

HAMILTON BOARD OF SELECTMEN

MINUTES OF MEETING

American Legion, A.P. Gardner Post, 37 School Street

July 29, 2019

Selectmen Present: Chair Jeffrey Hubbard, Darcy Dale, and Rosemary Kennedy

Selectmen Absent: Shawn Farrell and William Olson

Town Manager: Joe Domelowicz

Welcome and Introductions

Chair Jeff Hubbard called the Board of Selectmen (BOS) meeting to order at 6:37 p.m. He acknowledged Town board and committee members in the audience. The meeting was well-attended with most seats filled. He said he first wanted to be clear the Town's water meets all safe drinking water standards. He said the discussion would be divided in two parts: water source and water service (treatment plant and distribution). Each presentation would address present conditions and options for the future. Panelists were Department of Public Works (DPW) Director Tim Olson; Special Counsel Ray Miyares; and Consultant Peter Calderazzo, P.E., of Dewberry [Dewberry Engineers Inc.]. Water Plant Supervisor Dave Dolan was also present for answering questions.

The BOS had received a copy of the Water System Master Plan Draft Report prepared by Dewberry, which was an extensive evaluation of the Town's water system for the purpose of determining its ability to meet present and future demands.

The Pledge of Allegiance was recited.

Public Comment

Rather than the customary public comment time, a 15- to 20-minute Q & A session was held after each part of the presentation.

AGENDA

Water Source Presentation by Tim Olson, Ray Miyares, and Peter Calderazzo

Attorney Ray Miyares said he's been assisting the Town since 2006 and hoped to condense 14 years of work into 10 minutes. He reviewed Hamilton's water sources. Most supply wells are in the Ipswich River Basin, specifically the Idlewood sub-basin. He talked about limits on water withdrawals per capita. The Town can withdraw 920,000 gallons per day as its registered amount. In addition, in the past the Department of Environmental Protection (DEP) enabled towns to have a permitted amount on top of that to accommodate future growth. The permitted amount for Hamilton currently amounts to an additional 110,000 gallons per day. Combined, that's a total of 1,030,000 gallons per day. Mr. Miyares reviewed the Town's water-use history showing the Town is staying well below its registered volume and not tapping into the additional permitted amount, but it does not want to give that additional permit up in case it may need it in the future. At one point in the past, Hamilton had 220,000 additional permitted gallons, but the DEP had encouraged the sharing of half of that (110,000 gallons) with Wenham. Later Wenham gave up their permitted amount and it didn't return to Hamilton.

Mr. Miyares showed graphs of the amount of rainfall the Town has had in given years and how the water withdrawals in those years doesn't always correlate. He said in the permit is a condition that says what the residential gallons per capita per day should be. The standard for each Hamilton resident is 65 gallons per day. Also the water supply system should be able to account for at least 90 percent of the water it withdraws, which means the water has to show up on a meter. In 2012, the Town had a spike in unaccounted for water, which may account for higher than normal water usage that year. In the last 10 years, the Town met the condition of having less than 10 percent of unaccounted-for water only in one of the years. It's been a persistent problem. He reviewed litigation that had challenged DEP's right to impose a cap on summer water withdrawal. The issue died unresolved. Mr. Miyares said the key thing the Town has going for it is the so-called water ban. Every summer the town's DPW imposes it, as the DEP requires. It is based on the level of the Ipswich River. When that falls below a certain level, the ban goes on. Instead of turning the ban on and off, the Town leaves it on when the water level in the river first gets low. Recently the DEP created something called a baseline flow, which equals 920,000 gallons per day, and they will treat anything over that as asking for an increase. (This doesn't take into account that the Town is already permitted for 110K more than that.)

DPW Director Mr. Olson said he has been with the Town since 2016. He reviewed the distribution upgrades that had been done for the last seven to nine years. He said they had replaced 50,000 feet of water main and had made a large upgrade to the water treatment facility that involved bringing the system back to its original operating design. It was operating at only about 50% of its efficiency prior to that and now has returned to normal.

He introduced consultant Mr. Calderazzo who reviewed the locations of the Town's supply wells and their production rates. He said over the years some of the wells have lost production capacity as is typical. He discussed the upgrades made to the water treatment plant in further detail. He said that of the wells, the Idlewood #2 well has the worst quality and has been offline since 2018. They could perhaps discontinue it altogether but would need to find a way to make up for that and are looking for other sources. They could put a

satellite well next to it. In addition to looking at other sources, they are looking at how to maximize use of the wells they have. Mr. Calderazzo said his group had analyzed water projections up to year 2035 based on population growth. He discussed those projections.

Town Manager Joe Domelowicz said they would now take questions from the audience.

Water Source—Questions and Answers

Jack Lawrence, 105 Rock Maple Ave., said he was curious why the Idlewood well (#2) was not functioning as it should. He asked if it was a crack in the casing. He inquired about the satellite well. Mr. Olson responded he wasn't sure about the casing, but said they could drill close to that well to optimize the water there. Mr. Calderazzo said permitting for a satellite well is easier than for a new well. They could take Idlewood #2 offline since the water quality is poor and use the satellite well instead.

David Wanger, 5 Boardman Lane, asked about the condition DEP had about sharing water with Wenham. He wanted to know the current status. Mr. Miyares said the time period they were talking about was the early 2000s. Hamilton had a permitted amount of 220K gallons per day and had to give up half to Wenham so Wenham could increase its permit by 110K gallons per day. His understanding is that this volume was lost when Wenham gave up that permit. Mr. Wanger asked about the Town's unaccounted-for water that exceeded the 10%. Mr. Olson responded that the way they arrive at that calculation is to measure the water coming from the plant and compare it to what the meters capture. There are other uses of that water, such as municipal uses for fire hydrant flushing or water loss "situations" (small leaks). Mr. Wanger asked about potential abuse by users, such as avoidance of a meter. Mr. Olson said there's no evidence of that. Mr. Wanger said the Finance and Advisory Committee (FinCom) had been called upon for an expenditure of green sand (new media) and asked if the Town was making use of that. Mr. Olson said yes, the media was installed and is currently in their filters.

Duke Seaver, 402 Essex St., asked if the Bridge Street well was dead. Mr. Olson said yes, it's inactive. Mr. Seaver asked if they could put a pump in it for watering the football fields. The answer was not at this time. Mr. Seaver also said he noticed brown water while they were watering the fields.

Walter Leszczynski, 10 Honeysuckle Road, said according to studies done in the 1980s, there were three locations noted from which water could be drawn. Two are in use. The other was the Patton well, which was a large supply. He said the former BOS and former Town Manager accepted land from the Patton Estate and poured concrete down the well there, to allow for the development. He said that instead of doing that, they could have run new pipe to connect up. He said it was done for no other reason except money and to balance the budget.

Mr. Lawrence said they had a diligent leak detection program back in the 90s and many properties were based on estimates and not metered. Mr. Olson said now 99.9% are metered.

Judy Blinn, 4 Norris Road, asked how they kept track of private wells. Mr. Miyares said they generally don't, with the exception of Myopia's. She discussed the marijuana "factory" and amount of water it would require. Mr. Miyares said his understanding is that the water for it would only amount to 7K gallons per day, a number so small it would only be a small blip on their graphs.

Brad Bradshaw, 286 Bridge St., asked how they would address the summer limit on withdrawals other than by fighting with the DEP. He asked if they were exceeding the replenish rate of the wells. Mr. Calderazzo and Mr. Olson said the wells recover; they are not maxing out the pumping of them. As far as the summer cap number—Mr. Miyares said that was literally a number drawn from a hat. The State took Hamilton's historical usage during the summer vs. the rest of the year and came up with an average. The Town Manager at the time protested it. He doesn't know how they can meet that consistently regardless of rainfall and expects it to be a topic of vigorous conversation.

Patrick Reffett, Director of Planning & Inspections, said one of the questions brought up at the last Planning Board Meeting is how the water ban is enforced. Mr. Olson responded that if they find someone using a sprinkler system outside of the appropriate hours, they send a letter out with a fine, \$50 for first offense, \$100 for second. They have had some residents call in not understanding the rule, he said. An on-call officer might be sent out as a next step and could issue a law enforcement citation.

Mr. Seaver asked if houses with wells are marked. Mr. Olson said those with wells are also included in the water ban.

Nick Tensen, 169 Sagamore St., said there was mention of using the North Coastal Basin. Mr. Olson said yes, and he defined its location as east and north of Essex Street. (Chebacco Lake is in the North Coastal basin.) He said they'd looked at a property near Beck's Pond, but there was not enough water there for using it as a production well and it would require treatment for the quality. To drill a well you have to have a certain size property (11 acres) and there aren't that many properties that qualify or where the parties are interested, although they are always looking. There may be opportunity to tie into Manchester, but drilling their own well requires further investigation.

Mr. Tensen asked if they could drill a well into water, for example, into some of the ponds. Mr. Calderazzo said he didn't think so. If you did that it would fall under the category of surface water and would require more money for treatment. He talked about how it could be done, but said to do it, you are actually treating surface water.

Rosemary Kennedy asked the cost of digging a new well. Mr. Olson said a couple test wells were done on the Ford property for around \$15K. Mr. Calderazzo said to put a new satellite

in was about \$750K. Her other question was what is the capacity of the filtration plant and are we near it. The plant was designed for 900 gallons per minute. Right now the plant can meet the demands and is doing about 650 gallons per minute. There isn't a need to pump at the maximum rate.

Alex Dale, 58 Woodbury St., asked at what point Hamilton's population would cause concern over water. Mr. Caderazzo said they had projected it out to 2035 and were within the range. He explained how the calculation would be done to project further out, but said he hadn't done it. Mr. Dale asked if they could experience a sudden failure of a well. The answer was yes, it could happen. Mr. Dale asked if the baseline permit would be skewed if the Town wasn't able to keep the additional 110,000 gallons per day it is currently permitted for. Mr. Miyares said there is a still a good margin using the 920,000 gallons per day registered figure. Mr. Olson said the master plan is in draft form and will be shared with the public.

Mr. Lawrence said it was his understanding the Legislature gave Manchester rights to some of Hamilton's water but it was to surface water only and that Manchester had drilled wells. He wondered if Hamilton could get access to that information. Mr. Miyares said it was public record and could be obtained. As far as the ancient statutes that created the rights in the first place, Mr. Miyares said he didn't recall the rights as being exclusive to surface water.

Mr. Wanger asked if the Town had estimated the cost of tying in with Manchester. The answer was that the tie-ins would be more expensive than the \$750K needed to drill a satellite well. The costs would be in the million-dollar range.

Dave Thompson, 103 Essex St., said back in the 80s the Town passed the ground water protection overlay district, which was to limit the density of construction that could occur in the recharge areas. He said it gets bastardized in the planning process. While it reads 80K per building lot, the lot is not defined and latitude is taken. For example, with Patton Ridge, there are three houses on one acre and the intent was for one house on two acres, he said.

Water Service Presentation by Tim Olson, Dave Dolan, and Peter Calderazzo

Mr. Olson turned the floor back to Mr. Calderazzo. He also noted water treatment plant manager Mr. Dolan would be available to answer questions following the meeting.

Mr. Calderazzo gave a rundown of the Town's water system and overview of existing facilities, including about 54 miles of water main, 2,500 service connections, 380 hydrants, Brown's Hill reservoir, Idlewood treatment plant, and School Street pump station. He gave the history of the plant, which was designed to remove iron and manganese. In 2008, an issue came up related to media loss and there were elevated TTHM levels to the point that the plant was only able to operate at half capacity. In 2017, a plan was made to resolve the issues. The two options were to convert the system back to its original media or to

construct a new green sand or membrane filtration facility. They decided to convert the plant back to its original design. He discussed the many upgrades done and showed photos. He discussed the spike experienced in November 2018 that resulted in an elevated TTHM in the system, and what had been done to address it. Faulty piping was replaced. The Idlewood #2 well was taken out of service. They also began routine flushing of the system in the area where the spike occurred (after they got the water capacity they needed to do this from the upgrade to the plant). Since then results of the monthly sampling have been good. To put things in perspective, he showed maps of other communities dealing with the same challenges. TTHM ranges go as low as 19 to a high of 79. They have to stay under 80.

Water Service—Questions and Answers

Ms. Blinn asked Mr. Calderazzo if the Town gets fined if out of compliance. He said yes, but fines only get assessed if a Town doesn't work with the State to address the issues.

Mr. Thompson said assuming the Town wants to give up on the Idlewood #2 well, they could get a permit for a satellite well. Mr. Calderazzo said yes. Mr. Thompson said if something happens and the plant goes down altogether, are there connections to other towns that could service the town while it does major maintenance or replaces the plant. He answered that the town does have connections that can help but not for long enough to allow for replacing the plant. That is why they made the upgrades they did to the existing plant so if they did need to build a new plant they would have that operating well.

Mr. Lawrence asked if the Town had determined who owned the property where the wells are. Mr. Olson said the Town has an agreement with Mass Audubon; the property is under their jurisdiction and care. They meet annually.

Ms. Blinn noted the city of Beverly has a massive water tower and doesn't have water bans. She wondered if they might be taking more than their fair share. Mr. Domelowicz said there are two watersheds that are overdrawn and one is the Ipswich River. Beverly and Salem do have rights there. Many communities are served by it, which is one reason to open up a conversation with Beverly and Salem. Mr. Miyares said Beverly doesn't have a permit, they are operating under their grandfathered-in registration volume. If there isn't a permit, there isn't a water ban.

Ms. Kennedy said speaking as a nurse, she noticed the Town has a high sodium level in its water. She said sodium can contribute to heart issues and other health problems and she would like to look at the deicing compound used by the Town and have a conversation about it.

Bill Bowler, 328 Essex St., said Mass Audubon owns the property where the plant is. The Town agreed to turn over certain parcels to them as part of its agreement. He said in the past the Town had approached Mass Audubon about putting a cell tower on top of the plant and they had said no.

Virginia Cookson, 318 Forest St., said she was curious if the reservoir atop Brown's Hill could be used if the plant needed an overhaul or downtime. She wondered if there were other places identified, as well. Mr. said yes, they had identified Scilly's Hill and had recommended both Brown's Hill and Scilly's Hill as sites for building water tanks.

Mr. Domelowicz said he has a meeting set up with Manchester's Town Administrator on Aug. 7 to discuss the potential of tying into their water system. Manchester has a Level 2 plant and Hamilton has a Level 4 plant. The cost to tie in with Manchester would start with running pipe down Chebacco Road. All solutions have costs and they are trying to balance solutions vs. the costs. Another question is whether it is fiscally responsible to invest in a pretreatment plant for total organic compounds (TOCs) as was voted at Town Meeting. The master plan will help answer some of those questions.

Discussion of Next Steps

The situation is fluid and next steps remain to be determined.

Adjournment

Mr. Hubbard thanked the panelists and audience for coming, and the meeting was adjourned at 8:30 p.m.

Prepared by:

Mary Alice Cookson 09-09-19
Mary Alice Cookson Date
Minutes Secretary

Attest:

Darcy Dale 09-09-19
Darcy Dale Date
Board of Selectmen Clerk

