

CHI OPERATIONS, INC.

Division Of: CONSOLIDATED HYDRO, INC.

October 22, 1987

LITTLEFIELD HYDROELECTRIC PROJECT OUTLINE OF FISHERIES MITIGATION OPTIONS

Option 1.

- Trout:
- A. Provide a management plan for the optimal utilization of the habitat of the Little Androscoggin basin between Paris and Mechanic Falls.
 - B. Provide for the stocking of fry and/or yearling fish in accordance with the management plan.
 - C. Provide periodic surveys of habitat utilization and fishing pressure for continuing implementation of the management plan.
 - D. Permanently open the Welchville Dam to provide: a continuous reach of free-flowing habitat between Paris and Mechanic Falls; a higher degree of water quality; lower water temperatures; the potential for creation of more trout habitat as soft substrate materials are flushed, over time, from the former impoundment; etc.

Clupeids:

- A.
 - 1. Fund a long term trucking program for clupeids (primarily Alewives), from the Brunswick-Topsham fishway to the Little Androscoggin basin.
 - 2. Fund a short term trucking program for American shad, from the Brunswick-Topsham fishway to the Androscoggin basin.
- B. Provide and operate a downstream passageway for clupeids at the Littlefield Dam.
- C. Provide and operate a downstream passageway for clupeids at the Mechanic Falls Dam.
- D. When and if necessary, provide for the permanent upstream passage of clupeids at the Littlefield Dam.
- E. Perform effectiveness evaluations of passage facilities, when sufficient numbers of migrating anadromous fish are present to utilize the facilities.

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OUTLINE OF FISHERIES MITIGATION OPTIONS
(cont.)

Option 1. (cont.)

Atlantic Salmon:

- A. Development of the Littlefield Project will not preclude future restoration of Atlantic salmon to the Little Androscoggin basin, although such restoration is not presently anticipated
- B. All anadromous fish passage facilities provided under this mitigation plan will also be designed to pass Atlantic salmon.

Option 2.

Trout: Lower the percent fines and raise the HSI value of selected riffle habitat in the Norway to Oxford reach of the Little Androscoggin, to a level suitable for trout utilization. Streambed stabilization, in conjunction with existing stream gradients, pool and riffle associations and indigenous gravels, can be utilized to create replacement trout habitat for that lost at Littlefield, if necessary.

Clupeids: Same as Option 1, above.

Atlantic Salmon: Same as Option 1, above.

Note: The above mitigation options are contingent upon timely receipt of an FERC licence and construction and operation of the project by Consolidated Hydro, Inc. (CHI).

As per ongoing discussions with the Maine Department of Marine Resources, CHI would assume funding of the clupeid trucking programs in the "mid-1990's".

CHI OPERATIONS, INC.
Division Of: CONSOLIDATED HYDRO, INC.

October 26, 1987

MEMORANDUM

Subject: Transmittal of CHI's 10/22/87 "Littlefield Hydroelectric Project, Outline of Fisheries Mitigation Options

From: Wayne Nelson, CHI

To: Sonny Pierce, MDIF&W
Steve Timpano, "
Phil Andrews, "
Mac Smith, MDMR
Gordon Russell, USF&WS
Bill Hearn, NAI
Lew Flagg, MDMR
Ken Beland, MASRSC
Dana Murch, MDEP

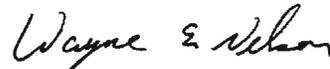
The subject two page outline is hereby formally provided to you for your further consideration.

This outline, less the note at the botom of page 2, was distributed and discussed on 10/22/87 at a project consultation meeting at the regional headquarters of the Maine Dept. of Inland Fisheries and Wildlife in Gray, Maine.

Those individuals listed in the above left column of addressees were present at the meeting. This writer had discussed most of the elements of this outline with Messrs.: Pierce, Timpano, Russell, Flagg and Hearn, either by phone or in person, over a several week period prior to this meeting.

This outline is the subject of ongoing discussions and the thrust of these discussions will be reported in CHI's Additional Information fileing with FERC, scheduled for mid-November, 1987.

If you have any questions or comments on this present outline, please feel free to contact me at (207) 490-1980 or write to me at the address on this letterhead.



Wayne E. Nelson
Manager, Environmental Affairs

cc: M. Alessi
J. James

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January 8, 1988

3. No further letters of consultation have been received from the USF&WS, MDIF&W, MDMR or MASRSC, since the Applicant's 8/14/87 Deficiency filing. This filing included: "Study I, An Evaluation of Salmonid and American Shad Habitat in the Area of the Proposed Littlefield Hydroelectric Project, FERC Project No. 8158-002".

The Applicant's enclosed memorandum, subject: "Transmittal of CHI's 10/22/87 'Littlefield Hydroelectric Project, Outline of Fisheries Mitigation Options'", dated 10/26/87, provides a record of the most recent, formal, fisheries mitigation consultation. No correspondence concerning this mitigation proposal has been received from the above consulting fishery agencies.

It is the Applicant's (CHI's) understanding, from personal communications with fishery agency representatives, that the MDMR and MASRSC concur with CHI's mitigation plans for clupeids and Atlantic salmon.

It is CHI's understanding, as a result of the 10/22/87 consultation meeting, noted above, and more recent personal communications with fishery agency representatives, that the MDIF&W and the USF&WS will oppose the Littlefield Project on the basis of the anticipated loss of some 700 linear feet of acknowledged seasonal and presently unutilized and unmanaged, trout habitat. This habitat is described in the enclosed report: "Alternative Plans for Mitigating Fisheries Related Impacts at the Proposed Littlefield Hydroelectric Project Site, FERC Project No. 8158-002", prepared by Normandeau Associates, Inc.

The MDIF&W and USF&WS have both designated this 700 foot section of habitat as Resource Category 1, according to the Mitigation Policy of the USF&WS. This designation results in a determination of no net loss of existing habitat value. These agencies have provided no formal justification for this determination and the determination therefore appears arbitrary and unsubstantiated.

The Applicant argues that due to the seasonal nature and limited extent of the subject habitat, this habitat should have a designation no higher than Resource Category 4 of the Mitigation Policy. The Applicant's proposed Mitigation Option 1, presented at the 10/22/87 consultation meeting and formally transmitted on 10/26/87 (noted above and enclosed), would provide more than adequate mitigation for the loss of the 700 feet of Resource Category 4 habitat. The need and justification for the Applicant's proposed mitigation for the Littlefield Project is well represented in the enclosed Normandeau Associates report, which was noted above.

January 8, 1988

4. The enclosed letter from Mary Gaudette of Normandeau Associates, Inc., to Wayne Nelson of CHI, dated 11/6/87, details the approximate acreage that would be cleared of forest vegetation at the Littlefield Project.

Approximately 35 acres of forest vegetation would be cleared, of the 45 existing acres of forest vegetation which would be affected by the Littlefield Dam impoundment. This leaves a narrow strip of forest vegetation around the periphery of the impoundment, comprising approximately 10 acres between the 0.0 and 2.0 foot depth contours, which will be left as "snag trees" to enhance wildlife utilization on and in the vicinity of the impoundment.

The wildlife benefits associated with leaving these "snag trees" is noted in paragraph 5 of Ms. Gaudette's letter.