



The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES



Thomas S. Burack, Commissioner

January 21, 2014

The Honorable Shannon Chandley, Chair
Resources, Recreation and Development Committee
Legislative Office Building, Room 305
Concord, NH 03301

RE: HB 1303, relative to the Cass Road Dam in Epsom

Dear Chair Chandley and Members of the Committee:

Thank you for the opportunity to testify on HB 1303. This bill would require the Department of Environmental Services (DES) to continue to maintain Cass Road dam in Epsom.

Cass Road dam, also known as Cass Pond Dam, is one of 278 state-owned dams. It currently does not meet state dam safety standards and is in need of major reconstruction. However, continued maintenance of this dam may not be the most economical or environmentally preferable alternative. For this reason, DES respectfully opposes this bill.

Cass Pond Dam is located on the Little Suncook River below Northwood Lake. The dam is a composite timber, stone, concrete and earth dam with a maximum height of 10 feet and an overall length of 140 feet. The timber spillway is 100 feet long and 6 feet high. The dam is classified as a low hazard, run-of-the-river dam that impounds a 15-acre pond, which is very small in comparison to the 31-square mile watershed that flows into it. The pond has an average depth of approximately 2 feet.

The dam was formerly owned by Joseph B. Cass, whose estate transferred ownership of the dam, which was then in poor condition, to the State of New Hampshire. In 1967, the state's Dam Maintenance Crew repaired the dam by replacing the timber spillway and installing a clay liner along the upstream face of the right abutment. The dam was last reconstructed in 1981, when the state's Dam Maintenance Crew added concrete cutoff walls to the upstream face of the right abutment, installed concrete training walls to both right and left ends of the spillway, and again replaced the timber spillway.

The dam is currently in disrepair again. The downstream stone retaining walls on either side of the spillway have settled, are leaning and could fail. In addition, the spillway does not have the capacity to pass the 50-year flood (a flood which has a 2% chance of occurring in any given year), so it does not meet current dam safety standards. Because of this, when we experience floods on the Suncook River, as we have over the past several years, the river overtops the dam and erodes its abutments. This could lead to the dam's failure and require emergency repairs such as those that occurred in the flood of April 2007 when the dam nearly breached and emergency responders had to use sandbags to fortify the left abutment.

Correcting these deficiencies will require a significant modification and reconstruction of the dam, which DES currently estimates could cost approximately \$250,000. In addition to this cost, over the past several

years DES has been spending an average of \$4,000 per year on the operation and maintenance of this dam, and that amount has been higher and increasing over recent years as the dam continues to age.

Regarding environmental issues, the New Hampshire Fish and Game Department (the NHFG) has indicated that they prefer that the dam be removed because it is a barrier to the migration of fish, specifically adult river herring (blueback herring and alewives) that migrate from the Suncook River, through the Merrimack River and into the Atlantic Ocean. However, to preserve habitat for bridal shiners, a short-lived (1 to 2 years) State-Listed Threatened fish species, NHFG favors construction of a rock ramp, which would keep some water in the pond while allowing upstream and downstream fish passage.

In view of the high cost of reconstructing the dam to meet dam safety standards and the continuing operation and maintenance cost, coupled with the environmental benefit of removing the dam and constructing a rock ramp in its place, DES began to focus on this alternative. However, after notifying the Town of Epsom of this proposal, DES received information from the Town and some of its citizens about the importance of the dam to the Town. In response, DES indicated to the Town of Epsom a willingness to reconsider this option. As part of that reconsideration, DES has proposed to hold an informational meeting in the Town of Epsom this year as an educational opportunity for the public, as well as an opportunity for DES to receive additional input to help in reaching a final decision on the work to be done to the dam. DES would then make a final decision on the dam, to achieve the greatest public benefit, after fully evaluating all these issues and any additional input from the Town of Epsom.

DES respectfully requests that it be able to follow the standard process for determining whether to repair, rebuild or remove state-owned dams, rather than being mandated to continue to maintain Cass Pond Dam regardless of the costs and benefits, and before receiving additional input from the Town of Epsom and interested members of the public, as would be required if HB 1303 were enacted. For this reason, DES respectfully opposes the bill.

Thank you for your consideration in this matter. If you have questions or need additional information, please contact Jim Gallagher, Dam Bureau Administrator, at 271-1961 or james.gallagher@des.nh.gov, or me at 271-2958 or thomas.burack@des.nh.gov.

Sincerely,



Thomas S. Burack
Commissioner

cc: Representative Dan McGuire
Representative Mary Frambach
Glenn Normandeau, Director, New Hampshire Fish and Game Department