

Agenda item 6.3(b)  
For decision

**Council**

**CNL(04)17**

*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. The objective of the NASCO Plan of Action for Application of the Precautionary Approach to the Protection and Restoration of Atlantic Salmon Habitat, CNL(01)51, is to maintain and, where possible, increase the current productive capacity of Atlantic salmon habitat. In order to measure and improve progress in meeting this objective, the Plan of Action recommends that NASCO, its Contracting Parties and their relevant jurisdictions establish inventories of rivers. Two key objectives for developing comprehensive inventories of rivers have been identified:
  - to establish the baseline level of salmon production against which changes may be assessed;
  - to provide a list of impacts responsible for reducing the productive capacity of rivers, so as to identify appropriate restoration activities.

Furthermore, the Plan of Action recognises that the inventory, or a summary version, will provide a valuable tool for dissemination of information on salmon rivers to user groups and for education of the wider public in order to encourage improved stewardship of natural resources. The structure of the inventory as envisaged under the Plan of Action includes river data, salmon production data and habitat impact data.

2. The Council has already established a database of salmon rivers which is held and maintained by the Secretariat. This database is a simple listing of salmon rivers, providing information by Party on river name, location (latitude and longitude of the river mouth), and a category based on the status of its salmon stock (lost, maintained, restored, threatened with loss or not threatened with loss). The database is available for use by the Parties but it is not web-based. In its report to the Council in 2001, when the Plan of Action was developed, the SCPA had noted that the Council may wish to decide if the establishment of a database of the inventories envisaged in the Plan of Action should be undertaken by modification of the existing rivers database and if so whether the information should be made available to the public.
3. Last year a representative of the US presented an overview to the Council of a Salmon Rivers and Habitat Database project, CNL(03)38. The US had started the development of a database to hold the US rivers data as envisaged under the Plan of Action, and indicated that it would welcome input by the other Parties. The Council agreed to establish a Working Group to work by correspondence to further develop this database. The US agreed to coordinate this work and Mr Ed Baum chaired a small Working Group, which has worked inter-sessionally by correspondence. A report from the Group's Chairman on progress with the development of a database of salmon rivers is attached as Annex 1.

4. In summary, US scientists have developed an expanded database based on the more detailed inventory format proposed in the Plan of Action. This database has been made available through a website, [www.WildAtlanticSalmon.com](http://www.WildAtlanticSalmon.com), and data is being entered into the database via this website by the US and Canada. The intention is that, following thorough testing of the database, it will be available for data entry by the other Parties. The general public may view, but not edit, the information in the database via the website. The substantial contribution by the US in developing a database and the website by which information can be entered, edited and accessed without prior knowledge of database software is greatly appreciated.
5. The SCPA had previously noted that providing the comprehensive information envisaged under the Plan of Action would be a considerable undertaking and that in the first instance the information might be provided by the Parties for a small selection of rivers. It is suggested in the Group's report that the information might be provided sequentially over time depending on the resources and information available.
6. The Council is asked to consider the report of the Working Group and decide on future action with regard to the database of salmon rivers. In particular, it would be useful to know if each Party is willing to contribute to the enlarged database. The Council may wish to host the database on the Organization's website. The Chairman of the Working Group has agreed to give a brief presentation on the database at the Twenty-First Annual Meeting.

Secretary  
Edinburgh  
8 April, 2004

*Progress Report on the NASCO Atlantic Salmon Rivers Database Project*

Under the Development and Implementation of Habitat Protection and Restoration Plans, CNL(03)16, NASCO agreed to establish a comprehensive database of salmon rivers. The purposes of this database are:

- to establish the baseline level of salmon production against which changes (due to habitat degradation or improvement) may be assessed; and,
- to provide a list of impacts responsible for reducing the productive capacity of a river system in order to identify appropriate restoration activities and to assist policy makers in prioritizing restoration programmes.

Subsequent to the Twentieth Annual Meeting in Edinburgh, the US agreed to develop a relational database template of salmon rivers (in MS Access software) for NASCO and to utilize North American salmon rivers data to test the system. Building upon the original NASCO salmon rivers database which was established about 10 years ago, US scientists expanded the scope and structure of the database to include five data tables (salmon rivers, habitat, juvenile and adult salmon production, habitat impacts) which incorporate all of the information identified by NASCO in the proposed comprehensive database of salmon rivers.

Following consultations with a number of the members of the Working Group of NASCO Parties which was appointed following the Annual Meeting in 2003, the database template was deployed on the Internet ([www.WildAtlanticSalmon.com](http://www.WildAtlanticSalmon.com)) in January 2004. Information pertaining to North American Atlantic salmon rivers is currently being entered by US and Canadian scientists; data for European Atlantic salmon rivers will be entered later in the process, once the database has undergone sufficient testing to clear up any known errors or inconsistencies.

The general public may view existing information in the database; however, data entry and editing may only be accomplished via an assigned, organization log-in name and password which have been issued by the database administrator. Entry into the database itself is accomplished via several graphical web development forms (technically referred to as a web front-end to an Access database back-end) which are used to facilitate ease and clarity of data entry and editing. It is important to note that, in utilizing this system it is not necessary for NASCO Parties or other users of the database to have MS Access on their computer or to be knowledgeable in the use of Access software. Information fields within the database have been structured to encompass dropdown boxes (i.e., itemized lists of choices) wherever possible. This should minimize the opportunity for data entry errors and significantly reduce the amount of time required to enter the raw data.

Contracting Parties to NASCO are urged to review the draft database on the Internet in order to obtain a general indication of the extent of information that each Party should be prepared to provide in the future. It should be noted that data may be entered immediately in its entirety or sequentially over time, depending upon the resources and information available to each country. Each country will also need to designate personnel specifically for data entry purposes. It is extremely important that these personnel be intimately familiar with the

salmon rivers within their country in order to provide as much information to the database as possible.

Once the database template has been sufficiently tested in order to confirm its usefulness for NASCO purposes, it will be necessary for the Parties to NASCO to consider arrangements for permanent web hosting on the Internet and for overall maintenance of the comprehensive salmon rivers database.

Any questions, comments, and recommendations pertaining to the structure of the database and/or the data entry website may be directed to NASCO ([hq@nasco.int](mailto:hq@nasco.int)) or to the current database administrator ([atlantic\\_salmon\\_unlimited@adelphia.net](mailto:atlantic_salmon_unlimited@adelphia.net)).