Agenda item 7.1 For information

Council

# CNL(06)17

Returns under Articles 14 and 15 of the Convention

## CNL(06)17

## Returns under Articles 14 and 15 of the Convention

#### **Summary**

- 1. Under the Convention, the Parties shall report on actions taken in accordance with Articles 14 and 15 of the Convention. Details of the new actions taken are attached. At the time of preparation of this paper, some EU Member States with Atlantic salmon stocks (France and Portugal) have not sent returns.
- 2. Under Article 14 of the Convention, Canada has reported on measures introduced in the Labrador food fisheries to minimise harvests of salmon. EU (Ireland) has reported that a Sea Fisheries Bill, which will strengthen sea fisheries law, is at the Committee stages with the Irish Senate. Norway has reported on its surveillance activities which (together with the surveillance activities of the Icelandic coastguard) are very valuable in identifying fishing for salmon by non-Contracting Parties in international waters in the North-East Atlantic Commission area.
- 3. Under Article 15, a number of new laws, regulations and programmes, other new commitments and factors affecting salmon stocks have been reported. In summary these include:

#### **European Union:**

In Denmark, a stocking programme using wild offspring has been implemented in accordance with the Danish Salmon Rehabilitation Programme.

In Germany (Baden Wuerttemberg), there has been increased stocking, increased numbers of river and stream reaches restored, and a salmon management plan developed with France and Switzerland is being implemented. There have also been measures to prevent injuries to fish at hydroelectric plants and monitoring of stocking programmes.

In Ireland, a Statutory Instrument was updated and amended with the effect that the carcass tagging and logbook scheme was continued in 2005. Orders prescribing the maximum number of licences for commercial fishing for salmon and prescribing the Terms of Reference for the National Salmon Commission were also introduced. The national aggregated TAC for the commercial salmon fishery in 2005 was set by regulation at 139,900 salmon to limit the catch by this sector. For 2006 the commercial quota has been set at 91,000 salmon, a reduction of 58% from the initial TAC of 219,000 set in 2002. For the first time an angling quota (15,000 fish) has been set for 2006. Catch and release fishing has increased in 2005. The Irish Government's intention is to introduce measures to fully align with the scientific advice from the Standing Scientific Committee of the National Salmon Commission in 2007. If the scientific advice is followed and the Precautionary Approach implemented, then it will have serious implications for drift net fishing. An independent group has been appointed to examine the implications of the new regulations for the commercial sector in 2007 and beyond.

In Spain, regulations were adopted in 2005 which set fishing seasons and quotas in the autonomous regions. In Galicia, on some rivers the TACs were increased, while on others they were reduced. Some rivers remain closed to angling. In Asturias, the quotas were set at 1 salmon per fisherman per day in free areas and 3 salmon per fisherman per day in preserves. In Navarra, the total harvest of salmon for the region in 2005 was set at 75 fish. In Asturias, restocking programmes with native fish have led to increased returns, with stocked fish making up 15% of catches.

In Sweden, an outbreak of IPNv was observed on Atlantic salmon smolts at a fish farm.

In the United Kingdom, in England and Wales, there were season extensions for rod fishing on a number of rivers in Wales and South-West England, with catch and release mandatory during these extensions. The Cumbrian drift net fishery was closed by a byelaw in 2005. Netsmen have been compensated or have entered into voluntary agreements not to fish for all or part of the season in several areas. The phase-out of a number of mixed-stock fisheries is continuing. In Scotland, a number of Statutory Instruments were introduced which, for example, prohibited retention of rod-caught salmon in certain rivers at certain times of the year. The Salmon and Freshwater Fisheries (Consolidation) (Scotland) Act 2003 entered into force on 1 April 2005, and repealed and replaced Scottish salmon and freshwater fisheries primary legislation dating back to the nineteenth century. Catch and release fishing continues. There were extensive stakeholder consultations in 2005 as part of the process of developing new primary legislation to be introduced in 2006.

**In Norway**, 22 Atlantic salmon rivers were limed at a cost of NOK50 million (approximately £4 million) in 2005. In 2005, the total catch of salmon in limed rivers was 46 tonnes. It has been estimated that the salmon stocks in 14 of the limed rivers will be fully re-established after 15 years of liming (most programmes commenced in the period 1991 – 1997 and that the total catch of salmon from these rivers will be about 75 tonnes in 2011. In 2005 a project to eliminate the parasite *Gyrodactylus salaris* was undertaken in Laerdalselven using a combination of aluminium sulphate and rotenone. The final treatment was scheduled for April 2006. The River Leirelva was also treated, but unfortunately the parasite reappeared in 2 rivers treated in 2001/2002. Of the 45 rivers infected with *Gyrodactylus salaris*, 34 rivers have now been treated with chemicals and in 15 rivers the parasite has been eradicated and 11 rivers are still being monitored. Monitoring and preventative measures for the parasite are given a high priority. Norway has continued to cooperate with Russia on environmental issues.

**In the Russian Federation**, the Federal Act on Fisheries and Conservation of Aquatic Biological Resources was adopted in 2004 and was implemented in 2005. This law involves a new management approach introducing the concept of fishing sites which are rented out under 5-year contracts by the Federal Fisheries Agency. It is anticipated that this new approach will increase the commitment of users to the conservation of resources and protection of habitat and encourage them to invest more in their businesses and make their operations more transparent.

In the US, a final draft recovery plan for the populations of salmon listed as endangered has been completed and a Recovery Team has been convened to facilitate the plan's implementation. This team has been asked to advise on those actions considered to be most critical to carry out over the next few years. The Water Chemistry Committee has continued to develop recommendations in relation to liming of salmon rivers. Telemetry data indicate that harassment activities were successful on the Narraguagus River, with fewer than 20% of tagged smolts being predated by double-crested cormorants when harassment was occurring. An independent review of Atlantic salmon hatcheries supporting the Gulf of Maine Distinct Population Segment and the Penobscot River has been initiated.

Secretary Edinburgh 9 May, 2006

# **Returns under Article 14 of the Convention**

# 1. Actions Taken To Make Effective The Provisions Of The Convention (Article 14, Paragraph 1)

# 1.1 The prohibition of fishing for salmon beyond $12^*$ nautical miles from the baselines from which the breadth of the territorial sea is measured. (Article 2, paragraph 2)

\* 40 nautical miles at West Greenland \* Area of fisheries jurisdiction of the Faroe Islands

#### **European Union**

#### Ireland

The Sea Fisheries Bill, 2005, which will strengthen sea fisheries law to secure compliance with EU Law and *inter alia* increase penalties, is currently at committee stages of the Seanad Eireann (Irish Senate).

#### Norway

Information on sightings is reported directly to NASCO by the Norwegian Coast Guard Squadron North.

#### **Other Parties**

No actions reported by the other Parties or EU Member States.

**1.2** Inviting the attention of States not party to the Convention to any matter relating to the activities of the vessels of that State which appears to affect adversely the salmon stocks subject to the Convention. (*Article 2, paragraph 3*)

#### **Other Parties**

No actions reported by any Party.

**1.3** Measures to minimise the by-catches of salmon originating in the rivers of the other member. (*Article 7, paragraph 2*) [North American Commission members only]

#### Canada

Ongoing improvements to Labrador food fisheries to ensure the catch of migrating salmon is minimized. Measures include seasons set to avoid salmon runs, and relocation of fishing activities further into rivers to avoid mixed stocks.

No actions reported by the US.

**1.4** Alteration in fishing patterns in a manner which results in the initiation of fishing or increase in catches of salmon originating in the rivers of another Party, except with the consent of the latter. (*Article 7, paragraph 3*) [North American Commission members only]

No actions reported by either Party.

# 2. Actions Taken To Implement Regulatory Measures Under Article 13 (Article 14, Paragraph 1)

No actions reported by any Party.

# **Returns under Article 15 of the Convention**

## 1. Laws, Regulations And Programmes Adopted Or Repealed Since The Last Notification (*Article 15, Paragraph 5(a*))

#### **European Union**

#### Ireland

Statutory Instrument (SI No. 256 of 2000) was updated for the 2005 fishing season for the continuation of the Carcass Tagging and Logbook Scheme in 2005. Under this instrument all salmon fishermen (commercial and recreational) must apply a coded carcass tag to each salmon caught and provide details of these landings and subsequent disposal (sale, storage, etc.) in official logbooks.

Control of Fishing for Salmon Order, 2005: This Order, which replaces the Control of Fishing for Salmon Order 1980 (as amended) and the Control of Fishing for Salmon by Drift Net (Kerry Fishery District) Order 1982 (as amended), authorises the issue of commercial salmon fishing licences by Regional Fisheries Boards and prescribes the criteria under which those licences may be issued. The Order also specifies the maximum numbers of commercial licences which may be issued by Regional Boards.

National Salmon Commission (Terms of Reference) Order, 2005: This regulation prescribes the terms of reference for the operation of the National Salmon Commission.

TAC in 2005: The commercial quota in 2005 was set at 139,900 salmon. This is a reduction of 48% from the initial commercial TAC of 219,000, which has been brought about by staged reductions of 17%, 11% and 14% annually since 2002.

#### Spain

Salmon fishing in Spain is regulated independently by each Autonomous Community. A general framework for fishing has been developed. It regulates fishing in fresh water for the rational and sustainable harvest of Atlantic salmon and other species every year. Atlantic salmon can be found in the following Spanish Autonomous Communities: Galicia, Principality of Asturias, Navarra, Cantabria and Basque Country. Maps showing the Autonomous Communities, the salmon rivers and further information on management measures are provided in Annex 1.

The following information explains how these Spanish Autonomous Communities have regulated salmon fishing in 2005.

#### Galicia:

According to the law approved on February 11, 2005 in the Official Bulletin of Galicia number 34 (Friday, February 18, 2005) the Environment Department (Consellería del medio ambiente) regulates the fishing seasons and the standards related to the continental fresh water. The fishing law 7/1992, July 24, articles

number 46 and 47 of the Fishing Regulation in rivers and the aquatic continental ecosystems, (Ordinance 130/197, 14th May) and the Order established on January 20, 2000 regulate the fishing in rivers and continental fresh waters of the Autonomous Community of Galicia. TAC regulations have been reviewed in several rivers: in 2004 the TAC was 25 salmon in Masma river, 6 in Mandeo river, 30 in Ulla river, 5 in Lérez river and 5 in Miño river (in the exclusively Spanish area). For 2005 the TAC was 40 salmon in Masma river, 5 in Mandeo river, 40 in Ulla river, 7 in Lérez river and 5 in Miño river (in the exclusively Spanish area), with the exception of the Eo River, which does not have an annual catch quota. When the permitted number of salmon has been caught, the fishing season is closed. Salmon fishing is not allowed in other rivers and the sea.

#### Principality of Asturias:

Fishing in Asturias is regulated by Law 6/2002 of June 18, to protect the aquatic ecosystems and regulate fishing in fresh water (Official Bulletin of the Principality of Asturias) number. 151; July 1, 2002). This law addresses the protection of the aquatic ecosystems and the regulation of fishing in fresh waters for sustainable development. According to the law approved in October 29, 2004 the Environment Department (Consejería del medio ambiente) regulates the fishing seasons and the standards related to fresh water in 2005. This resolution was published in the Official Bulletin of the Principality of Asturias number 260, on 9 November 2004.

This resolution establishes:

The salmon fishing season: from March 20 to July 31.

The quotas per person per day is:

- Free Areas: 1 salmon per fisherman per day.
- Preserve: 3 salmon per fisherman per day.

#### Navarra:

In the Autonomous Community of Navarra salmon fishing is regulated by Foral Order 190/2005, February 17 (published in Official Bulletin of Navarra, number 27 – date: 4th March 2005). There are no new changes with regard to fishing standards. This order establishes the open season from the third Sunday in March to the third Sunday in July. A maximum of 75 salmon can be caught. Salmon less than 40cm must be released. Areas where salmon fishing is allowed are from San Tiburcio dam in Doneztebbe/Santesteban to Navarra border.

#### Cantabria:

In the Autonomous Community of Cantabria salmon fishing is regulated by Foral Order 1/2005, January 11 (published in Official Bulletin of Cantabria, number 12 -date: January 19, 2005). There are no new changes with regard to fishing standards.

#### Basque Country:

Atlantic salmon fishing is not allowed in Guipuzkoa.

#### United Kingdom

#### In England and Wales:

Season extensions operated in 2005 for rod fisheries on a number of rivers in Wales and South West England. For some of these rivers (in North Wales) these arrangements were formalised in 2005 through new close season byelaws. In all cases, catch and release is mandatory during the extension period; other method restrictions also apply at this time on some rivers.

A byelaw came into force in July 2005 closing the Cumbrian drift net fishery. This fishery had previously been subject to a reducing Net Limitation Order which had been accelerated by compensation agreements.

#### In Scotland:

Scottish Statutory Instrument 2005 No. 24. The Conservation of Salmon (Esk Salmon Fishery District) Regulations 2005. Came into force on 16 February 2005. Restricts angling for salmon in the Esk District during the period 16 February to 31 May to the use of single or double barbless hooks, and prohibits retention of any salmon caught by rod and line during that period. Restricted the use of net and coble to one fishery in the North Esk and to one net and coble during the period 1 May to 31 May. Restricted the maximum number of traps that may fished outside estuary limits in the Esk District during the period 1 May to 31 May. Regulations remain in force until 15 February 2010.

Scottish Statutory Instrument 2005 No. 37. The Conservation of Salmon (River Annan Salmon Fishery District) Regulations 2005. Came into force on 25 February 2005. Prohibits the retention of any salmon caught by rod and line in the River Annan Salmon Fishery District during the period 25 February to 31 May. Regulations remain in force until 24 February 2010.

Scottish Statutory Instrument 2005 No. 72. The Annual Close Time (Esk Salmon Fishery District) Order 2005. Alters the annual close time for fishing for salmon in the Esk Salmon Fishery District from 1 September to 15 February to the new close time of 1 September to 30 April. Fishing is permitted by rod and line during the periods 1 September to 31 October and 16 February to 30 April.

Scottish Statutory Instrument 2005 No. 174 (C.8). The Salmon and Freshwater Fisheries (Consolidation) (Scotland) Act 2003 (Commencement) Order 2005. Brought the Salmon and Freshwater Fisheries (Consolidation) (Scotland) Act 2003 into force on 1 April 2005. This Act repeals and replaces Scottish salmon and freshwater fisheries primary legislation dating back to the 19<sup>th</sup> century. This Act does not apply in the Border Rivers, the River Esk and the River Tweed. The original legislation remains in force in respect of the River Tweed. Separate arrangements are being made in respect of the Tweed.

Scottish Statutory Instrument 2005 No. 487. The Argyll Salmon Fishery District Designation Order 2005. Came into force on 4 October 2005. Designated the Argyll Salmon Fishery District, abolishing the 10 former districts now covered by the new area.

#### **Russian Federation**

Under the Federal Law on "Fisheries and conservation of aquatic biological resources" of December 2004 a new management approach introducing a concept of "fishing sites", and including the development of inventories of fishing sites and renting them out to users on the basis of a 5-year contract with the Federal Agency for Fisheries (state authority) is being implemented from 2005. As far as Atlantic salmon is concerned a fishing site is assigned for conducting:

- commercial fisheries;
- aquaculture;
- a subsistence fishery by First Nations of the North;
- recreational fisheries.

Atlantic salmon is a resource owned by the State. It is anticipated that a new management approach will increase commitment of users to the conservation of resources and protection of their habitat, enhance their responsibility before the State for sustainable exploitation of resources within the fishing site assigned, encourage them to invest more in their businesses and make their operations more transparent.

No changes reported by the other Parties or the other EU Member States.

2. Other New Commitments Relating To The Conservation, Restoration, Enhancement And Rational Management Of Salmon Stocks Subject To The Convention (Article 15, paragraph 5(b))

#### **European Union**

#### Ireland

The Government's intention is to introduce measures to fully align with the scientific advice from the Standing Scientific Committee of the National Salmon Commission (NSC) in 2007. If the scientific advice is followed and the precautionary approach fully implemented, then it will have serious implications for drift net fishing. An Independent Group has been appointed to examine the implications of the new regulations for the commercial sector in 2007 and beyond. The Group will make recommendations on the options available to address any financial hardship arising from full compliance with the scientific advice for 2007. They will also determine the extent to which those stakeholders deriving economic benefit from the decision should contribute to any scheme, whether in cash or in kind including improved tourist access. The Group will report to the Minister within five months, having drawn on the reports already generated through the National Salmon Commission by the National Fisheries Managers Executive (NFME) and the Standing Scientific Committee and undertaking appropriate consultation with relevant stakeholders.

#### Spain

Navarra: Two dams in tributaries have been equipped with fish passages, and the accessible length of Bidasoa River to salmon was increased by 5% in 2005.

Principality of Asturias: A dam in a tributary was pulled down last year, and another will be destroyed in the Sella Basin this year with an important increase in accessible length of a tributary.

Basque Country (Guipuzcoa): Adult salmon distribution has been studied with radiotracking during the last three years.

#### Sweden

An outbreak of IPN-V was observed on Atlantic salmon smolts in a fish farm. All fish in the farm were eradicted, and the farm was disinfected and declared free from the disease by the Board of Agriculture. In one fish farm *Gyrodactylus salaris* has been found on rainbow trout, which restricts that farm's possibility of stocking fish in rivers considered to be uninfected.

#### United Kingdom

#### In England and Wales:

Netsmen have again received compensation payments (from various sources), or have entered voluntary agreements, not to fish for all or part of the season (or to release fish alive) in the following salmon fisheries: Tavy, Tamar, Lynher, Fowey, Camel, Lyn, Ribble and the Hampshire Avon and Stour. The phase-out of a number of mixedstock fisheries is continuing.

#### In Scotland:

The practice of catch and release in the rod fishery continues, with 58% of early running MSW salmon (Jan-Apr), 51% of summer MSW salmon ((May-Dec), and 46% of grilse caught by rod and line released after capture. Members of the Salmon Net Fishing Association of Scotland renewed their voluntary deferment of the start of net fishing until 1 April. Engagement with stakeholders throughout 2005 via the Scottish Freshwater Fisheries Forum and its Steering Group to develop policy to inform the development of new primary legislation for salmon and freshwater fisheries to be introduced to the Scottish Parliament in summer 2006.

#### Norway

#### Liming

In 2005, 22 Atlantic salmon rivers were limed in Norway at a cost of NOK 50 million (approximately £4 million). The increased funding in 2005 made it possible to start liming in the river Nidelva in Aust-Agder county in December 2005. The natural Atlantic salmon stock in this river is regarded as being extinct due to acidification. Before acidification, during the late 1800s, the yearly catch of salmon in the river Nidelva was up to 12 tonnes. A programme for restocking will start in 2006. Today the potential for salmon production is reduced by two dams built for production of hydroelectric power. Work to reduce the negative consequences of these dams has started.

For 2006, the Government of Norway has reduced the funding for the liming programme by NOK 26 million (approximately £2 million) compared with 2005. As a consequence the Directorate for Nature Management (DN) stopped liming in five salmon rivers from January 2006. As a result of a political process, the Ministry of Environmental Affairs advised the Directorate for Nature Management to continue liming in all 22 salmon rivers. The Ministry of Environmental Affairs has indicated that it will consider the need for more funding this summer.

In 2005 the total catch of Atlantic salmon was 46 tonnes in the 21 limed rivers. Most liming projects in Norway commenced during the period 1991 to 1997. It will take some years before salmon stocks in treated rivers are re-established. The Norwegian Institute for Nature Research (NINA) has estimated that the salmon stocks in 14 of these rivers will be fully re-established after about 15 years of liming, and has suggested that the total catch may be about 75 tonnes in 2011.

The largest liming projects are in three large watercourses in southern-most Norway: Tovdalselva, Mandalselva and Bjerkreimselva. In Tovdalselva and Mandalselva, the natural Atlantic salmon stocks became extinct due to acidification. Before acidification, during the late 1800s, yearly catches of salmon in the rivers Mandalselva and Tovdalselva were as high as 30 and 20 tonnes respectively. In both rivers, a restocking programme is being carried out in connection with the liming programme. The catches are increasing in the river Mandalselva with an average catch of about 10 tonnes in the last six years. In the River Tovdalselva the density of young fish was monitored in 2002 - 2005 and the catches are expected to increase in the next few years. From 2004 to 2005 the catches doubled in the River Tovdalselva, from 481 kg to 1097 kg. The River Bjerkreimselva had a small population of its natural salmon stock before liming commenced and catches increased significantly in the first few years after liming started. The average catch in the river Bjerkreimselva for the last six years has been about 14 tonnes.

#### Gyrodactylus salaris

In 2005, an eradication project in the River Lærdalselva began. The main river and its largest tributaries were treated with aluminium sulphate (AlS). Rotenone was used in small quantities in more or less stagnant water and other complex areas connected to the river. A final treatment will be carried out in April 2006.

A rotenone treatment project was completed in the River Leirelva in the northern part of Norway. Immediate treatment of this river was necessary to prevent the parasite entering a big lake situated in this watercourse.

Unfortunately, in 2005 the parasite was detected again in 2 rivers, which were treated with rotenone in 2001/2002. River Steinkjerelva and River Figga are situated in the innermost Trondheimsfjord, in the middle part of Norway. This fjord system is the most important area for Atlantic salmon in Norway. The eradication of the parasite from the River Steinkjerelva and the River Figga is being given the highest priority.

Out of 45 infected rivers, chemical treatment has so far been carried out in a total of 34 rivers in Norway. In 15 of the treated rivers the parasite has been eradicated. Eleven rivers are still being monitored. Five years of monitoring after treatment is

necessary to confirm that the treatment has been successful. In eight rivers the parasite has been registered again after chemical treatment.

In addition to the remedial measures, the monitoring programme and preventive measures are being given high priority.

#### International cooperation

Cooperation between Norway and Russia on environmental issues, and on research and management of Atlantic salmon, has continued, especially concerning Atlantic salmon in the Pechora River and in relation to *Gyrodactylus salaris*.

#### Conservation of salmon stocks

There has not been any activity concerning cryopreservation of salmon milt in 2005. By the end of 2005, milt from a total of 6,511 wild salmon from 169 stocks had been included in the Frozen Gene Bank (cryopreservation). Norway currently operates 3 living gene banks (LGB); one in northern Norway, one in middle Norway and one in south-western Norway. The threats to the stocks that are kept in these stations are hydropower development, acidification, high proportion of escaped farmed salmon and the freshwater parasite *Gyrodactylus salaris*. Nine of the 29 salmon stocks that have been maintained in LGBs have been re-introduced into their river of origin; seven are no longer retained in captivity but two are being kept as a precaution against future catastrophes. Twelve additional stocks are under restoration, while the seven remaining stocks await eradication of *G. salaris* from their native rivers. One stock of landlocked salmon is maintained in the LGB as a precautionary measure. The three LGBs are now preserving 22 stocks, 4 in Bjerka, 10 in Haukvik and 8 in Eidfjord.

#### USA

As reported last year, following the listing of Atlantic salmon under the Endangered Species Act (ESA), NOAA's National Marine Fisheries Service (NMFS) and the US Fish and Wildlife Service (USFWS) (collectively referred to as the Services) have been consulting with other federal agencies to review all projects carried out in the salmon watersheds in order to avoid or minimize impacts to Atlantic salmon and their habitat. Consultations have been conducted on the permitting process for discharge from aquaculture facilities, siting and operation of aquaculture facilities, dredging projects, and bridge and road repair.

The Services have worked with the Maine Atlantic Salmon Commission (ASC) to develop a final Recovery Plan for the populations of Atlantic salmon that have been listed as endangered. The draft was reviewed by technical staff at both state and federal agencies during 2003. During 2004 the draft was subject to public and peer review. The Recovery Plan was then revised to address public comments received during the public review process. A final draft was completed in November 2005. A copy of the Final Recovery Plan is available at the following link: http://www.nmfs.noaa.gov/pr/recovery. The Services have convened a Recovery Team representing a diversity of expertise in order to facilitate implementation of the Recovery Plan. The Recovery Team is being asked to develop recommendations to the Services as to what actions identified in the Plan are the most critical to carry out over the next several years. The Recovery Team will be asked to review and revise

their recommendations annually based upon recovery activities that have been completed or are ongoing and any new information on the species or threats.

In 2003 the Services assembled an Atlantic Salmon Biological Review Team (BRT) to review and evaluate all relevant scientific information necessary to evaluate whether the population in the Penobscot River and other rivers should be included in the Gulf of Maine (GOM) distinct population segment (DPS). The populations in the Penobscot and several other rivers were not included in the GOM DPS at the time it was listed under the ESA in November 2000 because there was not enough scientific information at that time to demonstrate that those populations were part of the same DPS or constituted a different DPS. Since the listing in 2000, new information has come to light which indicates that the GOM DPS should be re-evaluated to determine if any other populations should be included because they are closely related. The Draft Status Review was completed in January 2006 and is currently undergoing peer review. Depending on the findings in the Status Review, the Services may be required to take some action under ESA.

NMFS, in conjunction with other federal and state agencies, Universities, and nongovernmental organizations, continue to work cooperatively on the Water Chemistry Committee to investigate the potential to implement a pilot liming project on a portion of the Dennys River, Maine. Based on data from the 2004 and 2005 streamside study, the Water Chemistry Committee has determined that it does not seem that low pH events in the Dennys River is the major cause of reduced survival of stocked smolts and it would be premature to conduct a liming project on the Dennys River for the purpose of mitigating low pH and high aluminum impacts on smolts. The Water Chemistry Committee has concluded that a liming project on the Dennys River or any river in Eastern Maine may, in fact, enhance Atlantic salmon productivity regardless of low pH and high aluminum because rivers with high limestone influence are often far more productive then rivers that have very little limestone influence. The committee believes that an *in situ* liming experiment would be the most effective tool for assessing the ecological benefits or impacts of liming in Eastern Maine rivers. A liming project on a small tributary would allow for more intense monitoring of the response of juvenile Atlantic salmon and the surrounding ecosystem to liming and would reduce costs associated with monitoring and labour. This project should be designed to mitigate acidic conditions where they appear to be present, including the Pleasant River and some tributaries. The study proposed above is very different from the whole-river treatment initially planned. Based on existing data, the salmon population viability analysis (PVA), and our current understanding of how acidification effects salmon survival, acidification does not appear to be having a significant population effect on the DPS rivers. The Committee recommends that until new information becomes available, it would be premature to assume that river liming on a large scale would contribute significantly to the recovery of the DPS.

NMFS, the ASC, and USDA Wildlife Services developed a study to determine the effectiveness of non-lethal methods to remove or displace foraging double-crested cormorant populations from the Narraguagus estuary. The objectives of the cormorant harassment study are twofold: 1) to reduce predation on migrating Atlantic salmon smolts by excluding double-crested cormorants from the lower Narraguagus River and Narraguagus Bay; 2) to assess the efficacy of non-lethal predator exclusion as a means of reducing predation on migrating Atlantic salmon smolts. In order to measure

success in meeting the first objective, smolt survival during times of active harassment and non-harassment was monitored. Smolt survival was monitored with ultra-sonic telemetry gear. In addition, cormorant abundance before, during, and after the smolt run was also monitored with automated digital cameras that are programmed to take pictures (i.e. point counts) at fixed intervals every day. The telemetry data generated during the study showed that harassment activities were successful, with fewer than 20 % of tagged smolts being removed from the system when harassment was occurring.

The ASC, USFWS, and NMFS have agreed to jointly pursue an independent review of Atlantic salmon hatcheries supporting the Gulf of Maine DPS and Penobscot River. The hatchery review process was initiated with the goal of providing direction and operational guidelines to develop hatchery reform programs which are scientifically founded and evaluated. NMFS, USFWS, and ASC are in the process of drafting a Request for Proposals and seeking funding to support the review. Compilation of reference materials to be provided to the reviewers in order to expedite the review process is underway.

#### **Other Parties**

No new commitments reported by the other Parties or the other EU Member States.

# 3. Other Factors Which May Significantly Affect The Abundance Of Salmon Stocks Subject To The Convention (Article 15, Paragraph 5(c))

#### **European Union**

#### Denmark

Stocking in accordance with the Danish Salmon Rehabilitation programme is now fully implemented with wild F1 offspring. In two rivers there is a ban on salmon fishing for a period of years.

#### Germany

In Baden-Wuerttemberg:

- a) Increasing numbers of stocked fry, pre-smolts or smolts.
- b) Increasing number of restored rivers and stream reaches.
- c) A management plan developed together with France and Switzerland for salmon stocks has come into force.
- d) Measures at hydroelectric power stations to prevent fish injuries.
- e) Monitoring of stocked fry and pre-smolts.

#### Ireland

The commercial quota in 2006 has been set at 91,000 fish and for the first time an angling quota of 15,000 fish has been set. This is a reduction of 58% from the initial

commercial TAC of 219,000, which has been brought about by staged reduction of annually since 2002.

Catch and release angling has been increasing steadily. 12% of the potential angling catch is now being returned. This is an increase over that reported in 2004 (9%).

Conservation of Salmon and Sea Trout Bye Law Number 802, 2006: A provision for the restriction on the annual angling bag limit of 10 fish per angler for 2006; the NSC had recommended a limit of 15 fish per angler. (The lower level is believed to be necessary to contain the total harvest by anglers to 15,000 fish, given that there is there no appreciable reduction in the average angling catch (25,000) over the past five years and in the interest of a balanced treatment of all stakeholders), and

Conservation of Salmon and Sea Trout Bye Law Number 803, 2006: The introduction of compulsory catch and release provisions from 1<sup>st</sup> September until the end of the season in 8 districts which are not meeting conservation limits. The fishery managers have argued that there is an absolute need to conserve stocks in those districts. Given that commercial fishing ceases in the majority of districts on 31 July, there is no reason why anglers should be allowed to continue to kill fish up to the end of September.

In addition, three technical amendments have been incorporated into the 2006 regulations on the advice of the managers. The amendments provide for: the latest date by which logbooks (angling and commercial fishing) should be returned to the Fisheries Boards; specification in the regulations of fines/penalties in respect of a contravention or failure to comply with the regulations; and the return of tags with angling logbooks including data in relation to fish caught and released.

The Minister has also approved the necessary byelaw amendments to enable draft net fishing with monofilament nets, within the quotas set down for the Cork district in the draft Wild Salmon and Sea Trout Tagging Scheme Regulations in the 2006 season. The approval is on foot of the results of a pilot study to investigate aspects of draft net fishing in Cork Harbour, conducted over the past three years by the Cork and District Draft Net Fishermen's Association under the direction of the South Western Regional Fisheries Board.

#### Spain

Principality of Asturias: Restocking programmes with native fish have produced an increase in the rate of return estimated at 15% of the total number of salmon caught. Smolt and parr production in hatchery and release was over 1,000,000 in 2005. No others measures.

#### **Other Parties**

No factors reported by the other Parties or the other EU Member States.

## Annex 1

# Maps showing the Autonomous Communities in Spain, the salmon rivers and further information on management measures



Autonomous Communities: Galicia, Principality of Asturias, Navarra, Cantabria and Basque Country

#### Galicia



#### Principality of Asturias



#### Navarra



#### Cantabria



## Basque Country

