

Offshore Sand and the Endangered Species Act (ESA)

Dr. William Y. Brown, Chief Environmental Officer
Bureau of Ocean Energy Management





BOEM manages development of the nation's offshore resources in an environmentally and economically responsible way.

BSEE develops and enforces safety and environmental regulations.



Both bureaus are in the Department of the Interior

The Chief Environmental Officer reports to the Director of BOEM and supervises the bureau's environmental studies and environmental assessment divisions.

Outer Continental Shelf Lands Act (OSCLA)

- Defines the outer continental shelf (OCS) as the area beyond state waters to 200 nautical miles offshore (or more in some cases).
- State waters end at 3 nautical miles offshore (or 9 nautical miles for Texas and the west coast of Florida)
- BOEM is authorized to lease OCS blocks for development of oil, gas, renewable energy, and non-energy minerals, subject to environmental safeguards.



- Oil and Gas Program (O&G)
- Renewable Energy Program (OREP)
- Marine Minerals Program (MMP)



OCSLA generally requires competitive bidding, but there are exceptions for renewable energy and non-energy minerals. Particularly, OCSLA was amended in 1994 to provide:

“The Secretary may negotiate with any person an agreement for the use of Outer Continental Shelf sand, gravel and shell resources—

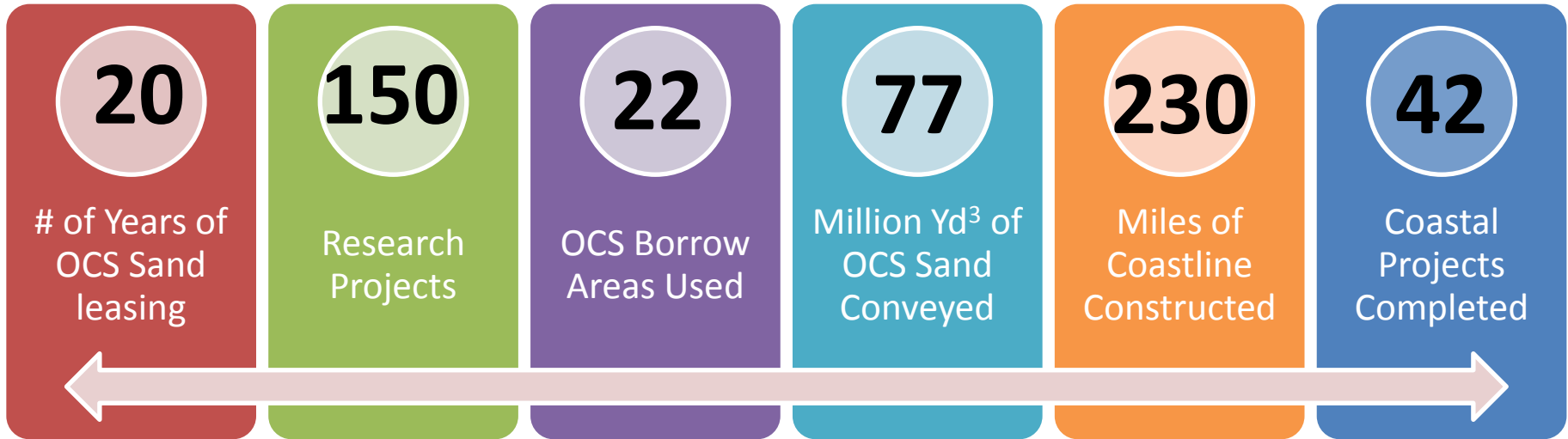
(i) for use in a program of, or project for, shore protection, beach restoration, or coastal wetlands restoration undertaken by a Federal, State, or local government agency; or

(ii) for use in a construction project that is funded in whole or in part by or authorized by the Federal Government.”



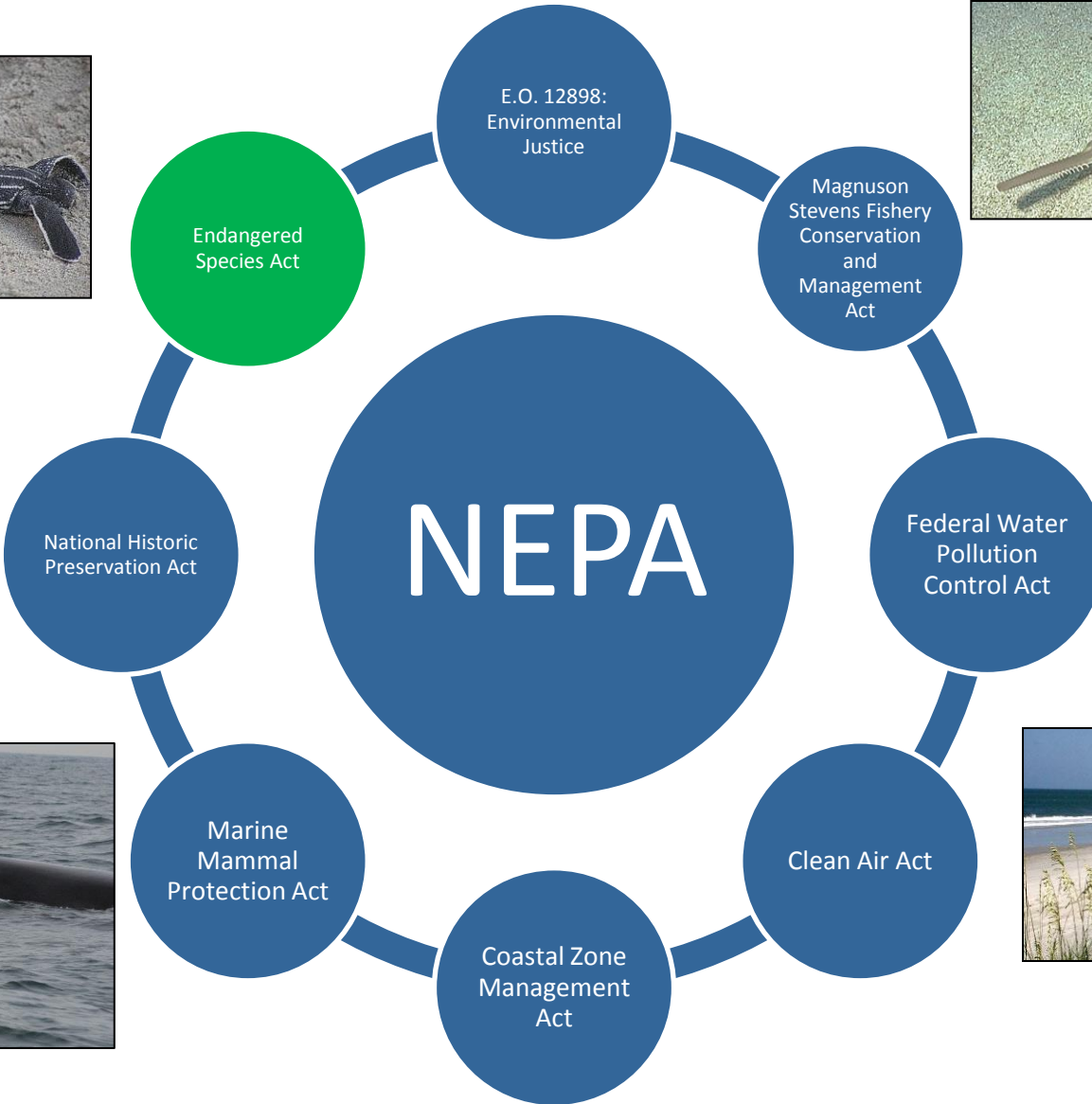
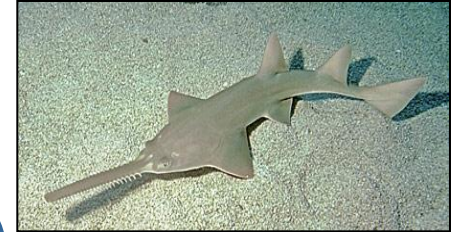
- Provides policy framework for the development of marine mineral resources on the OCS
- Collects and provides geologic and environmental information, developed through partnerships
- Identifies and makes available OCS sand deposits suitable for beach nourishment and wetlands restoration projects
- Conducts studies to fill in data gaps and inform environmental review

Two Decades of OCS Sand Stewardship



Pelican Island, Louisiana before and after



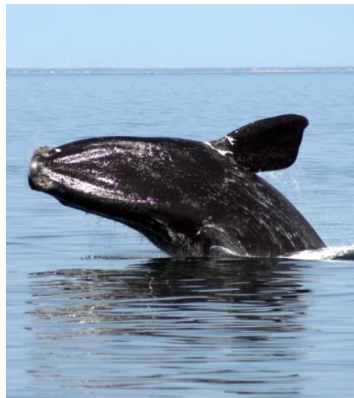


Each NEPA analysis examines areas and environmental impacts:

- **Physical**
 - Water movement and sediment transport
 - Water quality
 - Air quality
 - Noise
- **Biological**
 - Bottom invertebrate and fish habitat
 - Fish and other organisms in the water
 - Endangered and threatened species
- **Socioeconomic**
 - Archeological and cultural resources
 - Recreation and tourism
 - Fisheries



- ESA directs all Federal agencies to protect threatened and endangered species
- BOEM, along with the US Army Corps of Engineers (USACE), consults with the National Marine Fisheries Service (NMFS) or US Fish and Wildlife Service (FWS) on all beach renourishment projects that may affect endangered or threatened species.
- NMFS and FWS jurisdiction is typically split by species
- The Loggerhead sea turtle is an exception (NMFS-swimming, FWS-nesting)
- Gulf Regional Biological Opinion (GRBO) and South Atlantic Regional Biological Opinion: <http://el.erdc.usace.army.mil/seaturtles/refs-bo.cfm>

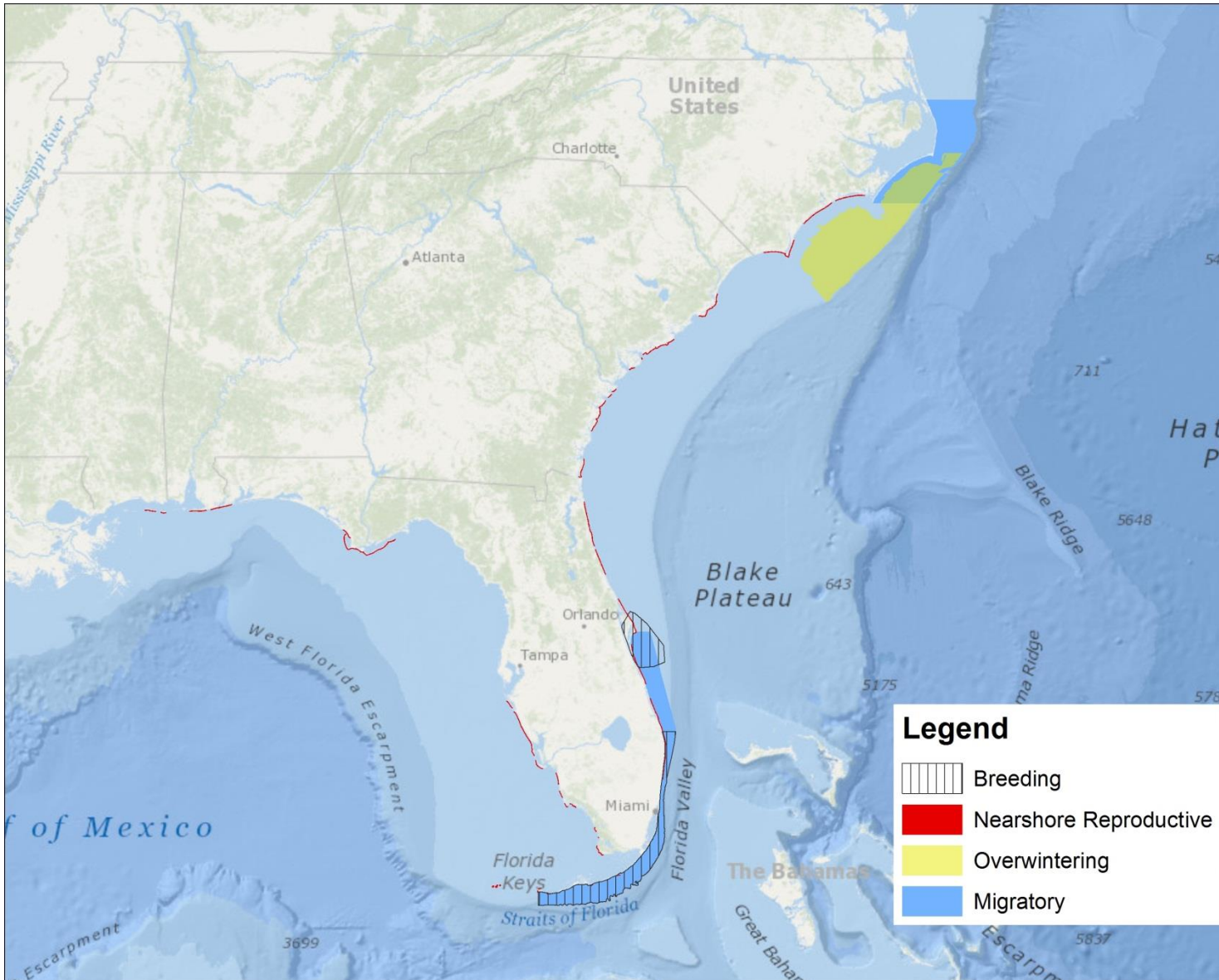


- North Atlantic right whale (*Eubalaena glacialis*)
- Fin whale (*Balaenoptera physalus*)
- Humpback whale (*Megaptera novaeangliae*)
- West Indian manatee (*Trichechus manatus latirostris*)
- Atlantic Sturgeon (*Acipenser oxyrinchus oxyrinchus*)
- Smalltooth sawfish (*Pristis pectinata*)
- Gulf Sturgeon (*Acipenser oxyrinchus desotoi*)
- Acropora corals: Staghorn (*Acropora cervicornis*) and Elkhorn (*Acropora palmata*)
- Loggerhead sea turtle (listed population) (*Caretta caretta*)
- Kemp's ridley sea turtle (*Lepidochelys kempi*)
- Leatherback sea turtle (*Dermochelys coriacea*)
- Green sea turtle (*Chelonia mydas*)
- Hawksbill sea turtle (*Eretmochelys imbricata*)



- North Atlantic right whale
<http://www.nmfs.noaa.gov/pr/pdfs/fr/fr59-28805.pdf>
- Loggerhead sea turtle (Proposed)
<https://www.federalregister.gov/articles/2013/07/18/2013-17204/endangered-and-threatened-species-designation-of-critical-habitat-for-the-northwest-atlantic-ocean>
- Smalltooth sawfish
<http://www.nmfs.noaa.gov/pr/pdfs/fr/fr74-45353.pdf>
- Elkhorn coral
<http://www.nmfs.noaa.gov/pr/pdfs/fr/fr73-72210.pdf>
- Staghorn coral
<http://www.nmfs.noaa.gov/pr/pdfs/fr/fr73-72210.pdf>





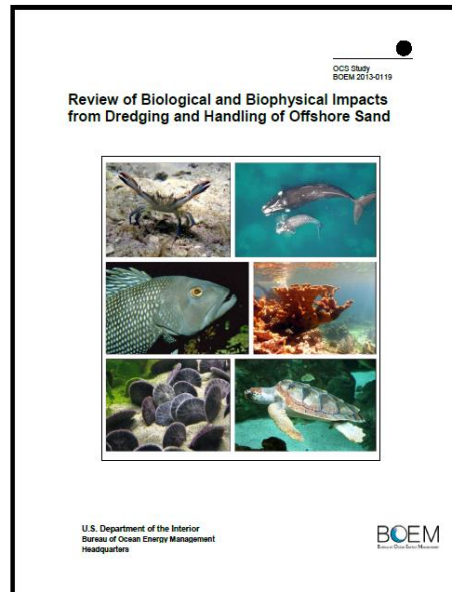
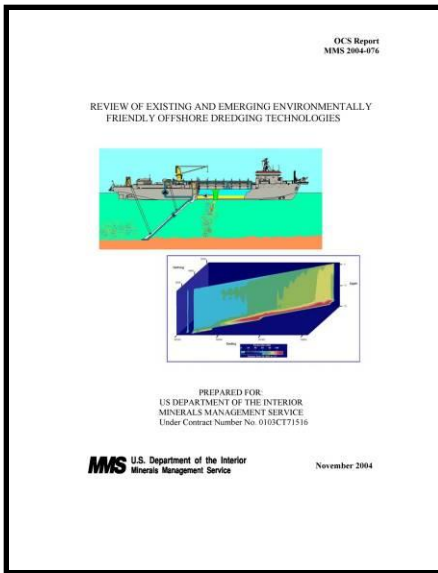
- **NMFS**

- Published Proposed Rule - July 18, 2013
- Closed - September 16, 2013
- Reopened and closed - November 29, 2013
- Final Rule expected - July 2014
- <https://www.federalregister.gov/articles/2013/07/18/2013-17204/endangered-and-threatened-species-designation-of-critical-habitat-for-the-northwest-atlantic-ocean>

- **FWS**

- Published Proposed Rule - March 22, 2013
- Closed - May 24, 2013
- Reopened and closed - September 16, 2013
- Final Rule expected – July 2014
- <https://www.federalregister.gov/articles/2013/07/18/2013-17205/endangered-and-threatened-wildlife-and-plants-designation-of-critical-habitat-for-the-northwest>





- BOEM Environmental Studies Program
 - 9 ongoing programmatic studies
 - \$15.2 million spent on MMP Environmental Studies
 - Hurricane Sandy funds - \$3.1 million for Environmental Studies
- Research identifies mitigation and minimization measures information gaps warranting future research



- Concern: Current required hopper dredging windows are based on water temperature, are conservative, and may increase costs unnecessarily.
- Proposed Study: Assess the risk of turtle incidental take in OCS borrow areas to inform mitigation that minimizes take while avoiding any unnecessary time/area closures.



Blair Witherington,
Florida Fish and Wildlife Conservation Commission



Federal Agencies

National Park Service
Fish and Wildlife Service
US Geological Survey
US Army Corps Engineers
National Ocean Atmospheric
Administration
National Marine Fishery Service

U.S. Navy
US Coast Guard
Council on Environmental Quality
US Department of Agriculture
Environmental Protection Agency
Department of Transportation
Marine Mammal Council

Nation Ocean Service
National Aeronautics and Space
Administration
U.S. Air Force

States

Alabama
California
Delaware
Florida
Louisiana
Maine

Maryland
Massachusetts
Mississippi
New Hampshire
New Jersey
New York
North Carolina
South Carolina
Texas
Virginia

Universities/Educators

Coastal Carolina University
University of North Carolina, Wilmington
Memorial University of Newfoundland
University of Florida
Mote Marine Laboratory
Florida Institute of Oceanography

Louisiana State University
Virginia Institute of Marine Science
Old Dominion University
University of New Orleans

Public/Industry

ASBPA
FSBPA
Dredge Contractor's of America
Surfrider Foundation
Great Lakes Dredge and Dock Company
Weeks Marine

Marine Tech
RPI, Inc.
Normandeau Associates, Inc.
Woods Hole Group, Inc.
W.F. Baird & Associates Ltd.
Applied Marine Sciences, Inc.

Emu Ltd.
Impact Assessment, Inc.
Versar, Inc.
Continental Shelf Associates, Inc.
Dial Cordy

Marine Minerals Program email:

MarineMinerals@boem.gov

Marine Minerals Program website:

<http://www.boem.gov/Non-Energy-Minerals/Marine-Minerals-Program.aspx>