



Bureau of Safety and Environmental Enforcement

BSEE

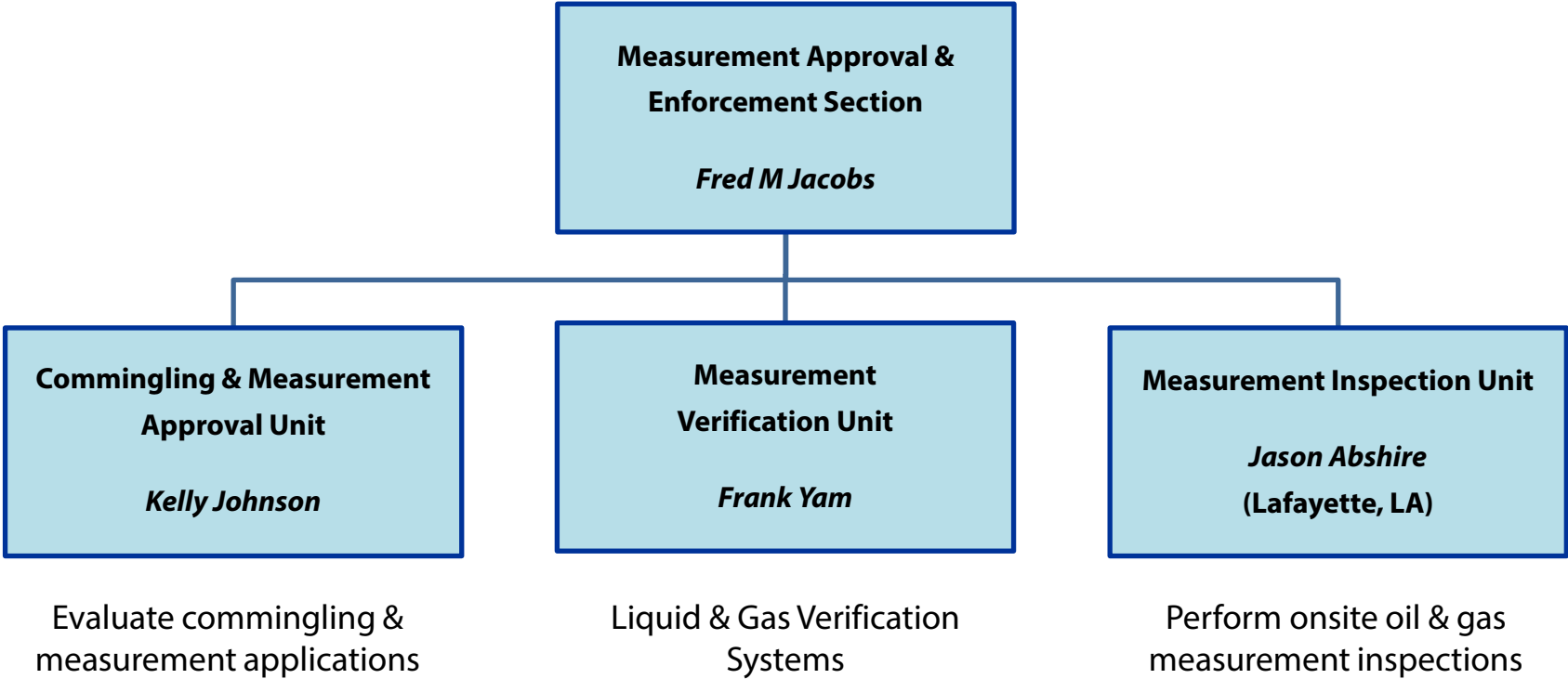
Gulf of Mexico Oil & Gas Update

Fred M. Jacobs
February 21, 2018

UPM FORUM
UPSTREAM PRODUCTION MEASUREMENT

“To promote safety, protect the environment and conserve resources offshore through vigorous regulatory oversight and enforcement.”

Measurement Approval & Enforcement Section



These functions help ensure accurate measurement, reporting, and royalty collections.

DOI Leadership



New Interior Secretary
Ryan Zinke



New BSEE Director
Scott Angelle

2017 Presidential Executive Orders

- Secretarial Order 3349: Promoting Energy Independence and Economic Growth

Directs agencies to review existing regulations and appropriately suspend, revise, or rescind those that unduly burden the development of domestic energy resources beyond the degree necessary to protect the public interest or otherwise comply with the law.




- Secretarial Order 3350: Implementing an America-First Offshore Energy Strategy

Directs BOEM to develop a new five-year plan (2019-2024) for oil and gas exploration in offshore waters.

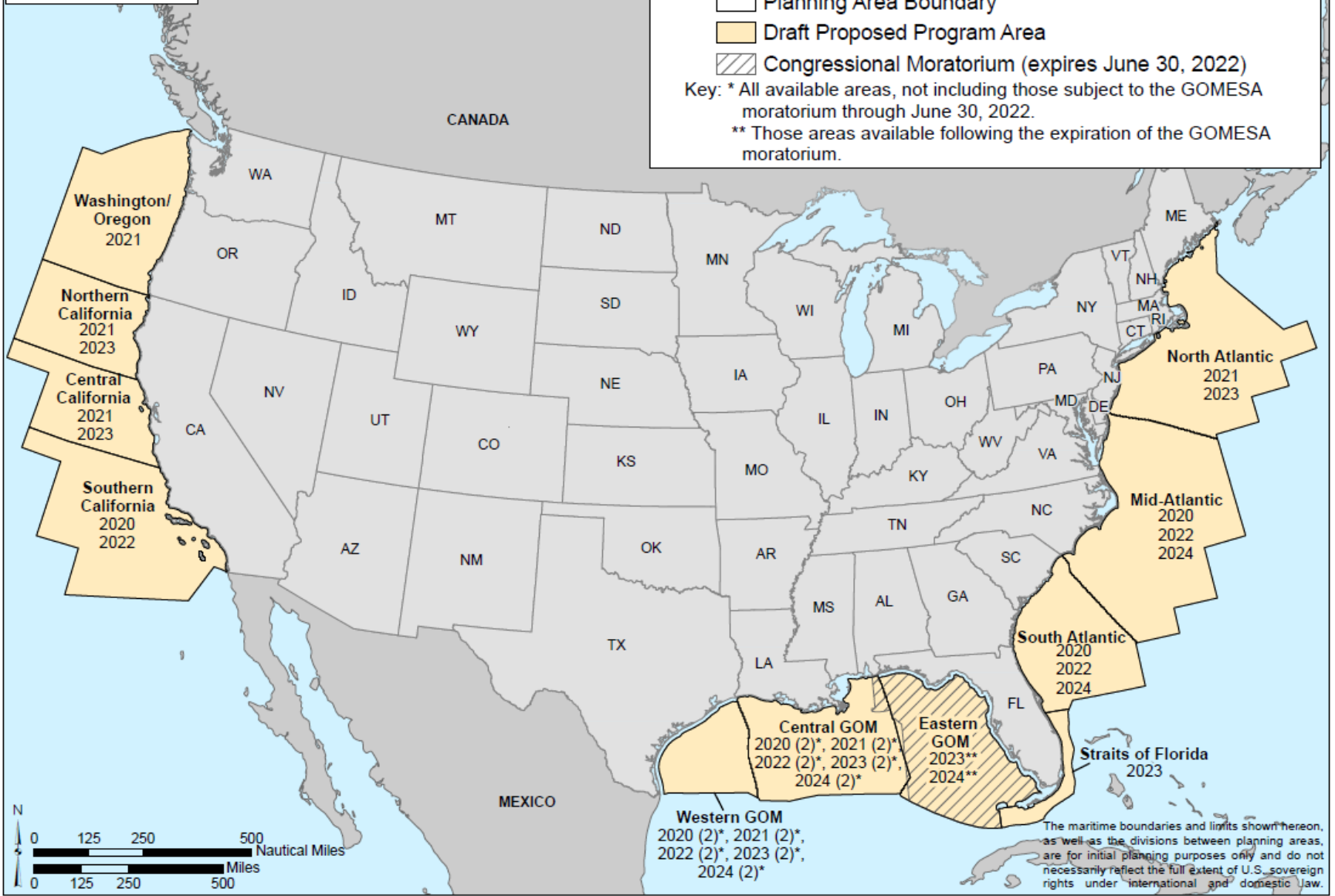
- Secretarial Order 3351: Strengthening Department of the Interior's Energy Portfolio

Develop and coordinate strategies and policies that promote responsible development of all types of energy on public lands; promote efficient and effective processing of authorizations, permits, and agreements.

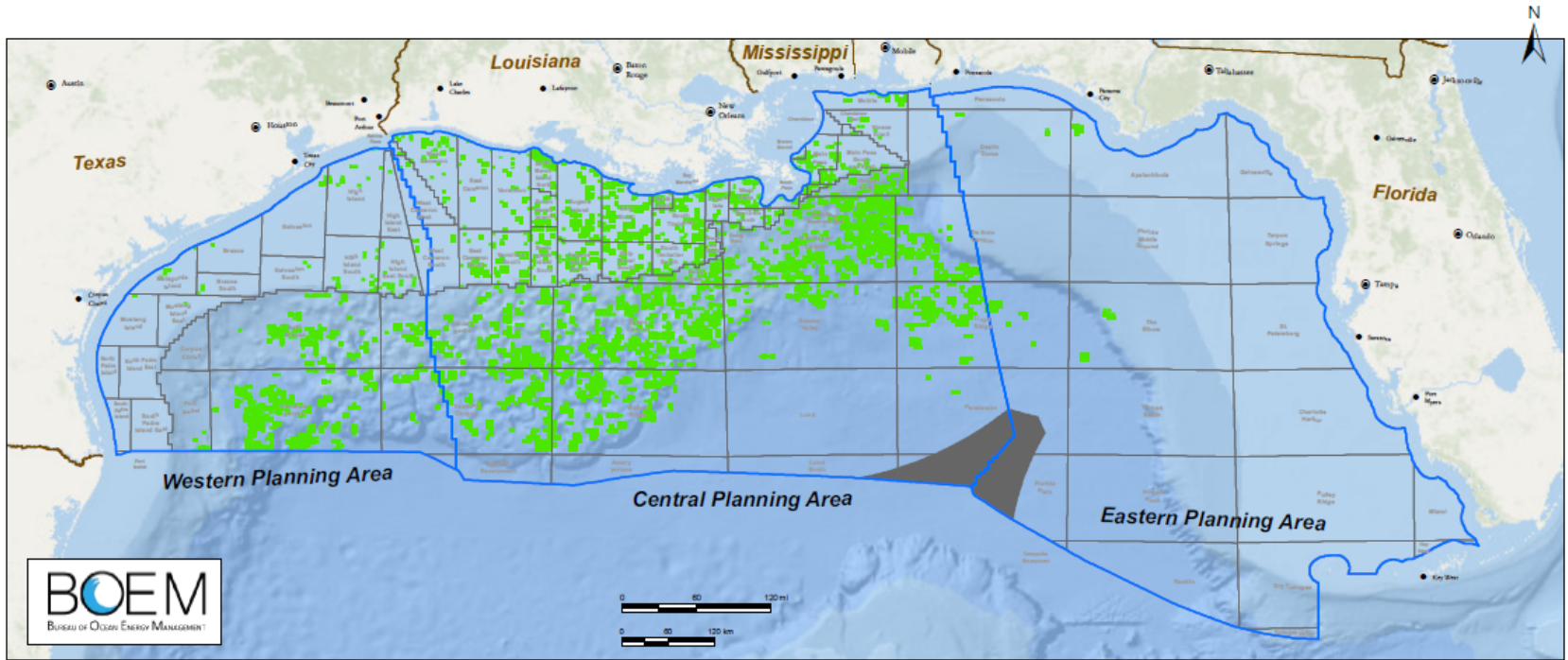
**2019–2024 Outer Continental Shelf Oil and Gas Leasing
Draft Proposed Program Areas and Sale Years: Lower 48 States**

-  Planning Area Boundary
-  Draft Proposed Program Area
-  Congressional Moratorium (expires June 30, 2022)

Key: * All available areas, not including those subject to the GOMESA moratorium through June 30, 2022.
** Those areas available following the expiration of the GOMESA moratorium.



BOEM Gulf of Mexico OCS Region Blocks and Active Leases by Planning Area January 1, 2018



Planning Areas	Total Blocks	Total Acres	Number of Leases	Acres Leased
Western	5,240	28,576,813	430	2,427,282
Central	12,409	66,446,351	2,331	12,215,577
Eastern	11,537	64,357,859	37	200,670
Sub-Totals	29,186	159,381,023	2,798	14,843,529
CPA/EPA Shared Blocks*	(86)		(3)	
Totals	29,100	159,381,023	2,795	14,843,529

■ Active Lease
 Exclusive Economic Zone
 Northern Portion of the Eastern Gap
 Planning Area Boundary

* CPA and EPA contain 86 shared blocks of which 3 are leased. These blocks are given both a CPA and EPA designation in the data which accounts for a higher block total.

BOEM Lease Sale 250

March 21, 2018

- Largest lease sale in U.S. history announced
 - 77 million acres in GOM federal waters
 - 14,375 unleased blocks offered
 - 3 – 230 miles offshore
 - 9 – 11,115 ft water depth
 - Estimated resource potential of 48 billion bbl oil and 141 tcf gas

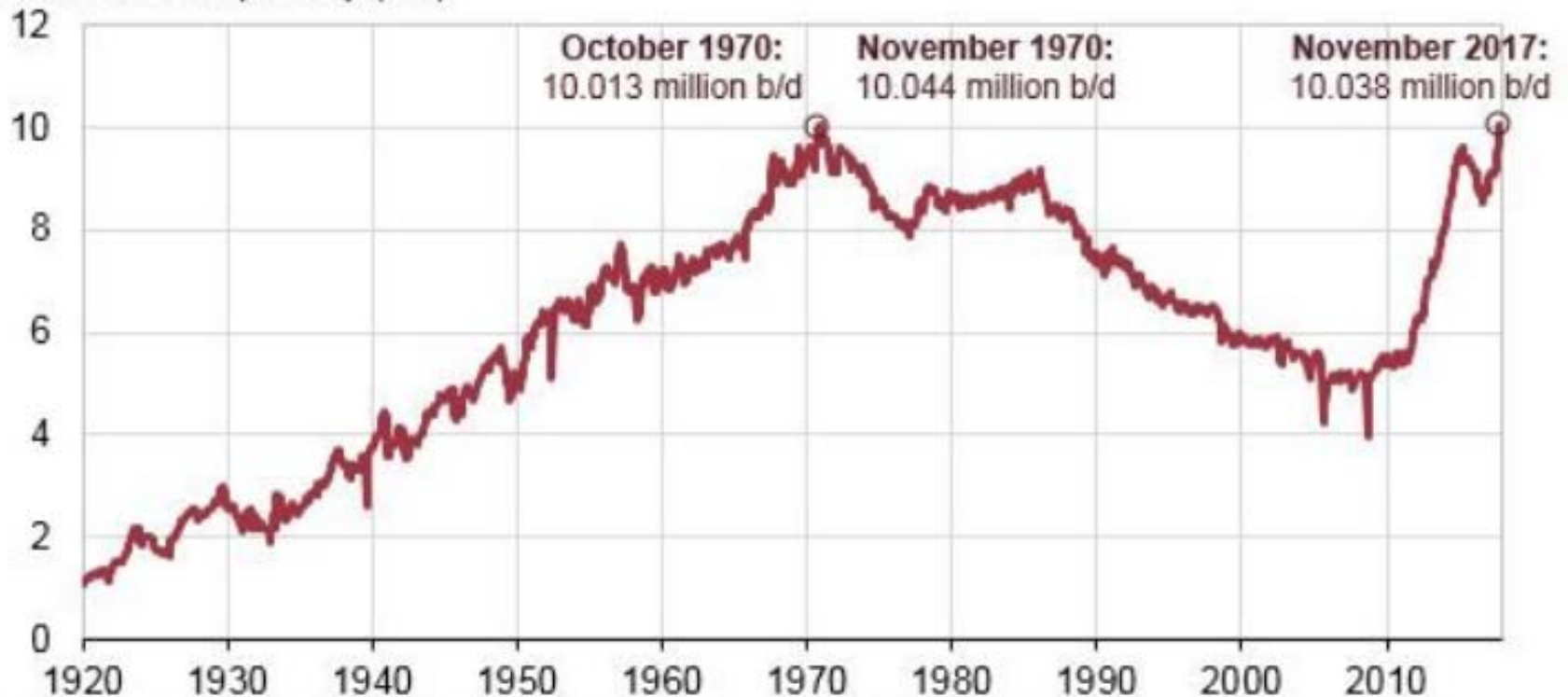
Lease Continuation thru Operations Rule

Effective June 9, 2017

- BSEE regs amended to extend the time allowed between lease holding operations (drilling, well-reworking, or production) for leases beyond their primary term. The new rulemaking extends the time from 180 days to a one year period.
- Will provide additional flexibility for operators in planning and coordinating development activities.

U.S. Oil Production is Growing

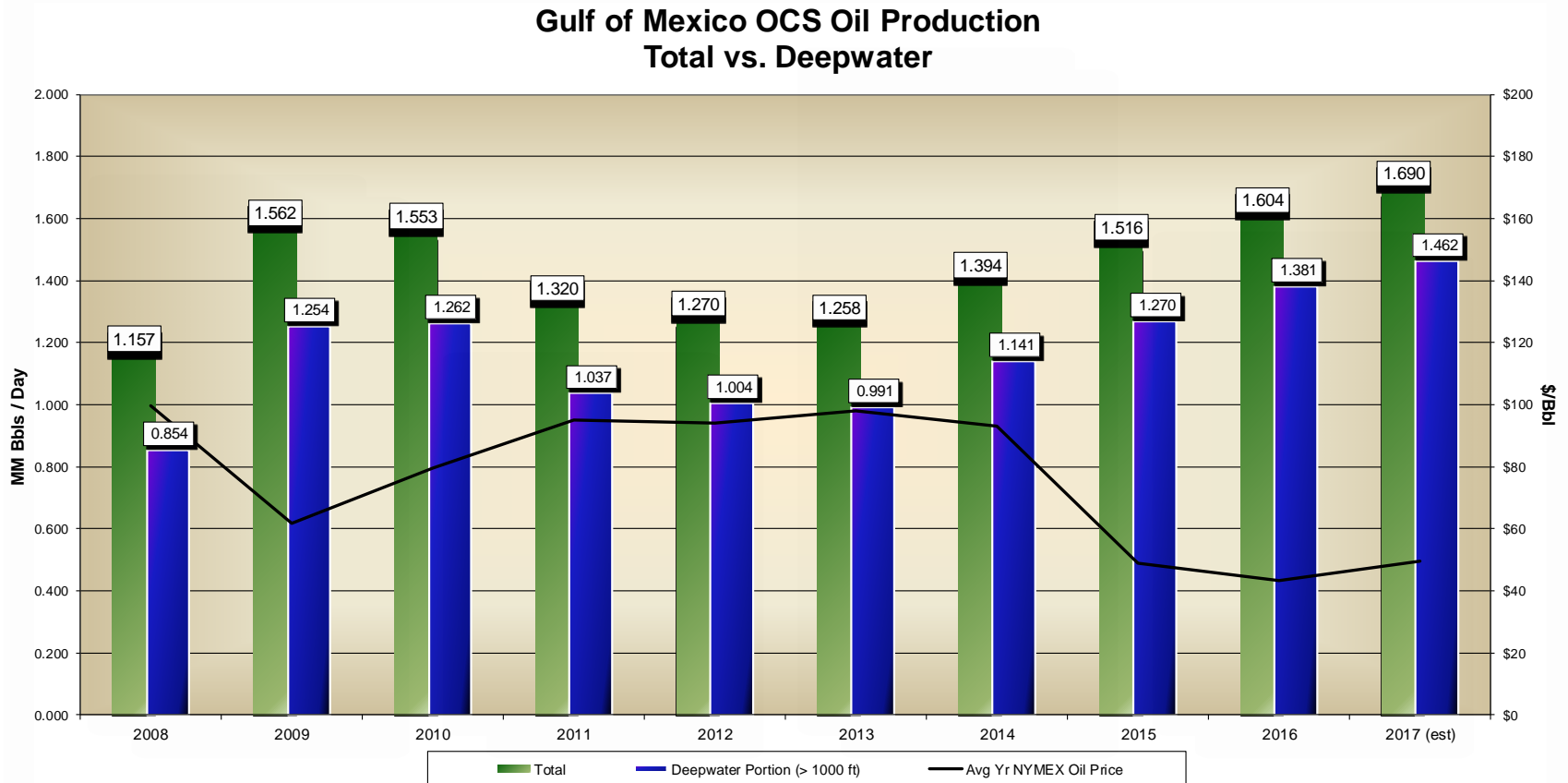
U.S. monthly crude oil production (Jan 1920- Nov 2017)
million barrels per day (b/d)



Source: U.S. Energy Information Administration, *Petroleum Supply Monthly*

U.S. oil output recently reached 10 million barrels/day for first time in decades
Projected to become highest producer in world by end of year

Gulf of Mexico OCS Oil Production



Record high oil production in GOM in 2017; vast majority from deepwater facilities
Steady decline of gas production in GOM since 2001

New GOM Deepwater Projects

New Project	Operator	Location	Type	Water Depth	First Prod	Remarks
Stampede	Hess	GC 468	TLP	3500	2018	80 mbopd
Big Foot	Chevron	WR 29	TLP	5200	2018	75 mbopd
Claiborne	LLOG	MC 794	Subsea	1500	2018	SS tieback
LaFemme	LLOG	MC 427	Subsea	5800	2018	SS tieback
Blue Wing Olive	LLOG	MC 471	Subsea	5800	2018	SS tieback
Crown & Anchor	LLOG	VK 959	Subsea	4200	2018	SS tieback
Red Zinger	LLOG	MC 257	Subsea	6000	2018	SS tieback
Kaikias	Shell	MC 812	Subsea	4575	2019	SS tieback
Constellation	Anadarko	GC 627	Subsea	1527	2019	SS tieback
Buckskin	LLOG	KC 872	Subsea	6978	2019	SS tieback
Appomattox	Shell	MC 392	Semi	7200	2020	150 mbopd

Recently announced major discoveries:

Shell's Whale prospect in AC 772; Chevron's Ballymore prospect in MC 607

Overview of GOMR Activity

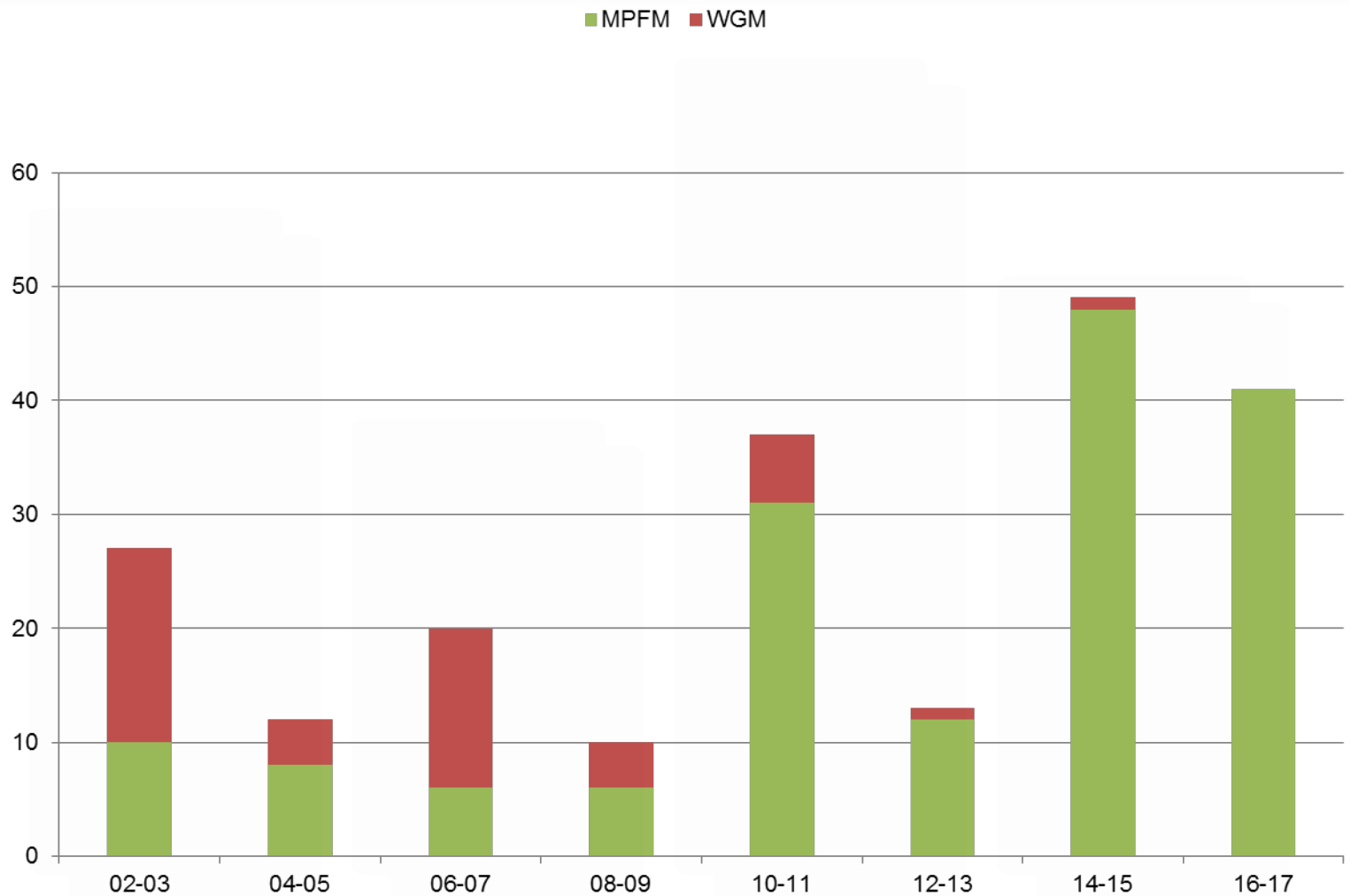
	FY 2015	FY 2016	FY 2017
Total Platforms	2344	2165	2021
Wells Drilled	223	166	143
Wells P&A'd	515	633	457
Oil Sales Meas Points	334	314	302
Gas Sales Meas Points	565	505	470

Types & Numbers of Meters Used

For Royalty, Allocation, and F/V Metering

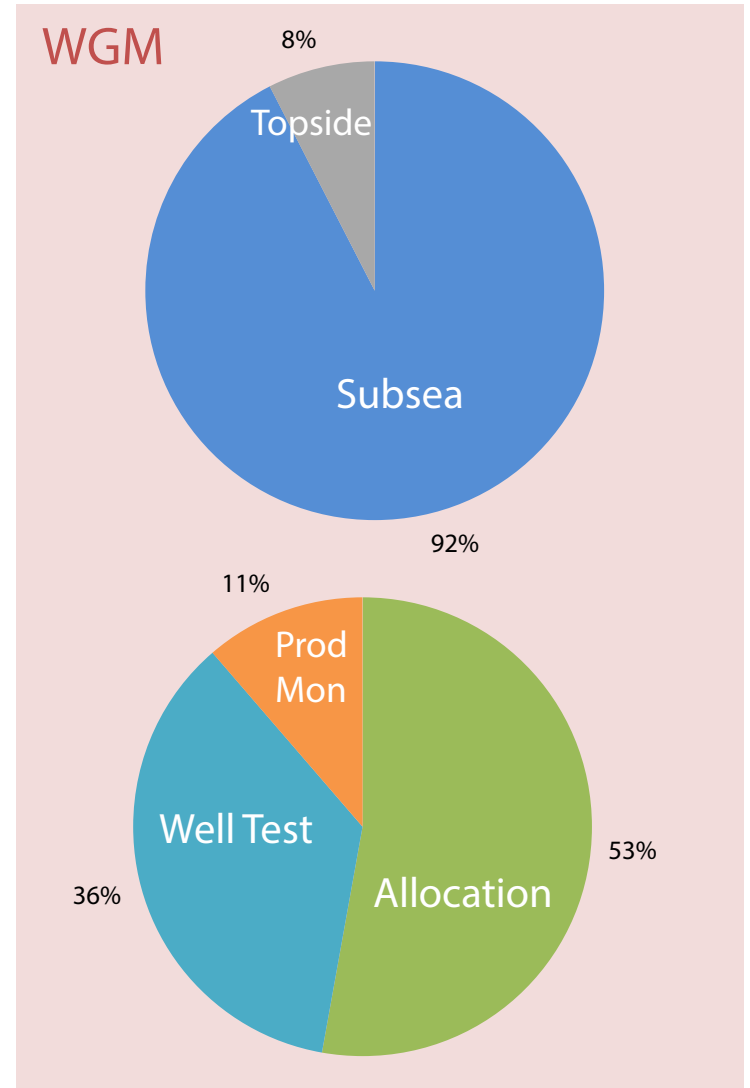
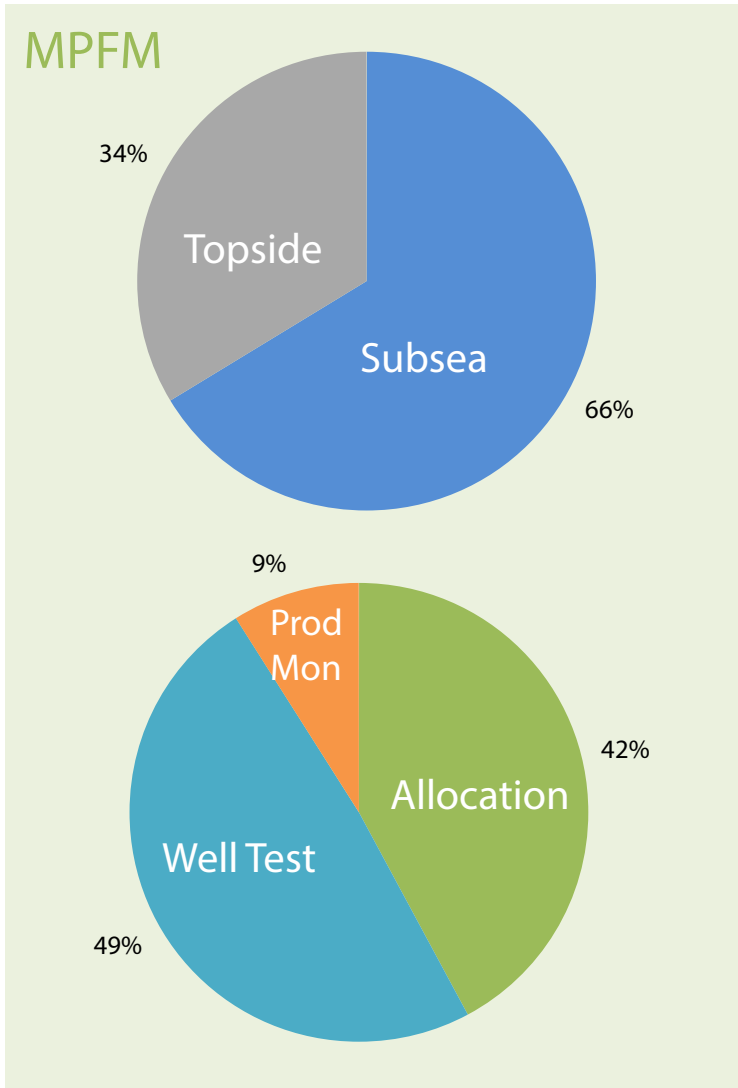
		2013	2014	2015	2016	2017	2018
Orifice Meters		1416	1323	1301	1208	1125	1089
Turbine Meters		972	913	850	743	648	598
Positive Displacement		718	694	686	600	574	574
Thermal Dispersion		131	152	168	218	231	234
Helical Turbines		91	92	97	102	116	120
Gas Ultrasonic		78	82	102	110	113	117
Cone Meters		103	103	116	109	99	101
Multiphase Flow		32	37	63	62	52	68
Coriolis		15	18	17	18	22	22
Total		3556	3414	3400	3170	2980	2923

MPFM & WGM Approvals by Year



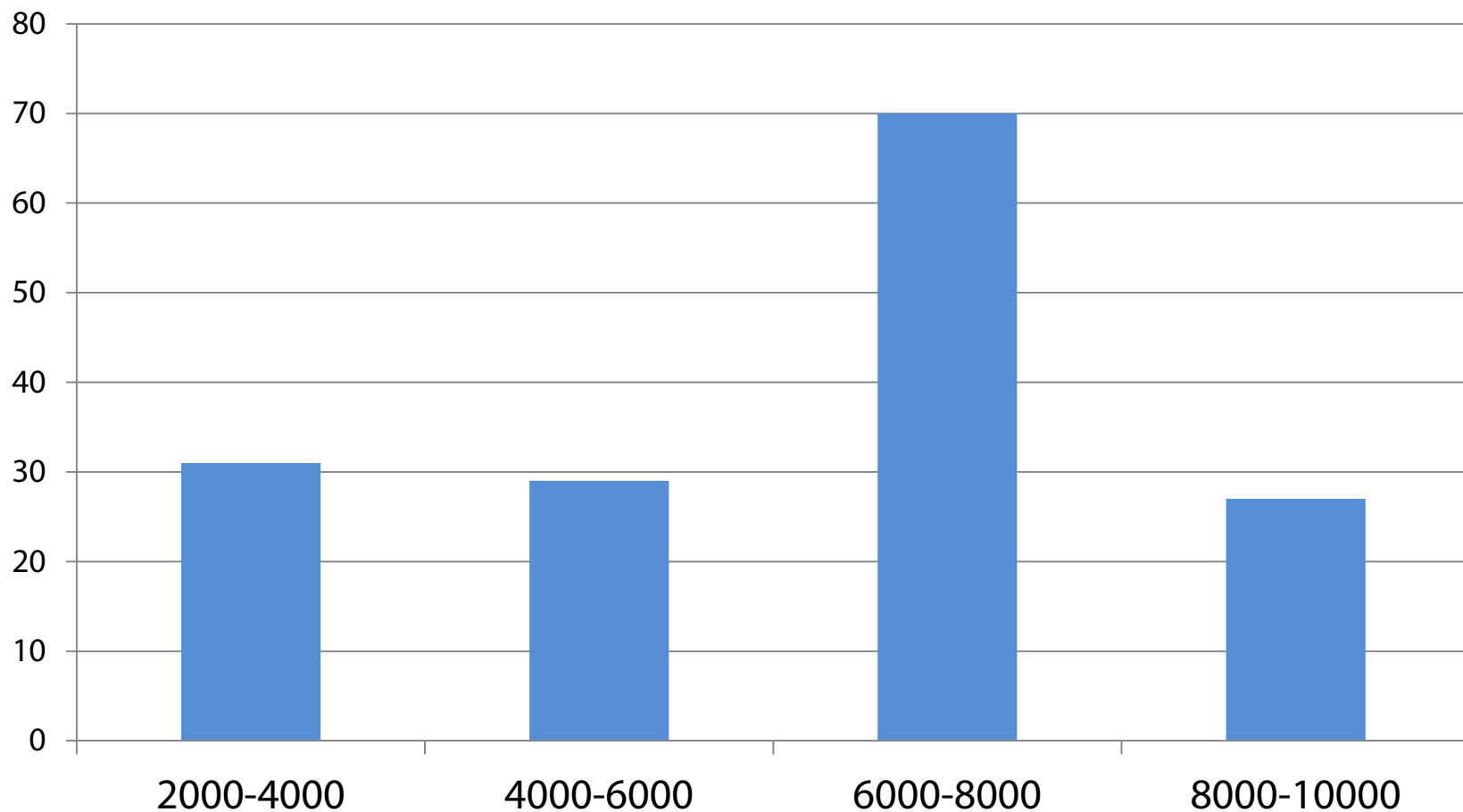
Total of 209 Multiphase Flow Meters (MPFM) & Wet Gas Meters (WGM) approved for well test & allocation purposes through 2017 in the GOM OCS

Service & Application



Charts include 22 additional MPFM/WGMs used for production monitoring

Water Depth (ft) for Subsea MPFM/WGMs



Deepest Water Depth for MPFM/WGM – 9627 ft at AC 859

Offshore Operators Committee (OOC)

Best Practice / Guidance Documents

- Best practice document for site security sealing to meet BSEEs requirements.
- Guidance document for preparing Surface Commingling and Measurement applications.

The documents can be found at...

<http://oocmain.theooc.us/technicaldeepwater.html>

Thank You

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