Friends of Merrymeeting Bay

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10/12/26

VIA E-FILING

Debbie-Anne A. Reese, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

Re: Brookfield White Pine Hydro Brunswick, Maine Project (FERC P-2284) - FOMB Comments on Brookfield's Response to FERC's Request for Additional Information re. October Fish Kill

Dear Secretary Reese,

We have several issues with Brookfield's response to your request for additional information on the October fish kill at the Brunswick Project. Our comments follow the Brookfield cites below.

Brookfield points out that:

1. (Out-migrating river herring, it should be noted, are believed to follow pulses of flow downstream and as such may pass projects during either day or night.)

FOMB: Herring movement does occur on a 24 hour basis and while downstream flow pulses certainly facilitate downstream movements of young of the year (YOY) fish, during drought conditions flow pulses may not occur so fish move anyway. River herring daytime movement was recognized by Brookfield yet turbines were running despite this. No mortality was observed until several hours after daytime operation was begun which begs the questions-did Brookfield have a technician solely dedicated to continuous observations or was the technician simply to check once in a while? And how readily visible are 3.5 inch (only floating) dead fish from atop the project?

2. At the time, the Project was located within an area classified as experiencing Extreme Drought (D3) conditions, and river flows were unusually low, averaging approximately 1,430 cubic feet per second (cfs). Due to the low flow conditions, only one to two small generating units were operating intermittently during daytime hours.

FOMB: See Figure 1, USGS flows for Auburn, ME. 2026 conditions were entirely predictable and nearly identical to last year. With extremely low flows and expected outmigration, turbines should not have been running at all.

3. At approximately 10:30 a.m. on October 10, 2026, a BWPH fisheries technician observed a small number of dead juvenile river herring in the Brunswick Project tailrace.

FOMB: Was this a dedicated observer or did they just happen to see some dead YOY?

4. BWPH fisheries personnel closely monitored fish passage conditions throughout the day. At approximately 2:00 p.m., technicians observed a noticeable increase in juvenile river herring mortalities. In response, BWPH immediately shut down the remaining operating unit, allowing all river flow to pass via spill in accordance with the Project's fish passage protection measures.

FOMB: High tide was at 1:30 am on the 10th, low at 9:45 am and high again at 2 pm. There were several hours of outgoing tide in the morning to carry dead YOY away without notice. It was only when the tide turned mid-morning that dead fish were noticed and at high tide when there was a "noticeable increase." Mortality may be only or at least most visible when fish are backed up by the tide.

5. MDMR reported that a total of 10,847 adult river herring were stocked in Sabattus Lake, Little Sabattus Pond, No Name Pond, and the Sabattus River in 2026. An additional 29,654 adult river herring were passed upstream into the mainstem Androscoggin River above the Brunswick Project. MDMR further estimated that approximately 8.52 million juvenile river herring would outmigrate from the Sabattus Lake system via the Sabattus River and migrate through the Brunswick Project during the 2026 outmigration season.

FOMB: If 10,847 stocked herring in the Sabattus system equal 8.52 YOY outmigrating, than the additional 29,654 river herring would yield 23,292,346 more YOY. And equal 31,812,346 grand total out migrant YOY from the lower Androscoggin. While the Sabattus fish are released largely as a group, the bulk of Androscoggin outmigrants are coming down river in dribs and drabs or in smaller less noticeable pulses and all while the turbines are normally full operational. Millions of river herring are no doubt being killed by the Brunswick turbines.

6. Based on observations collected by BWPH and discussions with resource agencies, BWPH believes the juvenile river herring mortalities observed on October 10, 2026, were associated with a highly unusual combination of circumstances, including: (1) the annual drawdown release from Sabattus Lake; (2) an exceptionally large concentration of juvenile river herring migrating downstream over a short period; and (3) persistent drought and low-flow conditions throughout the watershed.

FOMB: Conditions 1, 2 and 3 are 100% predictable and clearly Brookfield remained unprepared despite their protocols.

7. BWPH documented approximately 1,500 juvenile river herring mortalities, while the Free the Andro Coalition (FTAC) estimated approximately 3,000 mortalities. Based on the estimate of 8.52 million out-migrating juvenile river herring originating from the Sabattus Lake system and passing the Brunswick Project via the Sabattus River, the estimated mortality represents approximately 0.035% of the anticipated migration population.

FOMB: the Androscoggin River is a bit shy of 900' wide in the Pinette Landing area and gets substantially wider as it extends about 7 miles downstream into Merrymeeting Bay at a line between Pleasant Pt. in Topsham and North Bath. It is absurd to think that 1,500-3,000 dead fish found along ½ mile of south shoreline represent the total fish killed in this incident or certainly for the season. Figures 2 and 3 show buoy tracks from a 2005 deployment in a multi-year circulation study of Merrymeeting Bay by FOMB. These tracks are of buoys released on an outgoing tide in the vicinity of the Brunswick Water St. Boat Launch and represent about 3 days in time. The spatial dispersion and distribution of water is extensive as would be dead or dying juvenile river herring who besides the tide and current would be subject to sinking and predation primarily by other fish, turtles and birds.

Mathur, et al. 2007 in their publication **Juvenile Blueback Herring (Alosa Aestvalis) Survival via Turbine and Spill Way** find 48 hour turbine mortality to be about 4% and mortality from spill over a 3.7 meter drop to be near 12% noting "these results suggest that diversion of juvenile alosids over spillways may not be assumed to be a totally benign strategy without obtaining site-specific data." In a study published April, 2026: **Study Report for the Desktop Entrainment, Impingement, and Turbine Passage Survival Assessment-Lawrence Project (FERC No. 2800)**, Normandeau Associates found a similar 4% rate of turbine induced mortality for alosids. Four percent of the 31,812,346 total estimated outmigrating river herring from the lower Androscoggin is 1,272,493.84. Four percent of the 8.52 million

is 340,800 dead or injured fish. This is far in excess of Brookfield's .035%**.** Their migratory fish passage protocols need further refinement.

Thank you,

Ed Friedman, Chair

Fig. 1. Top line: 97 year median flows, dark line 2026, light line 2025



Fig. 2.

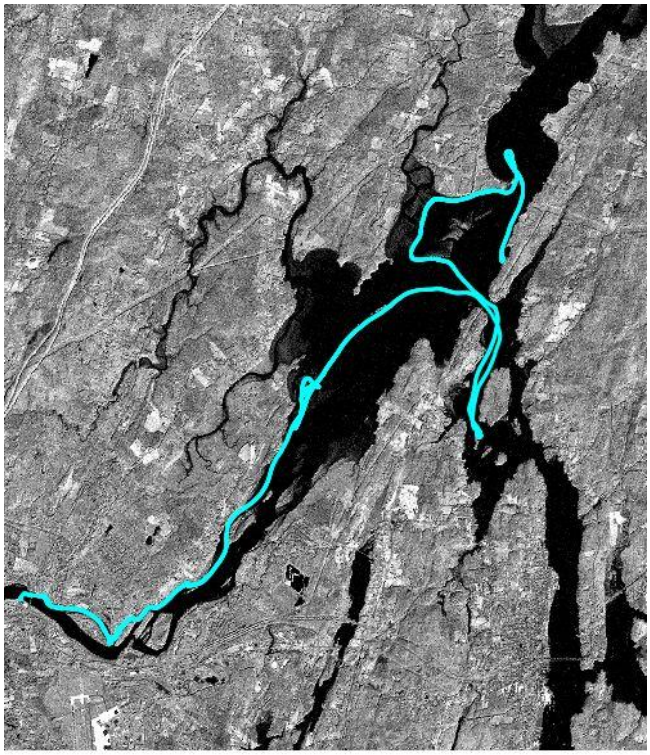
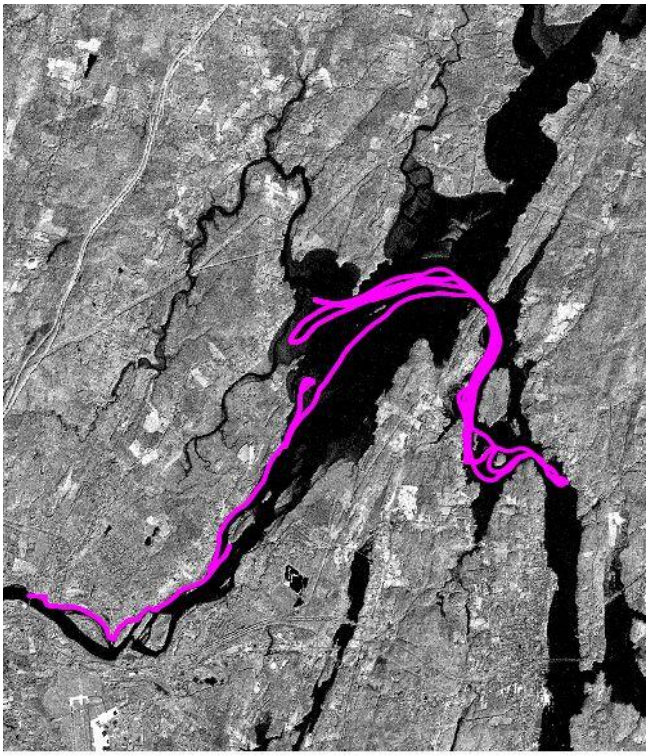


Fig. 3



Founded in 1975, Friends of Merrymeeting Bay (FOMB) utilizes research, education, advocacy, and land conservation to preserve, protect, and improve the unique ecosystems of Merrymeeting Bay and Gulf of Maine.