## DRAFT Minutes HARVEY LAKE DAM COMMITTEE KICK OFF MEETING WITH NICOLE BUCK, PE FROM McFARLAND JOHNSON JULY 7, 2023

A meeting was held at the Barnet Library at 12:30 PM on July 7, 2023. The purpose of the meeting was to go over the Engineering services agreement with Nicole Buck, PE from McFarland Johnson, Inc. who will prepare the Hydraulic and Hydrologic (H&H) study in an effort to obtain a "low hazard dam" rating rather than the current "significant hazard dam" rating. According to Ben Green at the DSP, a low hazard rating would streamline the permitting process.

The following individuals attended the meeting:

Individual	Title	Representing
Nicole Buck, PE	Professional Engineer	McFarland Johnson, Inc
Dylan Ford	Co-chair selectboard	Town of Barnet
	and Barnet Dam	
	Committee Member	
Shane Stevenson	Contractor	Town Resident
Don Easter	Barnet Dam	Town of Barnet
	Committee Member	
Joe Mangiapane	Barnet Dam	Town of Barnet
	Committee Member	
Red Dufresne	Barnet Dam	Town of Barnet
	Committee Member	

The following items were discussed at the meeting:

- 1. Dylan opened the meeting by going over the goal to of maintaining and improving Harvey Lake water quality by eliminating backflow of agricultural runoff from the South Peacham Brook. We have recently received information from Vermont Fish and Wildlife that the water column below 30 feet is deficit in regard to dissolved oxygen and insufficient for lake trout and normal rainbow trout which ratchets the situation up to a crisis and requires a short-term solution. Dylan pointed out the frustration of dealing with this situation for decades and every alternative has met with pushback from various state agencies and failure to obtain approval for any alternative solution.
- 2. Dylan related the discussion with the representative of the Flood Resilient Funding Program and noted that the prospect for any grant funding was remote.
- 3. There was discussion about a recent meeting with Sacha Pealer which is recorded in the minutes of the July 6, 2023 meeting.
- 4. There was lengthy discussion on the history of the current and previous dams at the location and the condition of the outflow channel as observed before and after the current dam was constructed.

- 5. Shane related that erosion has occurred by numerous lake property owners due to the higher than normal lake level due to backflow of South Peacham Brook into Harvey Lake.
- 6. There was much discussion of the previous days meeting with Sacha Pealer in regard to the flow criteria used by FEMA to determine the 100-year flood elevations and boundaries. Shane and Red pointed out that the exact number used by FEMA was not readily identified in the 1988 information but in one case appeared to be about 3,000 cfs and in another place appeared to be 2,300 cfs for the flow below the Harvey Lake dam during a 100-year flood.
- 7. Red showed Nicole page 27 (attached) of the Interfluve report which listed the 100-year flood flow below the dam as between 1,740 cfs and 2,125 cfs after discarding the M&M value which seemed to be an outlier to Interfluve.
- 8. Nicole was surprised that the Interfluve work included flood effects estimated by modeling flood flows for 1.5 miles downstream of the dam which will be very beneficial with her work.
- 9. Joe asked if the design plans would be helpful and Nicole indicated it would be good to have the information and Red indicated he would send the plans (completed).
- 10. Red noted that Sacha indicated that Nicole should contact her in order that Nicole can be aware of the criteria used in the revised FEMA mapping which may affect the criteria used in the final memorandum. Red indicated that Sacha noted that any flow used for the 100-year flood in the H&H study must be at least the number used by FEMA. Nicole indicated that she would contact Sacha and discuss the project criteria with her.
- 11. After the meeting Joe, Red, and Nicole reconvened at the dam and Nicole took some photos. Red and Joe outlined the proposed project and observed the significant siltation which had occurred on the easterly upstream area of the dam. Nicole left to observe the beach area and the Harvey Lake Bridge on the South Peacham Brook and the Garland Hill Bridge below the dam.