

# Biological Observations Project

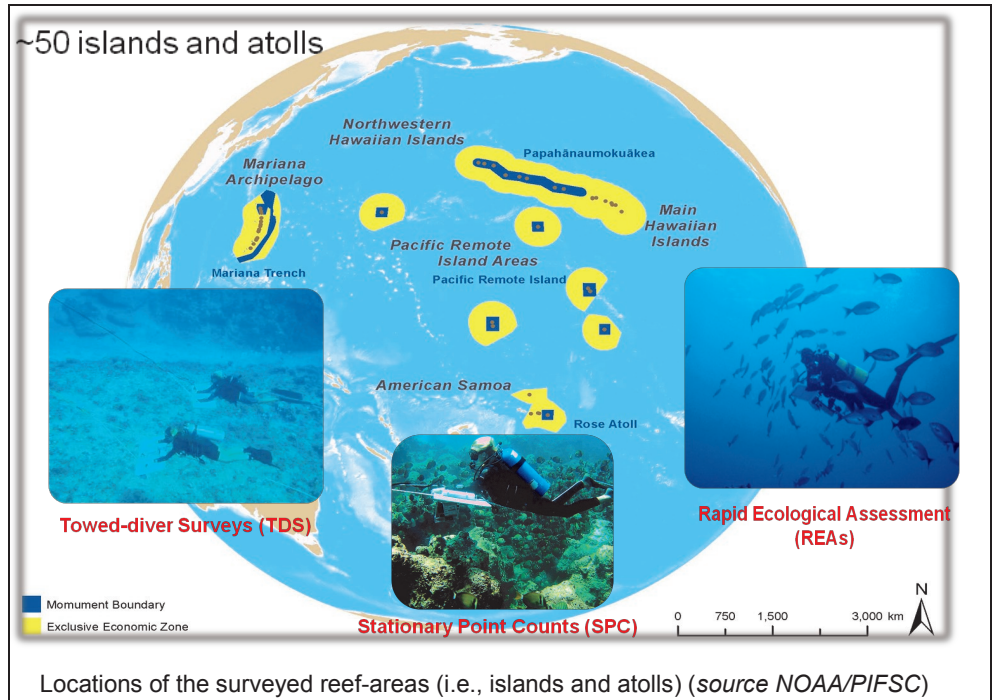
## Making U.S. IOOS Inclusive of Marine Biological Resources

### Introduction:

The U.S. Integrated Ocean Observing System (IOOS) Biological Observations Project is addressing the data management requirements that pertain to biological observations standards and interoperability applicable to IOOS and to various observing systems.

The basic idea is to connect end-users with biological observations databases in a more straightforward way. These databases typically come from disparate organizations, institutions and individuals for differing purposes and have locally-specific structure, contents, methods, and policies. In addition, these data and applications are diverse and can change over time (e.g., data from one source might contain different variables depending on when the data were collected).

An important IOOS goal is to enable a multi-disciplinary view of the ocean environment by facilitating discovery and integration of data from various sources, projects and scientific domains. IOOS data management functional requirements are based upon guidelines for standardized data access services, data formats, metadata, controlled vocabularies, and other conventions. So far, the data integration effort has focused on geophysical variables such as temperature, salinity, ocean currents, etc.



### Objective:

The objective of the IOOS Biological Observations Project is to develop an efficient and effective information infrastructure for biological observations, adding components and links as necessary to serve end-users. To achieve this, we are focusing on a single customer (reef fish population assessments) and a single region (Pacific region). Reef fish population assessments are used to establish Annual Catch Limits as defined by the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act.

The observations used for this project are reef fish species presence/absence/abundance in the Hawaiian Archipelago and other locations in the Pacific region. The data include independent fishery surveys (diver-based reef fish surveys) collected as

part of each agency's coral reef monitoring programs. While a single user-group was identified in the Pacific region for this project, the results should be applicable more broadly to projects utilizing biological observations, and it should be portable to other geographies.

### Partners

National Park Service Pacific Island Network  
 NOAA Pacific Islands Fisheries Science Center  
 NOAA Papahānaumokuākea Marine National Monument  
 Pacific Islands Ocean Observing System  
 USGS, OBIS-USA, COML and UH  
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