Plan B Emerges for West Harbor Pond Water Woes: A quantum leap in search for solution, say WHPWA members (Matthew Stilphen, *Boothbay Register*, September 27, 2016)

Members of the West Harbor Pond Watershed Association (WHPWA) may have found a Plan B to repair a damaged siphon designed to flush salt water out of the 80-acre freshwater pond. In a presentation to the Boothbay Harbor Board of Selectmen Sept. 26, WHPWA member Merritt Blakeslee discussed a recent examination of the siphon which revealed the problem could be addressed through "trenchless repair," a relatively new method developed 40 years ago. By doing so, the project would not affect the Route 27 roadway, a sticking point in the group's efforts thus far.

"This method uses various technologies to rehabilitate pipes from the inside," said Blakeslee. "This is a quantum leap in our steps to find a solution."

On Sept. 20, representatives from the Ted Berry Company of Livermore, Boothbay Harbor Public Works officials, and the Maine Department of Transportation inspected the siphon using small cameras. The examination revealed a break in the pipe but the siphon is not crushed or obstructed by debris, said Blakeslee.

According to Blakeslee's presentation, because of its cribwork and fill construction, the West Harbor Pond dam has always been subject to infiltration of saltwater, which, because it is heavier than freshwater, settles to the bottom. From 1880 onward, two siphons kept the pond free of saltwater below the 22' mark, the depth of the siphon intakes. The larger siphon was removed sometime after the turn of the last century, and in 2008, the smaller siphon pipe failed and water quality in the pond began to decline. Subsequent water quality monitoring revealed that while the surface water remained relatively healthy, the layer of saltwater below is devoid of oxygen and high in hydrogen sulfide, making it unsuitable for fish and other aquatic life.

"The best piece of news is Ted Berry Company's representative stating definitively that it could repair the break," said Blakeslee. "These are techniques that it uses routinely in work it performs for Maine DOT, and none involves opening the roadbed. The most promising of these involves removing the vertical ends of the siphon, installing a smaller piece of high-density polyethylene pipe within the existing host pipe, and grouting the space between the two pipes with controlled-density grout."

In previous efforts to fund the repair, WHPWA submitted six grant requests to the Department of Environmental Protection's culverts and stream crossings program. The first four were unsuccessful, while the last two, submitted only recently, are still pending. In response to Selectman Wendy Wolf's question as to why the grants were not awarded, Bob Faunce of the Lincoln County Regional Planning Commission said the grants are specific to culverts and not siphons.

"This may be the only example in the state, possibly the country," said Faunce, who was in attendance on an unrelated matter.

Wolf also brought up the potential scenario of the dam breaking during any type of repair which could have an adverse effect on property values and consequently the tax rolls. Both Wolf

and Faunce pointed to Sherman Lake in Newcastle as an example. In 2006, a twice-a-day ocean surge destroyed an earthen dam on the 237-acre lake.

"It's now Sherman marsh," said Faunce.

To fund the siphon repair, the group is seeking assistance from various agencies and public entities including the DOT, DEP, Marine Resources, and the Department of Inland Fisheries.

"At the local level the water district, the sewer district, and, of course, the town of Boothbay Harbor," said Blakeslee. "The assistance of these state, local, and municipal entities could take many forms: partial funding, provision of materials, provision of expertise (particularly engineering expertise), and the use of personnel in obtaining permits."

Blakeslee also indicated members of his group and the community at large would be ready and willing to contribute out of their own pockets. The Berry Company is expected to provide an estimate on the repairs as early as next week. Vice Chairman Russ Hoffman, standing in for absent chairman Denise Griffin, urged the group to return as developments warrant.

"I'm asking for your moral support tonight," said Blakeslee. "However, we will not bashful about asking for material support in the future."

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