

**WINNIPESAUKEE RIVER BASIN PROGRAM**  
**ADVISORY BOARD MEETING MINUTES**  
**July 20, 2017 – Belmont Corner Meeting House**

**Members Present:** The meeting was called to order by Brian Sullivan (Franklin), chair, at 10:05 am. Ron White (DAS), Johanna Ames (Tilton), Wes Anderson (Laconia), Glen Brown (Northfield), Gene Forbes (NHDES), and Sharon McMillin (NHDES) were present at that time. Katie Ambrose (Sanbornton), Steve Dolloff (Meredith), and Ray Korber (Bay District) arrived between 10:05 am and 10:15 am.

**Absent:** Peter Nourse (Gilford) and Jeanne Beaudin (Belmont).

**Visitors:** Robert Scott (Commissioner, NHDES), Karen Rantamaki (Assistant Administrator, DAS), Brian Barry (Franklin). Robert Scott, Karen Rantamaki, Brian Barry and Advisory Board members introduced themselves. Robert Scott is the recently appointed Commissioner for NHDES. Karen Rantamaki continues to assist the Advisory Board and NHDES with evaluating solar power options and is involved with the State's power purchasing and energy efficiency projects. Brian Barry is the proposed advisory board member alternate for Franklin.

**Minutes:** Ray moved, seconded by Glen, to approve the meeting minutes for February 16, 2017, as amended. The motion passed. Ray moved, seconded by Wes, to approve the meeting minutes for May 4, 2017 as written. The motion passed.

**Monthly Summary Report:** Sharon provided the following updates based upon the *Monthly Summary Report* for June 2017 as previously submitted to the AB members by email.

- Flow metering services – The WRBP was extending the EST contract that ended on June 30<sup>th</sup> in order to continue flow metering services. Included in the extension is a flow metering concurrent trial at the three (possibly four) southern locations for 3 months. The flow metering trial is intended to help resolve some data accuracy issues. At TF-1, the meter was pulled because of debris. It is important to remove the debris prior to the flow metering trial since the debris is from upstream in Tilton. Some of this debris is adversely affecting the siphon downstream of this location; with one barrel being blocked.
- Asset Management/Collection System Evaluations Initiative – The WRBP is in the process of purchasing software and implementation support from Cartegraph. Please see the discussion immediately below.
- WRBP infrastructure ownership – Belmont, DAS, Northfield, and Tilton executed MOAs with DES. Draft MOAs for Bay District, Gilford, Laconia, Meredith, and Sanbornton were under review by these members. Sanbornton will finish its review after its sewer ordinance has been updated and approved at its March 2018 town meeting. A MOA for Franklin, which is a little more complicated than other communities, is being drafted.
- Rate assessment formula – Please see the Rate Assessment Formula Discussion section below.
- Governance Work Plan – Please see the Authority Discussion section below.

With regard to the software purchase, Wes asked when Cartegraph would have the WRBP up and running. Sharon said implementation will start once purchasing is in place and added that there was an email answering questions posed by Ray Korber that was sent to all members. The WRBP hopes to have the purchasing in place no later than next month. WRBP staff, Wright-Pierce, and Cartegraph will then begin working on the software rollout, database population, and conversion from the existing database – this implementation process is expected to take approximately six to eight months of work but the Cartegraph support services last a full year. Sharon has applied for SRF loan principle forgiveness only through the Clean Water SRF Program for the asset management. The WRBP is eligible for three phases under this program and implementation milestones for each \$30K phase will have to be met. The goal is not to incur interest so the application this year is for the first \$30K milestone and the pre-application submitted for next year is for the remaining two milestones at \$30K each; for a total of \$90K to offset project costs for all three phases.

**WRBP Solar Array Status Update:** Sharon handed out a document titled *WRBP Franklin WWTP Solar Proposals – Summary*. This potential opportunity came to light when the City of Franklin explored the possibility of having a solar array placed on City-owned property adjacent to the WRBP WWTP. The WRBP agreed to explore the possibility of having a solar array placed on State-owned property just south of the WWTP and created a RFP to allow both a qualification-based and cost-based analysis to determine whether doing so would be feasible and financially beneficial to the WRBP rate payers. Karen assisted the WRBP with this process as did DES and UNH staff familiar with solar projects and power purchase agreements at other locations. Eight proposals were received in response to the solicitation. These proposals are summarized in the handout. Firms that proposed a rate that started higher than the current supply rate that the State receives through its power purchasing contract were listed on page two. The current State rate is \$0.078/kWh and expected to go down slightly over the next two years. Eversource's current rate is \$0.11/kWh. Some of the firms listed on page two had a higher rate to start than Eversource. These firms were not shortlisted for further consideration.

Three firms were shortlisted for further evaluation - listed as A, B, and C on page one of the summary document. These firms had better rates and were invited in for interviews and then given the opportunity to conduct site assessments and revise their proposals, if needed. Costs for each firm were normalized for a 20-year term so that they could be compared. Current and future costs for each firm were compared with Direct Energy's and Eversource's rates using the same annual escalation rate. The proposing firms' escalation rates were used to compare their cost per year versus speculative savings when compared to Direct Energy and Eversource using 2% per year over the 20-year term. This 2%/year escalation was typical of all short-listed proposing firms. The State's power supply contract with Direct Energy expires on October 31<sup>st</sup>. So, the State's power supply contract will be going back out to bid for another one-, two- or three-year term in the near future. Meanwhile, Karen obtained a more current market rate of \$0.07615/kWh for a new two-year power supply contract term to help with comparative projections. Cost savings are speculative since power costs over a 20-year term are unknown. However, any contract with a solar firm would effectively commit the WRBP to paying their contract supply costs over a 20-year term, regardless of market prices. The State power contract used by the WRBP, by comparison, would save the WRBP \$800K versus Eversource rates over the same 20-year period using the same analysis.

The summary document also took into account a financial loss that would occur if the biosolids spreading field adjacent to the State-owned property was lost due to a solar array sited on this portion of the State-owned property. The City of Franklin is no longer leasing all of their abutting property to the farmer using WRBP biosolids so a financial loss has already occurred. Loss of the remainder of the biosolids spreading farm field would cost the WRBP approximately \$6,100 per year or \$122,000 over the 20-year term. The proposals from firms A and B along with the first proposal from firm C offered a small benefit over a 20-year term unless this potential loss is taken into consideration, in which case they broke even. Firm A is revising its proposal in order; taking this potential loss into consideration. Firm B proposed to site the solar array on the sludge monofill which is largely unstable – making it unsuitable for constructing a pile driven array system. It would cost an additional \$150,000 in construction costs for the ballasted system option on the monofill location. No final decision has yet been made to pursue an array or not.

Karen said that the State has not yet ventured into a power purchase agreement for solar before. It was exciting to do so and the State planned to use information obtained during this process for future projects at different locations. Sharon asked Karen to explain how the contracting side of things worked. Karen said that the State currently required all electric purchases to go through the DAS. If a contract was put together for the WRBP, it would be between the vendor and the DAS and an MOU would be put together between the DAS and the DES so the WRBP would pay the costs. Sharon said that Firm A was the WRBP's top choice given the analysis of all eight firms, so the WRBP has forwarded their draft purchase power agreement to the NH Attorney General's Office last week for a review in order to determine whether there were any fatal flaws in the agreement.

Brian said it sounded as though this was the first project of its type that the State was involved in and that there were not any significant savings – in short, it did not sound as though it was cost-effective or provided any cost savings for the WRBP. He felt that the information obtained during this process was invaluable. Sharon said that the site constraints (location) were not ideal and the State had a favorable power supply rate; making these solar proposals less financially beneficial. The PUC recently ruled to effectively eliminate the net-metering cap, which was essential to even consider a solar array. An array of the size that the WRBP was looking at would have to buy excess power at the \$0.11 Eversource supply rate. The WRBP would probably need to purchase 6-10% of its power from Eversource, according to firms A, B, and C. This was yet another financial factor to consider. None of the systems in the proposals contained battery storage capability so utility power would have to be purchased from Eversource, not the third party supplier, during periods without solar power production. Wes asked if it was pretty much a no-go at this point. Sharon said that unless Firm A came back with a significantly better offer, and it might be difficult to do so given the site constraints, she suspected that this might be the case. Construction would take two years anyway. During that time, the WRBP would remain with the State's power supplier. Brian said that Franklin's solar array project was on hold pending a legal dispute over rights one solar company wanted to assign to another company. So, it does not look as though the City's project in the farm field would be moving forward in the foreseeable future. It would be even more beneficial to the WRBP to have both the City and State portions of the farm field available for biosolids spreading.

**Authority Discussion:** Brian reminded members that in the 2012 MOU between the municipalities and DES, item No. 11 specified for the AB to work with the DES to study the possibility of transferring

governance of the WRBP to a new regional utility authority. The CIP Subcommittee has been tasked with determining a strategy for this process and Wes is now the chair of that subcommittee. The other members of the CIP Subcommittee included himself, Ray, and Steve. Brian asked Wes to provide an update.

Wes announced that the CIP Subcommittee narrowed the scope of work down to seven areas. The whole concept was not to collect the information to make a decision but how to get the information or get the steps needed to get the information to get to a point to decision. Those seven steps involved reviewing the legal requirements and legal instruments that would be required for a transfer and determining which asset transfer processes need to be followed. There were a lot of other factors to consider, such as legacy costs and the rights and authorities of the member communities plus any other issues to get from point A to point B; not to collect the information. To keep costs down, the subcommittee wants to use B&C as their consultant contracting directly with one of the member – like Franklin or Laconia - instead of contracting through NHDES to do this sole source study. Laconia is willing to do the contracting with B&C. Advantages would be that B&C would know who they are working for – the community, not the State.

Brian asked if the member communities that were interested in financing the study would pay a proportional share and no money would come through the State. Wes affirmed that this was what was envisioned. He estimated that the B&C contract would cost between \$10,000 and \$15,000 for the analysis to get from point A to point B, not collect the information. The first study would help determine the cost to get the information to make a decision – which could be to stay as-is, create an authority or something else altogether. Wes planned to put something together to send out to the other AB members so that they would have a better idea of what the CIP Subcommittee had in mind and of the member would participate financially. He also planned to talk with B&C beforehand in order to put together a better estimate. Steve affirmed that Meredith was interested in financially participating. Brian affirmed that Franklin and Glen affirmed that Northfield was interested in participating as well.

**Rate Assessment Formula Discussion:** Brian reminded members that Item No. 7 in the 2012 MOU specified eight steps for the AB and the DES to evaluate with regard to the cost allocation formula. He asked Sharon for an update. Sharon handed out a document titled *WRBP Franklin WWTP Capacity Status* and a memo dated July 14<sup>th</sup> titled *WRBP Flow Metering Program Draft Outline*. Gene said that they took a closer look at capacity allocations and put together a flow metering decision tree, which was in the memo. Flow has two components – flow contributions and capacity. Cost of service assessment, strength, flow, and capacity for structural components. Obtaining accurate data for billing purposes was an ongoing issue and one he hoped to resolve moving forward.

Sharon said that collecting defensible, accurate, and precise flow data for relative community contributions was important to the WRBP where both the current and proposed rate assessment formulas were concerned. The first step is the proposed flow metering trial at three (possibly four) of the southernmost locations due to the complexity of multiple locations being used to calculate the four southern communities – Belmont, Franklin, Northfield, and Tilton. There is the potential for imprecise flow measurement contributions at these locations because there are low flows in large pipes with several such locations each contributing meter and mathematical errors. The flow metering trial will allow the WRBP to evaluate alternative flow metering technology that may be able to collect more

defensible, accurate, and precise flow data. W-P identified the Belmont-Tilton, Tilton-Northfield, and Northfield-Franklin metering locations as locations with significant errors. Both W-P and EST suggested a flow metering trial using a different technology (laser flow technology) to see if it would help address the issue. Under the new contract with EST, the laser meters will be deployed and the monthly data from laser meters will be compared concurrently to the existing meters at those locations. The flow metering decision outline accounted for both positive and negative outcomes from the flow metering trial. The flow metering trial will take place over a number of months, because a longer time frame would allow more accurate data to be collected as month-to-month flows can vary dramatically. The WRBP may also consider working in consultation with W-P through a task order to complete an alternatives analysis for successfully measuring the community contributions from Belmont, Tilton, Franklin and Northfield if the different flow meters are not the solution to the flow measurement inaccuracies.

Sharon said that the other handout was an analysis for the member communities of the 2015 and 2016 flows using the flow meters which did provide the most accurate and precise flow data. This may help the member communities decide what their buying or selling capacities might be moving forward and whether they will need to adjust their capacity allocation in any new formula. Last year (2016) there was an extreme drought that may have been atypical of relative flow contributions in the future. That was why the two years were not averaged together. The percent capacity allocations purchased by each member community were based upon the WWTP design capacity [11.5 million gallons per day (GPD)] and not capacities at individual pumping stations. Percent of current flows and percent of “buy-in” capacity for these member communities are also shown. Gene said that even though the orange boxes could not be populated on the handout, that these member communities, Belmont, Franklin, Northfield, and Tilton, were collectively at approximately 38 percent of the overall purchased capacity (about 1.48 MGD or current flows for both years). The flow meter trial may help determine the breakdown between these communities. Part of the variability in Laconia’s flow percentages were due to the different flow meters used for Laconia flow determination regardless of drought conditions. A new flow meter was already installed to help address this identified variability – the Belmont Beach flow meter that is being used instead of the Winnisquam pump station flow meter that is not installed at an ideal location for obtaining accurate, consistent flow readings.

Brian indicated that this information was a great start. Wes indicated that Laconia’s emphasis on reducing water use, which correlates flow into the wastewater system, had declined and become more stable as a result of their water conservation and energy efficiency measures and that this may have helped stabilize Laconia’s flow. He indicated that most of the flow was now coming from between the house and the service line in the street. Brian indicated that sump pumps and roof drains were also an issue. Sharon acknowledged the work communities had done to remove I/I and that this was an opportunity to look at this information to make decisions related to projects to remove I/I and reduce a community’s flow contributions before any rate reset occurred.

**Other Business:** Sharon handed out draft copies of an informational pamphlet for end sewer users entitled *Winnepesaukee River Basin Program (WRBP)*. Included in the pamphlet is a chart comparing member community residential sewer rates and the portion attributable to the WRBP for each community’s current residential sewer rate (based on the NHDES definition of a typical 67,500 gallons per year residential use and any recurring costs). She asked each AB member to review their

community's information in the chart and accompanying table and confirm if the information is correct. She wants to be able for communities to use this informational brochure as they see fit – mailing with sewer bills, on front counters, etc. She wants this to be useful to communities to be able to educate the end sewer users in each community. Gene viewed this as a different way of looking at the capacity information and it demonstrated how each community had different rates due to the number of sewer users and infrastructure outside the WWTP. She asked if any of the AB members had any initial feedback on the informational pamphlet. Steve said that he was not in favor of the Advocates section on the back panel since there are many community representatives in the legislature and the information might serve to date the pamphlet. All agreed that a date on the pamphlet was necessary since this showed current rates. Brian indicated that he would like to use this pamphlet like the "What's Flushable" brochure he would include this pamphlet in his consumer confidence bulk mailing next year. Others suggested adding dates to the photos. Wes asked if the informational pamphlet would be made available to end users online as that was how most of the end users were accessing information. Sharon affirmed that it would be available as hard copy and on the WRBP website. Sharon asked the AB members to send any additional suggestions or corrections they may have for the informational pamphlet by August 3<sup>rd</sup>. She would reach out to the members not present at the meeting to confirm their information and ask for input. Sharon confirmed that the information included O&M, Admin, and capital repayment in the residential sewer rate graph and in the 2% total cost increase statement. Sharon asked that members provide input within the next two week and, if they needed hard copy or if a mass mailing was planned, to give her some notice so she could print enough copies

The meeting was adjourned at 11:15 am. The minutes were prepared by Pro-Temp Staffing. The next meeting will be held at the Corner Meeting House in Belmont on August 17<sup>th</sup> at 10:00 am.

Wes asked members to stay to discuss the mechanism for funding the B&C contract.