

Bristol Mills Dam ad hoc Advisory Committee
Minutes of Meeting Tuesday, June 13th, 2017
Congregational Church of Bristol, church hall meeting room

Committee members present: James Albright, Pam Allen, Phil Averill, Bill Benner, Chuck Farrell, John Freburger, James Hatch, Abby Ingraham

Absent: Claire Enterline

Also present: Joe McLean and Jim Wallace (Wright-Pierce); Chris Hall (Town Administrator); Chief Paul Leeman Jr. and Assistant Chief Tim Miller (Bristol Fire and Rescue); Rob Davidson, Rick Poland, George Parker, Don and Mary-Rae Means, George Haduch and Helen Miller.

The meeting was called to order by vice-chair Benner at 6:00 pm with a quorum present, and the Pledge of Allegiance was recited.

A motion to accept the Minutes of 5/23 was proposed by Farrell, seconded by Freburger, passing unanimously.

There were no amendments to the agenda.

Acting Chair Benner invited Joe McLain and Jim Wallace of Wright-Pierce to present their findings on options for firefighting water supplies in the event of removal or modifications to the dam. McLain invited Chief Leeman and Assistant Chief Miller to add their comments at any time.

McLain presented a large scale map of the Town showing the town's three fire stations, major structures, existing dry hydrants and sites for potential additional water supply; and distributed to committee members a package of aerial photographs of each site. He noted that an efficient dry hydrant could have a water level no more than 15 feet below that of the tanker's pump; 10 feet is the most efficient water rise. Water supplies should be clean, fresh water, and able to support an extended pumping rate of 1,500 gallons a minute (the capacity of the Town's newest pump trucks). The location of the fire houses (5 road miles) and hydrants (1,000 foot radius) has a beneficial impact on structure (eg homes) insurance rates (except for one small area of the town).

McLain gave an overview of the Town's existing fire protection water supplies, as follows.

1. Bristol Mills Dam: the primary source – ideal for the staging and turning of trucks; an essentially unlimited, clean water supply; central location. Within hose range of most of the village core of Bristol Mills. The dry hydrant has recently been lowered in the water to allow for 50-year drought levels.
2. Munro Bridge, Round Pond. A site currently in the process of being expanded to include a truck pull-off and turning area, and removal of vegetation that has built up in the basin. The primary site for the immediate Round Pond Village area.
3. Northern Point Road, Round Pond – brackish water, not a regularly-used source.

4. Transfer Station. Training facility for Bristol Fire and Rescue; would be used in event of a fire at the Transfer Station but otherwise inconveniently out of the way.
5. New Harbor Ice Pond – good supply and off-road parking; the primary source for the New Harbor area.
6. Pemaquid Point Road, opposite Mark Prior – no pull-off for trucks.
7. Pemaquid Falls at Hammond Lumber – good off-road parking (if the company's chain barrier is down or when access is granted when the chain barrier is in place); good location for Pemaquid Falls Village and Harrington Road area of town.

In questions at this point, it was asked what effect ice has on the dry hydrants. Ice thicknesses in Bristol rarely exceed two feet, so the dry hydrants are well beneath the ice – though in extreme cold, there may be problems with freezing above ground in the pipes and hoses. In response to a question about drought conditions, Chief Leeman reported that the Bristol Dam was the only hydrant in Town to remain fully available during the drought of fall 2016. He also noted that other sites, such as the Hatchtown Bridge, are available in emergencies for trucks to drop lines with strainers into the flowing river.

McLain next briefly reviewed options for additional sites to supplement or replace the Dam.

1. Bristol Road near the Damariscotta line, opposite the Ransdell dental office. Would need easement or purchase of land for a turnout for trucks.
2. Partridge Bridge. Currently available for drop lines; a dry hydrant would enhance its use but it is a distant corner of the town.
3. Bristol Mills beaver pond (south of village on Route 130): would need considerable fill (with permitting issues) to widen embankment for a turnout; is sited in a dip with poor sight lines and the dependability of water quantity without the “help” of the beavers is unknown.
4. Upper Round Pond Road near Middlefields: would need a gravel turnoff, but a good location for supplementary supply.
5. Lower Round Pond Road at Hatchtown;
6. Carl Bailey Road, Little Falls Brook and wetlands near South Bristol line;
7. The Transfer Station – an extended hydrant running to the Pemaquid River;
8. Ellingwood Park, the boat ramp. This is the nearest site to the Dam and Bristol Mills fire station; has the same water supply. Chief Leeman expressed concerns about the sharp fall-off from the road; although there is space to build a turnoff and circle for staging trucks, Ingraham pointed out that parking at this site (unlike at the Dam) is usually filled with cars whose drivers are off-site in boats and unable to move them on request, as opposed to the swimmers' vehicles parked at the Dam. One might expect that parkers would not keep fire lanes clear!

In questions, Ingraham asked about projected future needs. Leeman replied that fortunately, the quality of Bristol's stock of structures is good, and the incidence of structure fires has declined over the years while the capabilities of firefighting equipment and efficiency of the fire department personnel has gone up. D. Means asked

whether insurance rates could be further improved; Leeman believes that this will have to await a forthcoming ISO inspection of the department.

Don Means then asked Chief Leeman if the suggested alternatives to the dam are adequate. Leeman responded that “the dam site is the perfect location”. “If the dam blew up tomorrow, I hope the Town would rebuild it.” Assistant Chief Miller added that the Dam is “*the* go-to site for water; remove the dam and our firefighting capability will degrade”.

Averill asked why a hydrant immediately behind the Bristol Mills Fire Station had not been considered; McLain replied that the grade change is too great, probably requiring cistern storage.

OPTIONS FOR DAM

Vice Chair Benner thanked Leeman and Miller for their contributions, and the committee resumed discussion of the options that had begun on May 23rd. He stressed that “do nothing” should properly be an option considered, even though the committee appeared to be unanimous that something needs to be done.

Benner circulated a budgetary quotation from Sheepscot Engineering for an aluminum ‘Alaska SteepPass’ fish ladder. He asked if the Committee is open to small volunteer working groups taking on the study of particular options for fish passage, to report back to the Committee.

In discussion, four broad classes of solutions were seen as options for presentation in the Committee’s eventual report:

1. Do nothing, possibly with inexpensive ‘tweaks’ at the existing ladder to allow greater rates of successful fish passage; it is understood that this may include further repairs or enhancements to the dam over time.
2. Replacement of the existing fish passage, probably with the 2015 design.
3. Enhanced fish passage – retaining the dam, but with a nature-like structure perhaps diverting a high percentage of flow as at the Howland Dam diversion channel.
4. Dam removal, with alternative solutions for maintaining upstream water levels, for recreation and for fire protection.

McLain warned that the enhanced fish passage option might cost as much as two or three times the cost of a Denil passage, though comments were made about the cost of the Damariscotta Mills passage and several members looked forward to the scheduled meeting with Deb Wilson to discuss their experience.

From the floor, Davidson stated that the Fire Department is adamantly against the removal of the dam. Common sense and political reality suggested to him that we cannot sell the Town on removal, but we can sell enhanced fish passage. McLain stated he understood the terms of reference of the present committee are to look into alternatives to fish passage at the dam, rather than repeat the work done in 2015 to select a preferred solution for fish passage at the dam. Consideration of options of

enhanced fish passage – a nature-like or a weir-and-pool solution – would be something he would love to study, but its outside of the currently contracted scope of work for which Wright Pierce has been engaged and would cost more than the existing grant allows for.

Benner stressed that the remit of the Committee is not necessarily the same as the scope of work to Wright-Pierce; the Committee is tasked with identifying the costs and benefits of a range of solutions, with dam removal being just one. Hatch stated his belief that the Committee had received the TNC grant to study dam removal; this is what the funding must be used for. Ingraham urged that we not make the mistake of ‘chasing the money’ – doing only that for which there is funding available, such as dam removal, if it is not the best solution for the town. McLain agreed that there is certainly money available, e.g. from NOAA, for dam removal, which is a change in recent years from the previous availability of money for fish passage–related projects. He then said that he did not want to tell the committee that dam removal is the best option; but he is tasked with looking at all the options for satisfying needs in the event of dam removal.

It being 8.15 pm, Farrell moved that (1) the Committee send its best wishes to Claire Enterline and Slade Moore on the birth of their son; and (2) that they adjourn. This was seconded by Freburger and carried unanimously.