



NATIONAL MARINE
SANCTUARIES

In Pursuit of Science, Service, and Stewardship



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*NOAA's Office of National Marine Sanctuaries
Science and Heritage Division*

OUR CORE VALUES:

Who we are and how we work



COMMUNITY



CONSERVATION



COLLABORATION



RESPECT



CREATIVITY



ACCOUNTABILITY



TEAMWORK

OUR MANDATES

Resource Protection



Education and Outreach



Research and Monitoring



Community Engagement



NATIONAL MARINE SANCTUARY SYSTEM



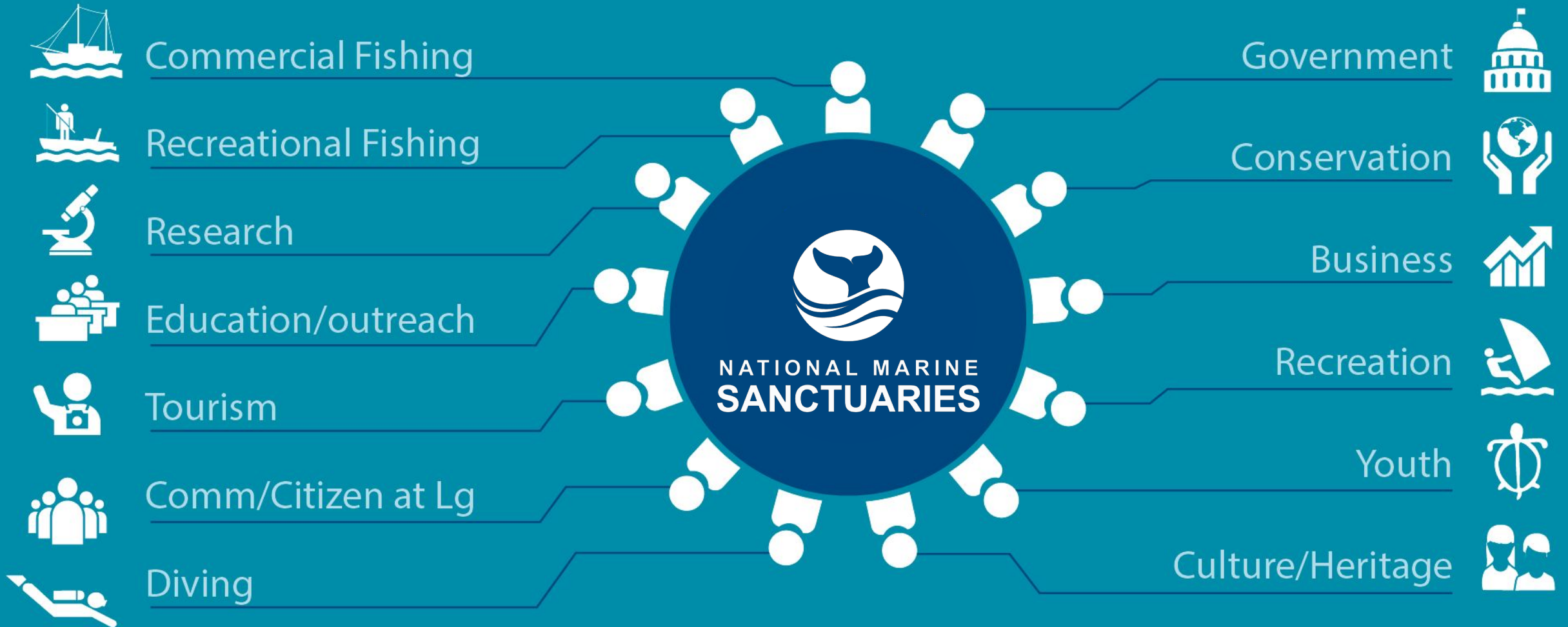
Places = People



- Resource management & policy makers
 - Federal, Tribal, state, local government
 - Advisory council working groups
 - NGOs, etc.
- Science
 - Academic, government, NGO research partners
 - Local, regional, national, international
- Education/Outreach
 - ONMS education team and partners
 - Teachers and students
 - **Engaged communities**



SANCTUARY ADVISORY COUNCILS



Reaching **FAR & WIDE**



- Over 44 million visitors
- 69,927 Students
- 18,588 Educators
- 6,502 Volunteers
- 110,958 News Stories
- 114,539,054 Social Media Followers

System-wide Issues of Concern



1. Climate change and ocean acidification
2. Soundscapes and noise impacts
3. Biodiversity loss
4. Vessel strikes and vessel traffic management
5. Water quality and contamination
6. Connectivity - tracking movement and site fidelity
7. Invasive species
8. Fishing impacts
9. Energy development

Sanctuary Condition Reports

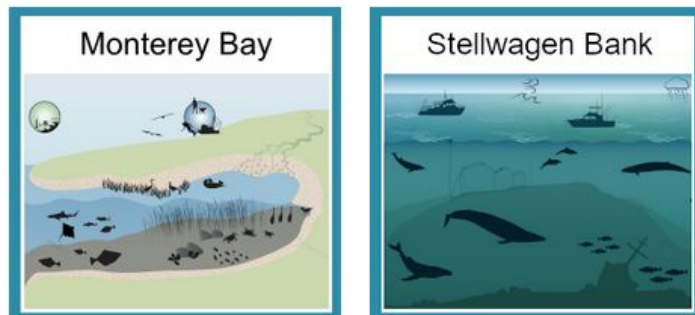
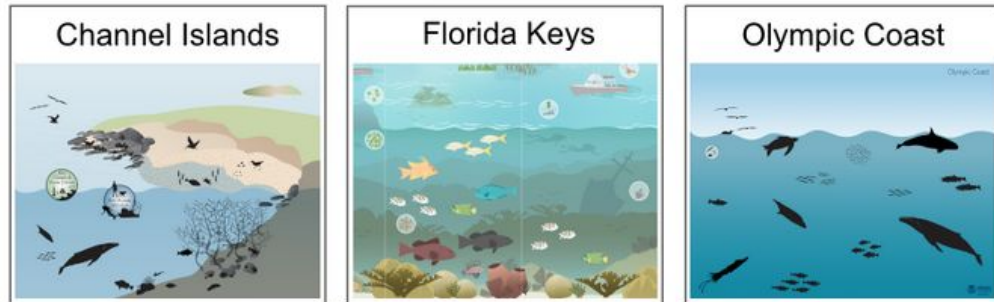


- Status and trends assessment (DPSEER) of pressures, resources, and ecosystem services across the system
- Context for community awareness, management plan review, policy and regulation, education programs, and accountability



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.



Coming soon

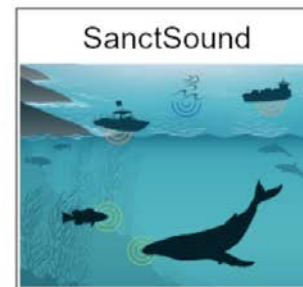
Coming soon

Sanctuary Watch

- *centralized location for tools used in Sanctuary management*
- *tools that connect to system-wide needs and priorities*
- *Public 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.

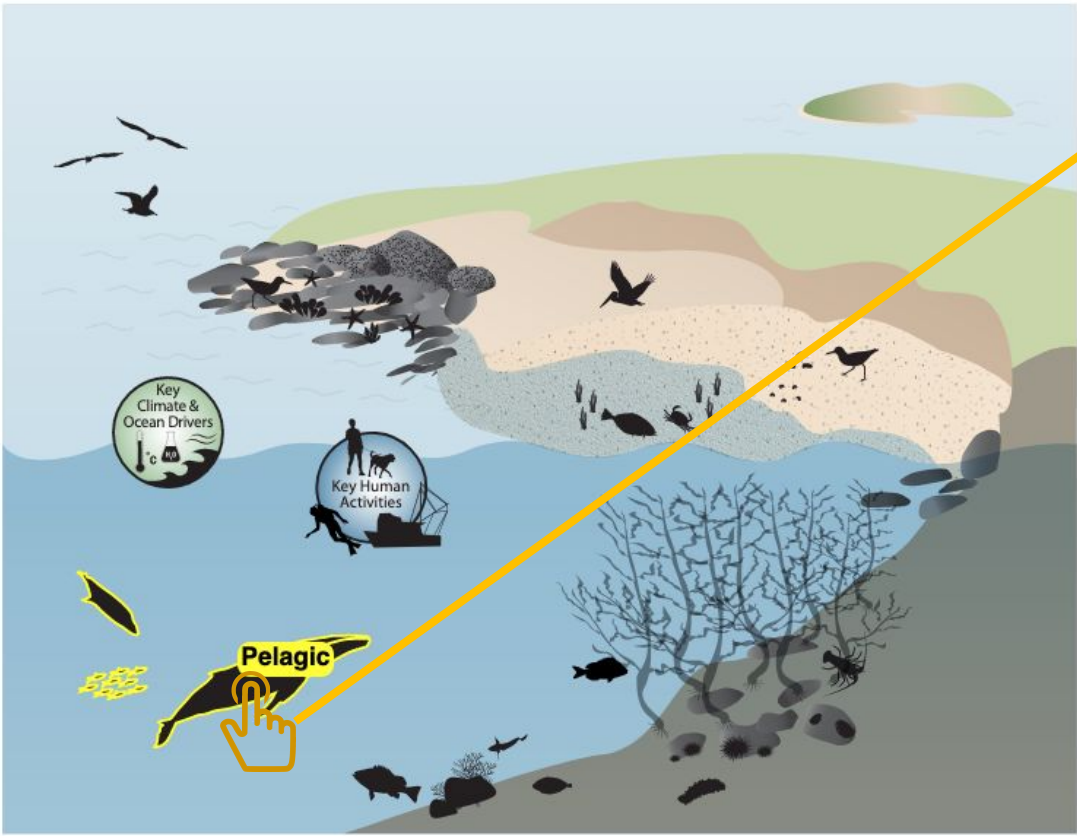


Web-enabled Condition Reporting (WebCR)

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

Overview

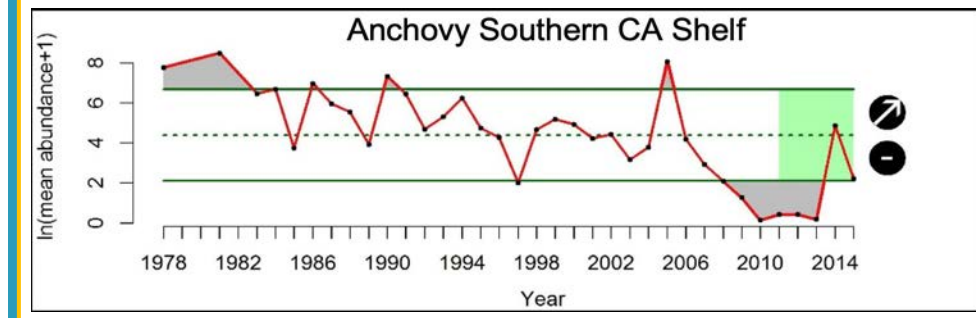
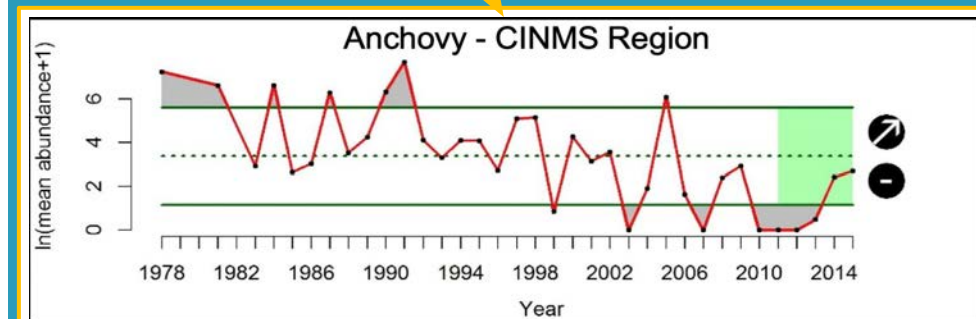
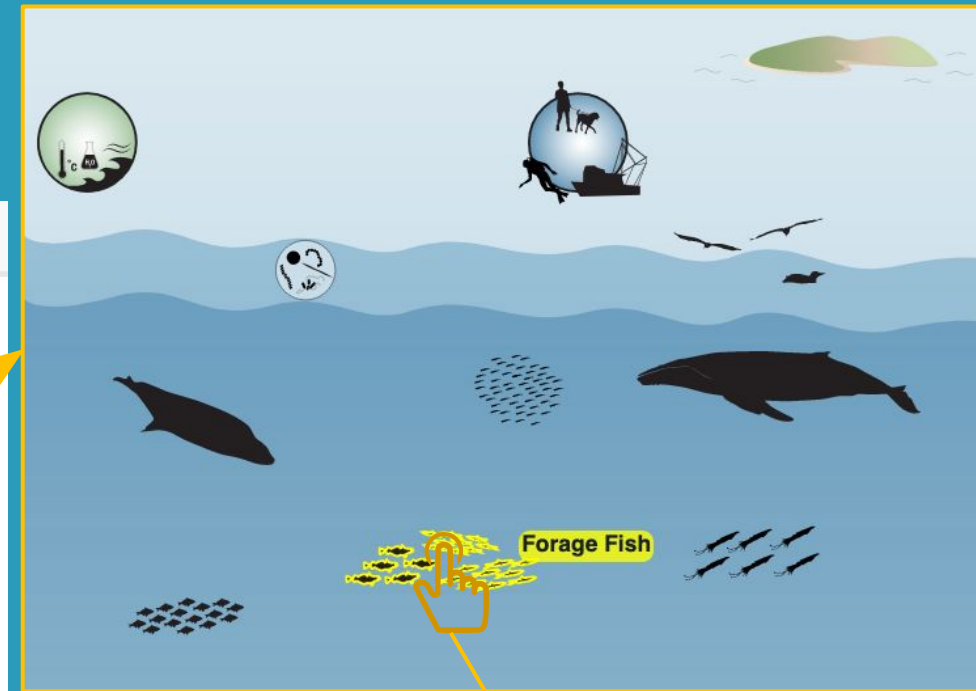
Please explore the interactive ecosystem for Channel Islands National Marine Sanctuary. Navigate by clicking on icons representing major habitats, species of interest, major climate and ocean drivers, and key human activities. These interactive icons and silhouettes access status and trend data, images,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

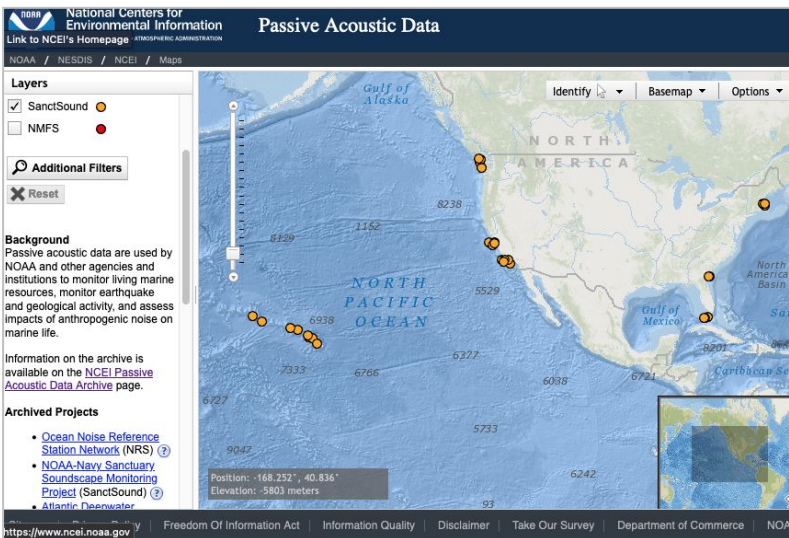


Targeted Products to Match Target Audience

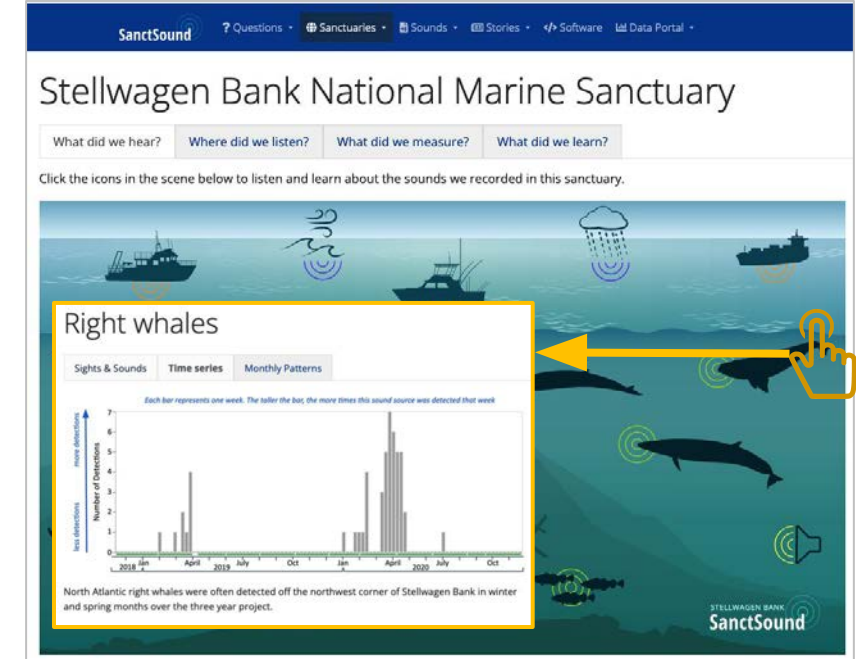
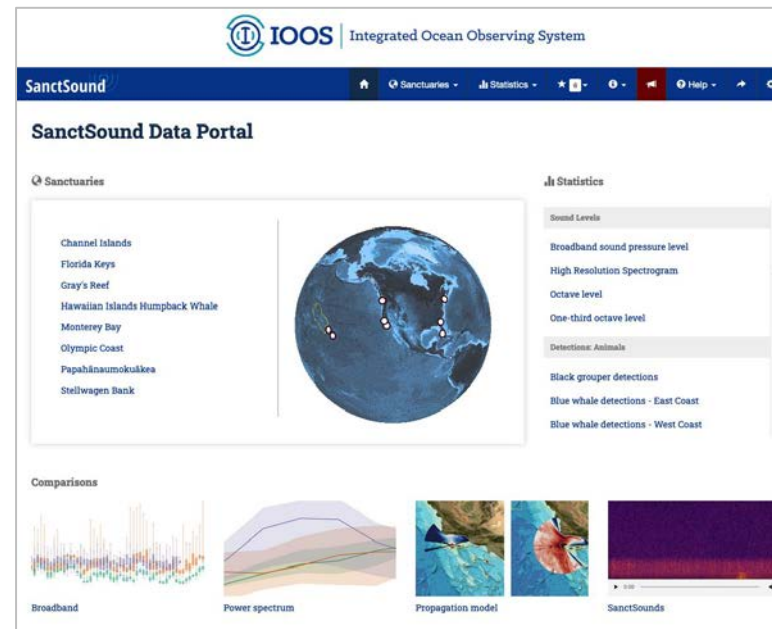
NCEI Raw Data Archive

SanctSound Data portal

SanctSound Web portal



& extracted standard measurements via ERDDAP



Level of Interpretation

Level of Technical expertise



Co-Design is Key: *Define the questions, scale, and use*

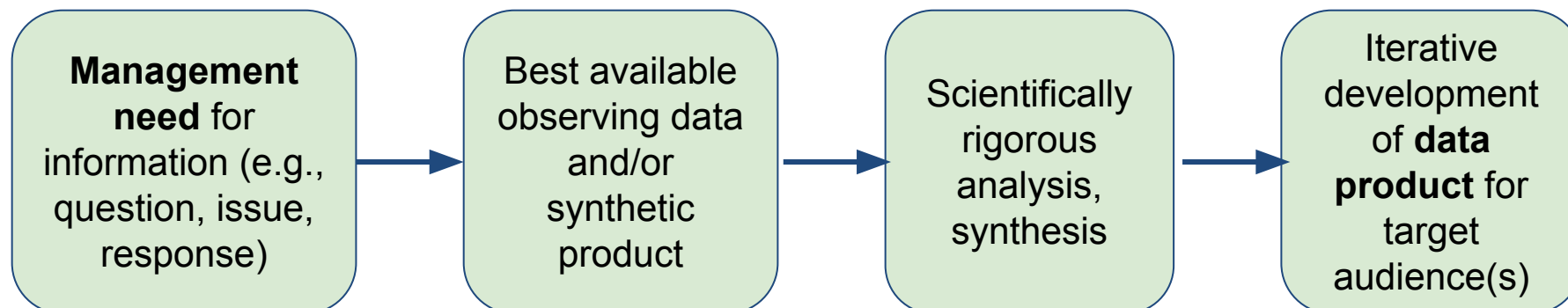
Start with the needs, identify the user, define the questions to answer

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

Co-design Perspectives

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

Process



Integration and Initiatives for Change



1. Community engagement in NOAA/ONMS processes
2. Advisory Council and external partner engagement
(*NGO, Tribal, Federal, State, NGO, Academic*)
3. Conservation policy and regulation
4. Consultation: Internal NOAA and external Federal programs
5. Increased protection: Expansion, designation, change
6. Governmental transparency

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Audience Engagement is an Art and Expertise

