

Presentation to the Clean Gulf 2019 Conference

BSEE's Role in Oil Spill Prevention and Preparedness: Ensuring Energy, Economic, and National Security

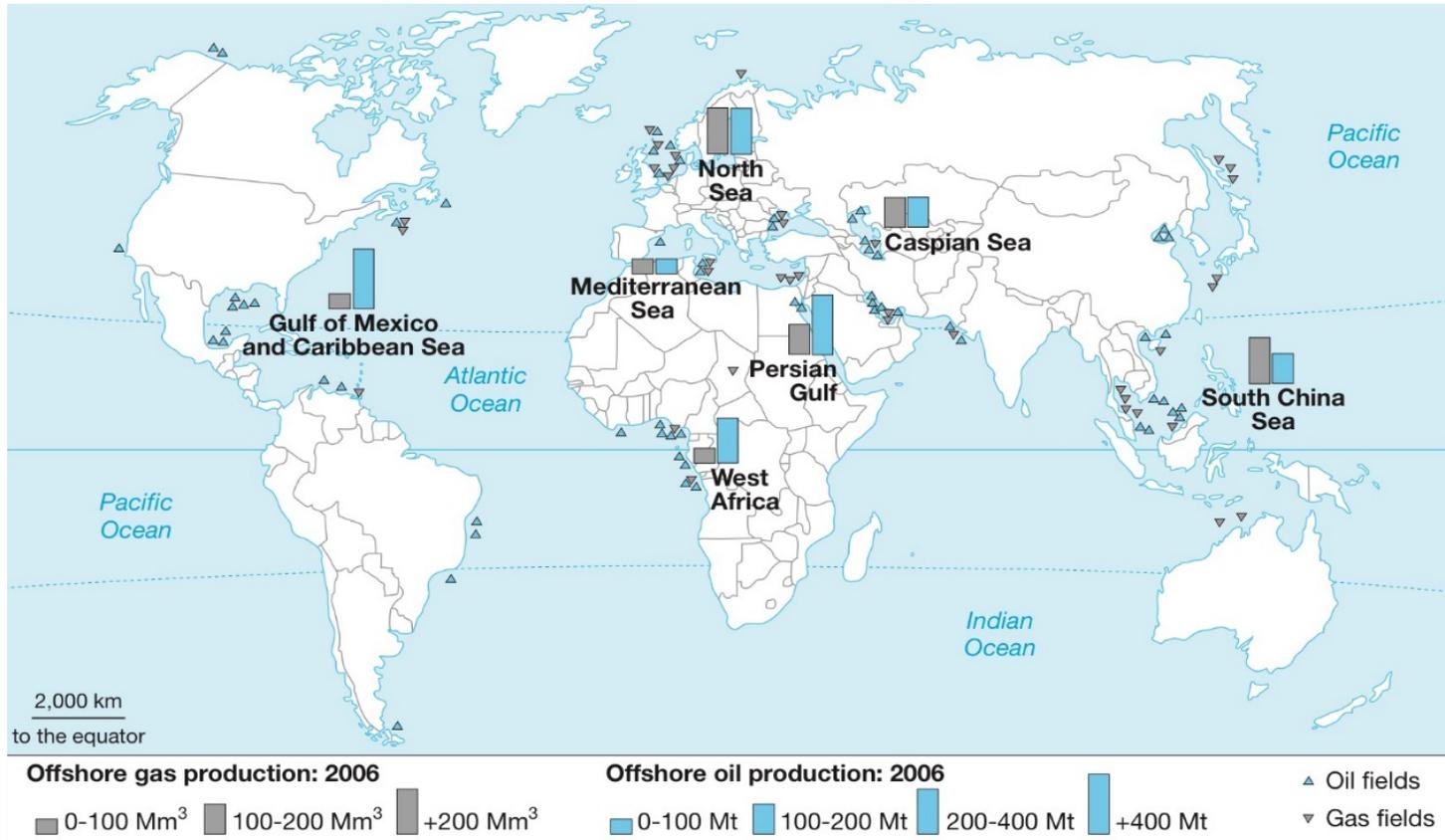
Director Scott Angelle



October 29, 2019

Over 70% of the earth's surface is covered with water.

Exploring for energy there is important to our national security, our economic security and our energy security!



Oil Spill Response Tactics

Dispersants

← **Spotter Plane**

Aerial Igniter →

In-situ Burning

↑ **Fire-resistant Oil Boom**

100% of what is in this scene is being delivered by the **private sector**. The government role is to drive preparedness and response, but industry and contractors – the people in this room – are responsible for making sure spill responses are swift and successful!

This graphic depicts examples of offshore oil spill countermeasures. However, they are not implemented as closely as depicted. Greater separation is necessary to ensure responders are safely protected against exposure to dispersant droplets or smoke particles.

Effective response depends on partners such as HWGC, MWCC and many other private sector entities.

A few facts about U.S. Offshore Energy....

- **1 in 6 barrels of oil produced in the U.S. comes the Outer Continental Shelf**
- **OCS produces enough oil to fuel 26 million cars annually**
- **OCS produces enough power for the airlines to fly 350,000 passengers each day**
- **OCS produces enough natural gas to heat 18 million American homes**
- **Offshore royalties contributed over \$5.04 Billion to the U.S. Treasury in FY 2019**

But It's About More than Just Producing Energy

Six recessions since 1973... all preceded by a spike in energy prices



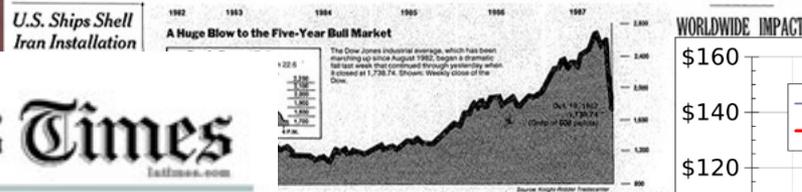
"All the News That's Fit to Print"

The New York Times

Late Edition
New York, Today, increasing clouds, High 62-67, Tonight, cloudy, breezy, showers ending, Low 51-57, Tomorrow, showers ending, High 58-65, Yesterday, High 65, low 48, Details on page 86.

VOL. CXXXVII ... No. 42,298 Copyright © 2007 The New York Times NEW YORK, TUESDAY, OCTOBER 20, 1987 30 CENTS

STOCKS PLUNGE 508 POINTS, A DROP OF 22.6%; 604 MILLION VOLUME NEARLY DOUBLES RECORD



TUESDAY, DECEMBER 2, 2008

Los Angeles Times

THROUGH PRISON GLASS

Pamela Griffin battles to get her husband out of the isolation that grinds him down. He claims his gang days are over. The government says he's still calling the shots.

PAMELA GRIFFIN
In her decade-long quest, the temperate wife has been her husband, Robert, imprisoned in California.

Recession could last into 2010

Heavy and continuing job cuts plus falling GDP give economists a pessimistic outlook. Markets volatile.

ILMAN
Moses, director of the Center for International Business Cycle Research at Columbia University.

To be sure, there are some unsettling similarities between the current era and the pre-Depression years. Like the Roaring Twenties, the 2000's have seen an astounding boom. Wall Street, New as then, individual and corporate debt.



Why do we do what we do?

Outer Continental Shelf Lands Act

est. August 7, 1953

*“It is hereby declared to be the policy of the United States that...the 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...**”*

Executive Order 13795

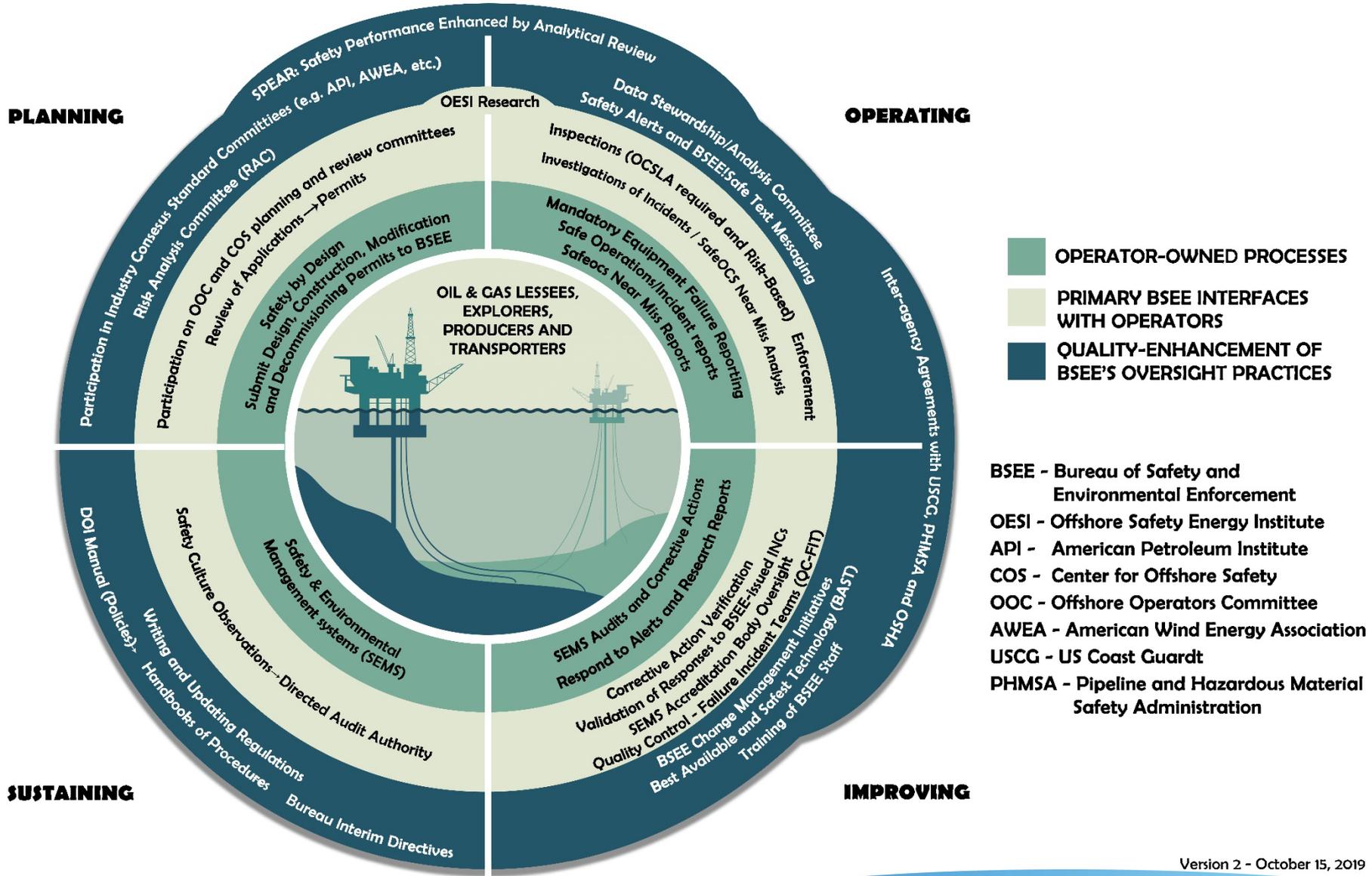
Signed April 28, 2017

Implementing an America First Offshore Energy Strategy

“It shall be the policy of the United States to encourage energy exploration and production, including on the Outer Continental Shelf, in order to maintain the Nation’s position as a global energy leader and foster energy security and resilience for the benefit of the American people, while ensuring that any such activity is safe and environmentally responsible.”

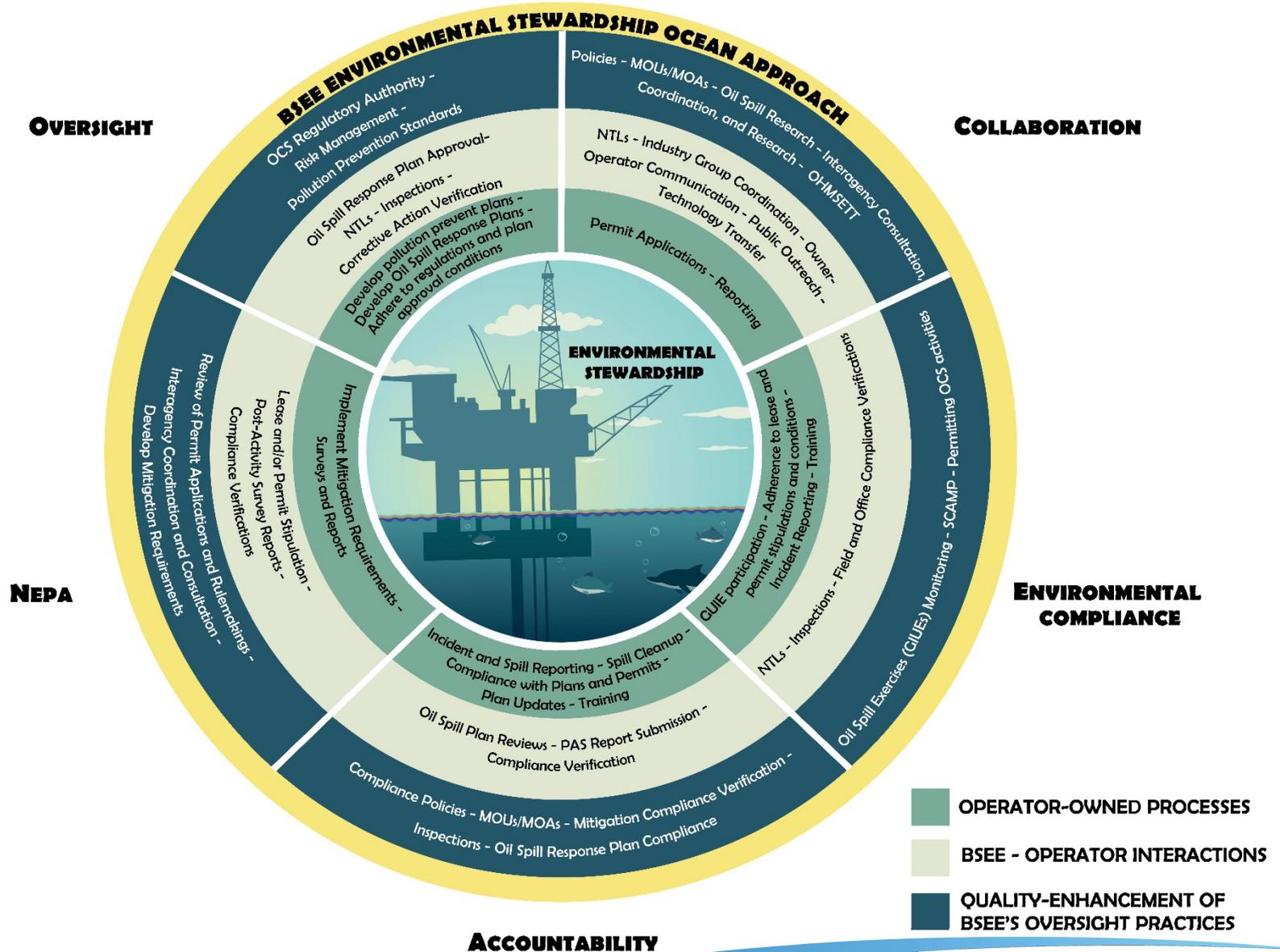
How Does BSEE Implement the Outer Continental Shelf Lands Act and Executive Orders?

BSEE'S SAFETY OVERSIGHT AND ASSURANCE PROCESSES



Version 2 - October 15, 2019

BSEE ENVIRONMENTAL STEWARDSHIP OVERVIEW



What has this Administration accomplished through regulatory reform?

Regulatory & Process Reform

- Production Safety Systems Rule, 484 provisions, revised 81 provisions (16.74%); removed 3 provisions (0.62%); and added 7 new provisions. ***Went into effect 27 December 2018***
- Well Control Rule, 342 provisions, revised 68 provisions (19.8%) of the total number of provisions, and added 33 provisions.
Went into effect 15 July 2019
- Arctic Rule, This is a BSEE and BOEM joint rulemaking to modify certain provisions of a 2016 rule. This rule established a regulatory framework for exploratory drilling operations performed from mobile offshore drilling units in the Arctic OCS. Our schedule is to publish a proposed rule in 2020.

For both the Production Safety Systems Rule and the Well Control Rule, every change compared to the 424 recommendations from 26 separate reports from 14 different organizations that issued findings after the Deepwater Horizon incident. Subject matter experts concluded revised rules do not contradict or ignore any of the 424 recommendations.

It Takes More Than Just Regulations!

Some of our other tools:

1. MOUs, such as with USCG
2. SafeOCS (near-miss reporting system)
3. Risk Based Inspections
4. Accelerated Compliance Together (ACT)
5. Risk Analysis Committee
6. BSEE!SAFE Text Messaging
7. Engagement
8. Smarter BSEE Processes
9. Private Sector Oil Spill Preparedness and Response

More details on these tools...

SafeOCS



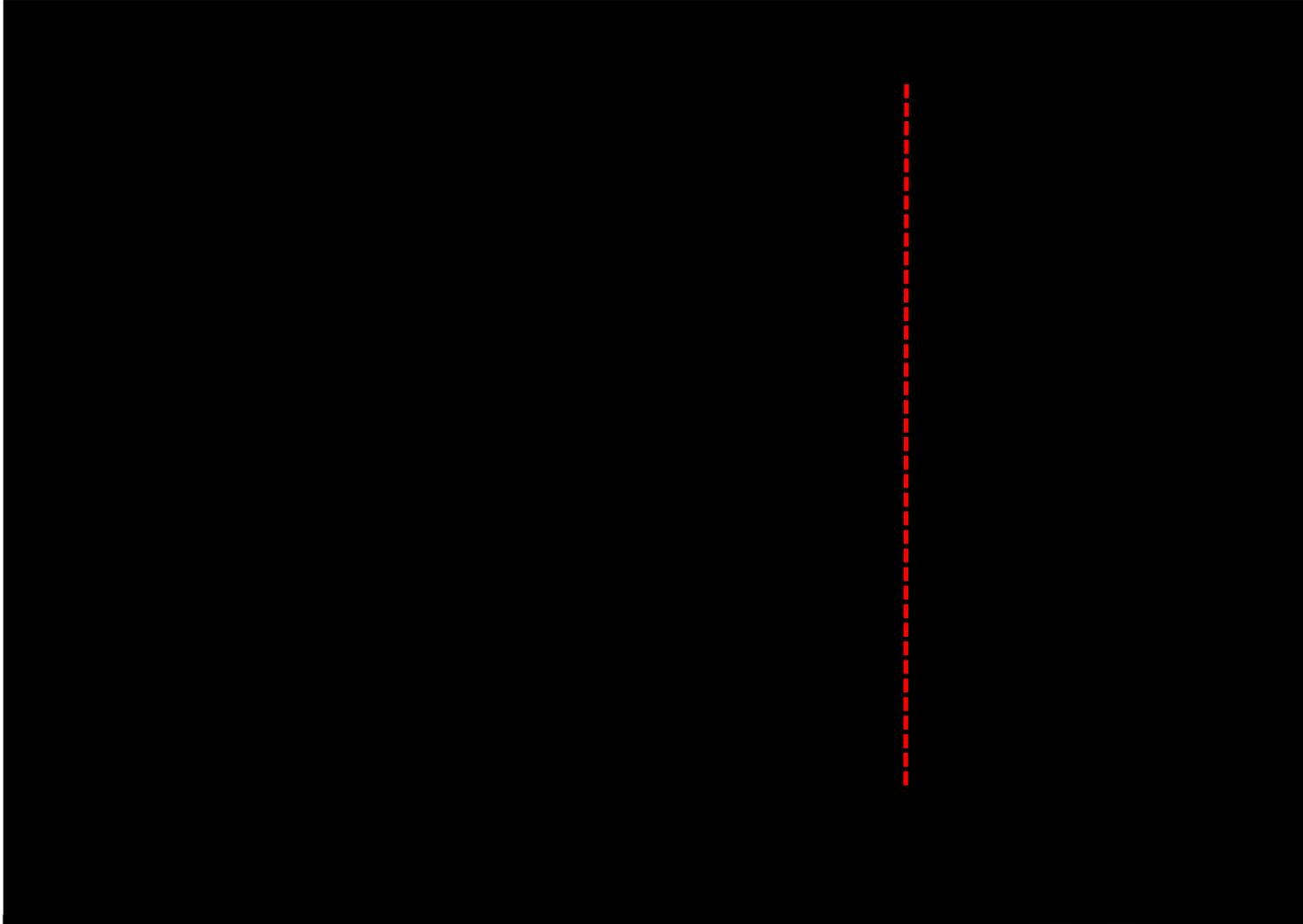
<https://www.safeocs.gov>

Near-miss reports go to 3rd Party: Bureau of Transportation Statistics (BTS)

- BTS protects the confidential safety event reports
- BTS aggregates and statistically analyzes information
- BTS identifies trends, emerging concerns, and potential causal factors of near-miss incidents
- Aggregated statistical reports are produced

Collaboration Works!

SafeOCS: We Can and Are Doing More



Source: Bureau of Transportation Statistics

BSEE Risk Based Inspection Program

- Implementation - March 2018.
- So far, 125 offshore facilities have been subject to RBIs.
- Based on initial RBIs, BSEE has issued three Safety Alerts with 28 recommendations.
- Required specific corrective action plans for deficiencies identified.
- Met with industry multiple times to discuss the RBI process and results.
- Developed protocols to work as partners to improve safety performance.



What's rarer than a unicorn?

BSEE's Accelerated Compliance Together (ACT) Program

Accelerated Compliance Together, or ACT, was inaugurated as a pilot project on January 1, 2019. The goal of the ACT pilot is to test the efficacy of encouraging offshore operators to accelerate compliance with regulations beyond the legally required time frame.

Improving a lifesaving
program and safeguarding
the environment at no
expense to the taxpayers!



Accelerated Compliance Together (ACT) program

- **Pilot began 1 January 2019**
- **Promotes accelerated compliance by OCS operators**
- **An Incident of Non-Compliance (INC) becomes a “Work Order” if corrected timely**
- **Operators will not be penalized if they choose not to use the program**
- **Results of Pilot ACT Program will be analyzed beginning 1 September 2019**

Risk Analysis Committee

- Identify and analyze existing and potential process safety risks arising out of existing and proposed OCS activities.
- Identify and analyze the barrier envelopes in place during high-consequence processes or operations (i.e., the component(s) that act together to prevent a high-consequence event).
- Identify significant gaps in BSEE's regulations, including the standards incorporated by regulation, that could be modified to reduce, to an acceptable level, the risks arising from existing, new, or future OCS activities.
- An SME Panel, appointed by the Director, will review the Risk Analysis Committee's report & make recommendations.



BSEE!SAFE: A Text Messaging Effort focusing on reaching offshore workers directly with text notification of BSEE Safety Alerts and Safety Bulletins.

Offshore workers sign-up themselves and will receive text message to provided-number with info/link to access Safety Alerts and Safety Bulletins.

Bringing the safety info to the front lines.

Sign up at: <https://www.bsee.gov/bseesafe>

22 Safety Alerts and Bulletins sent out as 27,157 text messages. There are now 3,400 BSEE!SAFE subscribers and growing.



Smarter BSEE Processes

Onshore E-Record Review Increases Inspection Time Offshore

- BSEE began robust e-records reviewed onshore as of April 1, 2018
- As a result comparing FY 2016 to FY 2019, offshore physical inspection time increased by 5.7 percent
- As a result comparing CY 2016 to CY 2018, offshore physical inspection time increased by 5.2 percent
- Total savings to taxpayers, due to reduced helicopter flights, estimate to to be \$3.5 million over 3.5 years
- Total helicopter operating expenses reduced by 15 percent

Smarter BSEE Processes

Reviewing Incidents EVERY DAY

- Reviewed by a panel of BSEE's safety, preparedness, environmental compliance, engineering, and data experts.
- Includes all operator submitted events including fatalities, lost time, reduced work, injuries, lifting events, fires, explosions, musters, gas releases, collisions, loss of well control, and spills.
- Identifying patterns, trends, barriers to process safety, and leading indicators.

Safety Performance Enhanced by Analytical Review (SPEAR)

- Identifying new data analytic tools and strategic processes.
- Will allow BSEE subject matter experts throughout the organization to thoroughly analyze data to identify current and emerging safety and environmental hazards.
- SPEAR is one piece of a larger effort to establish a world-class approach to analyzing and communicating data and information throughout the bureau and to external stakeholders.
- SPEAR will enhance BSEE's safety and environmental stewardship decision-making *and* overall safety outcomes for energy operations on the Outer Continental Shelf.

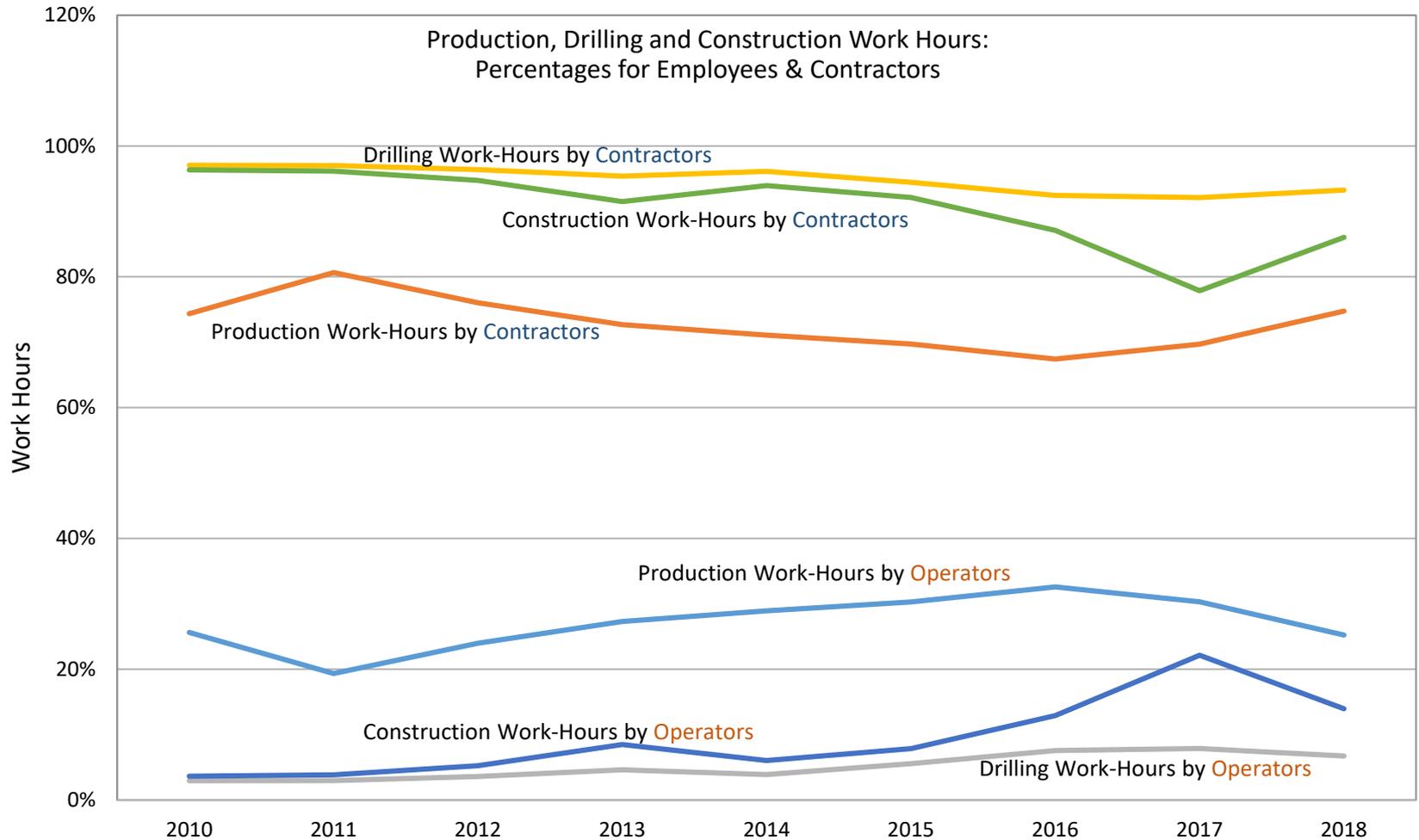
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(continued)

Engagement, Engagement, Engagement



Contractors Are Doing Most of the Offshore Work



Source: BSEE Internal Data as Reported by Industry

A Changing Gulf of Mexico

- Over the last 10 years we've witnessed a 60% reduction in the number of producing platforms, **YET** in the last 10 years saw a 51% increase in oil production.*

Conclusion:

Bigger, fewer, deeper, more complex

*2008: 423,453,202 barrels of oil produced

2018: 646,587,511 barrels of oil produced

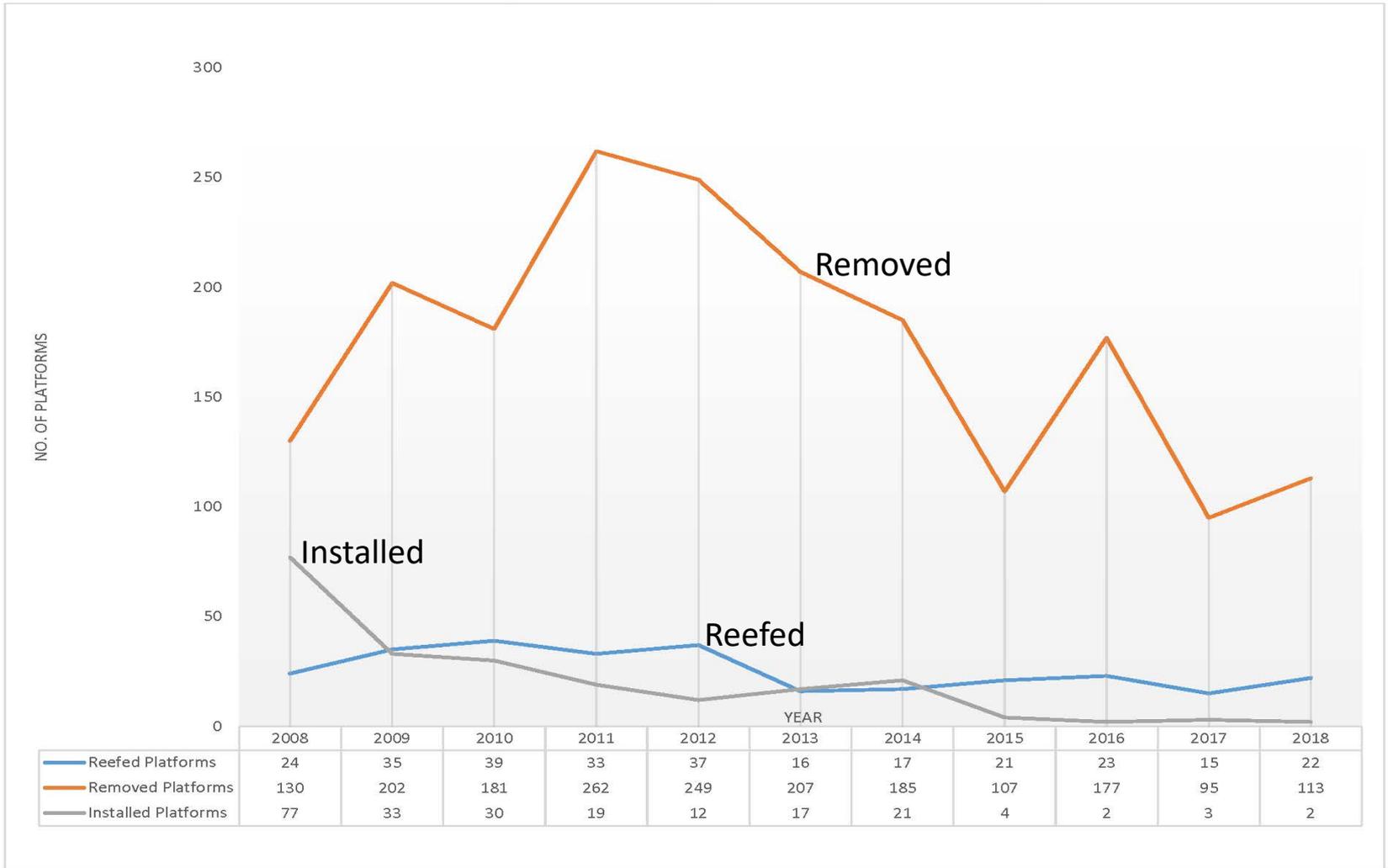
Shallow Water vs. Deepwater

Gulf of Mexico

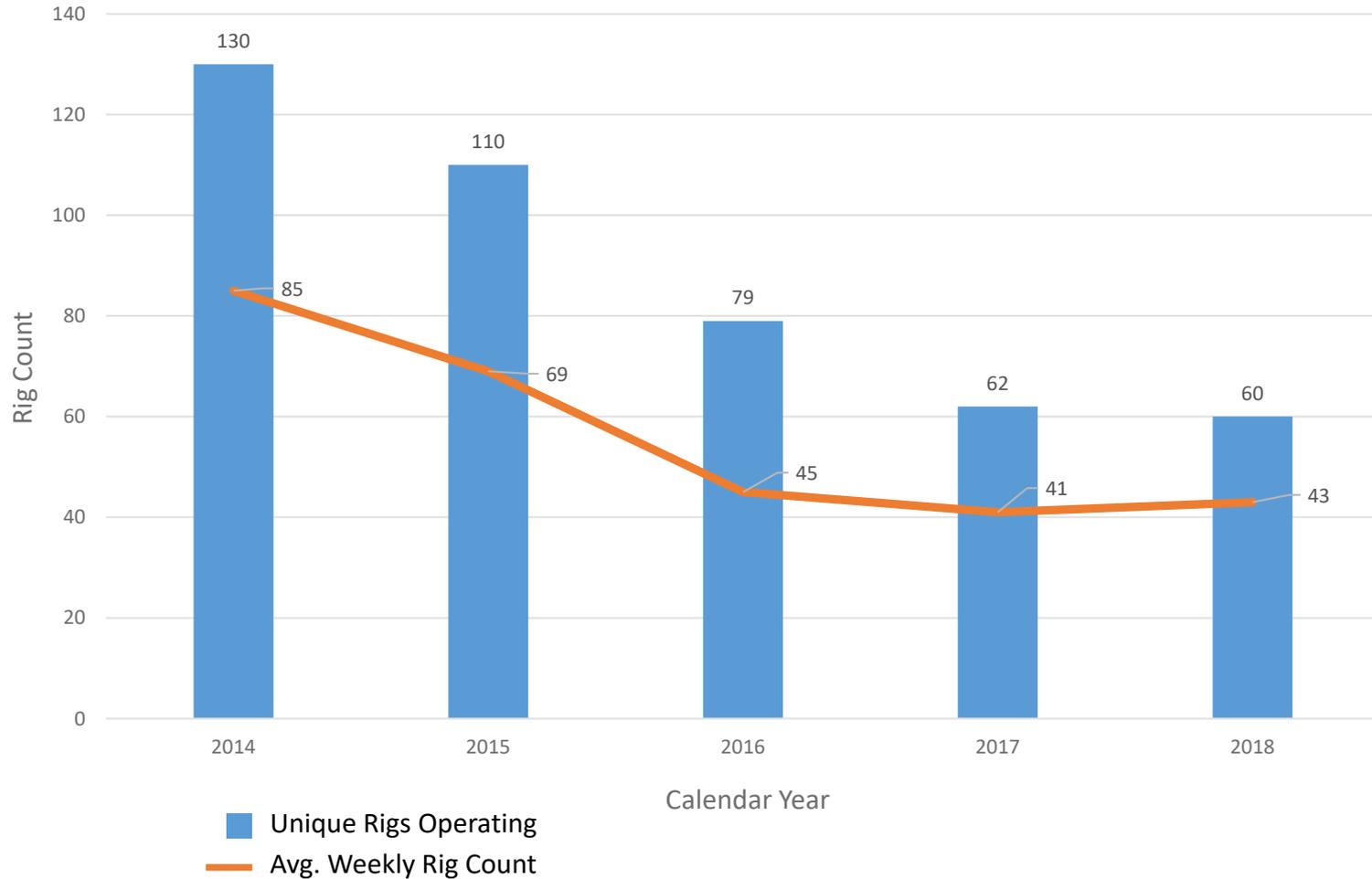
Two Distinct Provinces

Shallow water	Deepwater
Production began 70 years ago	First Gulf well about 45 years ago
Mostly Gas	Mostly Oil
~50,000 wells drilled	~5,000 wells drilled
61% decrease in producing wells in 20 years	73% increase in producing wells in 20 years
Oil production down 77% in 20 years	Oil production up 198% in 20 years
Gas production down 92% in 20 years	Gas production flat
“Rabbit-size” prize	“Elephant-size” prize

Installed, Removed, and Reefed Platforms by Year (2008-2018)



2014-2018 Unique Rigs Operating and Average Rig Count in the Gulf of Mexico



Oil Spill Preparedness, Research and Effective Responses when Spills Occur Builds Confidence in the American Public that Responsible Offshore Energy Development *is* Compatible with Environmental Stewardship.



Preparedness Verification



Oil Spill Response Research

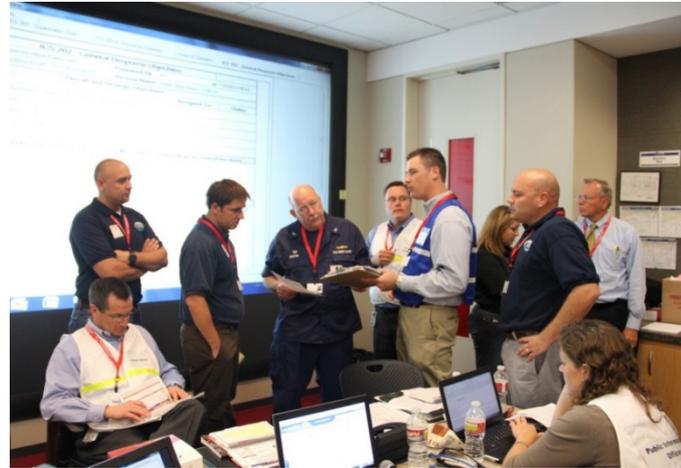


Ohmsett Management

An Important BSEE Role: Spill Response Equipment Verification



BSEE Also Drives Industry Training and Conducts Spill Exercise Audits



BSEE Drives Oil Spill Research

Research Spectrum



Basic	Applied	Developmental (early phase)	Developmental (late phase)
Basic Research	The <i>imagination phase</i> – acquiring new knowledge without a defined goal or expected application of the knowledge.		
Applied Research	The <i>art phase</i> – taking a question out of the realm of the imagination and creating something.		
Developmental Research	The <i>craft phase</i> – evolving a current state of something by either modification to, or the creation of a product, process, system, or service.		

BSEE's Ohmsett Facility – Leonardo, NJ



667-foot Research Test Tank



Oil Spill Response Tactics

Dispersants

← **Spotter Plane**

Aerial Igniter →

In-situ Burning

↑ **Fire-resistant Oil Boom**

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Effective response depends on partners such as HWGC, MWCC and many other private sector entities.



“However beautiful the strategy, you should occasionally look at the results.

- Winston Churchill

Last Full Year of the Previous Administration (2016) Compared to the First Full Year of the Current Administration (2018)

- Well permits issued increased by 44%
- Total inspections increased by 21.5%
- Inspections per visit increased by 33.9%
- Inspectors' time spent conducting physical inspections increased 5.2%
- BSEE Safety initiatives increased by 54.5%
- BSEE Environmental initiatives increased by 433%
- Issuance of Safety Alerts and Safety Bulletins increased by 214%
- Participation in the SafeOCS Program (voluntary near-miss reporting) increased by 2,766%
- Number of Renewable Energy Industry Submissions reviewed by BSEE increased by 193%
- Offshore Royalty Revenue Generated for Federal Treasury increased by 96%
- Production on the OCS increased by 8 million barrels of oil equivalent (BOE)

Oil Spill Response Plans Processed by BSEE

CY 2016

Total plans in Approved Status at end of calendar year = 126

Total new plans approved in calendar year = 10

Total new plans submitted in calendar year = 9

CY 2017

Total plans in Approved Status at end of calendar year = 118

Total new plans approved in calendar year = 4

Total new plans submitted in calendar year = 8

CY 2018

Total plans in Approved Status at end of calendar year = 118

Total new plans approved in calendar year = 4

Total new plans submitted in calendar year = 5

Thank you for all

you

do for America!



Together We Can

Drive Safety Performance

beyond Regulation Through

Innovation and Collaboration