



MBON: Supporting NOAA Ecosystem Based Management Data Requirements

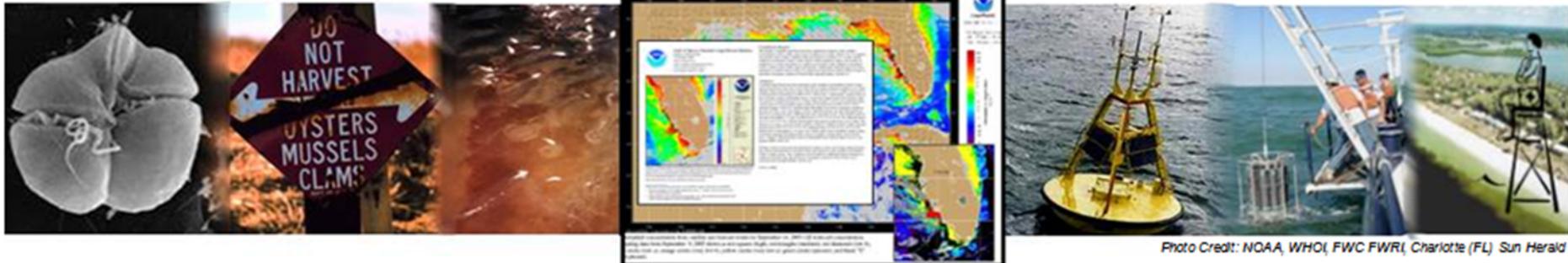


Photo Credit: NOAA, WHOI, FWC FWR, Charlotte (FL) Sun Herald



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); and

- Environmental DNA

- MBON projects are evaluating methods for collecting and analyzing water samples and proof of concept for eDNA in an MBON



Coupling MBON & EBM

- 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).



For more Information Contact:

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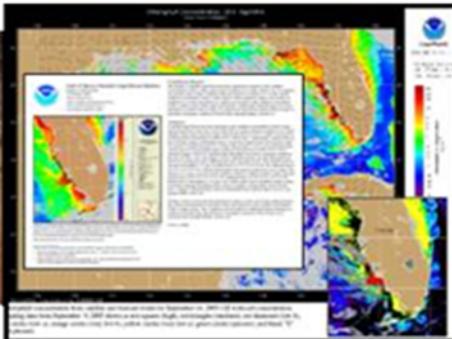


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