CNL(10)17

Report of the Socio-Economics Sub-Group

In 2007, the Council had established a Working Group on Socio-Economics, Chaired by the Secretary, which had met in 2008 and presented an interim report to the Council at its Twenty-Fifth Annual Meeting, CNL(08)17. This Working Group had commenced work in developing an international collation of social and economic values to inform management and which would support NASCO's public relations work. In order to progress this work, a Sub-Group had been established. A report on the Sub-Group's work is attached. Clearly this is work still in progress and much of the information still requires to be checked and gaps filled. However, the Sub-Group would welcome feedback on the proposed tables for presenting social and economic values associated with wild Atlantic salmon, the format for presentation of socio-economic information on the website and the initial proposals for a Special Session in 2011.

Secretary Edinburgh 12 May 2010

CNL(10)17

Report of the Socio-Economics Sub-Group

1. Introduction

- 1.1 Under the Strategic Approach for NASCO's 'Next Steps', CNL(05)49, the key issues identified in relation to the social and economic aspects of the wild Atlantic salmon are:
 - ensuring that appropriate emphasis is given to the social and economic aspects of the wild Atlantic salmon;
 - strengthening the socio-economic data as a basis for managing salmon;
 - integrating socio-economic aspects in decision-making processes; and
 - disseminating socio-economic information to ensure due weight is given to the salmon compared to other important commercial and public interests.
- 1.2 To progress these aspects the Council had established a Working Group on Socio-Economics which had met in 2008 and presented an interim report to the Council at its Twenty-Fifth Annual Meeting, CNL(08)17. This Group, which built on the work of two earlier Technical Workshops held in 2003 and 2004, had commenced work in developing an international collation of social and economic values to inform management and which would support NASCO's public relations work. In order to progress this work, a Sub-Group had been established and a progress report on its work was presented last year (see CNL(09)50). In order to make further progress in addressing the tasks assigned to it, the Council agreed a work programme for the period 2009 -2012 (see section 3 below). The Council further agreed that the Sub-Group should continue to comprise Dr Guy Mawle (EU) and Dr Oystein Aas (Norway) as the Co-Chairs, Dr Gudni Gudbergsson (Iceland) together with representatives from North America, Denmark (in respect of the Faroe Islands and Greenland) and the NGOs. In addition, jurisdictions would be invited to nominate representatives to support the work of the Sub-Group.
- 1.3 Following the Twenty-Sixth Annual Meeting, Dr Ciaran Byrne (EU) was appointed to replace Dr Gudni Gudbergsson. Ms Kim Blankenbeker (US) and Mr Paul Knight (NGOs) were appointed to serve on the Sub-Group. Mr Paul Brady, Dr Ursula Monnerjahn and Ms Louise Donnelly (all EU) had expressed interest in supporting the Group's work. Sweden had indicated at NASCO's Annual Meeting that it would also wish to contribute to the Sub-Group's work.

2. Work Programme

2.1 At its Twenty-Sixth Annual Meeting in June 2009, the Council had agreed the following programme of work for the Sub-Group for the period 2009 -2012.

2009-2010

1. Continue work to collate all relevant social and economic values associated with wild Atlantic salmon;

- 2. Develop a report and a presentation on this collation for inclusion in the "State-of Salmon" report and the NASCO website;
- 3. Develop a proposed structure for inclusion of socio-economic information into the 'State of Salmon' and the NASCO website;
- 4. Present the recommendations of the Sub-Group to the 2010 Annual Meeting for consideration by the Council.

2010-2012

- 5. Prepare for a Special Session at the 2011 Annual Meeting to discuss approaches for incorporating social and economic aspects under the Precautionary Approach;
- 6. Consider approaches for conducting an Atlantic-wide study on the Total Economic Value of wild salmon and report in 2012.
- 2.2 It had been the Sub-Group's intention to meet in Edinburgh during 19 21 January 2010 to start work on the tasks detailed in the programme of work described above. However, this meeting had to be cancelled and it was agreed that the Co-Chairs would work by correspondence and then consult the members of the Sub-Group to seek their input. The Co-Chairs held a series of conference calls with the NASCO Secretariat and have worked inter-sessionally, in consultation with the other members of the Sub-Group, to progress the various outputs envisaged in the programme of work i.e. the collation of relevant social and economic values associated with wild Atlantic salmon and a proposed structure for inclusion of socio-economic information into the 'State of Salmon' report for the NASCO website. In addition, however, the Sub-Group felt that it might be useful to present some initial ideas on the 2011 Special Session at the Twenty-Seventh Annual Meeting of NASCO in June this year.

3. Updated information on relevant social and economic values associated with wild Atlantic salmon

Tables of socio-economic information.

- 3.1 At the Working Group on Socio-Economics meeting held in Reykjavik in 2008, summary tables were developed based on the 'wish list' information provided by nine jurisdictions. These tables provided information on participation in salmon related activities, the costs and benefits of Atlantic salmon and the economic impact of Atlantic salmon (see CNL(08)17). The Working Group had considered that this information provided a valuable 'snapshot' of socio-economic information that might assist in the development of a 'State of the Salmon' report as a public relations tool. However, major gaps in the information were noted as was the need to update the 'wish list' information every five years or so. The Working Group had stressed however, that the information was only a summary to illustrate the available information and data deficiencies and should not be interpreted in any other way.
- 3.2 At NASCO's Twenty-Sixth Annual Meeting in June 2009, the Sub-Group's Co-Chair, Dr Øystein Aas, made presentation based on the 'wish-list' information which had been well received, CNL(09)50. In the light of the feedback from the Council, the Sub-Group has developed new tables of socio-economic information since those developed by the Working Group could be difficult to interpret, especially by the noneconomist. These tables are contained in Annex 1. The Sub-Group considers that this

format is more suitable for inclusion on the NASCO website, and as a basis for development of a 'State of the Salmon' report by the Public Relations Group (sees section 4 below). The information included draws on that provided at the 2008 Working Group meeting but it has also been augmented using data from the Focus Area Reports submitted to NASCO by the jurisdictions and from the ICES Working Group on North Atlantic Salmon. The sources of the data have been indicated. There are clearly gaps in the information and the intention would be for the Sub-Group to continue to collate relevant information. The tables are, therefore, still not complete and should be considered as work in progress that will need to be completed and then regularly updated.

3.3 The Council is asked to review these tables and advise if the new format is appropriate as a basis for providing simple summary information on socio-economic values associated with the wild Atlantic salmon. If any jurisdiction is aware of additional or more recent information that could be incorporated in the tables it would be helpful if this could be made available to the Sub-Group through the Secretariat.

Bibliography

- 3.4 The Working Group on Socio-Economics had initially developed a bibliography of literature relating to the socio-economic values of Atlantic salmon in 2003. It was updated in 2004 and again in 2008. It was recognised by the Working group that this bibliography was not comprehensive but represented a selection of studies provided by the Parties as background information. It was the Working Group's intention that this bibliography be annotated so as to provide a summary of the main findings.
- 3.5 The Sub-Group has reviewed this bibliography and considers it to be rather general and include many older references, some of which are of marginal relevance to NASCO's work. Annotating this bibliography in its current form would be a major undertaking and of limited value. The Working Group had also noted that there was limited information provided on non-consumptive and existence values. The Sub-Group believes that the inclusion of studies of the value of biodiversity of other species might be appropriate together with information on approaches to incorporating socio-economic values by other fisheries fora. It is proposed, therefore, that a new, concise, annotated bibliography be developed focussing on key references and which would be a source of information to support the development of the 'State of the Salmon' report. The Sub-Group intends to complete this work over the coming year.

4. Structure for a report and presentation for inclusion in the 'State of the Salmon' report and website

4.1 The proposal that NASCO develop a 'State of the Salmon' report, providing information on stock status, socio-economic aspects of wild salmon and NASCO's measures to conserve and restore salmon stocks arose from the 'Next Steps' Review Process. The aim was to raise public and political awareness of NASCO and its work. The Council of NASCO had agreed that, in the first instance, it would upgrade and improve its website (and that of the IASRB) and produce a 'State of the Salmon' report. The PR Group had indicated that the principal target audience for this report would be the general public although sections of the public with an interest in salmon, (e.g. managers, anglers) would be expected to access the report more regularly.

4.2 The Sub-Group considered a format for the information that might be included on the NASCO website and that would form the basis for the 'State of the Salmon' report. It is envisaged that a high level socio-economic component of a few paragraphs or slides would link to summary information collated from individual jurisdictions which in turn would link to individual reports from jurisdictions and other key reports or publications. This structure is illustrated below:



Figure 1: Proposed format for the information on the socio-economics of North Atlantic salmon to be included in the State of Salmon Report

- 4.3 The Sub-Group has developed a draft of the high-level socio-economic component of the report which is contained in Annex 2. NASCO has previously discussed whether or not it should be involved in the development of outreach products in the form of educational materials but agreed that in the first instance it would include links to educational programmes concerning salmon on its website. This has been done on the new NASCO website. Reference would be made to these links on the socio-economic web pages.
- 4.4 The Council is asked to consider the proposed format for the presentation of socioeconomic information on the website for the high-level report contained in Annex 2 and provide feedback to the Sub-Group so that it can take this into account in finalising this task.

5. Proposed Programme for the Special Session in 2011

- 5.1 The details of the arrangements for the Special Session, including how much time will be allocated to it, are not yet known but the Sub-Group has discussed the nature of the presentations that might be included. In 2004, NASCO had adopted Guidelines for Incorporating Social and Economic Factors in Decisions Under the Precautionary Approach, CNL(04)57. It was envisaged that there would be reporting back by jurisdictions on how socio-economic factors are incorporated into the decisionmaking process under the Precautionary Approach. This had not happened and furthermore the Review Groups that had assessed both the fisheries management and habitat focus area reports had highlighted the fact that in most cases the jurisdictions had not reported adequately on this aspect. The Sub-Group, therefore, believe that the Special Session might consist of a series of presentations or case studies relating to the incorporation of socio-economic aspects in decisions relating to the three focus areas of fisheries management; habitat protection, restoration and enhancement; and aquaculture and related activities. A draft proposal for the Special Session is contained in Annex 3.
- 5.2 The Sub-Group would welcome feedback from the Council on this proposal and the outputs it envisages from the Special Session before developing the programme.

6. Summary

6.1 The Sub-Group has made a significant start on its work programme for the period 2009 – 2012. This work had to be completed by correspondence and is still ongoing. The Sub-Group would now welcome feedback from the Council on the various initiatives detailed in this report. It is envisaged that the Sub-Group will continue to work by correspondence, or if necessary it will meet, to further collate social and economic information, to further develop a more informative bibliography, to incorporate social and economic information on the website and to ensure that the Special Session scheduled for June 2011 allows for a more comprehensive and useful exchange of information on the many social and economic aspects of the wild Atlantic salmon and how these are incorporated in management decisions.

Net and trap fisheries										
	Numbers caught	Weight caught (kgs)	Number of licences	Number of fishers	Gross value (Euros)	Year of data	Source	Most important type of gear		
Canada		48000			NR	2007	ICES WGNAS			
St Pierre & Miquelon		3450	64	64		2008	CNL (09)32			
Greenland		24646	261	105	Not relevant	2007	CNL31.847			
Iceland		16544	ID		110000					
Faroe Islands	0	0								
Russia		35000	330		255000	2007	CNL31.847	Trap nets, gill nets		
Norway		426000	1971		2663000	2007		Bend and bag nets		
Sweden		200	> 4	4		2008	FAR 2009	Trap nets		
Finland			780					Nets and local rods in Teno		
Denmark	ID	ID	ID	ID	ID	2007	FAR	Recreational Gillnets are likely taking salmon as by-catch		
England & Wales	10922	37900	362	971	437000	2007	see comment	Biggest catches are made by drift nets		
Scotland	19897	57033	945	503	983250	Mostly 2007		Should be checked by "Scots"		
Ireland		30000	158		675000??					
Northern Ireland		18000	30		?	2007	FAR			
France		5100	32				CNL (09)31	Drift nets		
Other										
	Delete this column?	701873	4608		5,123,250					
	Euro - USD conv 0.75									
	Euro - GBP conv									
	Euro - CaD conv	ersion = 0.70								

				Rod fisheries					
	No. Caught (incl. C&R)	Number of fishers	Fishing days	Total Expenditure (Million Euros)	Jobs supported	Year of data	Source	Comments	
USA	3	90	250	0		2007	FAR	No broodstock fishery incl	
Canada	80000	40340	364890	53		2005	CNL (08)17	Need to check if right estimate is used	
Iceland	45454	35000	175000	check or calculate	1200		FAR	Iceland withdrew from NASCO in 2009	
Russia	51000	15500	110000	check or calculate	250		FAR		
Finland	16000	9479	36000	check or calculate			ICES WGNAS		
Norway	112000	90000	900000	175	ID	2008	Various		
England and Wales	19984	27,000	135000	43	1200	2007	Various		
Scotland	35581	40000	467000	85	2200	Various	Various	Should be checked	
Ireland	30826	20000	200000	check or calculate	1200				
Northern Ireland	10010	6000	60000	check or calculate	300			Need update?	
Sweden (west coast)	3850	7575	32940	check or calculate		2008		C&R not included	
Denmark	1680			check or calculate		2007	FAR		
Germany	0	0	0					Delete?	
France	1900	2401	29000	check or calculate		2008	CNL(09)31		
Spain	Checking	Checking	Checking	check or calculate					
	408288	293,385	2,510,080	356	6350				
	Euro - USD conversion = 0.75								
	Euro - GBP co	nversion = 1.15							
	Euro - CaD cor	nversion = 0.70							

Annex 2

Comment [G1]: (Revised April 2010)

Comment [G2]: Link to 'Who values

Comment [G3]: Link to 'Changes in Value' page

the salmon and why' page



Home Background The Atlantic Salmon The Value of Salmon Who values it & why? Changes in value Measuring value The Fisheries Net & trap fisheries Rod fisheries NASCO's work **Rivers Database** Meetings Reports Links Newsroom **Contact Us**

The Value of Salmon

We value the wild Atlantic salmon not only for the jobs and income that the species can provide but also for itself.

So there are two basic types of economic benefit to society:

- The **Economic impact** of expenditure related to salmon on the economy of a locality, region or nation as reflected in jobs or household income.
- The Economic value: the value, expressed in monetary terms, that we place on salmon. This may be its value as food; as a quarry for anglers; as an iconic feature of the natural environment and indicator of its quality; or for its cultural significance. One measure of economic value is the amount we are willing to pay for the salmon and the activities it supports over and above what these cost. If everyone's willingness to pay is calculated, this gives us the **Total Economic Value**.

These two types of benefit should not be added but viewed as different aspects of the value of salmon to society.

Cultural, social, and psychological benefits may not be fully captured within economic value. So these should also be explored through other approaches, to gain a fuller appreciation of their significance.

Willingness-to-pay isn't always the best measure of economic value. For example, where people face losing a salmon fishery, it would be more appropriate to value their loss as the amount they would be willing to accept in lieu of the fishery.

Understanding the values of salmon can help us make rational decisions about the salmon and how we use, protect and restore it and its environment.

To understand the significance of our action, or inaction, we need to ask:

- Who values the salmon and why ?
- How will stocks and fisheries change ?
- How will the benefits to society change? (Changes in value)

Picture: Leaping salmon



Home Background About NASCO The Atlantic Salmon The Value of Salmon Who values it & why? Changes in value Measuring value The Fisheries Net & trap fisheries Rod fisheries NASCO's work **Rivers Database** Meetings Reports Links Newsroom **Contact Us**

Who values the salmon and why?

Salmon fishermen:

Net & trap fisheries: In different countries across the North Atlantic, some 3,500 fishermen use nets or traps, often using traditional techniques, to catch about 200k salmon. Some keep their catch to feed themselves but most are sold to fish dealers. The first sale value or **gross value** of the catch to the fishermen is about Euros 7 million/year. Fishermen may also value the activity for itself, especially fisheries with cultural significance.

Rod fisheries: >300k anglers catch another 550k salmon, mainly for recreation. Some 200k are released. Anglers spend more than Euros 500 million/year. But most value their fishing at more than this and would be willing to pay more to maintain or improve the quality of their fishing. The difference between what anglers pay and what they would be willing to pay is known as their **consumer surplus** and may be large.

Fishery owners: in countries where fishing rights are in private ownership, payments by fishermen or exclusive fishing can generate a substantial property value.

Salmon related businesses:

- Money spent by fishermen provides jobs and income for owners of private fisheries, tackle dealers, guides, hotels, fishery managers, garages and other businesses providing services for salmon fishermen.
- Fishmongers and smokeries generate extra income by processing and selling wild salmon.
- Some businesses may benefit from eco-tourism involving salmon watching, such as at salmon leaps or snorkelling, rather than salmon catching.
- Expenditure directly linked to salmon will ripple through an economy providing employment and incomes for other businesses not directly related to salmon or fishermen and so multiplying the economic impact.
- Possible benefits to the salmon farming industry of a wide genetic pool to draw on.

Local culture: salmon can have special significance and value to local culture.

General public: whether or not people are fishermen or benefit directly from salmon, many are willing to pay to protect or improve salmon stocks, perhaps reflecting the quality of the wider environment. This is the existence value. The public may also value maintaining fisheries, especially traditional ones. This has been called 'heritage value'. These values may include a 'bequest value' for being able to pass on salmon and the fisheries to subsequent generations. The amounts most individuals are willing to pay are generally small. Indeed, many may not be willing to pay anything. But where a large number of people are willing to pay something, the total can be so large that it forms the main value of salmon to society. This isn't surprising, given how much value we place on other wildlife, such as birds, otters and whales.

In several countries, the salmon has been used as an educational tool to raise awareness and appreciation of the natural environment.

Picture?

Comment [G4]: Link to 'Net and trap fisheries' page

Comment [G5]: Link to a page describing subsistence fishing in Greenland

Comment [G6]: Link to: 'Rod fisheries' page

Comment [G7]: Link to a page giving details of catch and release by country (from ICES report) and NASCO Guidelines.

Comment [G8]: Example. Link to summary of: Radford A.F. (1980). Economic survey of the River Wye recreational salmon fishery. Centre for the Economics and Management of Aquatic Resources. Research Paper No 10, University of Portsmouth. Anything more recent?

Comment [G9]: Example. Link to a page with summary of values notably from Scotland, Canada, England and Wales:

Comment [G10]: Examples. link to summary of : Agnarsson, S., Radford, A. and Riddington, G. (2008). Economic impact of angling in Scotland and Iceland. In Global Challenges in Recreational Fisheries. Edited by Oystein Aas. Blackwell Publishing. 364pp

Comment [G11]: Example: Link to Forman's of London website: www.forman.co.uk. Prices of £80/kg for wild smoked salmon

Comment [G12]: Example. Link to summary of : Anon (2003). An economic/socio-economic evaluation of wild salmon in Ireland. Report prepared for the Central Fisheries Board, Dublin, Ireland, by Indecon International Economic Consultants. 132pp

Comment [G13]: Is there an example we could cite?

Comment [G14]: Link to a page highlighting examples including the First Nations Fisheries but also perhaps some local European cultures (Wales, Sami? Ireland?)

Comment [G15]: Example. Link to summary of: Simpson, D. and Willis, K. (2004). Method for assessing the heritage value of net fisheries. Environment Agency Report. ISBN 1-84432-307-2. Environment Agency, Bristol, UK. 104pp.

Comment [G16]: Examples. Link to page with summaries of studies of Existence value in UK and, if available, elsewhere.

Comment [G17]: Link to 'Salmon in the classroom' page.



Home Background The Atlantic Salmon About NASCO The Value of Salmon Who values it & why? Changes in value Measuring value The Fisheries Net & trap fisheries Rod fisheries NASCO's work **Rivers Database** Meetings Reports Links Newsroom Contact Us

Changes in value

To make good decisions, managers, politicians and others must consider how society will benefit or lose if we manage, exploit, improve or damage salmon stocks in a particular way.

Knowing how valuable salmon stocks and fisheries are now isn't always that helpful. Of course, large values mean that potentially we have a lot to lose. But it's rare that we're faced by a choice between **all or nothing**. More usually we need to know how the value of the salmon might change given a **step change** in the abundance or distribution of stocks or catches.

We need to know how values will change, relative to some **baseline** that reflects not only current values but how they may change in the future given the current management regime.

Historical changes

Over the last few centuries the value derived from the Atlantic salmon has changed. Not only have its abundance and distribution changed in many countries but so have our tastes and the way we exploit it.

Historically, salmon fishing was primarily for food but, from the mid-19th century, salmon angling became increasingly a recreational activity. In the last three decades, this trend has continued. Commercial fishing effort, catches and value have fallen in many areas in response to:

- Falling stocks.
- Falling prices following the exponential growth in salmon farming; and
- The willingness of governments, conservationists and angling interests to pay commercial fisheries not to operate, and the willingness of fishermen to accept compensation.

Although benefiting from reductions in commercial fishing in some cases, salmon anglers have also helped to conserve stocks by releasing an increasing proportion of their catch. So the value of many rod fisheries has been less affected by falling stocks than the commercial fisheries. Even so, some rod fisheries have closed to protect stocks.

Awareness of, and concern for, the environment has increased. Television and the internet have brought wildlife into people's homes. Non-governmental organisations have become increasingly popular. People are willing to pay to protect or enhance wildlife especially familiar, iconic species with links to human culture such as the Atlantic salmon. The salmon does not, of course, exist in isolation but as part of the wider aquatic environment.

In many countries there has been extensive legislation and huge investment to improve the aquatic environment, including salmon rivers.

Overall, non-use values, such as existence and bequest values, may now substantially exceed values associated from recreational angling, which themselves exceed the commercial value of salmon as food.

It would be unwise to assume that there is no place for commercial salmon fisheries in future. In some countries, wild salmon is now perceived as a superior product to farmed salmon and, with limited availability, prices for wild salmon have risen again.

Picture?



Comment [G19]: Link to graph based on Table: 2.1.1.1CNL(09)8

Comment [G20]: Link to graphs based on CNL(09)8 Fig. 3.1.1 for NEAC and Fig. 4.9.2.1 for NAC

Comment [G21]: Link to new graph showing price of wild and farmed salmon at Billingsgate (Mawle, in prep.) and US paper on salmon prices: Knapp et al (2007).

Comment [G22]: Link to graph based on 2.2.1 from CNL(09)8

Comment [G23]: Link to page giving information e.g. Greenland, Faroes, Ireland, England.

Comment [G24]: Link to Table 2.1.2.1 CNL(09)8 and NASCO quidelines

Comment [G25]: Link to

Comment [G26]: Link to NASCO Special Session on Habitat

Comment [G27]: Link to page on salmon prices in UK (Mawle in prep) and USA (Gunnar et al)



Home Background The Atlantic Salmon About NASCO The Value of Salmon Who values it & why? Changes in value Measuring value The Fisheries Net & trap fisheries Rod fisheries NASCO's work **Rivers Database** Meetings Reports Links Newsroom **Contact Us**

Measuring value

Key points:

- Give links to best technical papers (in bibliography) giving guidance for different types of value, preferably with good spread across jurisdictions within NASCO.
 - Increased international awareness of the need for better methods of valuing biodiversity:

'the biodiversity crisis is ... exacerbated by a tendency to undervalue biodiversity and the ecosystem services it supports.'

From: The Economics of Ecosystems and Biodiversity for National and International Policy makers.

- Depending on the decision, it may be better to evaluate salmon as part of the Total Economic Value of an ecosystem rather than in isolation.
- Be proportionate: benefits transfer or direct measurement? Direct
- measurement should be more accurate but is more expensive and timeconsuming.

Picture?

Comment [G28]: Notably: link to EIFAC 'Guidelines for assessing social and economic benefits of European inland fisheries' (in prep). Also: Chapter 4 from TEEB for national and international policy makers from EU Commission.

CNL31.856

Annex 3

Draft Proposal for a Special Session at the 2011 Annual Meeting on Approaches to incorporating social and economic aspects under the Precautionary Approach

Background

In 2004, NASCO adopted Guidelines for incorporating social and economic factors in decisions under the Precautionary Approach, CNL(04)57. These Guidelines form a framework for incorporating social and economic factors into decisions which may affect the wild Atlantic salmon and the environments in which it lives. They were developed on the basis that all decisions in relation to: the management of salmon fisheries; habitat protection and restoration; aquaculture, introductions and transfers and transgenics; stock rebuilding programmes; and by-catch will be taken in the context of the Precautionary Approach as adopted by NASCO and its Parties.

It was the Council's intention that the Parties and jurisdictions would initially report on the application of the guidelines to one of the elements above. However, following the 'Next Steps' for NASCO review the Council agreed a new approach to reporting on progress in implementing the Precautionary Approach. Under this new arrangement more detailed Focus Area Reports (FARs) are prepared annually on a three yearly cycle on one of the focus area topics of management of fisheries; habitat protection, restoration and enhancement; and aquaculture, introductions and transfers and transgenics. It had been the Council's intention that the FARs would include a description of how socio-economic factors are included in management decisions taken under the Precautionary Approach. However, the Review Groups that have assessed the fisheries management and habitat FARs have both concluded that most FARs failed to provide a clear indication of how socio-economic factors are incorporated into management decisions

Objectives

One of the aims of the 'Next Steps' process was to improve the exchange of information among jurisdictions in managing salmon under the Precautionary Approach so as to facilitate a collaborative learning process. To date, there has been a limited exchange of information in relation to socio-economic considerations. The proposed objective of the 2011 Special Session is to provide an opportunity for a more detailed exchange of information on how jurisdictions are incorporating socio-economic factors in decisions taken under the Precautionary Approach relating to: management of fisheries; habitat protection and restoration; and aquaculture and related activities. It is hoped that in the light of this Special Session there will be a clearer understanding of:

- the approaches used, and challenges faced, by jurisdictions in incorporating socioeconomic factors in managing wild Atlantic salmon and its habitats under a Precautionary Approach;
- the usefulness to the jurisdictions of the NASCO Guidelines and any modifications that may be needed to them to assist jurisdictions with their application;

• the need to consider additional approaches that might support the incorporation of socio-economic factors in management decisions.

Structure

- **Time:** Subject to other commitments ideally a full afternoon or morning session of the Council would be allocated to the Special Session;
- Content: Introduction on NASCO's work to date on socio-economics followed by a number of selected presentations of 15 20 minutes each on topics selected by the Sub-Group to highlight best practice followed by discussion. The focus of the presentations will be on approaches and challenges to incorporating socio-economic aspects in management decisions not the presentation of socio-economic information;
- **Summary and Conclusions** to be considered by Council in the light of the information presented and discussions during the Special Session.

Conclusions

The Sub-Group believes that given the lack of reporting to date, a well planned Special Session focusing on socio-economic issues is timely, will facilitate a valuable exchange of experiences among jurisdictions and will highlight approaches and challenges to incorporating socio-economic factors in management decisions. The Council is asked to consider this proposal for the Special Session and provide feedback to the Sub-Group so that it can proceed to develop the programme well in advance of the Twenty-Eighth Annual Meeting.