

**Minnesota 3M PFC Settlement**  
Notes for Drinking Water Supply Technical Subgroup 1 Meeting

Wednesday, February 17, 2021

1:00 p.m. – 4:00 p.m.

Virtual WebEx Meeting

Group members in attendance:

Brian Bachmeier	Brian Davis	Dan DeRudder	Gary Krueger
Jack Griffin	Jason Moeckel	Jim Westerman	John Hanson
Jon Herdegen	Karla Peterson	Marian Appelt	Matt Moore
Ryan Burfiend	Ryan Stempski	Stephanie Souter	Steve Love
Stu Grubb			

Presenters:

- Gary Krueger, Minnesota Pollution Control Agency (MPCA)
- Hannah Albertus-Benham, Wood
- Mark Lorie, Abt Associates

### Welcome

Mark Lorie (Abt Associates) welcomed the Subgroup to the meeting. Mark reviewed the agenda. The purpose of the meeting was to review detailed cost updates and discuss next steps. Gary Krueger (MPCA) also provided an introduction and gave an overview of the key steps to date: the draft Conceptual Plan was released in September and the Co-Trustees had recently held one-on-one meetings with the communities. There will be follow-up one-on-one meetings in late February and early March. He explained that the main work group meetings included a presentation on the public comments that were received. That presentation will be posted to the Settlement webpage. The Co-Trustees sent out updated well sampling information to the communities in early January. A few new well advisories were issued. The State also completed a legislative report which details upcoming plans for this project and others in 2021. MPCA also released a PFAS Blueprint, an action plan for dealing with PFAS across the State of Minnesota. The Blueprint can be found here: <https://www.pca.state.mn.us/waste/minnesotas-pfas-blueprint>. PFAS is a legislative priority for the upcoming year.

### Updated cost estimates for recommended options

Hannah Albertus-Benham (Wood) presented updated cost estimates for the recommended options. The updated costs are compared to those originally released in September 2020 in the draft Plan. The costs were refined primarily based on one-on-one conversations with the communities. Wood will continue to refine costs after follow-up one-on-one meetings in February and March. Updated cost details were sent to Subgroup members on February 5<sup>th</sup>. The goal is to make costs as conservative and inclusive as

possible at this point. Hannah clarified that the updated costs include 20-year operation and maintenance (O&M) costs both with and without interest. Key cost updates include:

- Options 1 – 3 (these costs include a West Lakeland municipal system and a Lake Elmo-Woodbury interconnect for options 1 and 2): there was an overall increase in capital of about \$180 million for Options 1 and 3 and an increase of about \$214 million for Option 2. The biggest difference is the lower HI threshold, which means additional wells and POETS are treated. The O&M costs

	Capital cost (\$Ms)			Annual O&M cost (\$Ms)			Total 20 year costs (\$Ms)*		
	Sept 2020	Jan 2021	Difference	Sept 2020	Jan 2021	Difference	Sept 2020	Jan 2021	Difference
<b>Option 1</b>	302	<b>481</b>	<b>179</b> (59%)	4.24	<b>4.36</b>	<b>0.13</b> (3%)	417	<b>599</b>	<b>182</b> (44%)
<b>Option 2</b>	320	<b>534</b>	<b>214</b> (67%)	4.54	<b>5.54</b>	<b>0.99</b> (22%)	441	<b>684</b>	<b>243</b> (55%)
<b>Option 3</b>	299	<b>479</b>	<b>180</b> (60%)	8.19	<b>7.98</b>	<b>-0.20</b> (-2%)	520	<b>694</b>	<b>174</b> (33%)

were not impacted as much as capital costs.

- Wood looked at several options for Lake Elmo and West Lakeland Township. Capital and O&M costs are highest for Option 2 with West Lakeland Township on a municipal system and Option 3 with West Lakeland Township on a municipal system. Details on cost differences between these options were sent out to Subgroup members on February 5<sup>th</sup>.
- Some overarching changes to costs included stormwater compliance costs, community-specific updates (e.g., Lake Elmo-Woodbury interconnect), updated service laterals costs to connect homes to the system, power factor adjustment for large water treatment plants in Cottage Grove and Woodbury, demolition of temporary facilities, costs of POETS installed after the Settlement in February 2018, well and tank costs prorated to include expedited projects, and reduced some O&M costs related to the St. Paul Regional Water Supply bulk water rate.
- There is an updated number of POETS estimated for West Lakeland. Previously, Wood included costs for all homes to be connected if a municipal system were put into place. However, after additional evaluation, it was determined that connecting some homes was not as feasible as providing them with POETS. In addition, more POETS were added based on updated sampling data from 2020.

Hannah also discussed in more detail the factors that influenced costs. Wood used an updated power factor to scale high-capacity water treatment systems based on feedback from the communities. They

found, using an EPA tool, that 0.85 is appropriate. It makes sense to keep a smaller power factor (0.6) for smaller systems. This primarily impacts Woodbury and Cottage Grove that have plants over 6,000 gallons per minute. This creates an overall cost increase of \$8.3 million for Option 1 and \$17.1M million for Option 2.

Wood also worked to refine the service lateral connection costs. The updated costs incorporate the price to remove POETS (\$4,000 per POET) and community-specific conditions based on past experience, shallow bedrock, and City connection charges. This brings service lateral costs to \$19 million. This also brought up the importance of being consistent in what the Settlement covers across communities. One large factor is city connection fees that can include water availability charges, water connection charges, water meter charges, and permits. Each community has a different fee schedule. There are differences among communities on how they apply these fees in the expedited projects.

The most impactful cost update was stormwater compliance. The Valley Branch Watershed District requires stormwater management for all projects that create or reconstruct impervious surfaces equal to or greater than 6,000 square feet. Other construction permits have similar requirements. Based on a recent project in Cottage Grove, Wood estimated \$82/linear foot of pipe to account for stormwater compliance. However, these costs will not be fully known until the design phase. It is currently estimated that stormwater compliance accounts for \$70-90 million in additional capital costs across the options.

Hannah also reviewed cost updates by community:

- For private well-only communities (Afton, Denmark, Grey Cloud Island, Maplewood), there is a total 20-year increase of \$1.4 million for Options 1 and 3, and \$1.6 million for Option 2
- For Prairie Island Indian Community, there is a total 20-year increase of \$3.3 million. This is primarily due to costs for well modifications, ground storage tank, water distribution lines, and service laterals.
- For some of the smaller communities, there were also increased total 20-year costs: Lakeland (\$1.4 million), St. Paul Park (\$3.5 million), and Newport (\$0.1 to \$0.8 million for Option 1/3, and Option 2 respectively)
- For Cottage Grove, there was a total 20-year cost increase of \$18.4 million for Options 1 and 3, and a \$34.9 million increase for Option 2. Option 2 includes additional costs due to the lower HI threshold.
- For Oakdale, there was a total 20-year cost increase of \$8.4 million for Option 1 and \$7.7 for Option 2. Wood had previously predicted Oakdale would need two wells, but further analysis showed they need three to meet capacity.
- For Woodbury, there was a total 20-year cost increase of \$74.5 million for Option 1 and \$91.9 million for Option 2. These costs reflect the updated power factor and increased costs for a replacement well, stormwater piping, and distribution line upsizing.
- For West Lakeland, there was a total 20-year cost increase of \$61.1 million for Options 1 and 3, and \$61.8 million for Option 2 if they implement a municipal system. The Co-Trustees made the decision that if West Lakeland chooses a municipal system, residents will not be allowed to keep

their wells. This is consistent for what was decided in other communities. However, Wood did consider irrigation demands in their cost updates.

- For West Lakeland, there was a total 20-year cost increase of \$6.1 million for Option 1 and \$6.5 million for Option 2 if they installed POETS for all residents. This cost does not include particle tracking showing where PFAS may move in the future (particle tracking costs are accounted for outside of capital costs).
- For Lake Elmo and Woodbury with an interconnect, there was a total 20-year cost increase of \$10.6 million for Option 1 and \$37.6 million for Option 2.
- Wood also began estimating costs for a Lake Elmo autonomous option. This option involves two additional wells in southern Lake Elmo. Costs to relocate the wells are not covered under the Settlement since they are related to growth and do not have PFAS contamination. However, costs covered by the Settlement include stormwater piping, additional piping and distribution, and costs for service laterals and private well sealing. This option was created to try and work around the White Bear Lake situation. The interconnect option is more expensive by approximately \$20 million.

Hannah then discussed cost updates for Option 3. The increased costs primarily came from stormwater compliance costs. Under Option 3 SPRWS would provide softened water to Lake Elmo and Oakdale, which could save many homeowners money. Currently the O&M estimate for Option 3 includes the full bulk water charge for SPRWS. Subtracting out estimated cost savings to homeowners for softened water is being considered.

Overall, Wood incorporated a lot of feedback into the updated costs for Priority 1 funding categories. The estimates are a Class 4 level of accuracy with a margin of error +50%/-30%. More accuracy will occur in the detailed design phase. The increased costs create shortfalls of \$56-\$263 million under the previous funding allocations and O&M timeframes. The Co-Trustees do not plan to pull funds from the capital and O&M funds to cover the other funding categories; however, final decisions have not yet been made.

#### *Feedback:*

One Subgroup member asked about places in the Plan where redundancy might be justified. Some redundancy is needed for resiliency. They would like to discuss this further in the technical meeting. Gary asked them to discuss this as soon as possible. Another Subgroup member agreed. Some of the scenarios for Woodbury would involve running all wells through a single transmission line. If that line broke, it would take half of the system out of operation. They support a dual line system to remove some of that risk.

One Subgroup member asked for clarification on what triggers the stormwater piping costs. Hannah explained that they included an extra \$82 per linear foot for piping costs. She said that these costs are primarily related to roadwork since these projects would either create or reconstruct impervious surface.

Another Subgroup member asked about funding for additional POETS. Hannah explained that the costs include sampling conducted through October 2020. Sampling done after that is not included. There is no capital and O&M costs included to install future POETS but the funding allocations include a contingency fund which incorporates treatment for potentially impacted wells based on future PFAS movement.

Hannah then began a discussion with the Subgroup on city connection fees, stormwater compliance, water softening, and cost estimates.

#### **City connection fees:**

Hannah asked the Subgroup if it is appropriate to cover City fees using Settlement funds. Gary said they could have additional conversations in one-on-one meetings. The Co-Trustees want to make sure they understand what city fees cover and make sure they do not cover the same things twice.

#### **Feedback:**

One Subgroup member agreed that it was important for the Settlement to not cover any costs doubly especially given the varying fees between community. They want to make sure no communities are “double dipping” on reimbursement.

#### **Stormwater compliance:**

Hannah asked the Subgroup if the stormwater compliance costs seem accurate based on previous experience and rules in place.

#### **Feedback:**

One Subgroup member said that Lake Elmo has dealt with these requirements in most of their capital improvement projects. Most of the community lies in the Valley Branch Watershed District although different rules apply for different watersheds. They feel that \$82 per linear foot seems high. Construction projects in neighborhoods with tighter corridors mean excavating a lot more road to give service to everyone – you essentially have to recreate the road once the pipes have been put in, which triggers the stormwater compliance issues. A lot of the compliance comes through treating a certain volume of the stormwater (e.g., with an infiltration basin), not just installing storm drains/pipes. Since construction workers would not be running stormwater pipe along every foot, \$82 seems high. In reality, stormwater pipes would only run about 50% of the main water pipe. In more rural areas along county roads, there are fewer permit requirements for directional drilling and less road disturbance. Stormwater management could mean working in the roadside ditches, which would not impact the road at all. Stormwater compliance is more of an issue in neighborhoods.

Another Subgroup member agreed. The same rules apply to West Lakeland, which is also primarily in the Valley Branch Watershed District. Transmission lines along county roads and less impactful. They suggested looking at the amount of neighborhood area versus rural area to get a more accurate estimate of stormwater compliance costs.

Another Subgroup member brought up the new MS4 permits from the MPCA that have similar requirements to the Valley Branch Watershed District for stormwater compliance which will impact all communities uniformly. Wood is aware of this updated permit.

#### **Water softening:**

Hannah also reviewed the topic of central water softening. Central softening has benefits to residents and the environment and some synergies with the pre-treatment process necessary in certain communities. Estimated cost for centralized water softening in Cottage Grove for one treatment plant is \$12.6 million. There are also health considerations, such as lost sources of important minerals. Hannah asked the Subgroup if they feel this is Settlement-eligible and if it is a priority.

#### **Feedback:**

One Subgroup member from Cottage Grove said that while they brought up this topic in December, they recognized capital costs estimates have now increased and the Settlement may not be able to cover this cost. However, from a sustainability perspective, this is something to continue talking about and considering. They suggested that the design accommodate future centralized water softening and that conversations continue surrounding cost sharing options.

Hannah said the Government-3M Work Group suggested having a meeting entirely dedicated to water softening in the near future.

#### **Cost estimates:**

Hannah and Gary asked if the Subgroup members were comfortable with the updated cost estimates.

#### **Feedback:**

There was no feedback from the Subgroup on this issue.

#### **Next steps**

Mark reviewed the next steps in the process for finalizing the Plan. Over the next couple months, the Co-Trustees will continue to gather feedback and update the Plan based on that feedback. There will be one-on-one technical and leadership meetings throughout the next month. The Co-Trustees expect to have a final decision in May and release the Plan in June.

The next Subgroup meeting will occur on Wednesday, March 17<sup>th</sup>. The agenda is not yet set but will most likely include additional updates made to the Plan.

#### **Public comments and questions**

One member of the public asked about the stormwater compliance. They asked how the Co-Trustees planned to separate stormwater costs from growth-related costs. Wood explained that the water mains being installed under the Settlement that would trigger the stormwater compliance requirements are being put in because of PFAS, not because of growth. The Settlement funds are not being used for growth. The only thing related to growth in the Plan is wells that are necessary in the future (those costs

are not covered by the Settlement) and capacity at treatment plants (these costs are pro-rated based on the growth). The member of the public agreed that these costs seem extremely high for stormwater compliance costs.