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TO: Debra Hernandez, Executive Director, SECOORA and Principal Investigator for Proposal

FROM: David Witherell, Executive Director, NPFMC

By signing below, I acknowledge that I am listed as a supporter on this proposal, entitled "Implementing a Sustainable National MBON: Advancing the coordination, techniques and data integration for biodiversity and environmental observations to support region-specific decision making" with Debra Hernandez, SECOORA Executive Director, as the Principal Investigator.

If this proposal is funded, I agree to work collaboratively with the MBON data team to further the integration of biological data into Federal agency management decision making.

In particular, the interests of the North Pacific Fishery Management Council and the National Marine Fisheries Service's Alaska Fishery Science Center are to ensure that:

- 1. Biological data to be used by the agency has accompanying robust metadata meeting international Darwin Core standards, and
- 2. That biological data in the region of interest to the North Pacific Fishery Management Council and Alaska Fisheries Science Center is for use by our scientists and managers in developing Integrated Ecosystem Assessments and indicators for our fishery management plans.

Although we cannot commit funding outside of our annual budget process, we do commit to working with the regional biological data coordinators on these efforts, and to serving on any regional data advisory committees or similar coordinating groups to assist these efforts.

Sincerely,

David Witherell Executive Director

IMPLEMENTING A SUSTAINABLE NATIONAL MBON: ADVANCING THE COORDINATION, TECHNIQUES AND DATA INTEGRATION FOR BIODIVERSITY AND ENVIRONMENTAL OBSERVATIONS TO SUPPORT REGION-SPECIFIC DECISION MAKING.

Prime Applicant

Southeast Coastal Ocean Observing Regional Association (SECOORA) Debra Hernandez, Lead PI

Subawards

Alaska Ocean Observing System (AOOS) Molly McCammon, Executive Director

Central and Northern California Ocean Observing System (CeNCOOS) Henry Ruhl, Executive Director

> Axiom Data Science Rob Bochenek, Information Architect

Overview

The goal of this proposal is to facilitate marine biodiversity research and data integration between networks of researchers associated with several regional offices in the IOOS program in order to implement a sustained Marine Biodiversity Observation Network (MBON). This work contains four components: (1) Establish regional biological data sharing workgroups to facilitate accessibility to biological datasets, engage with MBON stakeholders and support the community in biological data management and synthesis. (2) Collect and/or aggregate autonomous biological sampling streams produced by flow cytobots, passive acoustics receivers, and eDNA, and develop computational toolkits for the science community to analyze these data streams. (3) Provide cyberinfrastructure support (technology and humans) to standardize, document, and curate biological and environmental time series so that they may be integrated into the IOOS MBON Data Portal and published to national archives at NCEI. (4) Work with regional partners to answer science and management questions through data integration tools and dedicated synthesis activities, as identified in Objective 1 workshops.

The result of this effort will be an enhanced MBON composed of a broad, geographically diverse community of researchers sharing both previously published and unpublished data, and working together to curate, document, and publish their own datasets as well as other datasets identified as relevant to monitoring changes in biodiversity. This will promote coordination of biodiversity research at all scales, integration of ongoing measurements with historical data already in the IOOS system, and stimulate synthesis of data across regions and domains. In addition, ingested marine biodiversity research will be made publicly-available in concert with the host of physical, environmental, and biological data already housed at the regional and national ocean observing system offices. The system is scalable, and will serve local users, users interested in regional and national data summaries, and can accommodate international observations as required.