Response Statement - Atlantic Salmon, Outer Bay of Fundy population

December 8, 2011

Common Name: Atlantic Salmon, Outer Bay of Fundy population
Scientific Name: *Salmo salar*

Status assessment by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC): Endangered

How the Minister of the Environment intends to respond to the assessment: The Minister of Fisheries and Oceans will undertake consultations with the government of New Brunswick, Aboriginal peoples, stakeholders, and the public on whether or not the Atlantic Salmon, Outer Bay of Fundy population, should be added to the *List of Wildlife Species at Risk* (Schedule 1) under the *Species at Risk Act* as Endangered. The Minister of the Environment will forward the COSEWIC assessment of the Atlantic Salmon, Outer Bay of Fundy population, to the Governor in Council upon completion of consultations.

Once a species has been assessed by COSEWIC, further steps must be undertaken before it is added to Schedule 1 of the *Species at Risk Act*. For more information on this process, please view The Species Listing Process Under SARA.

Reason(s) for status designation provided by COSEWIC: This species requires rivers or streams that are generally clear, cool and well-oxygenated for reproduction and the first few years of rearing, but undertakes lengthy feeding migrations in the North Atlantic Ocean as older juveniles and adults. This population breeds in rivers tributary to the New Brunswick side of the Bay of Fundy, from the U.S. border to the Saint John River. Small (one-sea-winter) and large (multi-sea-winter) fish have both declined over the last 3 generations, approximately 57% and 82%, respectively, for a net decline of all mature individuals of about 64%; moreover, these declines represent continuations of greater declines extending far into the past. There is no likelihood of rescue, as neighbouring regions harbour severely depleted, genetically dissimilar populations.The population has historically suffered from dams that have impeded spawning migrations and flooded spawning and rearing habitats, and other human influences, such as pollution and logging, that have reduced or degraded freshwater habitats. Current threats include poor marine survival related to substantial but incompletely understood changes in marine ecosystems, and negative effects of interbreeding or ecological interactions with escaped domestic salmon from fish farms. The rivers used by this population are close to the largest concentration of salmon farms in Atlantic Canada.

Occurrence: New Brunswick, Atlantic Ocean

Competent Minister(s):
Minister of Fisheries and Oceans

Province(s) and territory (territories) to be consulted:
New Brunswick

Applicable federal legislation: Fisheries are managed and fish and fish habitat are protected under the *Fisheries Act*.

Conservation activities underway: Under an agreement with the Province of New Brunswick, DFO is currently providing support for the rearing of oBoF Atlantic Salmon for the Saint John River. The Mactaquac Biodiversity Facility operates this supportive rearing program, which releases fish above the Mactaquac Dam to mitigate losses due to hydroelectric development. DFO also conducts annual parr, smolt, and adult oBoF Atlantic Salmon abundance surveys on two rivers, in co-operation with First Nations and local volunteers and staff of conservation groups and New Brunswick Power. The data from these surveys will be used to help determine the recovery potential of oBoF population. Researchers from DFO, First Nation partners, and conservation groups are also tracking the movements of adult salmon in relation to hydroelectric dams and spawning tributaries. In addition, there are plans in place, through a collaboration of multiple stakeholders, to attempt to restore salmon to the Magaguadavic River by captive-rearing and cross-breeding parr collected from tributaries of the lower Saint John River. Shoreline and habitat restoration projects have been undertaken by partners and stakeholders in multiple rivers within this Designatable Unit.