

June 26, 2025

Ellsworth Project (FERC No. 2727) Ellsworth Development

Debbie-Anne A. Reese, Secretary Federal Energy Regulatory Commission 888 First Street, NE, Room 1A Washington, DC 20426

Electronically Filed

Dear Secretary Reese:

Subject: Ellsworth Project (FERC No. 2727); Report on Fish Mortality Event

Black Bear Hydro Partners, LLC (Black Bear), licensee for the Ellsworth Project (Project) on the Union River in Maine, is reporting a fish mortality event observed at the Project's Ellsworth Development on June 7, 2025. This letter is also in follow-up to a report to the Commission of fish mortalities at the Project dated June 9, 2025 by Mr. Brett Ciccotelli.

In response to the observation and reports of dead adult alewives (presumed post-spawn outmigrants) in the Union River downstream of Ellsworth Dam, Black Bear initiated its voluntary downstream fish migration procedure during the morning of June 7, 2025. This operational response procedure, which has been previously described to the Commission (see letters dated August 27, 2018 and September 20, 2018) and was first implemented in October 2017, involves Black Bear's voluntary shutdown of generation at Ellsworth Station to encourage fish to pass downstream on spill. The procedure is implemented when significant fish mortalities are observed or Black Bear receives a credible report of such mortalities, and it involves a release of water from the upstream Graham Lake Dam prior to the shutdown to ensure that minimum flows are released and to provide a suitable passage flow over the Ellsworth Dam spillway for downstream-migrating fish.

Black Bear received the first report of some dead adult alewives in the vicinity of the Ellsworth Harbor Marina on Saturday morning, June 7th, at around 8:00 a.m. Following that initial report, Black Bear fish passage technicians checked several locations upstream of the Marina and observed some dead alewives in those areas as well. The fish passage technician working at the Ellsworth fish lift that morning did not initially observe any abnormal bird activity or dead fish in the Ellsworth Station tailrace; however, shortly after the 9:18 a.m. high tide, he observed dead alewives along the shoreline immediately downstream of Ellsworth Dam as the tide was going out. Based on this information, Black Bear initiated the operational response procedure (at approximately 10:30 a.m.) and then notified resource agencies of the event at 2:58 p.m. that Saturday afternoon (see attached correspondence).

Black Bear's fish passage staff did not observe any additional fish mortalities in the Ellsworth Project tailrace over the next 2 days, so the operational response procedure was terminated and Ellsworth Station was restarted during the morning of June 9th. The Project continues to operate normally, with no additional fish mortality events observed or reported.



Operational conditions were normal at the Project during the time period of the mortality event, with approximately 1,000 cfs of river flow passed through generating Units #1 and #4 at Ellsworth Station on Thursday, June 5th and into Friday, June 6th, at which point the station generation was reduced to 2 MW (from 4 MW) due to dry conditions with approximately 500 cfs of flow passing through Unit 4¹; this operational change, which was unrelated to the mortality event, was maintained until the time of the station shutdown on June 7th. In addition, the Ellsworth Development's downstream fish passage weirs and fishway flow recirculating pump were operating normally at the time.

Prior to the June 7th mortality event, Black Bear fish passage technicians were on site at Ellsworth each weekday from 7:00 a.m. until 6:00 p.m. operating the Development's fish lift. As a standard practice, the technicians monitor the tailrace throughout the day for indications of fish activity (upstream or downstream migrants) and are observant of bird behavior, which can be an indicator of fish activity.

Although some mortalities of downstream-migrating alewives had been observed², the fish passage technicians did not detect abnormally high mortalities nor significant numbers of post-spawn adult alewives passing by the dam through the end of their shift on Friday, June 6th. In addition, Black Bear did not receive any external reports of fish mortalities through the end of the day on Friday, June 6th. If Mr. Ciccotelli did in fact observe a significant mortality event on June 6th, he evidently failed to report this to Black Bear staff, who, if aware of this information, could have implemented the operational response procedure sooner.

¹

¹ As first communicated to the Commission in a letter dated July 28, 2017, Black Bear made an operational change at Ellsworth Station in 2017 to prioritize Units #1 and #4 over Units #2 and #3 during the downstream fish passage season to protect fish out-migrating to the ocean. This change was made based on the results of a downstream passage fish survival balloon tag study conducted in June of 2017.

² Due to the substantial numbers of alewives passing the Ellsworth Development, the Commission has acknowledged (in correspondence dated March 9, 2017) that some mortality observations are to be expected, stating that "even if a facility is operated as intended and all actions are taken to minimize or prevent fish injury and mortality, some injury and mortality to resident and anadromous fish could result from passage though the turbines during project operation."



Please contact me by e-mail at Kevin.Bernier@Brookfieldrenewable.com or by phone at (207) 951-5006 with any questions or comments.

Sincerely,

Kevin Bernier

Kevin Bernier

Senior Compliance Specialist

Cc: D. Tierney, D. Dow; NMFS

A. Cross, B. Sojkowski, P. Dockens; USFWS

S. Ledwin, C. Clark, L. Hammer, M. Simpson, J. Valliere, E. Atkinson, M. Brown; MDMR

J. Perry, S. Dunham, J. Scoville; MDIFW

L. Paye, C. Briggs; MDEP

H. Frank; FERC

L. Macomber, C. Goodhart, D. Bates, P. McDonough, R. Dill, D. Heidrich, R. Dorman,

M. Osborne, T. Mapletoft, R. Smith, S. Hill, J. York, K. Pocquette; Black Bear

Black Bear Files: Black Bear/Licensing & Compliance/2727/1

From: Dill, Richard

To: Donald Dow; Dan Tierney - NOAA Federal; Sojkowski, Bryan; Cross, Amanda S; Casey Clark

(casey.clark@maine.gov); sean.m.ledwin@maine.gov; mitch.simpson@maine.gov; Hammer, Lars; Valliere,

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Cc: Macomber, Lance; Goodhart, Cameron; Bernier, Kevin; York, Jason; Osborne, Michael; Dorman, Randy; Heidrich,

<u>David</u>; <u>Pocquette, Kayla</u>; <u>Mcdonough, Patrick</u>

Subject: Ellsworth adult alewife mortality event
Date: Saturday, June 7, 2025 2:58:24 PM

In response to the observation of dead adult alewives (presumed post-spawn outmigrants) in the Union River downstream of Ellsworth Dam, this morning Black Bear Hydro initiated its' voluntary downstream fish migration procedure which calls for a temporary station shutdown of all turbine units. As the generating units will be offline, Black Bear intends to pass 700 cfs of flow from Graham Lake in order to spill adequate flow over the Ellsworth flashboards to more safely pass downstream migrating fish during the outage. This is the same flow strategy employed during station shutdowns in the fall to pass outmigrating fish. The station outage will continue through the weekend and conditions will be reevaluated Monday morning. A status update and additional details will be provided to the agencies soon after.

Please let me know if you have any questions

Richard Dill

Compliance Specialist, Fishery Biologist

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From: Dill, Richard

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Cc: Macomber, Lance; Goodhart, Cameron; Bernier, Kevin; York, Jason; Osborne, Michael; Dorman, Randy; Heidrich,

<u>David</u>; <u>Pocquette, Kayla</u>; <u>Mcdonough, Patrick</u>

Subject: RE: Ellsworth adult alewife mortality event - Update

Date: Monday, June 9, 2025 12:01:00 PM **Attachments:** Ellsworth 06-05-25 through 06-08-25.jpg

Good morning,

As an update, Black Bear fish passage staff have not observed any additional mortality of outmigrating post-spawn adult alewives following the voluntary station shutdown initiated on Saturday, so Ellsworth station was brought back on line this morning.

During the 48-hours prior to Saturday morning, the Ellsworth station operation went from passing approximately 1,000 cfs of flow through a combination of generating Units 1 and 4 on Thursday into the day Friday (~ 4 MW generation), at which point the station generation was reduced to 2 MW with approximately 500 cfs of flow passing through Unit 4 (Unit 1 off) which was maintained into Saturday morning until the time of the station shutdown. The downstream fish passage weirs and flow recirculating pump operated normally all week.

Please let me know if you have any questions.

Richard Dill

Compliance Specialist, Fishery Biologist

Brookfield Renewable Mobile: 207-951-2438

From: Paye, Laura

To: <u>Dill, Richard; Donald Dow; Dan Tierney - NOAA Federal; Sojkowski, Bryan; Cross, Amanda S; Clark, Casey;</u>

Ledwin, Sean M; Simpson, Mitch; Hammer, Lars; Valliere, Jason; Bishop, Joseph; john.perry; Patrick Dockens (patrick dockens@fws.gov); Briggs, Claire; Atkinson, Ernie; Brown, Michael; Dunham, Steve; Scoville, Jacob;

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Cc: Macomber, Lance; Goodhart, Cameron; Bernier, Kevin; York, Jason; Osborne, Michael; Dorman, Randy; Heidrich,

David; Pocquette, Kayla; Mcdonough, Patrick

Subject: RE: Ellsworth adult alewife mortality event - Update

Date: Thursday, June 12, 2025 5:29:10 PM

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Hi Richard,

Could you describe in a little more detail exactly when your staff noted the mortality event? There was a report filed on the FERC record that indicated the mortality was observed 6/6, and that the fish could have been there longer.

Also, why was station generation reduced to 2MW on Friday, was it due to the mortality event?

Thank you for any other details you can provide.

Laura

Laura Paye (she/her) Hydropower Coordinator Bureau of Land Resources Maine Department of Environmental Protection (207) 219-9563 From: Dill, Richard

To: Paye, Laura; Donald Dow; Dan Tierney - NOAA Federal; Sojkowski, Bryan; Cross, Amanda S; Clark, Casey;

Ledwin, Sean M; Simpson, Mitch; Hammer, Lars; Valliere, Jason; Bishop, Joseph; john.perry; Patrick Dockens (patrick dockens@fws.gov); Briggs, Claire; Atkinson, Ernie; Brown, Michael; Dunham, Steve; Scoville, Jacob;

"holly.frank@ferc.gov"

Cc: Macomber, Lance; Goodhart, Cameron; Bernier, Kevin; York, Jason; Osborne, Michael; Dorman, Randy; Heidrich,

<u>David; Pocquette, Kayla; Mcdonough, Patrick</u> RE: Ellsworth adult alewife mortality event - Update

Date: Friday, June 13, 2025 11:16:38 AM

Good morning Laura,

Subject:

Last week fish passage technicians were on site each weekday from 7:00 a.m. until 6:00 p.m. operating the fish lift. As part of our standard operating procedures the technicians monitor the tailrace throughout the day for indications of fish activity (upstream or downstream migrants) and are observant of bird behavior, which can be a good indicator of fish activity.

Through the end of the shift on Friday, June 6th, our fish passage technicians had not detected significant numbers of post spawn adult alewives passing by the dam. We had also not received any external reports of fish activity through the end of Friday.

We only received the first report of some dead adult alewives in the vicinity of the Ellsworth Harbor Marina on Saturday morning, June 7th, at around 8:00 a.m.. Following that initial report, Black Bear fish passage technicians checked several locations upstream of the Marina (behind Dead River and RF Jordan) and observed some dead alewives in those areas as well. The technician working at the fish lift that Saturday morning did not initially observe any abnormal bird activity or dead fish in the Ellsworth Station tailrace; however, a few hours after the 9:18 a.m. high tide, he observed dead alewives along the shoreline immediately downstream of the dam as the tide was going out.

Based on this information we promptly undertook operational changes to reduce the potential impact of this event. At 10:27 a.m. our systems operations was directed to adjust operation of the station, with agency notification of the event being sent at 2:58 pm.

The reduction of station generation from 4 MW to 2 MW that occurred on Friday, June 6th was a normal operational event, and not a response to observed or reported fish mortalities.

Richard Dill

Compliance Specialist, Fishery Biologist

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