

Deepwater Gulf of Mexico



Mike Celata
Regional Director
Gulf of Mexico Region



- Brief overview of Bureau of Ocean Energy Management
 - Enabling legislation/mission
 - Agency responsibilities
 - GOM Region status
- Deepwater Gulf of Mexico
 - Production
 - Drilling
 - Fields
 - Technology challenges
 - Progression into deepwater
- Summary



*“(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)



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

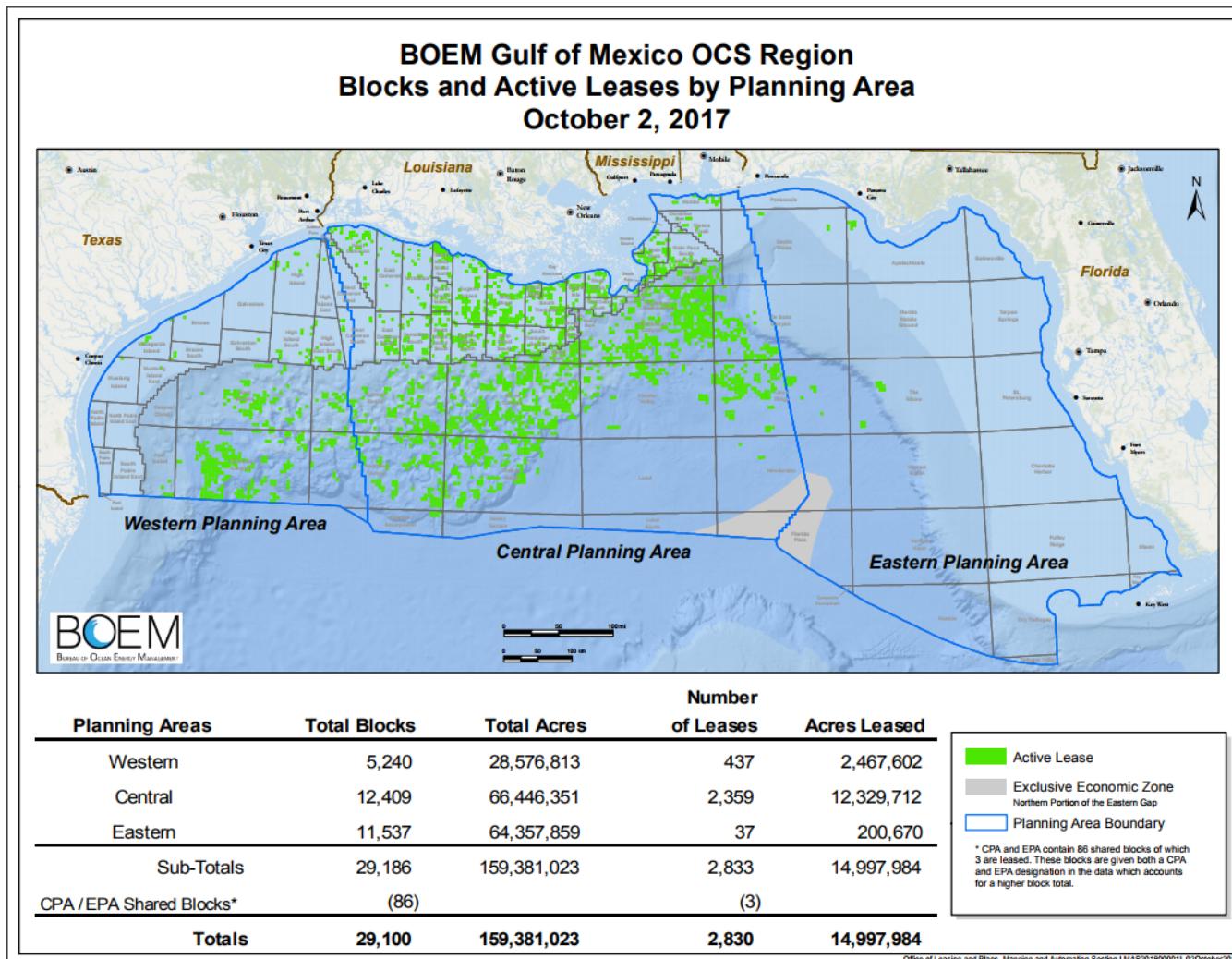
Mission:
Enforce safety, environment, and conservation compliance on the Nation's offshore resources

Key functions:

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



Gulf of Mexico Active Leases



Gulf of Mexico Highlights

Lease Sale	Date of Sale	No. of Tracts Offered	No. of Tracts Bid On	No. Of Bids Received	Total Bonus High Bid (\$)
249 Gulfwide	8/16/2017	14220	90	99	121.1 M
247 CGOM	3/22/2017	9118	163	189	274.8 M
248 WGOM	8/24/2016	4399	24	24	18.1 M
226 EGOM	3/23/2016	162	0	0	0
241 CGOM	3/23/2016	8349	128	148	156.4 M
246 WGOM	8/19/2015	4083	33	33	22.7 M
235 CGOM	3/18/2015	7788	169	195	538.8 M
238 WGOM	8/20/2014	4026	81	93	110 M
225 EGOM	3/19/2014	134	0	0	0
231 CGOM	3/19/2014	7511	326	380	850.8 M
233 WGOM	8/28/2013	4036	56	64	123.7 M
227 CGOM	3/20/2013	7299	320	407	1.2 B

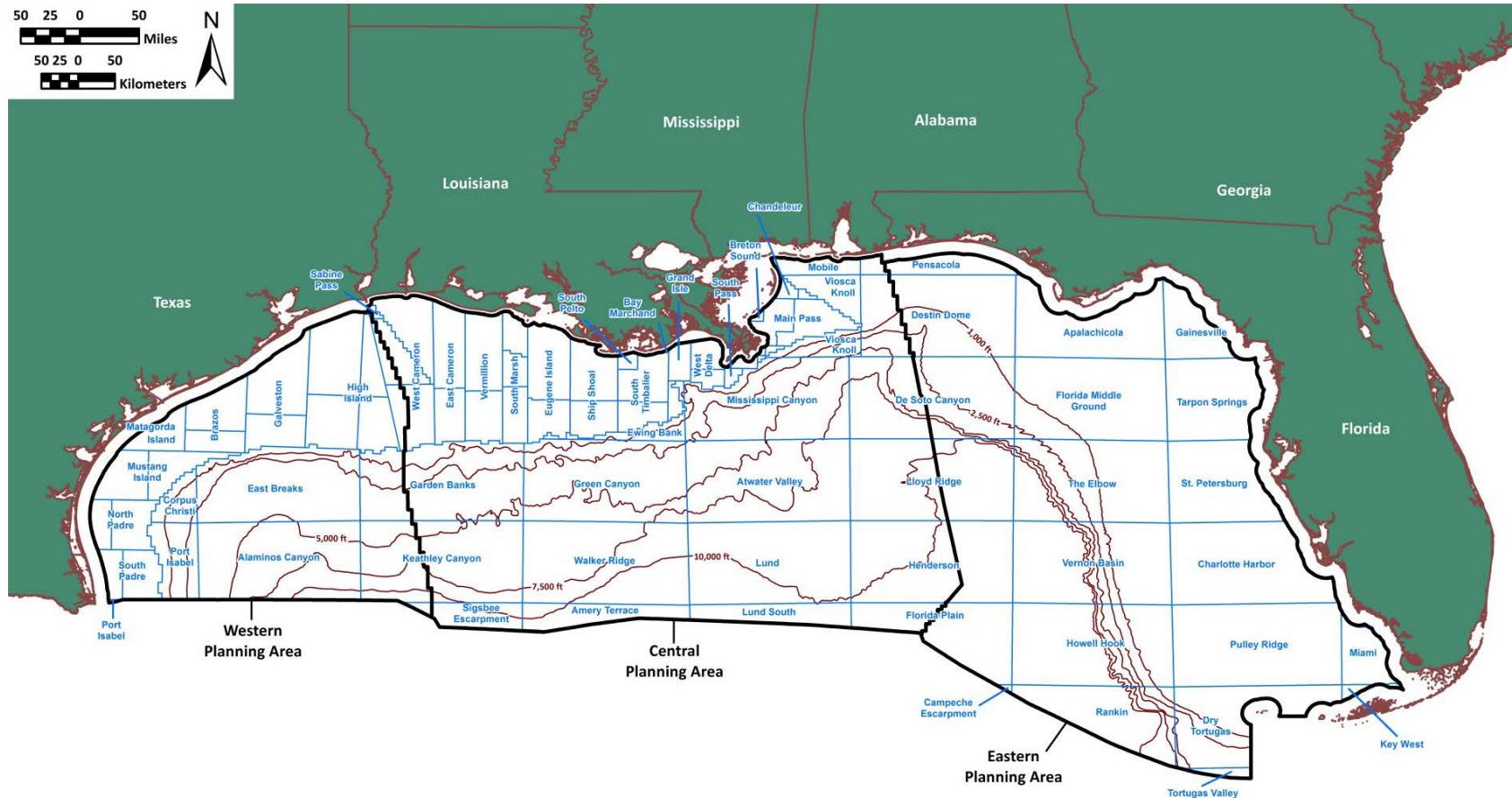




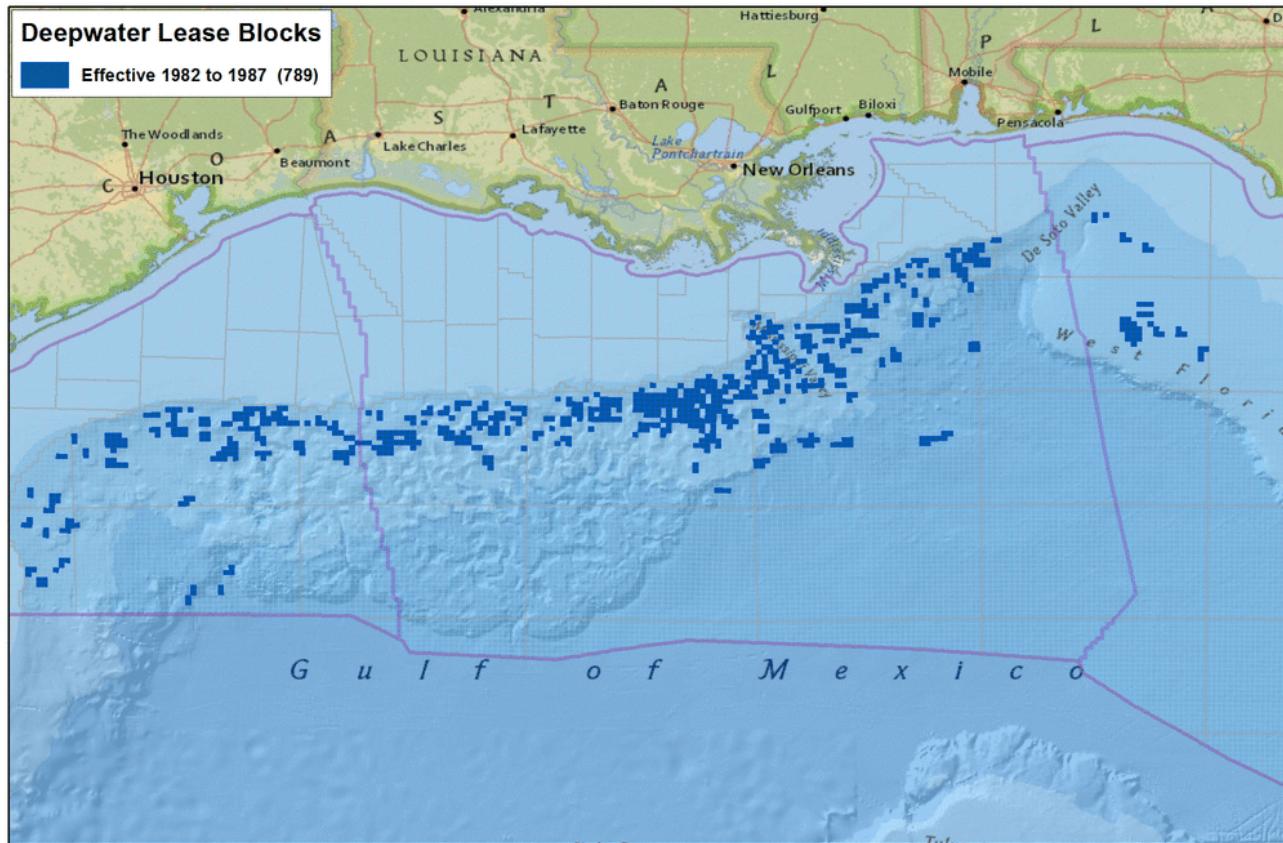
The Gulf of Mexico
is a proven petroleum basin that still
offers significant opportunities for
exploration and development.



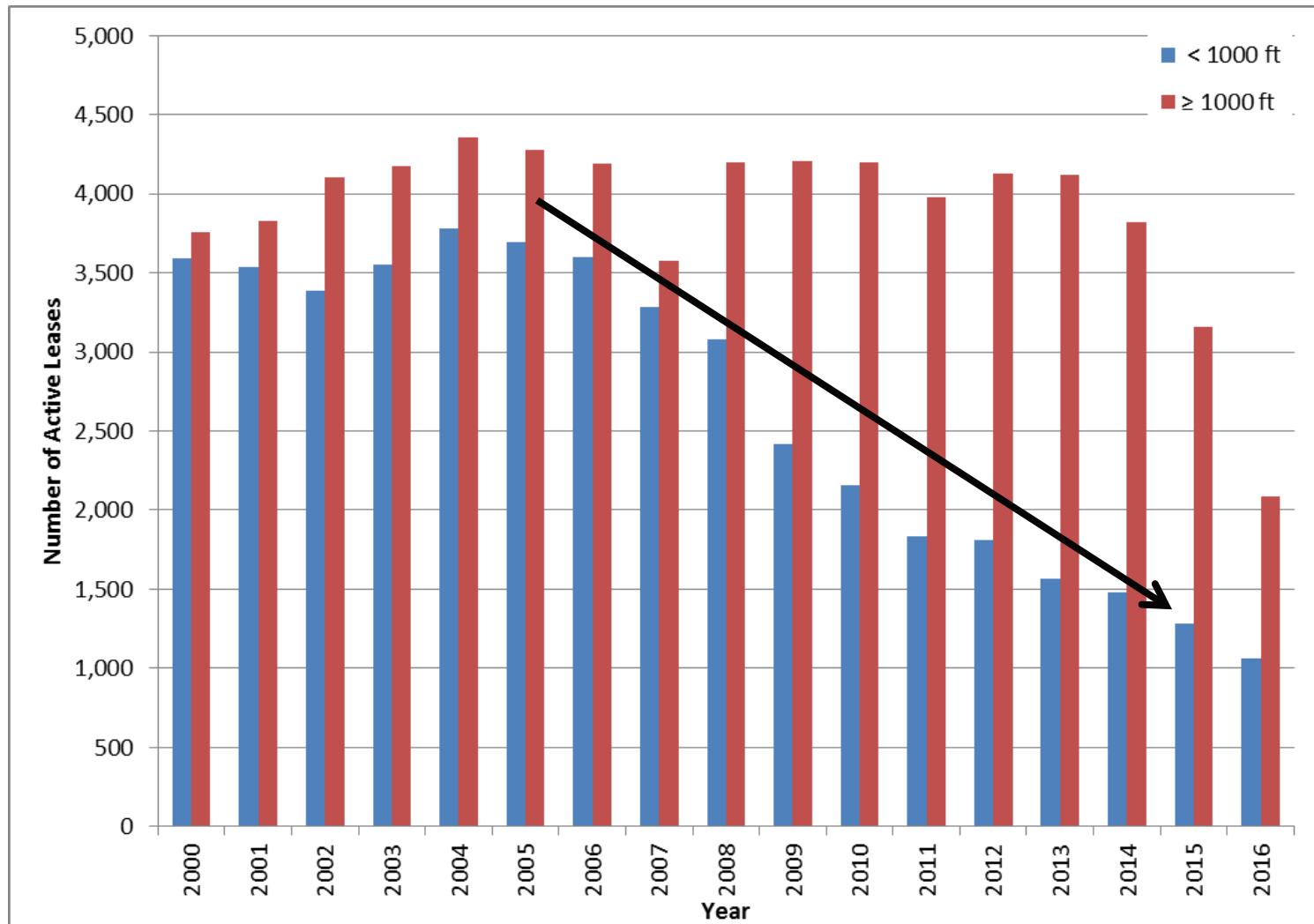
Gulf of Mexico U.S. Federal Jurisdiction



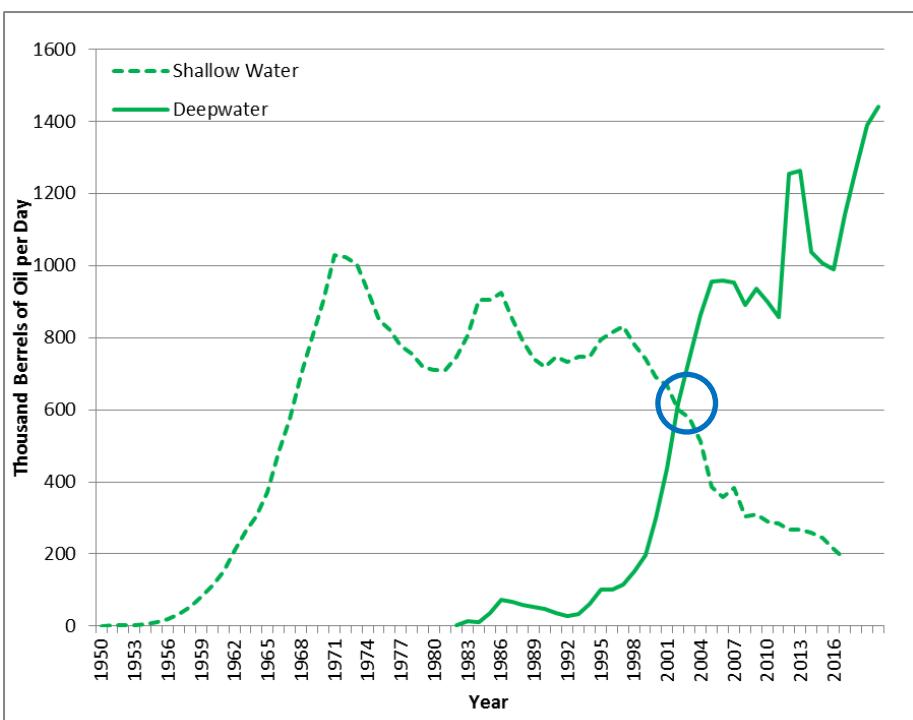
Deepwater Leasing



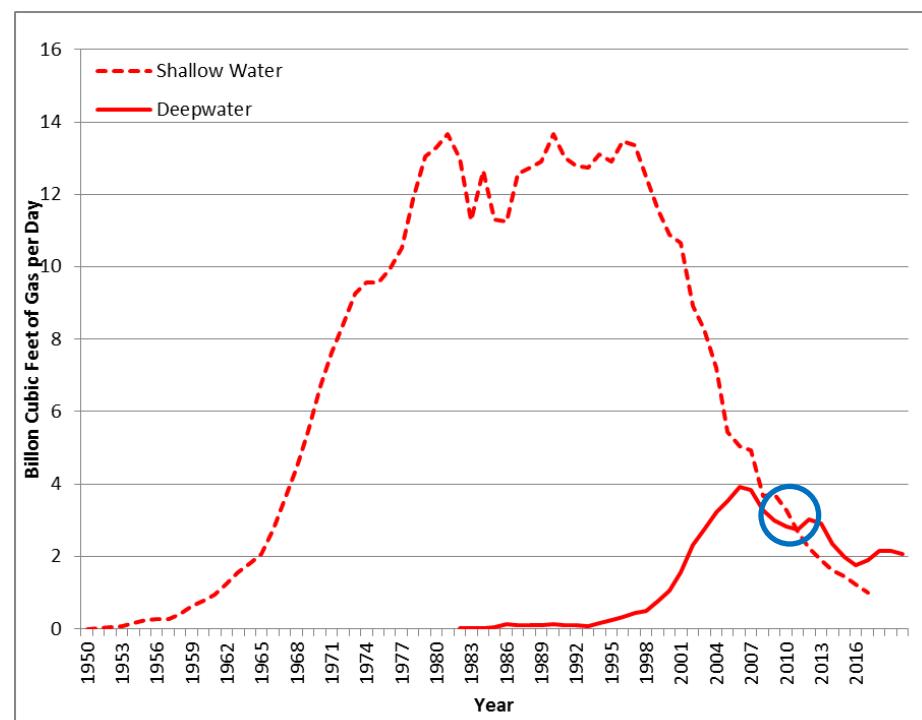
Leasing



Comparison of Annual Production Volumes from Deep and Shallow Water

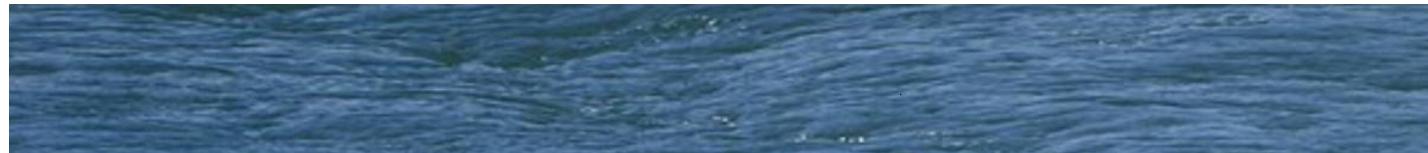


OIL

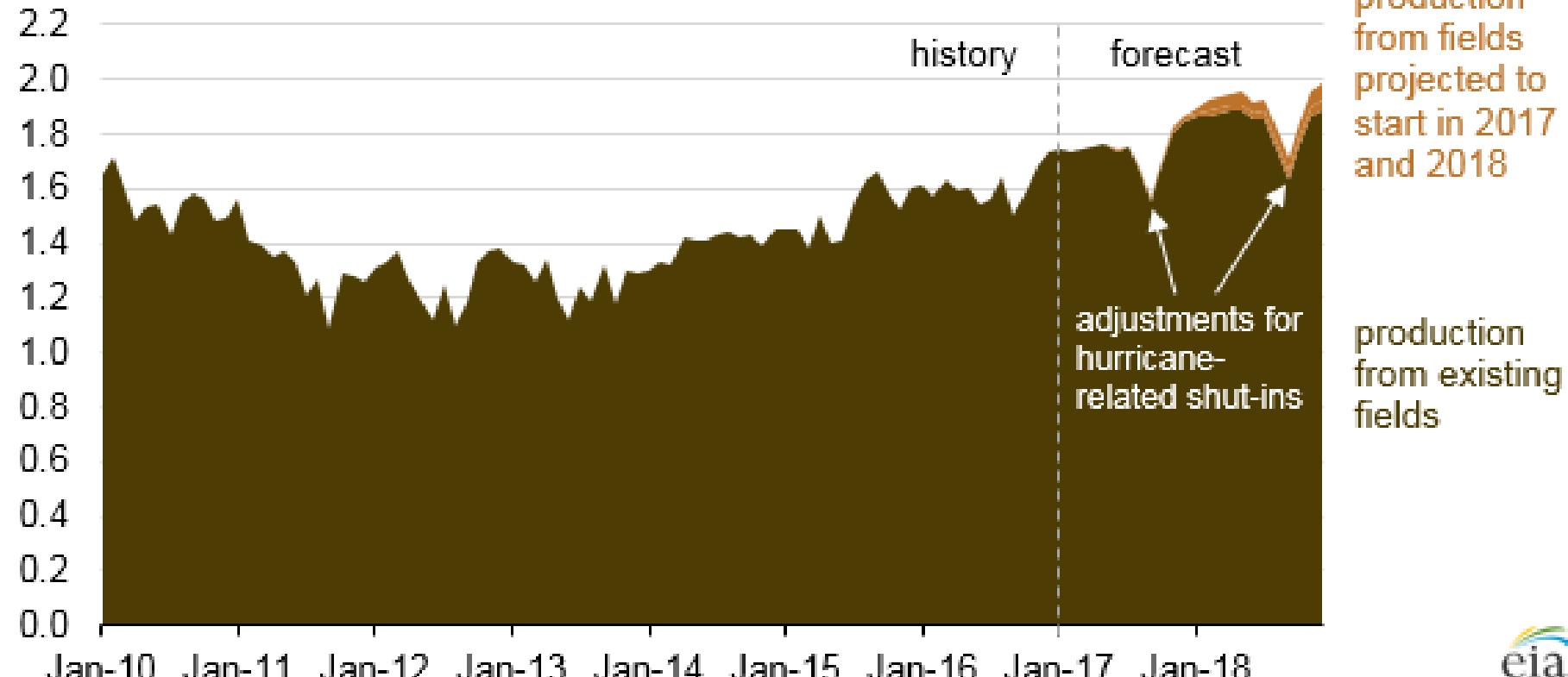


GAS

deep surpassed shallow

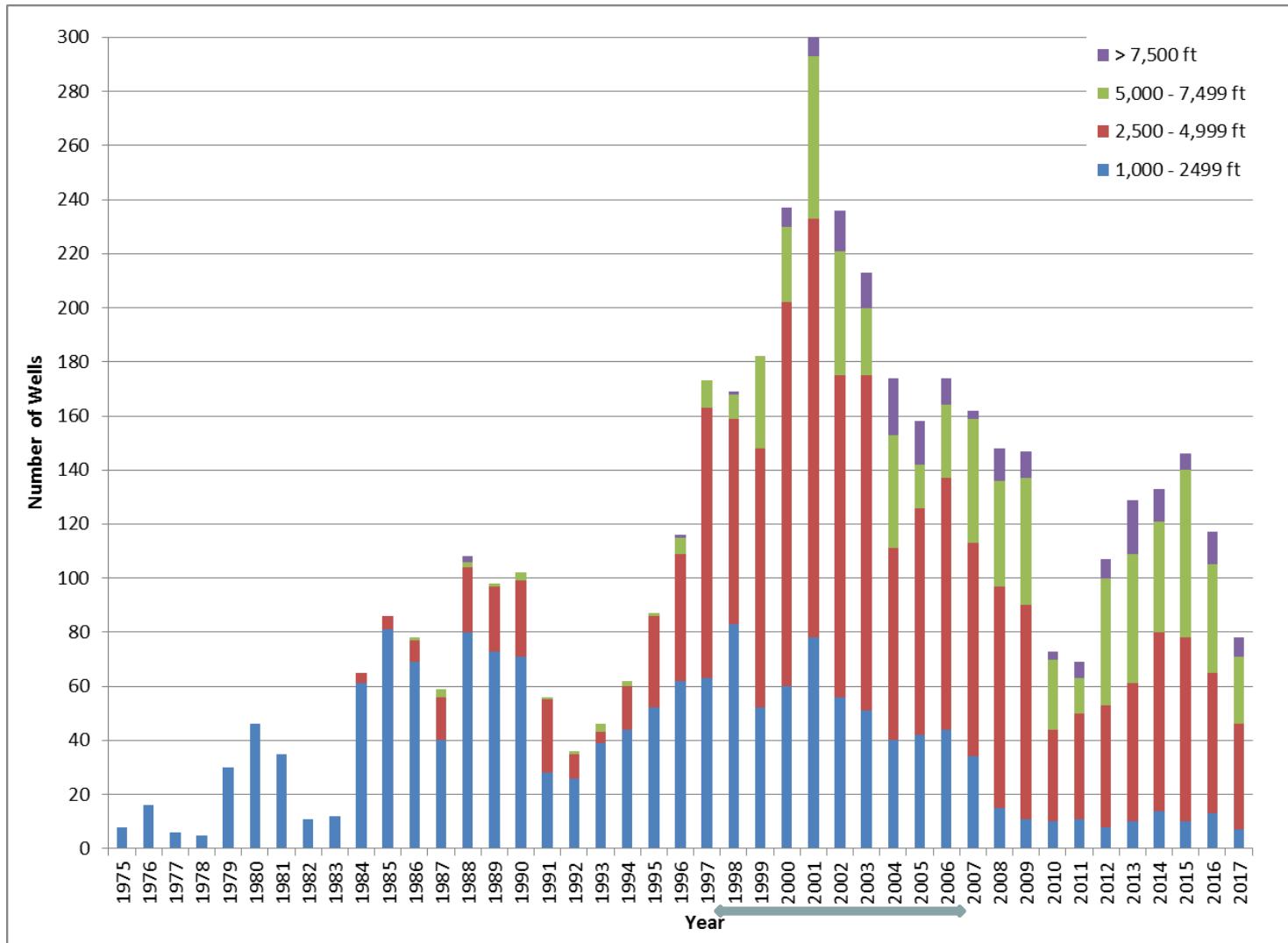


Monthly oil production from U.S. Federal Gulf of Mexico million barrels per day

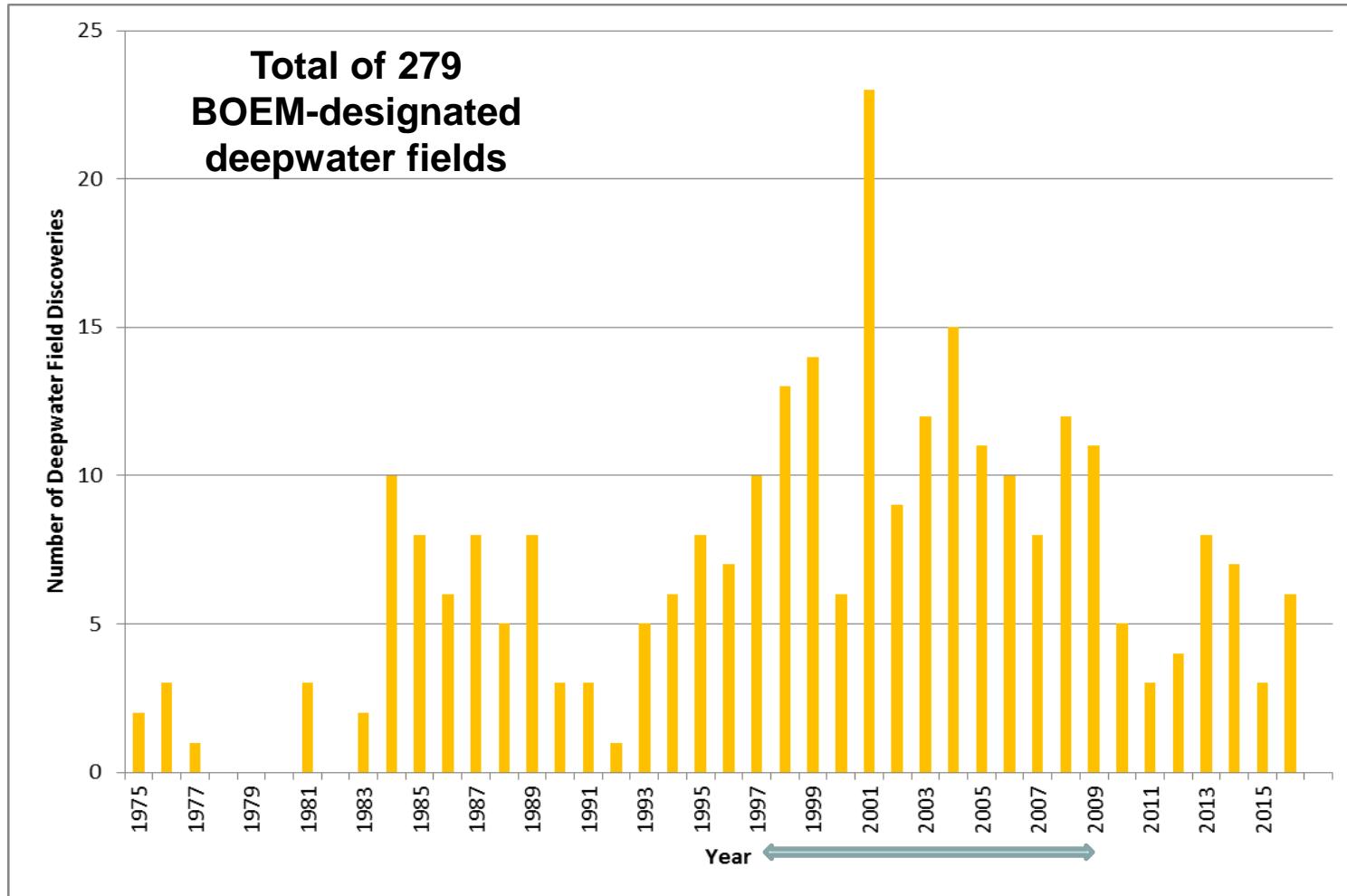


Source: U.S. Energy Information Administration, [Short-Term Energy Outlook](#) April 2017

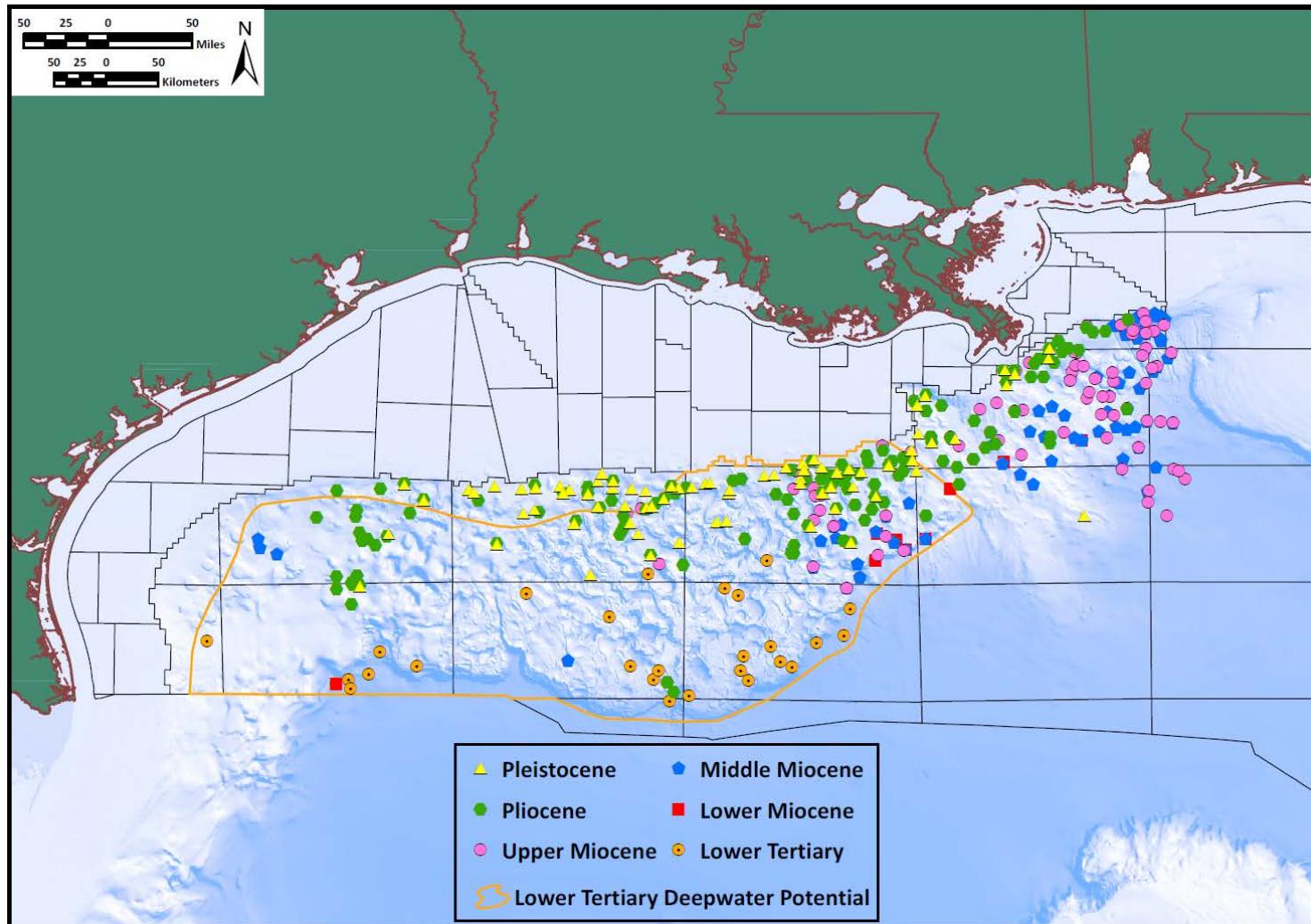
Number of Wells Drilled Per Year



Number of BOEM-Designated Fields in Deepwater by Year



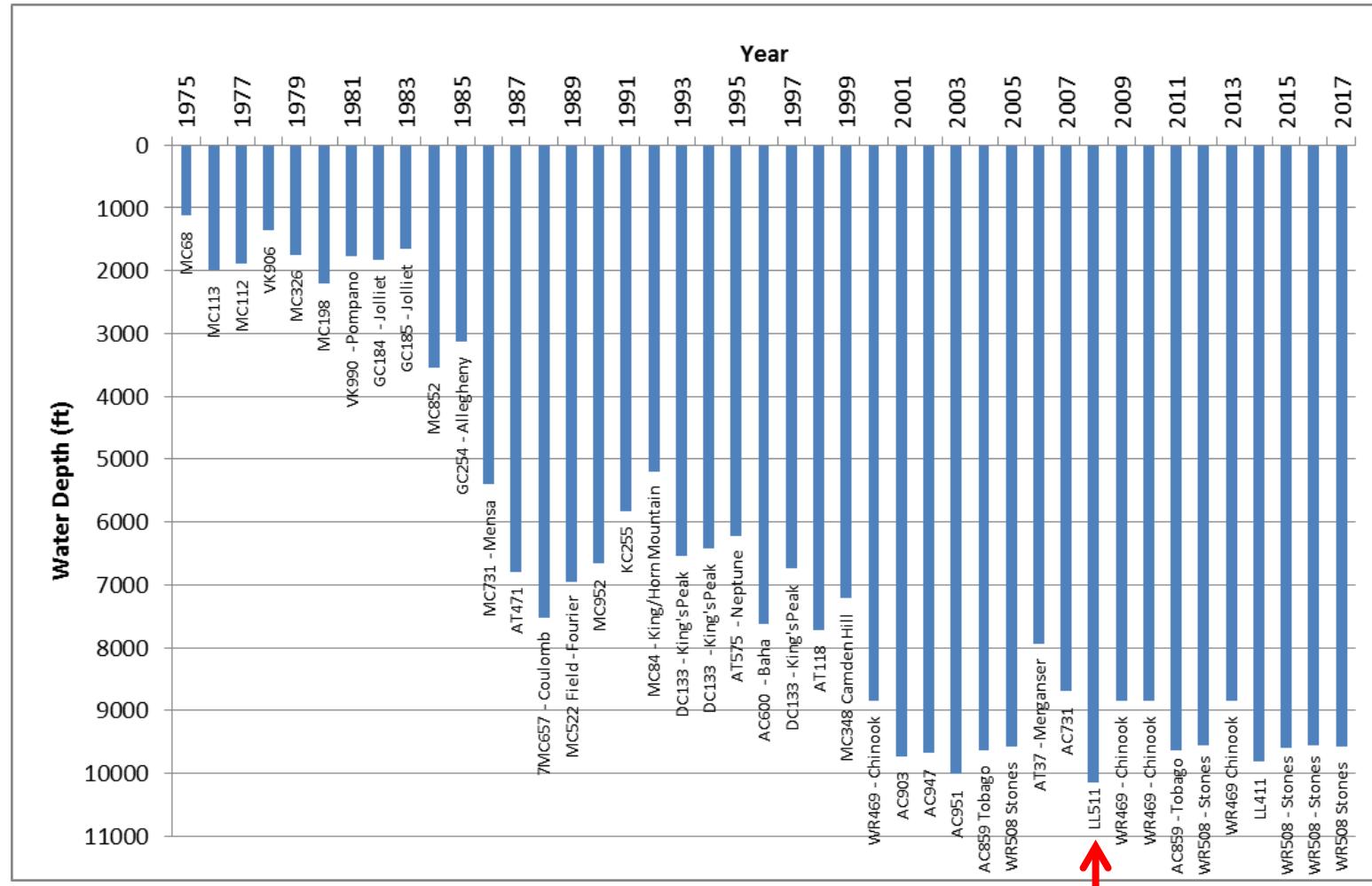
BOEM-Designated Deepwater Fields



- Very Deep Water
- Remote location from infrastructure
- Thick overlying salt of complex shapes
- Deep subsea drilling
- High well costs
- Low porosity and permeability
- Low gas-to-oil ratio



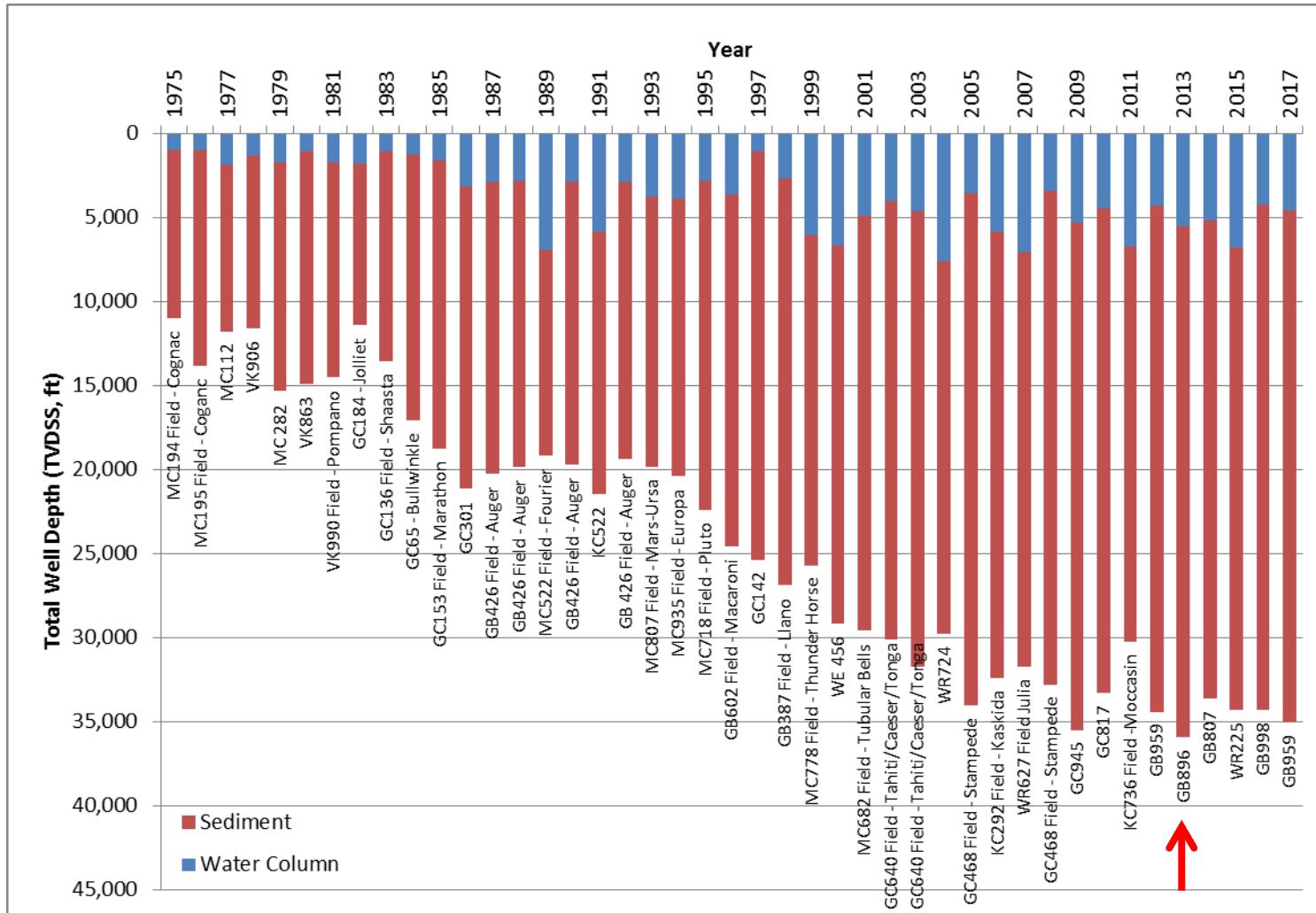
Deepwater Wells Drilled in the Deepest Water



10,141 ft



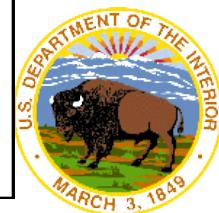
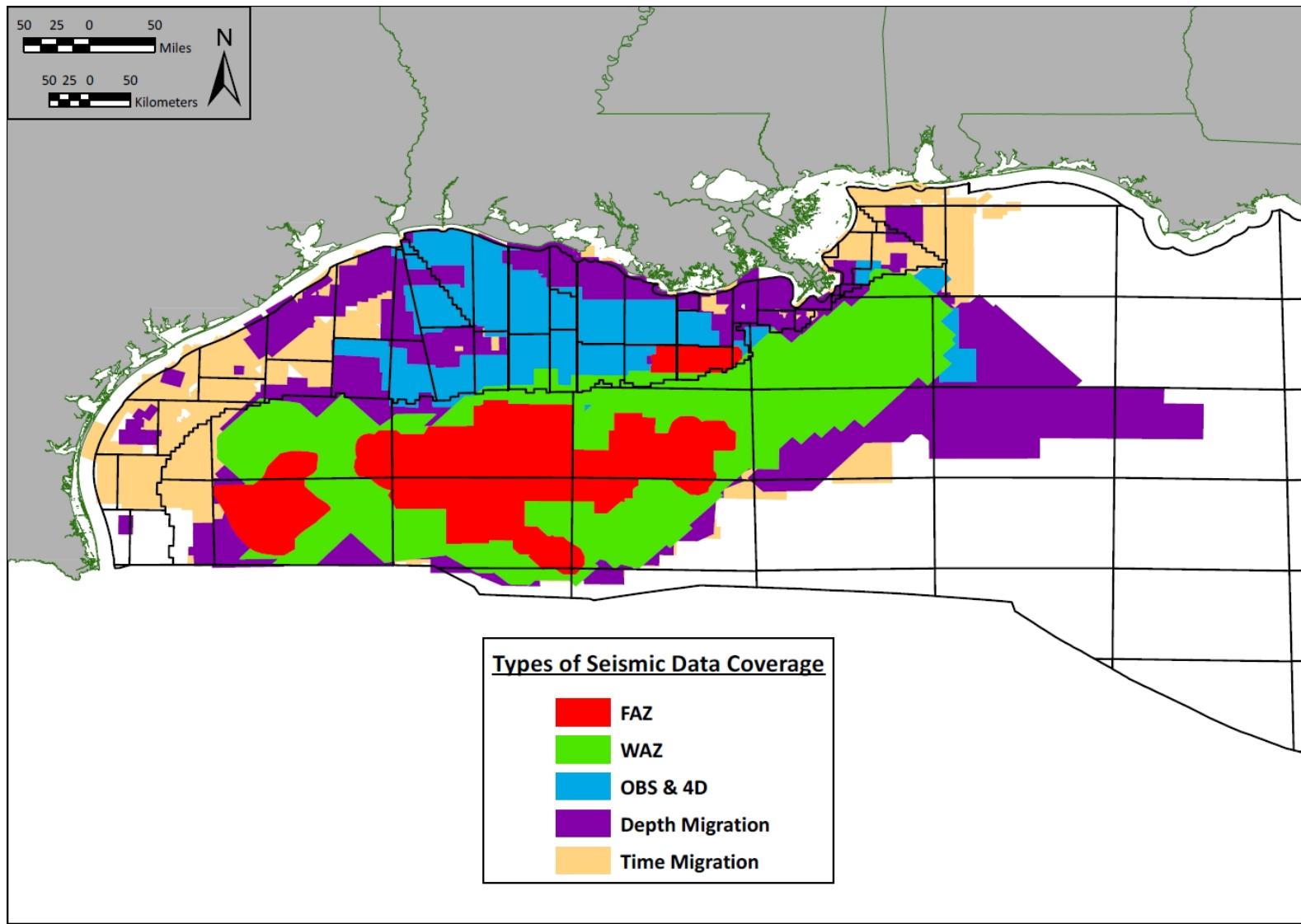
Deepest Wells Drilled in Deepwater Each Year



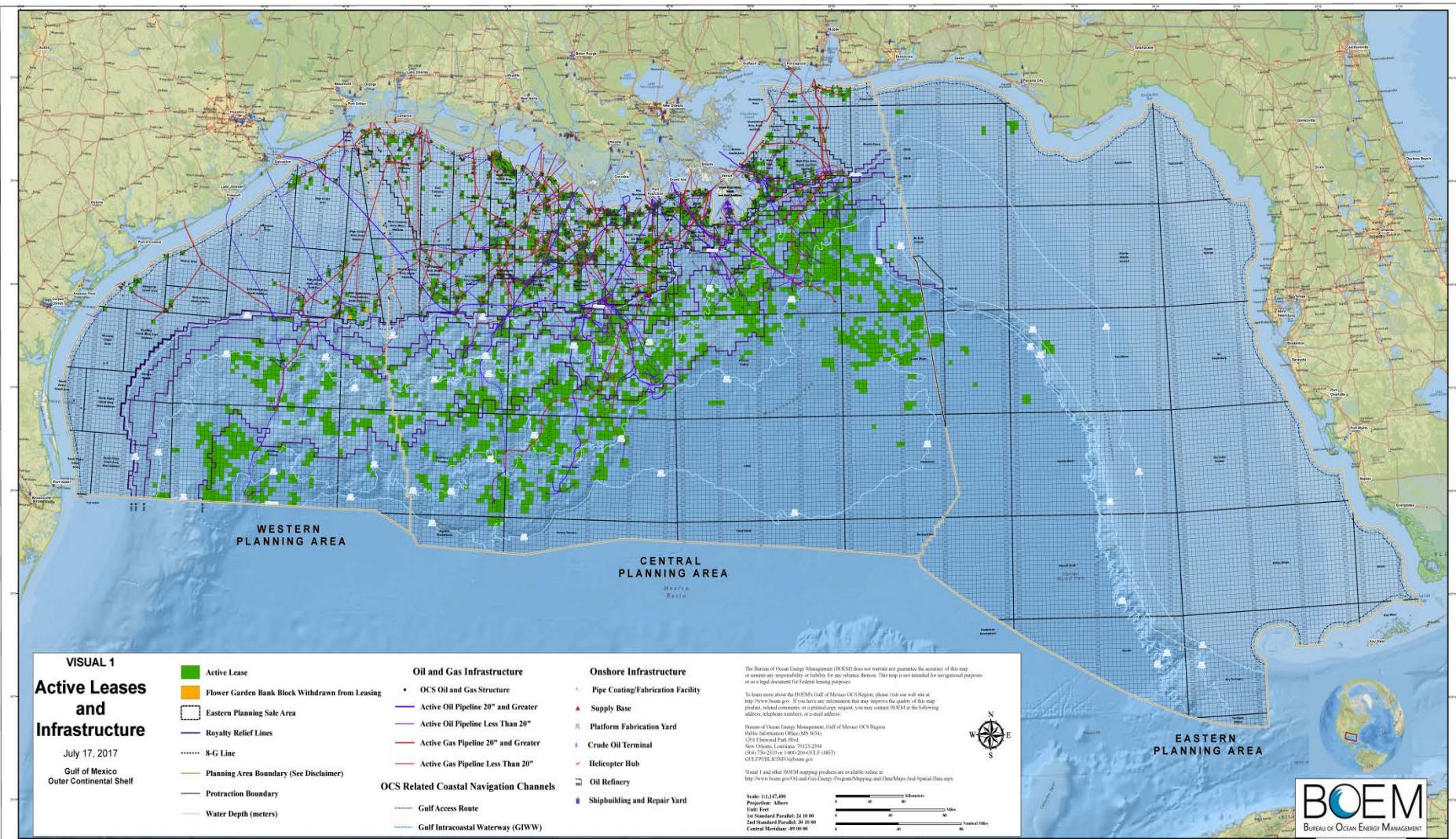
35,935 ft TVDSS



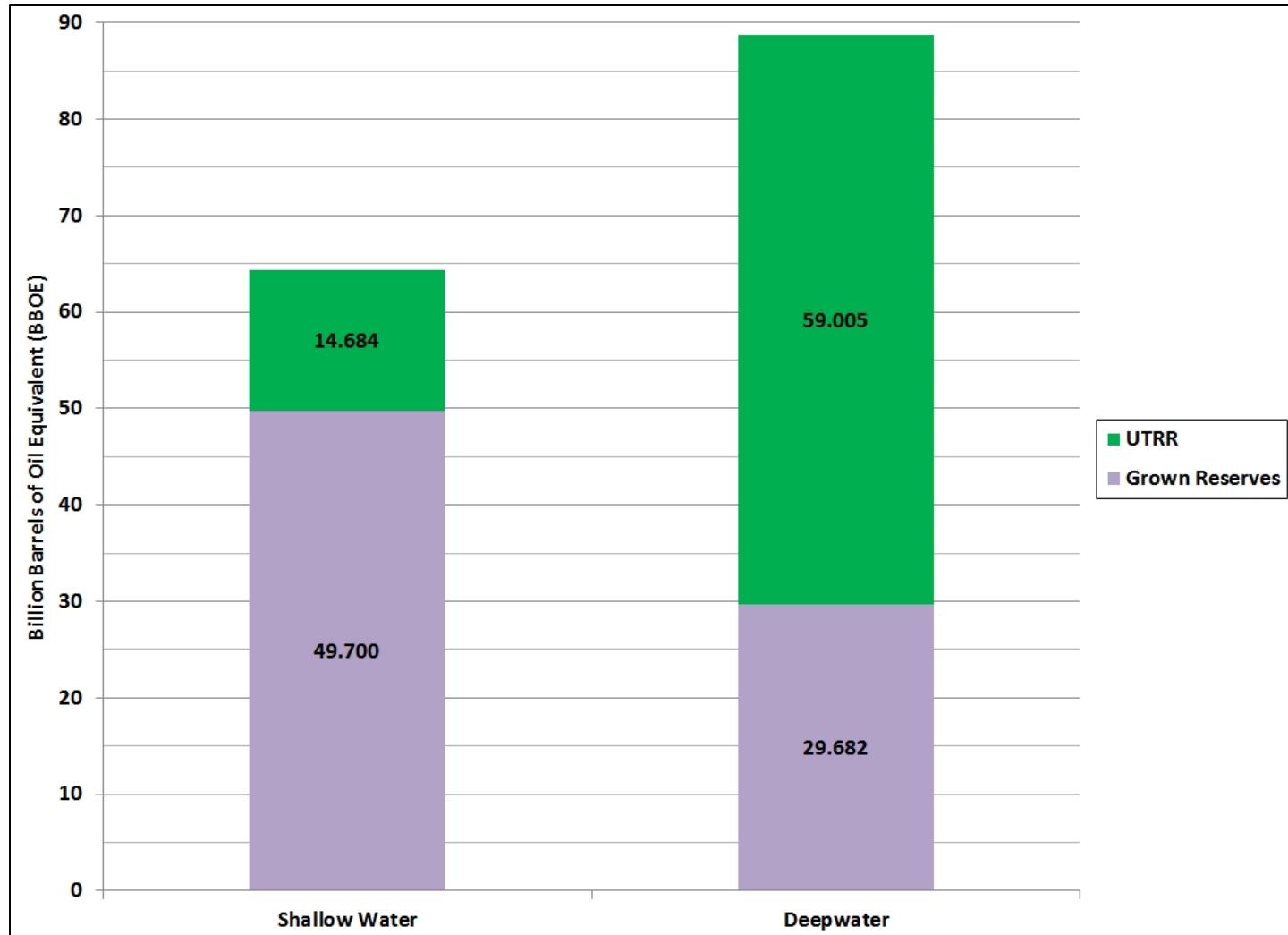
Seismic Data



Platform and Pipeline Infrastructure



Shallow Water vs. Deepwater



The United States Depends on the Gulf of Mexico

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

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

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

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



Thank You

Questions/Comments?

Visit BOEM Website @ www.boem.gov

BOEM manages the responsible exploration and development of offshore energy and marine mineral resources on the OCS. The bureau promotes energy independence, environmental protection and economic development through responsible management of these offshore resources based on the best available science.

