

Council

CNL(12)13

Summary of Annual Reports on Implementation Plans

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Background

1. The Council's Guidelines for the Preparation of Implementation Plans and for Reporting on Progress, NSTF(06)10, indicate that reports to the Council should be provided in two formats: written annual reports and focus area reports (FARs) presented at Special Sessions and subject to review. The primary purpose of the annual reports is to provide a summary of all the actions that have been taken under Implementation Plans in the previous year including details of any actions in accordance with Articles 14 and 15 of the Convention. The information sought is as follows:
 - details of any significant changes to the management outlined in the introduction to the Implementation Plan;
 - a description of any significant changes in the status of stocks and information on catches;
 - a description of any new factors which may significantly affect the abundance of salmon stocks;
 - an account of all actions taken under the Implementation Plan;
 - details of any proposed revisions to the Implementation Plan.
2. In order to avoid duplication of reporting the Council has agreed that no information needs to be provided in the annual return on the focus area topic under consideration unless a jurisdiction wished to supplement its FAR or had not submitted a FAR. However, for 2012 reporting on all aspects of the Implementation Plan was anticipated.
3. To date, annual returns, using the agreed format, have been received from the following Parties and jurisdictions: Canada, (CNL(12)36); Denmark (in respect of Faroe Islands and Greenland) – Faroe Islands, (CNL(12)35); Denmark (in respect of Faroe Islands and Greenland) - Greenland, (CNL(12)22); EU – Denmark, (CNL(12)24); EU – Finland, (CNL(12)26); EU – France, (CNL(12)25); EU – Germany, (CNL(12)27); EU – Ireland, (CNL(12)28); EU – Sweden, (CNL(12)29); EU – UK (England and Wales), (CNL(12)30); EU – UK (Northern Ireland), (CNL(12)31); EU – UK (Scotland), CNL(12)32; Norway, (CNL(12)21); Russian Federation, (CNL(12)33); and the USA, (CNL(12)23). Additionally, a document entitled 'Information for the compilation of an Implementation Plan and NASCO Focus Area Reports for Spain 2011', has been provided, CNL(12)34.

Changes to management outlined in the Introduction to Implementation Plans

4. The following changes have been notified:

EU - UK (England and Wales): There have been no significant changes to the management described in the Implementation Plan for England and Wales (as updated in 2009). The Marine and Coastal Access Act (MCAA) came into force in 2009 and contains a number of provisions which relate to the management of salmon. Some of these came into effect from January 2011. They change the way the Environment Agency permits fishing. Fishing by rod and line, certain (established) salmon and sea trout nets and historic salmon traps must be licensed. Any other fishing method (including for salmon and sea trout) is either prohibited or authorised, and if authorised, can be subject to conditions. As a consequence of this, legislation explicitly prohibiting the use of unauthorised fixed engines for any fish under the Salmon and Freshwater Fisheries Act 1975 has been repealed. This was mainly used to prevent illegal fishing for salmon and sea trout in coastal waters. Setting an unauthorised fixed engine for salmon remains an offence under the Salmon and Freshwater Fisheries Act: setting an unauthorised fixed engine for sea fish is an offence under Inshore Fisheries and Conservation Authority byelaws.

EU - UK (Scotland): There have been no significant changes although the Fisheries Trust network developed management plans now covering 95% of mainland Scotland, Skye and the Outer Hebrides. The Scottish Government has consulted on legislative proposals, mainly aimed at the operational management of fisheries and also aquaculture management and interaction issues, and expects to introduce a bill to the Scottish Parliament during 2012. A National Fisheries Management demonstration project for Salmon and Sea Trout has been initiated on the River South Esk under the direction of Marine Scotland Science. The project started in February 2012 and will run for 3 years.

US: In 2009, the US issued a final rule listing the Gulf of Maine Distinct Population Segment (GOM DPS) of Atlantic salmon as an endangered species as well as a final rule designating Critical Habitat pursuant to the Endangered Species Act (ESA). The effect of these actions is to protect greater numbers of Atlantic salmon and to protect the features of their habitat that are essential to the conservation of the species. The “take” of species listed under the ESA is considered a violation of the ESA unless an incidental take permit or incidental take statement is provided. Take is defined to include harm, harass, trap, collect, kill or injure. Federal agencies conducting, authorizing or permitting work that may affect the GOM DPS of Atlantic salmon must consult with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service to ensure that they do not jeopardize the continued existence of Atlantic salmon and/or adversely modify or destroy critical habitat.

Changes in Stock Status and Catch Statistics

5. The catch statistics and information on unreported catches and on catch and release are presented in Annex 1 using the format previously agreed by the Council.

EU - UK (England and Wales): The annual review of stock status for 2011 shows:

- 12 rivers (19%) were classified as ‘not at risk’ – i.e. had a high probability (>95 %) of meeting the management objective;
- 15 rivers (23%) were classified as ‘probably not at risk’ – i.e. had a probability of 50% to 95% of meeting the management objective;
- 16 rivers (25%) were classified as ‘probably at risk’ – i.e. had a probability of 5% to 50% of meeting the management objective;
- 21 rivers (33%) were classified as ‘at risk’ – i.e. had a very low probability (<5%) of meeting the management objective

Note: The ‘at risk’ category means that stocks are falling well short of the management objective.

There has been a progressive decrease in the proportion of rivers regarded ‘at risk’ over the past 8 years and a marked increase in the proportion of rivers assessed as ‘probably at risk’ and ‘probably not at risk’. These trends are predicted to continue. The changes in categorisation over the time series suggest an overall increase in the number of rivers moving towards compliance with the management objective of meeting the CL four years out of five, on average.

EU - UK (Northern Ireland): The River Bush (key indicator river for UK-NI) stock attained 45% of CL in 2011. Data for other monitored rivers:

Percentage compliance with conservation limits in 2011 for monitored rivers in the DCAL area of UK (N. Ireland).

River	2011
Blackwater	45
Main	55
Glendun	68
Moneycarragh	n/a
Shimna	23

Percentage compliance 2011 with management target for monitored rivers in the cross border Loughs Agency area.

River	2011
Mourne	n/a
Finn	36
Roe	143
Faughan	152

NB All compliance data in both the DCAL and Loughs Agency Areas are *minimum* estimates:

US: There have been no significant changes to the stats of stocks since the development of the US Implementation Plan. The US queried available databases (vessels, dealers, and fishery observers) for information relating to bycatch of salmon. There was one salmon (11 pounds) reported in the observer database for calendar year 2011. In 2011, recreational fisheries on post-spawned domestic broodstock occurred in the Merrimack River, an area south of the GOM DPS. Roughly 1,550 broodstock were released to the river to support the fishery with approximately 1,200 permits sold. Broodstock are known to be captured and killed in the fishery for consumption. However, the time series of creel data for this fishery suggests that the majority of anglers practice catch and release. In addition, there was one instance of a recreational angler incidentally capturing an adult salmon in southern New England. The angler contacted state authorities, who promptly retrieved the fish alive to take to a conservation hatchery for broodstock.

New factors which may significantly affect the abundance of salmon stocks

6. The following new factors have been reported:

EU - France: The 2011 fresh-water catch was higher than in 2010, but below the decade average. A study on the evolution of the migratory characteristics of French salmon populations since 1985 is currently being carried out by the French National Institute for Agricultural Research, using trap information and reported line catch in France. The preliminary results show that grilse and spring-run salmon have lost on average 2 – 3cm and 200 – 400g between 1985 and 2008. These changes are more significant for grilse than for 2SW salmon. It is also shown that during the same period, the migration peak for grilse is about 1 month later, around mid-June, while the MSW peak one week later, towards the end of March. The later the average return date is, the smaller the grilse and spring-run salmon tend to be. Additionally, a later return does not seem to offset poor marine growth conditions. This finding, which has also been observed in studies conducted on UK and Scandinavian rivers, is worrying. In fact, studies carried out in several European countries suggest that marine survival is positively correlated to growth. It is possible therefore, to assume that marine survival of salmon has declined. Furthermore, the number of eggs produced per female is dependent on her physical condition. These results, taken as a whole, suggest that egg deposition has decreased throughout the last two decades and this phenomenon could continue over the coming years.

EU - Germany: For the Rhine, the most important occurrence concerning the restoration of river continuity in the Rhine catchment in 2011 was a decision of the Dutch government to proceed with their plans to partly open the Haringvliet Sluices, an important entrance for salmon to the Rhine and Meuse river systems. It is expected that this will take until 2014, with sluices open in 2015.

The exceptional low water conditions in 2011 resulted in suboptimal conditions for downstream migration of smolts in the spring and for upstream migration of adult salmon in the autumn. Predation on downstream migrating smolts by piscivorous birds significantly affects salmon abundance.

There have been a number of habitat improvements including construction of new fish passes but siltation and mechanical river maintenance works have adverse impacts on habitat. Full details are provided in the Annual Return (CNL(12)27).

EU - Sweden: Commercial catches of salmon with gill nets on the coast were insignificant during 1995-2010. However, during 2011 a gill net fishery directly targeting salmon started in the southern part of the Kattegatt with a total catch of 1,966 salmon (8.7 tonnes). This has led to a significant increase in Atlantic salmon fishing in Sweden. The catch constitutes 23% of the national catch weight.

Wild salmon parr densities in salmon rivers in western Sweden are still at a historically low levels (period 1985 – 2011). During (1985-89) the average parr density was 137 Atlantic salmon parr per 100 m², but declined to 59 parr in 2007-2011, a decline of 57%. The decline appears to be continuing and national actions are required.

Monitoring for the parasite *Gyrodactylus salaris* indicates that only 9 out of 23 rivers are uninfected but there have been no new infections since 2005. The majority of uninfected rivers are in the northern part of the Swedish west coast, i.e. close to Norway.

The Gyro-monitoring programme was evaluated in spring 2011. Preliminary results indicate that although individual parr with many parasites will have impaired growth and eventually die, no effects can be seen at the population level. Comparing parr abundances before and after infection with *Gyrodactylus* and with reference sites in uninfected rivers showed no significant differences.

During 2008-2011 the prevalence of *Gyrodactylus* in infected rivers has been 45%, as compared to 71% in 2001-2007. The number of parasites per infected fish decreased over time since the first year of infection. Models indicate that after 43 years there will be a transition to lower number (<5) of parasites per fish. It is suggested that northern stocks may be more sensitive to *Gyrodactylus salaris* as they are isolated from southern stocks (and the Baltic) by high saline ocean waters with >30 PSU, as compared to circa 20 PSU in the southern part of the Swedish west coast.

EU - UK (England and Wales):

Extreme low flows were widespread in England and Wales in April and May 2011 and there are concerns that this led to an increase in predation on salmon and sea trout smolts by avian predators. Parts of South Eastern England have been in drought since June 2011 and areas in central and South West England are being heavily affected by low rainfall. Fish rescues have been necessary in some drought affected reaches.

EU - UK (Northern Ireland): Marine survival of salmon to the River Bush remains very low and, consistent with other NASCO jurisdictions, is the major factor affecting abundance of populations. No commercial fishing for salmon took place in the Foyle area in 2011. Angling in the River Finn was restricted to catch and release only. Six commercial fishing licenses were issued in 2011 in the DCAL area. The commercial catch by the 5 operating engines fell by ~40% in 2011 compared to 2010. Overall this represented a continuation of the very significant reduction in licensing of commercial fishing engines seen in 2010. Provisional data suggests a slight increase in rod catch

in the Foyle area in 2011 compared to the reduced final figure for 2010. Rod catch in the DCAL area was stable. Whilst detailed monitoring data indicates that implementation of the Salmon Management strategy (Implementation Plan) is conserving and re-building stocks in fresh water, this management activity remains against the background of low marine survival relative to before 1997. Thus, reduced exploitation and freshwater habitat management measures can only buffer that decline. This being the case, the DCAL Minister has asked for a voluntary cessation to the taking of salmon in 2012 by any fishing engines in the DCAL jurisdiction. It is hoped that there shall be no commercial fishing and that anglers shall practice catch and release in 2012. The Loughs Agency has echoed this call for 2012.

US: In August of 2011, Tropical Storm Irene produced severe floods that damaged the White River National Fish Hatchery (WRNFH), a primary source of egg and fry production for the Connecticut River Program in southern New England. The USFWS determined that the hatchery had to be de-populated and shutdown by December 2011, which created huge operational challenges for the Program. The Connecticut River Technical Committee quickly modified previous plans to deal with spawning plans, incubation space options, chiller status, fish health testing and transfer of eggs. A brief but intensive spawning effort at WRNFH salvaged 1.2M eggs. The remaining broodstock were provided to Northeast Indian Tribes for their ceremonial purposes (food), in December and early January. The estimated cost of rebuilding and repairs is \$5.0 million dollars. Funding options to address a sequenced approach to repairs are being developed, but at the time of this report it remains uncertain as to when the facility will become operational again.

Management Actions taken under the Implementation Plans

7. Information on the management actions taken in accordance with Implementation Plans is reported in the returns for each jurisdiction and is not summarised here.

Revisions to Implementation Plans

8. The following revisions to Implementation Plans have been reported:

EU - Finland: The Negotiations Concerning the Revision of the Agreement between Finland and Norway on Fishing in the River Tenojoki will continue in 2012 with a view to modernising the existing treaty and for better implementation of NASCO guidelines.

EU - France: ONEMA, the Ministry for Over-Seas Territories and Departments and the Ministry responsible for maritime fisheries hope to revise the French plan in order to make it more operational. It is hoped that the process will be underway by the end of 2012.

EU- Germany: Regarding the implementation of the Marine Strategy Framework Directive, the ICPR would appreciate further professional exchange with NASCO about salmon stocks.

The following improvements are demanded by *Brandenburg+Saxony-Anhalt*:

1. Financial support of required salmon monitoring and habitat restoration measures.

2. Financial support and improved regulatory measures of spawning habitat protection.
3. Improvement of regulatory measures against salmon poaching in the Elbe river.

EU - Ireland: The current management structure for inland fisheries in Ireland changed with the establishment of a new authority in 2010 i.e. Inland Fisheries Ireland. This has not resulted in any significant changes overtly to the management plan except in responsibilities for inland management. Ireland has drafted new legislation (S.I. No .477) relating to the implementation of the Habitats Directive, this is important as Salmon are protected under Annex II of this directive. This legislation supports Ireland's efforts in the conservation on protection of wild salmon stocks.

EU – Sweden Revision of the Implementation Plan will be ongoing 2012. Urgent items include:

- the increase of mixed-stock fishery on the coast in 2011 and a mixed stock fishery in three rivers (Göta älv, Nissan and Lagan) where wild fish is caught along with reared (fin clipped) fish in sport fishing;
- several stocks on the Swedish west coast (Kattegat) were below 50% of potential smolt production and requires urgent action;
- reporting of catch statistics from sport fishing is voluntary, and often catch and release, proportion of wild fish and sex of fish is not reported; and
- no conservation limits for salmon have been adopted due to lack of reliable data on spawners in the index river. The catch efficiency of the spawner trap is not evaluated.

Norway: Fisheries regulation. Milestone 11: A new regulatory regime will be introduced in 2012.

Secretary
Edinburgh
30 May 2012

Table 1: Official Catch Statistics

	Provisional 2011 Catch (Tonnes)	Provisional 2011 Catch according to Sea Age						Confirmed 2010 Catch (Tonnes)
		1 SW		MSW		Total		
		No	Wt	No	Wt	No	Wt	
Canada	179	63,851	110	13,668	69	77,519	179	153
Denmark (in respect of Faroe Islands and Greenland)								
Faroe Islands								
Greenland	28							38
European Union	512							496
Norway	696							642
Russian Federation	83							88
USA	0							0

Note: The breakdown of the Canadian catch by sea-age is into 'small' and 'large' salmon.

Table 2: Catches of Atlantic Salmon by the Parties to the NASCO Convention

	Canada	Denmark (Faroe Islands and Greenland)	European Union	Finland	Norway	Russian Federation	Sweden	USA
1960	1636	60	2641		1576	1100	40	1
1961	1583	127	2276		1456	790	27	1
1962	1719	244	3894		1838	710	45	1
1963	1861	466	3842		1697	480	23	1
1964	2069	1539	4242		2040	590	36	1
1965	2116	861	3693		1900	590	40	1
1966	2369	1338	3549		1823	570	36	1
1967	2863	1600	4492		2058	883	25	1
1968	2111	1167	3623		1752	827	150	1
1969	2202	2350	4407		2083	360	76	1
1970	2323	2354	4069		1861	448	52	1
1971	1992	2511	3745		1847	417	35	1
1972	1759	2146	4261	32	1986	462	38	1
1973	2434	2402	4604	50	2126	772	73	3
1974	2539	1945	4432	76	1973	709	57	1
1975	2485	2086	4500	76	1754	811	56	2
1976	2506	1479	2931	66	1530	542	45	1
1977	2545	1652	3025	59	1488	497	10	2
1978	1545	1159	3102	37	1050	476	10	4
1979	1287	1694	2572	26	1831	455	12	3
1980	2680	2052	2640	34	1830	664	17	6
1981	2437	2602	2557	44	1656	463	26	6
1982	1798	2350	2533	83	1348	364	25	6
1983	1424	1433	3532	79	1550	507	28	1
1984	1112	997	2308	75	1623	593	40	2
1985	1133	1430	3002	49	1561	659	45	2
1986	1559	1490	3524	38	1597	608	53	2
1987	1784	1539	2593	49	1385	559	47	1

	Canada	Denmark (Faroe Islands and Greenland)	European Union	Finland	Norway	Russian Federation	Sweden	USA
1988	1311	1136	2833	34	1076	419	40	1
1989	1139	701	2450	52	905	359	29	2
1990	912	542	1645	59	930	316	33	2
1991	711	533	1139	69	877	215	38	1
1992	520	260	1506	77	867	166	49	1
1993	373	35	1483	70	923	140	56	1
1994	355	18	1919	48	996	141	44	0
1995	259	86	1852	-	839	130	-	0
1996	290	92	1474	-	787	131	-	0
1997	229	59	1179	-	630	111	-	0
1998	157	17	1183	-	740	130	-	0
1999	152	19	1016	-	811	102	-	0
2000	153	29	1336	-	1176	124	-	0
2001	148	42	1407	-	1267	114	-	0
2002	148	9	1245	-	1019	118	-	0
2003	141	9	1012	-	1071	107	-	0
2004	161	15	978	-	784	82	-	0
2005	139	14	884	-	888	82	-	0
2006	132	23	703	-	931	91	-	0
2007	112	25	453	-	767	63	-	0
2008	158	26	444	-	807	73	-	0
2009	126	26	327	-	595	71	-	0
2010	146	38	496	-	642	88	-	0
2011	179	28	512	-	696	83	-	0

1. The European Union catch from 1995 includes the catches by Finland and Sweden.
2. The catch for Denmark (in respect of the Faroe Islands and Greenland) includes the catch for Greenland when it was a member of the European Union and the catches up to 1983 by Denmark.
3. Figures from 1986 are the official catch returns to NASCO but where no return to NASCO has been made ICES data have been used.

Catch and release

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Canada	62,106	58,961	54,425	51,442	57,005	45,886	49,279	42,820	58,000	47,892	58,300	77,641
Denmark (Faroe Islands and Greenland)	0	0	0	0	0	0	0	0	0	0	0	0
European Union	27,346	33,504	32,984	34,968	55,064	60,145	62,812	82,977	81,301	71,133	115,065	99,086
Norway	0	0	0	0	0	0	0	0	5,512	6,696	15,041	14,303
Russian Federation	12,624	16,410	25,248	33,862	24,679	23,592	33,380	44,341	41,881	-	14,585	-
USA	0	0	0	0	0	0	424	-	61	-	-	-
Total	104,994	112,482	118,233	125,629	144,042	138,773	154,156	176,313	202,155	125,721	202,991	191,030

Notes: Not all EU Member States provided information on Catch and Release. Catch and release catches have typically been high in Russia (average of 36,500 salmon in the 5 years 2004 to 2008) and are believed to have remained at this level. However, there were no obligations to report caught-and-released fish in Russia since 2009 and the information provided for 2010 is incomplete.

Unreported catches

Year	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Canada	133	124	81	84	118	101	101	56	-	21	-	18	29
Denmark (Faroe Islands and Greenland)	10-15	10	10	11	10	11	11	11	12	10	5	12.3	10
European Union	215	240	169	165	125	116	114	95	72	54	47	70	71
Norway	320-540	440-760	500-860	410-690	320-600	252- 420	285- 475	299- 499	247 - 411	260 - 432	166 - 338	206 - 344	298
Russian Federation	237-255	249-309	200-252	166-206	99-152	110	70-103	70-103	25 - 77	-	-	-	-
USA	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	917- 1,160	1,065-1,445	962- 1,374	838- 1,158	674- 1,007	593- 761	584- 807	534- 767	360 - 576	362 - 534	218 - 390	306 - 444	408

Note: The information for Canada in 2010 is incomplete, as only 3 of 4 administrative regions reported. Not all EU Member States provided an estimate of unreported catch.