A regular meeting of the Board of Water Commissioners was called to order by Acting ir Lucien Langlois. Commissioners present were Paul Poulin, Paul Ingersoll and via telephone, Lucien Langlois. Absent from this meeting was ex-officio member Mayor Paul Grenier. Chair Michael Caron informed the office that he would be running late. Also present for this meeting was Superintendent Craig Carrigan, General Foreman Steve Lefebvre and Lynne C. Lessard.

There was neither Public nor Board Comments.

It was moved by Commissioner Poulin, seconded by Commissioner Ingersoll, with all in favor, to accept and place on file, the Minutes of December 20, 2017.

Under the Berlin Water Works Monthly Status Report dated January 12, 2018, Superintendent Carrigan reviewed and discussed the following with the Board:

- 1. Treatment Systems Status:
 - a. The Brown Farm Well #01 was run 6 days in the month of December for the 10 day pump test. The water from Well #01 as pumped into the system and water from the new Well #02 was discharged into the Androscoggin River.
 - b. We had a chemical delivery of 4,900 gallons of 605.
 - c. Filter #01 was cleaned; however, the results were not a good as we would have liked. We will be scheduling another cleaning.
- 2. Distribution System Status:
 - a. We had one main line break.
 - b. Water supplied into the distribution system for December averaged 1.60 MGD. The Ammonoosuc Plant was 1.45 MGD and Brown Farm Well was 0.15 MGD. BF Well was run for 6 days. December daily wasted sludge flow to the City Pollution Control Facility was 131, 449 GPD.
 - c. Burgess Bio-Mass December's daily average for water usage was 841,380 GPD.
 - d. The Burgess Bio Mass was not off-line for the month of December.
 - e. There was one main line repair in the month of December. It was located on Twelfth Street. The 6" cast iron main had split lengthwise 8 feet. This was leaking about 200 GPM. We shut down and replaced the broken section with 10 feet of 6" ductile iron pipe and used two Alpha Couplings. This took approximately 7 hours to repair and we believe this break was due to water hammer from working on the well last month.
 - f. 2017 closed out with only this one main like break since we have been keeping records. This is an indication that using the main line break data to prioritize main replacement is achieving good results. We have contacted the NHDES to request that we be able to put this area on the scope of work for the new SRL Project in which they replied that the loan agreement is not specific to particular streets.
 - g. There were no curb stop or service line repairs in the month of December.
 - h. One running water customer's property was eliminated on Denmark Street.

- i. We have received dozens of calls for houses with frozen water. All of them were frozen on their properties. We advised those to check their residence for drafts and heat in their cellars and if further help was needed, to contact a plumber for assistance. They were informed that if we go over, there would be a service call charge; this helped to eliminate many customers. For those that requested our service they were charged and told to contact a plumber because where they were freezing inside and it was not Water Works responsibility. We started the running water program January 8, 2018 when our regular early water customers were starting to freeze. The staff was busy clearing snow from our buildings and hydrants due to the recent snow storms. Steve suggested that we place a "thankyou" note in the paper for those who helped keep the hydrants cleared near their property for their time and effort and to encourage others to participate. Commissioner Ingersoll questioned about having the fire department assist in the clearing of snow around hydrants. Superintendent Carrigan said that last year when he spoke to the Fire Chief he stated that their department would assist but also charge out their time. Superintendent Carrigan informed the Board that with a crew of 5 employees, it was difficult to clear all hydrants due to deep snow, meter reading time and freeze-ups. Superintendent Carrigan stated that he will speak to the Fire Chief.
- 3. Water Meter Replacement Status:
 - a. We installed 23 backflow preventers, 21 radio reads and 35 iperl meters. This is one of the requirements of our conservation plan to replace 200 meters per year in conjunction with the Brown Farm Well Large Groundwater Permit.
- 4. Cost Reduction/New Income/Improvements Status:
 - a. Water meters were read from January 2nd thru January 11th. Readings took longer this period due to deep snow, cold temperatures and lack of available manpower.
 - b. December water sales for our 47 accounts were \$118,047.
- 5. Safety/Personnel & Other Status:
 - a. The quarterly JLMC meeting was held
 - b. BWW has not had a lost Time Accident in the last 1,198 days.

It was moved by Commissioner Ingersoll and Commissioner with all in favor to accept and place on file, the Berlin Water Works Monthly Status Report dated January 12, 2018.

It was moved by Commissioner Poulin, seconded by Commissioner Ingersoll, with all in favor, to accept and place on file, the Cashier's Report for the month of December 2017.

Old Business:

a. Project Status: We had our final progress meeting on December 19, 2017 with Superintendent Carrigan, Steve Lefebvre, and Andy Sharpe, our project engineer and Lee Carrol, our Consulting Electrical Engineer in attendance. BWW reports that the 2017 construction season is closed and all temporary employees have been laid off for the winter. BWW installed 2,531 linear feet of water main and 894 linear feet of service lines. The remaining balance on the SRL #11 is \$105,121.00 to be used next season.

1. Brown Farm Back Up Well Status: The following was read from the Progress Meeting notes: "On December 19, 2017, the Brown Farm Well project achieved a major milestone with the completion of the 10-day pump test. The test began on December 9, immediately following Layne's checking of pump rotation and other items related to the acceptance of the pump and motor. Well #02 was operated at a flow of 900 GPM for about 24 hours and was reduced to 700 GPM for the remainder of the initial 5-day period to maintain the minimum water level over the screen. At the end of the initial 5-day period of the 10-day withdrawal test, flow from Well #02 was reduced to 450 GPM and Well #01 was going to be operated at a flow of 750 GPM. However, a glitch in the programming prevented Well #01 from coming on line on Day 6. Well #01 was brought on line on Day 7 and was operated at a flow of 750 GPM. Flow from Well #01 had to be reduced during the 5-day combined pumping of Well #01 and Well #02 to assure that a minimum level of water was maintained in the wells. At the end of the 5-day combined withdrawal testing program, Well #01 was operating at 650 GPM and Well #02 was operating at 450 GPM". Superintendent Carrigan stated that our expectations were for 1400 GPM combined but we still have not received the final report. Superintendent said that the VFD controller was installed today and EII will come up next week for the instrumentation installation. We anticipate a late spring approval of the large groundwater withdrawal permit. submitted the final Water Conservation Plan to NHDES and are awaiting approval.

At 12:35, Michael Caron entered the meeting and resumed the position of Chair.

- b. Auditor Status: The Board was informed that we contacted and received the City's e-mail list of vendors for the annual audit from City Manager Wheeler & Finance Director Chase. The RFP will be sent out this week with an opening date of March 16th for the Boards review at their March 21, 2018 meeting.
- c. Hydro Mechanical Seal Status: Superintendent Carrigan handed out the latest communication dated January 16, 2018 from Eric Melander at Canyon Hydro (they acquired SOAR) regarding the Superintendent's correspondence dated January 04, 2018 to Brett Bauer, VP Engineering of Canyon Hydro. Mr. Melander acknowledged receiving the Superintendent's letter and offered the facts surrounding the installation of the replacement seal and bearings. The e-mail included comments made by Canyon Hydro: First was about the original seal. Second, the recently installed replacement seal leaking and the use of grease during the installation. Third that they spoke with other pump installers and they do not use moly based grease. Fourth was they believe the failure of the replacement seal is due to the installation using a moly based grease as no silt was present in the system at the time of year the immediate Fifth was that Canyon Hydro has provided the appropriate failure occurred. replacement parts. Per the SOAR Technologies warranty, the installation is the responsibility of the purchaser. His letter ended by suggesting BWW proceed with replacement of the current seal using care to ensure the work is done to Cornell's specifications. Superintendent Carrigan explained to the Board that if you go back to the beginning the original seal leaked. Cross was hired by SOAR to do the work.

What they are saying now is that the original seal was the wrong one and the second seal that was installed was the same as the first seal. By using the moly grease on the second seal it is not warrantied. For the first seal and bearing replacement, BWW paid a portion to get this problem resolved. As for the second seal, in our interest of moving this project forward before the replacement seal fails and causes potentially significant damage to mechanical and electrical equipment at the plant BWW received a quote from Cross Machine in the amount of \$2,485 for the seal replacement. Berlin Water Works is concerned that if this seal leaks, are they responsible and what if it is a bigger mechanical issue than just the seal? Based on an e-mail from December 12, 2017 from Mr. Melander informing BWW and we were again questioning whether the use of a lubricant during installation of the seal had resulted in the seal's failure. He did not state that use of a lubricant had resulted in a leak and was uncertain whether it would have leaked had a lubricant not been used. Based on his email, BWW concludes that the use or non-use of a lubricant during installation of the mechanical seal does not have a quantifiable impact on the seal's ability to perform. Commissioner Langlois suggested the Superintendent speak with Cross Machine regarding using the grease. After discussion and concerns, it was moved by Commissioner Ingersoll, seconded by Commissioner Poulin, with all in favor, to authorize the Superintendent to contact our Attorney as to proceed.

d. There was no other Old Business to discuss.

Under New Business:

- a. Running Water: Superintendent Carrigan handed the "Update on Running Water Improvement Program". He explained the several categories that we use such as early, regular and severe and trial and our process as to how we arrived at those groups. Our trial program is those customers where we have completed repairs or installed new curbs and recommended to those who needed their service lines lowered and or a heat probe installed in their service line. At the present time we have 63 customers running water to prevent freeze up. He informed the Board of a few key customers that we use for indicators to start the program. He also informed the Board that we have opened the "blow-off" on Jericho Road. Because of the water conservation plan, we placed a meter to account for the water usage. This is one way that we can track for unaccountable water to work within the variance that the State recommends.
- b. Approve Other & Communications: There was no other New Business to come before the Board.

The Board agreed to hold their next regularly scheduled meeting on Thursday, February 22, 2018.

There were no Public-Board comments.

The Board did not enter into a non-public session.

There being no further business to come before this meeting at this time, it was moved by Commissioner Ingersoll, seconded by Commissioner Poulin, with all in favor to adjourn this meeting.

The meeting did so adjourn at 12:50 pm.

A True Record:

Paul Poulin, Clerk of the Board