

Town of Barnet
Dam Committee Meeting Minutes
August 31, 2022
2750 Roy Mtn. Rd at 4 pm

Attendees: Dam Committee members George Coppenrath (by phone), Red Dufresne, Don Easter, Dylan Ford, Joe Mangiapane.
Members of the Public: Harry Cornelius

Meeting called to order at 4:12pm

Purpose of the meeting is to discuss goals and expectations of the meeting September 6 at 2pm with Vermont Section Chief and Dam Safety Engineer, Ben Greene and Dam Safety Engineer Steven Hanna.

Mr. Coppenrath opened the meeting by stating that there has been significant growth in the area around the lake and upstream and downstream of the dam since the dam was constructed 100 years ago. Any drastic removal of the dam and thus lowering of the lake level would have potentially significant unforeseen ramifications. Therefore, removal is not an option. The 1970 alterations of the dam were allowed to proceed without a hydrology study. Now we need to address the concerns that those alterations created; namely backflow into Harvey's Lake.

There was discussion regarding potential fixes to the dam that may alleviate the backflow issues. Mr. Mangiapane was concerned that the dam crest was not level and was lower to the west which has created the silt deposition to the east. He also stated that lowering the dam height might potentially help. Another idea mentioned by Mr. Dufresne was the crest gate that Dr. Downer has an engineered drawing of. It would not change the geometry of the dam as the gate would fit exactly into the stopboard slots. It wouldn't stop backflow during all intense storms, but but would reduce the amount of backflow during all storms and would reduce the nutrient load during heavy storms by allowing more flow to pass over the dam. Discussion then went to Dam Alteration permitting vs Dam repair. The board agreed that Dam repair was a preferable approach. Even with the old Dam Alteration permits filed, it is a long shot to get any approved. The board agreed on this matter.

Ms. Ford suggested that essentially, the main goal of this meeting with the State is to protect the future of our resource, Harvey's Lake. The threat to this resource is the backflow into it from high water events and the spilling over of S. Peacham Brook. Ms. Ford thought perhaps the approach to the State should simply be that we can't lose this essential resource to the Town and how can we protect it from all the negative outcomes that will come should this backflow continue. Should the State's answer include removal of the Dam, we may want to ask what that might look like from the Lake homeowners perspective; how low would the level go, what happens to the land uncovered from lowering the lake? We are not interested in removing the dam, but it may be good to get these questions answered.

There was discussion on the alternative of allowing the State to take over ownership of the dam. The concern was that someone from the state had indicated it was likely the state would breach the dam and allow the lake to drop to pre-dam levels. Mr. Mangiapane thought this may be 1.5 feet as he recalled a ledge across the outlet near the Havery Lake Condominiums. Mr. Dufresne indicated he thought that Dr. Downer felt the drop would be more like 3 to 4 feet based on some old photos. Mr. Mangiapane was going to review the ledge probes taken by Interfluve

to confirm the potential vertical drop if the dam was breached.. At any rate, there was general consensus that the dam ownership should not pass to the state due to loss of local control.

Mr. Easter suggested that we simply ask Mr. Green and Mr. Hanna what they suggest we do to help us eliminate the problems caused by the dam. The board thought this was a good suggestion and may encourage collaboration rather than discord between the Town and the State.

Ms. Ford will get copies of photos of before and after the silt was cleared from behind the dam and print out the picture of the lake that outlines the silt problem. She will also try and get an estimate of what we've spent on the dam repair process through the years.

The strategy for September 6 at 2pm:

Ms. Ford will open with a welcome and a statement suggesting collaboration on improving the water quality of Harvey's Lake.

Mr. Coppentrath will suggest give a brief summary of why we are having backflow issues and issues we'd like to see addressed;

1. Reduce frequency and volume of backflow events in order to reduce adverse water quality effects from Peacham Brook without any major construction modifications at the existing dam.
2. Improve operational safety and security at the existing dam.
3. Do the best we can to diminish backflow with the existing dam.

Mr. Dufresne will outline what we think will accomplish these goals.

1. Repair or replace the bottom drain gate, stem, and stanchion and install a trash rack upstream of the bottom drain gate
2. Replace the stop boards with an automatic gate.
3. Cut off the east wall of the fish ladder at the same elevation as the dam crest.
4. Install some grating and handrails to increase safety during maintenance activities and inspections.

At this point in the September 6 meeting we assume that the conversation will take it's own direction.

We are all in agreement that the spirit of collaboration is our goal.

The agenda for the meeting is appended to these minutes.

Ms. Ford made a motion to adjourn, Mr. Mangiapane seconded.

Adjournment: 5:30pm

Next meeting: September 6, 2pm at the Dam.