

River Advisory Committee Meeting
Thursday, April 22, 2021
3 PM
Remotely via Zoom
Final Minutes

1. Call Meeting to Order

Members present: Richard Huber (Chair), Lionel Ingram, Dan Jones, Rod Bourdon; Ginny Raub, Conservation Commission Rep.; Niko Papakonstantis, Select Board Rep.; Paul Vlasich, the Town Engineer; and Warren Biggins, PEA Rep.

Members Absent: Terrie Harman, Carl Wikstrom

The meeting was called to order by Mr. Huber at 3 PM.

Mr. Huber read a statement:

As Chair of the River Advisory Committee, I find that due to the State of Emergency declared by the Governor as a result of the COVID-19 pandemic and in accordance with the Governor's Emergency Order #12 this public body is authorized to meet electronically.

Public notice of this meeting was posted on the town website and on the bulletin board of the town offices at 10 Front Street. As provided in that public notice, the public may access the meeting online and via phone. The usual rules of conduct and decorum will apply.

Please note that all votes taken during this meeting shall be done by roll call vote. Let's start the meeting by taking a roll call attendance. When each member states their presence, please also state whether there is anyone in the room with you during this meeting and who that person is (son, daughter, spouse, etc...), which is required under the Right-to-Know law.

Mr. Huber started the meeting by taking a roll call attendance.

1. Pickpocket Dam Project

Jake San Antonio and Jill Baumbach of VHB Engineering were present to discuss Pickpocket Dam. [The slides for this presentation can be found on the River Advisory Committee page of the Exeter town website, at <https://www.exeternh.gov/bcc-rsc>] Mr. San Antonio gave a presentation on their Pickpocket Dam preliminary spillway alternatives analysis. The dam alternatives they considered were 1) an increase in abutment height; 2) adding a second abutment; or 3) removing the dam and fish weir. The dam abutment is currently 66 feet, and the 100-year flood would just about overtop the existing abutments at 66.14 feet. 2.5x the 100-year flood would be 2.2 feet over the current abutments. Cross Road Bridge was found to have no impact on flood elevations. The river naturally narrows where the bridge is, and that's what is causing the constriction. It would require a much larger earthwork project to impact the dam.

Regarding alternative 1, they looked at raising the abutments to 70.96', or a rise of 5 feet, but this would create an increase in the 100-year flood elevation, which is undesirable. If they did the same alternative but also removed a sediment island, they would need to add 4.43 feet to the dam, and this would lower the 100-year flood elevation. Regarding alternative 2, creating a second abutment, this alone creates an increase in the 100-year flood elevation, which is undesirable. If they additionally remove the island, which would decrease the 100-year flood elevation, they would also need to add 3.21 feet to the existing abutment elevation. Regarding alternative 3, dam removal, this would decrease the 100-year flood elevation by 5.4 feet. He also discussed the possibility of extending the dam with new tiebacks of 140-175' to contain the 100-year storm event; these would be on town property on one side but extend off of town property on the other. Additional survey and evaluation would be required.

Robert Stephens, the Chair of the Brentwood Conservation Commission, asked about next steps. He's concerned about other impacts, such as on upstream wells. Mr. San Antonio responded that this is just a preliminary study of the hydraulics requirement to pass the design flood. They'll be working with the town to determine next steps.

Paul Vlasich said the town had a substantial dollar figure in the CIP to do an alternatives analysis for Pickpocket Dam, but that request did not make it to the town warrant. They were left with the previous year's fund. To move forward, they contracted VHB to use existing information to understand the 2.5x storm event and the effect it would have on the dam. Typically, they would have done surveys and gathered field data before this analysis, but the town wanted to get started. The town also needs to talk to the State about the possibility of lowering the dam's classification.

Don Clement asked about the tiebacks. Mr. San Antonio said the tiebacks are the extent of the new abutments, whether it's a concrete or earthen portion.

Mr. Jones asked if there was any effect of the Cross Roads Bridge on the dam removal option. Mr. San Antonio said no, the bridge had no effect on any of the alternatives they evaluated.

Mr. Jones asked where the 2.5x the 100-year flood number came from, and whether it had been challenged. Mr. San Antonio said that's what DES has set as the discharge metric for a high hazard dam. It's applicable to all high hazard dams. He can't speak to how DES set those standards, but it's typical for States to have higher discharge requirements based on hazard class. If this is a high hazard dam, meaning that failure has the potential to risk life, the standards are high. Ms. San Antonio asked if that had been challenged in NH, and Mr. San Antonio said not to his knowledge.

Mr. Stephens said he practices dam engineering, and he's never heard of a challenge to the 2.5x standard. If it were a new dam, there would be a statistical analysis for probable maximum flood; if an existing dam, it has a grandfathered criterion to meet.

Christopher Clinton, an Exeter resident, asked if there are water level maps that would give a better idea of how the dam and a potential flood affects everything. Mr. San Antonio said VHB has not prepared any inundation maps, but the FEMA flood insurance rate maps might be a good place to look. Mr. Clinton asked how changes to the dam might affect water levels of wells and wetlands. Mr. San Antonio said the first two options he presented would have minimal to no impact on groundwater levels. Regarding dam

removal, they only considered the high-level events, and don't yet have enough information on the effects at normal level.

Mr. Clement said the proposal to extend or raise the abutments is intriguing, but the numbers are preliminary. He would like to see more data.

Mr. Ingram said they should go back to the State and try to make it not a high hazard dam. The high-risk part is based on problems downstream, which they could potentially address and lower the classification. They should consider that before spending money on changing or taking the dam out. Mr. Huber said he thinks they already looked at potentially purchasing downstream property but didn't think it would work. Mr. Vlasich said they are going to clarify their options there with the Dam Bureau. Even if they were able to reduce the high hazard to substantial hazard, they will still have to do work on the dam based on the 100-year storm events. It doesn't sound like the Committee has ruled out any of the three options, so the next step would be to gather additional information. He should have info to report next month.

Mr. Jones asked if dam removal brings Route 111 or the Linden Street Bridges into play, since they'd be sending a great deal more water down to them. Mr. San Antonio said this dam is not being operated to modify flood peaks, so the dam itself doesn't create a lot of attenuation. Removal of the dam is not expected to change flood conditions downstream.

Mr. Stephens asked if the fish ladder is working. Mr. San Antonio said yes, and it is monitored by NH Fish and Game. It's not working as successfully as they would like, but it does pass fish.

Mr. Biggins asked if dam removal or reinforcement was the cheaper option. Mr. Vlasich said in the Great Dam project, it would have been 30-40% cheaper to anchor the dam in place than to remove it. The removal was expensive because they also had to recontour the river to allow fish passing and make other riverbed improvements. Mr. San Antonio said the lack of long-term maintenance often makes the removal the cheaper option. Mr. Vlasich said there may be grant funds out there for removal of a dam, but likely not for rehabbing it.

Mr. Ingram left at this time.

2. Other Business

- a. Emergency funding for the sewer siphons that cross the Squamscott River
Mr. Huber said that Interim Town Manager Melissa Roy submitted the siphons project to Rep Chris Pappas, who will pick 10 projects to bring to Washington to fight for funding. They should show community support through letters and comments. Mr. Papakonstantis described the process of this proposal so far. In the worst-case scenario, if they don't get any money from the American Relief Fund, they are looking at ways to move forward with what they have now.
- b. 2021 Climate Summit
Mr. Huber mentioned an upcoming climate summit held by the Coastal Adaptation Work Group (CAW) on May 26 and 27.
- c. 2022 Alewife Festival

Mr. Huber said that Kristin Murphy asked him to gauge the Committee's interest in designating a representative to a temporary festival committee.

- d. Bob Glowacky mentioned that the documentary about the river that EXTV released in 2019 has been viewed more than 25,000 times.

3. Approval of Minutes

- a. Minutes of September 17, 2020

Corrections: Mr. Huber said that on the top of page 2, "BRC" should be written out as "Budget Recommendations Committee." On the last page, "RAB" should be "RAC"/River Advisory Committee. It also says that members discussed an issue with the River Advisory Page of the Town Website; he has no memory of that, but since it's in the minutes he doesn't want to take it out.

Mr. Bourdon moved to approve the minutes as amended. Mr. Jones seconded. The motion was approved unanimously.

- b. Minutes of November 19, 2020

Corrections: Mr. Huber said that "BRC" should be "Budget Recommendations Committee."

Ms. Raub moved to approve the minutes as amended. Mr. Bourdon seconded. The motion was approved unanimously.

- c. Minutes of March 18, 2021

Corrections: Mr. Huber said that on page 2, there's an extra "had" that should be removed. There were also two sentences on page 2 and 3 that don't have a period at the end.

Ms. Raub moved to approve the minutes as amended. Mr. Huber seconded. The motion was approved unanimously.

4. Public Comment

- a. There was no public comment at this time.

5. Review Committee Calendar

- a. The next meeting is May 20, 2021 at 3 PM.

6. Adjournment

Mr. Jones moved to adjourn. Mr. Huber seconded. All were in favor and the meeting adjourned at 4:10 PM.

Respectfully Submitted,
Joanna Bartell
Recording Secretary