It is increasing recognized that the single biggest impediment to science and management of salmon and their associated ecosystems are timely access to data. Our collaborative high seas work has reaffirmed the need to establish standards and data sharing protocols to mobilize data associated with salmon and epipelagic ecosystems of the North Pacific Ocean that are consistent with the FAIR data principles (Findable, Accessible, Interoperable and Reusable) and create the data standards that define Essential Ocean and Essential Biological Variables for coastal areas and the open ocean. The NPAFC has established a Study Group to develop common standards for salmon and their ocean ecosystems and is working with international partners to test the application of emerging graph database technologies to facilitate the rapid discovery and synthesis of data.

Based on collected data and literature, mortality factors within an overall spatio/temporal framework covering the freshwater migration/sea entry phases and the marine phase of the salmon life cycle should be clarified. The concept of a Likely Suspects Framework (ICES 2016) is being developed to accomplish this. An international toolkit will be developed to synthesize current and future states of the open ocean and coastal ecosystems with understanding of salmon mortality factors for use in short-term projections of productivity and abundance for marine resources, including salmon. The next steps of the NPAFC development on that momentum are outlined in the proposal submitted for the U.N. Decade of Ocean Science for Sustainable Development, which is particularly built on the IYS legacy.