

Agenda item 5.2(b)
For decision

Council

CNL(04)16

***Reports on Progress with Development and Implementation of Habitat
Protection and Restoration Plans***

CNL(04)16

Reports on Progress with Development and Implementation of Habitat Protection and Restoration Plans

Summary

1. At its 2001 Annual Meeting the Council adopted a NASCO Plan of Action for Application of the Precautionary Approach to the Protection and Restoration of Atlantic Salmon Habitat, CNL(01)51. The overall objective of this Plan of Action is to maintain and, where possible, increase the current productive capacity of Atlantic salmon habitat through the establishment and implementation, by the Contracting Parties and their relevant jurisdictions, of comprehensive salmon habitat protection and restoration plans. These plans aim to:
 - protect current productive capacity of existing habitat and restore habitat that has already been adversely impacted;
 - identify potential risks to productive capacity and develop procedures for implementation of corrective measures;
 - place the burden of proof on proponents of an activity which may impact on habitat;
 - maintain biodiversity;
 - take into account other biological factors affecting productive capacity, e.g. predator-prey interactions;
 - balance risks and benefits to salmon stocks with the socio-economic implications of a project.

In order to measure and improve progress in meeting the objective, the Plan of Action proposes the establishment of inventories of rivers by the Contracting Parties and their relevant jurisdictions. The Parties agreed to report to NASCO on progress towards implementation of the plan(s) and on development of inventories.

2. A reporting format for this information was used on a trial basis for the first returns last year, and the Council agreed to use this format for subsequent returns. The information provided by the Parties according to this format is attached. At the time of preparation of this report, no return had been received from some EU Member States (France, Portugal and Spain) with salmon interests. A summary of the measures taken in the two years since reporting began is contained in tabular form in Annex 1 in order to allow progress since the Plan's adoption to be reviewed.
3. Progress in developing or updating inventories of salmon rivers since the last notification has been reported by the EU (Ireland, and the United Kingdom (Northern Ireland)) and the USA. In Ireland, wetted areas and river-specific conservation limits have been included in the inventory and each river classified according to reach and sub-reach and gradient. In the United Kingdom (Northern Ireland), the inventory described in 2003 is being extended through the compilation of information for additional river catchments. In the US, a web-based database has been established to hold inventory data. No progress in establishing or updating inventories of salmon rivers has been reported by the other Parties or the other EU Member States.

4. There has also been progress in establishing or updating habitat protection and restoration plans in the EU (United Kingdom (England and Wales, and Northern Ireland)), and the USA. In England and Wales, Salmon Action Plans have been completed for all the principal salmon rivers. These plans include an agreed list of actions to be addressed within five years. In Northern Ireland, funding has been secured to implement a habitat restoration plan in two catchments. In the US, a report by the National Research Council is being used as a guide to restoration activities. In Iceland, while no overall plan has been developed, habitat protection is the responsibility of each river association and as most rivers do not have habitat problems, no restoration plan is required. No progress in developing or updating habitat protection and restoration plans has been reported by the other Parties or the other EU Member States.

5. With regard to evaluation and monitoring, in the United Kingdom (England and Wales), stock status and fishery performance are monitored in all rivers where the catch is >50 salmon. The evaluation and monitoring programmes are reviewed annually. No changes to evaluation and monitoring programmes were reported by the other Parties or the other EU Member States.

Secretary
Edinburgh
11 May, 2004

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| 1. Has an inventory of rivers, as envisaged in Annex 2 of the NASCO Plan of Action, been established or updated since the last notification? If “yes” please provide a brief description of the inventory or of any changes to an existing inventory. |
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Canada

Organizations and agencies such as the Atlantic Salmon Federation, Fisheries and Oceans Canada and Environment Canada maintain and update various databases on Atlantic salmon rivers and associated environments.

European Union

Ireland

The inventory has been significantly improved in 2003 with the addition of wetted areas accessible to salmon produced by the Central Fisheries Board (Quantification of the Freshwater Salmon Habitat Asset in Ireland - 2004) and the establishment of river-specific Conservation Limits based on these areas and known stock and recruitment parameters from European index rivers. Each river has been classified according to reach and sub-reach classified according to gradient classes (Amiro, Rosgen classification schemes).

Sweden

An inventory of all salmon rivers has existed for several years. It describes the physical characteristics of each salmon river, obstacles to migration, and size and quality of the rearing habitat for salmonids. The salmon population in each river is described with regard to its present status, the need for protection, to what extent it is dependent on continued liming operations and other factors such as releases and the fishery. A short summary of actions to be taken for each river has been developed. This list of actions, as well as the inventory, needs to be revised to be more in line with Annex 2 in the NASCO Plan of Action.

United Kingdom

England and Wales

Various inventories are employed for the management of salmon rivers in England and Wales, for example for the establishment and review of conservation limits in 64 principal salmon rivers. A Geographical Information System (GIS) based method for estimating the extent and quality of salmon habitat is in development, to be completed during 2004.

Northern Ireland

An inventory of rivers in Northern Ireland supporting or capable of supporting salmonids has been compiled on a GIS. Data on habitat quantity and quality, juvenile fish abundance and adult escapement were updated for rivers in the Foyle and Carlingford area and in the Bush, Glendun, Maine and Blackwater rivers in the Fisheries Conservancy Board area. Similar information is also being compiled for other catchments, for example the Erne system.

Scotland

Salmon fishery management in Scotland is devolved to District Salmon Fishery Boards. A number of Fishery Trusts and Foundations has also been established. Trust biologists and biologists employed by Boards have established a series of inventories listing either rivers or habitat problems relevant to their areas of jurisdiction.

USA

As reported in CNL(04)17, at last year's Annual Meeting the U.S. agreed to chair a Working Group to develop a Habitat Database inter-sessionally. A database has been developed and made available through a website and data was entered by the U.S. and Canada.

Other Parties

No progress in establishing or updating inventories of salmon rivers has been reported by the other Parties or the other EU Member States.

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| <p>2. Has a comprehensive salmon habitat protection and restoration plan been developed in accordance with the aims of the NASCO Plan of Action, or an existing plan updated, since the last notification? If "yes" please provide brief details of the plan and the extent of its implementation or of any changes to an existing plan since the last notification.</p> |
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Canada

Canada has a no-net-loss policy that we continue to apply to ensure conservation of salmon and other fishery resources. An example is the latest hydro-electric facility being proposed on a salmon river in Quebec: DFO is reviewing the project and will only recommend approval if no-net-loss is assured. It is also Canada's policy to encourage and support habitat stewardship to involve government agencies, public interest groups and the private sector to conserve, restore and develop fish habitat.

European Union

Ireland

The objectives of National Programmes run by state agencies (Central and Regional Fisheries Boards, Marine Institute, the Environmental Protection Agency, etc.) are in accordance with the NASCO Plan of Action.

Sweden

The present status of the habitat plan is provided in section 1 above. The present protection and restoration plan needs to be revised and expanded to be in line with the NASCO Plan of Action.

United Kingdom

England and Wales

Salmon Action Plans (SAPs) have now been completed for all principal salmon rivers in England and Wales. Each SAP comprises two documents. The Consultation document reviews stock and fishery status, identifies factors limiting performance and lists a series of costed options to address these. Following consultation on this document, a Final Plan is prepared containing an agreed list of actions to be addressed within five years. Progress on each of these actions is reviewed annually.

Northern Ireland

A Habitat Restoration Plan has been prepared and funding secured to implement this in two catchments – the Maine (FCB area) and Clanrye (Carlingford area). Procedures are now in place to inform all proposals with a potential to impact on habitat or which involve the improvement of land and water use.

Scotland

Salmon fishery management in Scotland is devolved to District Salmon Fishery Boards. A number of Fishery Trusts and Foundations has also been established. Trust biologists and biologists employed by Boards have established a series of inventories listing either rivers or habitat problems relevant to their areas of jurisdiction

Iceland

Each river association is responsible for salmon habitat protection on its river. Additionally any gravel mining or in-river structures, such as fish ladders, need to be approved by the Directorate of Freshwater Fisheries. Most Icelandic salmon rivers do not need a habitat restoration plan as the habitat is in fairly good condition.

USA

A great deal of time and effort over the past year has been focused on the development of a recovery plan for endangered populations of Atlantic salmon. This plan includes provisions for the protection and restoration of Atlantic salmon habitat. Atlantic salmon restoration programmes on other rivers, such as the Connecticut and Merrimack, are conducted under management plans that include provisions for salmon management and habitat protection.

There are a number of programmes within the U.S. to support and facilitate Atlantic salmon protection and restoration. These include the Atlantic Salmon Collaborative grants operated by the National Fish and Wildlife Foundation

(http://www.nfwf.org/programs/atlantic_salmon.htm)

and the NOAA Community Based Restoration programme

(http://www.nmfs.noaa.gov/habitat/restoration/funding_opportunities/funding.html).

In 2000, the National Research Council of the National Academies was asked to describe what is known about the genetic make-up of Atlantic salmon in Maine and this was done in a report issued in January 2002. In addition, they were asked to assess the causes of decline

and to suggest strategies for the rehabilitation of salmon in Maine. That report was issued on 20 January 2004 and is being used as a guide for restoration and recovery activities.

Other Parties

No progress in developing or updating comprehensive salmon habitat protection and restoration plans has been reported by the other Parties or the other EU Member States.

3. If a Plan has been developed or updated since the last notification have evaluation and monitoring systems been introduced or updated to assess the effectiveness of the plan in protecting and restoring salmon habitat? If the response to question 2 was “yes” please provide details of these systems or of changes to existing systems since the last notification.

European Union

United Kingdom

England and Wales

Stocks and fishery performance are monitored in all those rivers where the annual catch is >50 salmon. The juvenile programme started in 2002, and aims to identify spatial differences and temporal trends in the juvenile salmon population. It samples 380 sites quantitatively each year to identify temporal trends in abundance, and 3,030 sites are sampled semi-quantitatively once every five years to identify spatial variation in the juvenile population. Evaluation and monitoring programmes are reviewed annually as part of the development and implementation of Salmon Action Plans. A review has been completed of salmon stocks in recovering rivers

Northern Ireland

Baseline data (adult escapement, juvenile populations, habitat quantity and quality) to inform habitat restoration plans has been collated on specified catchments.

USA

Monitoring provisions will be included as part of the recovery plan for endangered Atlantic salmon populations. The process of identifying appropriate systems and evaluation criteria is on-going.

Other Parties

No progress in developing or updating evaluation and monitoring systems has been reported by the other Parties or the other EU Member States.

1. Summary of progress reports on the establishment or updating of inventories of salmon rivers.

Party	2003 Return	2004 Return
Canada	A number of inventories have existed for years, but one common database as outlined in the NASCO Plan of Action does not yet exist. A number of inventories were carried out over the past year by the various jurisdictions. DFO has developed a Geographic Information System to access all habitat-related information for the province of Quebec. A similar system has recently been developed in Newfoundland and Labrador. Further inventory development is expected in 2003/2004.	Organizations and agencies such as the Atlantic Salmon Federation, Fisheries and Oceans Canada and Environment Canada maintain and update various databases on Atlantic salmon rivers and associated environments.
Denmark (in respect of the Faroe Islands and Greenland)		
<i>Faroe Islands</i>	No return received.	
<i>Greenland</i>		
European Union		
<i>Denmark</i>	No return received.	
<i>Finland</i>		
<i>France</i>	No return received.	No return received.
<i>Germany</i>	No return received.	
<i>Ireland</i>	The current Irish inventory is being modified in line with NASCO's suggested inventory. The current inventory contains: River number (OS index); Region; River name; Location (latitude and longitude); Brief description; NASCO category; Catchment area; Total length; Axial length; Maximum altitude; Hydrographic characteristics; Presence of trap or counter; Conservation limit (provisional).	The inventory has been significantly improved in 2003 with the addition of wetted areas and the establishment of river-specific Conservation Limits. Each river has been classified according to reach and sub-reach classified according to gradient classes.
<i>Portugal</i>	No return received.	No return received.
<i>Spain</i>	No return received.	No return received.
<i>Sweden</i>	An inventory of all salmon rivers has existed for several years and describes the physical characteristics of the rivers, obstacles to migration and the quantity and quality of rearing habitat. A list briefly summarizing the actions to be taken for each river has been developed. This list, as well as the inventory, needs to be revised so as to be more consistent with the NASCO Plan of Action.	No change from 2003 return.

Party	2003 Return	2004 Return
<i>UK – England and Wales</i>	Various inventories are employed for the management of salmon rivers, e.g. for the establishment and review of conservation limits. A Geographic Information System (GIS)-based method for estimating the extent and quality of salmon habitat is in development, to be completed during 2004.	No change from 2003 return.
<i>UK – Northern Ireland</i>	GIS inventories were updated for rivers in the Foyle and Carlingford area, and in the Bush, Glendun, Maine and Blackwater rivers in the FCB area. These record data on habitat quantity and quality, juvenile fish abundance and adult escapement.	An inventory of rivers has been compiled on a Geographical Information System (GIS). Data on habitat quantity and quality, juvenile fish abundance and adult escapement were updated for rivers in the Foyle and Carlingford area and in the Bush, Glendun, Maine and Blackwater rivers in the Fisheries Conservancy Board area. Similar information is also being compiled for other catchments, for example the Erne system.
<i>UK – Scotland</i>	Trust biologists and biologists employed by Boards have established a series of inventories listing either rivers or habitat problems relevant to their areas of jurisdiction.	No change from 2003 return.
Iceland		
Norway	A new categorization system for rivers with salmon has been developed and applied in a nationwide survey of salmon rivers. The system is compatible with, but more detailed than, the NASCO rivers database. During the survey, information on human impact factors, restoration and mitigation actions was collected. Information on the status of stocks will be updated every year.	
Russian Federation	Compilation of an inventory has been initiated. It now includes the complete information required for 2 rivers and partial information for another 76 rivers.	
USA	The US is in the process of developing a salmon river habitat database, using the structure contained in the NASCO Plan of Action. It will include river data, salmon production data, habitat improvement data and river classification.	The U.S. agreed to chair a Working Group to develop a Habitat Database inter-sessionally. A database has been developed and made available through a website and data was entered by the U.S. and Canada.

2. Summary of progress in the development or updating of comprehensive salmon habitat protection restoration plans.

Party	2003 Return	2004 Return
Canada	All fish habitat in Canada is managed according to the national Policy for the Management of Fish Habitat. A net gain in the productive capacity of fish habitat is the overall objective. There is currently a significant amount of restoration work underway. DFO's contribution is focused on improving access. Although an overall conservation and restoration plan already exists, it is being further refined and developed at the watershed level. A number of new watershed management plans are being implemented and more are being developed.	Canada has a no-net-loss policy that continues to be applied to ensure conservation of salmon and other fishery resources. It is also Canada's policy to encourage and support habitat stewardship to involve government agencies, public interest groups and the private sector to conserve, restore and develop fish habitat.
Denmark (in respect of the Faroe Islands and Greenland)		
<i>Faroe Islands</i>	No return received.	
<i>Greenland</i>		
European Union		
<i>Denmark</i>	No return received.	
<i>Finland</i>		
<i>France</i>	No return received.	No return received.
<i>Germany</i>	No return received.	
<i>Ireland</i>	No specific plan has been developed. However, the objectives of National Programmes run by state agencies are in accordance with the NASCO Plan of Action. These include: establish an inventory; quantify existing habitat; estimate productive capacity; estimate current production; identify shortfalls and recovery potential; enhance damaged habitat; monitor outcome.	No change from 2003 return.
<i>Portugal</i>	No return received.	No return received.
<i>Spain</i>	No return received.	No return received.
<i>Sweden</i>	The present protection and restoration plan needs to be revised and expanded to be consistent with the NASCO Plan of Action.	No change from 2003 return.
<i>UK – England and Wales</i>	Salmon Action Plans (SAPs) are being developed for all principal salmon rivers. Plans contain an agreed list of actions to be addressed within five years. SAPs are expected to be completed for all principal salmon rivers by the end of 2003.	Salmon Action Plans (SAPs) have now been completed for all principal salmon rivers. Plans contain agreed list of actions to be addressed within five years. Progress on each of these actions is reviewed annually.

Party	2003 Return	2004 Return
<i>UK – Northern Ireland</i>	A Habitat Restoration Plan has been prepared and funding for implementation is being sought.	A Habitat Restoration Plan has been prepared and funding secured to implement this in two catchments – the Maine (FCB area) and Clanrye (Carlingford area).
<i>UK – Scotland</i>	Fishery Boards and Fishery Trusts have been developing plans relevant to their areas of jurisdiction. A number of habitat enhancement programmes are in place, including bank stabilization, removal/easing of obstructions, riparian buffer strips. Forest and Water Guidelines have been introduced.	Trust biologists and biologists employed by Boards have established a series of inventories listing either rivers or habitat problems relevant to their areas of jurisdiction.
Iceland		Each river association is responsible for salmon habitat protection on its river. Gravel mining and in-river structures need approval from the Directorate of Freshwater Fisheries. Most Icelandic salmon rivers do not need a habitat restoration plan as the habitat is in fairly good condition.
Norway		
Russian Federation	Salmon habitat protection and restoration plans have been developed for two rivers.	
USA	A great deal of time and effort over the past year has been focused on the development of a recovery plan for endangered populations of Atlantic salmon. This plan includes provisions for the protection and restoration of Atlantic salmon habitat. Restoration programmes on other salmon rivers include provision for habitat protection.	A great deal of time and effort over the past year has been focused on the development of a recovery plan for endangered populations of Atlantic salmon. This plan includes provisions for the protection and restoration of Atlantic salmon habitat. Restoration programmes on other salmon rivers include provisions for habitat protection. There are a number of programmes within the U.S. to support and facilitate Atlantic salmon protection and restoration. A report by the National Research Council of the National Academies is being used as a guide for restoration and recovery activities.

3. Summary of progress in introducing or updating evaluation and monitoring systems.

Party	2003 Return	2004 Return
Canada	Some monitoring to measure the efficacy of conservation and restoration initiatives has and continues to occur; however, it is recognized that further monitoring would be beneficial. The Habitat Management program is moving towards a more results-based approach.	
Denmark (in respect of the Faroe Islands and Greenland)		
<i>Faroe Islands</i>	No return received.	
<i>Greenland</i>		
European Union		
<i>Denmark</i>	No return received.	
<i>Finland</i>		
<i>France</i>	No return received.	No return received.
<i>Germany</i>	No return received.	
<i>Ireland</i>	Monitoring of EU-funded physical enhancement works continued.	
<i>Portugal</i>	No return received.	No return received.
<i>Spain</i>	No return received.	No return received.
<i>Sweden</i>		
<i>UK – England and Wales</i>	Evaluation and monitoring programmes are reviewed annually as part of the development and implementation of Salmon Action Plans. The national fisheries monitoring programme was revised in 2000. 2002 was the first full year of the new programme (comprising electrofishing, trapping, counters and catch recording). A review has been completed of salmon stocks in recovering rivers.	Stocks and fishery performance are monitored in all those rivers where the annual catch is >50 salmon. Evaluation and monitoring programmes are reviewed annually as part of the development and implementation of Salmon Action Plans.
<i>UK – Northern Ireland</i>	Monitoring data (on adult escapement, juvenile populations, habitat quantity and quality) on specified catchments.	No change from 2003 return.
<i>UK – Scotland</i>	Trust and Board biologists undertake regular sampling to assess fish population and habitat status.	

Party	2003 Return	2004
Iceland		
Norway		
Russian Federation	Federal nature conservation authorities assess the effectiveness of plans for protection of salmon habitat.	
USA	Monitoring provisions will be included as part of the recovery plan for endangered Atlantic salmon populations. The process of identifying appropriate systems and evaluation criteria is ongoing.	No change from 2003 return.