



**Annual Meeting
April 13, 2017**

Questions for Panelists

1. What is your agency's overall purpose? What are the specific goals and objectives of your office/program/division?
2. What are your top 3-5 management priorities? What's most critical in the next 12-24 months?
3. What are your top 3-5 needs for scientific information? How do you plan to get these needs met?
4. Please describe your agency's competitive funding programs as well as opportunities for scientists to work with you directly to develop projects.
5. How are your budgets looking for the next 1-4 years?

Speaker Order

- Becky Smyth, NOAA Office for Coastal Management
- Jeremy Potter, BOEM
- Mike Weise, ONR
- Becky Ota, CDFW Marine Region
- Jenn Eckerle, OPC
- Sam Schuchat, SCC
- Jon Bishop, SWRCB

NOAA - Science, Service and Stewardship

- To understand and predict changes in climate, weather, oceans and coasts;
- To share that knowledge and information with others; and
- To conserve and manage coastal and marine ecosystems and resources.



NOAA Office for Coastal Management

Vision: The nation's coasts and oceans are ecologically, socially, and economically sound.

- **Healthy coastal ecosystems;**
- **Resilient coastal communities; and**
- **Vibrant and sustainable coastal economies**



NOAA Office for Coastal Management Top 3-5 Management Priorities

- **Adaptation Planning and Implementation**
- **Benefits of Natural Systems for Economic Resilience**
- **Habitat and Restoration Prioritization for Conservation**
- **Nature-Based Solutions for Community Resilience**



NOAA Office for Coastal Management

Top 3-5 Scientific Information Needs

- **Social Science – understanding vulnerability and community response**
- **Sediment – offshore movement, shoreline response**
- **Climate Change – Impacts and Solutions, especially ecological**
- **Integrated Monitoring – wetlands, water quality**

NOAA Funding Available

Directed Research and Collaborative Projects

- **National Ocean Service**
 - Office for Coastal Management
 - Science Collaborative
 - Coastal Resilience Grants
 - Integrated Ocean Observing System
 - National Centers for Coastal Ocean Science
- **Office of Oceanic and Atmospheric Research**
 - California and University of Southern California Sea Grants
 - Ocean Acidification Program
 - Climate Program Office
 - Cooperative Institutes



Purpose of the Bureau of Ocean Energy Management

- Mission – Manage development of U.S. Outer Continental Shelf energy and mineral resources in an environmentally and economically responsible way
- Studies Program Goal/Objectives – Provide critical environmental information to support BOEM science-based decision making
 - Identify information gaps; develop, fund, and manage studies; provide resulting information for consideration in assessments

BOEM's Top 3-5 Management Priorities

- Pacific Region includes areas from ~3-200nm offshore of California, Oregon, Washington, and Hawaii
- Near-Term Study Priorities
 - Advance offshore renewable energy
 - Prepare for potential decommissioning of oil and gas infrastructure
 - Ensure data and information are useful and available to agency, our partners, and the public

BOEM's Top 3-5 Scientific Information Needs

- Conventional energy – status/trends environmental conditions and human uses; potential environmental and socioeconomic impacts of decommissioning
- Renewable energy – baseline environmental conditions and human uses; potential environmental and socioeconomic impacts of renewable energy development
- Marine Minerals – Baseline environmental conditions and human uses; potential environmental and socioeconomic impacts of marine mining activities on the OCS

BOEM Funding Available for Directed Research and Collaborative Projects

- In 2017, providing ~\$4.5M in funding for new and continuing scientific studies in the Pacific Region.
- Project ideas developed both internally and externally.
- Maximizing chance of success requires directly addressing critical BOEM information needs.
- Contracts, Cooperative Agreements, Interagency Agreements. No grants.

Future Outlook

- No way to predict outyear federal budgets
- President proposed 12% reduction in FY18 to the Department of Interior overall
- More specific FY18 budget information is pending
- Always interested in identifying new opportunities for partnership



ONR Ocean Studies Overview

CSU COAST Annual Meeting

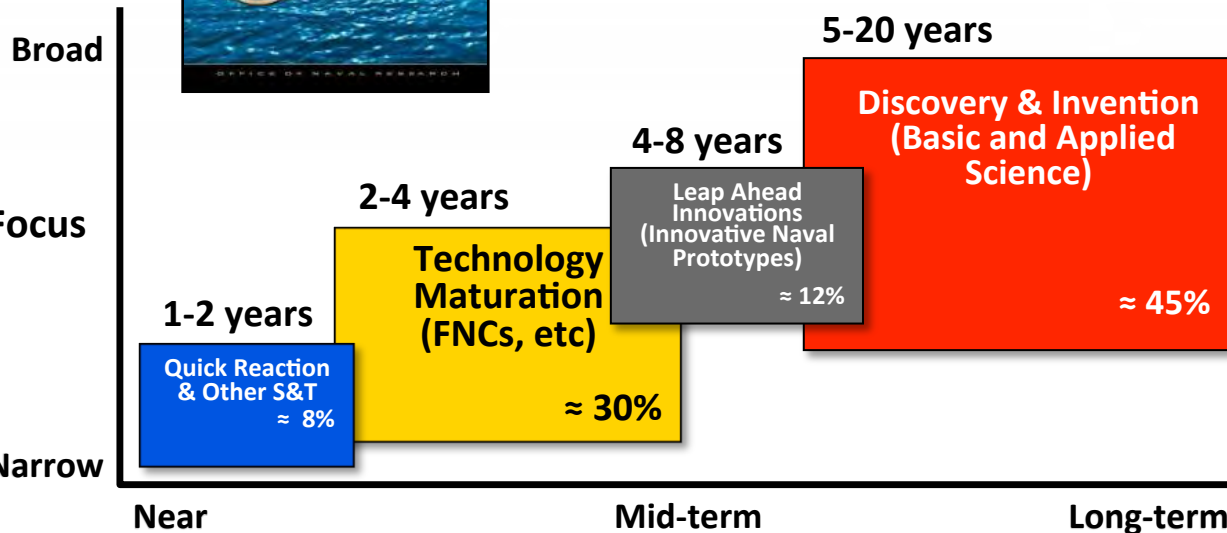
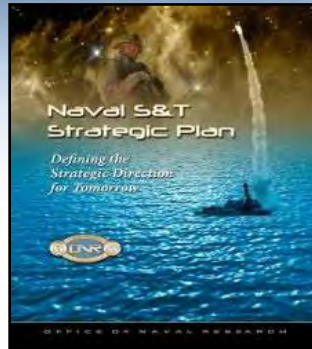
19 April 2017

Dr. Michael Weise
Marine Mammal & Biology Program
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The Office of Naval Research

The S&T Provider for the Navy *and* Marine Corps



Focus Areas

- Power and Energy
- **Operational Environments**
- Maritime Domain Awareness
- Asymmetric & Irregular Warfare
- Information Superiority and Communication
- Power Projection
- Assure Access and Hold at Risk
- Distributed Operations
- Naval Warfighter Performance
- Survivability and Self-Defense
- Platform Mobility
- Fleet/Force Sustainment
- Total Ownership Cost



Solid State Lights for Submarines



Advanced Materials

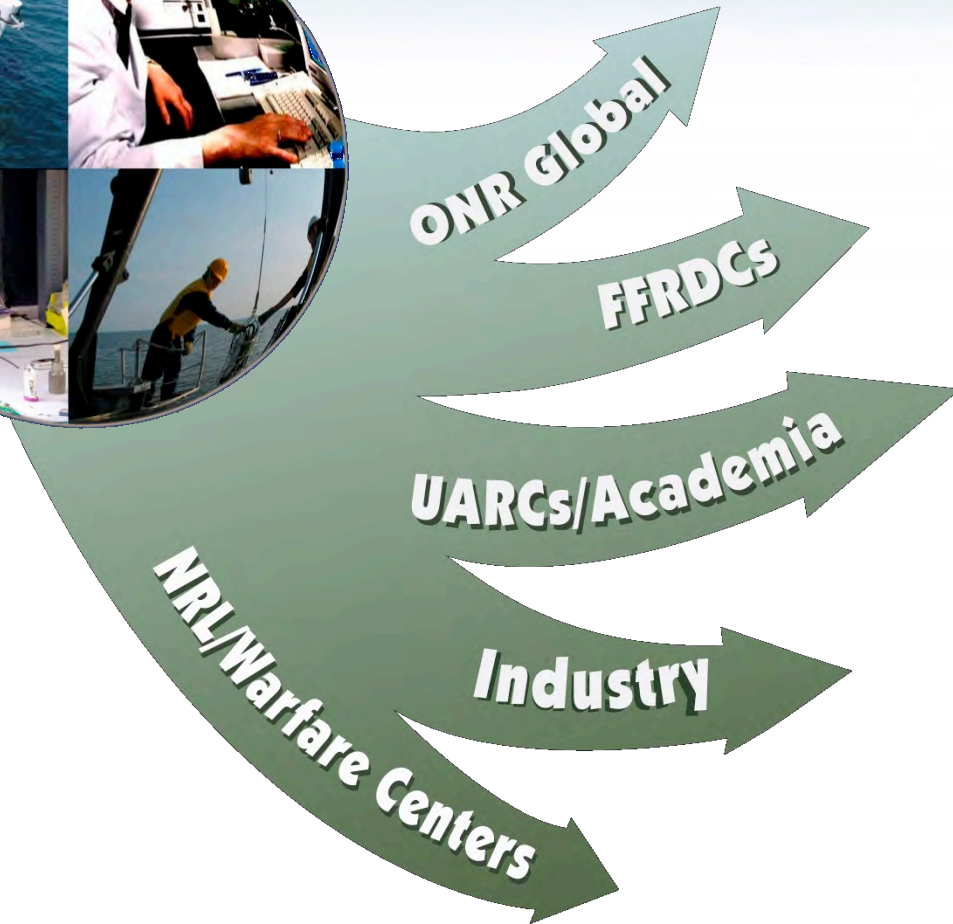


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ONR Execution



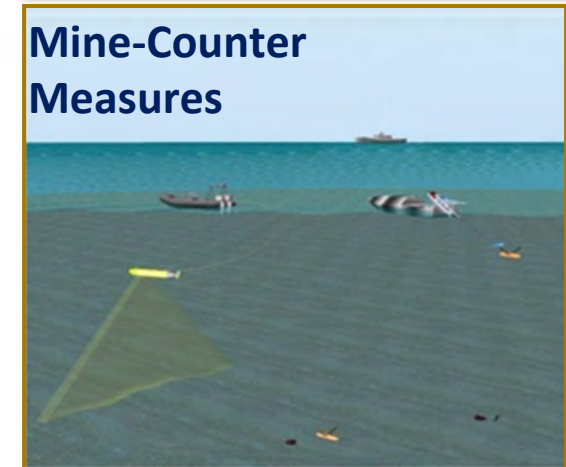
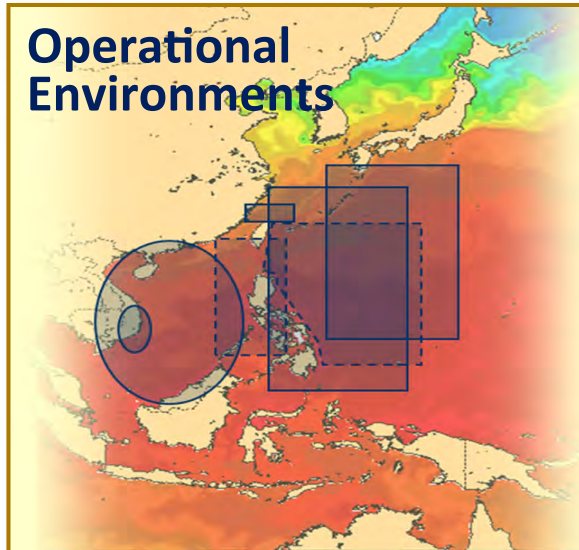
- 70 Countries
- 50 States
- 1,078 Companies
- 1,035 Universities & Nonprofit Entities
 - 3,340 principal investigators
 - 3,000 grad students



The Office of Naval Research

The S&T Provider for the Navy *and* Marine Corps

- **Code 32 - Ocean Battlespace Sensing Department**
 - Equip the Navy with technologies designed to observe, model and predict air, ocean and shore environments



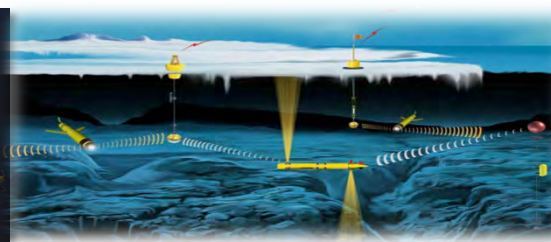
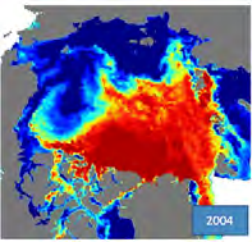


The Office of Naval Research

The S&T Provider for the Navy *and* Marine Corps

Division 322 - Ocean Battlespace Sensing

- Goal: Improving the Navy and Marine Corps' understanding of environmental evolution, the assimilation of data and the limits of predictability. It plans, fosters and encourages an extensive program of scientific inquiry, technological development, and development of the next generation of scientist in fields including:
 - Marine Mammal & Biology
 - Physical Oceanography
 - Arctic and Global Prediction
 - Ocean Acoustics
 - Marine Meteorology
 - Littoral Geosciences & Optics
 - Space Environment
 - National Ocean Partnership (NOPP)
 - University-National Oceanographic Laboratory System (UNOLS)





Code 32 – Program Goals

Basic and Early Applied Research Programs

- **Marine Mammals & Biology** - Discover and understand the effects of sound on marine mammals
- **Arctic and Global Prediction** - Better understand and predict this environment at a variety of time and space scales.
- **Physical Oceanography** – Investigate submesoscale ocean processes, air-sea interaction and new ocean observing technologies.
- **Ocean Acoustics** – Explore the generation, propagation, and scattering of narrowband and broadband acoustic waves in the temporally and spatially varying ocean environment.



Code 32 – Science Needs

- **Marine Mammals & Biology**
 - Improve monitoring capabilities over current methods by developing new and existing technology such as passive acoustics, IR, and others
 - Investigate the patterns and causes of variability in the distribution and abundance of marine mammals over space and time
 - Better understand and characterize the behavioral, physiological (hearing and stress response), and potentially population-level consequences of sound exposure on marine life
- **Arctic and Global Prediction**
 - Improving understanding of the physical environment and key processes in the Arctic Ocean
 - Investigating new technologies, e.g., sensors, platforms, navigation and communications, that may enable a sustained observational capability in the challenging Arctic environment
 - Developing integrated ocean-ice-wave-atmosphere models for improved Arctic prediction at a variety of time scales



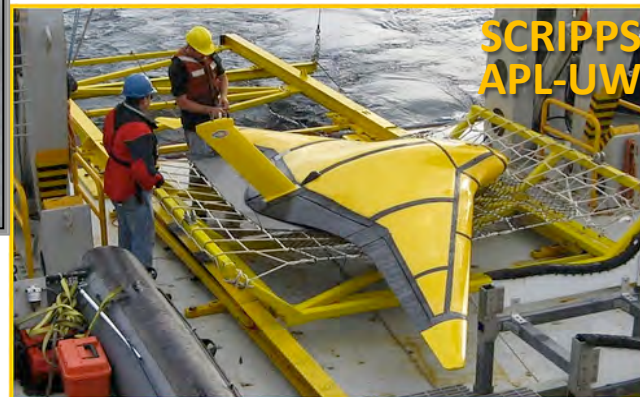
Funding Opportunities

- **322 Programs**
 - Pre-Proposals due in spring/summer for following FY (soft deadlines)
 - Proposals due in fall/winter for the current FY
 - Grants for 6.1/6.2 funds and Contracts for 6.3/6.4 funds
- **MURI – Multi-University Research Initiative**
 - Topic based driven by Program Managers
- **DURIP – Defense University Research Instrumentation Program**
- **YIP - Young Investigator Program (faculty position win last 5 yrs)**
- **PEACSE – Presidential Early Career Award for Scientist and Engineers**
- **DRI - Departmental Research Initiatives**
- **BRC – Basic Research Challenge**



Thank you

<https://www.onr.navy.mil/Science-Technology/Departments/Code-32>



R/V Neil Armstrong (AGOR-27)
Woods Hole Oceanographic Institute
Delivered: 2015



Department of Fish and Wildlife's Purpose

To manage California's diverse fish, wildlife, and plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public.



Management Priorities

- Marine Life Management Act (MLMA) Master Plan Amendment
- Fisheries Dependent Data review and electronic reporting
- Integration of Marine Protected Areas (MPAs) and Fisheries Management
- Adaptive Management of MPA Network



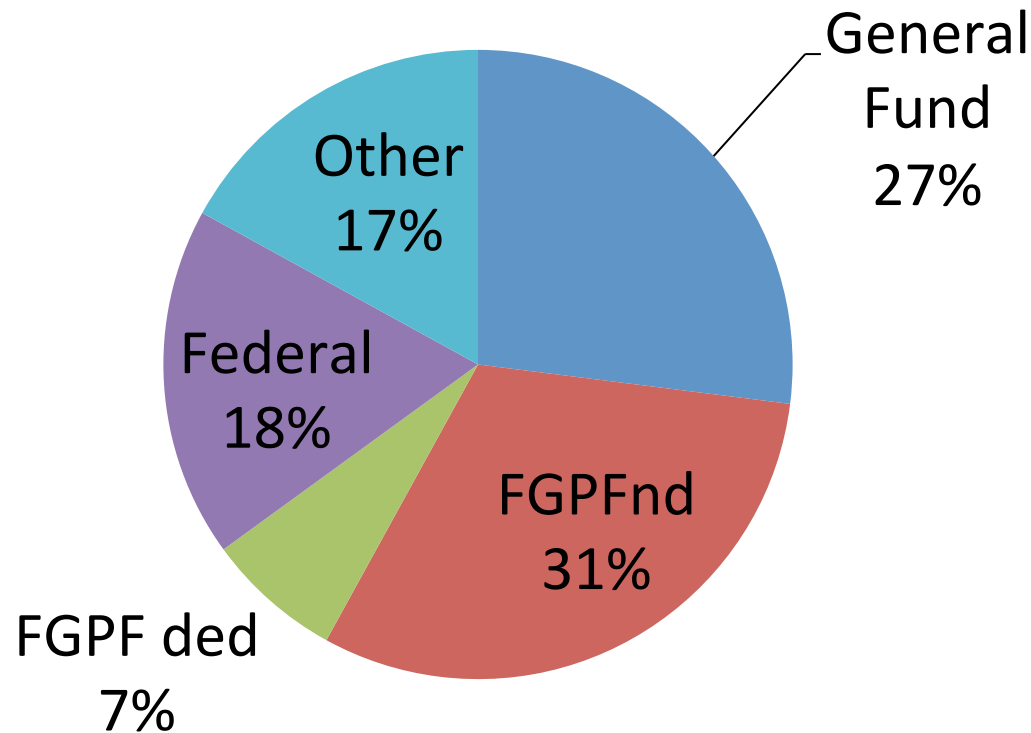
Top 3-5 Scientific Information Needs

- MLMA/MLPA Integration
- ROV Data Integration
- Statewide MPA Monitoring Action Plan



Funding Available for Directed Research and Collaborative Projects

Marine Region Funding





Future Budget Outlook

- How are your budgets looking the next 1-4 years?
 - ***Imbalance in Fish and Game Preservation Fund***
- How is the state affected by changes at the federal level?
 - ***Good Question!***

Ocean Protection Council's Purpose

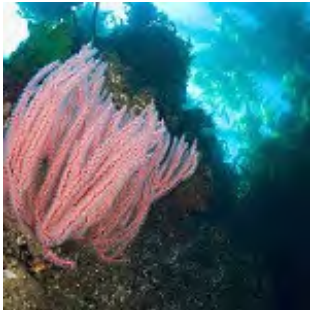
Ensuring healthy, resilient, and productive ocean and coastal ecosystems in California.

Ocean Protection Council's Priorities

Climate Change



Marine Protected Areas



Marine Pollution



Sustainable Fisheries



Emerging Uses



Ocean Protection Council's Science Needs

OPC will continue to work collaboratively with agency, academic and stakeholder partners to address scientific needs that inform policy and management decisions in our priority programs.

Ocean Protection Council's Funding Opportunities

**Proposition 84:
Protection of Beaches, Bays and Coastal Waters**

**Proposition 1:
Protecting Rivers, Lakes, Streams, Coastal
Waters and Watersheds**

Thank You

**Jenn Eckerle
Ocean Protection Council**

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CA State Coastal Conservancy Purpose

- *The Coastal Conservancy acts with others to preserve, protect, and restore the resources of the California coast, ocean, and the San Francisco Bay Area.*
- *Specific goals and objectives may be found in our strategic plan at www.sccc.ca.gov.*

Coastal Conservancy's Top 3-5 Management Priorities

Most of the funding SCC has now is from Proposition 1, therefore most of our priorities are derived from that:

- Water Sustainability
- Anadromous Fish Recovery
- Wetland Restoration
- Urban Greening

Coastal Conservancy's Top 3 Scientific Information Needs

- Coastal Conservancy needs 3 general kinds of scientific information:
 - Project specific design and monitoring, e.g. mercury methylation in South SF Bay;
 - Programmatic, e.g. how and where should we restore wetlands in Coastal So. Cal given SLR;
 - Occasional and special, e.g. "How much carbon has been sequestered by our land acquisitions in the past 20 years?".

Coastal Conservancy Funding for Science

- No funding set aside for science. ☹️
- Large projects and programs (South Bay Salt Ponds, So. Cal Wetland Recovery Project) have dedicated science panels.
- Individual projects are mostly funded via RFP, see our website for more information.
- Calling or meeting with us ahead of time is always a good idea.

Future Outlook

- How are your budgets looking for the next 1-4 years?
 - Historically much of our funding has been from state resource bonds. The future of these is always uncertain.
 - The Coastal Conservancy gets significant and variable amounts of funding from the Federal Government each year both for particular projects and the agency itself.

State Water Board's Purpose

- *To preserve, enhance, and restore the quality of California's water resources and drinking water for the protection of the environment, public health, and all beneficial uses, and to ensure proper water resource allocation and efficient use, for the benefit of present and future generations.*

State Water Board's Top 3-5 Management Priorities

- Ocean Acidification & Hypoxia
- Trash Policy Implementation
- Desalination Project Review
- Once-Through Cooling Policy Implementation

State Water Board's Top 3-5 Scientific Information Needs

- Sources & control of ocean acidification
- Harmful algal blooms
- Constituents of emerging concern
 - Bioanalytical tool development
- Rapid bacteria assessment methods

State Water Board Funding Available for Directed Research and Collaborative Projects

- Proposition 1 Recycled Water Research Funds
- Once-through Cooling Policy Interim Mitigation Payments

Future Outlook

- Surface Water Ambient Monitoring Program
- Beach Monitoring Program
- Planning & Standards
- NPDES Permitting

Mash-Up

- GOAL: Small group discussions with agency representatives
- 1:15-3:30 pm: groups visit each of the seven agency tables
 - 15 minutes at each table
 - 3 minutes between tables
 - Leave question cards at tables
- Free to jump in and out of rotation
 - Take Mash-Up Rotation Schedule with you!