

Agenda item 6.2 For information

## Council

**CNL(17)12rev** 

Update on the work of the International Year of the Salmon Committees and IYS planning

(Revised 31 May 2017)

### **CNL(17)12rev**

# Update on the work of the International Year of the Salmon Committees and IYS planning

- 1. At its Thirty-Third (2016) Annual Meeting, the Council had recognised that an International Year of the Salmon (IYS) could provide a very good opportunity to raise awareness of the factors driving salmon abundance, the environmental and anthropogenic challenges they face and the measures being taken to address these. An Outline Proposal for an IYS, entitled 'Salmon and People in a Changing World', which included a proposed rationale, vision, themes and timings for the IYS, together with details of its scope, a governance model and initial budgetary considerations, was broadly accepted by the Council subject to some provisional points of clarification. The focal year of the IYS is 2019 and, if the event is to be the success that we all hope and intend, careful planning by the lead organisations (NASCO and NPAFC), the core partners, Parties/jurisdictions, NGOs and others will be essential. This paper provides a brief overview of progress in planning for the IYS.
- 2. Since last year, the three Committees envisaged under the governance model in the Outline Proposal have been established and have commenced their work. It was recognised that most IYS activities would occur at the basin level but that there would be some tasks that would benefit from collaboration at the 'salmosphere' level. The governance model was designed to allow for these differences in focus between the Atlantic and Pacific regions. The current NASCO representation on these Committees is as follows:

**Coordinating Committee:** Raoul Bierach (Norway), Peter Hutchinson (Secretariat) and Dan Morris (USA, Co-Chair).

North Atlantic Steering Committee: Raoul Bierach (Norway), Doug Bliss (Canada), Ciaran Byrne/Stamatis Varsamos (EU), Konstantin Drevetnyak (Russian Federation), Hugo Hansen/Jóannes Hansen (Denmark (in respect of the Faroe Islands and Greenland)), Peter Hutchinson (Secretary), Paul Knight (NGOs) and Dan Morris (USA, Chair).

**Symposium Steering Committee:** Tony Blanchard (Canada), Ciaran Byrne (EU, Co-Chair) and Peter Hutchinson (Secretariat).

#### **Coordinating Committee**

3. The Coordinating Committee has held three conference calls and the reports of its meetings are available at <a href="www.nasco.int/iys.html">www.nasco.int/iys.html</a>. Initially the work of the Coordinating Committee has been concerned with developing Terms of Reference for the various Committees and in developing a logo and website. A Creative Brief had been developed by the Coordinating Committee and agreed by the North Atlantic Steering Committee. Recently the Committee agreed an IYS logo and this is shown below:



- 4. It is good to have an IYS identity and the design is eye-catching and captures the global (hemispheric) scale of the IYS and reflects the human dimension as well as the fish and their aquatic environments. It has been welcomed by the North Atlantic Steering Committee. Criteria governing the use of this logo are being developed (see paragraph 11 below). Work is underway to develop a website with a Vancouver-based company, My Loudspeaker <a href="www.myloudspeaker.ca/">www.myloudspeaker.ca/</a>, having been chosen to provide a design.
- 5. Through the Fisheries and Oceans Canada Partnership Fund an agreement was reached between Fisheries and Oceans Canada and NPAFC that included funds to support IYS activities in both the North Pacific and the North Atlantic. NASCO Parties and members of the North Atlantic Steering Committee had been advised of the availability of these funds (CAN\$100,000) and requested to provide details of any eligible costs to the NASCO Secretariat by 10 March 2017. A sum of £2,200 has been reimbursed to NASCO so far under this agreement. This support from Canada is very much appreciated. A joint request for further funding through this partnership has been made for 2017/18 and 2018/19 (CAN\$75,000 per lead organisation per year).
- 6. NPAFC has been working with the Fisheries and Oceans Canada IYS network and the North Pacific Steering Committee to develop a results-based planning framework to determine the priorities and projects that will have the highest likelihood of making a measurable difference. Ultimate goal and results statements are being developed, similar to mission/vision statements, that can be used to provide simple and compelling communications materials. These have not yet been considered by either the Coordinating Committee or the North Atlantic Steering Committee with regard to their possible relevance or utility to IYS activities in the North Atlantic.

#### North Atlantic Steering Committee

7. The North Atlantic Steering Committee (NASC) met in London in early November 2016 report (IYS(16)8)available and its is www.nasco.int/pdf/iys/IYS\_16\_8\_Report.pdf. Representatives of all NASCO Parties except the Russian Federation attended the meeting together with a representative from NASCO's accredited NGOs, and two of NASCO's three core partners (ICES (by conference call) and the OSPAR Commission). The input from, and expertise of, the participants was very much appreciated. The meeting sought to stimulate thinking and kick-start planning for a year of focus on salmon in 2019 in the North Atlantic, and hopefully the Baltic, that will raise awareness of issues facing Atlantic salmon and benefit their conservation and restoration. The NASC noted that the focus of the IYS in the North Pacific appears to be predominantly on research while activities in the North Atlantic are more focused on outreach to raise awareness of the challenges facing salmon, the measures being taken to conserve them and to foster support for research. The NASC considered that this should not be an issue given the flexibility in the governance model.

- 8. As requested by the Council, the NASC has planned a Special Session on the IYS to be held during the 2017 Annual Meeting, the programme for which is contained in document CNL(17)13. The NASC agreed that the objective of this session should be to allow for an exchange of information among NASCO Parties and its core partners on planning for the IYS and to inspire, enable and empower those involved in the initiative with a view to ensuring a successful outcome for the IYS.
- 9. The NASC reviewed and proposed changes to a document which had been developed by the Coordinating Committee detailing the governance arrangements for the IYS. A number of changes were proposed by the Committee including renaming the document 'Terms of Reference for the IYS Coordinating Committee, Symposium Steering Committee and Regional Steering Committees'. The NASC welcomed inclusion of wording to clarify the relationship between the Coordinating Committee and the Regional Steering Committees as follows: 'The Coordinating Committee will undertake these activities in accordance with recommendations from the Regional Steering Committees and it will, therefore, need to plan and organise its work in order to allow for proper consultation with the Steering Committees before decisions are taken. Wherever possible, recommendations from the Regional Steering Committees should be framed as a range of options so as to allow some discretion by the Coordinating Committee to take decisions in the best interest of the IYS at a salmosphere level'. The TORs as agreed are available at www.nasco.int/iys.html. The NASC discussed the tasks to be undertaken by the Coordinating Committee and considered that the focus should be on development of the IYS brand (logo and website) and, through its Symposium Steering Committee, organising an international symposium. The Coordinating Committee may also develop some key messages at a salmosphere level and develop criteria for IYS endorsement/use of the IYS logo.
- 10. The NASC noted that the International Atlantic Salmon Research Board's research priority is studies to partition marine mortality and that ICES supports this priority which the SALSEA - Track programme seeks to address. This programme fits well under at least three of the IYS research themes. It was agreed that there could be benefits from improved exchanges between scientists working around the salmosphere with a view to exploring options inter alia for improved consistency in data collection and analytical methods and that options for facilitating this might be explored. The international symposium could serve as a forum in which to launch such collaboration but, additionally, ICES indicated that it may be willing to convene a workshop to facilitate improved exchange of information among salmon scientists working in different parts of the salmosphere. The NASC noted that one of the tasks assigned to the Coordinating Committee is to identify research priorities at a salmosphere level. The NASC believes that the primary task relating to research is to identify priorities and support implementation of research at a basin scale and it did not see great value in having the Coordinating Committee invest its time in identifying research priorities at the salmospheric scale. Furthermore, the NASC considered that opportunities for, and perceived benefits of, research programmes at a larger geographical scale should first be considered by the International Atlantic Salmon Research Board's Scientific Advisory Group or at the international symposium.
- 11. The NASC reviewed a Creative Brief relating to the logo, which had been developed by the Coordinating Committee, and proposed some changes, mainly to the keywords and which relate only to the logo. The NASC recommended that consideration be given

to the pros and cons of having a single shared website or separate websites for activities in the North Atlantic and North Pacific. It was noted that criteria for use of the IYS logo are being developed by the Coordinating Committee. Experience from the World Fish Migration Day (WFMD) was that an evaluation process for use of the logo was demanding on staff time and that this had been changed to allow self-assessment although checks were made once projects were uploaded to the WFMD website. The NASC noted that the IYS applies to activities relating to the conservation and restoration of wild salmon and not to farmed salmon. The NASC also considered that while focusing only on wild salmon, activities undertaken under the IYS could benefit other species and that this benefit should be highlighted in outreach materials.

- 12. NASCO's accredited NGOs are supportive of the IYS and the NASC recognised the importance of engaging and mobilising NGOs. The need to consider the inclusion of additional expertise on the NASC to address specific tasks in future was recognised, particularly with regard to outreach. It was noted that there is considerable interest in the IYS in the Baltic region and that a representative from the EU was expected to be appointed to serve on the NASC to represent Baltic interests. Denmark (in respect of the Faroe Islands and Greenland) agreed to consider an appropriate approach to involving arctic interests in the work of the NASC.
- 13. The NASC recognised that a major outreach initiative could bring benefits to NASCO and that key messages were important in communicating with the media. The NASC noted that NASCO's Public Relations Working Group had developed some key messages in 2007 and that, while these may need some adapting, they were good examples of messages that could be used as a basis for outreach materials for the IYS. A number of outreach activities had been identified in the Outline Proposal including development of curriculum packs for schools, exhibits, themes and sessions at conferences etc., and IYS declarations. The film, 'Atlantic salmon – Lost at Sea' (see CNL(17)6), and the State of the Salmon report, which the Council of NASCO has agreed should be prepared, may also be valuable contributions to the IYS. It was also suggested that publishers might be approached with regard to releasing new versions of books relating to salmon. The NASC also recognised the importance of engagement at a political level and noted that there might be opportunities to do so including through the Nordic Council of Ministers and the annual 'Our Ocean Conference'. It was agreed that it would be useful to develop a one-page briefing note on the IYS drawing on the information available on the NASCO website relating to the IYS.
- 14. A number of activities that might be considered by Parties/jurisdictions were discussed. These included holding a two-day symposium in conjunction with the 2019 Annual Meeting of NASCO. A template was agreed by the NASC to facilitate reporting by Parties/jurisdictions on the IYS activities they are planning and the returns will be compiled by the NASC and presented during the IYS Special Session to be held during the 2017 Annual Meeting (see paragraphs 17 and 18 below).
- 15. The Council of NASCO had asked that the NASC develop a spending plan for the funds made available through the IYS Fund established in 2016 (£60,000). The NASC agreed that it was not feasible to prepare a more detailed spending plan at this stage but asked that the Secretary consult the Steering Committee prior to any substantial expenditure on IYS activities. The NASC did, however, agree that it would use some of the funds made available through the IYS Fund to cover travel and subsistence costs for invited

speakers for the IYS Special Session to be held during the 2017 NASCO Annual Meeting. The need for fund-raising could be further considered once the planned IYS activities had been developed.

#### Symposium Steering Committee

16. The Symposium Steering Committee has not had an opportunity to meet although it has had some initial discussion on the nature and scope of the IYS symposium. The NASCO Co-Chair on this Committee has referred this matter to the NASCO Parties for further consideration. NPAFC had invited the Symposium Steering Committee to hold a meeting in Victoria, British Columbia immediately prior to its Annual Meeting. This invitation is very much appreciated but it was agreed not to proceed with this meeting until there was clarification about the nature and scope of the symposium, even if this meant it could not be held until 2019. The NASC stressed the importance of the symposium focusing not just on science but also on the management implications of the science and the human dimension, including the ecological, economic and social values of salmon. The importance of disseminating the findings to a broad audience was recognised. ICES has indicated that it wishes to be involved in planning for the symposium and would consider its possible involvement including the possible use of the ICES Journal of Marine Science for the symposium proceedings.

#### Progress Report on Actions taken to implement the IYS

- 17. As indicated in paragraph 14 above, the NASC agreed that it would be useful to have input to the Special Session from NASCO Parties/jurisdictions on their initial planning for the IYS and had developed a reporting template in order that this information could be provided to the Secretariat in a standard format. The primary purpose of these IYS progress reports is to provide information for each of the three IYS goals as follows:
  - Goal 1: raise awareness of what the public can do to help ensure salmon and their ecosystems are protected and recovered;
  - Goal 2: increase collaboration among researchers undertaking efforts to understand the factors affecting salmon under a changing climate to effectively support the management of salmon and allow the important social and economic benefits that salmon provide to be realised now and into the future; and
  - Goal 3: stimulate an investment in research which will leave a legacy of knowledge, data/information systems, tools and a new generation of scientists equipped to provide timely advice that will inform the conservation, recovery and rational management of salmon.
- 18. For each of these goals, the following information was requested: actions being undertaken as a contribution to the IYS; how progress on these actions will be tracked; the target audiences; and timelines for implementing the actions. Returns have been received from Canada, EU UK (England and Wales), EU Sweden, Norway and the United States and these are presented below. An overview of these planned activities will be presented by the NASC at the IYS Special Session.

Co-Chair of IYSCC/Chair of NASC and Secretary Edinburgh 24 May 2017

Goal 1: Raise awareness of what the public can do to help ensure salmon and their ecosystems are protected and recovered

Party/jurisdiction	Activity
Canada	In January 2017 managers, researchers, and biologists from all regions of Fisheries and Oceans Canada (DFO) met in Richmond, British Columbia to share a country-wide overview of the assessment and research programs and management approaches within DFO; to initiate the development of a national DFO network of salmon researchers and managers; and to engage that network in the implementation of the International Year of the Salmon (IYS) complete with identified potential outcomes of the IYS and impact measures to demonstrate how goals were met.
	A component of the Fisheries and Oceans Canada (DFO) IYS internal workshop held in Richmond, B.C. was to identify research and outreach priorities that could be addressed at the regional, national, basin and/or hemispheric scale that linked to the six IYS themes: Status of Salmon, Salmon in a Changing Salmosphere, New Frontiers, Human Dimensions, Information Systems, and Salmon Outreach and Communication. Two among these themed discussions directly related to public awareness of both salmon and the protection of the ecosystems upon which they rely: Human Dimensions and Salmon Outreach and Communication. While actions on these two themes are yet to be finalized, lists of potential actions that might be employed to arrive at those outcomes were identified for each.
	Human Dimensions
	Develop tools and frameworks to support the incorporation of multiple sources of science, observations and data (e.g. including citizens, First Nations, harvesters, etc) that can be used to support decisions that impact salmon.  - Habitat restoration resources are prioritized to achieve maximum benefit  - Communication is improved between agencies, organizations and the general public
	<ul> <li>Methods are set out to better incorporate first nations</li> <li>Guidance, or standards are available to support effective collaboration on assessment programs</li> </ul>
	Develop mechanisms of shared stewardship and accountability to support stewardship groups, and empower individuals to work with the interests of salmon.
	Develop management plans at the appropriate ecological scales that include clear objectives, performance indicators & monitoring references, and are aligned with science resources.
	Develop and/or strengthen collaborative research and conservation efforts between and among governments, first nations, NGOs, communities and academics.

Party/jurisdiction	Activity
	<ul> <li>Salmon Outreach and Communication</li> <li>Two lofty goals were identified for outreach and communication in Canada both with unique intended audiences:</li> <li>1. The general public understands the importance of salmon and salmon habitat and the issues that face both. By understanding where and why science and conservation resources should be directed, the general public becomes an active participant in local and</li> </ul>
	regional conservation and decision-making processes and are better equipped to align their priorities with science and conservation.  2. There is political will to support science and conservation activities related to salmon science and ecosystem conservation and management.
	Potential activities for 2017-2019 targeted at the general public (note that budgets and potential timelines are under development therefore have not yet been endorsed nor approved):
	<ul> <li>i. Develop a series of salmon coins through the Canadian Mint</li> <li>ii. Develop a series of salmon stamps through Canada Post</li> <li>iii. Produce t-shirts and/or other apparel with contemporary styling and graphics that simply addresses the messages of salmon and ecosystem conservation and features the IYS logo.</li> <li>iv. Produce television spots to introduce the general public to salmon, their different species and populations, their habitats and related issues (in the style of Hinterland's Who's Who produced by Wilderness Canada).</li> </ul>
	Produce documentaries introducing the public to work carried out by salmon researchers i.e. include a photo-journalist on board oceangoing research vessels.
EU - Sweden	1. Sweden will include salmon in the Baltic Sea and Baltic salmon rivers, the landlocked salmon in Lake Vänern as well as Atlantic salmon rivers in the International Year of the Salmon.
	Sweden believes there are opportunities for creating synergies in the planning of IYOS activities on the regional level through for example HELCOM, OSPAR and EIFAAC.
	2. Swedish website for International Year of the salmon
	A national Swedish website with information on IYS and Swedish activities during IYS. Links visitors to international and national websites on IYS.

Party/jurisdiction	Activity
	Through the website we will also try to engage schools at different levels, with focus on presenting the fantastic life cycle of a salmon.
	The website will also have information on local activities in each river that involve the public in salmon management as well as protection and conservation of river ecosystems.
	Examples on activities:
	Celebrating the opening day for salmon fishing in the river
	Public information on fishways and restoration activities
	Guided walks along salmon rivers
	Regional seminars on Salmon and Salmon Rivers will be held in cooperation with stakeholders, Universities, municipalities and County Administration Boards.
	Stakeholder and NGO involvement will be an important issue both to create and update the website.
	Target audiences: The public, schools, stakeholders, administration, NGO's Timelines for implementing the actions: Development and published during 2018.  Driver: Swedish Agency for Marine and Water Management, Swedish Board of Agriculture, The Swedish University of Agriculture Sciences other Universities and County Administrative Boards in cooperation with NGO's
	3. National website for salmon conservation, restoration and management
	Planning has started for a national website on protection, management and conservation of salmon stocks and salmon rivers both international, national and river specific. The website will provide information about stock status, restoration, management and scientific advice.
	For each salmon river there will be information on status of the stocks in relation to Conservation Limits/MSY, results from data collection as electrofishing, fish counter and catches.
	Target audiences: The public interested in fisheries and nature conservation, stakeholders, NGO's, administration and politicians. Timelines for implementing the actions: Development of the website is planned for 2018 and the website published late 2018. Driver: Swedish Agency for Marine and Water Management, County Administrative Boards, Swedish University of Agriculture Sciences and Swedish Board of Agriculture

Party/jurisdiction	Activity
	4. Production of a book on salmon, salmon stocks and salmon rivers in Sweden from a historical, cultural and biological perspective.
	The compilation will describe salmon in Sweden from cultural to biological significance, from the past into the future. The salmon life history and ecosystem will be the main theme. Each river/stock will be presented along with its history, from medieval times until today. The importance of salmon as food and later for recreation and as an indicator of a healthy environment will be emphasized. Salmon management will be presented, both internationally, nationally and on the stock level.
	Target audiences: The public, stakeholders, schools, management, NGO's, research.  Timelines for implementing the actions: 2018 - 2019 (2020). To be presented in 2019.  Driver: Swedish Agency for Marine and Water Management, Swedish Board of Agriculture, Swedish National Heritage Board, Natural History Museum, Swedish University of Agriculture Sciences.
	5. Film about salmon protection, management and fisheries broadcasted in national television
	Sweden will investigate the possibility to contribute to a film broadcasted in national television. The film is planned to describe in a historical perspective the current status of the salmon stocks, salmon fisheries and management as well as conservation and restoration of salmon rivers and habitats.
	Target audiences: The public. Timelines for implementing the actions: Production during 2018 and 2019, broadcasted in Swedish television late 2019.  Driver: Swedish television and film production company.  Contribution: Swedish Agency for Marine and Water Management, Swedish Board of Agriculture, the Swedish University of Agriculture Sciences in cooperation with NGO's.
EU – UK (England and Wales)	Work underway: Environment Agency's 5-Point Approach (formal mechanisms for monitoring progress; timelines established; target audience includes: NGOs, fisheries and anglers). Influencing Integrated Catchment Management initiatives including: catchment sensitive farming natural flood management, etc. NGO initiatives and projects (e.g. barrier removal, habitat improvement, etc.) – work ongoing, often utilising volunteer help from fishing clubs / public. NGO campaigns (e.g. Angling Trust 'Save Our Salmon' campaign). NGO websites.

Party/jurisdiction	Activity
	Highlighting importance of small streams (initial target audience - scientific community & policy makers, but with objective of
	improving integrated catchment management).
	R&D investigations (initial target audience – scientific community & policy makers).
	Possible options for the future:
	Angling Summit?
	IFM themed conference?
	Targeted communications on NGO websites.
	Presentations at Angling Consultative meetings.
	More transparent communication of salmon management processes & objectives (and benefits of different actions).
	Directed communications to salmon anglers (associated with licence renewals / return reminders).
	Wider outreach – leaflets / posters /community art and sculpture adjacent to rivers (highlighting heritage, importance and actions for
	salmon).
	Wider outreach – museum displays, sea life centres/aquaria, National Salmon Centre (Environment Agency's Kielder hatchery). Wider outreach – events in schools / colleges?
	Wider outreach and support from corporate, civic and NGO organisations (e.g. HSBC bank, WWF, National Trust).
	Explore opportunity for a postage stamp.
Norway	We have started to inform about the initiative whenever there is an opportunity.
	We have asked the Norwegian Hunters and Fishermen Organization and the Norwegian Salmon Rivers Association to cooperate on developing and drafting an action and activity plan for 2019. This plan will be basis for a budget proposal in spring 2018.
United States	Planning
	In 2016, the National Oceanic and Atmospheric Administration's (NOAA) Greater Atlantic Regional Fisheries Office (GARFO) developed an Outreach/Engagement Strategy for the International Year of the Salmon (IYS). The Strategy is a guide to activities leading up to 2019, during the International Year of the Salmon in 2019 and beyond. The Strategy includes an implementation plan that identifies initiatives, partners, potential timelines and an evaluation component.
	<b>Progress:</b> It is a working document and includes an evaluation plan to help track our progress in completing the actions identified in the document <b>Target audience:</b> an internal working group
	Timeline: Ongoing

Party/jurisdiction	Activity
	We have developed outreach materials related to Atlantic salmon and IYS to be distributed at upcoming events in the Northeastern United States such as Endangered Species Day and World Ocean Day. These materials will promote the International Year of the Salmon, encourage participation and highlight the complex life history of Atlantic salmon.
	<b>Progress:</b> We will track the number of events that we attend, number of participants attending these events, and amount of materials that are disseminated <b>Target audience:</b> General public throughout the Northeastern United States - Adults and Kids <b>Timeline:</b> Ongoing
	Coordination
	We are coordinating internally within NOAA Fisheries to facilitate a collaborative approach for the Northeast, West Coast and Alaskan regions of the United States for engagement in the International Year of the Salmon.
	Progress: Develop a system to share information and projects  Target audience: NOAA Fisheries regional public relations coordinators (outreach, education, science)  Timeline: Ongoing
	A potential display/exhibit in collaboration with our partners (a major tourist attraction and educational center in the region) to celebrate the International Year of the Salmon (IYS) in 2019. It is anticipated that this project will extend beyond 2019 and IYS will be the catalyst for more widespread action, outreach, education and research on the important role that diadromous fish play in marine and freshwater ecosystems, as well the important part the public can play in conserving and restoring Atlantic salmon and their ecosystems.
	Progress: Development of an exhibit/new displays by mid-2018 Target audience: Visitors to an aquarium or museum Timeline: Ongoing
	We began regional coordination meetings around International Year of the Salmon in 2017 with representatives from Maine including the Maine Chapter of The Nature Conservancy, Maine SeaGrant, the Atlantic Salmon Federation, Project SHARE and the Downeast Salmon Federation. These regional non-governmental organizations (NGOs) are vital to our promotion and success of the International Year of the Salmon.
	<b>Progress:</b> High level of involvement from NGOs and other organizations in the Northeastern United States <b>Target audience:</b> Environmental organizations

Party/jurisdiction	Activity
	Timeline: Ongoing
	Enlisting partners
	It is important to connect with national organizations whose mission and current programs align closely with the vision of the International Year of the Salmon. We intend to send letters to the Association of Zoos and Aquariums and the American Fisheries Society to introduce the IYS initiative and encourage participation. We hope to follow these letters up with meetings with these national organizations should they indicate interest.
	Progress: Organization participation Target audience: National Organizations Timeline: Ongoing
	Conference presentations and workshop:
	In February 2017, a poster on the International Year of the Salmon was presented at the American Fisheries Society - Southern New England Chapter Conference to promote awareness of the initiative to researchers, university staff and other government agencies.
	In early April, a number of fish and wildlife professionals and organizations were reached through a presentation on the International Year of the Salmon and networking events at the Northeast Fish and Wildlife Agency Conference in Norfolk, VA.
	In late June, we plan to present at a panel workshop for the National Marine Educators Association's annual conference in Charleston, SC. The objectives of the workshop are to promote the International Year of the Salmon and encourage involvement in the initiative through demonstrating how the NOAA Fisheries is integrating IYS into current education and outreach programs.
	We also hope to present on IYS at the upcoming annual meeting of the American Fisheries Society Conference in Tampa, FL in August 2017 to discuss International Year of the Salmon.
	Progress: Evaluation of the number of events attended and the number of participants reached  Target audience: Professionals involved in education, fish and wildlife conservation, science and research, and marine and freshwater management.  Timeline: 2017

Goal 2: Increase collaboration among researchers undertaking efforts to understand the factors affecting salmon under a changing climate to effectively support the management of salmon and allow the important social and economic benefits that salmon provide to be realized now and into the future

Party/jurisdiction	Activity
Canada	National
	DFO Science convened a national workshop of stock assessment experts (including recognized international expertise) to consider how to better incorporate environmental variables into standard stock assessments (completed November 2016). The results of this workshop are currently being compiled, and this National guidance will soon be available to guide stock assessors how to better integrate these environmental factors into day-to-day science advice.
	The formation of a DFO Salmon Network is proposed to organize DFO input to, and participation in, the IYS. It is envisioned that the DFO network could also be used to coordinate DFO staff working on other aspects of salmon biology and management and may serve as a model to coordinate salmon-related activities that involve non-DFO personnel.
	Regional leads for the proposed network have been determined; these leads will identify who is working on salmon across all regions and departments within DFO. Once this preliminary DFO salmon network has been identified, staff will be asked to self-identify their interests, which will initially be aligned with the 6 IYS themes.
	Atlantic
	Atlantic Salmon Research Joint Venture – Shaping the future of wild Atlantic salmon science and conservation
	In response to the Canadian Ministerial Advisory Committee on Atlantic Salmon (MACAS) Report released in July 2015, that provided recommendations to protect, conserve, and rebuild Atlantic salmon stocks across eastern Canada, the Atlantic Salmon Research Joint Venture (ASRJV) was launched in September 2016. The mission of the ASRJV is stated as: "Scientists working together to advance knowledge on wild Atlantic salmon by identifying common scientific objectives; sharing expertise and resources; and generating knowledge that improves conservation and management for the sustainability of the resource in North America."
	Funding has been provided by Fisheries and Oceans Canada for a Joint Venture Coordinator who performs the administrative duties of the Joint Venture and further funding has been allocated for collaborative research projects determined by the Joint Venture that address priority gaps in our information about wild Atlantic salmon.

Party/jurisdiction	Activity
	The ASRJV has been established as a collaborative partnership that brings the Atlantic salmon science community together and is comprised of experts from Fisheries and Oceans Canada, Indigenous groups, provincial agencies, non-government organizations, and academic institutions. The Joint Venture is guided by the following four objectives each of which will ideally position it to contribute directly to the collaborative focus of the International Year of the Salmon:
	<ul> <li>i. Coordinate the development and application of collaborative research and science activities to address the important and urgent knowledge gaps and threats affecting North American wild Atlantic salmon throughout their life history stages and range;</li> <li>ii. Providing venues and mechanisms for scientists to share their knowledge amongst themselves, with the management and conservation community, and with the general public;</li> </ul>
	iii. Collaboratively funding and/or providing expertise and support on collaborative research, science and monitoring activities of wild Atlantic salmon; and,
	iv. Making accessible and distributing results of science, research and monitoring activities of the ASRJV to natural resource agencies, policy-makers, stakeholders, and the general public to support the conservation, restoration, and management of wild Atlantic salmon.
	Over the next year the Management Board and Science Committee of the ASRJV will be working to determine the most important research questions facing Atlantic salmon conservation and management; prioritizing these projects in a 5-year Strategic Science Plan; and undertaking the research required to answer the questions.
	Pacific
	Recognizing the importance of collaborating with non-government scientists, a report is being prepared that will identify:  i. Potential academic collaborators related to the 6 IYS themes and what they are working on,  ii. potential research grant opportunities, and  iii. recommendations on how to foster improved collaborations between university and government scientists.
	Central and Arctic
	Researchers in the Central and Arctic region of DFO are investigating occurrences of both Pacific and Atlantic salmon colonizing routes to the waters of Canada's North. Salmon monitoring programs are underdevelopment to better assess the salmon populations across the Canadian Arctic as salmon appear to be increasing in both abundance and distribution. While field surveys play an important role in the monitoring activities, researchers in the Region have found that social media (Facebook in particular) can be a powerful tool in the development and maintenance of community-based monitoring programs ( <a href="www.facebook.com/arcticsalmon">www.facebook.com/arcticsalmon</a> ).

Party/jurisdiction	Activity
EU - Sweden	1. Sweden will examine existing national data on effects of a changing climate on salmon life history and stock status.
	The project will focus on compiling existing data for detecting trends and thresholds using also climate data and other relevant data, e.g. reared salmon, exploitation, fisheries, diet, growth, prey and predator abundance. As Sweden has salmon in the Atlantic Ocean, the Baltic sea and landlocked salmon in Lake Vänern a comparison of different stocks and environments may provide new insights into processes. Together with a literature survey the project will give suggestions for future research and monitoring. It is suggested that the results are presented at scientific seminars and in journals.
	Target audiences: The scientific community, management, politicians.
	Timelines for implementing the actions: 2018 - 2020.
	<b>Driver:</b> Swedish Agency for Marine and Water Management, Swedish Board of Agriculture, Universities.
EU – UK (England	Work underway:
and Wales)	Initiatives underway as part of the Environment Agency's 5-Point Approach (e.g. reviews of potential stressors for salmon in freshwater, estuarine and marine environments under changing climate conditions to help inform and prioritise management activities).  Build on existing R&D initiatives and collaborations between research bodies, and facilitate output of scientific publications / reports. Supporting work of NASCO IASRB, SALSEA-Track, etc.  Formal R&D liaison meetings.  Conferences / symposia.
	ICES workshops, meetings, etc.
	Atlantic Salmon Trust coordinator being appointed for tracking investigations.
	Possible options for the future:
	Theme sessions at symposia / conferences.
	Improve linkages with researchers studying climate impacts on aquatic habitats and other species.
	Improve linkages with researchers studying marine ecosystems.  Seek to establish network and support from Universities with possible funding from NERC.
	Seek to establish network and support from Oniversities with possible funding from NERC.
<b>United States</b>	Coordination
	Initial discussions were held with the biological, ecosystem and social science teams from NOAA's Northeast Fisheries Science Center regarding potential research projects for the International Year of the Salmon.

Party/jurisdiction	Activity
	Progress: Development of project proposals
	Target audience: NOAA's Northeast Science Center
	Timeline: Ongoing
	Enlisting partners
	Initial discussions with researchers at the various conferences have been encouraging. We are soliciting interest, questions, ideas for research projects or ways to collaborate from the research community and intend to keep them apprised of with further details about the International Year of the Salmon as the initiative develops.
	<b>Progress:</b> Track the number of researchers involved or expressing interest in participating in IYS related projects <b>Target audience:</b> Researchers in the Northeast <b>Timeline:</b> Ongoing

Goal 3: Stimulate an investment in research which will leave a legacy of knowledge, data/information systems, tools and a new generation of scientists equipped to provide timely advice that will inform the conservation, recovery and rational management of salmon

Party/jurisdiction	Activity
Canada	Subsequent to the Federal Budget 2016, Canada has renewed investments in science, including more ecosystem research and additional investment in monitoring of Atlantic Salmon, Pacific salmon, and the creation of a new partnership fund aimed at external partnerships.
	To improve stock assessments in support of decision-making processes, DFO has increased their expertise in stock assessment by investing additional resources into training programs for our scientists. This training will improve the quantitative modelling skills of DFO scientists, including their capacity to better integrate the impacts that changes in environmental conditions may have on stocks.
	DFO has created a new research program to increase our knowledge of Canada's diverse marine ecosystems, and to better integrate this knowledge into our stock assessments in support to the management of key Canadian fisheries.
	The Atlantic Salmon Research Joint Venture noted above, was launched to bring the salmon science community together to identify common research issues and priorities, pool resources and foster collaborative research, science, and data sharing that directly contributed to effective salmon management and conservation.
	In 2016, new investments were made to increase departmental survey efforts and track salmon movements, and through partnership agreements to conduct population genetic sub-structure studies in the Miramichi River and generally to better understand factors affecting salmon, in order to better inform management decisions.
EU - Sweden	1. Database on older reports
	As many other countries with salmon Sweden has a long tradition in research on salmon. Much has been published as gray literature or in journals not accessible digitally. We intend to launch an indexed database with older reports accessible as pdf.
	Target audiences: Scientific community, schools, management, NGO's, Timelines for implementing the actions: 2018 - 2020.
	<b>Driver:</b> Swedish Agency for Marine and Water Management, County Administrative Boards, Swedish University of Agriculture Sciences and other Universities.

Party/jurisdiction	Activity
	2. Public accessible data on salmon research
	To stimulate new research, we will provide links to public available databases with salmon data, both nationally and to an international
	public. The data will be accessed via the new website suggested above (Goal 1; 3. National website for salmon conservation, restoration
	and management).
	Target audiences: Scientific community, schools, management, NGO's,
	Timelines for implementing the actions: 2018 - 2020.
	<b>Driver:</b> Swedish Agency for Marine and Water Management, County Administration Boards, The Swedish University of Agriculture Sciences and other Universities.
EU- UK (England	Work underway:
and Wales)	Environment Agency's 5-Point Approach.
	Maintain focus on importance of R&D to underpin advice / informed management.
	Maintain focus on scientific publications / reports.
I	Regular liaison with national / international colleagues (ICES, NASCO, etc.).
	Conferences, symposia. Succession planning.
	Succession planning.
	Possible options for the future:
	Development of improved reference points / management framework?
	Alternative funding streams?
	Development of best practice guidelines for catchment management initiatives?
	Potential for Institute of Fisheries Management (IFM) salmon management course?
Norway	We are planning on working together with our NGOs and develop a plan for possible activities by the authorities and hopefully the science community.
United States	All US Atlantic salmon data that is vetted through the US Atlantic Salmon Assessment Committee continues to be both archived in relational databases in Access that are accessible thru a web portal. In fact, the 2017 database updates mark the 50th year of the modern databases. The US is also involved in efforts to archive and modernize historical databases with Canada's Department of Fisheries and Oceans. Finally, on the database front, NOAA is leading an effort to archive and make publicly available data from all NOAA-funded and other projects related to the Penobscot River restoration project. This effort will result in a published metadata guide with linkages to electronic databases. NOAA's Northeast Fisheries Science Center is leading modeling efforts to look at the impacts of multiple dams on salmon recovery. NOAA staff coordinate postdoctoral programs with colleagues, serve on graduate committees, and have

Party/jurisdiction	Activity
	developed an active undergraduate internship program. These programs provided training and development opportunities while
	advancing Atlantic salmon conservation. NOAA staff also participate in an international community for PhD and Post-Doctoral fellows
	working on anadromous salmonids providing guidance and expanded global networking opportunities to developing professionals.
	Staff also serve on the Canadian Joint Venture for Atlantic Salmon's Science Advisory and Science Management Committees. The
	involvement of US scientists has helped this group to develop initial action plans and actively coordinate on research projects ranging
	from headwater streams in Maine and northern Canada to marine foraging areas off the coast of Greenland. With expanded science support in terms of personnel and funding from Canada, this effort should allow more combined US-Canada efforts that will further energize research efforts and has already attracted funding from private sector and NGO partners.