# IOOS Advisory Committee

## West Coast Ecosystem Session: Sanctuary Watch

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Andrew DeVogelaere, PhD
Monterey Bay National Marine Sanctuary, NOAA

# NATIONAL MARINE SANCTUARY SYSTEM

IOOS | Integrated Ocean Observing System

Sanctuary Watch WebCRs Conservation Issues About

**Sanctuary Watch**

*Web-Enabled Information for Sanctuary Management*

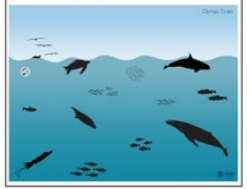
## WebCRs - Ecosystem Tracking Tools for Condition Reporting

The web-enabled Condition Reporting (WebCR) platform pairs artwork with information to make it easy to explore and track how ecosystem conditions are changing at a sanctuary. Select a sanctuary below to start exploring that sanctuary's ecosystem. Navigate by clicking on icons representing major habitats, species of interest, climate and ocean drivers, and human connections. Interactive icons and silhouettes are linked to status and trend data, images, web stories and other related content. The goal of WebCRs are to help us keep our finger on the pulse of these dynamic ecosystems and to help us to better understand and manage our sanctuaries together. Tiles for other sanctuaries will be added below as those tools become available.

Channel Islands

Florida Keys

Olympic Coast



Monterey Bay

Coming soon

Stellwagen Bank

Coming soon

# Sanctuary Watch

*centralized location for tools used in Sanctuary management*

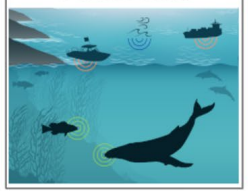
*tools that connect to system-wide needs and priorities*

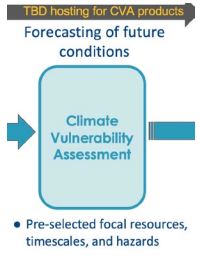
*easy access to synthesized information used in decision-making*

## Conservation Issues - Tools to Inform and Improve Management

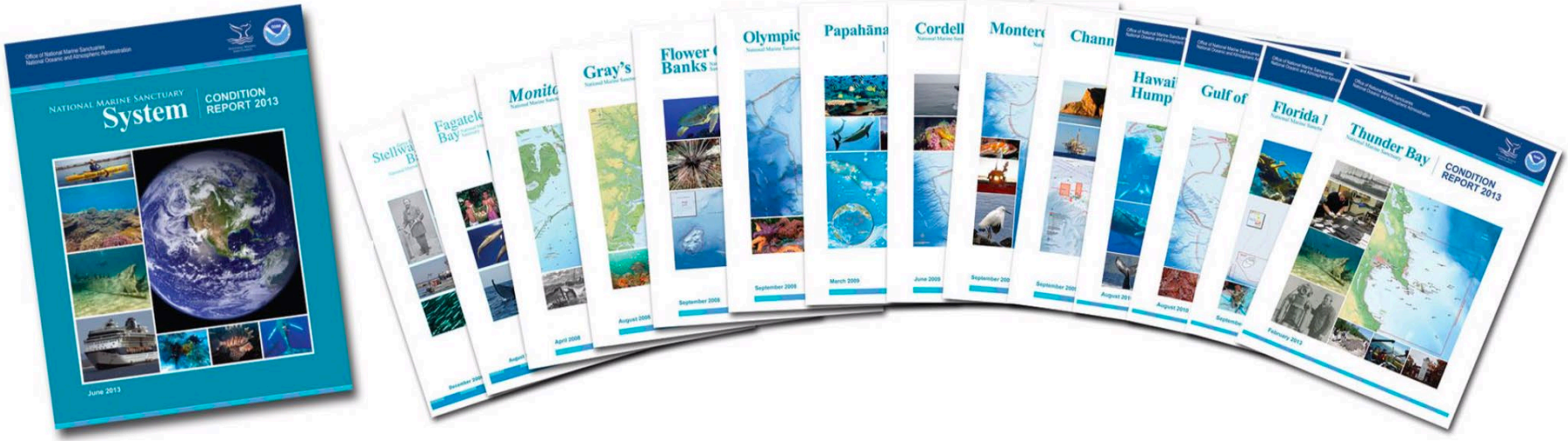
A number of pressing issues are facing sanctuaries, such as ocean noise, invasive species, marine debris, and climate change. We are building interactive tools that improve access to monitoring and characterization information that address these issues. Our first tool is focused on soundscapes and ocean noise. Tiles for other issues will be added as those tools become available.

SanctSound





# Sanctuary Condition Reports



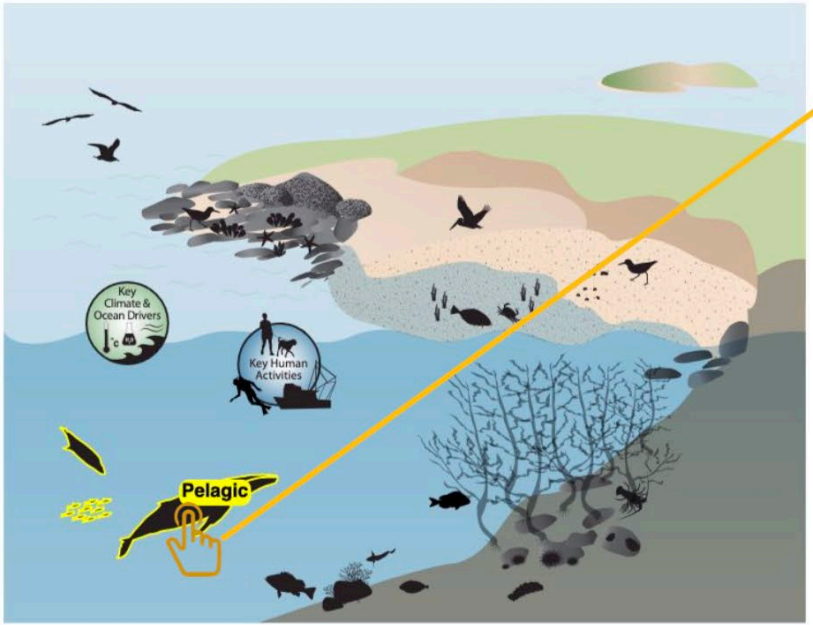

- Status and trends assessment (DPSER) of pressures, resources, and ecosystem services across the system
- Context for community awareness, management plan review, policy and regulation, education programs, and accountability

# Web-enabled Condition Reporting (WebCR)

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

## Overview

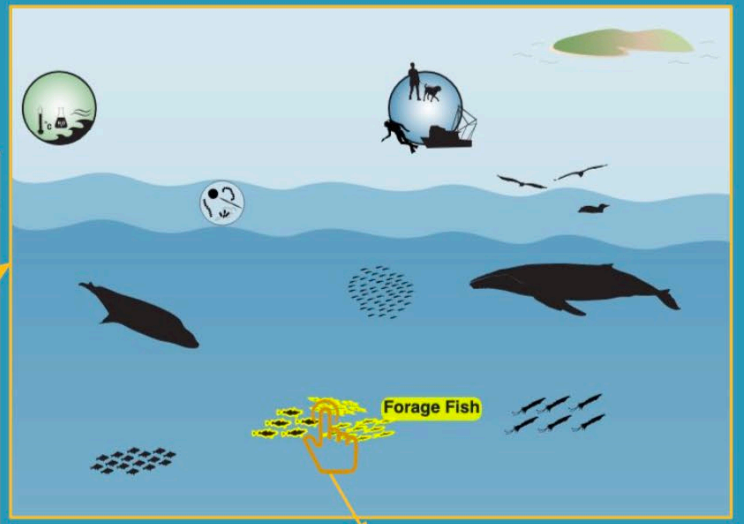
Please explore the interactive ecosystem for Channel Islands National Marine Sanctuary. Navigate by clicking on icons representing major habitats, species of interest, major climate and ocean drivers, and key human activities. These interactive icons and silhouettes access status and trend data, images,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

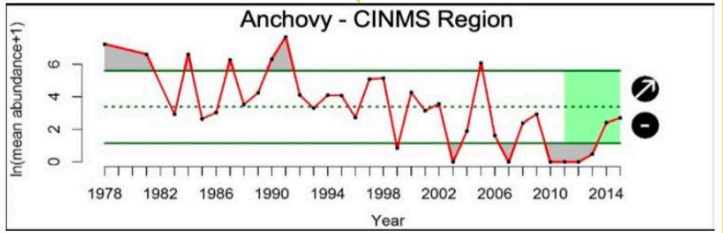


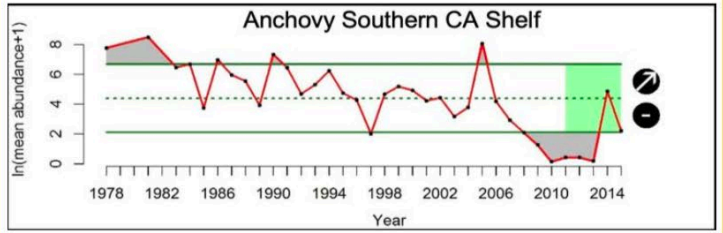

FULL SCREEN

Text in image: Off

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



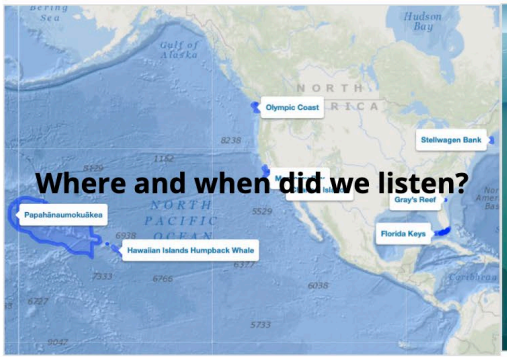



IOOS | Integrated Ocean Observing System

SanctSound | Questions | Sanctuaries | Sounds | Stories | Software | Data Portal

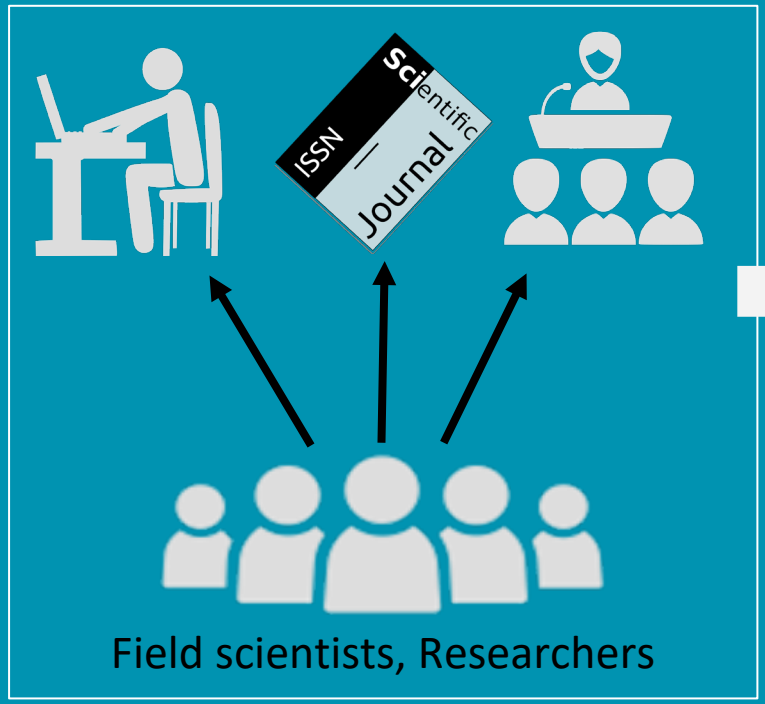
# Sanctuary Soundscape Monitoring Project (SanctSound)

## Exploring underwater sounds within U.S. national marine sanctuaries



# Observing Data to Ocean Management

## Knowledge producers




Questions

Time lines

Spatial scale

Availability

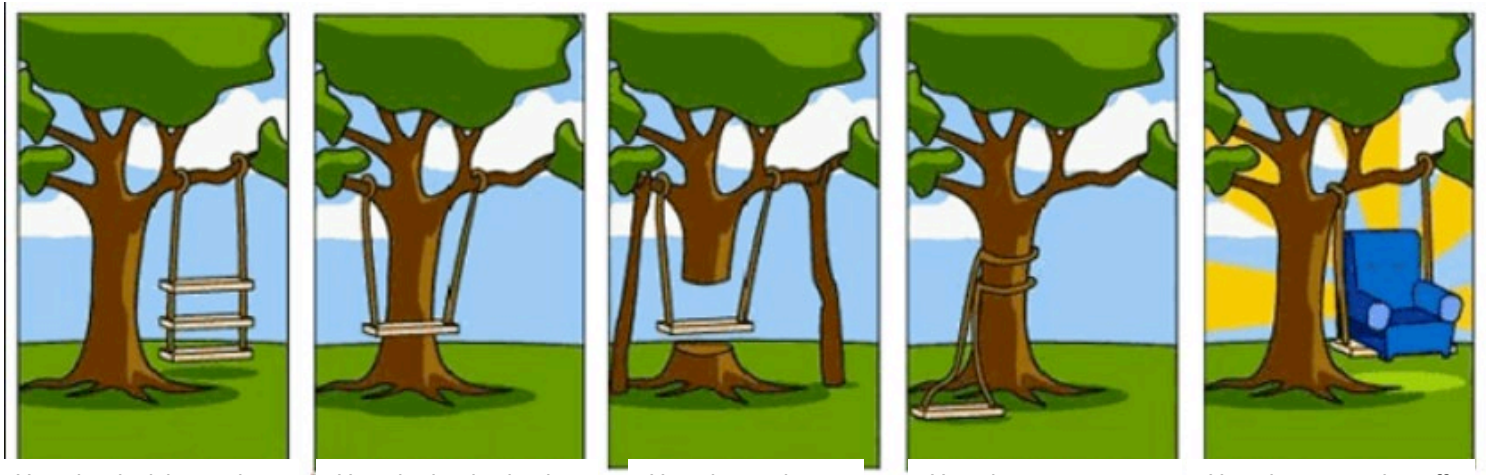
Interpretation

## Knowledge users

# IOOS Advisory Committee

**Opportunities for ongoing IOOS/Sanctuary Collaborations**

- Linking Sanctuary stakeholders with IOOS data
- Developing unique product co-development processes/expertise
- IOOS.US certified flexibility
- Measuring Sanctuary Condition Report critical parameters
- Addressing critical information needs
  - sound
  - animal movement
  - source and fate
  - climate/bio
  - wind energy
  - co-design teams
- Minimizing duplication of NOAA data collection/analyses



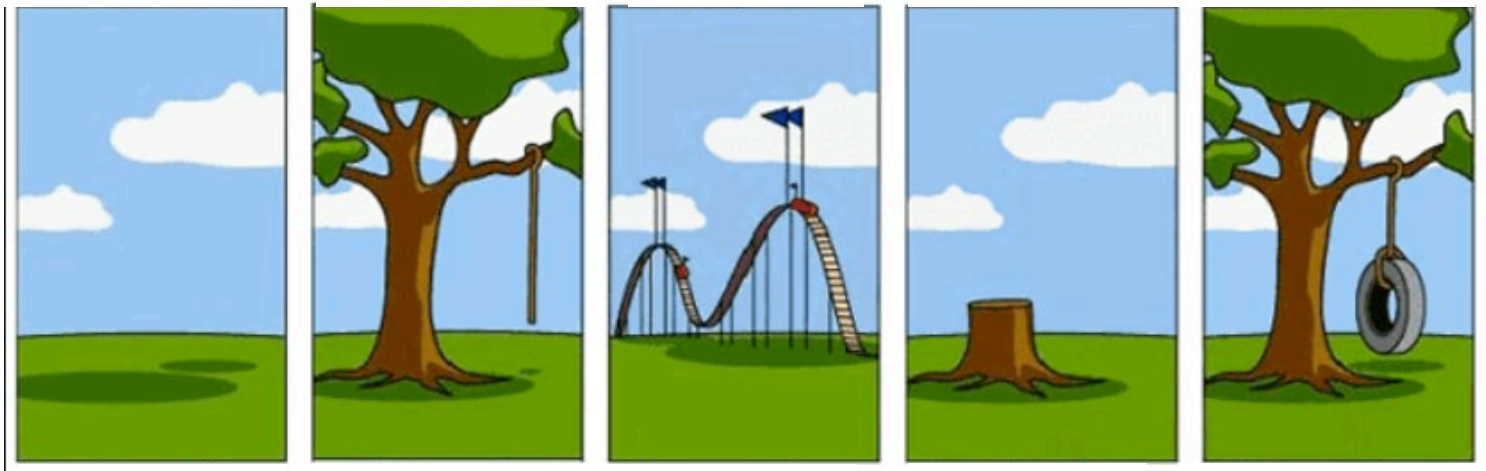
How the decision maker explained it

How the lead scientist understood it

How the engineer designed it

How the programmer wrote it

How the outreach staff described it



How the project was documented

What operations staff built

How contracting and billing progressed

How the helpdesk supported it

What the decision maker really needed