



**Gulf of Mexico Marine Mammal
Research and Monitoring**

Environmental Studies Program
Science for Informed Decisions

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Gulf of Mexico Marine Mammal Research and Monitoring

Our Mission

To provide the information needed to incorporate environmental safeguards into offshore energy and mineral exploration and development.





Gulf of Mexico Marine Mammal Research and Monitoring

Obtaining Energy and Preserving the Living Ocean

BOEM's managerial decisions based upon
best available scientific information

Impact Assessments; Leases; Permits;
Rules for Operators
Consultations

Compliance with NEPA, MMPA, ESA, State Laws
Mitigation





Gulf of Mexico Marine Mammal Research and Monitoring

What We Protect

Marine Mammals & Sea Turtles

Birds and Bats

Fish

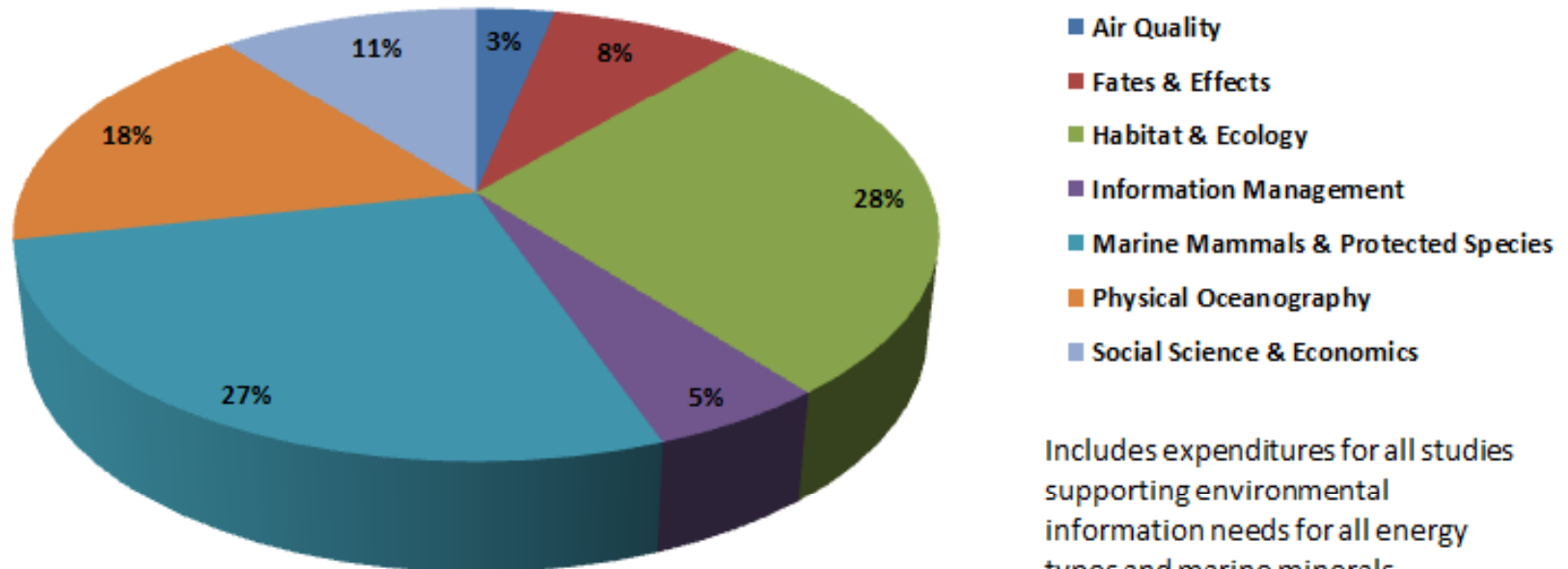
Corals and other Benthic Organisms

More Generally:

marine, coastal and human environments
biodiversity and the quality of air and water
resources that native peoples depend on



**Environmental Studies Program Funds by Discipline
FY 2008-2014 Cumulative**



Specific Issues on Mammals

Noise acute and chronic physiological effects; behavioral effects

Behavior migration; diving; reproduction; calving; nursing

Food stocks of lower trophic level organisms; ecosystem dynamics

Toxins exposure to and effects of spilled oil and other contaminants

Ship Strikes occurrence; high risk areas; methods for avoidance



Natural vs. Anthropogenic Variability

With the onset of significant climate change and the other complexities of marine environments, how can we tell the difference?

Long-term, Wide-area Monitoring

and

Reanalysis of “Historical” Data





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Partnering

Sharing: Costs; Data; Expertise; and Experience

Marine Mammal Commission
Office of Naval Research
Navy's Living Marine Resources Program
NOAA
NSF
Offshore Energy Industry
Academia
Consulting Companies



Questions ?



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