



Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First St., N.E.
Washington, D.C. 20426

FILED ELECTRONICALLY

October 5, 2015

RE: Fish Kill and License Violation. Ellsworth Project, Union River, Maine. FERC Project No. 2727. October 2015.

Dear Secretary,

This Complaint by the Downeast Salmon Federation (DSF) seeks immediate corrective action for an ongoing fish kill and license violation by the Ellsworth Dam Project in October 2015.

Description of Fish Kill and Ongoing License Violation:

At 10:30 a.m. Sunday, October 4, 2015, DSF director Dwayne Shaw of Franklin, Maine visited the Ellsworth Project site and noticed sea gulls hovering over the area directly below the dam spillway. Walking along the west side of the river directly below the turbine outfalls of the Ellsworth Project, Mr. Shaw observed a large number of dead juvenile alewives in shallow water in vegetation along the channel margin. Mr. Shaw hand-collected a number of these dead alewives and placed them on a streamside rock to be photographed and brought a sub-sample of them to his home and put them in his freezer to be physically preserved. Mr. Shaw spent approximately 30 minutes at the west-side shoreline site and took *in situ* photographs and video of his observations.

The fish hand-collected and photographed by Mr. Shaw are juvenile, out-migrating river herring, ie. alewives and blueback herring, ranging in length from 3.5 to 6 inches. The dead fish suffer a number of traumatic injuries including total decapitation, severe

lacerations along the dorsal and caudal sections, blown-out eye sockets (fish lacking eyeballs), distended eyeballs, and severe abrasion and scale loss. The dull ashen-beige sheen of the fishes' scales and skin and gills indicates mortality likely occurred 48 hours or more before Mr. Shaw observed and collected them. The condition of the alewives found by Mr. Shaw are physically inconsistent with a kill which occurred within the time of his arrival on Sunday, Oct. 4, 2015. Their moderately advanced decomposition and loss of tissue and blood coloration indicates these alewives were killed on Thursday, Friday or Saturday, ie. well before Mr. Shaw's impromptu visit to the project on Sunday morning. As shown by the attached fish kill photos from the Benton Falls Project on the Sebasticook River in central Maine in Oct. 2004, freshly killed juvenile alewives show a clear, bright skin and scale sheen and deep red coloration of their gills.

All of the physical injuries of the alewives documented on Sunday Oct. 4, 2015 are consistent with entrainment through a high-head turbine. The blown-out eye sockets and distended eyeballs are consistent with the sudden and severe pressure changes which occur in a high-head turbine. The small, weedy eddy where the dead fish collected is directly within the flow-field of the project turbines which discharge along the western shore of the channel. As Mr. Shaw's video shows, river flow on Sunday was very high (due to a large amount of rain in the area on Sept. 30) and the water was very brown and turbid, limiting visibility to less than two feet in the water column. The high flow and steep, ledge-sided character of the Union River channel directly below the dam prevents dead or injured alewives issuing from the turbines to collect along the shoreline where they can be found; most continue to drift well downstream. As such, the sample of dead alewives observed by Mr. Shaw during his 30-minute visit below the turbine outfall is likely just a small, serendipitous collection of a much larger group of mortalities. The circling gulls at the dam spillway on Mr. Shaw's Sunday visit strongly suggest that mortalities were actively occurring during his visit but the bodies were passively drifting in the channel and outside of his direct view.

Existing License Requirements:

Last fall, Mr. Shaw and DSF volunteers filed with the Commission photographs and video of a nearly identical fish kill at the same location at the Ellsworth Project in October and November of 2014. The details and follow-up of these witnessed fish kills are summarized by Mr. Thomas J. LoVullo of the Commission in a 7-page letter to the Licensee dated Jan. 27, 2015. In this letter at page 7, Mr. LoVullo states, "We expect **no** fish mortality during the 2015 fish passage season." It further states, "[P]lease include a detailed description of the operational and physical measures you will be implementing in 2015 to ensure **safe, efficient passage** at the Ellsworth Graham Lake Project." (emphasis added).

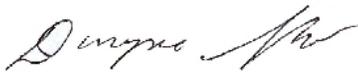
Mr. Shaw's observations and photographs from Oct. 4, 2015 show the Licensee has

failed to adhere to the letter or spirit of the Commission's pro-active guidance document of Jan. 27, 2015. In Oct. 2015, the dead and mutilated bodies of juvenile alewives are appearing at the same locations and in the same numbers as documented by DSF and Mr. Shaw in fall 2014.

Remedy Requested:

DSF agrees with the Jan. 27, 2015 finding of Mr. LoVullo of FERC that this perennial and ongoing killing of juvenile alewives in the turbines of the Ellsworth Project is a violation of Article 406 of the existing license for the Project. As such, DSF requests corrective action by FERC to stop this ongoing fish kill at the Ellsworth Project. DSF requests that FERC immediately order the Licensee to cease power generation at the dam for the duration of the fall 2015 fish migration season so as to prevent any further turbine entrainment of juvenile alosids and other migrating fish at the dam.

Sincerely,



Dwayne Shaw
Executive Director
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att: Fish Kill photographs and video, P-2727, Union River, Ellsworth, Maine. Dwayne Shaw, photographer; comparative photographs of Benton Falls Dam, 2004. Douglas Watts, photographer.