protection Plan in 2013, DCR was able to unify the plans into one document. Joel thanked Paul for his question.

Joel then began to discuss the background of the Watershed Protection Act. It was originally proposed in 1989 by Representative Cohen from Newton. He then proposed a question to the committee: why was the bill called the WsPA instead of WPA? Wetlands Protection already had the acronym in Massachusetts. Commonly, the bill is referred to as the Cohen Bill. It was passed in May of 1992 and is Chapter 36 of the Act 1992. There are four major components of the Act. The first was a set of land use regulations that limited alterations within 400 feet of the reservoir and within 200 feet of its tributaries. Additionally, it limited other land uses between 200-400 feet of tributaries of aquifers in the Wachusett watershed and on bordering vegetated wetlands. Joel said that many people associate these regulations with the Act, but that there are other elements of the Act. One such element was a bond of 135 million dollars to buy land; part of that was just to buy land and part of it was to save so that if they took property that lost all value, they would go and buy that property. Joel said that that has never happened.

The presentation proceeded to address technical assistance to the watershed communities on land use issues. Joel said a chapter of WsPA promotes working with people living in the watershed to help them understand land use regulations and what they can do to protect the watershed. He then mentioned language within the bill that supported the construction of a sewer system in West Boylston and Holden.

Despite vehement opposition to the regulations, the WsPA moved forward. Informational meetings were held, draft maps and regulations were distributed to citizens within the watershed, and three public hearings occurred. They were the first land use regulations to be set to digital map information; it was a big project for GIS to set themselves up as a critical resource for all planning in the commonwealth.

The regulations went into effect in February 1994 and the law was integrated with other laws that dealt with control and oversight of the watershed. For instance, public access and fishing were included in 350 CMR 11.00. The law affects twenty-two towns and 8,200 parcels; the law regulated 28,000 acres of unprotected lands and covers about eight percent of Quabbin, thirteen percent of Ware, and seventeen percent of Wachusett.

The law created two protection zones. The primary protection zone is within 400 feet of the reservoir and 200 feet from the bank, tributaries, and surface waters. Within the primary zone, alteration is prohibited. The secondary protection zone, which is between 200 and 400 feet of the tributaries, land over flood plains, and land bordering vegetated wetlands, is not as limiting as the primary protection zone. People can still build within the secondary zone but there are limits on the size in respect to septic density, how much impervious surface you can create, regulations on altering wetlands and the outdoor storage of hazardous materials.

Kurt Tramosch then posed a question to Joel: “When you talk about the outdoor storage of hazardous materials, petroleum products, is farming included?” Joel replied there is an exemption for existing agricultural use, but DCR has built working relationships with farmers to ensure regulations are met. Joel contended that the WsPA actually fostered those kinds of conversations as DCR was not simply coming in and saying “no” to property owners.

Paul also asked a question about septic density. He asked Joel to provide an example of how that regulation affected real people in the watershed. Joel said that the law dictates how much square acreage is required per bedroom for a septic system: two bedrooms per acre. It is intended to recognize the impact septic systems have on groundwater and eventually the entire water system. Paul then asked if any houses were taken down on account of this regulation. Joel said that nothing had to be torn down; these regulations are only applicable moving forward.

Joel then displayed a map of the watershed system from the MassGIS website. The primary zone, the secondary zone, and parcels were identifiable and differentiated by color. Joel commented that watershed protection has not stopped development. Whit questioned if town planning boards and building inspectors have access to this information. Joel replied that early on, towns were given hard copy maps along with a list of affected parcels; currently, that information is available online. He continued to say that DCR would like people to come to the agency for the final ruling as there can be quirks. Stephen commented that initially, people were under the impression that ninety-five percent of the watershed would be prohibited from development. He said that sequentially, as DCR had better tools to develop better maps, fewer and fewer people came to the public meetings. If a person was worried that their land would not be developable, and DCR demonstrated that they were far enough from a tributary, their interest began to wane. By the compromises around what was grandfathered and what was allowable moving forward, they diminished the anxiety of landowners; they began to see their land was not losing all value and the law became more feasible.

Elie Saroufim asked if the bond set aside to buy land was not used. Joel said that if DCR took all value of the property, DCR would buy that property. That situation has never happened in twenty years. Joel then detailed several exemptions included in the WsPA. For instance, if a landowner within the watershed wanted to put on an addition, or if there was an existing lot, the landowner was exempt from the act. DCR could

not tell the owner that they could not build. In a related vein, landowners can subdivide their land by one lot. Joel mentioned that there is a variance process by which landowners can work with DCR to determine how they can develop and meet the regulations of the act.

Paul questioned if DCR ever ran into an existing use that was causing the kind of problem that this legislation was designed to prevent. Joel said that yes, there are instances in which that has happened. DCR tries to work with land owners or buy that land outright. Stephen commented that there have been farms that were not being operated well and money has been allocated to remediate those situations; they have addressed septic system issues in several communities. He said the basic concept of watershed protection is to identify threats and remediate them: you have existing problems, places where there is pollution that needs to be remediated, you have threats, which are potential problems that need to be prevented from becoming an actual problem, and you have protection. All of those layers are necessary. Stephen said that when they developed their first plan, they struggled mightily to grasp the concept of having current problems, potential problems, and preventing problems as three different baskets of policies. They had to develop an intellectual framework to include each component.

Joel then transitioned to a discussion about the main ways in which landowners can communicate with DCR. Joel stated you can have an advisory ruling, which is a letter from a landowner to DCR that details the project they would like to do; field staff would send a letter in response either granting or denying permission. If denied, the landowner can come in for a variance. There is also a more formal option: the Determination of Applicability form. DCR responds to this form with a form that is recordable at the Registry of Deeds. Over the course of twenty years, Wachusett has had about 2,000 applications and Quabbin has had about 1,500.

Joel provided an overview of the staff that works with the WsPA and credited them as committed and knowledgeable. He noted that the WsPA Working Group is in constant communication with staff and meets quarterly. At this point, Paul posed a question about new blood coming up through the ranks: are we ten years away from an implosion as people retire? Joel responded that other staff have come and gone and there are several new hires. He said an implosion is not eminent as there are existing institutional tools to pass on knowledge.

Dona Motts then questioned if Joel has found any wider spread application of watershed protection among communities with large reservoirs, such as Cambridge Reservoir. Joel replied that watershed management generally relies on the WsPA and Title V. Stephen added that when they did the Cohen Bill, there were a number of regions that had buffer-type bills; around the country, both filtered and unfiltered systems have watershed buffer programs that are regulatory in nature. Other states, he said, have regulations similar to the Wetlands Protection Act that have elements that contribute to watershed protection. The principal mechanism for unfiltered systems, in terms of maintaining water quality, has been land acquisition.

Joel then shared images and information about several cases DCR has applied the WsPA to over the years. Kurt questioned if such projects would prompt any highway salting restrictions or fertilizer restrictions? Joel replied that salt is not a big issue; Stephen added that the level of sodium in source water is very low. He would rather have sodium on the roadways because it keeps cars on the road and out of the reservoir. Joel shared several more examples to demonstrate that the WsPA has not stopped development, but the Act mitigates development in ways that are beneficial to the watershed system. Kurt questioned if DCR promotes permeable paving. Joel replied that they promote anything that is within the regulatory scheme that is in line with smarter land use development.

The presentation continued to address issues of enforcement. DCR does not have regulatory police power; they work with DEP to enforce the WsPA if a landowner is found to be in compliance with the provisions of the Act. If there is a significant watershed protection violation, there is likely also a wetlands protection violation or Title V violation. The Attorney General's Office can also be involved with enforcement proceedings.

Joel then provided an overview of the construction of Bear Hill, a real estate development in Rutland, MA that prompted enforcement action. Part of the issue was that a large portion of the development project not affected by the Act. The developer needed a variance to build a bridge crossover a wetland, but that was it. Everything else was water quality issues and wetlands protection violations. The development was built on highly erodible soil and it eroded down the hill into the wetlands and Moulton Pond; the developer was supposed to build from the bottom up, but built from the top down and cleared out the hill. The developer was found guilty and incurred monetary fines. Joel commented that no matter how proactive DCR is, the development is still happening and they must continue to work with the developer to deal with these issues.

Joel detailed another example on Demond Pond in Rutland. In 1977, a person bought a small cabin with a small beach. The landowner wanted to build a luxury beach house on the property. He was aware that the WsPA had passed, but went ahead and did the project anyways. There were extensive alterations in the primary zone done without WsPA review or approval. DCR took the landowner to court and through a series of rulings and appeals, fought for twelve years. The landowner made the claim that the WsPA was facially invalid under the state constitution and under the federal constitution it was a physical taking. Joel said that the rulings were all in DCR's favor. Ultimately, the ruling validated the WsPA. Paul questioned who paid the legal fees for DCR. Joel replied that the Attorney General paid for it and rate payers paid for DCR's time and their lawyers. Stephen commented that as a regulator in a case like this, you don't mind someone taking you to court if you win, because now it is easy to issue a determination.

The presentation then addressed the topic of technical assistance. Although DCR regulates land, local land use authorities are a large part of watershed protection. The technical assistance program deals with planning, zoning, health, and subdivision issues. Joel stated that most of the rural towns do not have professionals involved on their committees/boards; they have volunteers that are doing the best they can so the program provides support. At this time, Joel turned the presentation over to Jim French.

Jim provided an overview of the Land Acquisition Program. Within twenty years, Jim said they have made significant strides. He noted that the Wachusett Reservoir Watershed was the most vulnerable of the three active watershed and they have made great progress, going from nearly eight percent of ownership to twenty-eight percent. At present, DCR is approaching 23,000 acres of acquired land.

In terms of the financial distribution, eighty-four percent of the allotted monies have been used to acquire land in the Wachusett watershed. Jim commented that DCR pays considerably more per acre on average for land in the Wachusett watershed as it is more developed and closer to the urban centers of the state. He stated that DCR works to achieve a balance between acquiring the expensive land of the most vulnerable watershed and getting deals on land in the Quabbin and Ware watersheds so that in the future, they do not have to pay the prices in the West that they have seen in the East.

Stephen asked how much land has been acquired from the Sudbury Reservoir. Joel responded that a quarter of the watershed is protected and that DCR is responsible for about twenty percent of it. No acquisitions, however, have been made since the reservoir was completed in the 19th century.

Jim then listed a number of organizations that protect land within the watershed. Kurt questioned if any of the protected land fell under Chapter 61A Agriculture. Jim stated that a lot of the land falls under Chapter 60, 61A, or 61B. Whit then asked what percentage of the central and primary basins are protected. Although Jim did not have access to the exact number, he responded that a great deal of that specific area is protected. Jim noted that a large portion of the watershed is protected by the efforts of other organizations and agencies. DCR encourages that protection and in some instances, collaborates with other organizations on projects related to the watershed.

Jim then stated that in respect to purchasing land, DCR either buys the property outright or they purchase partial interest in a property through the Watershed Preservation Restrictions Program. Through this program, owners continue to own the land, but they are subject to restrictions and land covenants. DCR prohibits development

and discourage agriculture; although they allow hayfields and the mowing of meadows, they disallow tillage, livestock, and the storage of manure.

Jim noted the Forest Legacy Program's significant contribution to the watershed system. The program run by the United States Forest Service recently awarded seven million dollars to protect close to 4,000 acres in the "Quabbin to Wachusett" corridor. Three quarters of that land will fall under DCR protection.

In terms of MWRA funding, Jim stated that nineteen million dollars was made available for land acquisition. The funding was fully expended by December of 2013. The MWRA Board then allocated five million dollars for land acquisition for FY14-FY18. Currently, DCR has about one million dollars remaining of allocation. Whit questioned if more funds could be made available. Stephen responded that it is not so rigid that if an extraordinary opportunity arose, funding could be negotiated.

Jim opened the discussion for questions. Kurt questioned if DCR has a policy regarding the maintenance of pipelines on protected lands within the watershed or whether or not pipelines should be allowed in watersheds. Jim stated that the proposed Kinder Morgan pipeline does not enter the DCR watershed. Kurt asked if the off watershed areas that are being acquired will be touched by the proposed pipeline. Jim stated once more that within their arena, none of the projects touch on the proposed pipeline. The partners with which DCR works, however, are very upset about the proposed route going through conservation restriction lands and state lands. Nonetheless, it does not directly affect DCR's watershed Land Acquisition Program.

Kurt then asked if there are any existing petrochemical activities in the watershed that may have an impact and require special oversight or maintenance. Jim said no, not that he is aware of. They are in the process of acquiring the underdeveloped portion of a former petroleum tank in West Boylston. It has been offline for a number of years, but Jim considered it one of the most frightening petroleum related facilities in the system.

The committee thanked Jim and Joel resumed his presentation. He spoke briefly to the law regarding the compensation of towns for land that is 'in fee' as a result of watershed protection. Upon the conclusion of his overview, the committee thanked Joel.

Stephen then spoke to the committee about the upcoming MWRA Board meeting. He noted the dedication of the UV Treatment Facility in Ware to Bill Brutsch and recounted Bill's contribution to MWRA throughout his career. Stephen then apologized for cancelling the committee's tour of the facility and said that a tour date would be scheduled in several months. He then discussed supply and demand; at present, Quabbin is at 90.9 percent, well within the normal operating range. He continued to state that conditions have been extremely dry in the late summer and fall, yet because of low demand, the reservoir is still well within its normal operating range. On November 5th, 182 mgd came out of the reservoir and into Boston; Steve commented that that is a very nice, low number. Additionally, demand this year is on track to align with the demand MWRA has seen over the past five years. Steve provided an overview of MWRA's current work with redundancy planning; he hopes to bring a plan to the Board early in 2015.

Lexi asked for an update on Spot Pond. Steve replied that the project is close to completion; however, they are still having some problems with accepting some of the pumps. Steve was optimistic that the project would wrap up early in 2015. Lexi commented that WSCAC would be getting a detailed presentation on Spot Pond in January.

Steve opened the floor for questions. Paul asked if there was any news on new member communities. Although there was not much to report, Steve said that conversations are ongoing with Ashland and North Reading. He stated that there are some infrastructure issues in both cases. Whit questioned if any analysis has been done regarding the effectiveness of the WsPA in heading off potential threats. Steve replied that yes, overall it has been effective. Joel noted the success of working with the gull population (a potential threat to the water supply)

that roosted near intake areas and water treatment facilities. Steve concluded by saying that things that are on the horizon for his colleagues elsewhere, such as pollution from pharmaceuticals, are not on his horizon. Lexi asked for an update on the rail talks. Steve said that MWRA is continuing to work with Pan Am in an increasingly positive manner and there are upcoming trainings scheduled. The committee thanked Steve for his time and presentation.

Travis Ahern, WSCAC's MWRA Advisory Board designee, then provided a brief overview of a storm water workshop put on by the Advisory Board Committee in October. Participants learned about the various options for dealing with storm water and how to organize a storm utility. A panel consisting of communities that have storm water fees and utilities in place was also provided. Travis said that a video of the workshop will be available soon. He conveyed that the Advisory Committee would like to host another workshop in 2015 and asked if WSCAC members had any suggestions for a topic. Finally, Travis asked if there was interest in the Retail Rates Survey. Lexi said that there is interest and proposed Travis discuss the survey with WSCAC in January. The committee thanked Travis.

Following several announcements from Lexi, including the Conflict of Interest Law signoffs and the William A. Brutsch Water Treatment Facility dedication, the meeting was adjourned.