Friends of Merrymeeting Bay

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FERC Comment Ref. P-2284
Brunswick, Maine Androscoggin Dam Killing Fish

October 28, 2016 Contact: Ed Friedman, 207-666-3372 /edfomb@comcast.net

Who: Friends of Merrymeeting Bay
What: **Brookfield Energy's Brunswick Dam Turbines Kill Thousands of Fish**
When: October 15th & 16th
Where: Androscoggin River, Brunswick, Maine

Turbines at Brookfield Energy's Brunswick/Topsham dam have recently killed thousands of out-migrating young of the year (YOY) alewives and other fish. Locals first noticed the massive kill on Saturday 10/15/16, posting mortality photos from the Brunswick Water Street boat launch on Facebook.

Sunday morning, Friends of Merrymeeting Bay (FOMB) volunteers on their monthly water quality monitoring circuit, noticed the kill at Brunswick and further downstream and reported back to Ed Friedman, the organization's Chair. After documenting 500-800 dead fish just at the boat ramp and others on the rocks below the Green Bridge between Brunswick and Topsham and directly below the Brunswick turbine area, Friedman went up and downstream to rule out other sources (there was no mortality observed above Brunswick nor below and above Pejepscot dam, the next one upstream) before calling the Brookfield Emergency Phone Line later that afternoon to report their dam turbines were killing fish. It is not known what immediate action Brookfield took if any.

When next observed by FOMB Tuesday morning, previous planned dam work was underway with a diver down in the turbine vicinity and all turbines shut off. The Taintor gates were open on the Topsham side of the dam allowing fish passage there. Currently after heavy rain the entire dam is spilling.

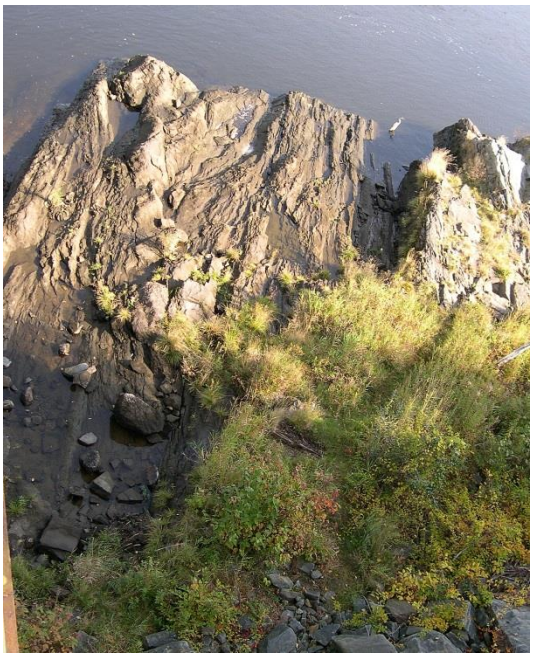
In normal conditions, the only way for migratory fish to pass downstream at Brunswick is through an 18" pipe with grate over the upstream end and flows of 40 cubic feet per second (cfs). This downstream passage is located immediately adjacent to the Unit 1 turbine with intake extending to the surface and with a throughput of 5,075 cfs. On the other side of the fish passage pipe are Units 2 and 3 with combined 2,672 cfs and entrances about 20' below the surface. Out-migrating fish, whether alewives, salmon, shad or eels follow maximum flows leaving the designated pipe in this instance, with little chance of attraction success and ensuring passage through the turbines.

Turbine mortality occurs through decapitation, direct concussive strikes, and pressure differentials on opposite sides of turbine blades leading to exploded swim bladders and eyeballs. All of these examples were seen in the recent kills. Similar mortality has been encountered on the Union River at the dam in Ellsworth, also owned by Brookfield.

FOMB has worked for years to ensure safe passage for migratory fish on the Androscoggin and Kennebec Rivers most recently during five years of litigation under the Endangered Species and Clean Water Acts. Despite overwhelming evidence, FOMB lost these cases because in the period from start to finish of litigation, interim species protection plans (ISPP's) were developed and issued by NOAA Fisheries pursuant to a joint cooperative agreement with USFWS and the court ruled FOMB claims no longer valid (even though several years of violations had occurred for which Brookfield should have been liable).

The recent kill is proof the ISPP's don't work. No fish, including endangered Atlantic salmon are adequately protected from turbine mortality at the facility as currently configured and operated. We request FERC take appropriate actions to ensure the dam owner is held liable and future mortality avoided.

An in depth report documenting detailed timelines of this event and agency correspondence will follow.



Note first photo of dam shows 18" fish passage "downspout" next to turbine bays. Dam is over 600 feet long and this is only safe passage unless water is spilling over the top. Last photo tentatively identified by DMR as a fallfish.

All photos: Ed Friedman, Friends of Merrymeeting Bay. Available on request as jpgs.