



Agenda Item 6.1
For Information

Council

CNL(14)33

*Annual Progress Report
on Actions Taken Under Implementation Plans for the Calendar Year 2013*

United States of America

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Annual Progress Report on Actions taken under Implementation Plans for the Calendar Year 2013

The primary purposes of the Annual Progress Reports are to provide details of:

- any changes to the management regime for salmon and consequent changes to the Implementation Plan;
- actions that have been taken under the Implementation Plan in the previous year;
- significant changes to the status of stocks, and a report on catches; and
- actions taken in accordance with the provisions of the Convention

These reports will be reviewed by the Council. Please complete this form and return it to the Secretariat **by 1 April 2014**.

Party:	United States
Jurisdiction/Region:	

1: Changes to the Implementation Plan

1.1 Describe any proposed revisions to the Implementation Plan and, where appropriate, provide a revised plan.

The United States is considering a revision to its current implementation plan as a result of changes to salmon restoration programs in southern New England. We are currently consulting with state and federal agencies as well as interested stakeholders as we consider these changes.

1.2 Describe any major new initiatives or achievements for salmon conservation and management that you wish to highlight.

The removal of Veazie Dam in the Penobscot River, Maine, is a major achievement for salmon conservation. The removal is the result of a long-term collaboration of state and federal agencies, the Penobscot Indian Nation, and non-governmental organizations, most notably the Penobscot River Restoration Trust. The removal of Veazie Dam, the lowermost dam on the Penobscot, when combined with the 2012 removal of Great Works Dam, have substantially improved access to freshwater habitat for all 11 species of sea-run fish (including salmon), including free access to 100% of all historic habitat for lower river species such as sturgeon. This is particularly significant, since the Penobscot typically receives roughly 75% of all adult salmon returns to the United States.

A Water Temperature Working Group has been established in Maine to begin development of a coordinated stream temperature monitoring array that can be integrated with regional and national efforts. The goals of the group are to:

- Conduct a comprehensive inventory of existing data for current and past water temperature monitoring efforts.
- Identify a network of reference sites, intended to be maintained in perpetuity.

- Develop minimum standards for data collection methods for a project to meet so that its water temperature observations can be usable in a regional network analysis.
- Develop databases and a distribution network for Maine water temperature data.
- Identify catchments that may be more resilient to temperature increases in the future.

In the United States, federal funding plays an important role in the conservation and restoration of Atlantic salmon. Fiscal challenges in the last several years, but particularly in 2013-14, have required the U.S. government to review how it spends scarce resources, including with respect to Atlantic salmon conservation and recovery. A particular area of focus has been on the operation of the conservation hatchery program at Craig Brook National Fish Hatchery and Green Lake National Fish Hatchery. These facilities are run solely for the purpose of supporting endangered populations of salmon. Under the leadership of the U.S. Fish and Wildlife Service, which runs the hatchery programs, an analysis of hatchery operations has begun that includes state, tribal, and federal partners to align priorities and ensure available resources are used in a manner that maximizes potential returns. Pursuant to our Implementation Plan, we will report relevant changes to hatchery operations as additional information becomes available.

2: Stock status and catches.

2.1 Provide a description of any significant changes in the status of stocks relative to the reference points described in the Implementation Plan and of any new factors which may significantly affect the abundance of salmon stocks.

In 2013, the United States saw the fewest returns in recent years, provisionally, 612 total adult returns. Low marine survival largely contributed in this situation. Past reductions to hatchery supplementation due to budgetary constraints have also played a role.

To help guide ICES with respect to the catch advice for the West Greenland fishery, we have proposed to revise management objectives for the United States. At the 2013 Annual Meeting of NASCO, we presented revised management objectives (NAC(13)4) that are consistent with the objectives for wild salmon (draft recovery criteria). NASCO has asked ICES to comment on the implications of the revised objectives with regard to catch advice for contributing stock complexes. We expect ICES to assess implications of the revised management objectives of 4,549 (wild) 2SW returns in its report in 2014.

2.2 Provide the following information on catches:(nominal catch equals reported quantity of salmon caught and retained in tonnes ‘round fresh weight’ (i.e. weight of whole, ungutted, unfrozen fish) or ‘round fresh weight equivalent’).

	In-river	Estuarine	Coastal	Total
(a) provisional nominal catch (which may be subject to revision) for 2013 (tonnes)	0	0	0	0
(b) confirmed nominal catch of salmon for 2012 (tonnes)	0	0	0	0
(c) estimated unreported catch for 2013 (tonnes)	0	0	0	0

(d) number and percentage of salmon caught and released in recreational fisheries in 2013.	No sea-run salmon are subject to recreational fishing. There is, however, a small fishery for non-anadromous broodstock in the Merrimack River.
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3: Implementation Plan Actions.

3.1 Provide an update on progress against actions relating to the Management of Salmon Fisheries (section 2.8 of the Implementation Plan)

Action F1:	Description of Action:	Work with state authorities to reduce bycatch (of Atlantic salmon juveniles) in recreational fisheries for other species, such as brook trout, to the maximum extent possible.
	Expected Outcome:	Closures of certain areas of rivers, gear restrictions, bag limit reductions and other means could be agreed to within the context of a conservation plan for recreational fishing permitted by the State of Maine.
	Monitoring/Enforcement Results:	There are stringent and extensive regulations governing recreational fishing (http://www.eregulations.com/maine/fishing/salmon-information/) in salmon habitats in addition to the “take” prohibitions of the Federal Endangered Species Act. Fishing regulations explain that sea-run salmon are endangered and cannot be removed from the water. Anglers are also prohibited from retaining landlocked salmon and brown trout above 25 inches in over 30 specific waters to ensure that sea-run salmon are not incidentally captured and retained. Also, biologists responsible for salmon waters, consult with one another regarding local management measures in order to reduce the effects of competition and predation on Atlantic salmon. These discussions have not, however, resulted in the development of a comprehensive conservation plan applicable to the entire freshwater range of endangered salmon.
	Ongoing/completed:	Ongoing
	Achieved objective?	No
Action F2:	Description of Action:	Maintain closures for all directed fisheries for Atlantic salmon, monitor catches for any presence of Atlantic salmon, and conduct surveillance.
	Expected Outcome:	Reduced risk to productive capacity.
	Monitoring/Enforcement Results:	The National Marine Fisheries Service maintains a vessel landings database, a dealer sales database, and an observer database for commercial fisheries subject to federal jurisdiction. We queried these databases with the following results for 2013:

		<p>vessel landings database – 0 individuals; dealer sales database - 0 individuals; observer database – 2 individuals, both of which were released.</p> <p>Further, surveillance in rivers for potential poaching activity is conducted routinely by conservation law officers throughout the salmon’s freshwater range.</p>
	Ongoing/completed:	Ongoing
	Achieved objective?	Yes
Action F3:	Description of Action:	Continue to remain active in the West Greenland Commission and the North American Commission
	Expected Outcome:	Continued collaborative management of the fishery at West Greenland and enhanced collaboration with Canada regarding fisheries and conservation issues throughout the jurisdiction of the NAC, including the fishery at St. Pierre et Miquelon.
	Monitoring/Enforcement Results:	<p>The United States was an active participant at the West Greenland Commission meeting in 2013. We intend to be an active participant at the inter-sessional meeting of the West Greenland Commission in April of 2014 and at the Annual Meeting of NASCO in June 2014.</p> <p>We had a useful exchange at the 2013 annual meeting concerning the fishery at St. Pierre et Miquelon, during which Canada tabled an example of a potential minimal sampling plan for that mixed-stock fishery. We await a report at the 2014 annual meeting to hear what sampling occurred during that 2013 fishery.</p>
	Ongoing/completed:	Ongoing
	Achieved objective?	Yes

3.2 Provide an update on progress against actions relating to Habitat Protection and Restoration (<i>section 3.4 of the Implementation Plan</i>)		
Action H1:	Description of Action:	Improve fish passage by removing dams, installing fishways, removing culverts, decommissioning roads, and upgrading road-stream crossings.
	Expected Outcome:	Enhanced connectivity between freshwater habitats and the Atlantic Ocean
	Monitoring/Enforcement Results:	In 2013, Veazie Dam, the lowermost on the Penobscot River was removed. This was a partial barrier to salmon and a complete barrier to many other sea-run species (e.g., shortnose sturgeon). Taken together with the removal of Great Works Dam in 2012, lower river species (i.e., two species of sturgeon, rainbow smelt, tomcod, and striped bass) now have access to 100% of their historic

		habitat in the Penobscot, the largest in Maine. Several other smaller dam removal and fish passage improvement projects have recently been completed or are underway throughout the salmon's freshwater range in the United States.
	Ongoing/completed:	Ongoing, though some activities are complete.
	Achieved objective?	Connectivity has been enhanced, but more work is needed.
Action H2:	Description of Action:	Continue to implement Clean Water Act and other federal and state laws
	Expected Outcome:	Continued water quality improvement
	Monitoring/Enforcement Results:	<p>The Maine Department of Environmental Protection implements water quality programs under the Clean Water Act and state law. The Department is responsible for managing, protecting and enhancing the quality of Maine's water resources through voluntary, regulatory and educational programs. The Department collaborates with local, state and federal agencies to plan and implement strategies to protect Maine's water quality.</p> <p>An online archive of enforcement and monitoring results over the last five years is available online at echo.epa.gov. A summary of the last five years of enforcement actions in Maine pursuant to the Clean Water Act over the last five years reveals a total of \$209,750 (USD) in fines.</p>
	Ongoing/completed:	Ongoing
	Achieved objective?	Yes.
Action H3:	Description of Action:	Review proposals for work in or affecting salmon habitats, analyse the effects, and recommend to federal partners measures that would avoid, minimize, or mitigate impacts to salmon habitat
	Expected Outcome:	No net loss of productive capacity
	Monitoring/Enforcement Results:	The United States' federal fisheries management statute requires that the National Marine Fisheries Service preview proposals by other federal agencies for work that would occur in or would potentially affect Atlantic salmon habitat. Accordingly, we consult with other federal agencies pursuant to the Magnuson-Stevens Fishery Management and Conservation Act. In 2013, NMFS completed many consultations and provided recommendations to prevent degradation of Essential Fish Habitat and reduce incidental mortality.
	Ongoing/completed:	Ongoing
	Achieved objective?	Uncertain. Some loss to productive capacity of the habitat may have occurred as the conservation recommendations issued under the Magnuson-Stevens

		Fishery Management and Conservation Act are largely discretionary. Quantifying the amount of productive capacity that may have been lost is currently not possible.
Action H4:	Description of Action:	Issue conservation recommendations to avoid and minimize impacts to salmon habitat on all federal actions in areas where Atlantic salmon are listed as endangered and Critical Habitat is designated
	Expected Outcome:	No net loss of productive capacity
	Monitoring/Enforcement Results:	NMFS and FWS conduct consultations with other federal agencies pursuant to the Endangered Species Act which requires all federal agencies to ensure that any action they undertake or fund does not jeopardize the continued existence of endangered Atlantic salmon. In 2013, NMFS and FWS completed well over 100 consultations. In each consultation, conservation recommendations made by NMFS and FWS led to changes in actions that prevented degradation of designated critical habitat and reduced incidental mortality (i.e., "take" as defined by the ESA) to levels that did not jeopardize the continued existence of endangered salmon.
	Ongoing/completed:	Ongoing
	Achieved objective?	Uncertain. Loss of productive capacity may be occurring even though individual actions may not jeopardize the continued existence of the species. Quantifying the amount of productive capacity that may have been lost is currently not possible.
Action H5	Description of Action:	Strategically evaluate use of limited resources in light of climate change.
	Expected Outcome:	Re-focus of limited funding and resources toward those actions and areas most likely to benefit salmon in light of climate change.
	Monitoring/Enforcement Results:	The increased focus toward connectivity and ensuring as many healthy smolts are able to leave our rivers is, in itself, a response to a changing environment and also reflects the lessons learned from the Salmon Summit in 2011. In addition, financial constraints have required reductions in conservation hatchery production throughout the United States. These reductions have been somewhat less severe in Maine where the endangered populations are supported by Craig Brook and Green Lake National Fish Hatcheries as well as the East Machias Aquatic Research Center.
	Ongoing/completed:	Ongoing
	Achieved objective?	Yes.

3.3 Provide an update on progress against actions relating to Aquaculture, Introductions and Transgenics (section 4.8 of the Implementation Plan)		
Action A1:	Description of Action:	Continue to monitor implementation of protective measures identified in the Biological Opinion from 2003. Continue collaboration with Canadian provincial and federal agencies to inform new regulations for consistency with U.S. federal permit requirements. Wild fish brought to the USFWS hatchery and used for broodstock to support the recovery program are screened for specific disease pathogens and genetic composition to eliminate any potential non-North American or aquaculture-origin fish.
	Expected Outcome:	Zero escapes, reduced disease transfer
	Monitoring/Enforcement Results:	<p>One reported escape event and no reported aquaculture-origin fish captured in Maine rivers.</p> <p>Disease monitoring and control was conducted at both conservation hatcheries (Craig Brook and Green Lake National Fish Hatcheries) in accordance with hatchery broodstock management protocols and biosecurity plans. All incidental mortalities of future or adult broodstock were necropsied for disease monitoring. Analysis indicated that incidental mortalities were not caused by infectious pathogens. All lots of fish to be released from either facility were sampled in accordance with fish health protocols at least 30 days prior to release. All Penobscot sea-run broodstock retained at Craig Brook National Fish Hatchery were tested for Infectious Salmonid Anemia (ISA) as they were brought to the station in 2013. Incoming adults were isolated in the screening facility to undergo sampling procedures and await the results of PCR testing. Only one adult was identified as “suspect,” in 2013.</p> <p>In addition, the Maine Department of Marine Resources updated its aquaculture suspect identification and notification protocol used to identify and intercept aquaculture escapes on rivers with trapping facilities.</p>
	Ongoing/completed:	Ongoing.
	Achieved objective?	Yes.
Action A2:	Description of Action:	Implement specific regulations and guidelines for importation of baitfish described in State laws and a National Aquatic Animal Health Plan (NAAHP).
	Expected Outcome:	Reduced transmission of diseases of concern including; Viral Hemorrhagic Septicemia and Bacterial Kidney Disease.

	Monitoring/Enforcement Results:	<p>The Northeast Fish Health Committee annually reviews the fish health status of the Northeast states and have developed regional guidelines that enable state resource agencies to prevent the importation or transfer among member states of fish infected with the listed pathogens of concern. The Northeast Fish Health Guidelines require all Northeast States to conduct appropriate health inspections of all imported fish and to develop rules, regulations, and/or protocols to manage fish importation in ways that minimize the movement of pathogens.</p> <p>Though not specifically linked to the baitfish trade, <i>Renibacterium salmoninarum</i> (causative agent of Bacterial Kidney Disease) was detected at two Atlantic salmon net-pen facilities. Clinical signs were detected in some fish but no elevated mortality was noted.</p>
	Ongoing/completed:	Ongoing.
	Achieved objective?	Yes.
Action A3:	Description of Action:	Implement broodstock management protocols at conservation hatcheries.
	Expected Outcome:	Slow the rate of the loss of genetic diversity.
	Monitoring/Enforcement Results:	<p>Estimates of genetic diversity are used to monitor if genetic diversity within each individual broodstock population is being maintained over time. Maintenance of genetic diversity is one of the primary goals of the hatchery program: to maintain the genetic characteristics of each individual broodstock, to allow for the diversity to persist for natural selection and adaptation to occur, and to ensure that genetic diversity is not being lost inadvertently due to management practices. Estimates of heterozygosity (observed and expected) compared over time within a broodstock and between broodstocks indicate that similar levels of diversity are present in each broodstock; however, some broodstocks, such as the Pleasant River broodstock, have slightly decreased estimates of allelic diversity relative to other broodstocks, likely a result of decreased broodstock number in the early and mid-1990s. Estimates of effective population size (N_e) also vary between broodstocks (Annex 1), and in general are low relative to conservation targets and cause concern for long-term maintenance of genetic diversity. The largest estimate of effective population size is found in the Penobscot River broodstock ($N_e=290.9$, 95% CI=265.5-319.9), due to the larger total broodstock number and overall population size of the Penobscot River population. Given concerns relating to continued</p>

		low marine survival in the coming years (and concomitant reductions in genetic variation) parr collection was initiated in the fall of 2013 in an effort to reduce the reliance on sea-run fish for broodstock.
	Ongoing/completed:	Ongoing
	Achieved objective?	Yes.
Action A4:	Description of Action:	Coordination with state programs that stock salmonids to support recreational fisheries.
	Expected Outcome:	Identification of potential areas of overlap of salmon and other stocked salmonids.
	Monitoring/Enforcement Results:	Within Maine, the Maine Department of Marine Resources coordinates with the Maine Department of Inland Fisheries and Wildlife of planned stocking events. Some brown trout stocking continues to occur in rivers. The level varies from year to year.
	Ongoing/completed:	Ongoing.
	Achieved objective?	No.

4: Additional information required under the Convention	
4.1	Details of any laws, regulations and programmes that have been adopted or repealed since the last notification.
	<p>Over the last several years, stocking associated with restoration and recovery programs has been scaled back. The most significant changes have occurred in the Merrimack and Connecticut River programs. The United States is considering revising its current implementation plan to reflect the changes to salmon restoration programs in southern New England. We are currently undergoing a series of consultations with state and federal partners to appropriately characterize these changes.</p> <p>A revised statute in the state of Maine (Marine Resources Law 6140-B. Unlawful fishing, possession or sale of Atlantic salmon) closed a legal gap relating to the legal possession of Atlantic salmon raised by means of aquaculture. The revision makes a distinction between aquaculture salmon raised for commercial purposes and hatchery salmon raised for conservation purposes. The statute prohibits the possession of Atlantic salmon raised in hatcheries for the purpose of restoration.</p>
4.2	Details of any new commitments concerning the adoption or maintenance in force for specified periods of time of conservation, restoration and other management measures.
	None
4.3	Details of any new actions to prohibit fishing for salmon beyond 12 nautical miles.
	None

4.4 Details of any new actions to invite the attention of States not Party to the Convention to matters relating to the activities of its vessels which could adversely affect salmon stocks subject to the Convention.
None
4.5 Details of any actions taken to implement regulatory measures under Article 13 of the Convention including imposition of adequate penalties for violations.
None
North American Commission Members only:
4.6 Details of any new measures to minimise by-catches of salmon originating in the rivers of the other member.
None
4.7 Details of any alteration to fishing patterns that result in the initiation of fishing or increase in catches of salmon originating in the rivers of another Party except with the consent of the latter.
None

Annex 1. Summary results for estimates of genetic diversity from the 2010 parr and 2012 adult (Penobscot) broodstock collection years. Estimates include the number of individuals sampled (N), the number of alleles per locus (Na), the expected (He) and observed (Ho) heterozygosity, inbreeding (f), estimated effective population size (Ne) and the 95% confidence interval, and the number of loci used for analysis.

Broodstock	Sample Year	Sample Size	N _a	H _e	H _o	Inbreeding (f)	N _e	95% CI	# loci
Dennys	2010	142.0	11.7	0.683	0.709	-0.038	60.4	56.5-64.8	18
East Machias	2010	148.0	12.0	0.669	0.676	-0.011	89.4	82.2-97.6	18
Machias	2010	242.0	12.1	0.672	0.679	-0.010	94.3	87.5-101.8	18
Narraguagus	2010	246.0	12.9	0.680	0.691	-0.016	139.4	129-151	18
Penobscot	2012	478.0	13.3	0.690	0.711	-0.032	290.9	265.5-319.9	18
Pleasant	2010	271.0	10.6	0.674	0.699	-0.038	55.4	52.9-58.0	18
Sheepscot	2010	160.0	11.5	0.681	0.702	-0.032	56.4	52.9-60.3	18