

11 April 2023

MEMORANDUM

From: Manager
To: Board of Trustees

Subj: MINUTES FOR THE TRUSTEE MEETING OF 28 MARCH 2023

The Board of Trustees convened at 1900 hrs. In attendance: Trustee Gamage, Southport (Chairman); Trustee Climo, Southport (Vice-Chairman); Trustee Anthony, Boothbay (Clerk); Trustee Tharpe, At-Large (Treasurer); Trustee Tibbetts, Boothbay Harbor; Trustee Blakeslee, Boothbay Harbor; Marcia Wilson, Administrative Manager (AM); Jonathan Ziegler, Manager. Guest: None. Absent: Trustee Stover, Boothbay.

1. The board approved the minutes for 14 February 2023.
Trustee Climo motioned, Trustee Anthony second, vote: unanimous.
2. The board approved payroll for 14 February 2023, 21 February 2023, 28 February 2023, 7 March 2023, 14 March 2023 & 21 March 2023.
Trustee Climo motioned, Trustee Anthony second, vote: Yea unanimous.
3. The board approved transactions for 13 February 2023 through 24 March 2023.
Trustee Climo motioned, Trustee Anthony second, vote: Yea unanimous.
4. **ADMINISTRATION**– The manager provided the board with Table 1- *Boothbay Region Water District Cash Account Status Report as of 28 March 2023*. The value of routes 5 & 6, that was billed on 1 March 2023 was \$47,819.01. The value of routes 1 & 2, that would be billed on 1 April 2023 was \$63,061.96. Since the previous meeting the district had received six (6) new service applications and has added four (4) new seasonal customers. Since 14 March the district has responded to sixty-three (63) Dig Safe notifications requiring 126 man-hours to complete. Seasonal billing was to be released on 1 April 2023 with the value of that billing to be reported at the 11 April 2023 trustee meeting. Lastly the manager reported that the district had been heavily involved in submitting grant applications for various capital improvement projects including grant applications to the Federal Emergency Management Agency (FEMA) and to Maine’s congressional delegation with word concerning any success expected in mid to late summer.
 - a. **Budget Performance Report as of 28 February 2023** – The AM provided the board with a budget performance report through the end of February. There were no questions of “red flags” by the board and all parameters looked solid.
 - b. **Contingency Funding** – The AM reported that during the previous week, with the concurrence of Treasurer Tharpe, the AM moved the maximum non-dedicated funding allowed for by the Maine Public Utilities Commission (PUC), equaling \$180,000.00 from the districts Sweep Account to the districts Capital Reinvestment Fund.
 - c. **Consumer Assistance Division (CAD) Finding and Possible Pending Legal Issue**. The manager reported to the board the possibility of legal action being taken by a customer who amassed approximately \$10,000.00 overage bill due to a broken service line. The manager informed the board that the PUC Consumer Assistance

Division (CAD) had already ruled in favor of the district as to the bill being proper and the responsibility of the customer. The manager was instructed to keep the board informed should independent legal action be taken against the district by the customer.

Table 1 BOOTHBAY REGION WATER DISTRICT Cash Account Status Report as of 28 March 2023	
Account	Balance
Business Checking	\$ 25,845.60
Deposit Sweep Account	\$ 658,966.55
Liquidity Total	\$ 684,812.15
DESIGNATED FUNDS	
BBH 2007 Sinking Fund	\$ 20,346.64
Land Acquisition Fund	\$ 2,516.91
Capital Reinvestment Fund	\$ 183,186.14
Mt Dora Easement Escrow	\$ 4,790.28
Southport Sinking Fund	\$ 65,330.34
EBB Upgrade 91-20	\$ 62,311.42
Bank of Maine Unemployment CD	\$ 17,365.77
Designated Fund Total	\$ 355,847.50
TOTAL CASH RESERVES	\$ 1,040,659.65

5. **NATURAL RESOURCES** - The manager reported that the Natural Resources Program Manager (NRPM) prepared the following report:
- 1) *Long-term conservation of BRWD properties: We have provided information to BRLT and met with Nick Ullo. Nick is confident that the Land Trust will be interested in supporting long-term conservation of watershed and well field properties. Based on our conversation, we believe BRWD maintaining ownership under a conservation easement held by the land trust is the best path forward. Nick will provide an estimate of endowment costs. We will provide the Board with a complete proposal when available.*
 - 2) *We continue to spend a great deal of time working with the Clean Drinking Water Initiative, particularly focusing now on education projects.*
 - 3) *We meet with Rachel Sipler, Bigelow Laboratory, tomorrow to discuss the potential for including Adams Pond and Knickerbocker Lake in state-wide monitoring for harmful algae blooms.*
 - 4) *The ARPA grant to BR CDWI has finally arrived (\$195,000). The Land Trust will hire a full-time lands conservation manager, whose time will be split 50:50 between BRLT and BR CDWI Conservation. The position has funding for 3 years.*

6. **SAFETY & TRAINING UPDATE** – The manager reported that there had been no safety violations or known missed inspections during the previous period.
- a. **Human Resources (HR)** – The manager reported that during the end of March, through the beginning of April, the AM would be taking an excused absence from work. The manager informed the board that staff had been cross trained to handle the basics of the AM’s responsibilities with the AM being set up to perform limited work from home.
 - 1. **Customer Service Representative (CSR) New Position** – Due to unprecedented district customer base growth, the AM and the manager laid out a case, requesting an additional CSR be added to the district. After trustee questioning and deliberation, the board approved the addition of a new CSR be added to the administration division.
Trustee Climo motioned, Trustee Anthony second, vote: Yea unanimous.
 - b. **Training Update** – The manager reported that during the week of 20 March 2023 the assistant distribution foreman attended training, airfare and lodging subsidized by the Plastic Pipe Institute (PPI), to become nationally certified in high density polyethylene (HDPE) welding and training. This course was held in Green Bay, Wisconsin. The manager then informed the board that he would be attending the New England Water Works Association (NEWWA) annual conference, held in Worcester, MA, 4 to 6 April 2023. Annual Safety Training would occur on-site 30 March 2020 by New England Water and Wastewater Training Associates (NEWWTA) to meet state and federal requirements. Lastly the manager informed the board that he, the AM and CSR had to endure required training held in Augusta and required by the Maine Bond Bank, for the district to receive grant money from the state revolving fund (SRF).
 - c. **National Board Appointment** – The manager informed the board that the distribution foreman had been appointed to Municipal Advisory Board for the Plastic Pipe Institute. This national board is to promote the use of plastic water main nationally and charged with developing construction standards for high density polyethylene (HDPE) water main. The manager stated this was a big deal and the board concurred. The manager was directed to put out a press release describing this appointment.
7. **TREATMENT DIVISION (TD)** –The manager reported current filter train efficiency remained at 100% for clarifier performance and filter performance had improved to 92%. Key chemical additions had increased to approximately 75% of normal. For the previous period, finish water production averaged 0.2566 MGD, under that recorded for the same period in 2022 which averaged 0.3853 MGD. Adams Pond remains way over 100% winter usable capacity.
- a. **Clearwell Cleaning** – The manager reported that the clear well cleaning was successfully completed the night of 15 February 2023 through the morning 16 February 2023. The manager went on to state that the process could not have gone any smoother and that the district was good for the next couple of decades. Before the treatment plant was reattached to the distribution system, only 150,000 gallons were needed to flush out the clear well before legal water was being produced. The treatment plant was reattached to the system at approximately 1200 hrs. on 16 February 2023. This project was now considered complete.

- b. **Security Breach at the Thompson Tank** – The manager reported that the Lincoln County Sherriff had issued two summonses to individuals responsible for this attack. The manager informed the board that he was waiting to discuss this further with the Lincoln County district attorney.
 - c. **Unregulated Contaminate Monitoring Rule (UCMR)** –The manager reported that the district had complied with an order issued by the United States Environmental Protection Agency (EPA) to conduct the first of four rounds of sampling of the districts finish water, by EPA coercion, to assist the EPA in developing the next bogey chemical that will theoretically, at least in EPA’s mind, bring about the downfall of western civilization. The manager informed the board that the district was required to expend 16 man-hours, four times per year to complete this unfunded mandate.
8. **DISTRIBUTION DIVISION (DD)** – The DD remained engaged in winter maintenance, primarily focused on keeping the district’s fire hydrants operational. Progress was reported to have been made attacking the “whiteboard projects” primarily focused on repairing and improving the seasonal water distribution system due to abnormally high temperatures. All other DD commitments were reported current and up to date.
- a. **Main Break – Lakeview Road – 19 February 2023** – The manager reported that this main break was a circular split on the 8” ductile iron (DI) water main, releasing an estimated 100,000 gallons of water. The break was due to moving ground during freeze/thaw conditions. All labor to complete the repair was overtime labor. A contractor was utilized to expedite repairs. Service was fully restored to affected customers within one shift.
 - b. **Main Break – McKown Point Road – 6 March 2023** – The manager reported that this main break was a circular split on the 8” ductile iron (DI) water main, releasing an estimated 200,000 gallons of water. The break was due to moving ground during freeze/thaw conditions. All labor to complete the repair was overtime labor. A contractor was utilized to expedite repairs. Service was fully restored to affected customers within one shift. This water main break marked the first emergency use of the BRWD vacuum trailer with great success reported.
 - c. **Unaccounted for Water** – The manager informed the board that as part of the annual PUC report preparation the unaccounted water loss rate was calculated at 10% for 2022. Although well ahead of industry standards, this result was not up to BRWD’s usual standards and was largely due to the water main break the district chased during the spring of 2022, ultimately showing itself on Middle Road in Boothbay Harbor.
 - d. **Farmington Water District (FWD)** – The entire field staff for the Farmington Water District will be visiting on 5 April 2023 to learn more on the BRWD method of HDPE use and installation methods. The manager informed the board that he had instructed the DD to be outstanding hosts including treating the FWD personnel to lunch at BRWD expense.

9. **5 RIVERS REGIONAL WATER COUNCIL** – The manager informed the board that on 21 March 2023 a superintendents meeting was held at the Bath Water District. Discussion centered around securing and developing the routes 1, 24 and 27 corridors to link up all districts into one grid.

The manager invited the board to a trustee’s dinner, 11 May 2023 at 1730 hr. to be held at the Brunswick Topsham Water District to update all trustees on ongoing joint efforts and to tour the new BTWD treatment facility.

The manager then reported that the BTWD reported on the status of home sprinkler systems. As of now, any new residential sprinkler systems installed at the district would pass through a one (1) inch mag meter prior to splitting into a sprinkler system. If in the future, the BRWD were required to shut down a residential service that has required fire protection, the BRWD must contact the CEO and the municipal Fire Chief who will require the premises to be vacated until water service is restored. Chairman Gamage stated that he would like the board to revisit this issue before setting any similar policy at the BRWD.

The manager informed the board that there was significant momentum for PUC deregulation, but due to unprecedented state regulation, the water industry had taken a “siege mentality” fighting the legislature on overreaching regulatory assaults on seemingly all water district activities.

The Wiscasset Water District (WWD) provided a status report on their charter change which would include the town of Edgecomb in their territory. No legislative hearing date for the bill had been set with the MRWA shepherding this project through the various regulatory hurdles. The manager then spotlighted other new laws currently being considered by the state legislature, which if enacted, would have a deleterious effect on district operations included:

- a. **LD 75 - An Act to Establish Maximum Contaminant Levels Under the States Drinking Water Rules to Prohibit Certain PFOA & PFAS Substances** - This bill will bring certain PFOA/PFAS compounds MCL (maximum contaminant level) for drinking water to the unachievable “zero”. The manager then informed the board that if the district tests out of the proposed federal EPA rules, there was a very good probability that the district would not be following this “law” if this bill was signed into law. The MRWA and MWUA were reported to be in sharp opposition to LD-75, which was still in the hands of the Health and Human Services Committee. The manger informed the board that is this “law” were to be emaciated, it would most likely lead the district into being forced by the state of Maine to outlay a \$4M capital improvement investment, requiring an estimated \$80,000 per year to support operation costs, all to be paid for by the BRWD rate payers resulting in no, or absurdly small, public benefit. Trustee Climo instructed the manager to round up as many of his colleagues as possible and to forcefully present testimony in opposition to this bill.
- b. **LD 354 – An Act to Amend the Laws Regarding the Use of Engineers on Public Works Projects Over \$100,000** – The manager informed the board that this bill would have been better named the “Engineer Employment Act”. He explained that the district is currently compelled by the state requiring anything affecting process in the treatment plant be

required to be stamped by a professional engineer. However, the manager told the board that this bill was different, extending to any activity completed by the district and stated that this bill was “completely unnecessary and a waste of ratepayer money”. This bill will have its most deleterious effect on the districts Paygo projects, which are currently handled in-house, citing the superior performance of the district in the multitude of previous projects.

Secondly the manager voiced his concern that once again the legislature was advocating a dollar amount in this legislation in that inflation would greatly increase the need for acquiring engineering services for more and more mundane activities. Trustee Climo instructed the manager to invoke the same strategy as described above to combat this seemingly ignorant legislation.

10. **LAND ACQUISITION UPDATE** –No change in status
11. **CAMERON POINT SEASONAL WATER MAINS** – The manager reported that he was in contact with a key landowner whose participation was critical for the completion of this project. This landowner is not only amenable to granting the district a needed easement but was committed to help facilitate the district gaining the second needed easement to complete this project.
12. **OCEAN POINT WATER MAIN LOOPING PROJECT** – No change in status.
13. **FILTER WASTE RECYCLING PROJECT** – The manger reported that on 2 March 2023 he notified Dirigo Engineering that this project was now the BRWD’s highest priority project with accelerated design work initiated. Preliminary sample results and piloting data showed the district’s plan is sound and would be effective in recycling raw water and managing sludge.
14. **SOLAR POWER** – The manager reported that he had contacted *Novel Energy Solutions* who would be providing him with a proposal for joining a local community solar farm as well as evaluating the Boothbay Region Refuse Disposal District (BRRDD) old dump landfill site for feasibility for installation of solar farm to offset the majority of the power consumed by the district. As of that time no deadlines have been set.
15. **DEBT LIMIT** – On 22 February 2023 the manager reported that he had presented the districts position to the Boothbay Selectmen at their regularly scheduled meeting which would be included in the May warrant.

On 27 February 2023 the manager again presented the districts ballot question to the Boothbay Harbor selectmen with an improved presentation. Per the Boothbay Harbor town manager, the question would be included on the town of Boothbay Harbor warrant as well.

The manager informed the board that in both presentations he had begun each presentation with a discussion regarding the district’s recent tri-annual review by the DHHS clean inspection in October 0222. The manager informed the selectmen that the strong performance of the district, in the eyes of the Drinking Water Program, was due to an exceptional board of trustees and an outstanding staff.

The manager informed the board that he still needed to meet with the Southport BOS to have them authorize a special election in May.

16. **BARTERS ISLAND WATER MAIN IMPROVEMENT PROJECT** – It was reported that the DD was gearing up to complete the first 2,800 ft of this project to replace existing services, hopefully before seasonal start-up began.
17. **2022 REVISIONS OF THE LEAD AND COPPER RULE** – The manager reported this project was on-course and provided the board with the following reports are from staff:

Assistant Distribution Foreman -

Distribution has reviewed all as-built records and have found good information pertaining to district owned side. Which state in as-builts type & copper on district owned side. Which we have made a list of and are entering into EPA'S form as time allows. We currently have been going through our old tie books to see what we can find for information pertaining to both sides of service. We have been working on the EPA'S data entry form, We have now figured out how to regenerate the list so all streets are in a order that is more efficient for data entry. This will save us a lot of time in putting information into EPA's data sheet. Ray Corson from GIS is helping us so when we plug information into GIS it will update on the EPA'S form automatically. We have received delivery of vac trailer. We have purchased all necessary equipment to haul the trailer. We have also purchased all tools to start daylighting services. This will not be a mad dash in the fall of 2024. Thank you to everyone who is helping us with this massive endeavor it is much appreciated.

Customer Service Representative –

Admin has completed both tasks assigned to us. I have attached the first pdf containing an excel spreadsheet with all new services since January 1st 2011 on. This should supply approx. 441 customers with the information needed. The second pdf contains information on automation for EPA Excel File with new billing software. Keep in mind this is just an overview and until the new billing software is implemented, we cannot utilize it. My hope is to be able to extract a file from our GIS software containing all information gained prior and upload it into the new billing software. Once the new billing software is implemented and the work order side is up and running information will be able to be gathered directly though the work order side of Muni-link. From there it is my understanding the new billing software will be able to export a file to the EPA in time that it is due. Please let me know if there is anything else we can assist with. Thanks

18. **SIVC WATER MAIN REPLACEMENT PROJECT** - No change in status.
19. **FILTER EFFICIENCY QUESTION** – The manager provided the board the following report:

On 14 February 2023 I was presented with a question from the board of trustees concerning the reason for poor filter performance while input chemicals to the treatment process was below normal. At the time I gave a very factual, albeit limited answer, citing a conservative approach to filter operation to preserve the integrity of the filter units. That being true, I also realized that I did not have an absolute answer explaining all the factors creating this annual phenomenon and took it as a mandate to investigate the causes, particularly with the high cost of wastewater in play (I contacted Mr. Ricky Pershken P.E., *Dirigo Engineering* as well as Mr. Ryan Lynch, Treatment Supervisor, York Water District

(YWD), a utility with the super-sized version of our treatment plant; to see if this occurs elsewhere and what is the root cause. I found several factors were in play.

Aluminum sulfate (Alum) is one of the critical chemicals used by the district and is the coagulant which creates “floc”. The treatment process will not work without a coagulant because any particulate contamination in the raw water needs to be increased in size for it to adhere to the various filter media. Alum is added just before the filter and passes through a “flash mixer” in which the floc is formed. However, Mr. Pershken advised me that the speed and effectiveness of alum is reduced in cold water and considering the proximity to for the injection point and flash mixer, the reaction process for alum and solids in the raw water, does not fully complete until after the water has passed through the clarifiers.

I later discussed this situation with Mr. Lynch and was somewhat relieved that YWD also experiences the same issue. Mr. Lynch oversees sufficient manpower and equipment to formally study this issue, and according to his findings, at least in the YWD case, YWD experiences reduced effectiveness of the aluminum sulfate in lower temperatures. What Mr. Lynch found was, as the raw water temperature lowered the floc produced also dropped off in size.

In a perfect world our clarifiers should remove 75% of the alum floc, but as temperatures drop, and with the drop in alum floc size, more alum floc is blowing through the clarifier, reducing the capture of the clarifier, and putting more of a particulate load on the filter itself.

This makes much sense in that current BRWD clarifier performance (before timing out) is at 100% while filter performance hovers between 75% and 83%. Using this logic, you would expect the clarifier to operate longer because it is trapping less of the alum sludge. Conversely you would also expect that between the increase alum sludge being transferred to the filter, a reduction in filter efficiency is to be expected.

To extend filter run times at the YWD, an addition of a polymer has been added to aid the impaired performance of the alum. This polymer is used only to increase floc size to increase the removal rate of the clarifiers. At this time, I am not recommending this approach in that I do not believe the cost benefit will be great enough to warrant the permitting, chemical, equipment and labor costs to operate such a system. However, the trustees should keep this concept in mind into the future if a strong winter population does grow on the peninsula wherein this temporary loss in efficiency will create enough waste to make any addition of chemicals to the treatment train cost effective.

Lastly, another contributing factor to filter inefficiency during the winter months is due to the high iron content within the raw water due to the lowering of pH in Adams Pond after “ice in”. As it turns out, the filter media used at BRWD is excellent for iron removal and therefore the iron occupies significant surface area on the filter media as well. It should be noted that the iron removal does not need to be in a floc state as it adheres in its naturally reduced form.

20. **MUNICIPAL SLUDGE DISPOSAL PROBLEM** – The manager informed the board that in 2022, the Maine Legislature and Governor of Maine, bypassing the long-established study and rulemaking process requiring the Maine Department of Environmental Protection (DEP) to develop rules and procedures, developed policy on their own in an effort to deal with a yet to be defined PFAS issue in Maine, ultimately banning the spreading of all municipal wastewater sludge, regardless of whether it was contaminated or not. This rule has caused much consternation with other states where a portion of the state’s sludge is disposed. Vermont has banned sludge originating from Maine already with New Hampshire in the process of following suit. Likewise, Canada is in the process of banning Maine sludge as well, all citing if Maine will not allow its own sludge to be spread in its state, then it will not be spread here”. The fallout from this bill is that the district, per information provided by the Boothbay Harbor Sewer District, can expect to see its sewer rates significantly increased due to runaway sludge disposal costs.
21. **PINE TREE POWER COMPANY** – The manager provided the board the following written report.:

Considering the situation described above, I thought it prudent to review other wide arching moves inspired by the Maine legislature, which will directly affect water district operations, electricity being a chief input. In 2021 LD 1708, An Act to Create the Pine Tree Power Company was passed by the legislature, changing what is now Central Maine Power, a private, for-profit company regulated by the Maine Public Utilities Commission (PUC), into a quasi-municipal organization, much like the BRWD. This measure was vetoed by Governor Mills with the veto sustained.

In this case the legislature got it absolutely correct, with a sound bill passed. Repeated studies have shown that as far as public utilities critical to basic human existence are concerned, the quasi-municipal model of governance is generally the most advantageous for the users of the utility. Again, I am citing statistically accurate and vetted science here. LD 1708 was a solid bill as far as the structure of the proposed entity was concerned. Why Governor Mills thought the bill to be “hastily drafted and hastily amended several times. In recent weeks without robust public participation, seems to be a patchwork of political promises rather than a methodical reformation of Maine's complicated electricity transmission and distribution systems,” puzzles me. In my mind, after reading the bill, and heavily involved in the operations of an outstanding quasi-municipal organization, it is what I believe would best serve the residents of Maine for the long term.

That said, in November a citizen’s initiative will bring this question directly to the voters. I am not recommending the board adopt a position or weigh in for that matter. However, I am advising the board that at worst, if adopted, in my opinion, in the long term this action would not be a move to be feared.

22. **PFAS AND THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (EPA)**- The manager informed the board that EPA was proposing absurdly low maximum contaminant levels (MCL) for PFOA and PFAS contamination through the written report listed below:

On 14 March 2023, EPA listed its proposed rules for setting new limits for PSOA/PFAS from 70 ppt to 4 ppt. Currently, using the EPA magical calculation exercise, as verified by *Dirigo Engineering*, the district is currently at 3.52 ppt with one round of samples yet to be completed. Even though a proposed rule, EPA always gets what it wants, especially with the current political climate in Washington. The district may be forced to change treatment technique which will, by the time construction is forced on the district, will be a \$4M bill (see Table 2).

I estimate the board will be dealing with this very real cost in two to three years.

This has the potential for being a huge hit to our rate payers and I recommend the board get out in front of this issue. The average person just gets a biased view from the news, which never addresses the true ripple effects. I have serious concerns for the board, in that the district will be forced into a situation where it will have to spend significant funds where the “cost-benefit” will be so poor, from the ratepayer’s perspective, that awareness and blame must be cast on EPA, and uncontrolled elements of the government of Maine, the true enemy of our ratepayers.

Table 2 PRELIMINARY COST-ESTIMATE If EPA or Maine drops the MCL for PFOA/PFAS below 5 ppt	
COST ITEM	EXPENSE
Equipment (see attached sheet)	\$ 1,100,000.00
Equipment Installation	\$ 550,000.00
New 50 X 40 Building @ \$400/ft ²	\$ 800,000.00
Pumps, Piping, and Valves to the New Facility	\$ 200,000.00
Generator Upgrade	\$ 75,000.00
Electrical	\$ 100,000.00
SCADA Equipment & Integration	\$ 75,000.00
Engineering, Permitting, Legal, Interim Interest, etc.	\$ 475,000.00
Contingency	\$ 500,000.00
TOTAL	\$ 3,875,000.00
Estimated annual Operating Expense	\$ 80,000.00

23. The meeting was adjourned at 2025 hr.
Trustee Climo motioned, Trustee Anthony second, vote: unanimous.

END OF MINUTES

Respectfully Submitted,

Jonathan E. Ziegra
General Manager