

Sanctuaries infographics partnerships

Jennifer Brown

jennifer.brown@noaa.gov

ECOS Consulting

with Channel Islands & Monterey Bay

National Marine Sanctuaries



ONMS Condition Reports



Habitat



Water Quality



Human Pressures



Living Resources

Conditions are assessed using available Status and Trend data for a suite of indicators

Partnership Motivation

Motivation, goal:

- Maximize utility of existing observing data
- Ensure observing and monitoring data are readily available to resource managers in an easily digestible way
- Create web-based, interactive tools to explore and understand impacts of change on ecosystems and marine life
- Leverage expertise and resources

Major partners

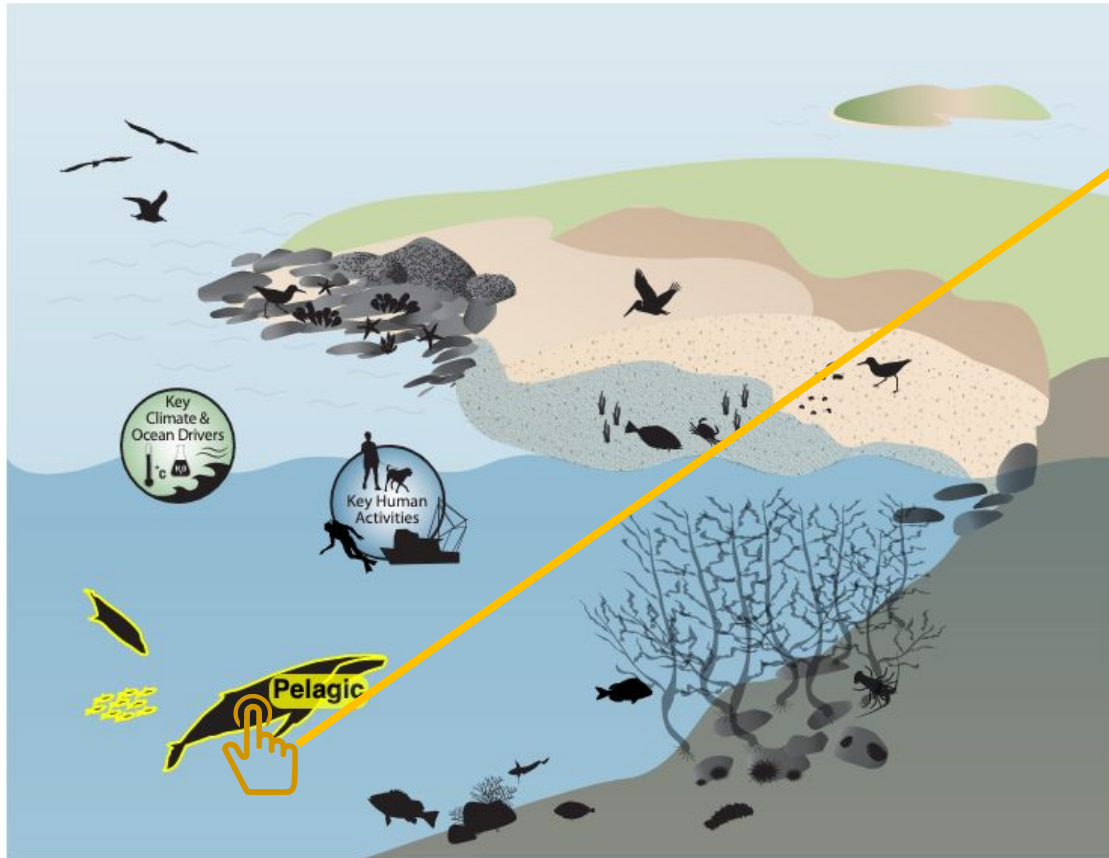


Interactive Infographics AKA 'Clickable' Sanctuary Ecosystem Trends

CINMS Deep Seafloor Kelp Forest Pelagic Rocky Shore Sandy Beach Sandy Seafloor About

Overview

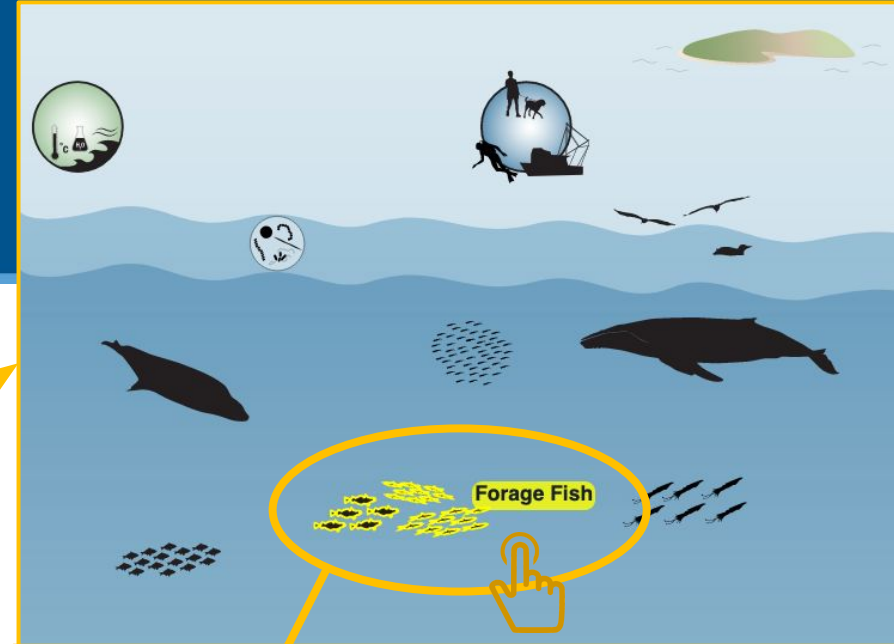
Please explore the interactive ecosystem for Channel Islands National Marine Sanctuary. Navigate by clicking on icons representing major habitats, species of interest, major climate and ocean drivers, and key human activities. These interactive icons and silhouettes access status and trend data, images, web stories and other supporting content.



Text in image: Off

- Deep Seafloor
- Kelp Forest
- Key climate & ocean drivers
- Key human activities and impacts
- Pelagic
- Rocky Shore
- Sandy Beach
- Sandy Seafloor

<https://noaa-onms.github.io/cinms/>



Forage Fish

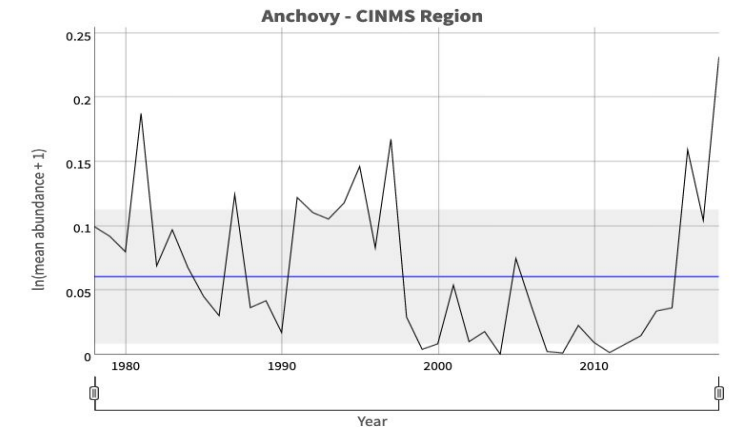
Forage fish, also called bait fish or bait fish, are small fish which are important food for larger predators including larger fish, seabirds, sea lions and whales. Forage fish, such as anchovies, sardines, feed near the base of the food chain on plankton.

Map of Regions Anchovies Hake Myctophids Rockfish Sanddab Sardines

CINMS Region

CalCOFI Monitoring Program

CalCOFI data

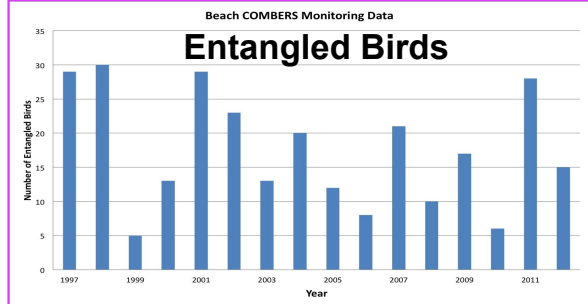
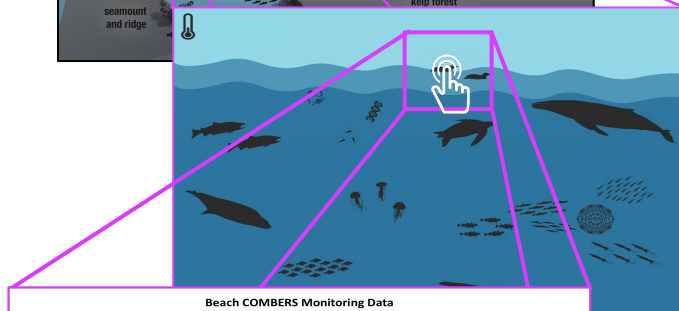
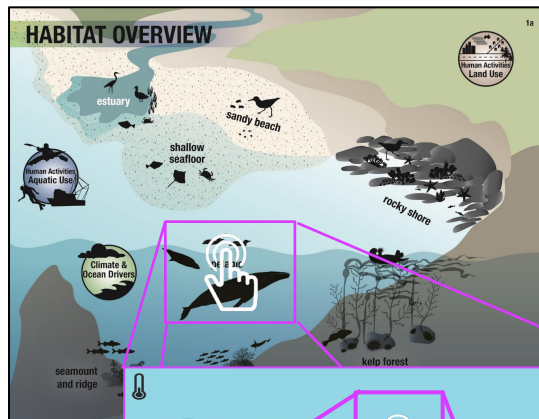


A figure showing the relative abundance of northern anchovy (*Engraulis mordax*) collected during the spring around the Northern Channel Islands from 1978 to 2018. The bar at the bottom of the figure can be used to zoom in to specific dates, using the small slider buttons on

Tiers of data products targeting different users

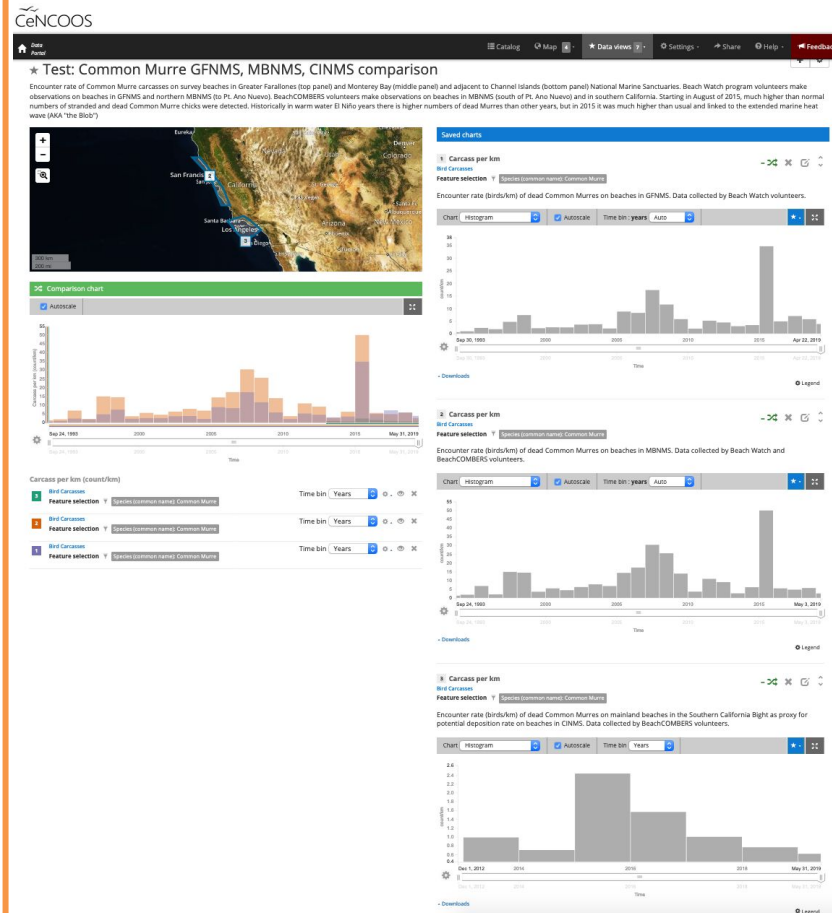
Infographics

Audience: Public, managers, educators



Curated Data Views

Audience: Advisory groups, researchers, managers



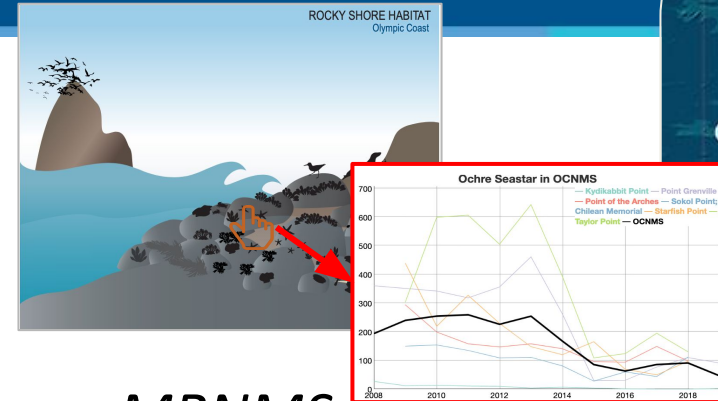
Data portals

Audience: technical experts

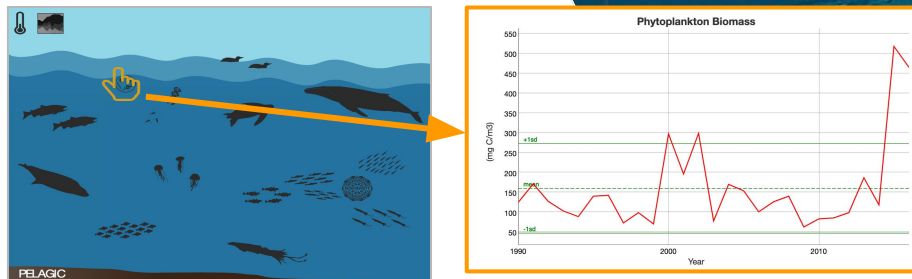


Current Status and Next Steps

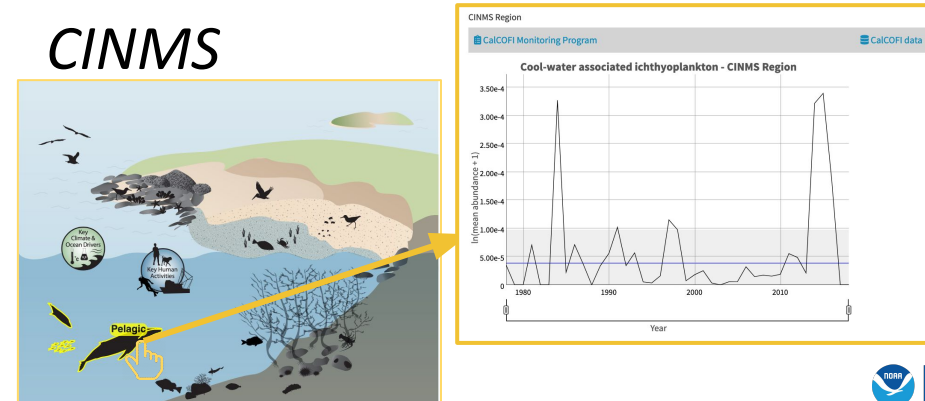
OCNMS



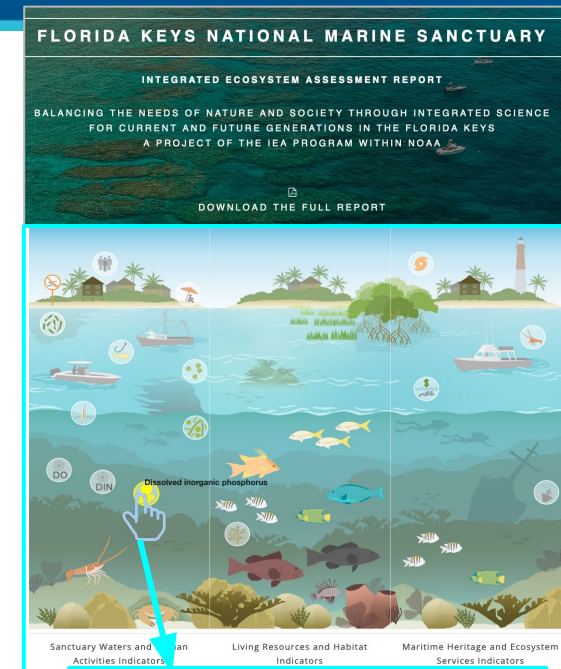
MBNMS



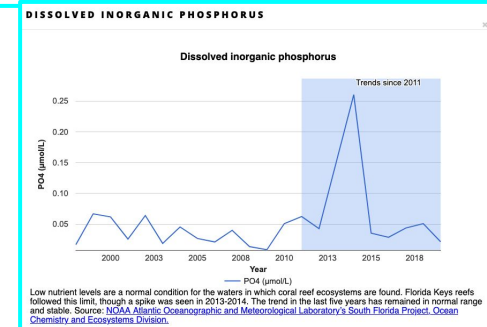
CINMS



FKNMS/GoM IEA



SanctSound interactive website



*need to ingest, synthesize and serve human use indicator data in a compatible manner

Lessons Learned

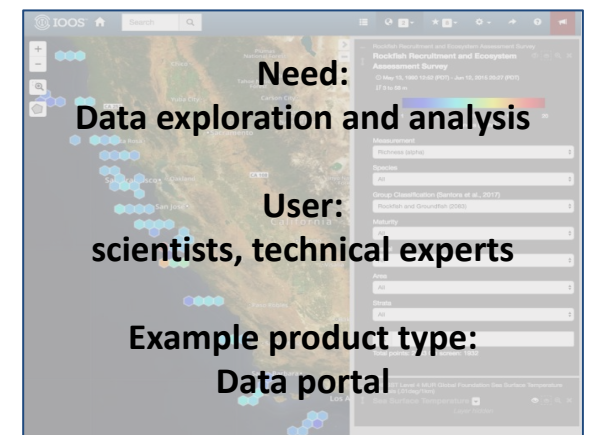
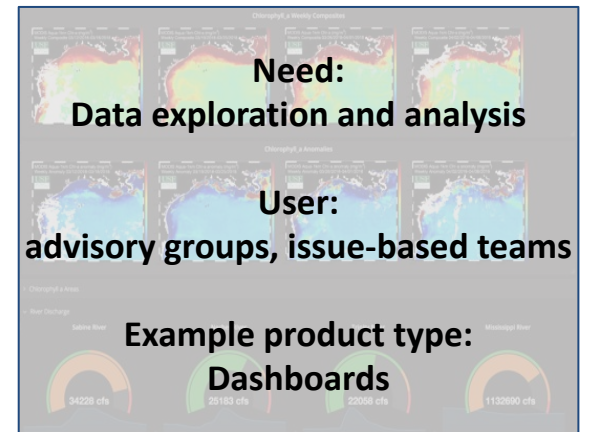
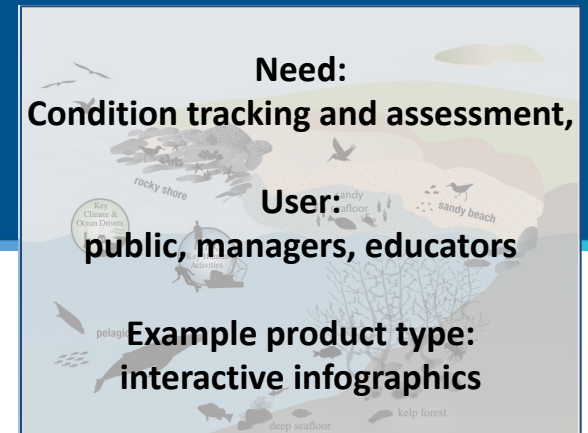
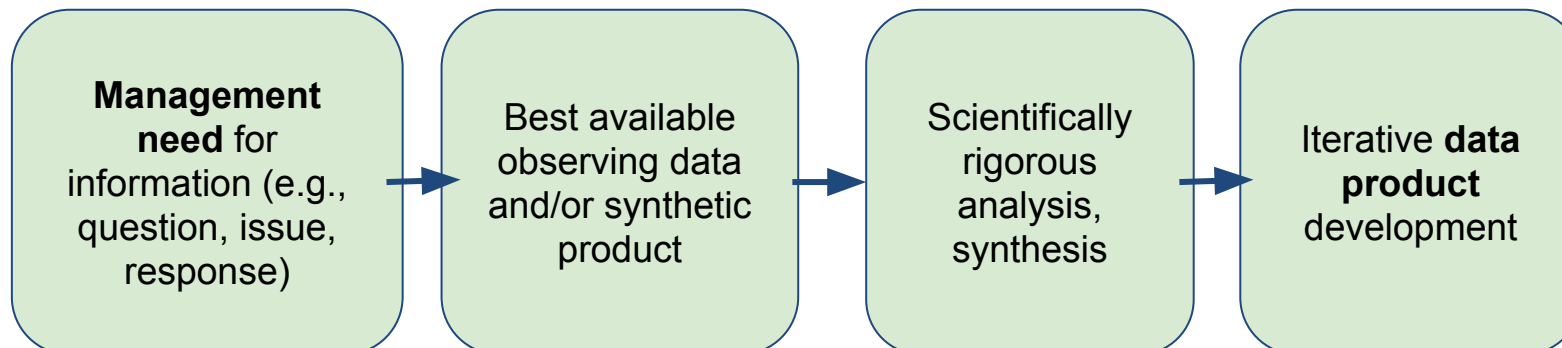
Start with the needs, identify the user, build and resource the team

Translation of data from observers and scientists to managers and the public is not automatic, requires focus and resources

Team

- manager (e.g., science, policy, resource protection, education)
- data-specific technical expert
- data product and web developer
- science translation, application, interpretation

Process



Outcomes and Impact

- Enabling timely response by managers to questions about sanctuary status and recent change
- Generating new interest and product requests; defining needed team and expertise to bring data to managers
- Through IOOS web services, providing direct access to external data making Condition Reports living information access points
- Ensuring data availability for Condition Reports, Environmental Impact Statements, Education & Outreach
- Leveraging strengths of NOAA programs and partners to build synergies