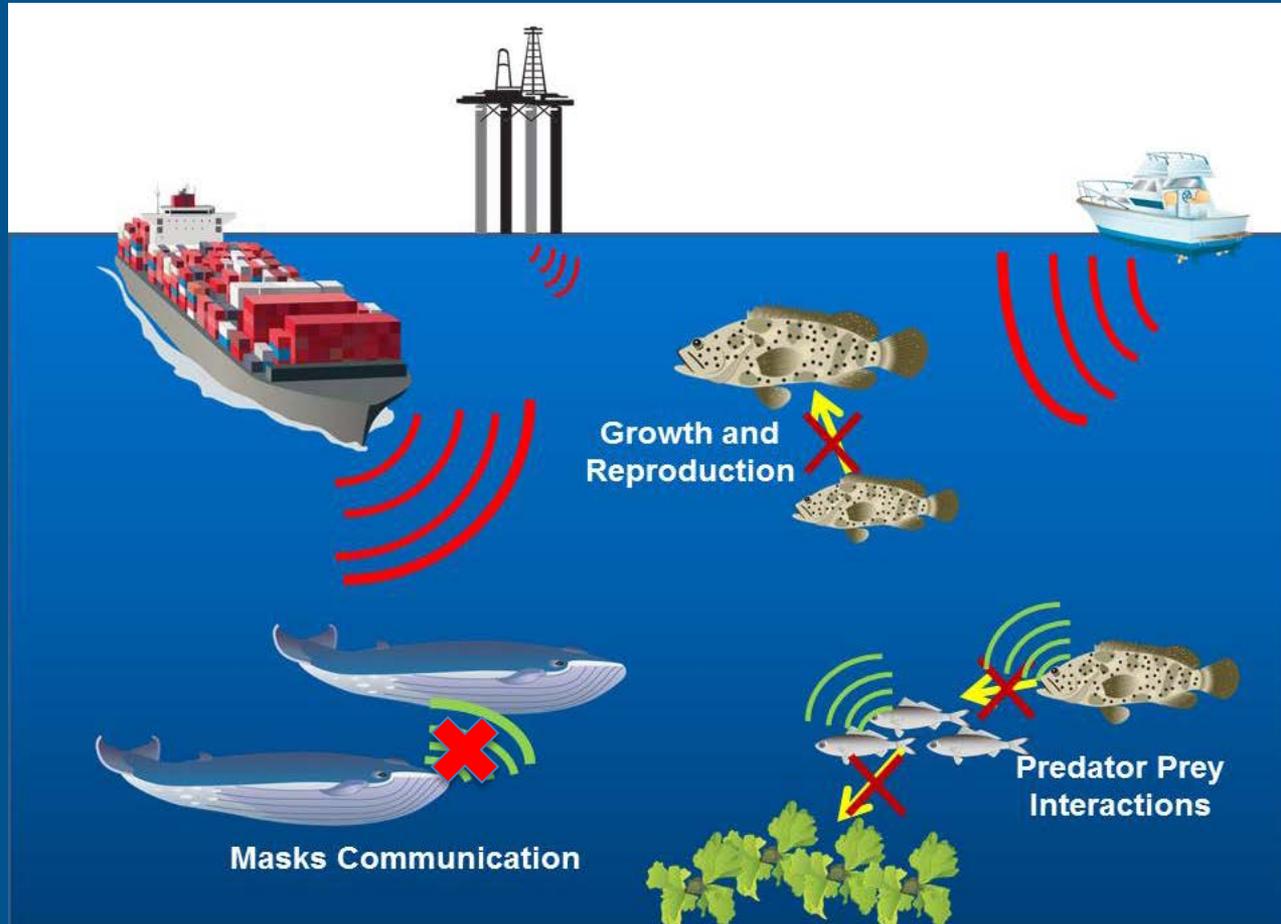


Ocean Noise impacts marine organisms in many ways



NOAA Ocean Noise Strategy



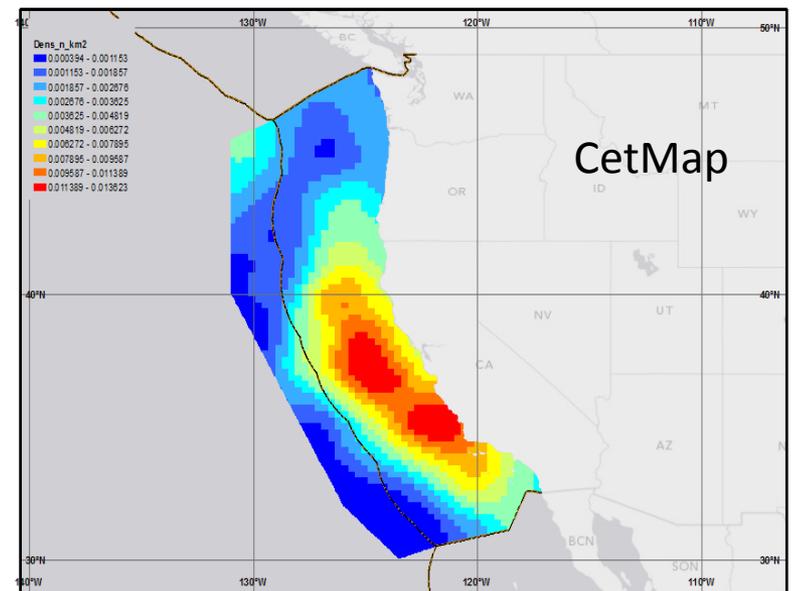
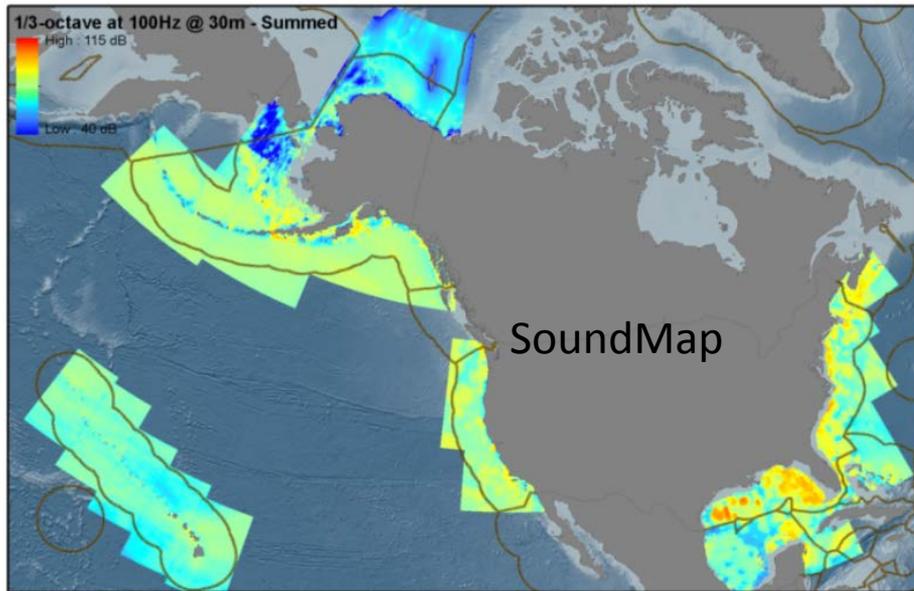
The goal is to articulate NOAA's vision for addressing ocean noise impacts over the next 10 years and guide science and management actions towards that vision.

- Phase I: "CetSound"
 - Cetacean and Underwater sound field mapping
cetsound.noaa.gov
- Phase II
 - NOAA Ocean Noise Strategy
 - NOAA Noise Reference Stations

Ocean Noise Strategy

Phase I (2010-2012)

- “CetSound”: Cetacean and Underwater Sound Field Mapping throughout US EEZ (cetsound.noaa.gov)



Ocean Noise Strategy

Phase II (2013-Present)

Timeline

- Kickoff meeting - Feb. 2013
- Draft Sent to ONS team - Nov. 2014
- Briefing for ONS team - Dec. 9, 2014
- Team members to circulate & compile comments by late Feb 2015

Content

- Executive Summary
- Chapter 1- The NOAA Ocean Noise Strategy and *Managed Species*
- Chapter 2- *Acoustic Habitat* and NOAA's Ocean Noise Strategy
- Chapter 3- Enhancing NOAA's Ability to Characterize *Aquatic Soundscapes*
- Chapter 4- NOAA Ocean Noise Strategy Implementation *Case Studies*
- Appendices

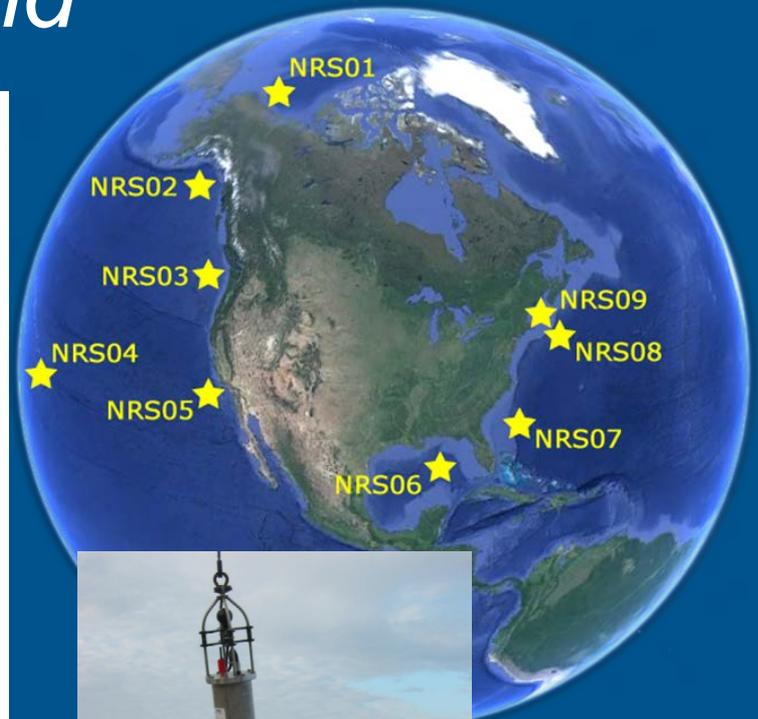
Outcomes of 2013 Kickoff mtg:

- Emergent Theme: **NOAA's management of ocean noise must be expanded to address the conservation of acoustic habitat**
- Ocean Noise Strategy Framework Outline and writing teams

Ocean Noise Strategy *in the field*

NOAA Noise Reference Stations

- Establishment of NOAA ‘branded’ long-term, standardized listening capacity across the agency
- 9 stations for 8 NOAA managed regions
- 3 in NMS (OC, CI, and SBNMS)
- Potential for more in NMS (CB, MB, FGB, and GRNMS)
- 2 year low frequency recordings
- Deep water and shallow water instrumentation

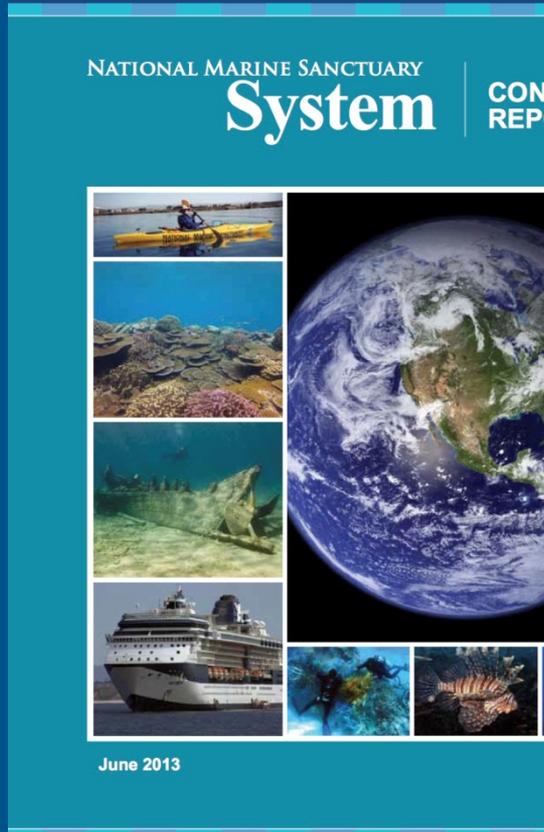


Noise and the ONMS Policy, Planning, and Conservation Science

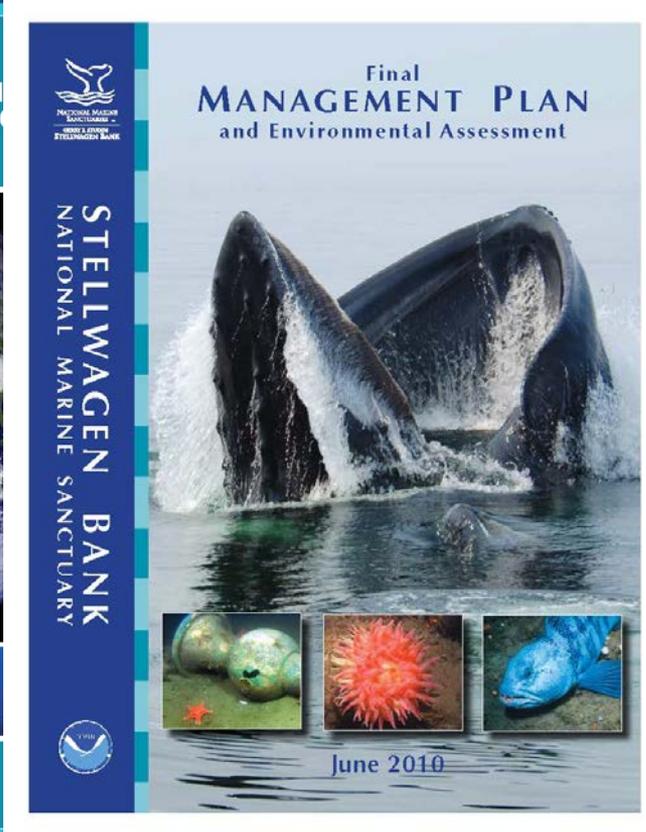
Office of National Marine Sanctuaries
National Oceanic and Atmospheric Administration



Science Needs Assessments



Condition Reports



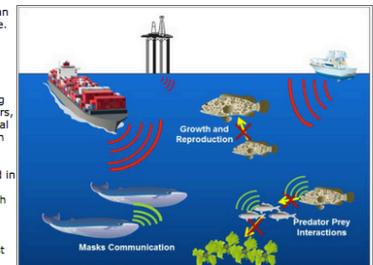
Management Plans



Issues: Acoustic (Noise) Impacts

[Acoustic \(Noise\) Impacts](#) | [How are the Sanctuaries Involved?](#) | [More Information](#)

Many human activities can have a direct effect on marine life. Documented behavioral changes in wildlife due to anthropogenic (human-caused) sources of underwater noise include commercial shipping (tugboats, freighters, tankers, smaller recreational vessels); sonars used in military operations; pile drivers and marine construction; seismic sources used in oil and gas exploration; and sonars and other acoustic sources used in research. Acoustic sources such as



important for the five West Coast National Marine Sanctuaries (NMS) in the United States, including Monterey Bay National Marine Sanctuary (MBNMS) and Stellwagen Bank National Marine Sanctuary (Stellwagen Bank NMS) in the northeast of North America is the increasing use of container-shipping routes in the world, and the Port of Oakland in San Francisco Bay is

Acoustic sources and impacts on marine life
(IAN :Integration & Application Network—University of Maryland)

Outreach

ONMS Noise Team

- Technical lead
 - Dr. Leila Hatch (SBNMS)
- ONMS Conservation Science Division, Headquarters
 - Mitchell Tartt
 - Maya Walton
 - Kathy Broughton
- Video
 - Paul Chetirkin
- Social Media/Outreach
 - Matt Dozier
- Site Representation (Regional Reps)
 - Becky Shortland (GRNMS)
 - Dani Lipski (CBNMS)
 - Karen Grimmer (MBNMS)
 - Jon Martinez (HIHWNMS)