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Book of Abstracts

Basin Events to Coastal Impacts: An Ocean Intelligence System for Fish and People

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The challenge of managing ocean resources that are impacted by increasingly uncertain ocean conditions driven by large-scale climate change is not something that can be addressed by one country. A partnership approach that leverages the investments and shared capacity of multiple governments, academia, the private sector and NGOs, coupled with the application of new technologies, can make the transformational change needed to allow our socio-ecological systems to respond effectively to a rapidly changing environment with a modest investment. A ten-year Programme under the UN Decade of Ocean Science for Sustainable Development (2021-2030) has been proposed by the NPAFC and PICES, in collaboration with other partners, to develop and test an international ocean intelligence system of monitoring, research and analytical approaches that provide timely knowledge and advice to decision makers about the impact of current and future climate on ocean conditions in high seas and coastal socio-ecological systems, using salmon as an exemplar species. This Programme will provide a series of key outcomes including (1) defining an affordable international ocean monitoring programme of the epipelagic ecosystems of the North Pacific and North Atlantic, (2) reaching hemispheric-wide agreement on data standards and data sharing protocols to mobilize data associated with epipelagic ecosystems in the North Pacific and North Atlantic, (3) a socio-ecological graph database that facilitates the rapid connections of people and data, (4) an international toolkit to synthesize current and future states of the ocean, (5) hemispheric governance arrangements to link organizations working on ocean science and management/decision-making bodies, (6) a cadre of early career scientists that contribute to the Programme ensure that changes are implemented and endure, and (7) a sustained research and assessment focus for ongoing changes in climate to oceans and linkages to the terrestrial ecospheres to build more resilient human communities globally. The Programme would become part of the International Year of the Salmon legacy, building on its outcomes, best practices, and lessons learned. We are seeking feedback on this proposal and would like to hear from interested people/organizations that may want to help further develop this Programme, should it be endorsed by the UN.