Agenda Item 5.1(b) For Decision

Council

CNL(09)12

Interim Report of the Habitat Protection, Restoration and Enhancement Focus Area Review Group

## CNL(09)12

# Interim Report of the Habitat Protection, Restoration and Enhancement Focus Area Review Group

- 1. The second focus area is the protection, restoration and enhancement of Atlantic salmon habitat. Last year the Council established an *Ad Hoc* Review Group to review and analyse the FARs; to identify common management and scientific approaches to challenges; to recommend best practice; and to provide feedback where additional actions may be helpful to ensure consistency with NASCO's Habitat Plan of Action. The Group met in London in February 2008 and in section 5 of this Interim Report has reviewed and analysed the FARs and provided feedback on where additional actions are needed.
- 2. The *Ad Hoc* Review Group will present its findings to date at a Special Session open to all delegates at the Twenty-Sixth Annual Meeting when the Parties and jurisdictions will have an opportunity to respond. The Council is asked to consider the Group's interim report and decide if any action is needed at this stage. The Group will present its final report in 2010.

Secretary Edinburgh 11 May 2009

## **IP(09)18**

# Interim Report from the First Meeting of the Ad Hoc Review Group on Protection, Restoration and Enhancement of Salmon Habitat

# NEAFC Headquarters, 22 Berner's Street, London E1T 3DY 17 - 20 February 2009

#### 1. Opening of the Meeting by the Coordinator

- 1.1 The Coordinator, Dr Malcolm Windsor, opened the meeting and welcomed the members of the Ad Hoc Review Group to London. He referred to the lessons learned by the two previous Review Groups that might assist with the assessment of the habitat FARs. The task before the Group is to: review the habitat FARs; identify common management and scientific approaches to challenges; compile recommended best practice; and provide feedback on each FAR detailing where additional actions may be needed to ensure consistency with the NASCO Plan of Action. NASCO's objective is to maintain and, where possible, increase, the current productive capacity of Atlantic salmon habitat. He indicated that the process of reviewing FARs in a transparent and inclusive manner is a central element of the 'Next Steps' process. It is an inclusive review process involving representatives of the Parties and of the NGOs, it allows progress in implementing NASCO's agreements to be assessed and it allows an exchange of information on best practice and identification of common challenges, thereby facilitating the collaborative learning process that the Council seeks to He stressed that the members of the Group from the Parties are representing the Organization and specifically not their Parties. The NGOs represent the international NGO community in NASCO. The Coordinator's role is to chair the meeting and facilitate the Group's work; he would not be one of the reviewers, nor would the Assistant Secretary who would also facilitate the Group's work and serve as Rapporteur. He also stressed that it was not necessary for the Group to reach unanimous agreement on its assessments although consensus would strengthen its report.
- 1.2 A list of participants is contained in Annex 1. Boyce Thorne-Miller was unable to attend the meeting and Sue Scott served as her replacement.

## 2. Adoption of the Agenda

2.1 The Group adopted its agenda, IP(09)15 (Annex 2). The Group agreed that it would carry out the tasks under agenda item 5, including identifying any questions or issues for the jurisdictions, before developing its recommendations on best practice.

### 3. Review of the Terms of Reference and Consideration of Working Methods

3.1 The Terms of Reference for the *Ad Hoc* Review Group, as detailed in Council document CNL(08)33 are as follows:

- 1. Review and analyze the Focus Area Reports on Protection, Restoration and Enhancement of Habitat;
- 2. Prepare a report which includes the following:
- a. Identification of common challenges in the FARs;
- b. Identification of common management and scientific approaches to challenges, as reported in the FARs;
- c. Compilation of recommended best practice with the intention of increasing the collaborative learning aspect of the 'Next Steps' Process; and
- d. Recommendations and/or feedback for each FAR where additional actions may be helpful to ensure consistency with the "Plan of Action for the Application of the Precautionary Approach to the Protection and Restoration of Atlantic Salmon Habitat"
- 3.2 The procedure the *Ad Hoc* Review Group was asked to use to accomplish its work is as follows:
  - 1. Meet in February 2009 to review the Focus Area Reports submitted, collaborate to highlight questions and/or issues to be sent back to the Parties/Jurisdictions by March 1, 2009. These answers should assist the *Ad Hoc* Review Group in preparing their report. Responses would be due from the Parties/Jurisdictions by April 1, 2009.
  - 2. Provide a draft report, as described in item 2, by May 15, 2009 for circulation to contracting Parties prior to the annual meeting.
  - 3. Present an overview of the draft report at the Special Session at the 2009 Annual Meeting, and facilitate a discussion on the five areas identified above (paragraph 3.1) in item 2. Parties and jurisdictions will not be expected to present their FAR during the Special Session, but may be asked to present information at the request of the *Ad Hoc* Review Group.
  - 4. Following the Special Session, prepare a final report for submission to the President by August 31, 2009.
- 3.3 The Group discussed its working methods. Prior to the meeting a format for assessing the FARs had been developed based closely on the structure and content specified by the Council in document CNL(08)33. An initial reviewer was assigned to each FAR from among the NASCO representatives and the NGOs also undertook initial reviews of all the reports. These initial reviews from the NASCO representatives and the NGOs formed the basis for deliberations by the whole Group (see paragraph 5.9 below).
- 4. Consideration of the elements of 'Best Practice' relating to the protection, restoration and enhancement of salmon habitat.
- 4.1 The Group considered that best practice was those actions that are most likely to achieve NASCO's objective of maintaining and, where possible, increasing, the

current productive capacity of Atlantic salmon habitat. The Parties had invested considerable time and effort, drawing on the wide expertise available to them, in developing NASCO's Plan of Action and the Group believed that the elements contained in that agreement represented areas around which guidance on best practice might be developed. However, in view of the limited time available and some uncertainty about what was being sought the Group agreed to use the Special Session at NASCO 2009 to discuss this further with the delegates.

- 4.2 The Group also considered the question of whether NASCO might facilitate a more detailed exchange of information of specific issues related to habitat management e.g. fish passage, liming of acidified waters. Such a process would further enhance the collaborative learning approach envisaged under the 'Next Steps' process. For example, the Council might consider whether, in future, there might be Special Sessions on particular aspects from among the wide range of factors that can impact salmon habitat. These factors are described in the NASCO Plan of Action
- 5. Review and analysis of FARs and identification of additional actions to ensure consistency with NASCO agreements relating to habitat.

#### Jurisdictions not submitting a FAR

- Before presenting its recommendations arising from the reviews of the FARs, the Group wishes to note that seven jurisdictions (Greenland, Faroes, EU-France, EU-Germany, EU-Portugal, EU-Spain, and EU-Sweden) have not presented a FAR. Furthermore, two of these jurisdictions (EU-Spain and EU-Portugal) have not yet developed Implementation Plans either. In the case of the Faroe Islands and Greenland, the lack of habitat FARs is perhaps to be expected. The Implementation Plan for Greenland indicates that there is only one small salmon river and no measures relating to habitat protection and restoration are included in the Implementation Plan. For the Faroe Islands there are only four small salmon rivers in which stocking was used to establish small salmon stocks. The Implementation Plan states that there are no external factors that affect the Faroese Atlantic salmon rivers and their estuaries. There are no proposed measures relating to habitat in the Faroese Implementation Plan.
- 5.2 For the other five jurisdictions (EU-France, EU-Germany, EU-Portugal, EU-Spain, and EU-Sweden), FARs were expected and the Group reiterates the views of previous Review Groups that if there is to be a complete assessment of whether the management actions being taken around the North Atlantic are in accordance with NASCO's agreements they need to have information from all jurisdictions. The development of Implementation Plans and subsequent reporting on progress through FARs is an essential part of the 'Next Steps' process. The lack of the habitat protection and restoration FARs means that it was not possible for the Group to assess if additional actions are required in these countries and to develop a comprehensive North Atlantic wide overview of approaches to addressing challenges in the management of salmon habitat. The Group recommends that the President, on behalf of the Council, again take this up with the jurisdictions concerned. While the habitat Review Group has completed its assessments of the FARs, it considers it essential for the success of the reporting process and the sharing of experience that all

jurisdictions submit FARs for subsequent reviews (and for two jurisdictions, Implementation Plans are needed as well).

5.3 The Group noted the following specific points in relation to habitat management in the five jurisdictions referred to in paragraph 5.2:

**European Union – France:** The Group is aware that France has some major salmon rivers and that the Implementation Plan refers *inter alia* to the presence of numerous dams creating obstacles for salmon and other migratory fish which have resulted in the loss of habitat and hindered restoration efforts. France has produced an Implementation Plan and it is disappointing, therefore, that France did not go the next step and produce a habitat FAR.

**European Union – Germany:** The Implementation Plan for Germany indicates that a combination of habitat restoration activities and efforts to reintroduce Atlantic salmon commenced in 1978. While a number of important areas of habitat have been successfully restored, self-sustaining populations of Atlantic salmon have not yet been established. The fact that Germany has produced an Implementation Plan but did not go the next step and produce a habitat FAR is disappointing.

**European Union – Portugal:** The Group is aware of the very small wild salmon stocks and their tenuous state in Portugal which, however, being at the southern limit of the range, are very important for genetic diversity. Portugal has not developed an Implementation Plan, a fisheries management FAR or a habitat FAR and the Group reiterates the views of the earlier Review Groups and hopes that Portugal can contribute to this important aspect of NASCO's work at the earliest opportunity.

**European Union – Spain:** The Group is aware that Spain has stocks which, being at the southern limit of the range, are important for genetic diversity but are vulnerable. Spain has not presented either a fisheries management FAR or a habitat FAR and has previously notified the Council that it was unable to produce an Implementation Plan referring to the fact that salmon management is devolved to the Provinces. Such devolution is not unusual and the Group hopes that coordination within Spain will produce the necessary outcome so that it can contribute to this important aspect of NASCO's work at the earliest opportunity.

**European Union – Sweden:** The Implementation Plan for Sweden indicates that a significant part of the Swedish rivers on the west coast are utilized for both hydropower and for agriculture. The water quality is heavily affected by acidification but the pH in most of the rivers has been kept at an acceptable level through various liming programmes. In addition, it is stated that the water quality is affected by discharges from industries and some sections of rivers have been destroyed because of physical constructions used for water canals to supply important agriculture areas. Sweden has produced an Implementation Plan and it is disappointing therefore that it did not go the next step and produce a habitat FAR.

#### Jurisdictions submitting a FAR

- 5.4 The Group welcomed the submission of the following eleven FARs which it reviewed:
  - Canada, IP(09)3;
  - EU Denmark, IP(09)12;
  - EU Finland, IP(09)4;
  - EU Ireland, IP(09)10;
  - EU UK (England and Wales), IP(09)5;
  - EU UK (Northern Ireland), IP(09)14;
  - EU UK (Scotland), IP(09)8;
  - Iceland, IP(09)6;
  - Norway, IP(09)11;
  - Russian Federation, IP(09)13;
  - USA, IP(09)7.

## Methodology

- 5.5 The Group agreed on a number of 'ground rules', based on those used by the previous two *Ad Hoc* Review Groups to guide its work in undertaking the reviews. These were as follows:
- (a) An initial reviewer was appointed for each FAR who was asked to lead the discussion within the Group and to develop an assessment of consistency of the actions documented in the FAR with the NASCO Plan of Action;
- (b) The initial reviewers would remain anonymous in the report and in the event that one or more members of the Group did not agree with a particular aspect or aspects of the review then the report would indicate that there were dissenting views but not disclose which members of the Group expressed the dissenting views unless they wished to be identified:
- (c) The Group would base its reviews only on the information presented in the FARs and the final Implementation Plans;
- (d) Because not all jurisdictions were represented on the Group, it was agreed that the NASCO representative on the Group from a country whose FAR was being reviewed would not be present during the review of that report;
- (e) While the Group recognized that the extent of the salmon stocks and the resources available to manage them varies markedly between jurisdictions, the Group took no account of these differences in undertaking its reviews;
- (f) The Group recognized that in some jurisdictions the responsibility for management of salmon habitat rests to some extent with the riparian owners while in others the resource is managed exclusively by the public sector. The Group felt that, nonetheless, governments have or should have powers to protect and restore habitat and it should, therefore, be possible to summarise in the FAR the actions that are

- expected to be taken by the appropriate bodies in the coming years. Such differences were not, therefore, taken into account in reviewing the reports;
- (g) Following the completion of the reviews all assessments were re-examined to ensure consistency.
- 5.6 The Group's TORs allowed for questions and issues to be raised with the jurisdictions before the Group completed its assessment of the need for additional actions that may be helpful to ensure consistency with the NASCO Plan of Action. The Group decided that in view of the limited time available it would not seek further clarification from the jurisdictions but would base its assessments on the FARs as submitted. This would also be more transparent as any issues that either the Group or the jurisdictions wished to raise would be done so during the Special Session at the Annual Meeting. While not required under its TORs, the Group decided to ask the Secretary to send the draft assessments to the jurisdictions indicating that it did not seek any feedback until the Special Session at the Twenty-Sixth Annual Meeting. Following that Special Session, the Group would carefully consider all feedback on its findings when finalising its assessments. The Group was also aware that the review of Implementation Plans had highlighted some aspects that needed to be addressed in the FARs. In carrying out its assessments the Group checked if any of these aspects related to the habitat FARs.

#### Recommendations – General Comments on FARs

- 5.7 The Group noted that the Council had asked that the jurisdictions submit their FARs to the Secretariat no later than 31 December 2008. Many of the FARs were received well after this deadline and in two cases on the day prior to the Review Group meeting. This meant there was no time for the NGOs to complete their consultations within the jurisdictions concerned and limited time for the FARs to be reviewed by the Group. The Group wishes to stress that for the review process to work effectively the timetable set by the Council must be adhered to.
- 5.8 The Group noted that some jurisdictions (EU (Ireland), EU UK(England and Wales), EU UK(Northern Ireland), EU UK (Scotland), Iceland, USA) had adhered exactly to the guidance from the Council on the structure and content of FARs as specified in document CNL(08)33. This had facilitated the Group's work and the Group urges all jurisdictions to adhere to the agreed format in future reporting. The Group also recommends that the Council considers providing further guidance to the jurisdictions concerning the amount of detail to be included in the FARs. It is suggested that a limit of no more than 20 pages be adopted with the option to provide more detailed information in annexes.
- 5.9 The Group developed a format to facilitate an assessment of the consistency of habitat management actions as detailed in the FARs with the guidance from the Council on the elements to be included. Each of the FARs was assessed against the elements in this format which covered the following aspects:
  - There are inventories of the quantity and quality of habitat (historic and current);
  - A clear process for identifying and designating priority/key habitat areas or issues is in place;

- A process for sharing and exchanging information on habitat issues and best management practice is in place;
- A comprehensive habitat protection restoration and enhancement plan has been established or is planned;
- The Plan identifies impacts and potential risks to productive capacity;
- The Plan includes procedures for implementing corrective measures;
- The Plan places the burden of proof on proponents of an activity that may impact habitat:
- The Plan describes how risks to salmon stocks are weighed with socio-economic factors:
- The Plan considers the effects of habitat activities on bio-diversity;
- The Plan takes into account other biological factors affecting salmon;
- There is an overview of ongoing habitat activities summarize progress in implementing the plan and describing the approach used to evaluate progress.
- 5.10 For each of these elements, where there was limited or no evidence of such an approach being developed or if the approach was considered to be only partially developed the Group's assessment would indicate that additional actions are needed. An initial reviewer was assigned to each FAR from among the NASCO representatives on the Group and the NGOs also undertook reviews of all the FARs using the agreed format. These initial reviews formed the basis for deliberations by the whole Group and the development of its recommendations. These recommendations were then subject to a further review to ensure consistency across FARs. The Group was not able to assess the effectiveness of the plans other than on the basis of information presented in the overview of activities that highlight progress in protecting and restoring habitat.
- The NASCO Plan of Action states that each jurisdiction should develop a 5.11 comprehensive salmon habitat protection and restoration plan. It further states that this should contain a general strategy for the protection of habitat for all salmon rivers including measures to minimise impacts and identify and prioritise requirements for restoration. The Group recognised that in some jurisdictions very strong protective measures have been afforded to designated rivers under, for example, the US Endangered Species Act and the Norwegian National Salmon Rivers programme. While the Group recognises the very strong measures applying to these rivers, the protection applies to only a proportion of rivers and cannot, therefore, be considered to be a general strategy for the protection of habitat for all salmon rivers. In these cases where clear progress has been made the Group has indicated that the approach is partially consistent with the Plan of Action. It anticipates that progress in developing national plans will be reported in the next habitat FARs. Furthermore, the Icelandic FAR states that a comprehensive plan is not needed because there are few pressures on habitat and, in fact, there has been a significant increase in available habitat through opening access to areas above natural barriers. In this case, although recognising that Iceland has successfully protected and restored habitat, the Group considered that the approach is not strictly consistent with the NASCO Plan of Action.
- 5.12 The Group identified a number of elements that many of the FARs failed to address in detail. This meant that is was difficult for the Group to conduct a comprehensive evaluation of the consistency of these aspects with the NASCO Plan of Action. It is

hoped that these aspects can be fully addressed the next time that the Council focuses on the management of salmon habitat. The following areas require particular attention:

#### Quantity and Quality of Habitat

The Group believes that it would be useful if all FARs provided an overview of salmon rivers with a map showing their location, management jurisdictions etc. While some FARs provided information on the quantity and quality of current habitat (and in some cases historical habitat) many did not. This information is important in providing a benchmark for assessing progress in protecting and restoring salmon habitat and it is hoped that all plans will include such information next time the focus is on habitat issues.

#### **Biodiversity**

The NASCO Plan of Action states that habitat protection and restoration plans should aim to maintain biodiversity. The Group's interpretation was that the FARs should describe how habitat activities affect other species of flora and fauna in the area where these activities are conducted. Few FARs reported on this aspect. It is, perhaps, most important to assess the impact of habitat activities on biodiversity when salmon habitat restoration works are planned and particularly for habitat enhancement work which may involve providing access for salmon to habitats that they have not previously occupied.

#### Other biological factors

The NASCO Plan of Action requires that habitat protection and restoration plans should take into account other biological factors affecting the productive capacity of salmon. Most FARs failed to address this issue in any detail, possibly because it was felt that this would be addressed in the FARs dealing with other aspects of the Implementation Plans. A brief overview of such factors would be valuable in subsequent habitat FARs. In particular, the NASCO Plan of Action refers to predator-prey interactions but other factors might include invasive species, poor water quality, aquaculture and diseases and parasites. The Group notes that similar concerns were expressed in relation to the review of the fisheries management FARs. The Group felt that it would also be useful for subsequent habitat FARs to consider the issue of climate change and its expected impacts on salmon habitat and any approaches that are being considered or implemented to mitigate impacts.

#### Burden of proof

Under the NASCO Plan of Action, habitat plans should aim to place the burden of proof on proponents of an activity which may have an impact on habitat. This means that there is a requirement for proponents of an activity to demonstrate by weight of evidence that an activity would not significantly degrade the productive capacity of the resource. The Group felt that while most FARs provided some details on how this important aspect of the habitat plans is addressed further clarification would be useful in the next habitat FARs.

#### Socio-economic factors

The NASCO Plan of Action states that the habitat plans should balance the risks and the benefits to the Atlantic salmon stocks with the socio-economic implications of any given project. The Agreement on Adoption of a Precautionary Approach states that priority should be given to conserving the productive capacity of the resource where the likely impact of resource use is uncertain. Thus, the NASCO Guidelines and Agreements do not make it clear how habitat management decisions are to be taken when there are conflicts between socio-economic and conservation issues. Most FARs also failed to provide a clear indication of how socio-economic factors are incorporated into decisions concerning the management of salmon habitat. For future reporting, it would be useful if this aspect could be addressed.

#### Recommendations – Additional Actions

#### Canada

The Group recognises that there is a large number of salmon rivers in Canada, many in remote areas. It is clear that there is a well-developed process for sharing and exchanging information on habitat issues. Furthermore, a range of legislative tools is available to protect habitat, there is a stated policy of 'No Net Loss' of habitat, and a detailed risk assessment process is described for evaluating proposed activities that could impact habitat.

However, the Group found it difficult to assess the FAR as it did not follow the guidance provided by the Council and many of the elements on which information was requested were not adequately addressed. Furthermore, a comprehensive habitat protection and restoration plan has not been developed. For the Inner Bay of Fundy salmon stocks, which are listed as endangered under the Species at Risk Act, no recovery plan has been developed. Similarly, there is no plan for a comprehensive liming programme of the 63 severely affected acidified rivers in Nova Scotia.

On the basis of the information presented to the Group, the approach is not consistent with the NASCO Plan of Action and in addition to the above, failed to adequately address the following issues:

- It is unclear how the burden of proof is placed on proponents of activities that could impact on salmon habitat;
- It is unclear how the effects of habitat activities on biodiversity are considered;
- No details are provided of how other biological factors are taken into account;
- There is no clear overview of ongoing habitat initiatives and the approach used to evaluate their effectiveness.

### **European Union - Denmark**

The Group is aware that salmon stocks in Denmark are currently low as a result of severe habitat degradation. The FAR includes maps that illustrate the extent of contemporary salmon habitat, impact factors have been identified and there is a process for information exchange. A National Salmon Rehabilitation Plan has been developed which applies to the four salmon rivers with remnant wild stocks present.

However, no details are provided on the content of the Plan, or on the management of habitat in rivers not covered by it but which are subject to severe anthropogenic stressors. On the basis of the extremely limited information presented to the Group, the approach is not consistent with the NASCO Plan of Action and in addition to the above, failed to adequately address the following issues:

- The potential risks to productive capacity are not clearly described;
- There are no details of procedures for implementing corrective measures;
- It is unclear how the burden of proof is placed on proponents of activities that could impact on salmon habitat;
- There is no information on how risks to salmon stocks are weighed with socioeconomic considerations;
- It is unclear how the effects of habitat activities on biodiversity are considered;
- No details are provided of how other biological factors are taken into account;
- There is no clear overview of ongoing habitat initiatives and the approach used to evaluate their effectiveness.

#### **European Union - Finland**

The Group recognises that the salmon habitat in Finland is largely pristine, with few pressures from anthropogenic factors. However, efforts have been made to quantify problems associated with culverts and actions taken to address fish passage issues. The two rivers with wild Atlantic salmon are border rivers with Norway. In accordance with the EU Water Framework Directive, an international river basin district has been established for the Tenojoki-Naatamojoki-Paatsjoki (the latter having lost its salmon population due to dams) and a draft river basin management plan has been developed. During 2009 management measures for 2010 – 2015 will be developed. A well developed process is in place for information exchange.

On the basis of the information presented to the Group, the approach is not consistent with the NASCO Plan of Action because it fails to adequately address the following issues:

- There are no details of procedures for implementing corrective measures;
- It is unclear how the burden of proof is placed on proponents of activities that could impact on salmon habitat;
- There is no information on how risks to salmon stocks are weighed with socioeconomic considerations;
- It is unclear how the effects of habitat activities on biodiversity are considered;
- No details are provided of how other biological factors are taken into account.

# **European Union – Ireland**

The Group congratulates Ireland on an exceptionally comprehensive FAR and on the major initiatives to protect and restore salmon habitat that have been implemented in recent years. There is a comprehensive inventory and description of habitat impact factors for each river to support and inform appropriate habitat management. There are comprehensive habitat protection, restoration and enhancement plans in place both at the individual river level and for the four River Basin Districts established under

the Water Framework Directive. A well-integrated process for information exchange exists and a training manual on habitat restoration has been prepared.

On the basis of the information presented to the Group, the approach is consistent with the NASCO Plan of Action.

## **European Union – UK (England & Wales)**

This is a comprehensive FAR that is well structured and addressed all the required elements. There is a clear, comprehensive description of the approach being adopted under the Water Framework Directive including the procedures for close cooperation and partnerships with stakeholders. A River Restoration Centre has been established to provide a focal point for the exchange of information and expertise. There are comprehensive habitat protection, restoration and enhancement plans in place both at the National and individual river level, which identify impacts and potential risks that might lead to failure of ecological quality. The Group notes that alternative approaches to traditional predator control are being trialled and it would welcome an update in the next habitat FAR. The FAR also refers to the need for longer-term evaluation of restoration and enhancement schemes and similarly the Group would welcome a report on progress in this regard in the next habitat FAR.

On the basis of the information presented to the Group, the approach is consistent with the NASCO Plan of Action.

#### **European Union – UK (Northern Ireland)**

This is a comprehensive and detailed FAR, but the Group is concerned that it was submitted in draft form and was only received the day before the Group met creating difficulties for its review. There is a clear description of the approach used to assess habitat quantity and quality through the use of Geographical Information Systems (GIS). There is a well integrated process in place to share and exchange information and engage stakeholders. A River Basin Management Plan has been developed together with a programme of measures designed to address all the pressures affecting the water environment. Restoration plans have been developed or are under development for all rivers, strongly supported by use of data to identify issues and inform corrective measures.

On the basis of the information presented to the Group, the approach is consistent with the NASCO Plan of Action.

#### **European Union - UK (Scotland)**

This is a comprehensive FAR that is well structured and addressed all the required elements. A detailed inventory of historic and current habitat has been developed using a GIS approach and in accordance with the EU Water Framework Directive comprehensive salmon habitat protection and restoration plans have been developed with timelines for implementing corrective measures and monitoring. Local fishery management plans have been commissioned and are at various stages of development. Useful information on the effectiveness of habitat restoration initiatives in increasing

access for salmon is provided. Monitoring programmes have been put in place to assess implementation of the plans.

On the basis of the information presented to the Group, the approach is consistent with the NASCO Plan of Action.

#### **Iceland:**

The Group recognises that the salmon habitat in Iceland is largely pristine, with few pressures from anthropogenic factors. Furthermore, through improvements to fish passage at natural waterfalls, the length of river accessible to salmon has been increased by 27%. There is a strong regulatory framework in place to reduce anthropogenic threats to salmon habitat. It is recognised that a high importance is afforded to salmon in Iceland and this has had clear benefits in protecting the resource from Hydro-electricity developments. However, the Group notes that some potential impacts have been referred to (including those associated with urbanisation around Reykjavik) in the FAR and a wider range of issues is identified in the Implementation Plan. However, no specific overview of impacts on a river-by-river basis is provided and no comprehensive habitat protection, restoration and enhancement plan has been developed although Environmental Impact Assessments or Biological Impact Assessments are required.

On the basis of the information presented to the Group, the approach is not consistent with the NASCO Plan of Action because of the lack of a habitat protection, restoration and enhancement plan.

#### **Norway**

The FAR describes a wide range of measures and approaches to managing salmon habitat in Norway. Threats to habitat and salmon generally are identified and prioritised. There is a well-developed, clear process for identifying and designating key habitat issues including a rigorous assessment of threats and how these are being addressed. A comprehensive liming programme is undertaken and has had significant benefits to date. An over-arching salmon restoration plan will be completed by 2010. National Salmon Rivers (52 rivers) and National Salmon Fjords (29 fjords) are afforded additional protection. While this is a relatively small proportion of Norway's 450 rivers they represent 75% of the present Norwegian salmon stock. An additional 118 rivers, not all of which contain salmon, have been designated under the National Protection Plan which protects them from further hydro-electric development. However, there does not appear to be a habitat protection plan in place to cover all salmon rivers.

On the basis of the information presented to the Group, the approach is only partially consistent with the NASCO Plan of Action because there does not appear to be a habitat protection plan in place that covers all salmon rivers.

#### **Russian Federation**

The FAR contains a comprehensive overview of the Atlantic salmon habitat resources, particularly for the Murmansk Region. The threats to salmon habitat are

generally well characterized. There is a strong regulatory framework in place to reduce anthropogenic threats to salmon habitat, and a process for implementing corrective measures for habitat impacts that do occur. There is also a compensation process that aims to fund projects to remedy habitat impacts at a local scale. There are programmes that aim to enhance natural productivity of salmon rivers. The Group recognizes that detailed habitat protection and restoration plans are under development for specific rivers and it looks forward to an update on progress the next time habitat FARs are reviewed.

On the basis of the information presented to the Group, the approach is only partially consistent with the NASCO Plan of Action because the plan is still under-development and it is not clear if the proposed plan will cover all salmon rivers.

#### **USA**

The Group notes that salmon habitat in the US has historically suffered severe degradation as a result of construction of dams and other factors and that major efforts are underway to rebuild and restore salmon stocks. Recently, a major initiative on the Penobscot River led by NGOs and the Penobscot First Nation has resulted in an agreement to purchase three dams at a cost of \$25 million and funds are now being raised to allow for their removal. This initiative could open an estimated additional 1,000 miles to salmon and other anadromous fish. The protection afforded to the habitat in eight wild salmon rivers in Maine under the Endangered Species Act is extremely comprehensive and there is a Recovery Plan for these rivers. The Group notes that there are proposals to extend this protection to a further three large wild salmon rivers in Maine. The FAR is less clear in describing the measures currently in place to protect and restore salmon habitat in these three rivers.

On the basis of the information presented to the Group, the approach is only partially consistent with the NASCO Plan of Action because there does not appear to be a habitat protection plan in place that covers all salmon rivers.

# 6. Identification of common challenges and common management and scientific approaches to address them

6.1 The Council asked that the Review Group identify common management and scientific approaches to challenges as reported in the FARs. This overview will be produced later taking account of the discussion in the Special Session at NASCO's 2009 Annual Meeting.

#### 7. Report of the Meeting

7.1 The Group agreed this interim report and will either meet again or work by correspondence to carry out the tasks not yet completed and then issue a final report. The Group may not be able to complete its work by 31 August as requested but would assume that this will not cause problems as its final report cannot be presented until June 2010.

# 8. Any other business

8.1 There was no other business.

# 10. Close of the Meeting

10.1 The Coordinator closed the meeting and thanked the participants for their contributions.

#### Annex 1

# List of Participants

Mr Tony Blanchard Fisheries and Oceans, Canada

Dr Paddy Gargan Central Fisheries Board, Ireland

Dr Peter Hutchinson NASCO Secretariat (Rapporteur)

Mr Paul Knight Salmon & Trout Association, UK

Dr Sergei Prusov PINRO, Murmansk, Russian Federation

Mr Rory Saunders NOAA Fisheries, USA

Ms Sue Scott Atlantic Salmon Federation, Canada

Dr Malcolm Windsor NASCO Secretariat (Coordinator)

# IP(09)15

# Agenda

- 1. Opening of the Meeting by the Coordinator
- 2. Adoption of the Agenda
- 3. Review of the Terms of Reference and consideration of working methods.
- 4. Consideration of the elements of best practice relating to the protection, restoration and enhancement of salmon habitat.
- 5. Review and analysis of FARs and identification of additional actions to ensure consistency with NASCO agreements relating to habitat.
- 6. Identification of common challenges and common management and scientific approaches to address them.
- 7. Arrangements for the 2009 Special Session.
- 8. Report of the meeting.
- 9. Any other business.
- 10. Close of the meeting.