

APPENDIX C-1

Letter from Dr. Caleb Slater of the Massachusetts Division of Fish & Wildlife regarding the West Dudley Hydroelectric Project application to the Low Impact Hydropower Institute dated March 16, 2011



Commonwealth of Massachusetts

Division of Fisheries & Wildlife

MassWildlife

Wayne F. MacCallum, *Director*

March 16, 2011

Mr. Fred Ayer, Executive Director
Low Impact Hydropower Institute
34 Providence Street
Portland, ME
04103

RE: West Dudley Hydroelectric Project
FERC No. P-7254

Dear Mr. Ayer:

The Massachusetts Division of Fisheries and Wildlife (Division) is the agency responsible for the protection and management of the fish and wildlife resources of the Commonwealth. As such we monitor operations at hydroelectric projects within the Commonwealth. The Division hereby submits the following comments on the Low Impact Hydropower Institute's ("LIHI") Pending Application for the proposed LIHI certification of the West Dudley Hydroelectric Project on the Quinebaug River, in Dudley, Massachusetts.

PROJECT DESCRIPTION

The project consists of the existing Quinebaug River Pond Dam (aka Rhode Island Cardboard Co. Dam). The dam has two sections; one 55 feet in length and one 144 feet in length with the powerhouse at the junction. The dam is topped with 4 foot high flashboards, and impounds a 201 acre-feet. The powerhouse contains three turbines with an installed capacity of 350 kW. The project is licensed to operate run-of-river, with outflow equaling inflow on instantaneous basis. The project has no bypass reach.

COMMENTS

River Flows

The project is licensed by the Federal Energy Regulatory Commission (FERC) to operate in an instantaneous run of river mode and when operated in this manner does not have adverse effects on the flows of the Quinebaug River.

However, data from the USGS gauge (01124000) downstream of the Project has documented rapid streamflow fluctuations indicative of peaking operations at a

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Field Headquarters, One Rabbit Hill Road, Westborough, MA 01581 (508) 389-6300 Fax (508) 389-7890

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hydropower facility. The Division understands that some of these fluctuations may have been caused by the operation of another hydroelectric project further upstream and some may have been caused by the operation of this project. The Massachusetts Department of Environmental Protection (MA DEP) has requested documentation to verify compliance with the FERC exemption requirement of an instantaneous minimum flow release of 76 cfs or inflow, whichever is less, and operation as a run of river facility in order to determine if the Project is causing or contributing to violations of state water quality standards. The Division agrees with this request.

Water Quality

If operated in accordance with its FERC license the project will not adversely affect the water quality of the Quinebaug River (see "River Flow" above).

Fish Passage and Protection

Currently there are no anadromous fish species present in the vicinity of the Project. However, there is an active migratory fish restoration program on the Quinebaug and Shetucket rivers in Connecticut. According to the Connecticut Department of Environmental Protection's (CT DEP) The Plan to Restore Diadromous Fishes to the Shetucket River Watershed (December, 2009), the Quinebaug River from its confluence with the Shetucket River in Taftville, upstream to the base of the Cargill Falls Dam in the Town of Putnam, has been targeted for anadromous fish restoration. The catadromous American eel is to be restored throughout the Quinebaug River, extending to and beyond the Massachusetts border.

Presently there are eel passage facilities at the first dam on the Quinebaug River (Tunnel Project, FERC non-jurisdictional). Upstream of Tunnel, there are six more dams (two are active hydropower projects and one is under development) on the mainstem in Connecticut. All of these dams would need eel passage before it would be required at the Project (presently there are no plans to restore anadromous fish to the Massachusetts portion of the Quinebaug River). However, since FERC exemptions are issued in perpetuity it is probable that eel passage will be required at some future date at the project.

Given the configuration of the project, with the turbines discharging at the base of the dam, there is no bypass reach and no need for minimum bypass flows.

Watershed Protection

The project as currently operated does not adversely affect the watershed.

Threatened and Endangered Species Protection

Provisions of the project's FERC exemption provide adequate protection for threatened and endangered species found within the project area.

Cultural Resource Protection

The project does not adversely affect the cultural resources of the Quinebaug River.

Recreation

We encourage the project owner to allow public access to project lands, where appropriate, for fishing and boating. The applicant should provide a canoe take out above the dam as well as a portage route and put in below the dam to enhance recreational opportunities along the Quinebaug River.

Facilities Recommended For Removal

This facility is not currently recommended for removal by the Division.

CONCLUSION

The Division does not object to the West Dudley Hydroelectric project receiving Low Impact Hydropower Institute Certification so long as the applicant can demonstrate to the Division and the MA DEP that its operations are not responsible for rapid flow fluctuations in the Quinebaug River that are causing or contributing to violations of state water quality standards.

Thank you for this opportunity to comment.

Sincerely,

A handwritten signature in black ink, appearing to read "Caleb Slater". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Caleb Slater, Ph.D.
Anadromous Fish Project Leader