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February 22, 2008

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME:	Rice Reservoir Reclamation, Private Pier and Boatshed
PROJECT MUNICIPALITY:	Brookfield
PROJECT WATERSHED:	Quinebaug
EEA NUMBER:	14164
PROJECT PROPONENT:	David Fromm, Fromm Development Company
DATE NOTICED IN THE MONITOR:	January 23, 2008

Pursuant to the Massachusetts Environmental Policy Act (G.L. c. 30, ss. 61-62H) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **requires** the preparation of an Environmental Impact Report (EIR).

Project Description

As outlined in the Environmental Notification Form (ENF), the project involves dredging in Rice Reservoir in Brookfield, MA. The approximately 60-acre privately-owned, man-made reservoir is located to the east of the intersection of Molasses Hill Road and Fiskdale Road (Route 148). The reservoir was created in the late 1800s when an earthen and concrete dam was constructed across Mason's Brook at the reservoir's north end. In 1955 Hurricane Diane caused flooding of the reservoir resulting in damage to the dam and partial drainage of the reservoir. Following the hurricane, a beaver dam was established in the area of the breach and the water level in the reservoir rose to a level somewhat below its original level. The reservoir is described in the ENF as shallow, weed-choked and swampy.

In 1966 the Massachusetts Water Resources Commission purchased the land containing the dam and took an easement on a portion of the reservoir for flood control purposes; the Department of Conservation and Recreation (DCR) Office of Dam Safety now owns and manages the dam. In the summer of 2006, DCR found that the beaver dam in the breached area had been illegally reinforced with plastic sheeting and rocks. A Declaration of Dam Safety Emergency was issued and the rock and plastic sheet dam was removed by hand in September 2006. The Brookfield Conservation Commission and the Natural Heritage and Endangered Species Program (NHESP) were consulted during this process. According to the ENF, after removal of the beaver dam, the reservoir drained completely such that only the channel of Mason's Brook remained flowing. Since that time, beavers have moved back into the area and maximum water depths in the Reservoir have been measured to be approximately 3 feet.

The Proponent proposes to dredge 9.47 acres of Rice Reservoir using a hydraulic dredge to remove sediment and pump it to an on-site dewatering basin on an adjacent hillside approximately 300 feet from the western shoreline. The project also involves construction of an 80 foot long x 4 foot wide timber pile supported pier, with a boathouse and a gazebo.

The stated goals of the project are to reestablish an area adjacent to the Proponent's residence that can be used for swimming and boating and to sell the dredged sediment as high-quality topsoil. The Proponent owns approximately 166 acres of property at the site, including the 60 acre reservoir. According to the ENF, if the Proponent is unable to establish a long-term topsoil business at the site, he would be faced with the prospect of converting some of the presently undeveloped land into a residential subdivision.

Jurisdiction and Permitting

The project as described in the ENF is undergoing environmental review pursuant to the following sections of the MEPA regulations: Section 11.03(3)(b)(1)(f) because the project will result in the alteration of greater than ½ acre of "any other wetlands" (9.47 acres of Land Under Water); Section 11.03(3)(b)(3) because the Proponent proposes to dredge more than 10,000 cubic yards of material; and Section 11.03(2)(b)(2) because the project may result in a "take" of species protected pursuant to the Massaschusetts Endangered Species Act (MESA). The project is located within the habitat of species state-listed as "Threatened" and "Special Concern" pursuant to the MESA (MGL c. 131A).

The project requires a National Pollutant Discharge Elimination System (NPDES) General Permit from the Environmental Protection Agency (EPA); a 401 Water Quality Dredge Permit from the Department of Environmental Protection (MassDEP); review and a possible Conservation & Management Permit from the Division of Fisheries and Wildlife (DFW) Natural Heritage and Endangered Species Program (NHESP); an Order of Conditions (OOC) from the Brookfield Conservation Commission (and hence a Superceding OOC from MassDEP if the local Order is appealed); and a Special Permit from the Brookfield Planning Board.

Because the Proponent is not seeking financial assistance from the Commonwealth, MEPA jurisdiction is limited to the subject matter of required or potentially required state permits and/or review. In this case, MEPA jurisdiction extends to wetlands and rare species.

Review of the ENF

The purpose of MEPA review is to ensure that a project Proponent studies feasible alternatives to a proposed project; fully discloses environmental impacts of a proposed project; and incorporates all feasible means to avoid, minimize, or mitigate Damage to the Environment as defined by the MEPA statute.

I have fully examined the record before me, including but not limited to the ENF that was noticed in the January 23, 2008 Environmental Monitor; information presented verbally at the MEPA site visit for the project, held on February 1, 2008; and the comments entered into the record. Based on this record, I find that the project will benefit from a full environmental impact review. The ENF fails to adequately address the potential impacts of the project and demonstrate that the project will meet the performance standards of required permits. Many elements of the project and project design are speculative, and the level of information provided in the ENF does not allow for a full and meaningful review of impacts by state agencies. I cannot allow the project to proceed permitting until these important issues are resolved.

The Proponent has not defined a finite construction period for the project; rather, the dredging is anticipated to occur over several years, and will be driven by the market for the topsoil product. According to the Proponent, the proposed dredging area of 9.47 acres is the fixed factor, however, at the MEPA site visit for the project the Proponent acknowledged that he intends to dredge the entire pond if market conditions are favorable. The open-ended nature of the project makes it difficult to determine whether all measures are being taken to avoid, minimize and mitigate adverse impacts to the environment. In addition, the MEPA regulations at 301 CMR 11.01(2)(c) prohibit the segmentation of projects, and during review I must consider the entirety of the project, including any likely future expansion, and not separate phases or segments thereof. The Proponent may not phase or segment a project to evade, defer or curtail MEPA review.

The Proponent refers in the ENF to the several publications issued by the Commonwealth on lake management as justification for the project, including the *Policy on Lake and Pond Management for the Commonwealth of Massachusetts* (Massachusetts Water Resources Commission, 1994), the *Final Generic Environmental Impact Report on Eutrophication and Aquatic Plant Management in Massachusetts* ("Lakes and Ponds GEIR", EEA, 2003), and the *Practical Guide to Lake Management in Massachusetts* (EEA, 2003). These documents are excellent resources that speak to protection of lakes from water quality degradation and reduction in ecological and recreational values; however, the Proponent must take into consideration current conditions at the site. While Rice Reservoir was historically created to provide open water, the history of the dam breaches at the site have allowed the reservoir to become part of a relatively pristine and ecologically diverse wetland system.

The Scope for the Draft Environmental Impact Report (DEIR) is laid out in detail below. In general, the Proponent should provide more information regarding the project's impacts to wetlands, rare species and fisheries, including an analysis of how the proposed long-term and continual nature of the proposed dredging will affect environmental resources. The DEIR should respond to the items outlined in this Certificate and should respond to all comments submitted on the ENF. Should the DEIR fully resolve the substantive issues outlined in the Scope, I will consider the procedural options available to me at 301 CMR 11.08 (8)(b)(2), as they may related to the Scope for the Final EIR.

SCOPE

General

The DEIR should follow the general guidance for outline and content contained in Section 11.07 of the MEPA regulations, as modified by this Scope. The DEIR should include a copy of this Certificate and a copy of each comment received. The Proponent should circulate the DEIR to those parties that commented on the ENF, to the Town of Brookfield, to any state agencies from which the Proponent will seek permits or approvals, and to any parties specified in Section 11.16 of the MEPA regulations. A copy of the DEIR should be made available for public review at the Brookfield Public Library.

Project Description and Permitting

The DEIR should include a thorough description of the project, including a detailed description of construction methods and phasing. The DEIR should include a brief description of each state permit or agency action required or potentially required, and should demonstrate that the project will meet applicable performance standards. The Proponent should also provide an update on the local permitting process for the project.

Wetlands

The project site contains the following wetland resource areas: Land Under Water (LUW), Bordering Vegetated Wetlands (BVW), Bank, Estimated Habitat of Rare Wildlife, and Bordering Land Subject to Flooding (BLSF). The Proponent states in the ENF that each of the identified wetland resource areas will be temporarily impacted by the proposed sediment dredging and the construction of the pier, boathouse and gazebo. Despite this statement, the Proponent has only quantified impacts to LUW in the ENF. The dredging project will result in impacts to 412,820 square feet (sf) of Land Under Water (LUW).

The DEIR should include plans that clearly delineate all applicable resource area boundaries on the project site including buffer zones, 100-year flood elevations and priority

and/or estimated habitat. The DEIR should quantify anticipated impacts to each resource area that will result from the proposed dredging and construction of the pier, boathouse and gazebo. The Proponent should evaluate the significance of the identified wetland resource areas with regard to statutory values identified by applicable laws. The DEIR should provide a discussion of how the project would comply with the performance standards in the wetlands regulations and the 401 regulations at 314 CMR 9.00. The Proponent should explain what impacts will be temporary or permanent, and should clarify how it defines temporary impacts in light of the plan to dredge on a continuous basis.

The reservoir will be dredged using a small barge mounted hydraulic dredge that will be lowered into the pond by a truck-mounted crane parked on an existing gravel road outside of wetlands. The hydraulic dredge will use a cutter head to break up the sediment, which will then be suctioned through a hose by a pump and discharged through a hose to the dewatering area. The dewatering area will be constructed by clearing approximately 3 to 7 acres of land and using soil excavated from the hillside to create an earthen containment berm. According to the ENF, the discharge hose from the dredge and the hose returning water from the dewatering basin to the pond will be supported on the pier above the wetlands. The Proponent should clarify the construction sequence for the project. The statement above implies that the pier will be constructed prior to dredging; no information regarding the pier has been provided in the ENF.

The Proponent anticipates that 50,000 cubic yards of material will be removed from the 9.47 acre area. The Proponent will dredge approximately 14 feet below the existing pond bottom elevation. One of the stated goals of the project is the reclamation of sediments that have accumulated in the Reservoir; however no data is provided to determine if the proposed dredge will exceed the depth of any historic condition associated with this area. Following guidance from NHESP, the Proponent should analyze sediment profile data to determine the historic condition of the bottom sediments and if the proposed 14 foot dredge is representative of any historic depth.

The Proponent's planned construction methodology is based on the assumption that the beaver dam on the north end of the pond will be allowed to remain and will be the control of the pond water surface elevation. According to the ENF, the dam is necessary for the reservoir to maintain a sufficient water depth to float the barge holding the dredge, approximately 2 to 3 feet. As the beaver dam is on DCR property, the Proponent should consult with DCR regarding any future plans to remove the beaver dam or plans to conduct work related to the original dam. DCR has already removed the dam once, and could do so again. The Proponent should also outline an alternative construction methodology in the event that water levels in the reservoir are not sufficient to float the barge.

The Proponent should provide an expanded discussion of measures to ensure that construction period impacts are adequately minimized and mitigated. According to plans submitted with the ENF, turbidity curtains will be installed around the discharge pipe from the dewatering area and downstream of the proposed dredging area. The Proponent should clarify whether erosion and sedimentation controls are proposed to be left in place over the course of several years while the dredging occurs.

The DEIR should consider the impacts of clearing the dewatering area on increased sedimentation to the reservoir. MassDEP has stated that silt fencing may not be sufficient to prevent impacts to resource areas downgradient of the dewatering area, which is proposed to be located on a relatively steep slope. The Proponent should describe how it will assess the quality the clarified water before it is reintroduced to the reservoir. The Proponent should also outline measures that will be taken to minimize the spread of invasive species during dredging, dewatering and storage of the dredge spoils.

Rare Species

NHESP has determined that the proposed project occurs within the habitat of the Bristly Buttercup (*Ranunculus pensylvanicus*, Threatened) and the Bridle Shiner (*Notropis bifrenatus*, Special Concern). The Bristly Buttercup is found in openings within marshes, wet meadows, stream corridors and other wetlands with seasonal fluctuations of water levels. The Bridle Shiner is a small minnow whose population is in decline due to a variety of factors including habitat loss, degradation of water quality and artificial water level manipulation. These species are state listed pursuant to the Massachusetts Endangered Species Act (MESA, MGL c. 131A) and its implementing regulations (321 CMR 10.00).

The Proponent has consulted with NHESP regarding the project's potential impacts to rare species habitat. Copies of correspondence between the Proponent and NHESP were submitted with the ENF. In November 2006 the Proponent submitted project plans and supporting documentation to NHESP for review pursuant to the MESA. In January 2007 NHESP issued a letter stating that the MESA application was incomplete and outlined numerous concerns about the potential adverse impacts of the project to rare species and fisheries. NHESP stated in that letter that the dredging project has the potential to result in a prohibited take of the Bristly Buttercup. In November of 2007 the Proponent provided a response to NHESP, including an analysis of the proposed dredging on the hydrology and hydro period of the wetland habitat of the Bristly Buttercup and the results of a botanical survey at the site. NHESP has reviewed the previously provided information and the information provided in the ENF and has stated in its comments that outstanding issues remain regarding the project's impacts to state-listed species.

Many of NHESP's concerns are reflected in this Certificate above. In the DEIR, the Proponent should describe all impacts to habitat of state-listed rare species and demonstrate compliance with the MESA. The Proponent should continue to consult with NHESP regarding the project, and any relevant communication with the NHESP should be included in the DEIR.

Fisheries

In the ENF, the Proponent provides a quote from the Lakes and Ponds Final GEIR stating that "maintenance of open water as part of a functioning aquatic system is encouraged, but should not outweigh reasonable impacts to any one of the eight interests of the Wetlands Protection Act". One of the stated Interests of the WPA is the "protection of fisheries;" as

outlined in comments from DFW and MassDEP, the Proponent must provide additional information in the DEIR to demonstrate that the potential impacts to fisheries are adequately addressed.

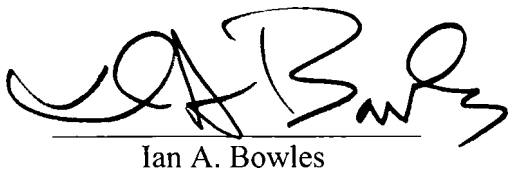
The Proponent states in the ENF that it is presumed that short term adverse effects to fisheries will be offset by the long term benefits to fisheries resulting from the creation of deep, coldwater habitat. This assumption has been made however without analyzing the current species and habitat conditions in the reservoir. In response to comments from DFW, the Proponent should conduct fisheries surveys within the Reservoir to better predict and model impacts. I note that DFW has indicated a willingness to assist the Proponent with this effort. Results of the surveys should be submitted with the DEIR. The Proponent should consult with DFW to develop a project that balances the needs of native fluvial species with the goals of the dredging project, and should report on this consultation in the DEIR.

Mitigation

The DEIR should contain a separate chapter on mitigation measures. It should include a Draft Section 61 Findings for use by MassDEP and possibly NHESP that include a clear commitment to mitigation, an estimate of the individual costs of the proposed mitigation, and a schedule for the implementation of the mitigation, based on the phases of the project.

Comments

In order to ensure that the issues raised by commenters are addressed, the DEIR should include a response to comments. This directive is not intended to, and shall not be construed to, enlarge the scope of the DEIR beyond what has been expressly identified in this Certificate. The DEIR should present additional narrative and/or technical analysis as necessary to respond to the concerns raised.



February 22, 2008
Date

Ian A. Bowles

Comments received:

2/7/2008 Department of Environmental Protection, Central Regional Office
2/8/2008 Division of Fisheries and Wildlife

IAB/BA/ba