

**Council**

**CNL(11)31**

*Annual Report  
on Actions Taken Under Implementation Plans*

*Canada*



## Annual Report on actions taken under Implementation Plans for the Calendar Year 2010

### Section 1: Details of any significant changes to the management outlined in the introduction to the Implementation Plan.

A Recovery Strategy was published for the endangered Inner Bay of Fundy Atlantic Salmon which included identification of freshwater critical habitat.

In addition, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) assessed all 16 Designatable Units (DUs) of Atlantic salmon in Canada. DUs in the southern range were more at risk than in the northern range. The south Newfoundland population was designated as threatened, and five populations in the Bay of Fundy, outer coast of Nova Scotia and Anticosti Island were assessed as endangered. To the north, the situation is not as dire. Populations in the Gulf of St. Lawrence were assessed as Special Concern and three of the most northern populations in Canada were considered Not at Risk; relatively pristine rivers and improved fisheries management likely explain the stable to increasing abundance of these northern populations. Recovery potential assessments for the threatened and endangered units are planned for 2011-2012 in support of the listing decision. Under the *Species at Risk Act*, the Government of Canada is required to formally respond to these assessments with a listing decision.

#### Maritimes Region

- Inner Bay of Fundy stocks (parts of Areas 22-23) listed under Schedule 1 of the Species at Risk Act as “endangered” – recovery plan in place in 2010; live gene banking is ongoing. See Annex 1 for Salmon Management Area map.
- In 2010, Areas 20 and 21 closed to hook and release due to low abundance and aboriginal concerns over priority access for Food, Social, or Ceremonial (FSC) fisheries where stocks are below conservation requirements. The closures implemented in 2010 are anticipated to continue in 2011.
- Low abundance is expected to continue with further river extirpations in Areas 20 and 21. Many rivers in these two areas are significantly impacted by acidification.
- Live gene banking (parr to adult grow-out) in priority rivers to prevent extirpations in Saint John River (Area 23) and several rivers in Areas 20 and 21.
- In Area 19, only 4 rivers were open to hook and release in 2010. That number could be reduced to 2 in 2011.

- In 2010, there was general agreement among aboriginal groups in Nova Scotia not to harvest on rivers that were below conservation requirements. Fisheries and Oceans Canada (DFO) expects that same position to carry forward into 2011.

**Section 2: A description of any significant changes in the status of stocks and information on catches. The Council has asked that the following information on catches be provided:**

- (a) the provisional catch of salmon in tonnes for 2010;**
- (b) the confirmed catch of salmon in tonnes for 2009;**
- (c) an estimate of unreported catch in tonnes for 2010;**
- (d) the number of salmon caught and released in recreational fisheries in 2010.**

- (a) Provisional catch for Canada for 2010 is 145.9 t (65,100 fish by number)
  - 92.7 t of small salmon and 53.2 t of large salmon
  - 54,200 small salmon (by number) and 11,000 large salmon (by number)
- (b) Final values for 2009 is 126.1 t (54,200 fish by number)
  - 73.9 t of small salmon and 52.2 t of large salmon
  - 42,900 small salmon (by number) and 11,200 large salmon (by number)
- (c) Unreported catch for Canada is incomplete (only 3 of 4 administrative regions reporting) for 2010 at 18.4 t.
- (d) Estimated number of salmon (all sizes) caught and released in 2010 was 58,300 fish (35,600 small salmon, 22,700 large salmon).

**Section 3: A description of any new factors which may significantly affect the abundance of salmon stocks.**

In an effort to identify the impact of removing barriers or improving fish passage, the Fish Passage Extension Tool is under development. The tool measures upstream and downstream habitat by type and assesses the cumulative effect of habitat fragmentation in the Maritimes Region. Determining which barriers will be addressed, and how, will be a combination of identifying

highest priority sites and taking advantage of opportunities that present themselves.

In Quebec Region, work was undertaken in 2010 to plan fish habitat compensation projects (including spawning grounds, rearing/wintering habitat and migratory habitat) to be built by 2013. These projects will be designed to offset habitat loss as a result of the Romaine River hydroelectric development, located in Conservation Unit 25, Middle North Shore of the St. Lawrence River. This habitat compensation will enhance significantly habitat availability for salmon in a river where habitat quality is a limiting factor.

Quebec Region is also working with the proponent of a small hydroelectric facility on the Sheldrake river, in Conservation Unit 25, to give fish access to high quality habitat upstream from the dam, as part of another habitat compensation project. This project could potentially support a salmon population of 3000 individuals over the long-term. Current salmon abundance on this river is low, as only a short length of the river is available between the estuary and an impassable natural waterfall at the location where the hydroelectric plant is going to be built. With this project, salmon should begin to colonize this inaccessible upstream habitat in 2012.

The Province of Quebec initiated work on the elaboration of the province's first formal Atlantic Salmon Management Plan in late 2010. It is expected that this document will allow for an updating of stock predicting tools, for the development of sowing guidelines, for the integration of up-to-date data in decision making and for a better uniformity throughout the province's salmon regions in terms of fisheries management. Ultimately, it is hoped that the Management Plan will help stabilize factors affecting salmon during its river-frequenting stage.

**Section 4: An account of all actions taken under the Implementation Plan with regard to the management of salmon fisheries; habitat protection and restoration; aquaculture and related activities; and other influences affecting salmon abundance or diversity (including the marine environment).**

Management Action	Reporting Update	Achieved Management Action (Yes, No, Ongoing, Completed)
<b>Fisheries Management</b>		
<b>Action: The Atlantic Salmon Conservation Foundation (ASCF) will report annually on its accomplishments concerning salmon restoration and conservation.</b>	The ASCF has been reporting annually through established mechanisms. Information on the Foundation and its work can be found at <a href="http://www.ascf-fcsa.ca">www.ascf-fcsa.ca</a>	<b>Ongoing</b>

<b>Action: Continue the Nova Scotia Salmon Association Adopt-A-Stream program habitat restoration projects.</b>	In 2010 the Nova Scotia Adopt A Stream program repaired 147,000 meters square of stream and riparian habitat; planted 23,245 trees along the stream banks and opened up 30 km of fish passage.	<b>Ongoing</b>
<b>Action: Canada will cooperate with France in respect of St. Pierre and Miquelon (SPM) and encourage the provision of catch statistics; biological samples and other data for detailed analysis of the SPM fishery and will encourage France to become a member of NASCO. Continue to meet with French officials annually, and encourage them to adjust their fishery to meet conservation concerns.</b>	Canada continues to encourage France (in respect of Saint Pierre and Miquelon) to provide catch statistics of its wild Atlantic salmon fishery. During the meeting of the Canada – France Advisory Council during March 2011, France (in respect of Saint Pierre and Miquelon) reiterated its position that it does not intend to join NASCO.	<b>Ongoing</b>
<b>Action: Undertake a socio-economic survey of the recreational fishery in Canada in 2010.</b>	The 2010 Survey of Recreational Fishing in Canada is underway, with an expected publication date of December 31, 2011.	<b>Ongoing</b>
<b>Action: Wild Atlantic Salmon Conservation Policy</b>	A Working Group, comprised of Federal and Provincial officials, First Nations and NGOs was established to develop an action plan for implementation of the Policy. The Working Group will present its work at a meeting of the Atlantic Salmon Advisory Committee in May 2011.	<b>Ongoing</b>
<b>Action: Canada will meet informally with the United States at intersessional meetings.</b>	An informal meeting of the North American Commission will be held in May 2011.	<b>Ongoing</b>
<b>Action: Based on the status of Atlantic salmon stocks and the advice from ICES, Canada will maintain the closure of commercial Atlantic salmon fisheries.</b>	The commercial Atlantic salmon fishery in Canada remains closed.	<b>Ongoing</b>
<b>Action: Continue to work with the aboriginal communities and aboriginal governments to reduce the catch of large salmon (some of which are 2SW fish)</b>	There continues to be four subsistence fisheries in Labrador: three FSC salmon fisheries; and one subsistence fishery for trout/Arctic char with an allowable salmon by-catch. These fisheries occur with gill nets. There was no FSC fishery in the straits area. Most catches (95%) in Canada	<b>Ongoing</b>

<p><b>and incorporate live capture fishing gears which allow for selective harvesting where concerns exist on the status of the river-specific stocks.</b></p>	<p>now take place in rivers or in estuaries. The remainder of the catches is located mainly close to river mouths.</p> <p>Work is continuing with the aboriginal communities and aboriginal governments to reduce the catch of large salmon and incorporate live capture fishing gears which allow for selective harvesting where concerns exist on the status of the river specific stocks.</p> <p>In 2010, it was announced that effective in 2011, the number of salmon permitted to be retained as by-catch in the resident subsistence trout net fishery in Labrador will be reduced by 25% from 4 to 3.</p>	
<p><b>Action: Recovery Strategy for the inner Bay of Fundy Atlantic salmon</b></p>	<p>The inner Bay of Fundy Atlantic Salmon has been listed as endangered under the <i>Species at Risk Act</i> since June 2003. A Recovery Strategy that includes identification of their critical habitat has been developed.</p> <p>To prevent the imminent extinction of the fish, a gene-banking program and a gene-pedigree program has been developed to maximize the inner Bay of Fundy population's genetic diversity. Several key populations are harboured and protected in DFO Biodiversity Centres in New Brunswick and Nova Scotia. When threats to the salmon's survival have been identified and rectified, self-sustaining populations of the fish will be restored to Bay of Fundy rivers.</p> <p>For more information see: <a href="https://www.registrelep-sararegistry.gc.ca/document/default_e.cfm?documentID=1917">https://www.registrelep-sararegistry.gc.ca/document/default_e.cfm?documentID=1917</a></p>	<p><b>Completed in 2010</b></p>
<p><b>Habitat Protection and Restoration</b></p>		
<p><b>Action: Canada will report annually on the number and extent (area of habitat affected) of habitat remediation activities undertaken annually. Many of these would be corrective measures to</b></p>	<ul style="list-style-type: none"> <li>• DFO Maritimes Region, the Gulf of Maine Council (GOMC) and National Oceanic and Atmospheric Administration (NOAA) have identified barrier removal as a significant priority on East Coast Rivers. On Moose River, Nova Scotia, in the outer Bay of Fundy, the Clean Annapolis River Project (CARP) carried out a feasibility</li> </ul>	<p><b>Ongoing</b></p>

<p><b>remediate dated and deficient historical structures.</b></p>	<p>study for the removal of a low head dam, conducted a biological assessment, and drafted conceptual designs for the project. The dam and fishway are dilapidated and not being maintained. DFO has confirmed a historic presence of salmon in the river. CARP has involved a number of partners in the project, including stewardship groups and federal government agencies in Canada (DFO) and the United States (NOAA). Funding has been provided by the GOMC-NOAA Habitat Restoration Partnership and the Royal Bank of Canada Bluewater Project. Plans for 2011 include finalizing project designs, obtaining provincial approvals and executing the conceptual plan.</p> <ul style="list-style-type: none"> <li>• On the Tusket River, Nova Scotia, the Carleton Dam (a hydro electric facility with a fishway that is operated by Nova Scotia Power Inc.) is undergoing scheduled refurbishment during 2010 and 2011 to meet Canadian Dam Safety Guidelines. This created an opportunity to install an improved fishway for salmon and other species.</li> <li>• Newfoundland Power was issued a Ministerial Order pursuant to section 20 of the <i>Fisheries Act</i> to provide fish passage around the hydroelectric generating facility at Rattling Brook. A local community group has begun the re-colonization of the area upstream of the hydro-electric facilities by transferring adult salmon from the nearby Exploits River.</li> <li>• In 2010, DFO completed a major renovation of a fishway the Department has owned and operated on the Terra Nova River since 1953.</li> <li>• DFO continues to address injuries being sustained by Atlantic salmon ascending Torrent River. In 2010, DFO built a temporary water diversion structure below the fishway on the river to divert salmon away from a site where it is believed they are sustaining injuries. DFO is continuing data collection and analysis related to this issue.</li> </ul>	
--	--	--



	<ul style="list-style-type: none"> <li>• There were several initiatives to restore, improve or create habitat for Atlantic salmon as part of formal fish habitat compensation projects designed to offset fish habitat loss authorized under the <i>Fisheries Act</i>. For example, the enhancement of spawning, rearing and holding habitat through additions of spawning gravels and construction of instream habitat features was initiated at North East Placentia River. As well as ongoing monitoring of the Lomond River and Harpoon Brook habitat restoration works.</li> <li>• A large log jam was removed from the lower portion of Deadwater Brook near Adies Lake, Newfoundland and Labrador. The log jam was impeding upstream migration of adults in an important spawning river for upper Humber River salmon. DFO worked closely with the Salmon Preservation Association for the Waters of Newfoundland (SPAWN) and the Atlantic Salmon Federation (ASF) on the project.</li> </ul>	
<p><b>Action: Continue to enforce provisions of the Fisheries Act and seek important monetary penalties for destruction of fish or fish habitat, including provisions for habitat restoration by a guilty party.</b></p>	<ul style="list-style-type: none"> <li>• DFO Habitat Management continues to focus substantial effort on reducing impacts of development projects on salmon habitat, in particular for large hydroelectric facilities and for road construction. Application of relocation and redesign (mainly for road construction), mitigation measures (providing adequate in stream flows at hydro projects) and fish habitat compensation projects (building of rearing and spawning habitat, or improving fish passage) to provide protection and development of salmon habitat. Ongoing monitoring programs will help assess effectiveness of these initiatives and adjust future projects to better protect salmon habitat.</li> <li>• The ongoing implementation of the National Habitat Management Program's strengthening of habitat compliance management activities in 2010 led to an increase in the level of monitoring of works and undertakings near fish habitat by Habitat Management personnel to maintain compliance with measures to protect Atlantic salmon habitat.</li> </ul>	<p><b>Ongoing</b></p>

	<ul style="list-style-type: none"> <li>In the Maritimes Region, monitoring activities focused on watercourse crossings and habitat fragmentation. Both systematic and incidental monitoring of watercourse crossings was conducted on various rivers with a priority on the inner Bay of Fundy. Specifically, an audit of culvert installations was conducted to review compliance with conditions of approval.</li> </ul>	
<b>Aquaculture and related activities</b>		
<b>Action: A revised I&amp;T delivery model is expected by 2008 – 09.</b>	As a result of a delay in regulatory amendments of Health of Animal Regulations by CFIA, and subsequent implementation of import and domestic disease control programs, corresponding I&T work was also delayed. This delay was further hampered by a major shift in priorities for DFO respecting regulatory development in the province of British Columbia. Work has now recommenced on this issue, and will entail in the short-term, a focus on administrative options for harmonizing permitting processes between CFIA and DFO. Any improvements to I & T delivery respecting federal-provincial processes will require further negotiations.	<b>Ongoing</b>
<b>Action: Amendments to the Health of Animals Regulations are expected by 2008-2009.</b>	<p>Effective December 22, 2010, the <i>Health of Animals Regulations</i> were amended to include aquatic animals. Aquatic animal diseases were added to the <i>Reportable Diseases Regulations</i> on January 5, 2011.</p> <p>The amendments to both regulations strengthen Canada’s ability to protect aquatic animals from infectious diseases. The changes also allow the Canadian Food Inspection Agency to meet international obligations and to fulfill its mandate and to protect the aquatic animal health resource base.</p> <p>The regulations mean that: (1)Aquatic animal diseases of concern, internationally, and in Canada are reportable; (2)Aquatic animal imports, which could be affected by these diseases, will require a CFIA import permit as of December 10, 2011 (Exemptions for aquatic animals used as pets or for personal use are outlined in the <i>Health of Animals</i></p>	<b>Complete</b>

	<p><i>Regulations).</i></p> <p>(3) Domestic permits for safe movements of susceptible species of finfish, molluscs, and crustaceans within Canada will come into force once further consultation is completed.</p> <p>Other program functions include:</p> <ul style="list-style-type: none"> <li>-certifying exports of aquatic animals</li> <li>-engaging in emergency disease response activities</li> <li>-developing risk assessments</li> <li>-carrying out disease surveillance plans</li> </ul>	
<b>Action: Regional Fish Health Facility to be fully operational by 2008-09</b>	Construction of the facility in St. Alban's, Newfoundland and Labrador was delayed due to a land dispute. Construction is now complete on the building and is expected to be operational within the year.	<b>Ongoing</b>
<b>Action: Provincial regulatory amendments for the Code expected by March 2008.</b>	The <i>Southwest New Brunswick Breach of Containment Governance Document</i> was finalized in 2009. This document is meant to complement the protocols contained in the <i>Code of Containment for Culture of Atlantic Salmon in Marine Net Pens in N.B.</i> The Code of Containment and Governance Document are supported by changes to regulations under the New Brunswick Aquaculture Act that occurred in August 2010 which includes mandatory reporting of all escapes.	<b>Complete</b>
<b>Action: Canada, through the North American Commission, will work with the US to develop a protocol for the sharing of information with respect to disease incidences, introductions and transfers, breaches of containment and transgenics activities.</b>	The Canada/U.S. working group developed a proposal for revisions to the NAC protocols and an annual report template. This was ratified by the NAC in 2010 and will be presented to the NASCO council in 2011. Once ratified in NASCO, the revisions will be made. Work is still needed to develop section 1 of the report on disease reporting, this is expected in 2011. Canada provided an annual report to the U.S. in 2010 on all other sections.	<b>Ongoing</b>
<b>Other influences affecting salmon abundance or diversity (including marine environment)</b>		
<b>Action: Canada will annually provide an</b>	In September 2008, smallmouth bass, an aquatic invasive species, was	<b>Ongoing</b>

<p><b>update on the status of invasive species of concern for Atlantic salmon in eastern Canada.</b></p>	<p>discovered in Miramichi Lake, a headwater lake in the Southwest Miramichi River. Smallmouth bass is a predatory species that competes with native fish species and could potentially be a threat to the species in the lake and potentially in the Miramichi River should they spread to it as well.</p> <p>A three-year plan (2010-2012) to control and remove smallmouth bass from Miramichi Lake using physical methods was developed by DFO and is supported by stakeholders. The goal of the plan is full eradication through mechanical methods.</p> <p>The first year of the plan (2010) allowed DFO to acquire knowledge of smallmouth bass distribution in the lake, and to assess the efficiency of different capture methods. The next two years will see the continuation of concentrated effort to remove smallmouth bass from Miramichi Lake.</p>	
--	--	--

**Section 5: Details of any proposed revisions to the Implementation Plan.**

No specific suggestions for revising the Implementation Plan.

Annex 1 - ATLANTIC SALMON MANAGEMENT AREAS

