



# Minutes of Meeting

**DATE:** October 24, 2016  
**MMI #:** 4430-02  
**PROJECT:** Moon Brook Impoundment Modification Project

**ATTENDEES:**  
See full attendees list.

**SUBJECT:** Public Meeting #1 Notes

**LOCATION:** Rutland High School Lecture Hall

See presentation slides for specific information presented in each portion of the meeting.

**7:00 Roy Schiff, Milone & MacBroom– Introduction and Project Overview:**

- Public Comment- Be clear when describing dams to clarify not beaver & clearly mention which ponds

**7:10 Jeff – Background:**

- 2 weeks ago the ANR/City lawsuit was settled
- There was a 20-year to-do list created as part of settlement
- Oct 1, 2018 – modifications to impoundments need to be under construction in order to meet the settlement agreement.
  - We are here to start the process together to figure out the right way forward together.
  - We need to make improvements & measure & show progress
- The settlement agreement is an 18-page PDF on City's ponds website
- If the City takes no action by Oct 1, 2018 then the state could hold conference to pursue dam removal order. At that point the dams would be removed.
- In order to avoid this outcome, we need to use time wisely. We have a year to figure it out together.
- We are not here to talk about:
  - Beavers, VTWQ standards, if ponds are heating the water or other things that are out of our control.
  - A separate meeting will be held for anyone interested in talking about the beavers. This is an immediate issue that is not related to this process. Please contact Jeff if you are interested in being part of this meeting. This will be held in the next few weeks.
- Public Question, Julie – What started this?
- Jeff - ANR designated Moon Brook as impaired
  - The law requires community to make improvements.
- It is possible to reverse the impairment designation, streams have come off 303d list – Mettowee is an example
- For the cause of impairment, the City thought thermal and the State thought stormwater. After a third party review it was determined that both parties were right and Moon Brook is impaired by both thermal and stormwater

- Based on the Mettowee example, the thermal impairment could be corrected 2 years & less expensive so we are working on that 1<sup>st</sup>
- The more we do now, the less we do later by requirement
- City also investing in SW improvements
- Feds gave 5-year time line & a hold on lawsuit
- Public Question - Any thought to dredging or shade?
- Jeff – yes, Shade is key and dredging is one option because we know that water is colder at the bottom.
- Roy – Yes, we will look at all alternatives. If pond is wide then the shade will not reach the middle. All alternatives are still on the table.
- Public Comment – I think the neighbors would pay for dredging and that the US district court will eventually make the decision.
- Public Comment – Have looked you looked at how climate change affects the ponds
- Roy – We have not looked at climate change specific to this Moon Brook project. I am not sure about how an increase in the temperature of the baseflow may be caused in part by climate change.

#### 7:33 Ethan Swift – Watershed, Water Quality, & Projects

- Public Question – Why are you showing the fish and bugs? What do they mean?
- Ethan – The fish and macroinvertebrates are examples of different classes of biota that we can use to determine how healthy the stream is. I am just showing them as an example of the process.
- Public Question – Why is the impairment important?
- Ethan - Reviewed why it is important that we meet standards, explained that we are not meeting the adopted standards, and explained that it is federal law to do so.
- Public Question – Are the state impairment standards the same as federal standards?
- Ethan - Yes. The state uses the federal protocol created by the EPA.
- In order to address the Thermal impairment, on the Mettowee we added trees along the river to create a canopy. We are already doing the same here, but there is need for more shade.
- Public Comment, Mike – We need to review the cities buffer standards to remove the requirement to mow and need to decide on buffer widths.
- Jeff – The city does have a no-mow requirement in the buffers.
- Ethan – In areas where buffers have been planted there is a no-mow requirement as part of the project. The examples shown on the slides are shown on the day the trees were planted, before the grasses grew tall.

#### 7:47 Roy Schiff, Milone & MacBroom – Project Requirements

- Public Comments – Several people disputed the temperature data source and accuracy.
- Roy – The data shown in the slides was compiled in the report that is referenced on the slide (Kleinschmidt, 2015). The raw data was collected by the City.
- Both ponds being considered in this project.

- Public Comment – At Piedmont Pond it is filling in with sediment and cattails. Now it is so shallow that ducks walk across. It is silting in with lots of sand. I think dredging should be done. At Piedmont Pond dam, someone used to pull out stop logs. How can we be expected to maintain the pond if we are not allowed to touch it? 10 years ago a group tried to rehabilitate Piedmont Pond and the application was denied.
- Public Question - How much \$ spent on this issue since 1986?
- Stormwater comes from whole watershed, not just the area immediately at the ponds.
  - But for this grant the stormwater treatment needs to be in Charter Hills
  - A stormwater treatment element will be part of project in the watersheds is going to ponds.
- Public Comment, Mike - Combination pond helped with flood control during Tropical Storm Irene. There was 300,000 ft<sup>3</sup> stored in Irene, in addition to the 300,000 ft<sup>3</sup> normally stored.
- Public Question - Who gets hurt if dam breaks? I live in the cross hairs downstream of Combination Pond dam. This makes me uncomfortable, especially with what the last commenter said about the storage during a large storm. Safety should be number 1. If something done at the ponds then the dams should be made safer.
- Discussed dam safety, see slide.
- Originally the Combination Pond dam was created for agriculture but in the 50's the residential land developers rebuilt it as an amenity.
- Public Comment - There as a stormwater ruling in a Virginia case, but it does not apply in VT
- Public Comment - The buildings at the Health Center need stormwater treatment.
- Public Comment - Moon Brook is not a trout stream, it has a silty bottom
- Public Comment – Moon Brook needs buffers
- Public Comment - Piedmont Pond is not public, but Combination Pond is therefore they should be considered separately.

#### 8:15 Roy Schiff and Jessica Louisos, Milone & MacBroom - Stakeholder Values Exercise

- The audience was asked “What do you value about the impoundments?”
- Public Comment – We don't know what an impoundment is. Please call it a pond.
- Audience members suggested different values that were recorded on large paper.
- Following the collection of values, members were each given 4 dot stickers and used them to vote for the values that meant the most to them.

#### 9:05 Open Comment Period:

- Public Comment, Mike – We need to keep balance, the City doesn't represent citizens and this process has previously been adverse to citizens. Look at pg 8 Line 22 of the federal settlement where it says it is not a court order. Combination Pond has 70 deeded property owners. A Thermal TMDL doesn't exist, but will be developed. The Hobo meters used in temperature monitoring have batteries that overheat. Just look at Samsung. Combination Ponds is only 2 acres of the 1800 acres in the watershed. Temperature is not measured at the bottom of the pond. I have valuated loss of the ponds at \$20 million (based on values). Property values are down. I will take the case as far as it needs to go. Everyone should do homework into the temperature measurements.

- Jeff – The court order is in the state lawsuit settlement completed by Judge Dirkin, not in the Federal settlement. There was a Thermal TMDL created for Mettowee, which has since been delisted. It is possible to find the information on this by searching google for “Thermal TMDL Mettowee”. The accuracy of the temperature sensors has been debated in past. The measurements were taken in 15 min intervals since 2005. I will put website links to the temperature data on the website. A study was done on the temperature stratification by depth of the pond and I will put this on the website too. In the previous engineering study, D&K did an alternative that used the cooler bottom water from the pond. In considering dredging, we will need to look at possible temperature gradient in the ponds and the benefit it can give. The temperatures show on the chart are only the warm months.
- Ethan – Even if dredging was considered, in Combination Pond the hard bottom of the pond is only 2 feet below the existing sediment level (9 feet down). Therefore dredging would not give them much additional depth. No one has measured Piedmont Pond sediment depths.
- Public Question - Would we even be here discussing this issue if the ponds were natural?
- Ethan - Yes. The impairment is based on the measured condition of the stream and if it had the same results, it would be impaired, regardless of if the ponds were natural or not.
- Public Question - Has flow been compared to other streams?
- Jim Pease, VT Agency of Natural Resources – Yes. The USGS did small study in 1960s. A Flow TMDL has also been done. The attainment (target flow condition stream) is Tenney Brook. The TMDL requires a reduction in flow by 12%.
- Question – Why is there sediment on bottom of the ponds?
- Jim – Sediment is there due to long-term urbanization. Sediment issues with stormwater are a national problem that is seen everywhere that urbanization has occurred.
- Roy – Stream features such as pools, riffles, bank vegetation all influence fish habitat. Pollutants also impact habitat.
- Public Question – Has Fish & Wildlife stocked fish in Moon Brook?
- Shawn Good, VT Fish & Wildlife – Moon Brook is not the type of stream that Fish & Wildlife usually stock with fish meant to live long term. They do stock on the Kiwamis Derby Day. This is just a Put & take stocking and is not long term.
- Public Comment – You need to look at the tributaries, Paint Mine & Muzzy Brook.
- Jeff – Yes. Both of these are being included in fixes.
- Public Question - Do we know cost to dredge?
- Roy – We will come up with costs after next meeting.
- Public Comment, Mike – The area around the ponds is used by deer overwintering and lynx.
- Public Comment – Please consider varying the night of the week of future meetings and communicating schedule dates early in order to maximize participation.
- Public Comment – I appreciate that you are here to hear our input.

Adjourned Meeting 9:20 pm