CNL(14)77

NASCO Implementation Plan for the period 2013-18

EU – Spain (Navarra)

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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:	**European Union**
Jurisdiction/Region:	**Spain (Navarra)**

1. Introduction

1.1 What are the objectives for the management of wild salmon? *(Max 200 words)*

The main objective for the management of wild salmon stock in the Bidasoa River (Navarra) is to improve its conservation status through:

(1) The restoration of a self-sustaining wild population of salmon, where the abundance and population structure will ensure the genetic diversity and natural reproduction.
(2) The control of the recreational fisheries in order to ensure that the first measure is achieved.

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 following nine Indicators have been chosen in order to determine the Conservation Status of the salmon population in the river Bidasoa:

(1) Salmon run size.
(2) Age structure.
(3) Sex-ratio.
(4) Escapement reproductive potential.
(5) Smolt escapement.
(6) Spawner run velocity.
(7) Effective length of river habitat.
(8) Genetic diversity.
(9) Sanitary status.

For every indicator, Conservations Limits will be established for the three Conservation Statuses (favourable, unfavourable, and critical). For example, for the Indicator #1 'Salmon run size' conservations limits have been tentatively established

as follows: Favourable status >700 salmon< Unfavourable status <150 salmon> Critical status.

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
1	Favourable	0
2	Unfavourable: salmon run in 2012 was 447 individuals.	1
3	Critical	0
4		
Insert additional categories as required		
TOTAL:		1

Additional comments:

The Conservation Limits established for salmon run size are tentative. The Conservation Limits for the other eight Indicators have not been established yet.

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)*

Features of the stock diversity have been included in the list of conservation status indicators, so conservarion limits will be established in the future in order to use them in the assessment of the conservation status and adapt the salmon stock management accordingly.

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)

As estimated for 2012, currently salmon can access to 45.9 km of the main channel of the Bidasoa river and to another 21.6 km of tributary streams.

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

Number of marine farms	None
Marine production (tonnes)	-
Number of freshwater facilities	One, but is a hatchery for salmon stocking purposes
Freshwater production (~~tonnes~~)	70,000 yearlings for supplemental stocking

Append one or more maps showing the location of aquaculture facilities and aquaculture free zones in rivers and the sea.

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*

No.

2. Fisheries Management:

2.1 What are the objectives for the management of the fisheries for wild salmon? *(Max. 200 words)*

To maintain the recreational fisheries (rod and line) of wild salmon providing that it does threaten the conservation status of the species.

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)? *(Max. 200 words)*
(This can be answered by providing a flow diagram if this is available.)
(Reference: Sections 2.1 and 2.7 of the Fisheries Guidelines)

The recreational fisheries will always be governed by the conservation status of the wild salmon stock. The conservation status will be evaluated yearly and the predetermined decisions to be taken under the three different stock conservations statuses are :

- If the conservation status is Favourable, the recreational fishery will be open the next season under a Total Allowable Catch (TAC).
- If the conservation status is Unfavourable, the recreational fishery could be opened the next season under a TAC but additional management actions (supplemental stocking, habitat protection and restoration) are necessary to improve the conservation status.
- If the conservation status is Critical, the recreational fishery will be closed until the management actions (supplemental stocking, habitat protection and restoration) taken improve the conservation status.

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)

The salmon fishery in the Bidasoa river is exclusively recreational (rod and line) and the fishing season encompasses the spring run. This recreational fishery could be permitted in unfavourable conservation status because it operates under a Total Allowable Catch (TAC) and additional management actions are taken to improve the conservation status (see reply to question 2.2).

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)

(a) The recreational fishery in the Bidasoa river exploits the salmon run during the spring run, catching mainly MSW salmon in the beginning of the fishing season and 1SW catches become more frequent as the season progress.

(b) The mean catch for the period 2008-2012 was 32 individuals, varying in the range between 10 and 48 individuals.

(c) Specific actions are not taken to differentially manage MSW and 1SW salmon 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)*
	Fishery management decisions are annually consulted to a 'Fisheries Advisory Commission' where all involved stakeholders are represented.
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)*
	Unknown.

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	Establishment of the necessary reference limits.
Threat/ challenge F2	Annual monitoring of the species.
Threat/ challenge F3	Control of recreational fisheries.
Threat/ challenge F4	Continue supplemental stocking until Favourable conservation status is achieved.

Copy and paste lines to add further threats/challenges which should be labelled F5, F6, etc.

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:	Data analysis for the establishment of the necessary reference limits.
	Planned timescale:	2014.
	Expected outcome:	Reference limits for every indicator of conservation status.
	Approach for monitoring effectiveness & enforcement:	The corresponding report.
Action F2:	Description of action:	(1) To collect biometric and biological data of every salmon captured on recreational fishing. (2) To collect biometric and biological data of every spawner salmon passing the salmon trap. (3) Electrofishing surveys on juvenile production areas. (4) Monitoring of redds and spawners. (5) To collect biometric and biological data of every salmon passing the salmon trap. (6) Setup of a rotary screw trap. (7) To collect biometric and biological data of smolts captured is the rotary screw trap. (8) Estimate annually the conservation status of the salmon stock. (9) Monitoring of the sanitary status. (10) Preparation of protocols for the above actions.

	Planned timescale:	Annually.
	Expected outcome:	Data for stock trend analysis and evaluation.
	Approach for monitoring effectiveness & enforcement:	The corresponding reports.
Action F3:	Description of action:	Establishment of the annual total authorized catch.
	Planned timescale:	Annually.
	Expected outcome:	Annual estimate of the total authorized catch.
	Approach for monitoring effectiveness & enforcement:	The corresponding report.
Action F4:	Description of action:	(1) Selection and transfer of wild spawners to the hatchery. (2) Artificial spawning and fry growth in captivity. (3) Differential tagging of fry according to stocking moment. (4) Supplemental stocking in the Bidasoa river and tributaries.
	Planned timescale:	Annually.
	Expected outcome:	Increase of the emigrating smolt population and returning salmons.
	Approach for monitoring effectiveness & enforcement:	The corresponding report.

Copy and paste lines to add further actions which should be labelled F5, F6, etc.

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)*

The habitat restoration prioritisation is made in upriver direction in order to gain access to the reproductive areas. A decade ago, an accessibility map was drawn and since then actions to improve upriver longitudinal connectivity are carried, mainly construction of fishways or barrier demolitions. Annually, the accessibility map is redrawn in order to estimate the progress in river connectivity and identify forthcoming actions to be taken.

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)

Every action for salmon sabitat restoration and protection actions is consulted with the corresponding local stakeholders and their opinion evaluated for the analysis of alternatives.

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	Protection of summer holding pools, spawning grounds, and juvenile rearing areas.
Threat/ challenge H2	Connectivity and habitat restoration.

Copy and paste lines to add further threats/challenges which should be labelled H5, H6, etc.

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 of the salmonid mesohabitat maps.
	Planned timescale:	2014.
	Expected outcome:	An updated GIS database and maps. This information will be used to report the impact assessment of any construction that could affect the salmonid mesohabitats identified.
	Approach for monitoring effectiveness & enforcement:	The corresponding report and GIS database.
Action H2:	Description of action:	(1) Evaluation of the successfulness of the 10 fish-way projects carried out in the last decade. (2) Preparation and implementation of 5 new projects to improve longitudinal connectivity.
	Planned timescale:	2014-2018.
	Expected outcome:	Significant improvement of the river habitat accessible for salmon.
	Approach for monitoring effectiveness & enforcement:	The corresponding studies and projects.

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

4. Management of Aquaculture, Introductions and Transfers, and Transgenics:

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)*

(a) As a general rule, the Government of Navarra will inform negatively to the installation of new commercial aquaculture facilities for salmon production that could significantly affect wild salmon population or its habitats in the Bidasoa river catchment.

Nowadays, there is only one aquaculture facility for salmon in the Bidasoa river basin, which is owned and managed by the Government of Navarra. This facility works as a freshwater hatchery, producing salmon yearlings from native wild parental broodstock for supplemental stocking within the Bidasoa river basin.

	(b) Marine environment is not under the jurisdiction of Navarre.
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)*
	Specific actions have not been adopted.
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)*
	(a) Specific actions have not been adopted. However, as mentioned in 4.1, the only salmon aquaculture facility in the Bidasoa river basin is managed by the Government of Navarra and works as a freshwater hatchery with wild native parental broodstocks.
	(b) Marine environment is not under the jurisdiction of Navarre.
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)*
	As mentioned in 4.1, there is only one aquaculture facility for salmon in the Bidasoa river basin, which is owned and managed by the Government of Navarra. This facility works as a hatchery, producing salmon yearlings from native wild parental broodstock for supplemental stocking within the Bidasoa river basin. Therefore the operation of this freshwater aquaculture facility is in accordance with the Williamsburg Resolution.
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)*
	As mentioned in 4.1, there is only one aquaculture facility for salmon in the Bidasoa river basin, which is owned and managed by the Government of Navarra. This facility works as a hatchery, producing salmon yearlings from native wild parental broodstock for supplemental stocking within the Bidasoa river basin. Therefore the operation of this freshwater aquaculture facility is in accordance with the Williamsburg Resolution.
4.6	**What measures are in place to prevent the introduction or further spread of *Gyrodactylus salaris*?** *(Max. 200 words)*
	As mentioned in 4.1, there is only one aquaculture facility for salmon in the Bidasoa river basin, which is owned and managed by the Government of Navarra. This facility works as a hatchery, producing salmon yearlings from native wild parental broodstock for supplemental stocking within the Bidasoa river basin. Therefore the operation of this freshwater aquaculture facility is in accordance with the Williamsburg Resolution.

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	It is not applicable.
Threat/ challenge A2	

Copy and paste lines to add further threats/challenges which should be labelled A5, A6, etc.

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:	It is not applicable.
	Planned timescale:	
	Expected outcome:	
	Approach for monitoring effectiveness:	
Action A2:	Description of action:	
	Planned timescale:	
	Expected outcome:	
	Approach for monitoring effectiveness & enforcement:	

Copy and paste lines to add further actions which should be labelled A5, A6, etc