

United States Department of Interior Fish and Wildlife Service Maine Field Office 1168 Main Street Old Town Maine 04468



United States Department of Commerce National Oceanic and Atmospheric Administration National Marine Fisheries Service One Blackburn Drive Gloucester, MA 01930-2298

August 13, 2009

Mr. Patrick Keliher Director, Bureau of Sea Run Fisheries and Habitat State of Maine Department of Marine Resources 21 State House Station Augusta, Maine 04333-0021

Dear Mr. Keliher:

As you are aware, at the recent July 21, 2009 meeting of the National Marine Fisheries Service (NMFS), U.S. Fish and Wildlife Service (USFWS), Maine Department of Marine Resources (MDMR), Maine Department of Environmental Protection (MDEP), and representatives from the hydro industry in Maine, there was some discussion as to what activities currently affecting listed Atlantic salmon at hydroelectric projects in Maine are presently covered under the existing scientific research/enhancement of survival and recovery permit (50 C.F.R. 17.22(a)) and what activities the industry should propose to be covered under ESA section 7 consultations and/or section 10 habitat conservation plans. At the conclusion of that meeting, we committed to provide written clarification and that is the purpose of this letter.

The Endangered Species Act (ESA) prohibits the take of endangered species, including the Gulf of Maine Distinct Population Segment (GOM DPS) of Atlantic salmon as well as shortnose sturgeon, unless the take is authorized under specific provisions of the ESA. "Take" is defined by the ESA as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect," or to attempt to engage in any such conduct. The ESA also prohibits actions that cause or solicit a take by a third party. Authorization can be provided by NMFS or USFWS through the issuance of a permit under section 10(a)(1)(A) of the ESA for directed or intentional take for the purposes of scientific research or to enhance the propagation or survival of a listed species (called scientific research, recovery, or enhancement permits). Alternatively, under ESA section 10(a)(1)(B), permits may be issued by the Services for taking that is incidental to the purposes of an otherwise lawful activity (incidental take permits). Finally, under ESA section 7(a)(2), incidental take statements may be issued to exempt from the prohibitions any take anticipated as an incidental result of an activity conducted, permitted, or funded by a federal agency provided this take would not be likely to result in jeopardy to the species or destruction of its critical habitat.

As stated in the final listing rule for Atlantic salmon, dams are among the leading causes of both historical declines and contemporary low abundance of the GOM DPS of Atlantic salmon. Dams directly and substantially reduce survival rates of Atlantic salmon in the following ways:

- 1. Dams directly limit access to otherwise suitable habitat. This has reduced spatial distribution of the GOM DPS over the last 200 years.
- 2. Dams also directly kill and injure a significant number of salmon on both upstream and downstream migrations. Injury and mortality due to dams occurs at the smolt and adult life stages. These older life stages are particularly important from a demographic perspective since slight changes in survival rates at older life stages can drive demographic trends.
- 3. Dams also degrade the productive capacity of habitats upstream by inundating formerly free-flowing rivers, reducing water quality, and changing fish communities.

Because of these impacts, NMFS and USFWS determined that dams represent a significant threat to the survival and recovery of the GOM DPS.

It is important that all of the impacts of dams on all life stages of Atlantic salmon be identified, and examined, and permitted, as appropriate, both to facilitate recovery of the species and to ensure that the industry has full protection and authorization under the ESA. We have advised dam owners that they should comprehensively identify and analyze all aspects of their operations that could impact salmon (and perhaps sturgeon) including, but not limited to, impeded passage, entrainment/impingement, effects on flow, and effects on water quality. This analysis could be compiled in either a habitat conservation plan to be submitted as an application for a section 10(a)(1)(B) incidental take permit or a species protection plan to be filed with FERC to request a license amendment which would trigger a section 7 consultation. As you are aware, under the Statement of Cooperation between NMFS and USFWS, NMFS has responsibility for addressing dams regardless of which option is pursued.

To clarify, the MDMR section 10(a)(1)(A) enhancement of survival permit covers the trapping and handling of the fish for scientific data collection and/or utilization in the conservation hatchery program per trap operating procedures and fish handling protocols, but not the effects of the dam on the upstream passage of salmon. The MDMR permit addresses only the effects on those fish that are trapped or sampled under the direction of state fishery biologists for data collection or use in the hatchery restoration program. The impact of the dam on passage and habitat conditions is not authorized under the MDMR section 10(a)(1)(A) permit.

While the State of Maine does own and operate several fishways at hydroelectric projects within the geographic range of the GOM DPS of Atlantic salmon (the Veazie Dam fishway is owned and operated by the State of Maine), these fishways are appurtenant structures to the power operations at FERC-licensed facilities. Therefore, it is the obligation of dam owners to identify, address, and seek ESA authorization and protection for the impact of these structures and their operations on listed species and their habitats. For instance, if a Licensee cannot demonstrate that 100% of upstream (or downstream) migrants can move safely and without delay past a dam, then take coverage under the ESA will be needed. That authorization and protection cannot be provided by others holding section 10(a)(1)(A) enhancement of survival permits. Enhancement of survival permits under section 10(a)(1)(A) can be issued only for scientific purposes or to enhance the propagation or survival of a listed species. The presence and operation of a hydroelectric dam is for generation of electricity, not for a scientific purpose or to enhance the survival of salmon. Because dams have been identified as a significant threat to the species, they

are not considered an enhancement tool for recovery. The incidental impacts of dams can only be appropriately authorized or exempted under section 10(a)(1)(B) incidental take permit (and accompanying habitat conservation plan) or through section 7 consultation with a federal action agency such as FERC, respectively.

The MDMR section 10(a)(1)(A) enhancement of survival permit does not cover activities related to downstream fish passage efficiency studies for salmon required by FERC license conditions because this is not an activity conducted by MDMR. Because passage efficiency studies are scientific studies whose purpose is to enhance the survival of salmon, we believe section 10(a)(1)(A) is an appropriate mechanism to authorize such take. As we requested in the July 21<sup>st</sup> meeting, it would be helpful if the dam owners would provide a list of such studies. The appropriate applicant for a permit to cover downstream passage efficiency studies would be whomever will be conducting the study, either the licensee or a consultant to the licensee. Here is a link to the application for a 10(a)(1)(A) permit <a href="http://www.fws.gov/forms/3-200-55.pdf">http://www.fws.gov/forms/3-200-55.pdf</a>. We again emphasize that section 10(a)(1)(A) authorization of take as a result of passage efficiency studies would not extend to covering the take that results from the impact of the dam on the species.

Given that the impact of dams is one of the driving factors for the current endangered status of Atlantic salmon and represents a significant impediment to recovery, it is important that we collaborate with the hydro industry to identify, avoid, minimize, and mitigate that impact. We look forward to continued cooperation with the State of Maine and the industry to work through these issues.

Sincerely,

Máry A. Colligan

Asst. Reg. Admin. for Protected Resources

National Marine Fisheries Service

Lori H. Nordstrom, Supervisor

Maine Field Office

U.S. Fish and Wildlife Service

cc:

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