MBON: Supporting NOAA Ecosystem Based Management Data Requirements
MBON Data

• Species and abundance
  - Phytoplankton, zooplankton, fish, corals, invertebrates, marine mammals, microbes, sea birds, sea turtles, and submerged aquatic vegetation (benthic and pelagic)

• Biological vital rates
  - including but not limited to production, recruitment, mortality, fecundity, growth, feeding rates, and microbial activity)

• Nekton diet
  - Diets of fish, sea birds, sea turtles, and marine mammals)

• Environmental DNA
  - MBON projects are evaluating methods for collecting and analyzing water samples and proof of concept for eDNA in an MBON
Species observations are required to support ecological forecasts and models.

Such observations are needed at different spatial, temporal, and taxonomic scales.

**MBON is:**
- Developing a network for and expertise on collection and maintenance of these obs and data.
- Addressing multiple scales - microbes to whales, instants to centuries, in situ to satellite.
- Integrating across existing biodiversity monitoring efforts.
Coupling MBON & EBM

- Share foundational data sets and products via NCEI and IOOS (e.g., water column & benthic habitats).
- Build on strong NOAA support for Ecological Forecasts Roadmap: research to operations and/or applications. EFR serves as coordinating program to leverage resources across NOAA to advance Habitat, Pathogens, Hypoxia, HABs ecological forecasts.
- Inform NOAA’s Habitat Conservation Team: Habitat Science & EF guidance document & 10 Habitat Focus Areas.
- Complement NOAA’s Coral Reef Conservation Program Investments.
- Advance NOAA’s Regional Integrated Ecosystem Assessments and EBFM.
- Advance NOAA’s Biogeographic Assessments in NMS and NERRs.
Coupling MBON & EBM: Underway

- Assessing rockfish recruitment along West Coast & NMS Condition reports (CC IEA & MBON).
- Developing models linking climate to biodiversity & productivity of kelp communities & associated species (CINMS & MBON).
- Defining ecological important areas for spatial management & Condition report (FKNMS & MBON).