

Agenda Item 7.5  
For decision

**Council**

**CNL(08)18**

***Report on Progress with the Development of a Database  
of Salmon Rivers***



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### *Report on Progress with the Development of a Database of Salmon Rivers*

1. In 2004 the US developed a database of salmon rivers based on the detailed inventory format proposed in the NASCO Plan of Action for Habitat Protection and Restoration. This database replaced a basic listing of salmon rivers held and maintained by the Secretariat. The Council had welcomed development of this database, had agreed that it should be made available on NASCO's website and had asked each Party or relevant jurisdiction to appoint a coordinator or coordinators responsible for updating the database and reporting on progress. Following testing, the database had been made available for data entry through a website [www.wildatlanticsalmon.com](http://www.wildatlanticsalmon.com). The Council had agreed that the Parties should:
  - update the original salmon rivers database annually;
  - consider using the database to report basic salmon habitat and habitat impacts information so as to establish the baseline level of salmon production potential against which changes may be assessed;
  - enter generalised juvenile and adult salmon production data as data and resources permit.
2. The database was transferred to the NASCO website in 2006 and is updated and added to by the Parties and relevant jurisdictions as resources permit. On 1 February this year I wrote to all rivers database coordinators, copied to Heads of Delegations, requesting that a brief progress report be provided on the three tasks detailed in paragraph 1 above. I have received responses from EU (Ireland), EU (UK - England and Wales), EU-UK (Northern Ireland), EU-UK (Scotland), and the US. These are listed in paragraph 3 below. Norway has indicated that it hopes to be able to provide an update on progress by the end of May. Denmark (Greenland) has responded to indicate that it has nothing to report (there is only one small salmon river in Greenland).

#### **European Union**

##### *Ireland*

*Updating the original NASCO salmon rivers database information (via the expanded web-based database):* The original NASCO salmon rivers database was updated in early 2008, corrections were made and the information conforms to the new format.

*Reporting basic salmon habitat and habitat impacts information:* Salmon habitat information relating to catchment size, wetted area and lake area are provided. Data on river length, accessible river length and axial length are also shown. A list of habitat impact factors was drawn up for Irish salmon rivers (CNL(05)45). These habitat impact factors have been identified by river and added to the database.

*Entering generalised juvenile and adult salmon production data:* The salmon conservation limit for 1SW and MSW fish has been entered by river. The salmon rod catch by river (5 year average) has been recorded. Data is provided on rivers open for salmon harvest, and rivers open for catch and release angling for the 2008 season. The number of rivers not meeting conservation limit (CL) in 2008 is entered along with the percentage CL currently being met.

### ***UK (England and Wales)***

In recent years we have submitted the following for our 65 principal salmon rivers in England and Wales:

- Information on basic salmon habitat but not on habitat impacts.
- Figures on predicted smolt output (at max smolt) but not on adult salmon production because river specific CLs in E&W are set and assessed for the stock as a whole and not for separate 1SW and MSW components (as required by the database).

We aim to review this information at least annually to ensure current entries are up-to-date and add new data as resources and developments permit.

### ***UK (Northern Ireland)***

1. Work progressed in 2007/08 to improve and update the information submitted by UK (Northern Ireland) to the NASCO Database of Salmon Rivers. A number of significant salmon producing rivers from the jurisdiction were added to the database and efforts were made to increase the quality and quantity of baseline data supplied for each reported river. Subject to data and resources, efforts will continue in 2008/09 to expand the database across all salmon producing catchments in the region.
2. The database co-ordinators for UK (N. Ireland) have also investigated the potential to co-ordinate and extend reporting for each river to include basic salmon habitat data and habitats impacts information. The extent and quality of information held for each river in UK (N. Ireland) is currently being assessed and future efforts will endeavour to identify catchments for which such data can be documented and reported.
3. Juvenile and adult salmon production data are available on a number of catchments in UK (Northern Ireland). This data is currently held between a number of agencies. Subject to resources, these datasets will be tabulated and reviewed with a view to reporting where sufficient detail and quality are available.

## ***UK (Scotland)***

*Updating the original NASCO salmon rivers database information (via the expanded web-based database):* This has been carried out. The algorithm used to convert UK National Grid references to Latitudes and Longitudes was not perfect and it is intended to improve the co-ordinates of the river mouths at some stage.

*Reporting basic salmon habitat and habitat impacts information:* Not yet at the stage of reporting. As a first step, our information on salmon distribution and obstacles to fish passage in Scottish watercourses originally collated in the 1980s has been captured into a GIS and updated with improved and updated information provided by Fisheries Trust biologists.

*Entering generalised juvenile and adult salmon production data:* Not progressed yet.

## **USA**

The data population of the NASCO Salmon River Database for US rivers is being coordinated by the U.S. Atlantic Salmon Assessment Committee (USASAC). Previously, the USASAC agreed upon a definitive list of all historic Atlantic salmon rivers in the US (six New England States). Most of those names have been entered into the NASCO database; however, some of the smaller streams still must be entered. Since the last annual meeting, effort has been focused on entering data pertaining to the impacts on these rivers. Through a coordinated effort among all state agencies and one federal agency information on the major impacts affecting all of the salmon rivers listed in the database was collected. Entry of these data into the NASCO database has begun but is much slower than anticipated. Due to the design of the NASCO database, one must go back to the very start of the process for each new river, necessitating the entry of redundant information, such as “data entry person” and “date”. Each time one finishes the data entry for one river, there are lengthy delays as the page re-loads for the next river. The system design is suitable if someone wishes to enter data for one river occasionally. But if the person seeks to enter data from many rivers at one time, the process is very slow and tedious. The U.S. intends to consult with the Secretariat and website administrators to determine if there is a way to streamline the data entry process—perhaps by entering data in batches from spreadsheets. If this is not possible, the data entry process for impacts could take a very long time and delay the entry of other data, such as juvenile production rates. Impact data has been entered for rivers within two of the six U.S. States and work has begun on a third State.

4. This is clearly a significant commitment but as the database is available on the Organization's website it is important that the updating of the original salmon rivers listing is undertaken as soon as possible. In the light of experience in using the database some modifications have been necessary to correct for technical issues and further changes will be needed to better adjust the format to the data available and to improve the efficiency of data entry. It is proposed that the design of the database be reviewed, in conjunction with the database coordinators, when the NASCO website is re-designed. The Council is asked to decide on any appropriate action with regard to the further development of the database.

Secretary  
Edinburgh  
12 May 2008