

# **“Ocean Science and the United Nations Decade of ocean science for Sustainable Development”**

North Pacific Anadromous Fish Commission (NPAFC)  
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NPAFC contribution to Part I of the UN Secretary-General report on  
“Oceans and law of the sea”

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## **Executive Summary:**

1. NPAFC efforts in advancing the ocean science
2. NPAFC initiatives and projects related to the UN Decade of ocean science for Sustainable Development
3. Emerging ocean science technologies at the service of NPAFC
4. Science-policy interface in the NPAFC
5. Integration of traditional knowledge in the NPAFC research and outreach programmes

1. One of the main NPAFC objectives is to coordinate and assess scientific studies of anadromous stocks and ecologically related species in the Convention Area, to review and coordinate the collection and exchange of scientific data and specimens, other scientific exchanges, and to review proposed scientific research programs. Every five years, the NPAFC adopts a Science Plan for cooperative scientific research. The present Science Plan is for the period of 2016–2020.

In 2014, NPAFC started planning the International Year of the Salmon (IYS) project to facilitate the NPAFC Science Plan implementation and attract the public attention to problems of anadromous fish conservation. Then, the project's scope expanded to address ocean climate change impacts to human and salmon ecosystems and possible societal responses to emerging challenges.

The IYS is an international framework for collaborative outreach and research. Through outreach efforts, the IYS will raise awareness of what humans can do to better ensure salmon and their varied habitats are conserved and restored against the backdrop of increasing environmental

implementation. The IYS outcome should underpin development of new NPAFC Science Plan and other multiyear scientific programs

3. Several new technologies will be used in the 2019 marine

4. The NPAFC has consistently taken specific steps to strengthening the science-policy interface on anadromous stocks conservation and fisheries enforcement. All the Commission's decisions are made based on the best available scientific data and recommendations.

In 2012, NPAFC initiated preparation of comprehensive review on the ocean ecology of Pacific salmon and anadromous steelhead trout instead of twenty-year old existing book. The book Beamish, R.J. (ed.), "*Ocean ecology of Pacific salmon and trout*" was published in April 2018. Currently, this is the most comprehensive summary and interpretation of the research published on the ocean ecology of six species of Pacific salmon, steelhead, and coastal cutthroat trout. Forty-one authors representing four NPAFC member countries contributed to this 1090-page volume. This review establishes a background for the new NPAFC Science Plan development as well as for other research programs and plans.

Within NPAFC, the Committee on Scientific Research and Statistics (CSRS) closely cooperates with the Committee on Enforcement (ENFO). Joint ENFO/CSRS sessions take place at every annual meeting of the Commission. Scientists present new scientific data on salmon distribution and migration timing depending on thermal conditions that allow the of reveal potential IUU fishing hot spots and adjust the Parties' patrol efforts in the NPAFC Convention Area in the most efficient manner. In 2018, two committees decided to improve the information exchange and established a new working group that will facilitate collaboration, aiming at enhancing of mutual activities.

5. NPAFC actively involves traditional knowledge into the IYS research and outreach programmes. Traditional knowledge holders participate in the IYS North Pacific Steering Committee activities, the IYS opening events in 2018, several projects and events listed on the IYS website, e.g. Skeena Salmon Art Fest, Yukon Salmon Resiliency Conference with presentation from Simpcw First Nation, who manage the Dunn Creek Hatchery producing coho salmon, etc. Traditional knowledge is very important

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