

**From:** Dan Kircheis - NOAA Federal <[dan.kircheis@noaa.gov](mailto:dan.kircheis@noaa.gov)>

**Sent:** Thursday, April 28, 2022 7:52 AM

**To:** Dan McCaw <[dan.mccaw@penobscotnation.org](mailto:dan.mccaw@penobscotnation.org)>; Ledwin, Sean M <[Sean.M.Ledwin@maine.gov](mailto:Sean.M.Ledwin@maine.gov)>

**Cc:** Peter\_Lamothe <[Peter\\_Lamothe@fws.gov](mailto:Peter_Lamothe@fws.gov)>; Cox, Oliver N <[oliver\\_cox@fws.gov](mailto:oliver_cox@fws.gov)>; Bartron, Meredith <[Meredith\\_Bartron@fws.gov](mailto:Meredith_Bartron@fws.gov)>; Simpson, Mitch <[Mitch.Simpson@maine.gov](mailto:Mitch.Simpson@maine.gov)>; Ruksznis, Peter <[Peter.Ruksznis@maine.gov](mailto:Peter.Ruksznis@maine.gov)>; julie.crocker <[julie.crocker@noaa.gov](mailto:julie.crocker@noaa.gov)>; jeff.murphy <[jeff.murphy@noaa.gov](mailto:jeff.murphy@noaa.gov)>

**Subject:** Re: Anticipated License Amendment at Milford to Address Delay in Bypass

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Thank you Sean and Dan for your feedback. We completely agree with your sentiments in respect to maximizing passage efficiencies for all diadromous fish.

As you know, Brookfield will be proposing to make improvements at Milford because they have exceeded the extent of take identified in the Incidental Take Statement included with our last Biological Opinion (i.e., not meeting the delay standard for Atlantic salmon). While we can recommend that Brookfield consider improvements that would not only address delay of migrating salmon but also improve passage of other species, we have limited ability to affect change for other species through this reinitiation. However, in any new Biological Opinion that results from the reinitiation of consultation we will need to consider the effects of the changes on Atlantic salmon critical habitat, which will consider effects to alosines. That said, Brookfield is still fully bound by all of the requirements that were set forth in their FERC license. Those terms and conditions establish a floor for fish passage of all other species that they will need to achieve following any design or operational modification resulting from the reinitiation of section 7 consultation. We will be sure to remind them of this as we proceed with the reinitiation as well as reiterating the importance of other species to Atlantic salmon critical habitat and the larger ecosystem on which the species depends.

Dan

On Thu, Apr 14, 2022 at 12:43 PM Dan McCaw <[Dan.McCaw@penobscotnation.org](mailto:Dan.McCaw@penobscotnation.org)> wrote:

Partners,

The Penobscot Nation fully supports the positions outlined by our colleagues at MDMR. Well said, Sean.

Milford is the gate all species must pass at least once in their lifetime, and for some, many times. Consideration of all species and the need for safe, timely and efficient upstream and

downstream passage in all seasons is a critical need at the project. Fortunately, we have a wealth of data and studies to inform the process.

Many thanks,

Dan

----- Original message -----

From: "Ledwin, Sean M" <[Sean.M.Ledwin@maine.gov](mailto:Sean.M.Ledwin@maine.gov)>

Date: 4/14/22 11:25 AM (GMT-05:00)

To: Dan Kircheis - NOAA Federal <[dan.kircheis@noaa.gov](mailto:dan.kircheis@noaa.gov)>, Peter\_Lamothe <[Peter\\_Lamothe@fws.gov](mailto:Peter_Lamothe@fws.gov)>, Dan McCaw <[Dan.McCaw@penobscotnation.org](mailto:Dan.McCaw@penobscotnation.org)>

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Subject: RE: Anticipated License Amendment at Milford to Address Delay in Bypass

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Hey Dan,

Thanks for reaching out on this. Happy to discuss the below comments in more detail. Basically we'd want to make sure all the other species are explicitly considered and while the ESA process might narrow the scope of specific requirements, we'd still want to stress to BF the importance and need to improve passage for all species and efficiencies in doing this now rather than addressing in future anticipated requirements. Sean

We support the criteria that has been outlined below, but we do offer the following recommendations.

1. “Minimize potential for any changes in operations or new structures to result in delays or reduced efficiency of passage for other diadromous fish; ideally, changes in operations or new structures would improve passage conditions for all diadromous species”
  - This is a “must”, not just a recommendation, for Maine DMR. Any changes in operations or structures will have some impact on passage for other species at the project. By making the process inclusive of all species, explicitly, you will ensure that the outcome is positive for all species. As you know, Milford is the first dam on the Penobscot River and will have a larger impact on populations in the watershed than any other single project. As restoring co-evolved species to critical habitat is a clear goal outlined in the salmon restoration plan, it is critically important that the other diadromous species are included in this important change to the Milford Project. While the primary goal of the alternatives analysis should be reducing impacts on salmon, the full suite of diadromous species must be explicitly included in the analysis by including the timing and physical constraints of these species.
  - Upstream and downstream passage issues have been identified for nearly every diadromous species. MDMR has made requests to Brookfield to discuss mitigation measures for river herring, American shad, and American eel. Brookfield has refused to acknowledge issues and has not agreed to discuss mitigation measures. That said, we are hopeful that mitigation measures will be implemented in the future to address these issues once performance standards or other measures trigger FERC to act. The primary means of downstream passage at Milford is a reliance on the spill program currently, and there is a potential that this spill program will be extended both for the protection of salmon smolts as well as for other species. The spill program is also known to cause false attraction for upstream migrants. Therefore, the alternatives analysis should include 1) the potential for the duration of the current spill program to increase and 2) analysis of alternative downstream measures such as hard structures that would not conflict with upstream passage effectiveness.

**From:** Dan Kircheis - NOAA Federal <[dan.kircheis@noaa.gov](mailto:dan.kircheis@noaa.gov)>

**Sent:** Monday, April 04, 2022 4:23 PM

**To:** Peter\_Lamothe <[Peter\\_Lamothe@fws.gov](mailto:Peter_Lamothe@fws.gov)>; Ledwin, Sean M <[Sean.M.Ledwin@maine.gov](mailto:Sean.M.Ledwin@maine.gov)>; Dan McCaw <[dan.mccaw@penobscotnation.org](mailto:dan.mccaw@penobscotnation.org)>

**Cc:** Cox, Oliver N <[oliver\\_cox@fws.gov](mailto:oliver_cox@fws.gov)>; Bartron, Meredith <[Meredith\\_Bartron@fws.gov](mailto:Meredith_Bartron@fws.gov)>; Simpson, Mitch <[Mitch.Simpson@maine.gov](mailto:Mitch.Simpson@maine.gov)>; Ruksznis, Peter <[Peter.Ruksznis@maine.gov](mailto:Peter.Ruksznis@maine.gov)>; julie.crocker <[julie.crocker@noaa.gov](mailto:julie.crocker@noaa.gov)>; jeff.murphy <[jeff.murphy@noaa.gov](mailto:jeff.murphy@noaa.gov)>

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Hello Peter, Sean and Dan -

We anticipate that Brookfield will file a request for a license amendment with FERC in 2022 to address false attraction to the Milford bypass reach which results in salmon stranding and delay in the bypass reach. It is likely that spill over the Milford Dam (which is unavoidable) causes false attraction to the bypass reach which then contributes to the project failing to achieve the upstream performance standard (i.e., 95% of adult salmon must pass the project within 48 hrs). A license amendment may be a modification to their Species Protection Plan or a stand alone license amendment. We then anticipate that FERC will request reinitiation of consultation with us to consider effects of continued operation of Milford, through the duration of their existing license, consistent with the proposed modified license. This will result in a new Biological Opinion for the Milford Project.

We plan to request that Brookfield carry out an alternatives analysis to support identification of preferred solutions to the bypass stranding and delay problem. In order for that analysis to be informed by agency interests and management needs, we need to identify issues that each group believes must be considered in the alternatives that Brookfield prepares. NMFS will request that any alternative includes a clear description of the proposed structural and/or operational changes and how they expect those changes to result in achieving or exceeding the performance standards that are in their current license, as amended by the SPP.

Following discussions regarding this issue within the SHRU coordinating committee, we have identified the criteria that we understand are “must haves” that should be considered in an alternatives analysis. We would appreciate it if you could let me know within 10 days (4/18/2022) if the following list of criteria capture your agency’s needs regarding this issue. If needed, we can make arrangements for a call to discuss this further. If we do not hear from you, we will assume that your agency accepts the list of management measures described below.

Bear in mind that the sole purpose of the identification of alternatives is to develop a list of alternatives that will reduce attraction and delay of adult salmon in the bypass reach as necessary to achieve the upstream performance standard currently in the FERC license for the Milford Project. While there may be some opportunities for resource agencies and PIN to request additional measures for Atlantic salmon protection at the Milford Project when FERC issues a notice of license amendment, we should not expect that Brookfield will propose or FERC will require a complete make-over of the Species Protection Plan or other license requirements.

***Criteria that Brookfield must address in any alternatives analysis***

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- Safe, timely, and effective passage of Atlantic salmon at the project consistent with or exceeding
- the criteria identified in the Milford license. This includes at a minimum, the project should achieve a standard of passing 95% of adult salmon (within 48 hrs) and 96% for downstream migrating kelts and smolts (24 hrs for smolts only).
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***Criteria we recommend Brookfield consider in their alternatives analysis***

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- Avoiding harm and reduce delay of smolts, adults and kelts at Milford as much as possible;
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- Allow for the potential collection of all upstream migrating Atlantic salmon passing the project
- *(this is not intended to direct operations just to ensure this is possible*
- *if it is determined necessary)*
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- 
- Minimize potential for any changes in operations or new structures to result in delays or reduced
- efficiency of passage for other diadromous fish; ideally, changes in operations or new structures would improve passage conditions for all diadromous species
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- 
- 
- Eliminate the potential for stranding of Atlantic salmon and other anadromous species in isolated

- pools downstream of the Milford Dam.
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Thank you!

Dan Kircheis

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Dan Kircheis

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