



Council

CNL(20)27

***Annual Progress Report
on Actions Taken Under the Implementation Plan for the Calendar Year 2019***

United States

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The Annual Progress Reports allow NASCO to evaluate progress on actions taken by Parties / jurisdictions to implement its internationally agreed Resolutions, Agreements and Guidelines and consequently the achievement of their objectives and actions taken in accordance with the Convention. The following information should be provided through the Annual Progress Reports:

- 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.

*In completing this Annual Progress Report please refer to the **Guidelines for the Preparation and Evaluation of NASCO Implementation Plans and for Reporting on Progress, CNL(18)49.***

These reports will be reviewed by the Council. Please complete this form and return it to the Secretariat **no later than 1 April 2020.**

Party:	United States
Jurisdiction / Region:	

1: Changes to the Implementation Plan
1.1 Describe any proposed revisions to the Implementation Plan (<i>Where changes are proposed, the revised Implementation Plans should be submitted to the Secretariat by 1 November.</i>)
1.2 Describe any major new initiatives or achievements for salmon conservation and management that you wish to highlight.
<p>In 2019, the Final Recovery Plan for the Gulf of Maine distinct population of endangered Atlantic salmon was published. The recovery plan details recovery goals, criteria, and site-specific actions needed for recovery of the species.</p> <p>In 2019, we estimate between 30 to 40 events and media campaigns were held throughout the northeastern United States in support of International Year of the Salmon (IYS) reaching approximately 30,000 people. Events and activities included: An IYS celebration event at the Maine Discovery Museum in Bangor Maine; an event called “Sea-Run-Go!” at the Lake Champlain Maritime Museum in Vermont aimed to educate the public about history, ecology,</p>

and conservation of Atlantic salmon; and, the Atlantic Salmon Conservation Schools Network (ASCSN) brought students together from New Brunswick and Maine to work with hatchery managers, field biologists, and civil engineers to improve salmon habitat in the Miramichi and Machias Rivers.

In September 2019, the agencies that co-manage Atlantic salmon (U.S. Fish and Wildlife Service, NOAA’s - National Marine Fisheries Service, Maine Department of Marine Resources, and Penobscot Indian Nation) began implementation of a one-year pilot of a new governance structure referred to as the Collaborative Management Strategy (CMS). The CMS is designed to improve collaboration, communication, and transparency across agencies and among stakeholders. The foundation of the CMS is three Salmon Habitat Recovery Unit (SHRU) teams. These teams are in place to plan, prioritize, and implement conservation efforts that facilitate Atlantic salmon recovery. An oversight group, referred to as the Implementation Team includes SHRU Team chairs, the management board, a science advisor, and an administrative coordinator. The Implementation Team is in place to make decisions on issues that cross-cut across SHRUs, including resource allocation, and to provide for conflict resolution.

In 2019, the Atlantic Salmon Federation removed a 23-foot section of the lower-most dam on the Sheepscot River, the Head Tide Dam. The completion of this project will allow for unimpeded upstream and downstream movement of endangered Atlantic salmon and other sea-run fish including American shad, alewives, and American eel. The Sheepscot River has the only remaining locally-adapted stock in the Merrymeeting Bay Salmon Habitat Recovery Unit.

2: Stock status and catches.

2.1 Provide a description of any new factors that may significantly affect the abundance of salmon stocks and, if there has been any significant change in stock status since the development of the Implementation Plan, provide a brief (200 word max) summary of these changes.

For 2019, no new factors significantly affected the abundance of wild salmon stocks in the United States. Provisionally, there were 1,535 adult returns to U.S. waters in 2019. This count includes 1,528 returns to the GOM DPS; four to the Central New England complex; and three to the Long Island Sound complex.

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 2019 (tonnes)	0	0	0	0
(b) confirmed nominal catch of salmon for 2018 (tonnes)	0	0	0	0
(c) estimated unreported catch for 2019 (tonnes)	0	0	0	0
(d) number and percentage of salmon	There are no recreational fisheries for sea-run Atlantic salmon in the United States. There are, however, small fisheries for domestic broodstock in the			

caught and released in recreational fisheries in 2019	Naugatuck and Shetucket Rivers in Southern New England; these rivers are outside the geographic range of endangered wild Atlantic salmon.
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3: Implementation Plan Actions.

3.1 Provide an update on progress on actions relating to the Management of Salmon Fisheries (section 2.9 of the Implementation Plan). *Note: the reports under ‘Progress on action to date’ should provide a brief overview of each action. For all actions, provide clear and concise quantitative information to demonstrate progress. In circumstances where quantitative information cannot be provided for a particular action because of its nature, a clear rationale must be given for not providing quantitative information and other information should be provided to enable progress with that action to be evaluated. While referring to additional material (e.g. via links to websites) may assist those seeking more detailed information, this will not be evaluated by the Review Group.*

Action F1:	Description of action (as submitted in the IP):	Reduce mortality of U.S.-origin salmon in mixed-stock fisheries by remaining active in the West Greenland Commission and the North American Commission.
	Expected outcome (as submitted in the IP):	<ul style="list-style-type: none"> a) Maintenance of existing mortality attributable to the West Greenland fishery as measured by the quota currently set at 30mt through 2020 (note: specific outcomes beyond 2020 cannot be determined at this time as the existing regulatory measure applies only for 2018, 2019, and 2020) b) Agreement on a regulatory measure in 2021 c) Maintenance of low levels (previously estimated at 30 to 40 U.S.-origin salmon per year) of interception of U.S.-origin salmon in the mixed-stock fishery in Labrador
	Progress on action to date (Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):	<p>In 2019, the United States worked cooperatively with the Parties of the West Greenland Commission to enable the continuation of the 2018-2020 regulatory measure. The regulatory measure contains a number of important elements designed to improve the management of the fishery, including limiting harvests, mandating that any quota overharvests in one year be paid back the next, and requiring additional strengthened monitoring and control measures. Effective implementation of these requirements is expected to provide conservation benefits to contributing stocks, including critically endangered U.S. origin salmon.</p> <p>The current regulatory measure is in effect through 2020. The United States continues to participate fully in the work of the West Greenland Commission, including the annual evaluation of the effectiveness of the 2018 regulatory measure <i>vis a vis</i> the results of the 2018-2020 fisheries at West Greenland. In light of the continuing need for strong protection of U.S.-origin salmon, the United States is eager to work with members of the Commission to develop and adopt a new regulatory measure in 2021.</p>

		<p>In 2019, the United States continued to support efforts to monitor the mixed-stock fishery in Labrador. The United States remains an active participant in the North American Commission and continues to encourage Canada to expand sampling of this fishery to ensure broader data collection and improved characterization of the impact of the fishery on U.S. origin salmon. In addition, we continue to urge Canada to implement fishery management measures that eliminate the catch of U.S. origin salmon in the Labrador fishery. Toward this end, management action has been taken in recent years by Canada. Expanded sampling in Labrador would assist in evaluating the effectiveness of these management actions.</p>
	Current status of action:	Ongoing
	If 'Completed', has the action achieved its objective?	
Action F2:	Description of action (as submitted in the IP):	Reduce bycatch of Atlantic salmon in recreational fisheries for other species, such as brook trout, to the maximum extent possible.
	Expected outcome (as submitted in the IP):	<p>Closures of certain areas of rivers, gear restrictions, bag limit reductions, publication of species identification guides in fishing law books, prosecution of poachers when necessary, among others.</p> <p>Note: this action (and therefore expected outcome) does not lend itself to quantitative measures because specific estimates of bycatch are not available. Thus, developing quantitative targets is not possible. Reporting on progress under this action will therefore focus on qualitative aspects (using specific examples where possible) with the assumption that activities under this action will correlate with reductions in mortality of Atlantic salmon attributable to bycatch.</p>
	Progress on action to date (Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):	<p>In 2019, the State of Maine incorporated into its fishing regulations that the area within 150 feet of any part of the West Enfield and Milford Dams on the Penobscot River, including fishways, are closed to fishing at all times. The aim is to reduce significantly the incidental catch of adult Atlantic salmon in recreational fisheries. Enforcement of these regulations is identified as a priority through a joint enforcement agreement between NOAA and the State of Maine described in action F3.</p> <p>The federal Endangered Species Act prohibits any "take" of endangered Atlantic salmon. The state of Maine maintains stringent regulations governing recreational fishing https://www.maine.gov/ifw/docs/19-MDIFW-23-Fishing-Lawbook-2020.pdf in salmon habitats that remained in place in 2019. These regulations explain that sea-run salmon are federally endangered and cannot be removed from the water. Anglers are also prohibited from retaining landlocked salmon and brown trout above 25 inches to</p>

		ensure that adult sea-run salmon are not incidentally captured and retained.
	Current status of action:	Ongoing
	If 'Completed', has the action achieved its objective?	<input type="checkbox"/>
Action F3:	Description of action (as submitted in the IP):	Reduce poaching of Atlantic salmon to the maximum extent possible.
	Expected outcome (as submitted in the IP):	Deterrence of illegal activity and prosecutions of poachers when necessary. Note: this action (and therefore expected outcome) does not lend itself to quantitative measures because specific estimates of mortality attributable to poaching are not available. Thus, developing quantitative targets is not possible. Reporting on progress under this action will therefore focus on qualitative aspects (using specific examples where possible) with the assumption that activities under this action will correlate with reductions in mortality of Atlantic salmon attributable to poaching.
	Progress on action to date (Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):	Marine Patrol Officers did not encounter any Atlantic salmon violations in 2019. Atlantic salmon is specifically identified as an enforcement priority within Marine Patrol's previous and current Joint Enforcement Agreement with NOAA. Since August 2018 when the agreement was signed, MMP Officers documented 577.5 hours of targeted Atlantic salmon enforcement with aircraft, watercraft, motor vehicle, foot patrol, and surveillance details. This documented effort is in addition to hundreds of additional hours spent enforcing smelt, alewife, elver, striped bass, and shad fishing regulations along Maine's rivers.
	Current status of action:	Ongoing
	If 'Completed', has the action achieved its objective?	<input type="checkbox"/>
Action F4:	Description of action (as submitted in the IP):	Reduce mortality of Atlantic salmon by (1) maintaining closures for all directed fisheries for Atlantic salmon consistent with the existing Fishery Management Plan under the Magnuson-Stevens Fisheries Conservation and Management Act and (2) reducing bycatch of Atlantic salmon in fisheries for other species to the maximum extent possible.
	Expected outcome (as submitted in the IP):	Zero mortality of Atlantic salmon attributable to (1) directed salmon fisheries and (2) bycatch of Atlantic salmon in other commercial fisheries.
	Progress on action to date (Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):	In 2019, there continued to be no directed fisheries for sea-run Atlantic salmon in the United States consistent with the existing Fishery Management Plan under the Magnuson-Stevens Fisheries Conservation and Management Act. There are, however, small fisheries for domestic broodstock in the Naugatuck and Shetucket Rivers in Southern New England; these rivers are outside the geographic range of endangered wild Atlantic salmon.

	<i>(e.g. website links) will not be evaluated):</i>	For 2019, our query of the dealer purchases database and vessel landings database revealed no record of Atlantic salmon being caught. NOAA maintains a vessel landings database, a dealer purchases database, and an observer database for commercial fisheries subject to federal jurisdiction. To ensure that bycatch of Atlantic salmon in other commercial fisheries remains insignificant, each year, we query these databases. For the observer database, bycatch of Atlantic salmon remains a rare event. Interactions have been observed in only 7 of the 30-year time series, and no Atlantic salmon have been observed since August 2013. Reporting is complete through August, 2019.
	Current status of action:	Ongoing
	If 'Completed', has the action achieved its objective?	

3.2 Provide an update on progress on actions relating to Habitat Protection and Restoration (section 3.5 of the Implementation Plan). *Note: the reports under 'Progress on action to date' should provide a brief overview of each action. For all actions, provide clear and concise quantitative information to demonstrate progress. In circumstances where quantitative information cannot be provided for a particular action because of its nature, a clear rationale must be given for not providing quantitative information and other information should be provided to enable progress with that action to be evaluated. While referring to additional material (e.g. via links to websites) may assist those seeking more detailed information, this will not be evaluated by the Review Group.*

Action H1:	Description of action (as submitted in the IP):	Improve fish passage by removing dams, installing fishways, removing culverts, decommissioning roads, and upgrading road stream crossings.
	Expected outcome (as submitted in the IP):	By 2024, restore connectivity to 5,000 units of suitable Atlantic salmon habitat (as defined in the Atlantic salmon Recovery Plan).
	Progress on action to date (Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links)	<p>Progress was made at improving fish passage at dams and culverts in all three recovery units in 2019. A small number of new projects were implemented, with construction at several more anticipated in coming years. The most notable project was the modification of the Head Tide Dam on the Sheepscot River, which, when combined with the habitat made available by the removal of the upstream Coopers Mills Dam in 2018, significantly improves access to over 2,000 habitat units in the Merrymeeting Bay recovery unit.</p> <p>The estimates of habitat gains are preliminary and will be adjusted in future annual reports. Only projects that are accessible from the ocean are considered in this table. For example, a dam removal that occurs upstream of an existing barrier to passage would not be included in the</p>

	<i>will not be evaluated):</i>	estimate. Habitat gains are reported in habitat units, where 1 habitat unit equals 100m ² .																																				
		2019																																				
		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Salmon Habitat Recovery Unit</th> <th colspan="2" style="text-align: center;"># of Projects</th> <th style="text-align: center;">Critical Habitat</th> <th style="text-align: center;">Non-critical Habitat</th> <th style="text-align: center;">Total Units</th> </tr> <tr> <th></th> <th style="text-align: center;">Dams</th> <th style="text-align: center;">Culverts</th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>Downeast Coastal</td> <td style="text-align: center;">1</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">15</td> <td style="text-align: center;">15</td> </tr> <tr> <td>Penobscot Bay</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> <td style="text-align: center;">0</td> </tr> <tr> <td>Merrymeeting Bay</td> <td style="text-align: center;">2</td> <td style="text-align: center;">0</td> <td style="text-align: center;">2641</td> <td style="text-align: center;">0</td> <td style="text-align: center;">2641</td> </tr> <tr> <td>Total</td> <td style="text-align: center;">3</td> <td style="text-align: center;">0</td> <td style="text-align: center;">2641</td> <td style="text-align: center;">15</td> <td style="text-align: center;">2656</td> </tr> </tbody> </table>	Salmon Habitat Recovery Unit	# of Projects		Critical Habitat	Non-critical Habitat	Total Units		Dams	Culverts				Downeast Coastal	1	0	0	15	15	Penobscot Bay	0	0	0	0	0	Merrymeeting Bay	2	0	2641	0	2641	Total	3	0	2641	15	2656
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Action H2:	Description of action (as submitted in the IP):	Improve fish passage at hydroelectric dams through dam removal or construction of effective fishways and the implementation of adaptive management strategies to achieve passage efficiency and survival targets for dams that cannot be removed.																																				
	Expected outcome (as submitted in the IP):	By 2024, restore connectivity to 10,000 units of suitable Atlantic salmon habitat and reduce mortality and injury of smolts and kelts at hydroelectric dams.																																				
	Progress on action to date (Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):	No additional habitat units were made accessible due to improvements in fish passage at hydro dams in calendar year 2019. However, progress has been made towards implementing and verifying effective passage through the relicensing of projects under the U.S. Federal Power Act (FPA), and through consultation requirements of the U.S. Endangered Species Act (ESA). The objective in these proceedings is to implement effective upstream and downstream fish passage and reduce the impact of hydroelectric dams and their operations on Atlantic salmon and the ecosystem on which they depend. Consultations addressing the implementation of effective fish passage are currently ongoing at all mainstem hydro dams within designated critical habitat in the Gulf of Maine population. In 2019, fishways were prescribed at the Ellsworth Dam (Downeast) on the Union River; once in place, these new fishways will allow salmon and other diadromous species volitional passage in the Union River watershed for the first time since the dams were built in the early 1900s. Brookfield Renewable operates the four lower river dams on the Kennebec River; they constructed a new fishway at the second lower-most dam on the river in 2017. This company has also proposed to install new upstream fishways at the remaining three dams in order to achieve ESA and																																				

		FPA regulatory compliance; when complete, this will result in a significant increase in habitat accessibility in the Kennebec River watershed.															
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Action H3:	Description of action (as submitted in the IP):	Develop and implement a freshwater protection, restoration, and enhancement strategy by 2024 for each of the three salmon habitat recovery units (actions PBS6.4, MBS7.4 and DES5.4 in the current recovery plan).															
	Expected outcome (as submitted in the IP):	Geographically explicit freshwater protection, restoration, and enhancement strategy for each of the three recovery units. These strategies will explicitly consider protection of climate-resilient spawning and rearing habitats for each recovery unit in the face of climate change.															
	Progress on action to date (Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):	<p>Three specific actions were completed in 2019 towards developing a freshwater protection, restoration, and enhancement strategy for each of the three salmon habitat recovery units.</p> <ol style="list-style-type: none"> 1. A Final Recovery Plan for the Gulf of Maine DPS of Atlantic salmon was published in January 2019. The plan details recovery criteria that must be met for salmon to be removed from the federal Endangered Species Act. The plan also identifies Salmon Habitat Recovery Unit (SHRU) specific actions that are necessary to achieve the recovery criteria. 2. The results of a climate scenario planning exercise were published. The exercise explores what the agencies can do to improve U.S. Atlantic salmon population resilience to changing climate conditions across its current range. The Project identified management and research activities that were incorporated into the final recovery plan including conducting a range wide habitat analysis of key attributes essential to Atlantic salmon persistence and productivity; and identifying habitat areas believed to be most resilient to climate change. 															

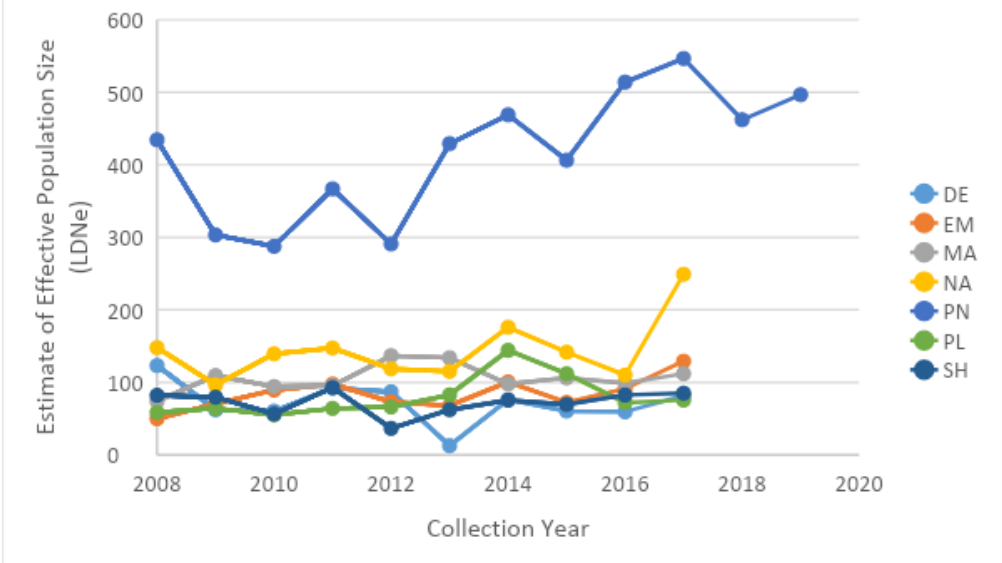
		<p>3. To operationalize the recovery plan, the two federal agencies, Maine Department of Marine Resources and the Penobscot Indian Nation implemented a one-year pilot of a new Governance strategy called the Collaborative Management Strategy (CMS). The CMS aims to ensure that resources are available to implement the recovery actions described in the Final Recovery Plan. A key component of the CMS is the formation of SHRU specific recovery teams. Each team is charged with planning for, and implementing recovery actions in each of the SHRUs. Each team must present an annual report describing their progress towards achieving the recovery criteria as described in the final recovery plan.</p> <p>In combination, the recovery plan, climate scenario planning, and CMS are the first steps in developing and implementing a freshwater protection, restoration and enhancement strategy for each of the three salmon habitat recovery units.</p>
	Current status of action:	Ongoing
	If 'Completed', has the action achieved its objective?	

3.3 Provide an update on progress on actions relating to Aquaculture, Introductions and Transfers and Transgenics (section 4.11 of the Implementation Plan). Note: the reports under 'Progress on action to date' should provide a brief overview of each action. For all actions, provide clear and concise quantitative information to demonstrate progress. In circumstances where quantitative information cannot be provided for a particular action because of its nature, a clear rationale must be given for not providing quantitative information and other information should be provided to enable progress with that action to be evaluated. While referring to additional material (e.g. via links to websites) may assist those seeking more detailed information, this will not be evaluated by the Review Group.

Action A1:	Description of action (as submitted in the IP):	Sea Lice - Minimize sea lice loads on commercial aquaculture fish being reared in marine net pens to reduce risks to salmon in the wild each year. This will be accomplished by mandatory fallowing, monitoring of lice levels (monthly when temperatures range from 6 – 8°C and bimonthly when temperatures exceed 8°C), and mandatory treatments when thresholds for sea lice counts are exceeded (1 gravid female and 5 pre-adult lice).
	Expected outcome (as submitted in the IP):	a) Lice loads in marine net pens maintained at a level b) below the pre-determined thresholds and Treatment when necessary (monitoring reveals sea lice levels above threshold levels) to ensure that risks to salmon in the wild remain low.
	Progress on action to date (Provide a brief overview with a	The aquaculture industry continues to exercise regularly scheduled fallowing periods and stocking schedules in an effort to decrease lice loads. In addition, sea lice treatments are occurring seasonally at several sites in Maine. Private veterinarian services are used to properly administer the treatments if needed. State and federal oversight has continued, and the industry is complying with the permit requirements that are in place.

	<i>quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):</i>	<p>Providing quantitative results of monitoring programs (e.g., lice counts) is not possible as Maine law prohibits the government from making public any data that can be linked to individual people or businesses. Because there is only one aquaculture company operating in Maine (Cooke Aquaculture), we have been unable to find a way that the industry can share this information without violating this regulation (which can be found in the code of Maine rules title 13-188 Ch. 5., § 5.30). We are currently working with Cooke Aquaculture in Maine to determine if there is any way to provide information that would not violate this state regulation.</p> <p>Meanwhile, other efforts are ongoing in Maine to address sea lice. In 2019, NOAA Sea Grant awarded financial support to the University of Maine for project titled ‘An integrated approach to addressing sea lice control in the commercial culture of Atlantic salmon.’ So far, two workshops have been held to bring together state and federal regulators, industry, and academia to discuss ways to collaborate on sea lice control within the Maine salmon farming industry.</p>
	Current status of action:	Ongoing
	If ‘Completed’, has the action achieved its objective?	[]
Action A2:	Description of action (as submitted in the IP):	Containment --- Minimize effects to wild salmon from genetic introgression from escaped aquaculture-origin salmon by ensuring that containment measures are maintained at 100% of all salmon farms each year.
	Expected outcome (as submitted in the IP):	No escapees of U.S origin spawning in the rivers containing endangered salmon.
	Progress on action to date (Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links)	The aquaculture industry is required to report any escapes (min. reporting requirement of 50 fish 2kg or more for marine pens) as a condition of their federal permits. The industry did not have any reportable escapes from commercial farms in Maine in 2019. Furthermore, the Maine Department of Marine Resources’ staff monitors sea run Atlantic salmon returns at many facilities in Maine. In 2019, field biologists reported there were no captures of farmed fish at these facilities. Atlantic salmon farming operations are concentrated in large bays and interspersed among the many islands along Maine's coast.

	<i>will not be evaluated):</i>	
	Current status of action:	Ongoing
	If 'Completed', has the action achieved its objective?	[]
Action A3:	Description of action (as submitted in the IP):	Implement broodstock management protocols at conservation hatcheries on an annual basis.
	Expected outcome (as submitted in the IP):	Reduce or eliminate the loss in diversity from endangered populations.
	Progress on action to date (Provide a brief overview with a quantitative measure, or other justified evaluation, of progress. Other material (e.g. website links) will not be evaluated):	In 2019, we continued monitoring genetic diversity within seven broodstock populations to ensure the goals of the conservation hatcheries are being met. Maintenance of genetic diversity remains the primary goal of the conservation hatchery program: to maintain the genetic characteristics of each individual broodstock, to allow for 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, particularly the Pleasant River, have decreased estimates of allelic diversity relative to other broodstocks, likely a result of decreased broodstock number. Estimates of effective population size also vary between broodstocks from between 50 to 150 for most populations to around 500 for the Penobscot, due to the larger total broodstock number and overall population size of the Penobscot River population. The most recent estimates of effective population size are provided in table A3 (below) and reflect estimates of the number of breeders for the parr-collected broodstocks primarily from a single cohort. This is based on multiple year classes of returning adults sampled at time of spawning for the Penobscot River. Due to the difference in collection times and year classes, there is a lag in the sample year between the two groups.

		 <p>Figure A3. Estimates of effective population size for the seven Atlantic salmon broodstocks managed through the conservation hatchery program in Maine based on time of sampling: as parr for the parr-based broodstocks, and as returning adults for the Penobscot River (operated by the U.S. Fish and Wildlife Service)</p>
	Current status of action:	Ongoing
	If 'Completed', has the action achieved its objective?	
Action A4:	Description of action (as submitted in the IP):	Reduce stocking of non-native salmonids in the freshwater range of endangered salmon to ensure that predatory and competitive effects are minimized.
	Expected outcome (as submitted in the IP):	Minimally, the current locations for stocking non-native salmonids will be maintained where only the Sandy River is routinely stocked with brown trout.
	Progress on action to date (Provide a brief overview with a quantitative measure, or other justified)	In 2019, no stocking of non-native salmonids occurred in rivers that are actively managed in support of locally adapted Atlantic salmon except for the Sandy River in the Kennebec River watershed where brown trout are routinely stocked. However, non-native Brown Trout and Rainbow Trout are routinely stocked in lakes and ponds throughout the range of the Gulf of Maine population that currently do not support wild sea-run Atlantic salmon.

	<i>evaluation, of progress. Other material (e.g. website links) will not be evaluated):</i>	
	Current status of action:	Ongoing
	If 'Completed', has the action achieved its objective?	

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.
	Changes were made to the ESA section 7 regulations that, in part, provide for a consultation process that can result in the authorization of the incidental take of endangered salmon from certain federal activities (e.g., licensing and operation of a hydroelectric facility); however, these changes were designed to clarify policies and procedures and are not anticipated to change the outcomes of consultations.
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.
	N/A
4.3	Details of any new actions to prohibit fishing for salmon beyond 12 nautical miles.
	N/A
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.
	N/A
4.5	Details of any actions taken to implement regulatory measures under Article 13 of the Convention including imposition of adequate penalties for violations.
	N/A
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.
	N/A
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.
	N/A