

LYNNFIELD CENTER WATER DISTRICT WARRANT The Commonwealth of Massachusetts Regular Board Meeting 7:00 pm March 15, 2021

Date, time, place: The regular meeting of the Board was held on Monday March 15, 2021 at 7:00 PM via Virtual Zoom Meeting.

Present via Virtual: Commissioners Anders Youngren, Joseph Maney, Jack Adelson, Superintendent John Scenna, Treasurer James Alexander and Clerk of the Board, Christine Smallenberger

Absent: none

Also attending virtual: Patricia Campbell, Stefan Taschner, Peter Volpe, Phil Crawford, Leon Glicksman, E Minor, Kate Flaws, Laurie Toscano, Bryce Foote, Gayle Richardson, Ken MacNulty, Donna Cashman, Lisa Lopez, Margaret Waugh, Dan Tomasello, Mike Nelson and Anne Malenfant from CDM Smith, Paul's phone, Stephan Fantone

Additional attachments: Agenda, incorporated into the minutes hereto.

Next Regular Meeting: Monday, March 29, 2021 at 7:00 PM - Virtual

Adjourn: 8:51 PM

The meeting was called to order at 7:07 pm and is being recorded for the purpose of taking notes and to also have a copy of this informational meeting in video for others to view who cannot be in attendance tonight.

Chairman Maney read the following statement:

Pursuant to Governor Baker's March 12, 2020 Order Suspending Certain Provisions of the Open Meeting Law, G.L. c.30A, §18, and the Governor's March 15, 2020 Order imposing strict limitation on the number of people that may gather in one place, this meeting of the LCWD Board of Commissioners will be conducted via remote participation. Specific information and the general guidelines for remote participation by members of the public and/or parties with a right and/or

requirement to attend this meeting can be found within this posting below. No inperson attendance of members of the public will be permitted, but every effort will be made to ensure that the public can adequately access the proceedings in real time, via technological means. In the event that we are unable to do so, despite best efforts, we will post minutes of proceedings as soon as possible after the meeting.

1. Superintendent's Update: n/a

2. New Business: n/a

3. Supplemental Water Program Study

a. Presentation of Capital Costs and Rates from Wakefield Intermunicipal Agreement

Tonight's presentation is what we hope to be a successful launch of the capital program to set up the infrastructure to succeed in the years to come. CDM is here to present the FY22-23 capital program with impacts and costs. The board will endorse what they feel will work for the district. The board has taken the approach leaving "no stone unturned" and analyzing anything and everything to make sure we have the right answer that makes sense technically, financially, and long-term. After tonight, this project will go to the Annual District Meeting and the customers will vote on whether they agree to move forward with this capital plan. 3 projects are being presented. Project 1: Return station 1 to seasonal operation which requires no capital investment. Project 2a: pursue a connection to Wakefield and Project 2b: begin the MWRA permitting process. Project 3: Water treatment plant at Glen Drive to deliver consistent clean water. Refer to the FY22-23 Capital Program presentation attached to these minutes.

There have been questions on water chemistry and quality from district members in attendance. Ann Malenfant has spent months looking at the quality and what we had to study and what was required by the DEP before DEP approved the study. The requirements for the interconnection between 2 water sources, there are certain parameters that impact the corrosion of the water of the impact of lead and copper solubility and to see how similar corrosion parameters are. They put the parameters in the models and found they are similar and thus considered compatible. Sometimes you may need to add certain chemicals to make the corrosion profiles similar yet in this case, they were found to be similar, and no adjustments needed between the 2 sources. LCWD and MWRA uses different residual disinfectants. LCWD uses free chlorine (bleach/sodium hypochloride) that doesn't travel far and tends to dissipate faster. MWRA water comes a long way from Western Massachusetts and uses chloramines (a combination of chlorine and

ammonia), that sticks around and doesn't disappear quickly. We looked at the blending and found we would still get a chlorine residual. Chloramines are more sensitive for fish tanks and dialysis.

Ann Malenfant from CDM elaborated on PFAS per Ms. Flaws question: do the reverse osmosis whole house filtration systems remediate PFAS contamination as some people have reverse osmosis systems in their homes; do they need to adjust them. The PFAS amount found at Phillips Road was found to be non-detectable. PFAS is a chemical typically applied to objects to make them slippery and is a forever chemical that has become a hot contaminant. It is showing up in detection levels because testing got better, and we are now understanding the impacts even at the lower levels. You can absorb it with carbon, iron exchange and also membranes; reverse osmosis is one of the treatment processes for PFAS.

Other inquiries from members of the district: would an increase in the water from the Glen Drive station increase water pressure to area homes; if Glen Drive water is treated, we could get up to 575 gpm as permitted, then what are we getting from Main Street and what is permitted? Since we can only get a proposed 250 gpm from the MWRA, it looks like the increase at Glen Drive of 300 gpm also solves the problems? The reality is we won't get Glen Drive back to 575 gpm but could possibly get north of 400 gpm. It could be but enough water but likely is not enough. Our modeling indicates we need another source during peak demand. The peak demand is around 1.2 mgpd and the average daily demand is .8 mppd. We want to meet our high demand and exceed it so if something goes wrong, we can handle it. Glen Drive is not enough. Additionally, it isn't good operating the system to run 24/7; we have to rest the wells and cycle them which is better for long term efficiency and maintaining the life of the infrastructure.

Mr. Glicksman inquired why not go up to 500 gpm from Wakefield and not improve Glen Drive? What are the relative costs and is there a report with these studies? If we take 500 gpm from Wakefield it would require more pipeline upgrades. We can't fit water through the current pipes and the cost will go up for significant upgrades to Wakefield's infrastructure. There is also additional costs for the MWRA rates and the wheeling fee to Wakefield versus building a treatment plant and setting our own rates. The treatment plant has an annual operating cost that is insignificant; once the plant is built the cost of water is much lower. Wakefield is a higher unit cost for every gallon; you will pay more for their water. The initiation fee to join MWRA will increase as well based on how much water you will use. A treatment plant and 250 gpd gives you north of 750 gpd combined. The maximum with Wakefield would only give 500 gpd. The combination allows us to bring more water in to the district. The Phillips Rd watershed and treatment plant cannot go away unless we go 100% MWRA. The staff will continue to run the Phillips Road treatment plant; that made the decision to propose running 2 treatment plants more efficient.

Mr. Volpe asked us to elaborate on the issues raised by the different disinfecting agents used by LCWD and MWRA and why the mixed water is not safe to use for dialysis or to fill fish tanks? Are there issues or concerns with drinking this water? Mr. Volpe was always under the impression ammonia and bleach should never be mixed. Mr. Volpe further inquired if there are any concerns to the general public for drinking this water. Also, bleach and ammonia are not compatible, I am not sure I understand how the two water systems can be mixed if these are residual disinfecting agents.

Anne Malenfant explained when chlorine and ammonia are added, it is added in the water and it dissolves in the water and creates this chloramine, the mono-chloramine which is a stable residual and remains in the water at a low level. The 2 can be mixed and combine together to form a formation of the 2 different residuals. It changes the chemistry and pushes it one way as far as the residual goes so you don't end up with residual in the distribution. The corrosion control report submitted to the DEP was approved in mid-August and will be posted it to our website. The environmental partners report will be posted and CDM's review of the study will also be posted.

Mrs. Campbell had a few questions. Will LCWD be able to shut off the MWRA water. Superintendent Scenna said the interconnection will be pressure regulated; we will have full control over it and will be on at all times. We want to create flow patterns and remain consistent throughout the year. When we need more water, we can increase it. Mrs. Campbell's then asked can the flow of water be reversed where Wakefield is drawing water from us. Superintendent Scenna responded that we will design the interconnection with a check valve where this would not be possible. Wakefield does not need water from us so we will design for a one-way valve. Mrs. Campbell loves the newsletter and wants to know when the AWIA study will be completed. Ann Malenfant said the study needs to be completed by June 30th. CDM is working on this study with district staff. Superintendent Scenna said the purpose of the study is to prepare for the unknown. Mrs. Campbell asked when the MWRA will complete their study and what are the results of their study. Mike Nelson said the MWRA is required to comply before LCWD. They gave smaller districts the most time and MWRA has gone through their assessment already. MWRA is a wholesaler, and their focus is keeping source water clean and protected to different threats and vulnerabilities.

Mr. Glickman asked if we will be eligible for any funds passed for water infrastructure improvements and has anyone had a conversation with a congressman. Superintendent Scenna said we should look into that and are always looking for grants yet at this time nothing has come forward on water infrastructure.

Mrs. Toscano asked: besides this past year, what was the prior peak demand for water? She is just not wanting to be overly conservative in how much water may be needed in the future based on a period where a lot more people were home constantly and where we saw pretty significant drought conditions. This is not based on last year's peak demand. The Annual Statistical Report (ASR) shows us where the pumping trends collected, we can

increase to 1.1 mgd, which is a typical summer day. Last year was compounded by the stay-at-home-order. We do an excellent job of water conservation. It shows water use is not off the charts in Lynnfield. The problem is that the district can't grow. We want to maintain fire protection and provide clean water. We need to bring in an additional water source in order to grow. New neighbors would need to provide their own private wells. If you bring in more ratepayers, you will have more people to pay for the system. We want room for growth for customers if they want to connect.

A benefit as an MWRA member is we become eligible for grant programs on pipe replacements as the system gets older. There will be water mains that will fail and will be another source of cost in the future. Partnering with MWRA gives us the ability to take out a 0% interest loan. A lot of MWRA communities take advantage of this program. The district's system is aging, and we will face this issue in the future.

Mr. Crawford mentioned there is a water pressure issue in some neighborhoods and asked what these projects will do for the water pressure. More water in the tanks will help with the pressure. The Grant area is the highest elevation in the district and is the most impacted by water pressure. Even when the tanks are full, the Grant area still has less water pressure than the rest of the district. The way to fix this issue is to create a pressure zone in that area. We need to get there in the capital program; this is a worthwhile investment once the source water has been taken care of. The Grant area needs a booster pump.

<u>Motion</u>: a motion was made to place capital program as outlined this evening on an article for the upcoming Annual District Meeting warrant tentatively scheduled for Monday, May 10, 2021 The projects are to be proposed as one (1) article and one (1) program. We hereby request authorization to borrow \$9.8 million in accordance with the timeline presented. Said funding will complete the pipeline and apparatus work as required to supplement the water supply with MWRA water wheeled through an interconnection with the Town of Wakefield at Main Street and Bay State Road and will construct a green sand filter plant at the Glen Drive water treatment facility designed and constructed to current water standards with the eventual ability to connect the water from the Main Street Station 2.

<u>Seconded</u>: the motion was seconded, and the motion was passed with all saying aye by a unanimous vote.

<u>Motion</u>: a motion was made to hereby authorize the superintendent to finalize negotiation and draft an intermunicipal agreement with the Town of Wakefield. Said agreement shall contain capital cost as outlined in the range of \$865,000 - \$915,000 and a wheeling fixed rate at 20% markup over the MWRA wholesale rate. The agreement shall be finalized and presented to the board at the board meeting April 20, 2021 and final accepted in advance of the Annual District Meeting. The agreement shall state any terms and conditions and

shall also contain a schedule of costs and requirements to complete the work as outlined. The agreement will be in full force and affect on July 1, 2021 and will have a term of 7 years.

<u>Seconded</u>: the motion was seconded, and the motion was passed with all saying aye by a unanimous vote.

Chairman Maney thanked everyone in attendance and stressed that the ratepayers will need to attend the Annual District Meeting in May to approve this program.

A Motion was made and unanimously passed to adjourn at 8:51 pm.

Respectfully submitted,