

Offshore Energy and Marine Minerals Gulf of Mexico

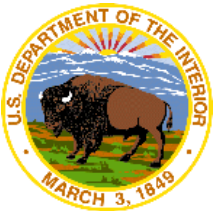


Mike Celata
Regional Director
Gulf of Mexico Region

November 9, 2016



- Bureau of Ocean Energy Management
 - Overview
 - Program updates
- Gulf of Mexico Opportunities
 - Conventional Energy
 - Focus on Deepwater
 - Marine Minerals
 - Renewable Energy



BOEM

Role:
Resource science and management

Mission:
To manage development of the U.S. Outer Continental Shelf energy and mineral resources in an environmentally and economically responsible way.

Key functions:

- Leasing & Plans
- Environment studies
- NEPA analysis
- Economic and reserves analysis
- Geologic risk analysis
- Renewables development
- Financial Risk Analysis

BSEE

Role:
Regulatory enforcement

Mission:
Enforce safety, environment, and conservation compliance on the Nation's offshore resources

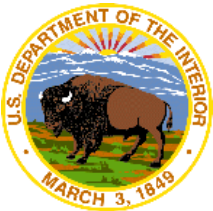
Key functions:

- Permitting
- Environmental compliance
- Conservation compliance
- Engineering standards and regulations
- Oil spill response planning
- Inspections
- Enforcement and investigations



*“(T)he outer Continental Shelf is a **vital national resource reserve held by the Federal Government for the public, which should be made available for expeditious and orderly development, subject to environmental safeguards, in a manner which is consistent with the maintenance of competition and other national needs**”*

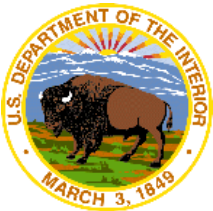
**Outer Continental Shelf Lands Act
Sec 3(3)**



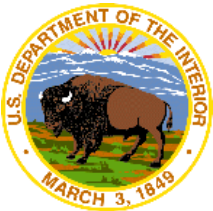
- **Transboundary Agreement:** Framework for joint development of cross-boundary reservoirs.
- **Environmental Assessment:** U.S. committed to further work to build upon safety, environmental regulation, and joint science programs in the Gulf.
- **Environmental Studies:** The first comprehensive, Gulfwide protected species surveys are being implemented through the new “GoMMAPPS” Program.



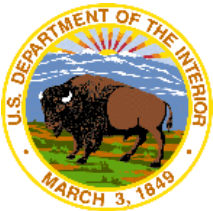
- **Background –**
 - Current 30 CFR Part 550, Subparts B and C were written by USGS in the early 1980s.
 - Changing technology and improved understanding of air quality warrant updated guidance for reporting emissions.
- **Purpose – To revise 30 CFR part 550 subparts B and C**
 - To create regulations applicable to all areas under BOEM’s jurisdiction, including the Chukchi and Beaufort Seas in Alaska.
 - To update terminology, standards, and sources.
 - Important Changes to Emission Exemption Thresholds (EETs)
 - EETs to be evaluated using distance to State Seaward Boundary
 - New EETs will consider shorter pollutant averaging periods
- **Status –**
 - Publish December 2016; Effective March 2017.
- **Coordination – USEPA, FWS, BSEE**



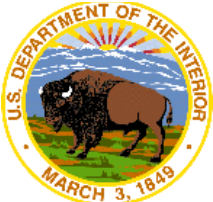
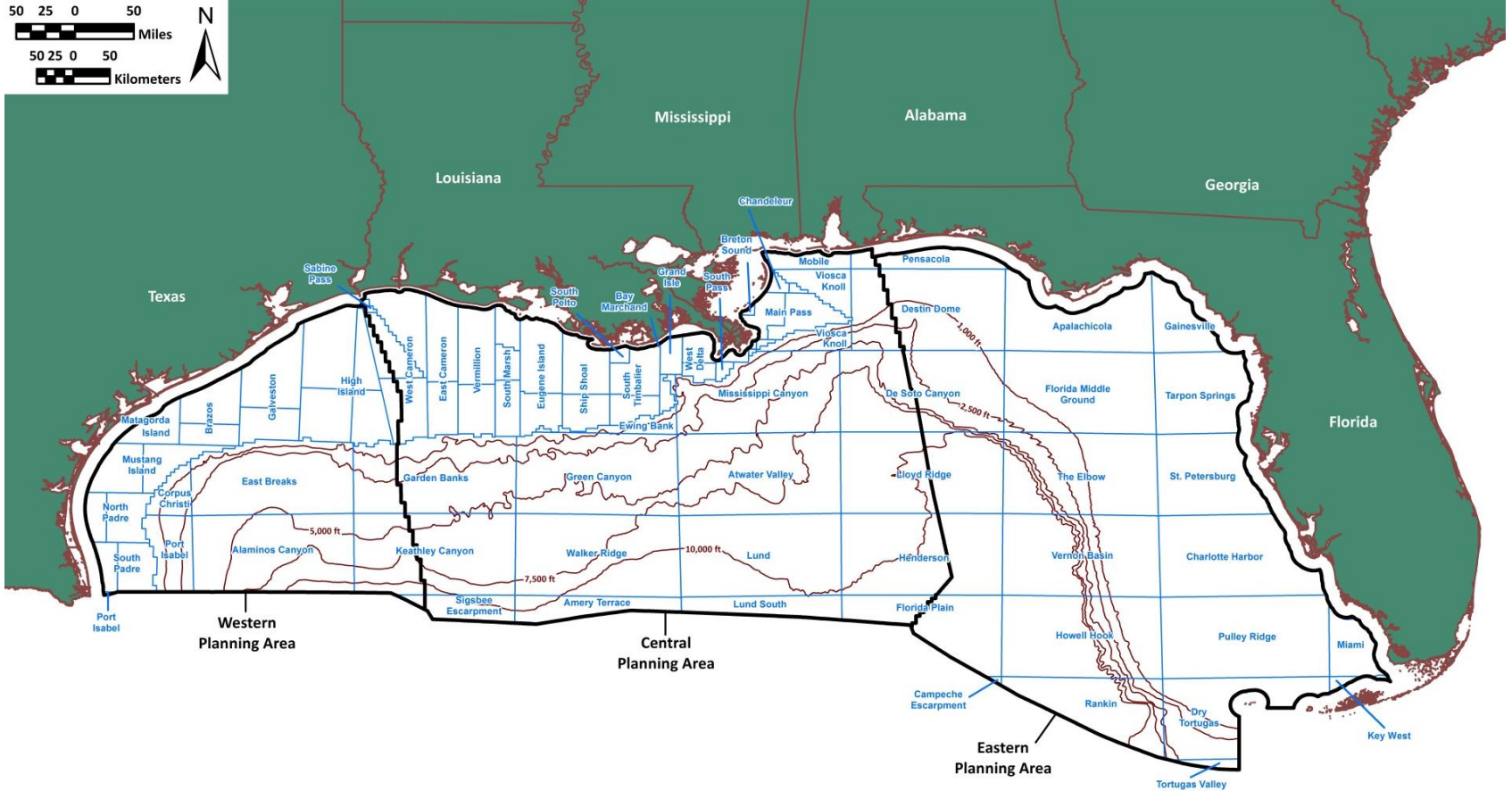
- NTL Issue Date – July 14, 2016
- General Notification Letter, July 14, 2016
- NTL Effective Date – September 12, 2016
- Self-Insurance Letter, September 12, 2016
- Proposal Letter, October 12, 2016
- Order Letter, November 14, 2016 - Within 10 calendar days of the order, written notification needs to be provided to BOEM if a company wishes to submit a tailored plan
- Within 60 calendar days of the order additional security must be provided for Sole Liability
- Within 120 calendar days of the order, additional security must be provided for the remaining properties and/or submit a tailored financial plan.
- Tailored Plan Approval or Denial, September 11, 2017

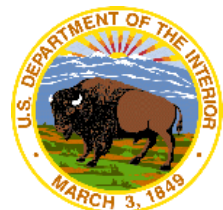
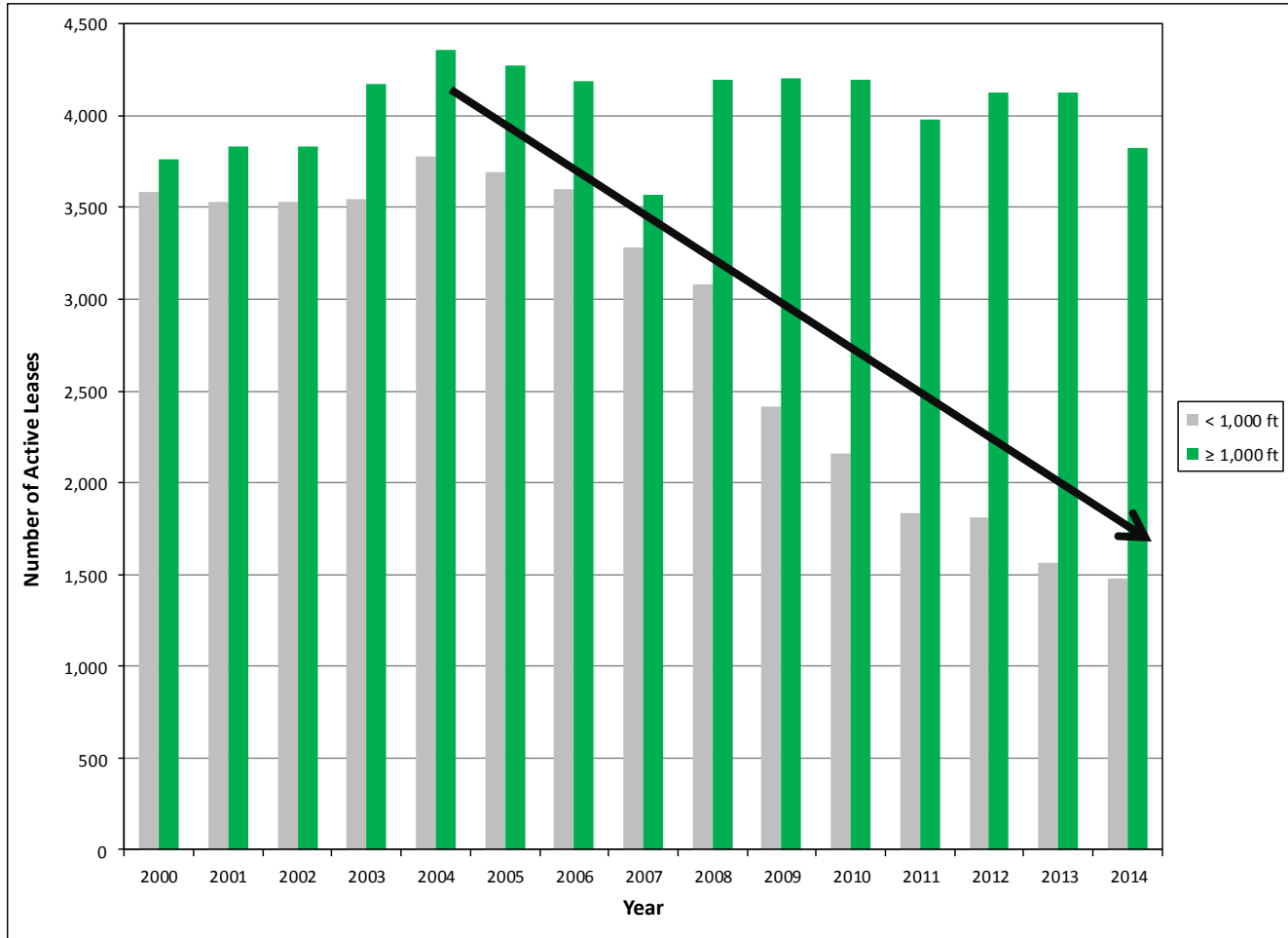


The Gulf of Mexico is a proven petroleum basin that still offers significant opportunities for exploration and development.

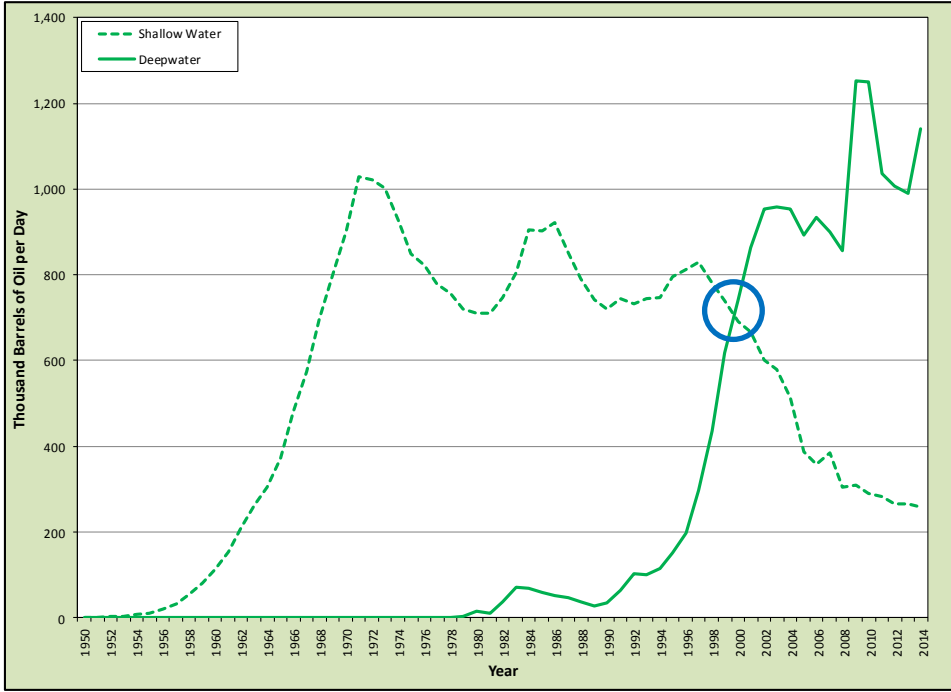


Gulf of Mexico U.S. Federal Jurisdiction

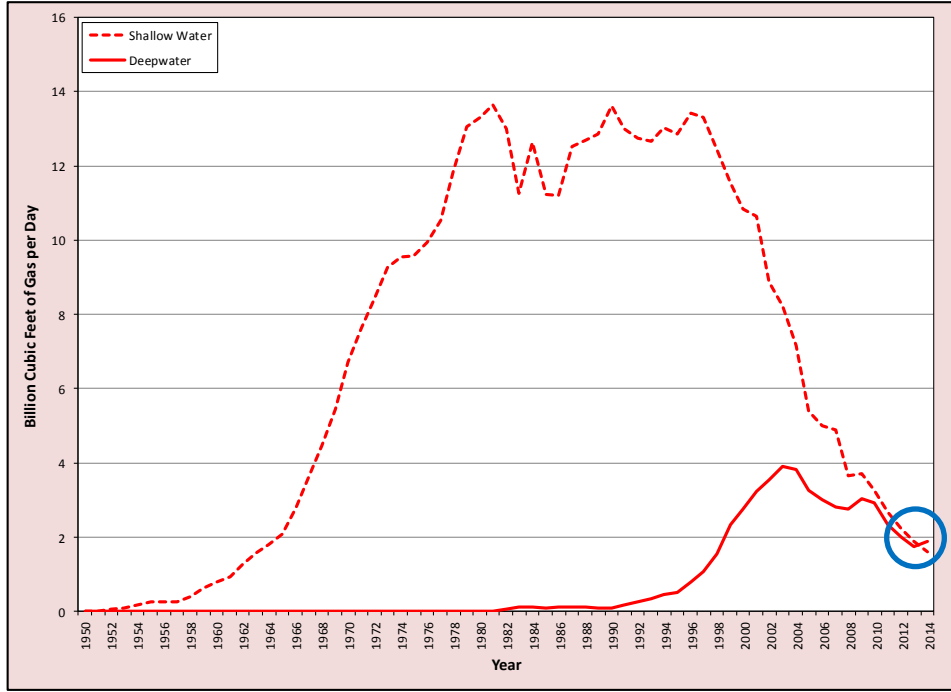




Comparison of Annual Production Volumes from Deep and Shallow Water



OIL

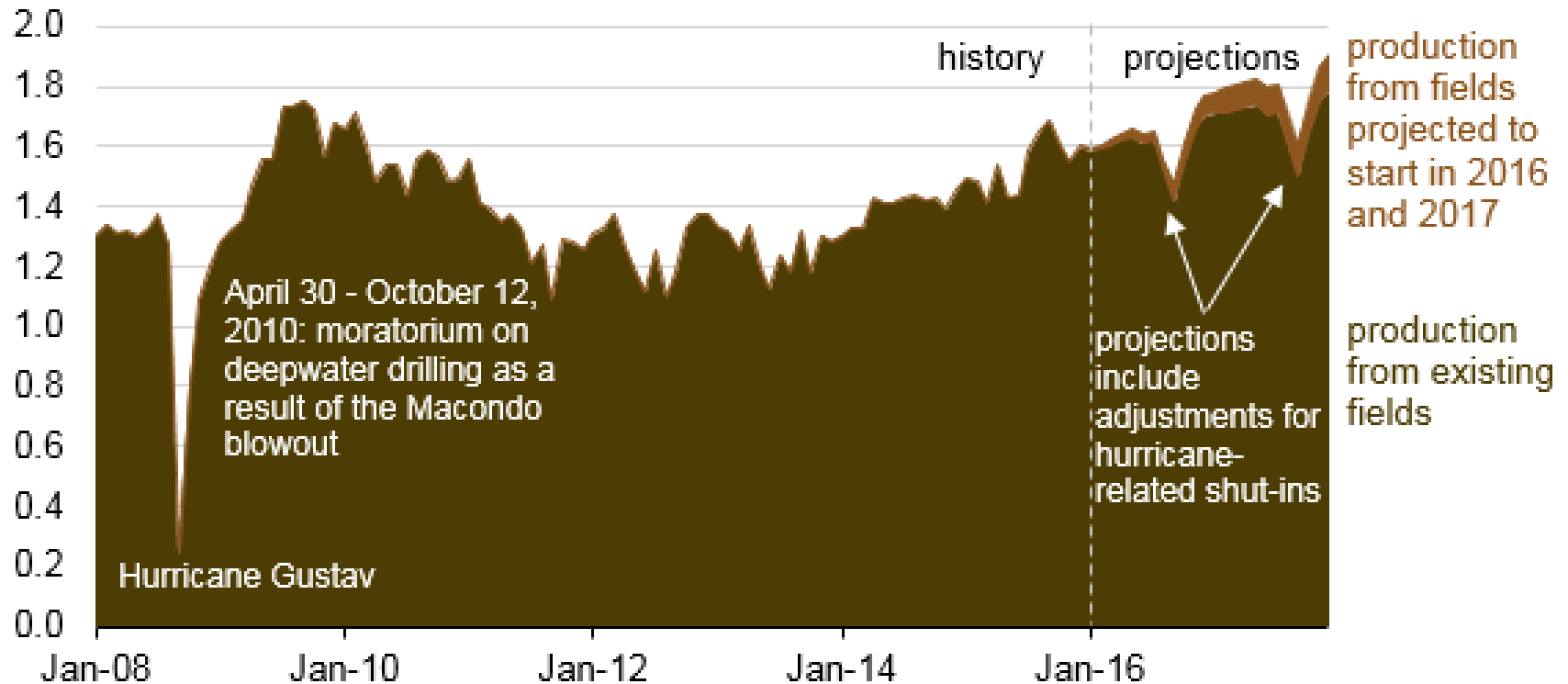


GAS

deep surpassed shallow



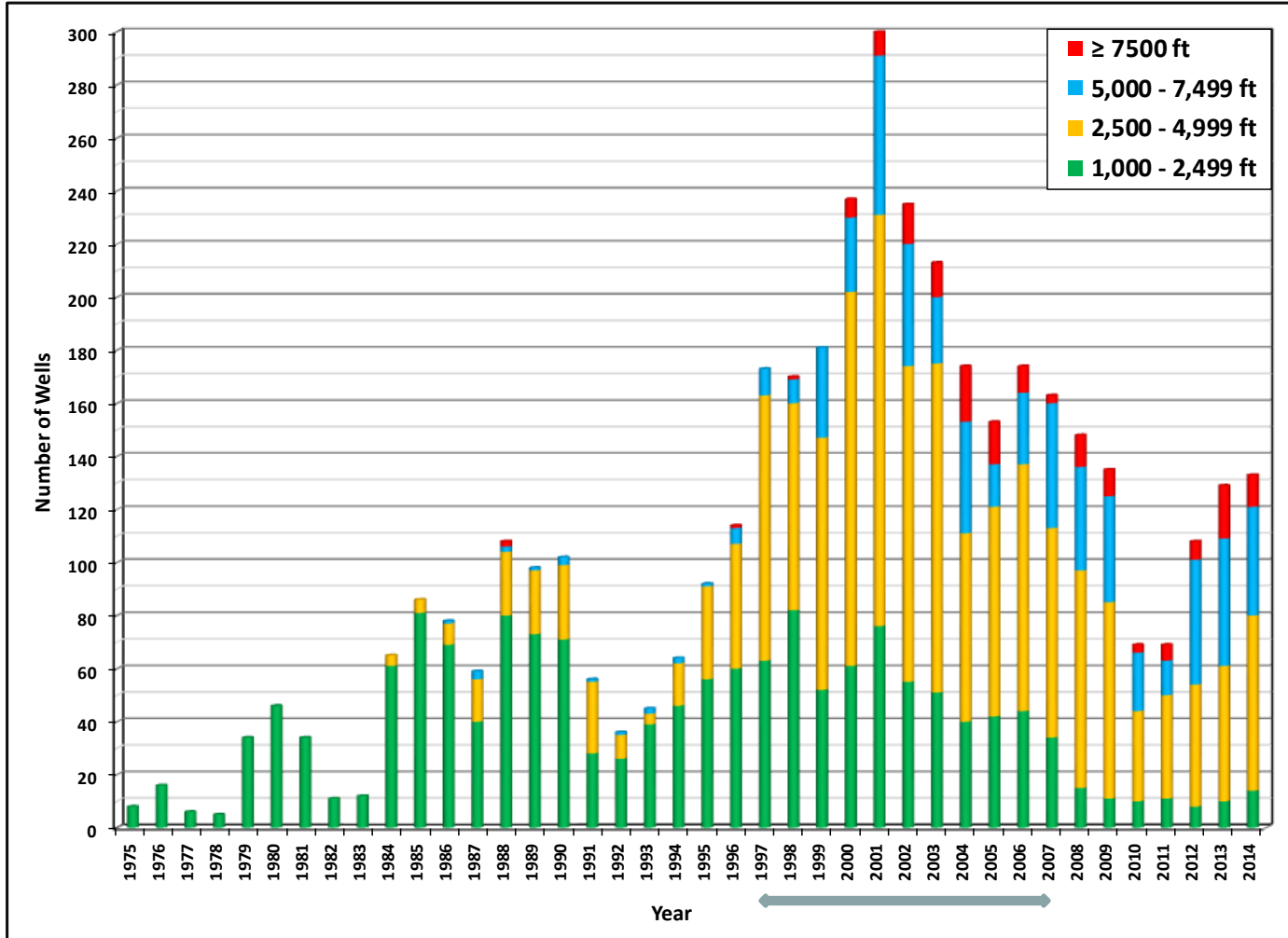
Monthly oil production from U.S. federal Gulf of Mexico (2010-17)
million barrels per day



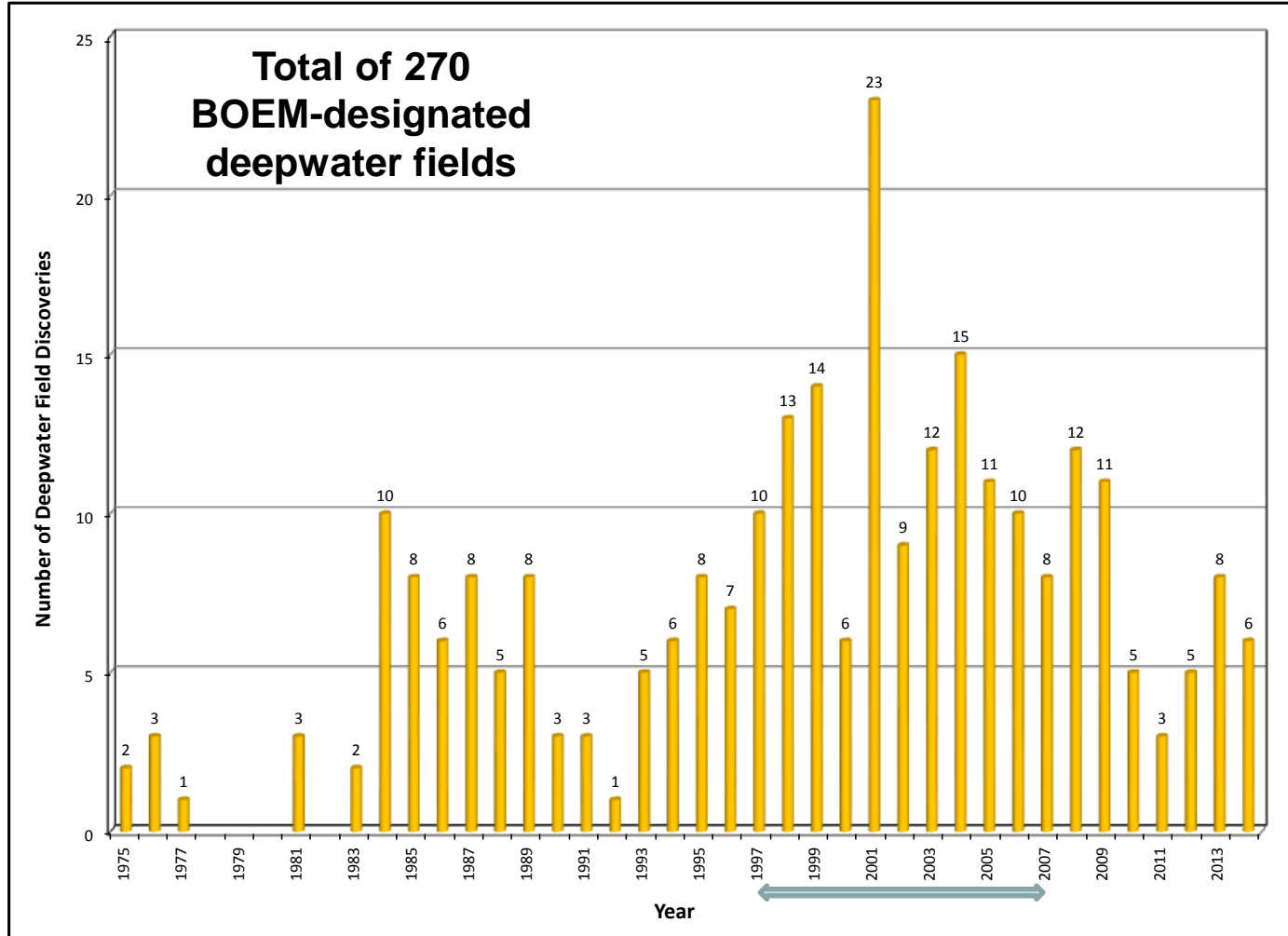
Source: U.S. Energy Information Administration, [Short-Term Energy Outlook](#), February 2016



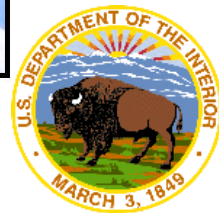
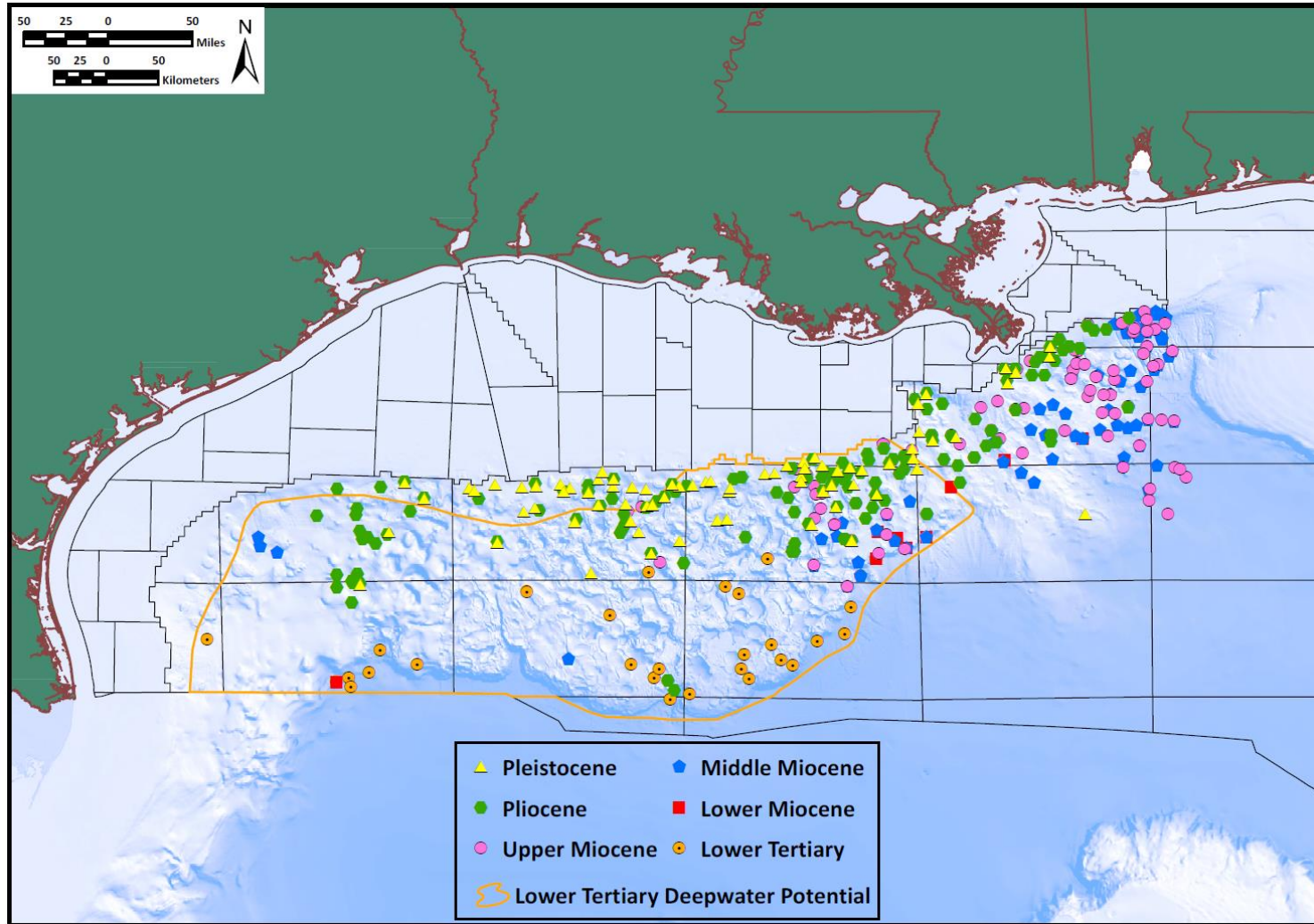
Number of Wells Drilled Per Year



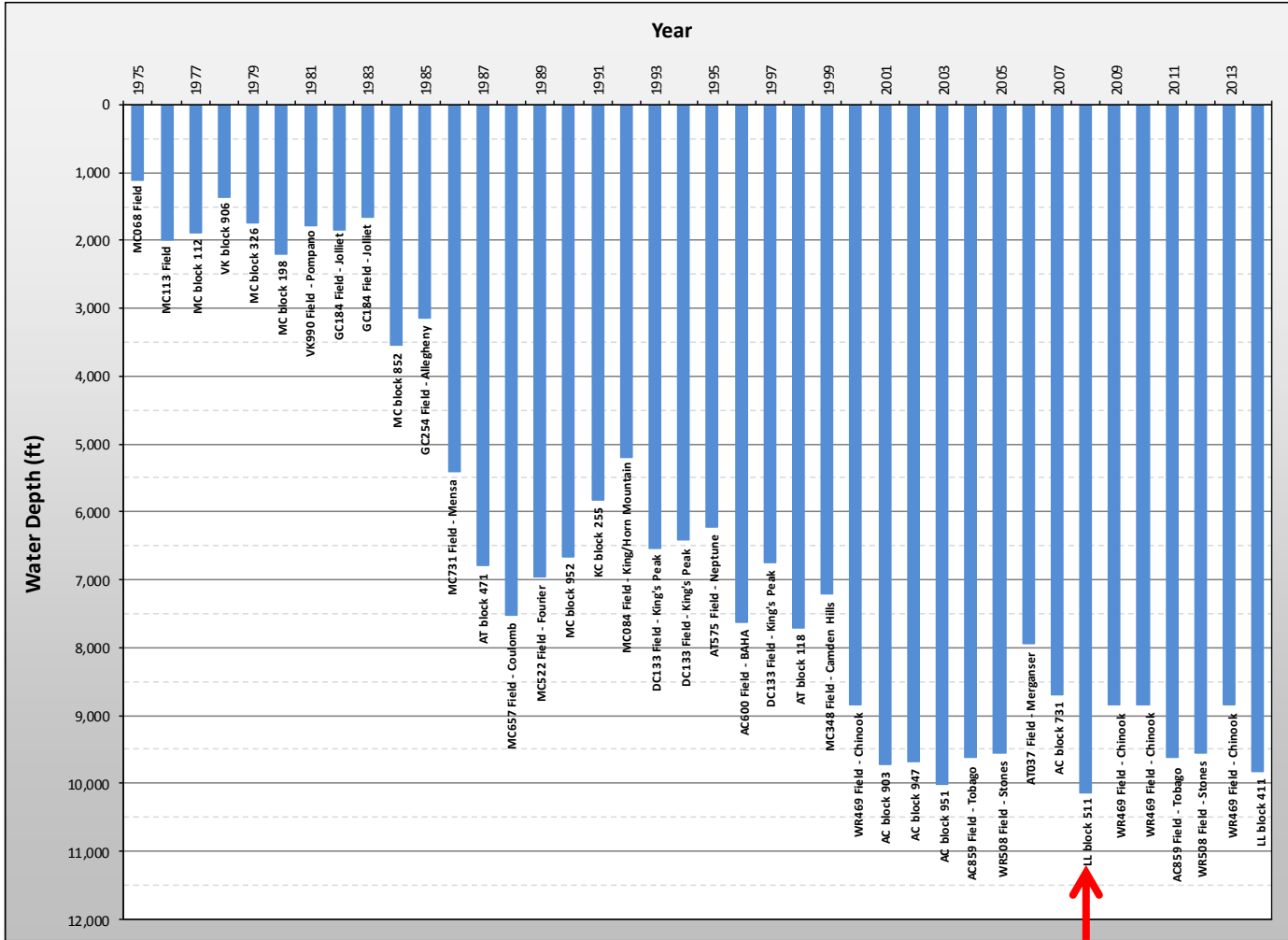
Number of BOEM-Designated Fields in Deepwater by Year



BOEM-Designated Deepwater Fields



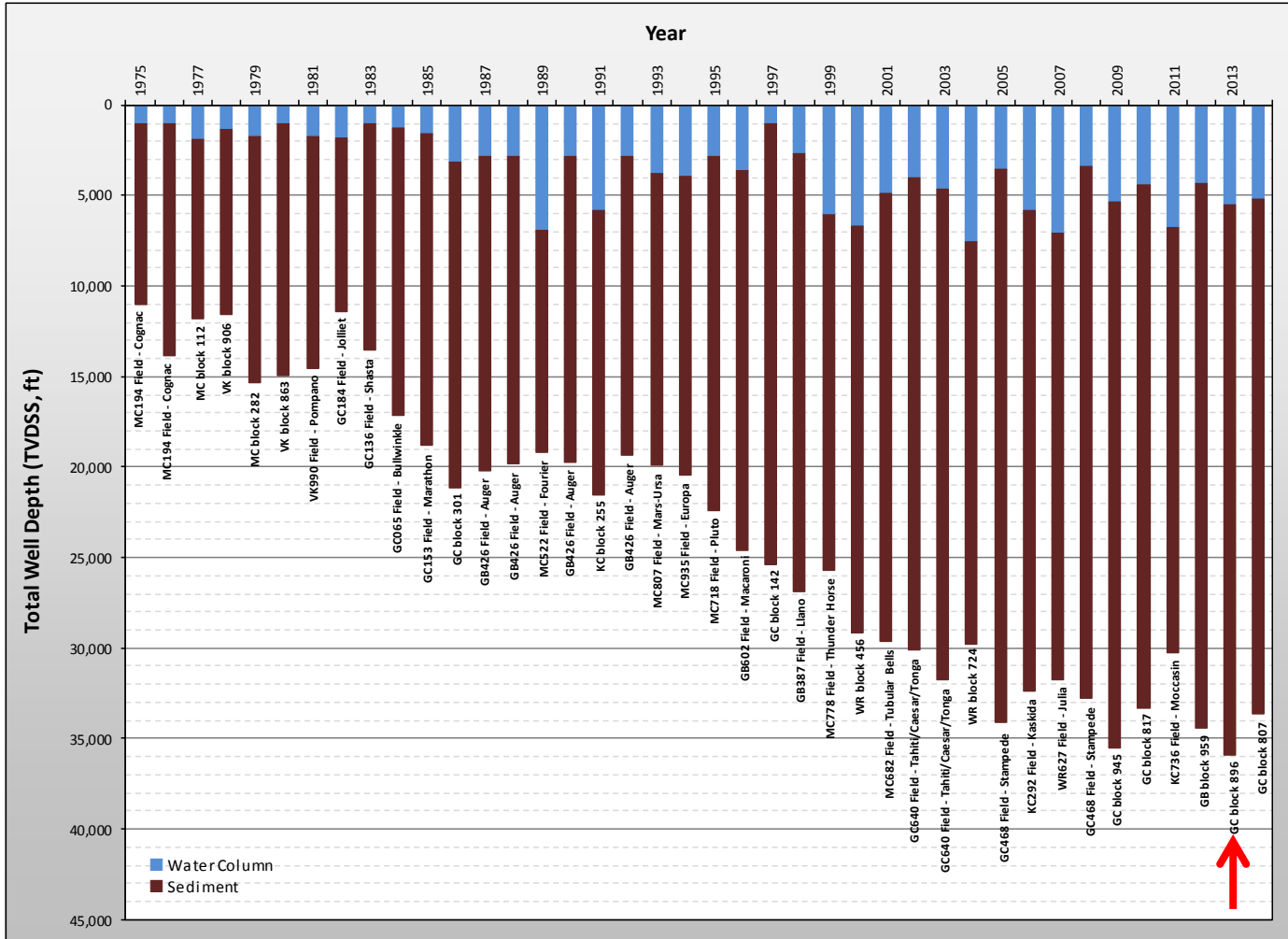
Deepwater Wells Drilled in the Deepest Water



10,141 ft

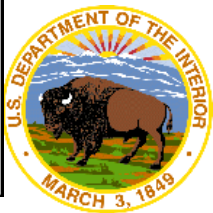
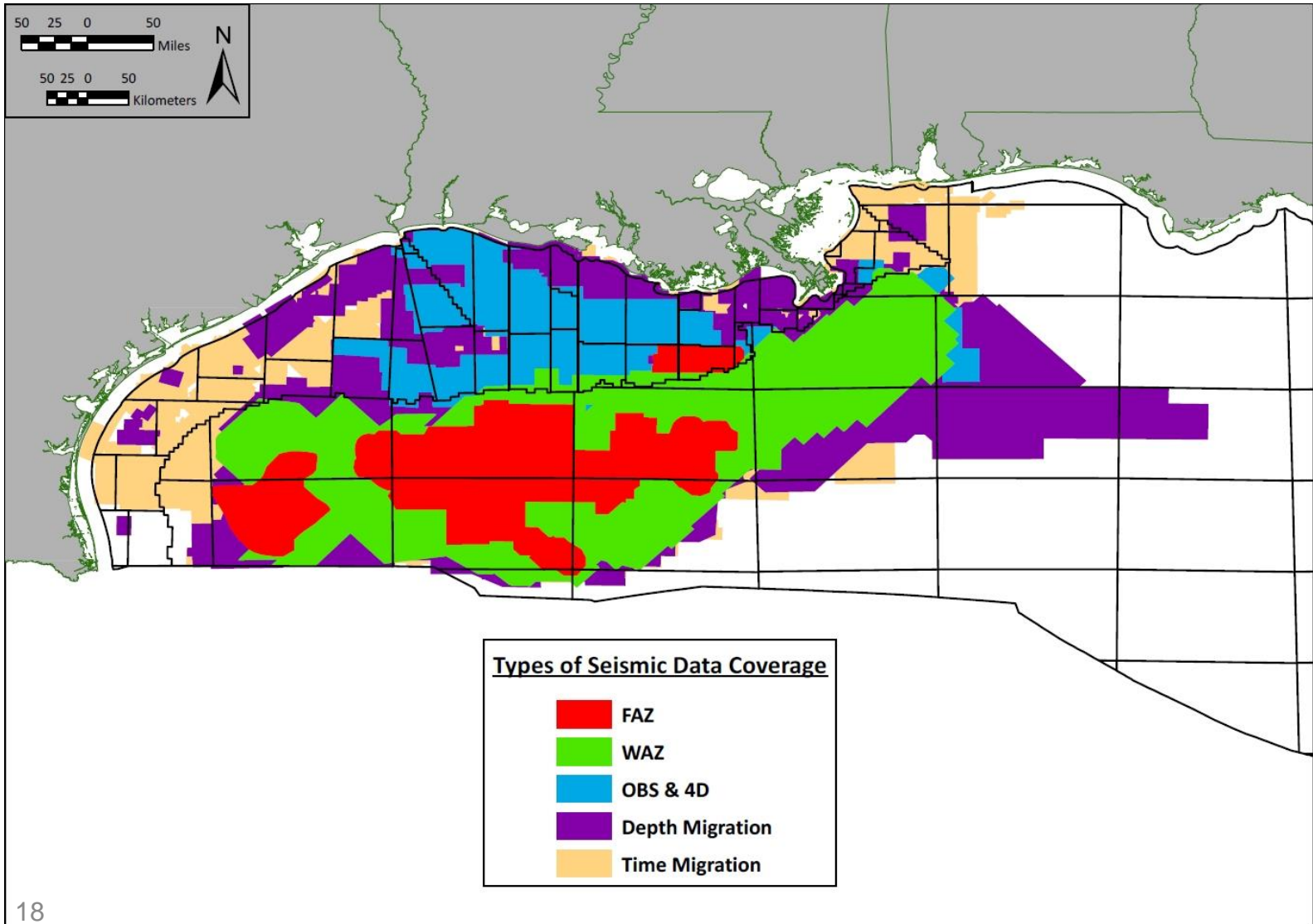


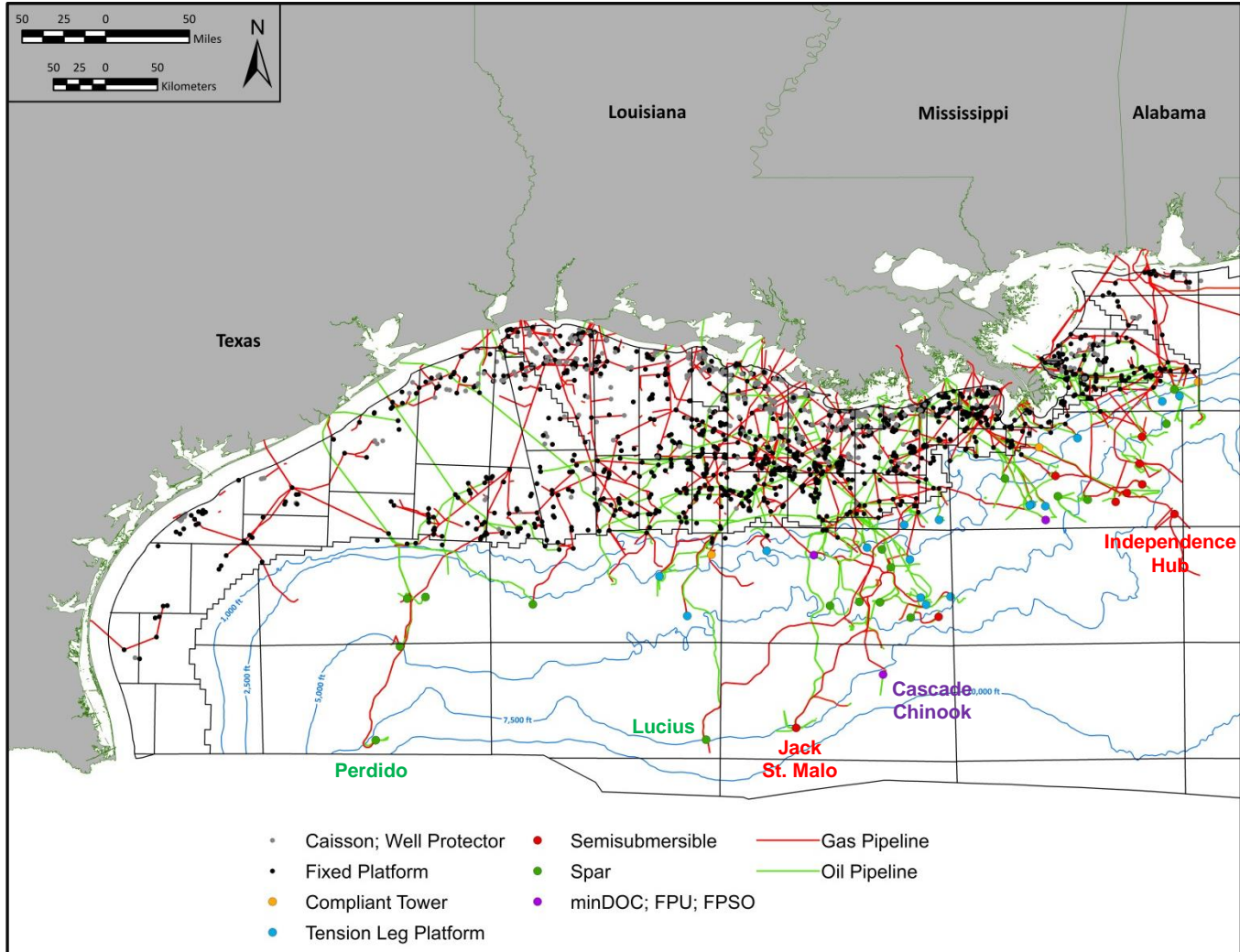
Deepest Wells Drilled in Deepwater Each Year



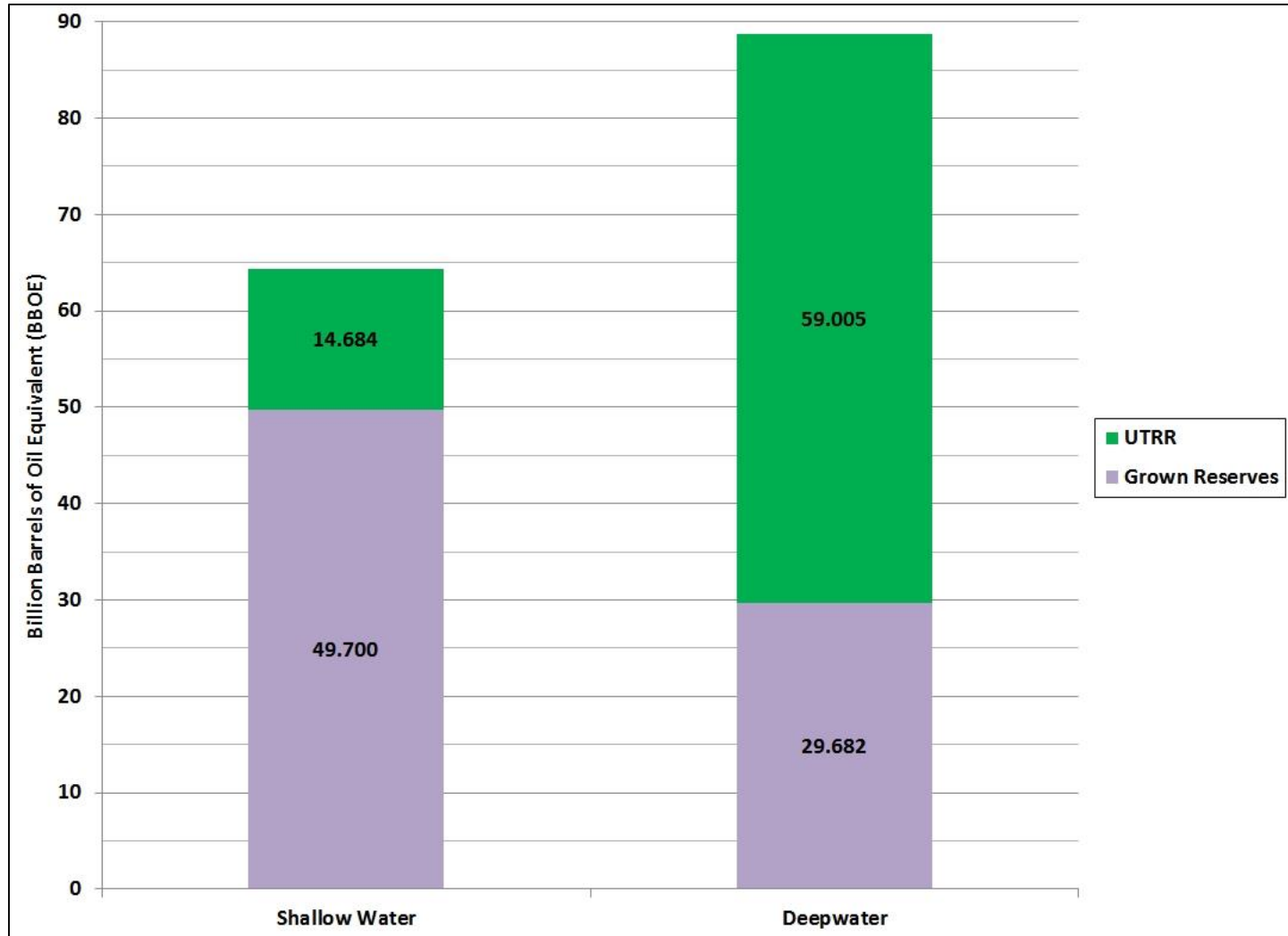
35,935 ft TVDSS







Shallow Water vs. Deepwater



The United States Depends on the Gulf of Mexico

The number of active deepwater leases remains robust, accounting for over 70 percent of all leases in the Gulf of Mexico.

The deepwater Lower Tertiary trend has spurred the acquisition of numerous, nonexclusive wide-azimuth (WAZ) and full-azimuth (FAZ) seismic surveys.

The number of wells drilled in deepwater has rebounded to pre-Macondo moratorium levels.

The Lower Tertiary and Jurassic Norphlet trends in deepwater continue to be excellent exploration targets.

For the entire Gulf of Mexico, the deepwater portion is assessed to contain 80 percent of the remaining undiscovered resources.

Eight production platforms located in deepwater have been installed since 2009, continuing to expand the infrastructure to bring deepwater production to shore.



The United States Depends on the Gulf of Mexico

The Gulf of Mexico is one of the world's prolific hydrocarbon basins, with a production history of more than 100 years.

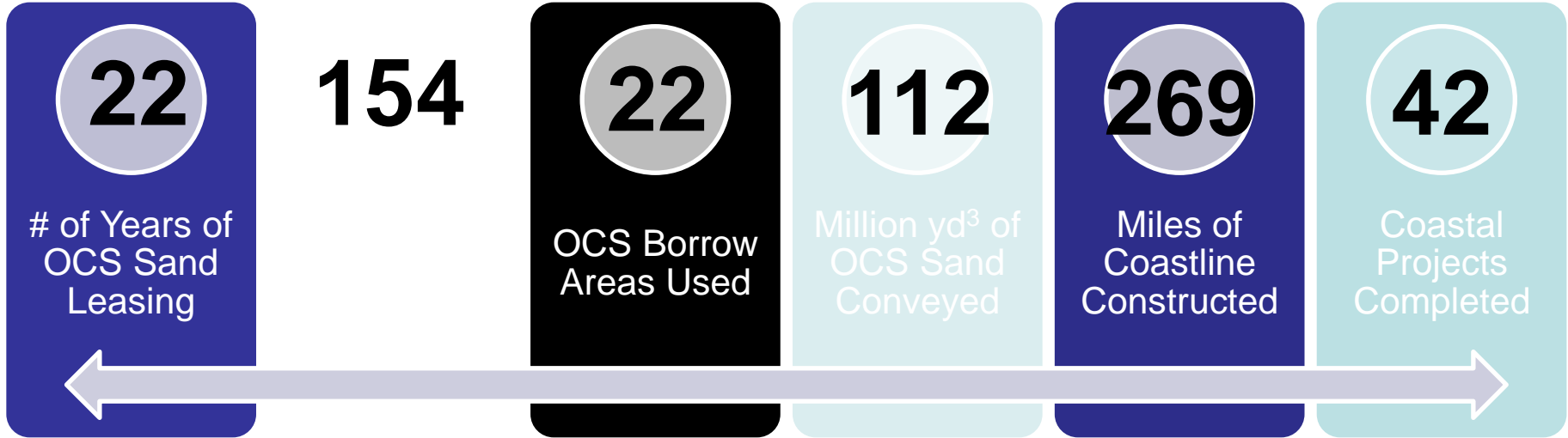
It is the primary offshore source of hydrocarbons for the United States, generating approximately 97 percent of all offshore oil and natural gas production.

Of both onshore and offshore domestic production in 2014, the Gulf supplied the Nation with 16 percent of the total oil and 4.5 percent of the total gas.

Of this Gulf production, wells in deepwater produced 82 percent of the oil and 54 percent of the natural gas.



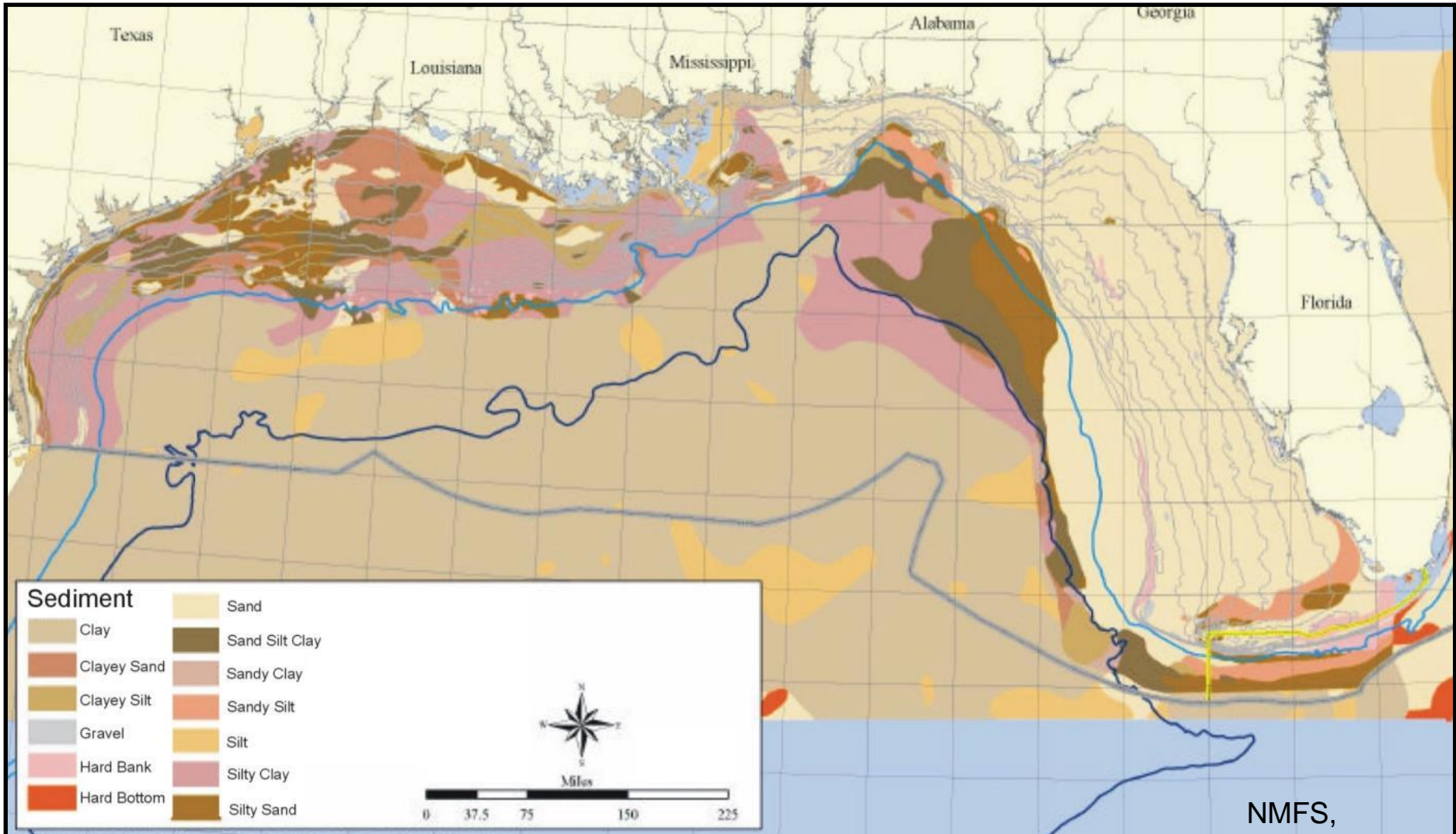
Two Decades of OCS Sand Stewardship

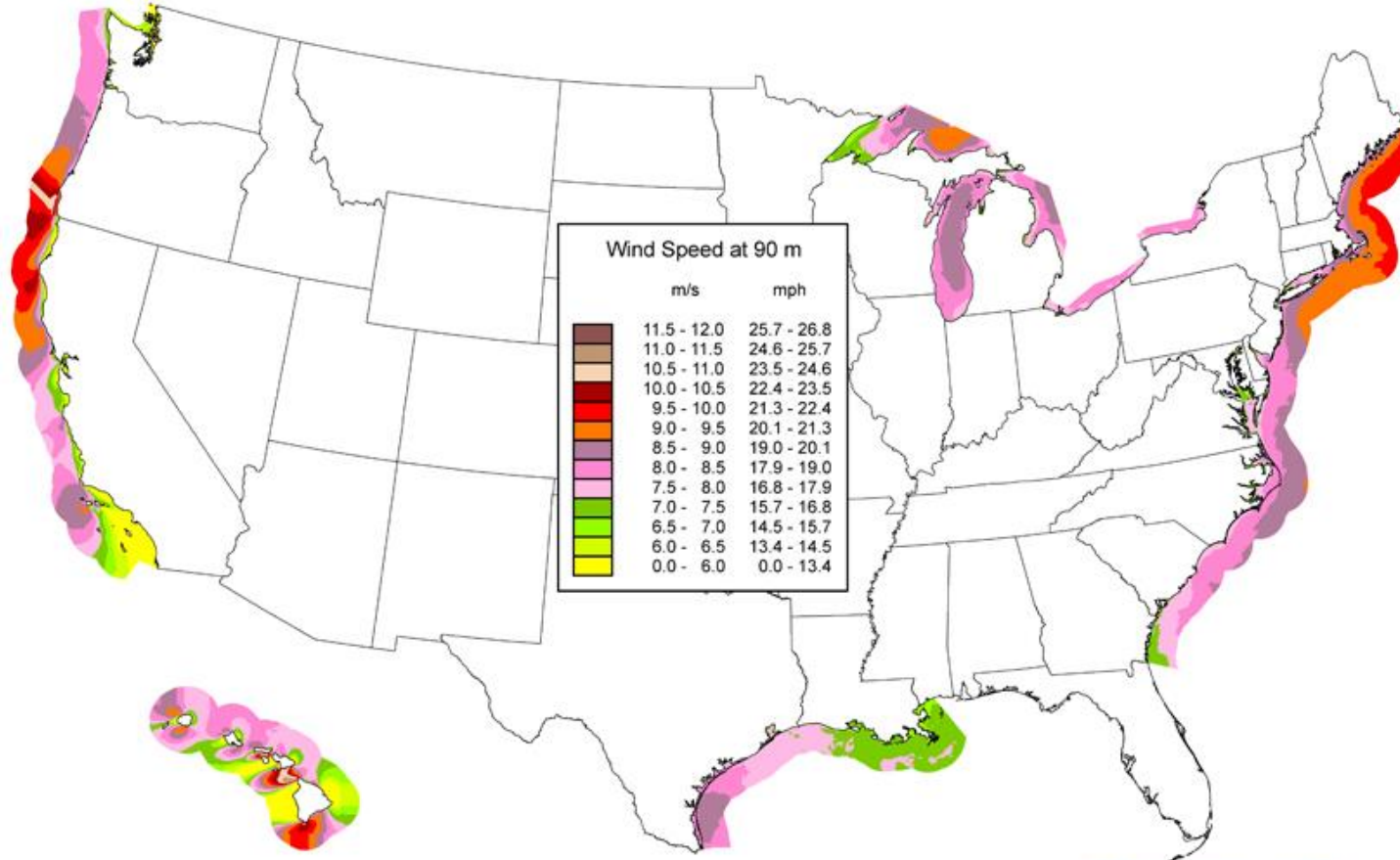


Pelican Island, Louisiana, before and after



Scarce Restoration Quality Sand Resources





Questions?

Deepwater Report

<http://www.boem.gov/Deepwater-Report-2014/>

michael.celata@boem.gov

