

Grant Secured for West Harbor Pond Siphon Repair Project (Bob Faunce, Lincoln County Regional Planning Commission, June 13, 2017)

On June 2, the Maine Coastal Program of the Department of Agriculture announced that the West Harbor Pond Watershed Association and the town of Boothbay Harbor were awarded a Coastal Communities Grant to engineer the repair or replacement of the 137-year-old siphon that until a few years ago was a critical element in maintaining the water quality of West Harbor Pond. The siphon was installed when a dam (now a causeway) was constructed across the mouth of Campbell Cove where it entered into Boothbay Harbor in order to create a freshwater pond for the production of natural ice for sale to the large urban centers of the Eastern Seaboard. A road was constructed along top of the causeway and it eventually became designated as State Route 27. While ice production ceased many decades ago, the siphon continued to function as originally intended until a few years ago.

West Harbor Pond receives fresh water from several streams but sea water enters the pond at extreme high tide and by infiltration through the body of the dam. This sea water has a greater density than fresh water and sinks to the pond bottom. The original designer of the dam, Capt. E.D. Haley, understood the situation and designed a passive siphon that would draw the salt water from the bottom of the pond as the tide receded on the harbor side of the dam, keeping the pond water fresh.

After 130 years of effectively protecting the water quality of West Harbor Pond, the siphon failed in 2008. The West Harbor Pond Watershed Association has been monitoring water quality in the pond for a number of years and found that the loss of the siphon resulted in a gradual decline of water quality to the point where the pond now has a “dead” zone extending from the bottom of the pond to within 12 feet of the surface. Due to the uniqueness of the situation (so far as is known, there is no siphon like the West Harbor Pond siphon anywhere else in Maine), neither the town or the Association had been able, until now, to identify any state or federal agencies that could provide either engineering or financial assistance to repair or find a replacement for the inoperative siphon.

With the assistance of the Lincoln County Regional Planning Commission, the town and the Association applied for and were awarded a \$12,400 grant from the Maine Coastal Program with the Association contributing an additional \$3,100. The funding will permit the project partners to engage an engineering firm later this year to oversee various studies and prepare a design and cost estimate for the repair or replacement of the siphon so as to once again make West Harbor Pond an environmental and scenic asset for the community.

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