From: Griffin, Mary (FWE) [mailto:mary.griffin@massmail.state.ma.us]

Sent: Thursday, July 21, 2011 6:59 PM **To:** Straus, William - Rep. (HOU)

Subject: Hathaway Pond

Chairman Straus, per your request, the following is some scientific and technical information that our Division of Marine Fisheries biologists put together concerning Hathaway Pond.

Division of Marine Fisheries surveys published in 1972 and 2004 document Hathaway Pond as spawning habitat for river herring. A Division survey from 1921 notes a herring run was documented in the Sippican River as early as 1808, but was impeded at the turn of the 20th century due to cranberry culture. The Division constructed a wood fish ladder at Leonard's Pond in 1993, and from 1995-2002 local efforts to count herring documented between about 300 and 900 spawning adults passing into Leonard's Pond. All available information points to a depleted herring run existing today that uses both the 21 acre Hathaway Pond and 43 acre Leonard's Pond as spawning and nursery habitat.

The Division monitored water and habitat quality in both ponds during 2009 and 2010 to assess the suitability for supporting river herring spawning and nursery requirements. We have published protocols for conducting such assessments and comparing field measurements to thresholds related to river herring life history. Both ponds were found to have degraded water and habitat quality. The assessment classified both ponds as being *Impaired* for water pH, dissolved oxygen, water clarity, total phosphorus, fish passage, and water flow. The ponds were impacted by reduced flow, poor fish passage and eutrophication. The classification was the same for both ponds, but Leonard's Pond had more criteria exceedances than Hathaway Pond due to slightly worse water quality. The fish passage problem at Leonard's Pond was corrected this past winter with the installation of a new fish ladder. Hathaway Pond currently has an inefficient fish ladder in poor shape.

In terms of future actions, this is a complex situation with trade-offs associated with all choices.

Mary B. Griffin, Commissioner

Department of Fish and Game <0))))><

251 Causeway Street, Suite 400

Boston, MA 02114

617-626-1550

617-626-1505 Fax