

**Board of Commissioners  
Minutes  
August 20, 2018  
(approved November 19, 2018)**

Present: J. Comer, T. Pellegrino, G. Keller, W. von Schoen, D. Provencher,  
Superintendent R. Miner, Business Manager/Water Quality Support J. Lavoie

**A consultation with G. Michael, Attorney was held in Non-Public session. No minutes were recorded for this attorney/client consultation.**

**Financial and Human Resources Review – June and July**

M. Holton noted that the audit fieldwork will begin this Wednesday, August 22<sup>nd</sup>. The preliminary fieldwork a few weeks ago went well. The June financial reports are a draft, as there are various items to be reviewed and adjustments to be posted, including inventory, depreciation and the Saint Gobain settlement. Both of these areas are being reviewed by DRA & the auditors for their recommendations as to how to record the transactions. As far as initial year end budget results, revenues came in just above projections at \$3.48M and expenses are below the approved budget by \$109K. There was a decrease in revenues of \$100K from FY17 to FY18 attributed to less domestic water usage and fewer entrance fees (Woodspring Suites totaled \$44K in FY17). On the expense side, Inventory has \$41K recorded as Inventory Adjustment under Cost of Goods Sold after the year end physical inventory. This will be reclassified to the various repairs & maintenance budget expense accounts (R&M) where the items were used from reports that are being generated from the Elements Asset Management program that went live in April. There are also a few offsetting expense adjustments to be recorded, and overall expenses will be under budget. Health Insurance, Purchased Water, Office Equipment (Elements Implementation), Legal, R&M – Tanks and Outside Services (Finance & Treatment Consultants) accounted for almost \$200K in expense lines over budget. Some areas were planned overages taking into consideration other areas that would be under budget to offset. Purchased Water and Legal were late year unanticipated expenditures. M. Holton also noted that interest on operating, investment and capital reserve funds doubled from FY17 to FY18. This was due to reorganizing the fee structure at TD Bank, additional funds moved into capital reserve funds and overall rate increases. Cash flow needs over the next year will be reviewed in September and excess funds transferred to investment.

**1. Board of Commissioners to review minutes from the June 13, 2018 and June 18, 2018 Public and Non-Public Sessions. (No July meeting)**

The following change was made to the minutes of June 13, 2018:

Page 3 – A new section “e” was added entitled “PFAs Feasibility Study”. The following was added to this section: “A motion was made by D. Provencher and seconded by W. von Schoen to authorize UEI to move

forward on the PFAs Feasibility Study for Wells 2, 3,7, and 8 based on the ESR dated May 17, 2018. The motion passed 5-0-0.

“K. Pratt noted that the original \$12M figure for treatment of those wells was based on the \$4M cost for wells 4 and 5, times 3 locations and not on the design per facility. At the moment the treatment target is community driven since the wells meet state and EPA standards. The next step is to pick a standard for designing treatment, whether it be no-detect, 50% of the current standard, or some other goal.”

Any further action of these minutes was tabled to the next meeting of the Board.

A motion was made by T. Pellegrino and seconded by W. von Schoen to accept the minutes of the public and non-public sessions of June 18, 2018 with the following changes:

Page 3 under “Odd/Even Watering” – the sentence “W. von Schoen noted that he would like all of the Commissioners to have correct information regarding this issue so that false information is not given to residents/customers” should be changed to “W. von Schoen noted that he would like all of the customers/residents to have correct information regarding this issue so that false information is not spreading.”

Page 3 under “July Meeting” – this title should be changed to “EPA PFAS Community Engagement” and a sentence should be added to this paragraph: “R. Miner and J. Lavoie stated that they would attend along with some Commissioners.”

Page 4 under “Consumer Confidence Report” – in the third line the word “report” should be “reported”.

The motion passed 4-0-1 with G. Keller abstaining.

**2. Board of Commissioners to hear updates from Underwood Engineers on:**

**A. PFAS Treatment Feasibility Study for wells 2, 3, 7, & 8**

M. Metcalf noted that aside from Wells 4 & 5 the next highest levels for PFAS were found in wells 7 & 8. The main treatment methods for PFAS are Granulated Activated Carbon (GAC) and resins. To achieve “non-detect” the GAC filtration system would need two 12 foot diameter vessels each holding 40,000 pounds of GAC. These vessels would be put online after the green sand filters and before the

clear well. The Well 7 & 8 pumps would need to be changed or booster pumps would be needed due to the additional headloss from the GAC units. Each unit would be able to handle 625 gpm so that the full 1,250 gpm capacity of Wells 7 & 8 can be treated. No backwash would be needed except when the units are first put online to remove fines. The current treatment building has 19-foot walls. These vessels are over 26 feet tall and would need the walls to increase in size to 30 feet. M. Metcalf noted that it would be better to go down into the ground for this additional wall size due to: 1) the wind driven snow load on the roof where the addition would rise 11 feet above the current roof, and 2) the reinforcing in the existing CMU walls was not designed for this height. No building costs have been estimated to date, but the preliminary cost developed for GAC treatment at wells 7 & 8 in 2016 was \$3.6M. It was noted that in 2016, the quote for the two 12 foot diameter units with media was \$400,000 and it is now \$600,000. This is due at least in part to the steel tariffs. If the planned WTP expansion area is used for PFAS treatment, then the District will not be able to add additional iron and manganese treatment capacity in that same location without further engineering effort which was the original intent of the expansion area.

If the resin method is used the water would need to go through 10-micron filters. Chlorinated water cannot be used with resins since at chlorine levels exceeding 0.2 mg/L, it will damage the resin. The water would need to be de-chlorinated before it goes through the resins. M. Metcalf noted that this can be done with a chemical reaction using sodium bisulfite, or if used in combination with GAC, the GAC will de-chlorinate the water. The resin vessels would be 10 feet in diameter and 18 feet tall. These vessels could exist inside a building addition with the addition of 2 feet of headroom above the current roof line.

The cost for the resin tanks and the piping would be approximately \$900K. The cost for the GAC tanks and piping would be approximately \$600K. There would be additional differences in the re-design of the building for each of these methods. M. Metcalf noted that the costs for the re-design of the building for each of these methods will be available for the Board meeting of September 17, 2018. A worksession to further discuss this issue could be held if the Board feels this is necessary. M. Metcalf noted that he is working on the same PFAS treatment issues for wells 2 and 3.

## **B. Rate Study**

M. Metcalf noted that K. Pratt is currently working on this. He noted that K. Pratt is waiting for treatment numbers and expects to be done with this study this fall. He noted that the rates will include items on the CIP. The

rate study will look out 5 years. W. von Schoen noted that the O&M costs for treatment of the PFAS after the 5 years of the contract with SGPP should be factored into the rate study and the rate study should probably factor in the O&M costs from SGPP as lasting 4 years, not 5.

### **C. Treatment design progress at well 4 & 5**

M. Metcalf noted that it is necessary to run wells 4 & 5 to determine water quality parameters such as TOC as well as the current PFAS levels since they have not been sampled since March of 2016. It is also necessary to get water for the Rapid Scale Small Column Tests (RSSCT) to test the effectiveness and expected life of the GAC. Since these wells were locked out and tagged out since they exceeded the Ambient Groundwater Quality Standard (AGQS) for PFOA, the water from these wells cannot just be run into the ground. Permission is needed from NHDES to dump this water on the ground and we are currently working with NHDES on this. The current design for this treatment is two 12 foot diameter GAC tanks. M. Metcalf noted that his preference would be also polish the water with resins. It is possible to combine GAC and resins. W. von Schoen noted it is best to use GAC and resins, not just GAC.

M. Metcalf noted that site and layout plans should be available for the next meeting of the Board. He noted he thinks that he will turn the wells on for 30 minutes to ensure we have exhausted storage in the well casing and determine the levels of PFAS in the aquifer surrounding the wells. Progress is being made on this issue.

R. Miner noted that the District would like to demolish the building at well 5. M. Metcalf noted he would investigate the impacts of this demolition. D. Provencher questioned whether there are plans for future expansion at this site. It was noted that there are such plans.

### **D. Turkey Hill Booster pumping station**

M. Metcalf noted that the 60% design would be completed by the fall, the 90% design by the winter, bids would go out in the spring, and construction would be completed next year.

### **E. Discussion Capital Improvement Plan (CIP) and Asset Management Plan**

D. Provencher questioned ideas on large improvements. M. Metcalf noted well #3 with its high levels of iron and manganese.

D. Provencher questioned the District's drought source capacity. R. Miner noted that the MVD can purchase 1M gpd from Pennichuck Water Works and use it throughout the system with the new booster station. They were unable to do this in the past since the PWW hydraulic gradeline is lower than MVD's.. M. Metcalf noted that K. Pratt will look at this type of purchase in the rate study.

**3. General Discussion topics submitted by Commissioner Provencher:**

**A. Greens Pond outlet pipe culvert (ownership, condition, upgrade/replacement considerations, modifications/feasibility for raising of water level in Greens Pond).**

D. Provencher noted that the town owns the road right-of-way and that the Fish and Game Club owns additional rights of way in this area. R. Miner noted that the MVD keeps the grate clear.

**B. My meetings with Citizens For Clean Water & Town Council members (I provided updates on our meetings as outlined in our meeting minutes. Request for joint MVD/TC meeting. Group is looking to add another member. Can we include PFAs treatment funding in our operating budget? When do we need annual meeting voter approvals? Should MVD be added to DES cc list for SGPP/Flatley correspondence? Revising MVD meeting time and location.)**

D. Provencher felt these questions had been answered or will be discussed at a later meeting.

**C. Uploading MVD meeting videos onto town cable channel 20.**

D. Provencher noted that the current recording of the Board meetings can only be viewed via the Internet. He noted that some residents/ratepayers may have access to cable channel 20, but have no access to the Internet. He noted that he feels it is important to have these meetings available through cable channel 20. He noted that a process to download the meeting from the Internet to broadcast them on cable channel 20 needs to be determined. J. Lavoie noted that she will call the current provider of the meetings on the Internet and discuss this with them.

**D. Graphing total and monthly water withdrawal trends from wells and from purchased water from Nashua.**

D. Provencher noted that this issue was discussed previously or will be discussed at a later meeting.

**E. Graphing well water quality trends (PFOA, PFOS, other PFAs, sodium, chloride, iron, manganese, others?)**

D. Provencher noted that this issue was discussed previously or will be discussed at a later meeting.

**F. Latest GW & SW PFAS results and proposed field work plan addendum for SGPP/Flatley property.**

D. Provencher noted that there are very high levels of PFOA in groundwater and surface water samples.

**4. Old Business**

**Niles International – Zeolite discussion– Lou Niles and Geoff Daley presented** - This developing filtration media, previously presented to the Board, but tabled at that time, can be surface modified to cause 98% removal of PFOAs. There are no infrastructure modifications needed for the use of this technology. There are currently 2 side-by-side studies taking place using this technology. There are no waste disposal issues involved with this technology. This technology costs a fraction of what competitive technologies cost. There is some math involved to make the media better able to sequester the required contaminants. This media is good at removing “indestructible” materials. There are no exothermic reactions with this media. The media is still in the developmental stage. A small scale test would be best at this time. This media can remove iron and manganese also. The Board was asked to consider a pilot proposal. The frack tank needed would be small and there is no break down in the bed volume of this material. This media can be positively and negatively charged and no backwashing is needed. The total cost to the District for the small scale test would be approximately \$91K. R. Miner noted that he would bring the information given about this material to the Board. It was noted that the loading rates for this material would be based on the level of contamination. The tanks holding this material can be put into any needed configuration. It was noted that NHDES is on board regarding a small scale test of this material. The applications of this material are enormous. D. Provencher noted he would like to see a preliminary test of this material. It was noted that no long term contract is needed. The material works best if the water is input from the bottom of the tank, then the water is forced to go through the media as the material is heavy.

**A. Vote needed to clarify the previously approved engineering relative to the Artificial Recharge project is to be funded from the Equipment and Facilities Capital Reserve Fund.**

R. Miner noted that a previous motion regarding this project approved by the Board was unclear as to the method of payment for the project.

A motion was made by W. von Schoen and seconded by T. Pellegrino to move that the Board of Commissioners of the Merrimack Village District, as clarification for previously approved engineering for the Artificial Recharge project – Proposal No. 2109 authorize payment in the amount of \$75,000 from the Equipment and Facilities Capital Reserve Fund.

D. Provencher noted he has not seen a cost estimate and would like to see such an item. R. Miner noted that this project is to determine if this Artificial Recharge is feasible. D. Provencher noted that this project may be putting the cart before the horse and would like more information regarding estimated construction costs before proceeding to the next phase.

The motion passed 4-1-0 with D. Provencher voting in the negative.

**B. Vote needed to acknowledge MVD/SGPP Agreement and acceptance of funds.**

A motion was made by T. Pellegrino and seconded by G. Keller to move that the Board of Commissioners of the Merrimack Village District, as clarification, acknowledge the MVD/Saint Gobain agreement and acceptance of funds as detailed in the signed agreement dated 3/27/18 and summarized below:

\$3,350,000 to fund the design and installation of the treatment plant at Wells 4 & 5

\$106,900/year for operation and maintenance of the treatment plant at Wells 4 & 5 for 5 years

\$438,500.52 for reimbursement of engineering and technical costs.

The motion passed 3-0-2 with D. Provencher and W. von Schoen abstaining.

**5. New Business**

There was no new business at this time.

## 6. Superintendent's Report

**NHDOT meeting** – R. Miner noted that NHDOT will be holding a public hearing on the Route 101 project on Wednesday, 8/22 at 7:30 PM in the Matthew Thornton room at the Town Hall.

**Bedford Road water main construction** – R. Miner noted that this construction has begun. It should take 2-3 weeks to reach the Bedford town line. There is a push to get this work done this year.

## 7. Questions from the Public

Nancy Murphy, 20 Brenda Lane, questioned why the Consumer Confidence Report (CCR) was not mailed in it's entirety. R. Miner noted that it was not mailed out, rather a postcard was mailed to ratepayers noting that the CCR is available at the District offices and on-line. The postcard also offers the office phone number to call if customers would like a copy mailed to them. This was done as a cost savings measure.

N. Murphy noted that putting the Board meetings on cable channel 20 is a wonderful idea. This will give access to members of the community who do not have computers. She noted that she thinks that people will come to the meetings if they are held later in the day. She questioned how decisions are made in the District and whether the decisions are made by the staff or the Board. R. Miner noted that the voters pass the budget; he makes decisions based on this approved budget; if there are projects involved these are brought to the Board.

N. Murphy noted some confusion regarding the grant applications. R. Miner noted that the District applied for grants. If grant money is offered it is brought before the Board for review. The Board can then decide to accept or reject the funds. R. Miner noted that a pre-application for Artificial Recharge was submitted. W. von Schoen noted that the Board is kept well-informed in general. He discussed with staff his request to be informed ahead of time or as things are happening, especially if it is PFAS related. Email is fine if he is away. MVD staff agreed. The MVD staff is supportive and such applications are in a fluid situation. D. Provencher noted that Board approval is needed before any such funds can be accepted.

N. Murphy noted that with so many issues it seems like it would be imperative that the Commissioners attend these meetings. J. Comer noted that he only remembers one meeting of the Board where there was no quorum. W. von Schoen noted that there is activity going on in the background. He noted that he



would approve a later meeting time, but not until more people come after 6 PM when the meeting is still taking place.

Lon Woods encouraged the Commissioners and the public to have patience with the issues. He indicated that he feels that the pace the Commissioners are taking is the correct one; he noted it is very easy to make a mistake if issues are taken too quickly. He thanked the Board for its diligence.

**8. Questions from the Press**

There were no questions from the press at this time.

**Adjourn**

A motion was made by T. Pellegrino and seconded by D. Provencher to adjourn the meeting at 7:55 PM. The motion passed 5-0-0.

Respectfully submitted,  
Rita Pointon, Recording Secretary