



February 13, 2010

Secretary Ian Bowles
Executive Office of Environmental Affairs
Attn: MEPA Office
100 Cambridge Street, Suite 900
Boston, Massachusetts 02114
Attention: Anne Canaday

RE: MEPA Project EEA 14537 – Foundry Pond Dredging and Restoration
Project, Weir River, Hingham MA

Dear Secretary Bowles,

The Weir River Watershed Association is a nonprofit organization concerned with the health of the Weir River and its watershed. We would like to provide comment on the Environmental Notification Form submitted for Foundry Pond Dredging Project EEA 14537. The project is required to submit an ENF as it requires a Water Quality Certification (401 WQC) from MassDep, exceeds wetland impact thresholds under MEPA, is listed with the Mass Historical Commission as an historic archaeological site and a small portion of the proposed project falls within the Weir River ACEC.

The project seeks to dredge significant wetland resource areas for improvement of water quality, to increase open water and benthic habitat, increase storage volume, reduce aquatic plant habitat and biomass and internal nutrient cycling.

Foundry Pond is a manmade impoundment formed by a dam at the head of the tide on the Weir River. The Weir River is a listed anadromous fish run (herring, eels and smelt). There are fish ladders at the Foundry Pond Dam and upstream at the next impoundment on the Weir River, Triphammer Pond. In the spring of 2009, the Hingham Conservation Commission, with local volunteers, documented a total of 17 herring that were able to make it over the fish ladder and into Foundry Pond. The fish ladder itself was poorly designed and requires significant human intervention in order to operate, even under the best of circumstances however fish ladders are a compromise and are species specific.

In the late 1990s the dam was repaired under an emergency condition and the stream channel below the dam was widened, bank vegetation removed and riprap placed in the

stream. This habitat alteration resulted in spawning smelt habitat diminishing significantly (pers. comm. Brad Chase, MassDMF). MassDMF has provided assistance to the town to restore stream channel and smelt habitat. That stream restoration work has not been completed as yet though has been in the planning stages for several years. Clearly, the anadromous fish population at this site has been diminished significantly to the point where herring are almost nonexistent from this river system and are in danger of becoming locally extinct from this river.

In many other river systems that were dammed during the industrial revolution, communities and private dam owners are reviewing dam removal and river restoration as an alternative to keeping and maintaining a dam. In many cases, dam removal can make sense from a cost and ecological perspective. Removing a dam restores river habitat, improves water quality, decreases thermal pollution, increases oxygen levels in the water, restores anadromous fish habitat and passage, restores river fish species, like brook trout, while at the same time alleviates the owner of liability associated with the dam, the maintenance of the dam or dredging of the upstream impoundment.

If river restoration is feasible, little or no dredging behind the dam may be needed. In many other river restoration projects, the impoundment is drained and the natural stream channel is allowed to form behind the dam, some targeted dredging to form the channel and grading to shape the river banks might be needed but not the large amount proposed.

We would like to request that the Secretary require an Expanded ENF or Environmental Impact Review that examines the alternative of removing the dam and restoring the natural river system at this site. The alternatives examined in the current ENF were No Action and the two alternative methods of dredging. A full comparison of costs, ecological benefits and environmental impacts should be done for both dredging and river restoration before a final decision is made as to which option provides the most environmental benefit with the least environmental damage. The option for dredging should provide information on how the dam, the pond, and the fish ladders are proposed to be maintained in the future to restore anadromous fish populations in the Weir River and how the stream channel and streamflow will be managed downstream of the dam, particularly during summer low flow periods, to maintain downstream habitats.

Lastly, according to the Hingham Conservation Commission, it is our understanding that the proposed dredging is a precursor to dam removal and if the dredging is needed to meet the ultimate goal to restore the river then the project should outline how that goal is to be met in the filing.

Sincerely,

Darrell Baker
President