Agenda Item 5.1
For Information

Council

CNL(15)32

Annual Progress Report
on Actions Taken Under Implementation Plans for the Calendar Year 2014

United States of America

CNL(15)32

Annual Progress Report on Actions taken under Implementation Plans for the Calendar Year 2014

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 2015**.

Party:	**United States**
Jurisdiction/Region:	

1: Changes to the Implementation Plan

1.1 Describe any proposed revisions to the Implementation Plan
(*Where changes are proposed, the revised Implementation Plans should be submitted to the Secretariat by 1 December).*

In December 2014, we updated our Implementation Plan to more accurately reflect the current status of Atlantic salmon in southern New England (see CNL(14)75). Programs in Maine (where populations are protected under the U.S Endangered Species Act) remain largely unchanged. We substantially revised sections 1.1, 1.2, 1.3, 1.5, 2.1, 2.2, 2.4, and 2.5. The threats in challenges in sections 2.7 and 3.3 were streamlined and that is reflected in revisions to actions that follow those sections. We also streamlined section 4.2 recognizing that information would be updated annually in our progress report.

We also note that some details in section 1.6 (dealing with recreational and conservation hatcheries) were omitted; this was an error. Section 1.6 should still include information on recreational and conservation hatcheries (in addition to information on commercial hatcheries that is provided). Following is the information on hatcheries supplementing recreational fisheries and conservation hatcheries supporting endangered salmon populations that should be in section 1.6:

Recreational – Each state in New England has a recreational stocking program. There are eight facilities in Maine, six in New Hampshire, four in Massachusetts, three in Connecticut, five in Vermont, and four in Rhode Island. In 2012 (the most recent information available), the total freshwater production was roughly 191 tons in Maine, 150 tons in Connecticut, and 228 tons in New Hampshire

Salmon Conservation - The U.S. Fish and Wildlife Service (USFWS) operates six conservation hatcheries that are involved in Atlantic salmon recovery and restoration. The State of Connecticut also operates one hatchery. Tonnage estimates are not available; however, the estimated number of individuals is as follows: 10,000,000 fry; 450,000 parr (age 0, age 1, and age 2 inclusive); and 808,000 smolts (age 1 and age 2 inclusive).

Finally, the revisions to the Implementation Plan also included a re-alignment of information in section 1.3 (status of stocks) to more closely mirror the information that is reported in NASCO's Salmon Rivers Database.

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

In 2014, Maine's Penobscot River watershed was selected as a habitat focus area under NOAA's Habitat Blueprint. This designation does not grant the fish or the habitat in the river greater regulatory protection than already exists; it elevates the profile of ongoing restoration efforts through fiscal investments as well as improved outreach and education on what is occurring in the watershed.

The transition to measurable survival standards at hydro-electric dams within the freshwater range of endangered salmon in Maine began in earnest in 2014. Each dam in the mainstem of the Penobscot River (with the exception of Weldon Dam) must now pass 96% of all smolts passing downstream (within 24 hours) and 95% of all adults passing upstream (within 48 hours). The dam owners must also be able to demonstrate that these performance standards are being achieved through quantitative studies. Studies to develop baseline survival levels also began in the Kennebec and Androscoggin Rivers. In the coming years, quantitative performance standards will be applied to these rivers as well. Similar approaches have been applied on the West Coast of the United States with great effect for a variety of Pacific salmon species (http://www.salmonrecovery.gov/Hydro.aspx) and lessons learned from these systems are being applied in Maine for the benefit of the endangered Atlantic salmon.

2: Stock status and catches.

2.1 Provide a description of any new factors which 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.

The status of stocks in the United States remains dire. Returns to U.S. waters in 2014 were only 450 fish, which ranks lowest in the 48 year time-series. This is in stark contrast to 2011 returns that were among the highest in the modern period. Returns the last five years suggest high interannual variability in marine survival with some of the widest differences in interannual returns in the time-series despite relatively consistent smolt production.

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').***				
(a) provisional nominal catch (which may be subject to revision) for 2014 (tonnes)	In-river	Estuarine	Coastal	Total
	0	0	0	0
(b) confirmed nominal catch of salmon for 2013 (tonnes)	0	0	0	0
(c) estimated unreported catch for 2014 (tonnes)	0	0	0	0
(d) number and percentage of salmon caught and released in recreational fisheries in 2014.	No sea-run salmon are subject to recreational fishing. There is, however, a small fishery for domestic broodstock in the Merrimack River in New Hampshire and similar small fisheries in the Naugatuck and Shetucket Rivers in Connecticut.			

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).

Note: *The reports under 'Progress on Action to Date' should provide a brief overview with a quantitative measure of progress made. 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*):	Continue to remain active in the West Greenland Commission (WGC) and the North American Commission (NAC)
	Expected Outcome (*as submitted in the IP*):	Continued collaborative management of the fishery at West Greenland, enhanced collaboration with France (in respect of St. Pierre et Miquelon) regarding the fishery at St. Pierre et Miquelon, and enhanced collaboration with Canada regarding the fishery in Labrador
	Progress on Action to Date (*see note above*):	WGC: The United States continues to work with the other parties to the WGC. We participated in the annual WGC meeting in 2014 and at the intersessional WGC in February 2015, and we supported continued sampling in the West Greenland fishery. The United States participated in the WGC working group focused on management controls and catch accountability in the fishery and tabled a well-received paper at the meeting expressing six tenets for management control and catch accountability in the fishery. We are preparing for the annual WGC meeting in June 2015, and will strive to confer to it with all the parties to help ensure a successful meeting.

		NAC: We have reviewed a considerable amount of new information pertaining to the mixed-stock fishery in Labrador in 2014. We will confer with Canada prior to the annual meeting. We will continue to support efforts to monitor and sample in the fishery that continues at St. Pierre et Miquelon.
	Current Status of Action (e.g. '*Not started'; 'Ongoing'; 'Completed'*):	Ongoing
	If 'Completed', has the Action achieved its objective?	
Action F2:	Description of Action (*as submitted in the IP*):	Work with state authorities to ensure that recreational fisheries for other species, such as brook trout, reduce bycatch of salmon to the maximum extent possible.
	Expected Outcome (*as submitted in the IP*):	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.
	Progress on Action to Date (*see note above*):	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.
	Current Status of Action (e.g. '*Not started'; 'Ongoing'; 'Completed'*):	Ongoing
	If 'Completed', has the Action achieved its objective?	
Action F3:	Description of Action (*as submitted in the IP*):	Maintain closures for all directed fisheries for Atlantic salmon
	Expected Outcome (*as submitted in the IP*):	Reduced risk to productive capacity.
	Progress on Action to Date (*see note above*):	Directed fisheries for sea-run salmon are all closed.

		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. For 2014, we queried each of these databases and found no record of Atlantic salmon having been caught. Further, Wigley et al. (2014; Annex 1) used recent estimates of discards from NMFS databases to estimate total discards of 14 federally managed species groups (including Atlantic salmon) across 56 commercial fleets. They estimated that approximately 49 pounds of Atlantic salmon would have been discarded on an annual basis (using data from July 2012 through June 2013). Finally, surveillance in rivers for potential poaching activity is conducted routinely by conservation law officers throughout the salmon's freshwater range.
	Current Status of Action (e.g. '*Not started'; 'Ongoing'; 'Completed'*):	Ongoing
	If 'Completed', has the Action achieved its objective?	

3.2 Provide an update on progress against actions relating to Habitat Protection and Restoration (Section 3.4 of the Implementation Plan). ***Note:*** *The reports under 'Progress on Action to Date' should provide a brief overview with a quantitative measure of progress made. 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, decommission roads, and upgrading road-stream crossings
	Expected Outcome (*as submitted in the IP*):	Enhanced connectivity between freshwater habitats and the Atlantic Ocean
	Progress on Action to Date (*see note above*):	The first dam on the Falls River was removed in the fall of 2014. The Falls River is a tributary to the Connecticut River in Massachusetts. Within a week of removal, an adult salmon ready to spawn was observed immediately upstream of the dam. In 2014, 33 additional aquatic connectivity projects were completed across the Gulf of Maine DPS with the primary goal of restoring aquatic organism connectivity and ecological stream processes by allowing the natural flow of materials (water, wood, sediment, etc.). A total of over 229 km of stream were

		made accessible as a result of these projects. These efforts were made possible due to strong partnerships including the Natural Resource Conservation Service, Penobscot Indian Nation, Project SHARE, Maine Department of Inland Fisheries and Wildlife, Maine Department of Marine Resources, Maine Department of Conservation, Maine Forest Service, NOAA, Atlantic Salmon Federation, U.S. Fish and Wildlife Service, The Nature Conservancy, Downeast Lakes Land Trust, municipalities, lake associations, towns, and numerous private landowners. One project of note was the construction of a small bridge that replaced an under-sized road crossing that was filled with timbers (on a tributary to the Penobscot River and on land belonging to the Penobscot Nation). This road crossing now provides access for the entire suite of sea-run and resident fish. Funding was provided with the Bureau of Indian Affairs and the Penobscot Nation under direction from staff at the Penobscot Nation's Natural Resources Department.
	Current Status of Action (e.g. '*Not started'; 'Ongoing'; 'Completed'*):	Ongoing
	If Completed, has the Action achieved its objective?	
Action H2:	Description of Action (*as submitted in the IP*):	Continue to implement Clean Water Act and other federal and state laws
	Expected Outcome (*as submitted in the IP*):	Continued water quality improvement
	Progress on Action to Date (*see note above*):	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. 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 roughly $180,000 (USD) in fines (none in 2014).
	Current Status of Action	Ongoing

	(e.g. *'Not started'; 'Ongoing'; 'Completed'*):	
	If Completed, has the Action achieved its objective?	
Action H3:	Description of Action (*as submitted in the IP*):	Conduct consultations on federal actions in areas where Atlantic salmon Essential Fish Habitat (EFH) is designated and issue conservation recommendations to avoid, minimize or mitigate impacts to salmon habitat.
	Expected Outcome (*as submitted in the IP*):	No net loss of productive capacity
	Progress on Action to Date (*see note above*):	Under the Magnuson-Stevens Act, EFH must be designated for all managed species. For Atlantic salmon, EFH (which equates roughly to the historic range of the species) has been designated by NOAA and the New England Fishery Management Council (http://www.greateratlantic.fisheries.noaa.gov/hcd/webintro.html). The EFH provisions of Act require that NOAA consult with federal agencies where their activities occur in or near EFH. NOAA incorporates EFH consultations into interagency procedures previously established under the National Environmental Policy Act, Endangered Species Act, Clean Water Act, Fish and Wildlife Act, or other applicable statutes. If a federal or state project may have an adverse effect on EFH, Federal action agencies are required to prepare an Essential Fish Habitat Assessment which must include the following: (1) a description of the proposed action; (2) an analysis of the effects, including cumulative effects of the actions on EFH, the managed species, and associated species by life history. NMFS is then required to develop EFH conservation recommendations for the project. These recommendations may include measures to avoid, minimize, mitigate, or otherwise offset adverse effects on EFH. Federal agencies are required to respond to EFH conservation recommendations in writing within 30 days explaining how they will incorporate them or why they will not.
	Current Status of Action (e.g. *'Not started'; 'Ongoing'; 'Completed'*):	Ongoing
	If Completed, has the Action achieved its objective?	
Action H4:	Description of Action (*as submitted in the IP*):	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 (*as submitted in the IP*):	No net loss of productive capacity
	Progress on Action to Date (*see note above*):	Under the Endangered Species Act, the United States has designated critical habitat for Atlantic salmon. NOAA and USFWS 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 prevent the survival and recovery of endangered Atlantic salmon. The Endangered Species Act also requires NOAA and USFWS to analyse whether an action may result in destruction or adverse modification of critical habitat. If it does, NOAA and USFWS must develop alternatives that the action agencies must comply with in order to receive legal coverage for that activity In 2014, NOAA and FWS completed well over 100 consultations. In each consultation, conservation recommendations made by NOAA and/or 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 prevent the survival and recovery of endangered salmon.
	Current Status of Action (e.g. '*Not started'; 'Ongoing'; 'Completed'*):	Ongoing
	If Completed, has the Action achieved its objective?	

3.3 Provide an update on progress against actions relating to Aquaculture, Introductions and Transfers and Transgenics (Section 4.8 of the Implementation Plan). ***Note:*** *The reports under 'Progress on Action to Date' should provide a brief overview with a quantitative measure of progress made. 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*):	Continue to monitor implementation of protective measures identified in the Biological Opinion from 2003 (published pursuant to an ESA consultation). Continue collaboration with Canadian provincial and federal agencies to inform new regulations for consistency with U.S. federal permit requirements.
	Expected Outcome (*as submitted in the IP*):	Zero escapes, reduced disease transfer
	Progress on Action to Date (*see note above*):	In 2014, no aquaculture-origin fish were reported captured in Maine rivers. We also continued to monitor the

		incidence of sea lice in sea-run returns to the Penobscot River (Annex 2). As reported in 2013, *Renibacterium salmoninarum* (causative agent of Bacterial Kidney Disease (BKD)) was detected in the fall of 2013 at two Atlantic salmon net-pen facilities. Clinical signs were detected in some fish but no elevated mortality was noted throughout the marine grow-out phase. All fish were harvested in 2014. Additionally, in 2013, MDMR was notified of positive test results for BKD at a commercial Maine hatchery. Elevated mortality was not observed but the pathogen was detected in several year classes during routine surveillance. Biosecurity measures and routine fish health surveillance have been increased. Additional disease testing of the same year classes of fish conducted in 2014 prior to stocking, did not detect any pathogens of concern. Since the most recent disease sampling of smolts prior to stocking did not detect any pathogens, the fish were transferred to two marine grow-out facilities in 2014. Prior to providing a stocking permit, the MDMR consulted with the Aquatic Animal Health Technical Committee regarding potential management options. The following conditions were placed on the transfer permit: • Mortalities are monitored frequently and collected 3 times a week. • Strict disinfection and biosecurity protocols are being practiced. • Contact with other sites is limited. • Sites are under supervision of a veterinarian. To date, test results have shown little infectious pressure on the sites with very few fish having tested positive, there has been no elevated mortality and no fish expressing any clinical signs of BKD.
	Current Status of Action (e.g. *'Not started'; 'Ongoing'; 'Completed'*):	Ongoing
	If Completed, has the Action achieved its objective?	
Action A2:	Description of Action (*as submitted in the IP*):	Implement specific regulations and guidelines for importation of baitfish described in State laws and a National Aquatic Animal Health Plan (NAAHP).
	Expected Outcome (*as submitted in the IP*):	Reduced transmission of diseases of concern including; Viral Hemorrhagic Septicemia and Bacterial Kidney Disease.

	Progress on Action to Date (*see note above*):	The Northeast Fish Health Committee (NEFHC, a subcommittee of the Northeast Fisheries Administrators Association) encourages state and federal fish and wildlife agencies to develop rules, regulations, and/or protocols to manage fish importation in ways that minimize the movement of pathogens. The NEFHC 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. In 2014, the NEFHC completed revisions to the existing fish health guidelines to include fish importation, movement and transfer between all states in the Northeast United States (Connecticut, Delaware, Maine, Maryland, Massachusetts New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and Virginia).
	Current Status of Action (e.g. '*Not started'; 'Ongoing'; 'Completed'*):	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.
	Expected Outcome (*as submitted in the IP*):	Slow the rate of the loss of genetic diversity.
	Progress on Action to Date (*see note above*):	Estimates of genetic diversity are used to monitor if genetic diversity within seven broodstock populations is being maintained over time (Annex 3). Maintenance of genetic diversity is a primary goal 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 (Ne) also vary between broodstocks from around 50 for most populations to over 200 for the Penobscot, due to the larger total broodstock number and overall population size of the Penobscot River population. Given concerns relating to continued low marine survival in the coming years (and concomitant reductions in genetic variation) parr collection

		in 2013 and 2014 was initiated from the Penobscot River in an effort to reduce the reliance on sea-run fish for broodstock purposes and to capture a broad array of the genetic diversity within the population in case returning adult numbers are low. In addition, pedigree lines have been established for the Dennys populations to more assertively reduce the rate loss of genetic diversity and to increase estimates of Ne.
	Current Status of Action (e.g. '*Not started'; 'Ongoing'; 'Completed'*):	Ongoing
	If Completed, has the Action achieved its objective?	
Action A4:	Description of Action (*as submitted in the IP*):	Coordination with state programs that stock salmonids to support recreational fisheries.
	Expected Outcome (*as submitted in the IP*):	Identification of potential areas of overlap of salmon and other stocked salmonids.
	Progress on Action to Date (*see note above*):	Many salmon rivers are no longer stocked with invasive species such as brown trout. These discussions most often occur on a river-by-river basis. There is not yet, however, a comprehensive conservation plan for Atlantic salmon agreed to by all relevant authorities
	Current Status of Action (e.g. '*Not started'; 'Ongoing'; 'Completed'*):	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.
Over the last several years, stocking associated with restoration and recovery programs has been scaled back particularly in Southern New England. We recently revised our implementation plan to reflect these changes.
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. Fishing for and possessing Atlantic salmon remains prohibited throughout the US EEZ.
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. References

Wigley SE, Blaylock J, Rago PJ, Shield G. 2014. 2014 Discard estimation, precision, and sample size analyses for 14 federally managed species groups in the waters off the northeastern United States. US Dept Commer, Northeast Fish Sci Cent Ref Doc. 14-05; 157 p. Available from: National Marine Fisheries Service, 166 Water Street, Woods Hole, MA 02543-1026. http://www.nefsc.noaa.gov/publications/crd/crd1405/crd1405.pdf

Annex 2. Summary of lice observed on Atlantic salmon captured at the Veazie Dam (1978-2014).

Year	Total # Salmon	# Salmon Without lice	# Salmon With lice	% Salmon With lice
1978	1464	1277	187	13%
1979	763	632	131	17%
1980	2498	2205	293	12%
1981	2704	2652	53	2%
1982	3241	2795	449	14%
1983	790	689	101	13%
1984	1449	1181	268	18%
1985	3034	2752	282	9%
1986	4137	3531	606	15%
1987	2335	1637	699	30%
1988	2684	2684	No Data	No Data
1989	2752	2752	No Data	No Data
1990	2955	2955	No Data	No Data
1991	1575	1575	No Data	No Data
1992	2233	2233	No Data	No Data
1993	1650	1650	No Data	No Data
1994	1042	1029	13	1%
1995	1336	1270	66	5%
1996	2044	1854	190	9%
1997	1355	1149	206	15%
1998	1210	835	378	31%
1999	969	791	188	19%
2000	534	490	46	9%
2001	786	511	275	35%
2002	784	555	229	29%
2003	1114	845	269	24%
2004	1324	1071	253	19%
2005	985	856	129	13%
2006	1045	870	175	17%
2007	916	672	244	27%
2008	2115	1666	449	21%
2009	1958	1361	597	30%
2010	1315	976	339	26%
2011	3125	2409	716	23%
2012	624	448	176	28%
2013	372	287	85	23%
2014	261	202	59	23%

Annex 3. Summary results for estimates of genetic diversity from the 2012 parr and 2014 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	2012	117	11.7	0.677	0.672	0.009	87.1	79.0-96.5	18
East Machias	2012	153	11.2	0.666	0.686	-0.030	73.2	67.4-79.7	18
Machias	2012	248	12.2	0.687	0.697	-0.014	136.9	127.3-147.6	18
Narraguagus	2012	255	12.8	.682	0.709	-0.040	118.8	110.6-127.7	18
Penobscot	2014	256	12.7	0.689	0.716	-0.040	468.9	391.9-577.3	18
Pleasant	2012	197	10.9	0.674	0.685	-0.017	66.1	61.4-71.2	18
Sheepscot	2012	164	10.7	0.686	0.723	-0.055	36.6	34.2-39.2	18