



CNL(13)40

NASCO Implementation Plan for the period 2013-18

***Denmark (in respect of the Faroe Islands and Greenland) -
Greenland***

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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:	Denmark (in respect of Faroe Islands and Greenland)
Jurisdiction/Region:	Greenland

1. Introduction		
1.1 What are the objectives for the management of wild salmon? (Max 200 words)		
<ul style="list-style-type: none"> • The Government of Greenland's over all management policy is to facilitate exploitation of the resource on a biological sustainable basis. This goal is currently achieved by ensuring that the salmon stock will only be exploited as subsistence and recreational fishery. The fishery consists of four components: (1) Subsistence fisheries for sale in open air markets or to hotels, institutions etc. (2) Quota based subsistence fisheries for landing at fish factories (3) Subsistence fisheries for personal consumption (4) Sport and leisure fisheries. According to § 2 in the Fisheries Act, all fish stocks must be exploited in a way that's sustainable. • The management objectives for the Greenland salmon fishery is to meet the 2SW conservation limits for the four northern areas of NAC (Labrador, Newfoundland, Quebec, Gulf), to achieve a 25 % increase in returns of 2SW salmon from the average returns in 1992-1996 for the Scotia Fundy and USA regions, and to meet the MSW southern European conservation limit. • To provide satisfactory data on the fisheries, broken down by individual licenses. • To provide data on annual catches for subsistence fisheries for private consumption and sale locally in Greenland. • To ensure the long-term survival of the only local stock of Atlantic salmon in Greenland (the Kapisillit River stock). • To ensure the recovery potential of wild Atlantic salmon. 		
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) <i>(Reference: Sections 2.4 and 2.5 of the Fisheries Guidelines)</i>		
<p>The reference point for the stocks contributing to the West Greenland salmon fishery, are those proposed by ICES and agreed upon by NASCO for the management of the fishery. They relate to North American and Southern European stocks exploited in the fishery. The management objectives are as shown in point 1.1.</p> <p>The total PFA of salmon from these stocks suggests a continued low abundance even though improvements have been seen during recent years. ICES, therefore, advise that there are still no mixed-stock fishery catch options at West Greenland in 2012, 2013 and 2014. This advice forms the basis of the NASCO multi-annual measure which was agreed in 2012. Greenland has only one homewater salmon stock, which is found in the Kapisillit River in the Godthåb Fjord. No abundance estimates exists for this stock, so therefore no reference points have been set.</p>		
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	Status is unknown (Kapisillit River)	1
2		
3		
4		
<i>Insert additional categories as required</i>		
TOTAL:		1
Additional comments:		
Since it has not been possible to set reference points, the status of the stock is regarded as		

unknown. However, recent investigations (2011 and 2012) have revealed the existence of several year-classes of smolts in the Kapisillit River, and the stock persists (unpublished).	
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)	
Genetic investigations of the local Greenlandic Kapisillit River stock are currently taking place. Results so far show that the stock is genetically unique (Greenland Institute of Natural Resources).	
1.5 To provide a baseline for future comparison, what is the current and potential quantity of salmon habitat? (Max 200 words) <i>(Reference: Section 3.1 of the Habitat Guidelines)</i>	
Current quantity is 1 river. A few other potential rivers with similar habitat have been identified, but they do not hold salmon. Although the quantity of habitat in the Kapisillit River is unknown it is considered to be pristine.	
1.6 What is the current extent of freshwater and marine salmonid aquaculture?	
Number of marine farms	0
Marine production (tonnes)	0
Number of freshwater facilities	0
Freshwater production (tonnes)	0
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? <i>Yes/no/comments</i>	
Yes.	

<p>2. Fisheries Management:</p>
<p>2.1 What are the objectives for the management of the fisheries for wild salmon? (Max. 200 words)</p>
<ul style="list-style-type: none"> • The management objectives for the Greenland salmon fishery are to meet the 2SW conservation limits for the four northern areas of NAC (Labrador, Newfoundland, Quebec, Gulf), to achieve a 25 % increase in returns of 2 SW salmon from the average returns in 1992-1996 for the Scotia Fundy and USA regions, and to meet the MSW southern European conservation limit. • To ensure correct reporting and to monitor the fishery and its extent. Management is in accordance with the Precautionary Approach, and all salmon catches by both licensed and non-licensed fishermen, must be reported to the Greenland Fisheries License Authority (GFLK). Furthermore information regarding catch site, catch date, number of nets, net dimensions and hours nets were fished must be reported to the GFLK. • To ensure the long term survival of the only local stock of Atlantic salmon in Greenland (the Kapisillit River stock).
<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)? (Max. 200 words) <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>The salmon fishery in West Greenland is managed through international agreements. The subsistence fishery is permitted in only three months of the year - August, September and October. No salmon fishery is permitted for the rest of the year. The catch may not be exported out of Greenland. The fishery is also regulated through the Government of Greenland Executive Order No 12 of 1 August 2012 on the Salmon Fishery. All fishermen who wish to sell Atlantic salmon on the local open air market, or to institutions or fish factories must hold a license and <i>all</i> catches must be reported to the Greenland Fisheries License Control Authority. Wildlife officers from GFLK make random checks at local markets in towns and settlements, hotels, restaurants etc. in order to compare purchase of salmon with reported catches. With the new Executive Order on Salmon Fisheries catch reporting has been improved in order to provide scientists with more detailed information.</p> <p>When it comes to fishery in the Kapisillit area, several stakeholders are involved in the decision-making process: the Government of Greenland, the local municipal government in Kommuneqafik Sermersooq and other relevant stakeholders such as the KNAPK, Greenland Institute of Natural Resources and the environmental organisation Avataq. Those are the primary stakeholders who are part of the hearing process. In the end it is, however, the Government of Greenland that makes the final decisions regarding matters, as for example, a protection plan for the Kapisillit area.</p>
<p>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.) <i>(Reference: Section 2.7 of the Fisheries Guidelines)</i></p>
<ul style="list-style-type: none"> • Since the salmon fishery in West Greenland is a mixed-stock fishery, an equivalent proportion of the catch will come from stocks below their reference points. According to advice it's an internal-use only fishery with the objective to rebuild the stocks contributing to the fishery. • In order to meet the recommendation from the assessment of the Focus Area Reports, the Government of Greenland has established a salmon quota for landings to the fish factories

of 35 tonnes in both 2012 and 2013. This was the first time since 2001 that a quota was established in Greenland, and catch figures from 2012 show that an amount of 34 tonnes was caught during the three month season. Of the 34 tonnes, 15 tonnes was landed to fish factories. No export of salmon must take place, and the fishery is monitored by the Greenland Fisheries License Control Authority. The salmon fishery is still only permitted in August, September and October, but if the salmon quota is fully utilized, GFLK will stop the fishery. The Government of Greenland so far has the intention to continue establishing salmon quotas on a yearly basis.

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 coastal fishery in Greenland is a mixed-stock fishery made up by both North American and southern European stocks.

(b) The 5-year mean catch was 29 tonnes a year plus an estimated 10 tonnes a year unreported. Estimated by ICES Working Group.

(c) First of all the fishery is managed through the Government of Greenland Executive Order No 12 of 1 August 2012 on the Salmon Fishery. According to this, only subsistence fishery for salmon is allowed in Greenland, and no export can take place. Furthermore the fishery is managed through the regulatory measures (2012-2014) adopted at the 2012 Annual Meeting of NASCO. To monitor the stocks which contribute to the fishery, Greenland is part of an international sampling program and has thus for a number of years accepted or entered into an annual sampling agreement. The Greenland Fisheries License Control Authority monitors the total catch. Catch is limited to subsistence fishery only, and may not be exported. For further details see also point 2.3.

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)

Public access to salmon as a native food resource. Article 9 of the Convention states that in exercising its functions, a Commission shall take into account, *inter alia*, the interests of communities which are particularly dependent on salmon fisheries. Given the lack of agriculture and farming, Greenland is very dependent on fisheries, including the salmon fishery, as a necessary food supply. Especially for the people living in small settlements along the coast. The economic impact of salmon fishery is reduced to subsistence fishery only. The salmon fishery is important for upholding a varied food supply and is considered an essential supplement for the low-income groups in Greenland. Self-sufficiency from natural resources is an integrated part of Greenlandic culture and has through generations been necessary for sustaining life.

2.6 What is the current level of unreported catch and what measures are being taken to reduce this? (Max. 200 words) <i>(Reference: Section 2.2 of the Fisheries Guidelines and the Minimum Standard)</i>	
<p>The level of unreported catch is unknown, but normally estimated to 10 tonnes a year by the ICES Working Group.</p> <p>By law all catches must be reported to the GFLK. Recent efforts include TV spots, license systems and improvements to the reporting system. These measures have been acknowledged by NASCO Parties. A new Executive Order on the salmon fishery was adopted by the Government of Greenland in August 2012. The new Executive Order improves catch reporting. Furthermore it should be mentioned that catch reporting from the Greenlandic fish factories is thought to be complete and the level of unreported catches should be lower than in previous years (estimated at 10 tonnes). ICES has supported the efforts made by the Greenlandic authorities to improve catch data collection and recommends that the authorities facilitate the coordination of sampling within factories receiving Atlantic salmon, if landings at factories are allowed in 2013.</p>	
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	Unreported catch and ensuring correct reporting.
Threat/ challenge F2	No NASCO quota in Greenland and concern that Greenland does not have powers to control the harvest. According to the FAR Review Group.
Threat/ challenge F3	
Threat/ challenge F4	

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:	Evaluation of the reporting system implemented in 2012 through the new Government of Greenland Executive Order on Salmon Fisheries.
	Planned timescale:	2015.
	Expected outcome:	Improved reporting and data.
	Approach for monitoring effectiveness & enforcement:	Evaluation of the data outcome.

Action F2:	Description of action:	In July 2012 a quota for landings to fish factories in the internal-use only fishery was set. Review and revise as necessary the quota.
	Planned timescale:	2013.
	Expected outcome:	Improved control of the harvest/fishery.
	Approach for monitoring effectiveness & enforcement:	On-going evaluation of the salmon catches and possible revision of the quota.
Action F3:	Description of action:	
	Planned timescale:	
	Expected outcome:	
	Approach for monitoring effectiveness & enforcement:	
Action F4:	Description of action:	
	Planned timescale:	
	Expected outcome:	
	Approach for monitoring effectiveness & enforcement:	

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) <i>(Reference: Section 3 of the Habitat Guidelines)</i>
The Kapisillit River in Greenland is natural and undisturbed (an insignificant water supply for a local settlement holding about 50 people is the only anthropogenic disturbance to the river). There are no known risks to productive capacity of the habitat, so no restoration actions are needed. A protection plan for the Kapisillit River stock and entire river area is currently undergoing a hearing process. If the protection plan is received positively, this will result in the Government of Greenland adopting a new Executive Order for the area in 2013.

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)

Socio-economic factors play a significant role in the decision-making process regarding habitat management in the Kapisillit area. The local population is part of the hearing process when it comes to management of the habitat. The economic effects which any eventual change in the management would create for the local inhabitants, is a significant part of the evaluation which leads to the final decision.

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	Main threats to the Kapisillit River stock are gillnets near the local river, poaching and possible future changes in the environment.
Threat/ challenge H2	
Threat/ challenge H3	
Threat/ challenge H4	

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:	A protection plan for the Kapisillit River stock and entire river area is currently undergoing a hearing process.
	Planned timescale:	2013.
	Expected outcome:	Protection of the entire river area including adjacent estuarine area from anthropogenic effects (pollution, development agriculture and gillnetting) and specifying rules of public access (including fishery).
	Approach for monitoring effectiveness & enforcement:	At present not determined.
Action H2:	Description of action:	
	Planned timescale:	
	Expected outcome:	
	Approach for monitoring effectiveness & enforcement:	

Action H3:	Description of action:	
	Planned timescale:	
	Expected outcome:	
	Approach for monitoring effectiveness & enforcement:	
Action H4:	Description of action:	
	Planned timescale:	
	Expected outcome:	
	Approach for monitoring effectiveness & enforcement:	

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) At present no aquaculture of any species.
(b)
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)
At present no aquaculture of any species. The international sampling programme checks salmon caught in Greenland for fish diseases.
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) At present no aquaculture of any species.
(b)

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)	
No stocking occurs in Greenland.	
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)	
No aquaculture.	
4.6 What measures are in place to prevent the introduction or further spread of <i>Gyrodactylus salaris</i>? (Max. 200 words)	
No aquaculture.	
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	
Threat/ challenge A2	
Threat/ challenge A3	
Threat/ challenge A4	

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:	
	Planned timescale:	
	Expected outcome:	
	Approach for monitoring effectiveness:	

Action A2:	Description of action:	
	Planned timescale:	
	Expected outcome:	
	Approach for monitoring effectiveness & enforcement:	
Action A3:	Description of action:	
	Planned timescale:	
	Expected outcome:	
	Approach for monitoring effectiveness & enforcement:	
Action A4:	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