



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
GREATER ATLANTIC REGIONAL FISHERIES OFFICE
55 Great Republic Drive
Gloucester, MA 01930

January 27, 2022

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

RE: NMFS comments on the Draft License Application for the Green Lake Hydroelectric Project (FERC No. 7189-014)

Dear Ms. Bose:

On November 1, 2021, Green Lake Water Power Company (GLWPC or licensee) submitted its Draft License Application (DLA) for the Green Lake Hydroelectric Project (FERC No. 7189-014 or Project) to the Federal Energy Regulatory Commission (FERC or Commission). The Project is located on Reeds Brook, a tributary to the Union River in the town of Ellsworth, Maine. We are submitting comments on the DLA in accordance with the Commission's Integrated Licensing Process (ILP).

If you have any questions regarding these comments, please contact Dan Tierney (Dan.Tierney@noaa.gov).

Sincerely,

A handwritten signature in black ink that reads "Julia E. Crocker".

Julia Crocker
Endangered Fish Branch Chief

Enclosure

cc: Service List



NMFS Comments on the Exhibit E of the DLA

Section 3.3, *Endangered Species Act*

GLWPC misinterprets the language in section 7(a)(3) of the Endangered Species Act (ESA) when they indicate that the consultation under the Endangered Species Act will occur with the US Fish and Wildlife Service (USFWS). The referenced language in the statute indicates that "...a Federal agency shall consult with the Secretary on any prospective agency action." Section 3(15) of the Act defines "Secretary" to mean either the Secretary of Interior or the Secretary of Commerce. The NMFS is within the Department of Commerce, and consistent with an agreement with USFWS, is the lead consulting agency for ESA consultations that consider effects of dams within the geographic range of the Gulf of Maine distinct population segment (GOM DPS) of Atlantic salmon.

GLWPC cites the language in section 4(b)(2) of the ESA that discusses exemptions to critical habitat designations, and suggests that the "section may apply to this Project when cumulative effects involving the Green Lake National Fish Hatchery are considered." We would like to make clear that the Secretary of Commerce did not exempt the Green Lake watershed from critical habitat at the time of listing, and therefore this section of the ESA does not apply. However, we recognize the importance of the conservation hatchery program to Atlantic salmon survival and recovery, and will consider potential effects to its operation during the section 7 consultation.

Section 5.3.1, *Species*

GLWPC indicates that "The following migratory fish were identified during scoping: alewife, American eel, American shad, Atlantic salmon, blueback herring, and sea lamprey. With the exception of landlocked salmon, none of these are currently present in Green Lake. These species are all migratory fish that have potentially been present in the Union River." GLWPC is correct that these species (except for American eel, which GLWPC reports as being occasionally entrained in the penstock in section 5.3.3.1) do not occur in Green Lake; however, this is because the dam blocks access. All of these species are expected to be present in the lower Union River, and some (i.e., Atlantic salmon, alewives, and blueback herring) are currently transported into the upper Union from the fish trap at the Ellsworth Dam. With the implementation of passage measures at the Ellsworth and Graham Lake dams (expected during the term of the new license), we anticipate that these species, particularly Atlantic salmon, will have volitional access to their historical habitat in the Union, except for those areas blocked by dams. Therefore, although the licensee may be correct that these species do not occur in Green Lake currently, we anticipate that they will have access to Reeds Brook during the term of any new license.

Section 5.3.3.6, *River herring (alewife, blueback herring)*

The GLWPC correctly indicates that blueback herring are trapped at the Ellsworth Dam and released into Leonard Lake. In an effort to capture some of the blueback herring run, Black Bear Hydro Partners releases approximately 1,600 river herring after June 10 into Leonard Lake with

the assumption that many of these are blueback herring. Any blueback herring that arrive before or after the trapping of those fish are transported to Graham Lake along with the alewives. It is possible, therefore, that a small number of blueback herring do occur above the Graham Lake Dam and could approach the Green Lake Dam. It should be noted that NMFS has required that swim-through fish passage be constructed at the both the Ellsworth and Graham Lake dams 15 years after FERC issues a license for the Ellsworth Project. Therefore, it is expected that blueback herring could have access to habitat above both dams once fish passage measures have been implemented.

Section 5.3.3.7, *American shad*

The Licensee claims that there is no American shad habitat in the Union River, and that they "...are not expected to have access to Reeds Brook now, or in the future." There is limited information of historical use of the river by shad, or any other sea-run fish. However, there is reason to believe that Ellsworth Falls (at the site of the existing Ellsworth Hydro Project) may not have been a complete barrier to the species, and that they may have accessed habitat up to Mariaville Falls on the West Branch. That said, the Licensee is correct that the species is not currently passed at the Ellsworth Dam, and the small number that are trapped at the project are released back downstream per guidance from Maine's Department of Marine Resources (DMR). However, as indicated, NMFS has required that swim through fish passage be constructed at the both the Ellsworth and Graham Lake Dams 15 years after FERC issues a license for the project. Therefore, it is expected that American shad could have access to habitat above both dams once fish passage measures have been implemented.

Section 5.3.4, *Proposed environmental measures*

It should be noted that although this section is entitled *Proposed environmental measures* the Licensee does not propose any measures to reduce project impacts on any species. Anadromous Atlantic salmon should be incorporated into this section. Although uncommon due to a lack of stocking and inadequate passage at the dam, salmon are occasionally trapped at the Ellsworth Project and trucked to the West Branch of the Union. In 2020, for instance, three pre-spawn adult salmon were trapped and transported into the river. We anticipate that there will be an increase in the abundance and distribution of salmon throughout the Union River over time due to improved fish passage measures required at the Ellsworth Project during the relicensing process.

Section 5.3.4.6, *River herring*

The Licensee indicates that "Alewife passage would risk fish in the lake and blueback herring are not expected to have access to Reeds Brook."

As indicated in a previous comment, we anticipate that a small proportion of the river herring that are stocked into habitat above Graham Lake Dam are blueback herring. Although Black Bear moves a small number of river herring (some of which are blueback herring) into Leonard Lake annually after June 10, it is unlikely that they are capturing the entire run of the species, which means some are likely transported into Graham Lake.

Maine's Department of Inland Fisheries and Wildlife (IFW) has filed the following comment regarding river herring accessing upstream habitat in Green Lake:

In addition to invasive fish concerns associated with fish passage, density dependent interactions between anadromous alewives and landlocked rainbow smelt remains an ongoing concern of our Agency and is a focus of an interagency interactions workgroup to coordinate research that will support restoration management goals. Smelt are an established fishery in Green Lake as well as the preferred forage species of landlocked salmon. To be clear, MDIFW continues to be supportive of the restoration of searun species to Maine waters within the historic ranges of these species; however, our Agency does have density dependent concerns regarding possible negative interactions between anadromous alewives and landlocked smelts that could decrease year-around smelt forage for managed game species in certain waterbodies, including Green Lake (FERC Accession # 20190626-5053; June 26, 2019).

Maine IFW indicates that the potential effect of alewives on landlocked smelt is an issue that is being considered by an active interagency workgroup (of which NMFS is a participant), and that they are generally "supportive of the restoration of searun species in Maine within the historic ranges of these species." While there is much work yet to be done, it is probable that this group will reach resolution during the term of any future license issued at the Green Lake Project, and that one possible outcome is consensus that alewives do *not* have an impact on smelt. Therefore, the assumption that alewives are detrimental to other species in Green Lake is premature.

Section 5.6.2.1, *Environmental Analysis, Atlantic salmon*

This *Environmental Analysis* does not contain sufficient analysis regarding the effect that the project has on critically endangered Atlantic salmon or its designated critical habitat. It consists primarily of an analysis on the presence of adequate fish passage flows, the threat of invasive species to fisheries in Green Lake, and the water needs of Green Lake National Fish Hatchery. While all of these are important considerations when analyzing the potential for fish passage at this project, this section should include a thorough analysis on the effect that the project has on critically endangered Atlantic salmon, and its designated critical habitat. With the implementation of fish passage measures at the Ellsworth Project, we anticipate that Atlantic salmon could access Reeds Brook with increasing frequency during the term of a new license at the Green Lake Project. There is also modelled rearing habitat for Atlantic salmon both in Reeds Brook, and in the tributaries to Green Lake¹. We request that GLWPC incorporate analysis to indicate how the Green Lake Project may impact this endangered species and critical habitat. We also note that consultation pursuant to section 7 of the ESA will be required for any proposed issuance of a new license by FERC.

Fish Passage Flow

¹ Maine Stream Habitat Viewer. <https://webapps2.cgis-solutions.com/MaineStreamViewer/>

In comments on a study dispute on March 20, 2020, GLWPC included an analysis regarding the amount of flow that might be available at the project for fish passage (Accession # 20200320-5152, Appendix B). We had requested this information as part of a study request that was rejected by FERC. It is our position that this is relevant information that is critical for evaluating the potential for installing and operating effective fish passage facilities at the project; and we thank GLWPC for providing it. The provided analysis indicates that the amount of available flow is extremely limited and, that except for the month of May, may not be sufficient to support facilities that could provide consistent upstream and downstream passage during the critical passage months for our trust species. We intend to evaluate the implications of limited flow on the potential for, and effectiveness of, any fish passage measures at the appropriate time. Although referenced in section 5.6.2.1, we request that the flow information be incorporated in full in the final license application so that it can be adequately considered by FERC and the state and federal agencies.

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