

Appendix C

The International Year of the Salmon (IYS) Short Prospectus

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Background

Pacific salmon abundances fluctuate in trends that generally have not been explained. As climate change introduces more variability into systems it is time to increase the efforts of researchers to discover the fundamental mechanisms regulating production. Salmon researchers from the Pacific rim countries of Korea, Japan, Russia, United States and Canada who meet annually through the North Pacific Anadromous Fish Commission (NPAFC) are in agreement that through an intensive, coordinated research initiative these mechanisms can be understood. This understanding will produce more accurate forecasts, stabilize fisheries management and optimize the use of hatcheries.

Objective

Conduct an international, multi-disciplinary, multi-year research initiative, entitled International Year of the Salmon to determine how Pacific salmon populations are regulated, and to develop models that will use climate and ocean parameters to forecast production trends of the various species of salmon.

IYS - Short Summary

The initiative will be conducted in two phases, *a scoping phase* and *an implementation phase*. The scoping phase will entail the development of a detailed prospectus by the NPAFC's Committee on Scientific Research and Statistics (CSRS). An initial scoping meeting will be convened by the CSRS in 2014 with researchers and representatives from government agencies, non-government organizations, academic institutions, First Nations and businesses. The detailed prospectus will provide a comprehensive description of research objectives and activities with associated costing, timelines, participants and deliverables. The scoping meeting will also include the discussion of a funding strategy.

Preliminary discussions suggest three major components of the implementation stage: First, *a data collation and field collection component* to develop integrated data bases linking salmon distribution, abundance and biology with related environmental data sets and to conduct field programs to address gaps in information regarding high seas distribution and ecology. It is anticipated that research cruises will be conducted to determine the high seas distribution of salmon populations in the Gulf of Alaska in particular during the winter months. The second, *an analytical component* to bring researchers together to jointly analyse assess and forecast the factors affecting salmon abundance and develop forecast models. This could potentially include exchanges of personnel and meetings of teams to conduct research as well as workshops and symposia. A third, *outreach component* to broadly engage the scientific community

as well as the public in our research to communicate results and highlight conservation and the importance of Pacific salmon and steelhead as cultural icons across the North Pacific Rim.

Some of the IYS details for consideration include:

Cost: to be determined but estimated to be in the range of \$2-4M (Canadian) over 4 years

Duration – 3–4 years

Participants: Scientists from NPAFC, PICES, academia and non-government organizations. Engagement of participants from unions, communities, First Nations, commercial and recreational fishers.

Deliverables: Primary publications including workshop and symposia proceedings. Outreach materials including videos/documentary, website, popular articles. IYS library

Funding: Business strategy to be part of detailed prospectus. Partners to include government, academia, industry, businesses and NGO's.

Staffing: Anticipated to require 1–2 staff, potentially housed by NPAFC secretariat to lead and administer the initiative.

Governance: IYS Honorary Council (senior officials, sponsors, fundraisers, etc), IYS Steering Committee and Sub-Committees (Data and information, Research-Field, Research-analytical, Logistics/Events, Communications and Outreach.

Timeline:

2014 – Scoping meeting completed and Detailed Prospectus

2015 – Project initiation – confirmation of funding, establish governance bodies, develop detailed workplans and data management protocols, hiring of staff.

2016 - Year 1 – Gulf of Alaska surveys

2017 - Year 2 – Gulf of Alaska surveys

2018-19 Years 3–4 – Analyses, workshops/symposia and publications. A major scientific symposium on status, dynamics, and factors driving production of salmon stocks that includes IYS expedition results.

Next Steps

- CSRS to confirm support for the concept of the IYS in principle and for convening a scoping meeting to develop a science plan for the initiative and discuss potential funding strategies.
- CSRS to develop a funding strategy for the meeting. Approximately \$30K(Can) is required to host the meeting which could be funded through contributions from the NPAFC parties, the NPAFC Research Fund, and/or potential IYS partners.