



Agenda Item 5.1
For Information

Council

**CNL(15)39
(as revised)**

NASCO Implementation Plan for the period 2013-18

EU - France

Note: This Implementation Plan has been issued to the Review Group for evaluation and may be subject to change.

CNL(15)39

NASCO Implementation Plan for the period 2013-18

The main purpose of this Implementation Plan is to demonstrate what actions are being taken by the jurisdiction to implement NASCO Resolutions, Agreements and Guidelines.

Questions in the Implementation Plan refer to the following documents:

- *NASCO Guidelines for Management of Salmon Fisheries, CNL(09)43 (referred to as the 'Fisheries Guidelines');*
- *Minimum Standard for Catch Statistics, CNL(93)51 (referred to as the 'Minimum Standard');*
- *NASCO Guidelines for Protection, Restoration and Enhancement of Atlantic Salmon Habitat, CNL(10)51 (referred to as the 'Habitat Guidelines');*
- *Williamsburg Resolution, CNL(06)48; and*
- *Guidance on Best Management Practices to address impacts of sea lice and escaped farmed salmon on wild salmon stocks (SLG(09)5) (referred to as the 'BMP Guidance').*

Party:	EU
Jurisdiction/Region:	FRANCE
1. Introduction	
1.1 What are the objectives for the management of wild salmon? (Max 200 words)	
<p>The French Government recognizes the status of salmon as set out in Directive 92/43/EEC (Annex II & V) and the requirement to protect and conserve the species.</p> <p>Restoration of habitats as well as opening of migratory pathways are carried out within the terms of the Water Framework Directive and comply with the major points of the NASCO Plan of Action for the Application of the Precautionary Approach to the Protection and Restoration of Atlantic Salmon Habitat. The French government is also working to implement the Marine Strategy Framework, the Renewable Energy Directive and the Data Collection Framework.</p> <p>Given that diadromous fish face the same problem worldwide, the central aims of management in France will be to:</p> <ul style="list-style-type: none"> - Maintain good ecological status, - Ensure ecological continuity - Protect spawning and growth areas - Eliminate poaching, <p>The French National Strategy for Migratory Fish Management defines national guidelines to optimize management of diadromous fish and ensure their preservation:</p> <ul style="list-style-type: none"> - Protect and restore populations and their environments (e.g. monitor rivers and catchments for salmon numbers) - Revise governance of diadromous fish management policies - Improve knowledge, monitoring and evaluation (e.g. ensure that, in most rivers, sufficient adult salmon are spawning to optimise output of smolts from freshwater) 	

- Develop pooling of experience, communication and training on problems faced by diadromous fish.

1.2 What reference points (e.g. conservation limits, management targets or other measures of abundance) are used to assess the status of stocks? (Max 200 words) (Reference: Sections 2.4 and 2.5 of the Fisheries Guidelines)

The reference point chosen to establish the status of individual stocks is the maximum sustainable yield or MSY as described by ICES (2005). ICES sets a boundary that defines safe biological limits within which the stock can produce a long term maximum sustainable yield. It therefore delimits the constraints within which the management strategy must operate to maintain a sustainable resource.

There are still a number of salmon rivers where CLs have not yet been derived (see Table 1) and these are scheduled to be completed during the course of this implementation plan.

Under the Habitats Directive, member States are called upon to draft the necessary conservation measures and, if need be, appropriate management plans, with the goal of achieving a favourable conservation status for the species and habitat types.

In addition, a number of monitoring and evaluation programmes are underway in France (including on the River Loire), like the [Morfish program](#), to evaluate the status of salmon stocks and the effectiveness of management measures.

- Direct counting of upstream migrating salmon can only be done in a limited number of rivers. Fish-counting stations, partly equipped with video counters, have already been installed.
- Salmon REDD mapping surveys are being carried out on various rivers.
- Monitoring of natural reproduction and stocking success is carried out using electrofishing equipment.

Finally, a watercourse classification has been drawn up in order to ensure that all diadromous fish benefit from special protective measures. The classification aims to protect and restore the ecological continuity of watercourses, and ensure they attain good environmental status.

- Watercourses to preserve are classified in List 1, prohibiting construction of any new obstacle to ecological continuity, regardless of use.
- Watercourses to restore are classified in List 2, requiring compliance within 5 years following publication of the lists.

1.3 To provide a baseline for future comparison, what is the current status of stocks relative to the reference points described in 1.2, and how are threatened and endangered stocks identified?

Category	Description of category and link to reference points	No. rivers in 2012
1	Not threatened with loss	-
2	Threatened with loss	-
3	Restored	-
4	Maintained	-
5	Lost	-
6	Unknown	-
TOTAL:		

Additional comments:

All French salmon rivers will be classified in accordance with NASCO criteria during implementation of the plan.

At present, the biggest French salmon rivers are only compatible with the “maintained” river category: “Rivers in which there is no natural stock of salmon, which are known to have contained salmon in the past, but in which a salmon stock is now only maintained through human intervention.” Rivers concerned are the Loire, Rhine and Dordogne/Garonne.

Some rivers are in transition to the “restored” category according to the NASCO criteria for the Salmon Rivers Database: “Rivers in which the natural stock of salmon is known to have been lost in the past but in which there is now a self-sustaining stock of salmon as a result of restoration efforts or natural recolonization.

The others could be classified as “threatened with loss”: “Rivers in which there is a threat to the natural stock of salmon which would lead to loss of the stock unless the factor(s) causing the threat is (are) removed”. Pyrenean rivers might well qualify here.

1.4 How is stock diversity (e.g. genetics, age composition, run-timing, etc.) taken into account in the management of salmon stocks?(Max 200 words)

When determining what actions should be taken in relation to fishery management, stock conservation and habitat protection and restoration, detailed consideration is given to:

- distribution within the catchment (i.e. potential population structuring),
- changes in the run-timing,
- age composition of spawning escapement.

Management measures are adjusted to prevent or rectify selective pressures on any one stock component. For the majority of rivers, monitoring is based mainly on catch data and juvenile surveys, although data from adult fish counters, fish traps and smolt counts on a selection of index monitored rivers are also considered to assess broad-scale trends in stocks.

Genetic stock identification (GSI) is being used to identify population structuring within and between rivers as well as to assess stock/population composition of catches in the remaining mixed stock fisheries. Our knowledge is based on a thesis by Charles Perrier (*Structure Génétique des Populations de Saumon en France*, 10/12/10; see Table 1) which is the basis of our knowledge.

Table 1: Geographical characteristics of the 34 sampled rivers and description of populations’ characteristics, sampling and genetic diversity indices. N is the number of alleles, A_R is allelic richness (based on samples of 11 individuals), H_E is the unbiased expected heterozygosity, H_o is the observed heterozygosity, F_{IS} is the inbreeding coefficient (significance is indicated by asterisk). The origin of fish stocked since 1990 is given (either non-native or native) and the mention ‘nearby’ is indicated for ‘unstocked’ populations in which we expected significant straying from nearby (< 100 km) stocked populations.

Sampling sites									Samples			Genetic diversity indices					
Region	River	Longitude	Latitude	Distance from Canch	River length	Proportion of Multi-sea-	Geological substrate	Stocking sources since 1990	Abbreviation	Sample size	Cohorts	A					
												N	R	H _E	H _O	F _{IS}	
Upper-Normandy	Canche	1°36	50°32	0	88		1	-	CAN	8	1999-	6.1	/	0.7	0.7	0.0	
	Authie	1°34	50°22	19	103		1	-	AUT	11	2003-	7.6	6.	0.7	0.6	0.1	
	Bresle	1°22	50°03	57	72		1	-	BRE	30	1998-	8.7	5.	0.7	0.7	0	
	Arques	1°05	49°56	82	67		1	-	ARQ	31	2003	7.3	5.	0.7	0.7	0.0	
	Valmont	0°22	49°45	138	14	18%	1	nearby	VAL	5	2003-	5.4	/	0.8	0.7	0.1	
Lower-Normandy	Seine	0°07	49°26	185	777		1	nearby	SEI	7	1998-	6.9	/	0.7	0.7	0.0	
	Touques	0°04	49°21	193	108		1	nearby	TOU	11	2E+07	8.4	7.	0.8	0.7	0.1	
	Orne	0°14	49°17	218	170		1	GAV	ORN	31	2001	11.	7.	0.8	0.8	0.0	
	Vire	1°07	49°21	284	128		2	nearby	VIR	19	1998-	10.	7.	0.8	0.7	0.0	
	Saire	1°14	49°36	315	31		2	nearby	SAI	9	2005-	7.1	/	0.8	0.8	0	
	Sienne	1°34	49°00	465	93		2	nearby	SIE	37	2002-	11.	6.	0.8	0.8	0	
	Sée	1°29	48°39	505	78		2	nearby	SEE	66	2002-	11.	6.	0.7	0.7	0.0	
	Sélune	1°29	48°39	505	91		2	AUL &	SEL	80	2002-	13.	6.	0.7	0.7	0.0	
	Couesnon	1°30	48°37	508	101	13%	2	AUL &	COU	34	2002-	10.	6.	0.8	0.8	0.0	
	Trieux	3°04	48°49	649	72		2	-	TRI	26	2002	9.8	6.	0.8	0.8	0.0	
	Leguer	3°33	48°43	716	60		2	-	LEG	27	2002-	10.	7.	0.8	0.7	0.0	
Brittany	Douron	3°38	48°40	726	27		2	-	DOU	27	2002-	9.8	6.	0.8	0.8	0.0	
	Penzé	3°56	48°40	755	30		2	-	PEN	26	2002-	10.	6.	0.8	0.8	0	
	Elorn	4°21	48°24	881	57		2	native	ELO	33	2003	10.	6.	0.7	0.7	0.0	
	Aulne	4°15	48°17	903	140		2	native	AUL	34	2003	11.	6.	0.8	0.8	0.0	
	Goyen	4°32	48°00	966	36		2	-	GOY	34	2003	10.	6.	0.8	0.7	0.0	
	Steir	4°06	47°52	1018	62		2	-	STE	20	2002	9	6.	0.8	0.8	0	
	Jet	4°06	47°52	1018	62		2	-	JET	20	2000-	8.6	6.	0.7	0.7	0	
	Odet	4°06	47°52	1018	62		2	-	ODE	19	2003	8.4	6.	0.7	0.7	0.0	
	Aven	3°44	47°48	1052	37		2	-	AVE	34	2003	10.	6.	0.7	0.7	0.0	
	Ellé	3°32	47°46	1069	76		2	-	ELL	34	2003	10.	6.	0.7	0.7	-	
	Scorff	3°22	47°42	1087	78		2	-	SCO	64	2002-	11.	6.	0.7	0.7	0.0	
	Blavet	3°22	47°42	1087	149	17%	2	-	BLA	64	2002-	12.	6.	0.7	0.7	0.0	
	Allier	2°10	47°16	1197	101	95%	3	native	ALL	35	2001-	8.1	5.	0.7	0.7	0	
	Gironde	Dordogne	1°06	45°34	1412	483		4	ALL &	DOR	15	2002	8.1	6.	0.7	0.8	-
		Garonne	1°06	45°34	1412	647	?	4	ALL &	GAR	30	2002	10.	6.	0.8	0.8	-
Adour	Gave	1°31	43°31	1642	309		4	native	GAV	29	2003	11.	7.	0.8	0.7	0.0	
	Nive	1°31	43°31	1642	80		4	-	NIE	8	2001-	5.5	/	0.7	0.7	0.0	
	Nivelle	1°40	43°23	1662	45	19%	4	-	NIL	17	1998-	7.9	6.	0.8	0.8	-	

1.5 To provide a baseline for future comparison, what is the current and potential quantity of salmon habitat? (Max 200 words)
(Reference: Section 3.1 of the Habitat Guidelines)

Currently only 1485 hectares of potential salmon spawning and juvenile habitats are accessible.

During the term of the current NASCO Implementation Plan, it is planned to produce an overall inventory of current and potential salmon habitats. Data is available in different river basins but needs to be homogenized.

1.6 What is the current extent of freshwater and marine salmonid aquaculture?

In France, the inclusion of fish farming in nomenclature related to Classified Installations for the Protection of the Environment (ICPE) makes them subject to specific regulations. Therefore freshwater and marine salmon farms whose production is over 20 tonnes *per annum* are subject to an authorisation procedure which requires a comprehensive dossier, including an environmental impact study, before they can begin to operate (annex 2).

This study includes a chapter on the direct and indirect effects of the facility on the environment. It focuses particularly on the area and landscape, flora and fauna, natural environment and biological balance as well as on the impacts on the surrounding area (noise, vibrations, smells, light emission) and on agriculture, hygiene, health, public health and safety, protection of material goods and cultural heritage.

Table 1: The principle salmon production sites used for stocking purposes

Basin	Production Facility	Annual Production Capacity (approximate)	Managed by
Rhine	Obenheim + connected site at Friesenheim (Bas-Rhin)	300,000 unfed fry; 250,000 fed fry	FDPPMA 67
	Huningue (Haut-Rhin)	200,000 fed fry; 150,000 unfed fry; 15,000 parr	The Petite Camargue Nature Reserve
Adour-Garonne	Cauterets (Hautes-Pyrénées)	1,500,000 eggs	FDPPMA 65
	Bergerac (Dordogne)	500,000 eggs	MIGADO
	Castels (Dordogne)	300,000 fry (200,000 fed fry and 100 to 150,000 parr); 20,000 smolts	MIGADO
	Pont Cruzet (Tarn)	500,000 fry; 40,000 parr	MIGADO
	Médous (Hautes-Pyrénées)	900,000 eggs of Cauterets origin hatched	FDPPMA 65
	Arcizans (Hautes-Pyrénées)		FDPPMA 65
	Sassis (Hautes-Pyrénées)		FDPPMA 65
Aragnouet (Hautes-Pyrénées)	AAPPMA		
Loire	Chanteuges (Haute-Loire)	1,100,000 eggs; 600,000 fry; 200,000 smolts Fry production from 300,000 eggs of Chanteuges origin	CNSS
	Verger (Creuse)		
	Talbat (Vienne)		
Brittany	Favot (Finistère)	200,000 parr and smolts	FDPPMA 29
	The AAPPMA de l'Elorn salmon farm (Finistère)	8,000 to 12,000 smolts	AAPPMA de l'Elorn

There are also two commercial aquaculture facilities:

- Saumon de France (15 ha in Cherbourg harbour)
- Salmoniculture Monts d'Arrée (Brittany, 29)

1.7 To aid in the interpretation of this Implementation Plan, have complete data on rivers within the jurisdiction been provided for the NASCO rivers database?

Yes/no/comments

Available information on catchments and, where appropriate, sub-catchments has been provided and will be updated as new data becomes available, which will be one the plan's aims.

<p>2. Fisheries Management:</p>
<p>2.1 What are the objectives for the management of the fisheries for wild salmon? <i>(Max. 200 words)</i></p> <p>Fisheries management aims to ensure that all stocks meet or exceed biologically based conservation limits (Maximum Sustainable Yields: MSYs) with only the surplus above such conservation limits being available for harvest.</p> <p>It ensures that catchment declarations are in good order, whether freshwater or marine waters, from whatever type of fishermen.</p> <p>Management's central aims are</p> <ol style="list-style-type: none"> 1) To monitor the river or catchment for salmon numbers 2) To ensure that, in most rivers in most years, sufficient adult salmon are spawning to optimise output of smolts from freshwater 3) To ensure that exploitation of salmon is only permitted where there is a sustained identifiable surplus above this limit.
<p>2.2 What is the decision-making process for fisheries management, including predetermined decisions taken under different stock conditions (e.g. the stock level at which fisheries are closed)? <i>(Max.200 words)</i> <i>(This can be answered by providing a flow diagram if this is available.)</i> <i>(Reference: Sections 2.1 and 2.7 of the Fisheries Guidelines)</i></p> <p>In France, options are provided along with the associated probability of meeting Conservation Limits at various catch options. Following the procedure used by ICES for the provision of catch advice, the harvest option that provides a 75% chance of meeting the CL for a given stock is recommended by scientists. Given the uncertainty in the data and the use of a risk analysis to allow for some of this uncertainty, a further limitation is applied to the recruit per spawner index of each river.</p> <p>Thus, fishing is prohibited in many French rivers:</p> <ul style="list-style-type: none"> - Garonne and Dordogne (because of re-introduction project) - Rhine (because of re-introduction project) - Loire-Allier (since 1994, due to risk of extinction) <p>Although fishing is closed, some accidental catches (drift nets) and by-catches occur (nets, rod and line, etc.) because fishing for other species is ongoing and gear is not selective.</p> <p>Management in Brittany and Normandy focuses on TACs (see the example below):</p>

		TAC MSW	TAC 1SW
Bretagne	25 Rivers	484	4357
Normandie	8 Rivers	150	675
	5 Rivers		15
	Sée and Sélune	105	476

On the Adour, rod fishing management focuses on licences: each of the 1000 fishermen is allowed to catch 4 salmon between March and July and during 2 weeks in September. The only salmon estuary fishery in France is located on the Adour. 25 to 30 professional fishermen catch between 1000 and 1200 salmon a year and the exploitation rate is estimated at 40%, maybe more for the MSW. Fishing is allowed from March to July but prohibited for 25% of each week. Discussions on reduction of fishing activities in the area are underway.

2.3 Are fisheries permitted to operate on salmon stocks that are below their reference point and, if so, how many such fisheries are there and what approach is taken to managing them that still promotes stock rebuilding? (Max 200 words.)
(Reference: Section 2.7 of the Fisheries Guidelines)

Data collected so far has not been able to determine if fisheries (not affected by TAC) are below LC. It is clear that once the established limit is reached, a ban will be applied to all fisherman categories and to all areas where these stocks can be captured.

2.4 Are there any mixed-stock salmon fisheries and, if so, (a) how are these defined, (b) what was the mean catch in these fisheries in the last five years and (c) how are they managed to ensure that all the contributing stocks are meeting their conservation objectives? (Max. 300 words in total)
(Reference: Section 2.8 of the Fisheries Guidelines)

Mixed stock fisheries (MSFs) are defined as ‘fisheries that predominantly exploit mixed river stocks of salmon’
Coastal and estuarian commercial fisheries could fish on such stocks. Mandatory reporting of catches should be introduced on the marine side in order to better assess the exploited stocks

2.5 How are socio-economic factors taken into account in making decisions on fisheries management? (Max. 200 words)
(Reference: Section 2.9 of the Fisheries Guidelines)

The primary management objective is to ensure the restoration and rehabilitation of salmon stocks. Angling associations and activists such as the seven “*associations migrateurs*”, are major supporters (mostly on a voluntary basis) of salmon reintroduction and restocking programs.

When new management measures are under consideration by Migratory Fish Management Committees (COGEPOMI), socio-economic factors may be taken into account to influence nature and balance decisions.

2.6 What is the current level of unreported catch and what measures are being taken to reduce this? (Max. 200 words)

(Reference: Section 2.2 of the Fisheries Guidelines and the Minimum Standard)

Catch declarations for migratory salmonids have been required since 1987. This national census enables the Migratory Salmonid Catches Interpretation Centre (CNICS) to evaluate samples and characterize size, weight and age of individual fish caught. The CNICS also monitors real-time fisheries in order to close them when the total allowable catch (TAC) is reached and to ensure sustainability of populations.

Unreported catches	2008		2009		2010		2011		2012		2013	
	MSW	ISW	MSW	ISW	MSW	ISW	MSW	ISW	MSW	ISW	MSW	ISW
BASSIN RIVER												
Artois-Picardie	0	0	0	0	5	0	0	0	0	0	0	0
	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%
Seine-Normandie	80	47	153	260	52	352	95	22	43	0	12	5
	43%	14%	70%	72%	47%	50%	46%	10%	22%	0%	7%	2%
Bretagne Nord	32	68	0	186	38	3	6	4	7	0	13	39
	14%	21%	0%	67%	32%	1%	3%	2%	3%	0%	6%	12%
Bretagne Sud	20	1	37	118	9	8	11	0	12	0	0	0
	9%	0%	25%	42%	15%	2%	5%	0%	4%	0%	0%	0%
Loire Bretagne	52	69	37	304	47	11	17	4	19	0	13	39
	12%	12%	12%	55%	27%	1%	4%	1%	4%	0%	4%	5%
Adour-Garonne	0	0	0	0	12	4	1	0	0	1	0	0
	0%	0%	0%	0%	15%	18%	1%	0%	0%	10%	0%	0%
Freshwater Professionals fisherme	3	0	3	0	12	13	0	0	3	2	0	0
	2%	0%	9%	0%	28%	50%	0%	0%	2%	50%	0%	0%
Total	135	116	193	564	128	380	113	26	65	3	25	44

By-catches at sea are not necessarily reported even though some fishermen who have CMEA licenses send their catch declarations to CNICS.

Efforts will be made on both sides in order to attain better reporting rates.

2.7 What are the main threats to wild salmon and challenges for management in relation to fisheries, taking into account the Fisheries Guidelines and the specific issues on which action was recommended for this jurisdiction in the Final Report of the Fisheries Management FAR Review Group,(CNL(09)11)?

Threat/ challenge F1	Reducing by-catches and illegal catches of salmon by professional and recreational fishing.
Threat/ challenge F2	Reducing unreported catches through establishment of an ad-hoc protocol.
Threat/ challenge F3	Development of CLs for French rivers and better management criteria for fisheries.
Threat/ challenge F4	Ensuring all management decisions are based on regular assessments of stock status and composition.

2.8 What actions are planned to address each of the above threats and challenges in the five year period to 2018?		
Action F1:	Description of action:	Conduct annual assessments in order to obtain more information on by-catch in other fisheries
	Planned timescale:	2015-2018
	Expected outcome:	Determination of the need for emergency regulatory controls or other new measures (including voluntary) on salmon fishing by nets and rods in all fisheries.
	Approach for monitoring effectiveness & enforcement:	Improvement of salmon population status.
Action F2:	Description of action:	Development and implementation of specific fishing rules, criteria or management strategies in order to eliminate unreported catches.
	Planned timescale:	2015-2018
	Expected outcome:	Minimizing adverse effects on populations and unreported catch.
	Approach for monitoring effectiveness & enforcement:	Data from CNICS
Action F3:	Description of action:	Setting of CLs should be completed at least for all French salmon rivers.
	Planned timescale:	2015-2018
	Expected outcome:	Development of a reliable management system to fix catch quota.
	Approach for monitoring effectiveness & enforcement:	Data from fish counters/traps and catch records (CNICS).
Action F4:	Description of action:	Conduct annual assessments of the status of salmon stocks.
	Planned timescale:	2015-2018
	Expected outcome:	Determination of the need for emergency regulatory controls or other new measures (including voluntary) on salmon fishing by nets and rods and implementation of changes.

	Approach for monitoring effectiveness & enforcement:	Annual report by ONEMA/MEDDE on status of salmon stocks and fisheries provided to ICES.
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3. Protection and Restoration of Salmon Habitat:

3.1 How are risks to productive capacity identified and options for restoring degraded or lost salmon habitat prioritised, taking into account the principle of ‘no net loss’ and the need for inventories to provide baseline data? (Max. 200 words)
(Reference: Section 3 of the Habitat Guidelines)

See also IP(09)20

The Water Framework Directive sets the goal of attaining “good status” for Europe’s rivers, lakes, groundwater bodies and coastal waters in accordance with a clearly defined timeline. The restoration of up- and downstream river continuity and the development of quantitative and qualitative aspects of spawning and juvenile habitats is a Ministry of Ecology objective. Besides salmon and eel plans in which nearly 1,500 dams that prevented eels from migrating were identified for modification by 2015, a plan to restore the ecological continuity of rivers has been drawn up with the aim of coordinating and creating synergies between different policies implemented in France.

Watercourse classification also aims to protect and restore the ecological continuity of watercourses to ensure they attain good environmental status. Furthermore, river segmentation is an obstacle to compliance with good water commitments and preservation of biodiversity in France

3.2 How are socio-economic factors taken into account in making decisions on salmon habitat management?(Max. 200 words)
(Reference: Section 3.9 of the Habitats Guidelines)

Reintroduction of salmon is seen as complementary to ecological rehabilitation. The results of decision-making on salmon habitat management are reflected in the plurality of measures bearing on river restoration in France.

3.3 What are the main threats to wild salmon and challenges for management in relation to estuarine and freshwater habitat taking into account the Habitat Guidelines, and the specific issues on which action was recommended for this jurisdiction in the Final Report of the Habitat Protection, Restoration and Enhancement FAR Review Group,(CNL(10)11)?

Threat/ challenge H1	Classify French salmon rivers in accordance with Nasco criteria and identify and improve environmental impacts on salmon habitat.
Threat/ challenge H2	Remedy the lack of connectivity in rivers, including barriers and impacts of hydropower developments.

Threat/ challenge H3	Identify appropriate sites on rivers favourable to development of specific life stages of salmon and homogenize data which is available in different river basins.
Threat/ challenge H4	Use knowledge to better understand management under global warming.

3.4 What actions are planned to address each of the above threats and challenges in the five year period to 2018?

Action H1:	Description of action:	Update a French rivers classification table and monitoring implementation of the WFD and other ongoing plans of similar nature
	Planned timescale:	2015-2018
	Expected outcome:	Monitoring ongoing work and trying to analyse levels of importance
	Approach for monitoring effectiveness & enforcement:	Increase of current habitat
Action H2:	Description of action:	Restoration of up- and downstream river continuity and development of the quantitative and qualitative aspects of spawning and juvenile habitats. Priority measures will be chosen based on aspects of efficiency (proportionality), technical feasibility and financing possibilities (Removal of obstacles, construction of fishways. improvement of accessibility, etc.)
	Planned timescale:	2015-2018
	Expected outcome:	Increased quality and quantity of spawning and juvenile habitats and decreased mortality due to barrages and hydropower plants.
	Approach for monitoring effectiveness & enforcement:	Increase of current habitat
Action H3:	Description of action:	Update of the salmonid mesohabitat maps.
	Planned timescale:	2015-2018
	Expected outcome:	An updated GIS database and maps. This information will be used to report locations of spawning and nursery habitats, etc.

	Approach for monitoring effectiveness & enforcement:	Increase of current habitat
Action H4:	Description of action:	Increase awareness of the problem of climate-change effects, to which there are no easy answers.
	Planned timescale:	2015-2018
	Expected outcome:	Heightened awareness helping to increase conservation, bearing in mind the fragility of salmon in the south of France
	Approach for monitoring effectiveness & enforcement:	Increase of current habitat, along with appropriate measures to counteract the effects of global warming.

Copy and paste lines to add further actions which should be labelled H5, H6, etc

<p>4. Management of Aquaculture, Introductions and Transfers, and Transgenics:</p> <p>See also: Aquaculture, Introductions and Transfers and Transgenics Focus Area Report for EU-France (IP(10)9)</p>
<p>4.1 What is the approach for determining the location of aquaculture facilities in (a) freshwater and (b) marine environments to minimise the risks to wild salmon stocks? (Max. 200 words for each)</p> <p>Regional management plans for development of marine aquaculture (<i>Schémas régionaux de développement de l'aquaculture marine (SRDAM)</i>) were drafted in 2013 in order to identify existing and potential sites for development of this activity, taking into account their ecological characteristics, environmental impacts and the socioeconomic benefits that the activity is likely to generate.</p> <p>All salmon aquaculture sites will be checked during implementation of plans.</p> <p>As regards commercial salmon aquaculture, there is only one site still in existence, and the site supplying its smolts is located some 40 km away.</p> <p>The authorisation procedure described hereunder covers marine and freshwater sites alike for facilities over 20 tonnes. From the first kilo in freshwater and first 5 tonnes at sea, facilities must be declared and comply with the same regulations, the main difference being absence of public inquiry.</p> <p>The procedure for requesting authorisation consists of holding direct consultations with interested parties along with a public inquiry and announcement in the newspapers. The procedure also involves the carrying out of an “appropriate assessment” of environmental impact.</p> <p>Furthermore, animal health certification is required in compliance with Regulation 2006/88 EC. Before authorisation is granted, inspection services inspect the facility for biosafety and overcrowding, both of which are also among annual inspection focuses.</p>

<p>The authorisation includes conditions designed to ensure good biosafety, based on risk, surveillance of movement, recording of mortality rates, and reporting.</p>
<p>4.2 What progress can be demonstrated towards the achievement of the international goals for effective sea lice management such that there is no increase in sea lice loads or lice-induced mortality of wild stocks attributable to sea lice? (Max. 200 words) (Reference: BMP Guidance)</p>
<p>The biological production model in combination with local environmental conditions (strong tidal currents) makes treatment for sea lice unnecessary. In France, there has so far been no history of such treatment as infestations are few and far between and strict surveillance is maintained.</p>
<p>4.3 What progress can be demonstrated towards the achievement of the international goals for ensuring 100% containment in (a) freshwater and (b) marine aquaculture facilities? (Max. 200 words each) (Reference: BMP Guidance)</p>
<p>There are a number of hatcheries used for artificial propagation of wild Atlantic salmon for restoration purposes. It is in their operators' interest to ensure that screens are in place to prevent salmon leaving the facilities, even though there is no explicit legal requirement for freshwater hatcheries to prevent escapes. Furthermore, all salmon hatcheries require authorization and are subject to regular health inspections.</p> <p>Biosafety is a health priority, and a requirement if an aquatic animal health authorisation is to be granted. It also seeks to reduce the possibility of fish escaping.</p> <p>All cage nets undergo regular maintenance procedures to treat fouling; the protocol requires that each net be removed individually and cleaned before reuse.</p> <p>In addition, operators have contracts with professional divers to make regular inspections of cages and report on the structural integrity of fish holding units.</p>
<p>4.4 What progress has been made to implement NASCO guidance on introductions, transfers and stocking? (Max. 200 words) (Reference: Articles 5 and 6 and Annex 4 of the Williamsburg Resolution)</p>
<p>Introduction of salmon is controlled by European and national fish health legislation.</p>
<p>4.5 What is the policy/strategy on use of transgenic salmon? (Max. 200 words) (Reference: Article 7 and Annex 5 of the Williamsburg Resolution)</p>
<p>French law prohibits commercial use of culture organisms and transgenic breeding.</p>
<p>4.6 What measures are in place to prevent the introduction or further spread of <i>Gyrodactylus salaris</i>? (Max. 200 words)</p>
<p>We have so far not detected any <i>Gyrodactylus salaris</i> on salmon in French catchments.</p>

4.7 What are the main threats to wild salmon and challenges for management in relation to aquaculture, introductions and transfers, and transgenics, taking into account the Williamsburg Resolution, the BMP Guidance and specific issues on which action was recommended for this jurisdiction in the Final Report of the Aquaculture FAR Review Group, (CNL(11)11)?	
Threat/ Challenge A1	No comment
Threat/ challenge A2	No comment
Threat/ challenge A3	No comment

4.8 What actions are planned to address each of the above threats and challenges in the five year period to 2018?		
Action A1:	Description of action:	No comment
	Planned timescale:	No comment
	Expected outcome:	No comment
	Approach for monitoring effectiveness:	No comment
Action A2:	Description of action:	No comment
	Planned timescale:	No comment
	Expected outcome:	No comment
	Approach for monitoring effectiveness & enforcement:	No comment
Action A3:	Description of action:	No comment
	Planned timescale:	No comment
	Expected outcome:	No comment
	Approach for monitoring effectiveness & enforcement:	No comment