

BOEM

Bureau of Ocean Energy
Management

MANAGEMENT OF CONFLICTS OF USE

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Mission

The Marine Minerals Program will facilitate access to and manage the Nation's Outer Continental Shelf (OCS) **non-energy marine minerals**, particularly sand and gravel, through

- environmentally responsible stewardship of resources,
- prudent assessments of exploration and leasing activities,
- coordination with governmental partners and engagement of stakeholders,
- strategic planning, and
- mission-focused scientific research to improve decisionmaking and risk management.

Functions and Priorities

- **Stewards of OCS non-energy marine minerals**
- **Facilitate access** to OCS sand for Federal, State, and local government agencies
- **Identify and evaluate** OCS sand resources (National Sand Inventory)
- **Manage multiple-use conflicts** (e.g., pipelines, telecom cables, navigation, and commercial fisheries)
- **Conduct research** to inform decisionmaking and manage risk
- **Provide for competitive and noncompetitive** leasing of OCS “non-energy” marine minerals

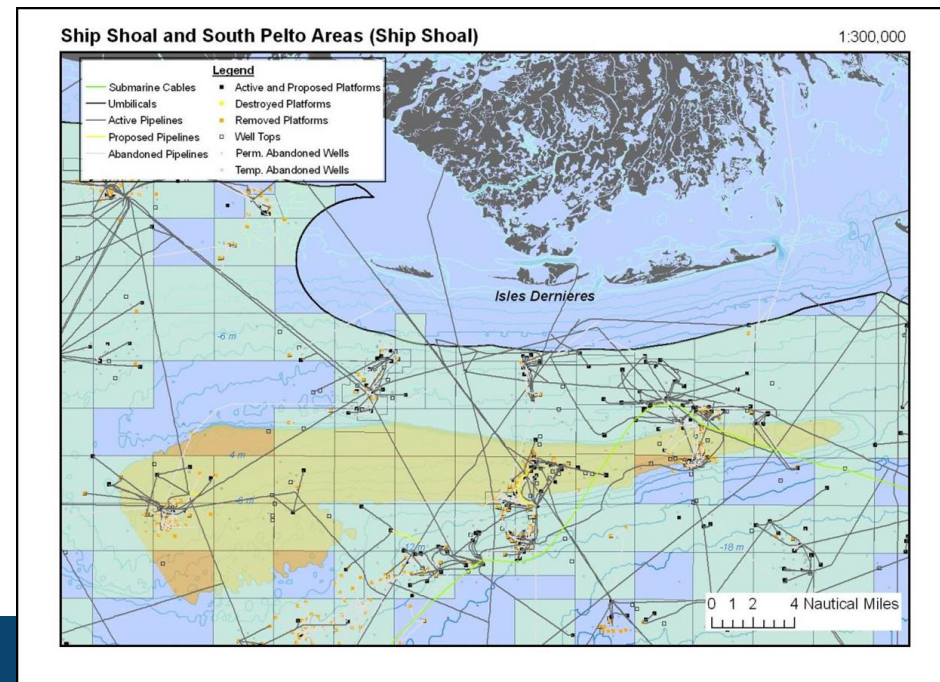


Multiple-Use Conflicts

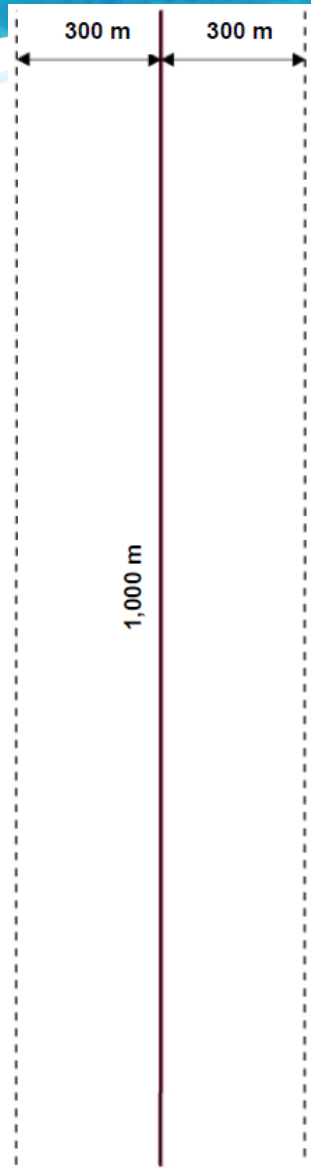


Gulf of Mexico: Managing Multiple Uses

- Sand is extremely scarce where needed most in the northern Gulf of Mexico
- **Every Gulf of Mexico Region OCS-identified borrow area has pipeline conflicts (usually multiple)**
- Oil and gas infrastructure obstructs access = higher costs to projects
- Significant OCS sediment resources policy developed: BOEM must proactively manage resources to ensure availability



Impact of Pipeline Buffers



- Volume and value of sediment unavailable based on 1,000-meter pipeline
 - It will occupy $1,000 \times 600$ sq. meter = 600,000 sq. meter of significant sediment resources area
 - It will prevent access to about $600,000 \times 3$ meter (thick) = 1,800,000 sq. meter **or** 1.8 MCM/2.4 MCY of sediment
 - Average economic value of sediment – \$21 per meter cubed
 - Economic value of 1.8 MCM – ~\$37.8 million

Courtesy of Syed Khalil, Louisiana CPRA (2019)

Reduction in Available Sediment Volume

- There is a 41% reduction in volume due to pipelines.
- ~441 MCM of surficial sand could be made available by removal of decommissioned pipelines.

AREA TYPE	TOTAL VOLUME (~MCY)	TOTAL VOLUME (~MCM)
Potential Fines	1,100.00	841.00
Potential Mixed Sediment	256.50	196.00
Potential Sand	754.00	576.00
Surficial Fines	365.00	279.00
Surficial Mixed Sediment	814.00	622.00
Surficial Sand	577.00	441.00
Unknown	8,993.00	6876.00
TOTAL	12,859.50	9831.00

Courtesy of Syed Khalil, Louisiana CPRA (2019)

Pipeline Decommissioning in Significant OCS Resources

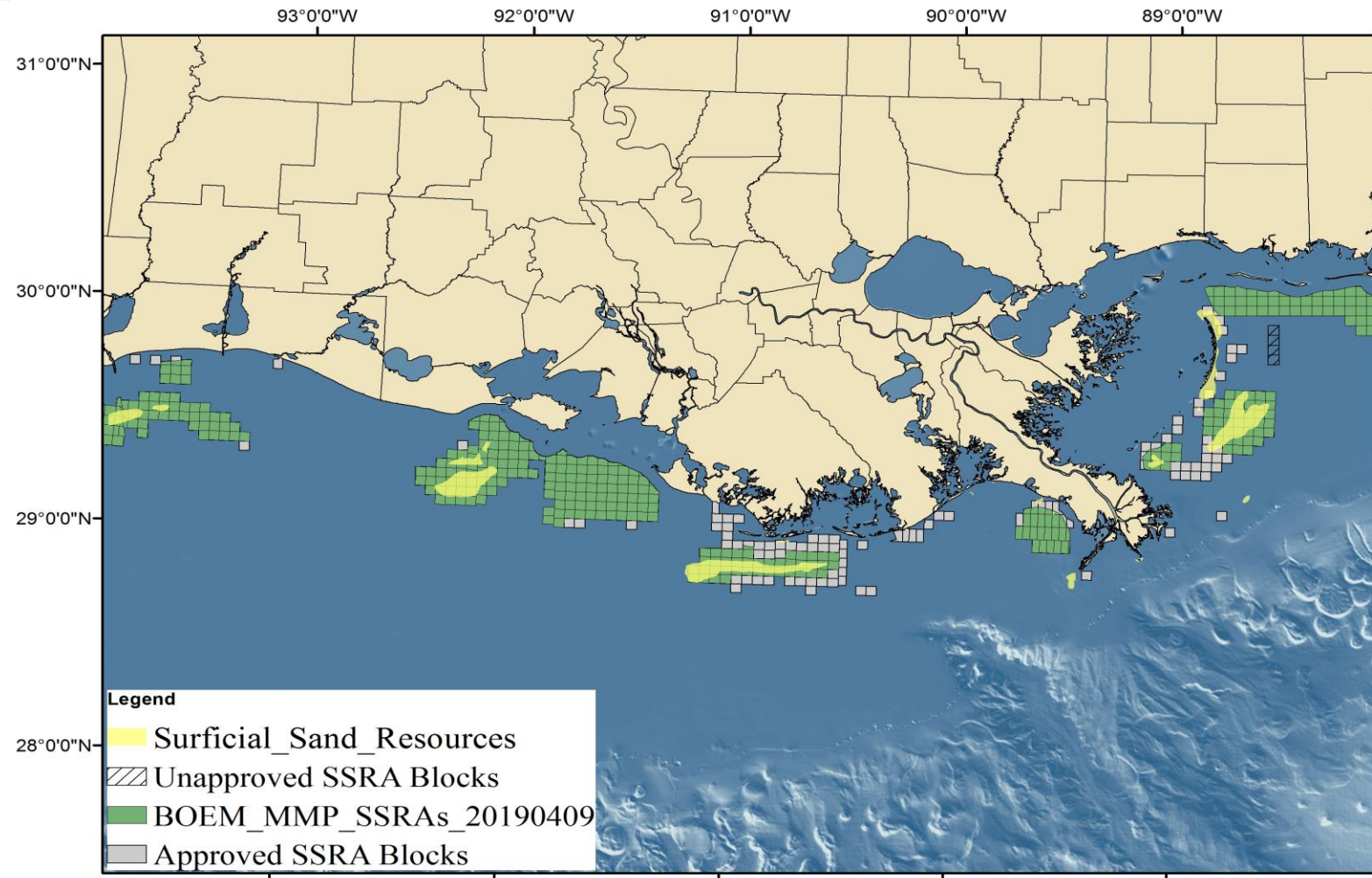
- **Case-by-case Marine Minerals Program review for requests to abandon in place**
- **Consider existing permanent obstructions (e.g., active or plugged and abandoned wells)**
- **Consider best available geologic/geophysical and sediment dynamics data (presently lacking centralized database → MMIS)**
- **Coordinate with State geologist to ensure consistent guidance in BOEM vs State CZMA reviews**

Designation of Significant Sediment Resource Areas(SSRA)

- In continuing BOEM's mission to facilitate access to mineral resources needed to address the Nation's coastal needs, BOEM's Marine Minerals Program evaluates data collected through its National Sand Inventory initiative and cooperative agreements with States to determine areas of significant reserves of surface and shallow subsurface mineral deposits.
- BOEM designates these areas as Significant OCS Sediment Resource Areas (SSRAs).
- Full list available: <https://www.boem.gov/marine-minerals/managing-multiple-uses-gulf-mexico>

Significant Sediment Resource Area Update 2019

- 93 new blocks flagged as SSRA blocks.
- This is the fourth SSRA update since 2014.

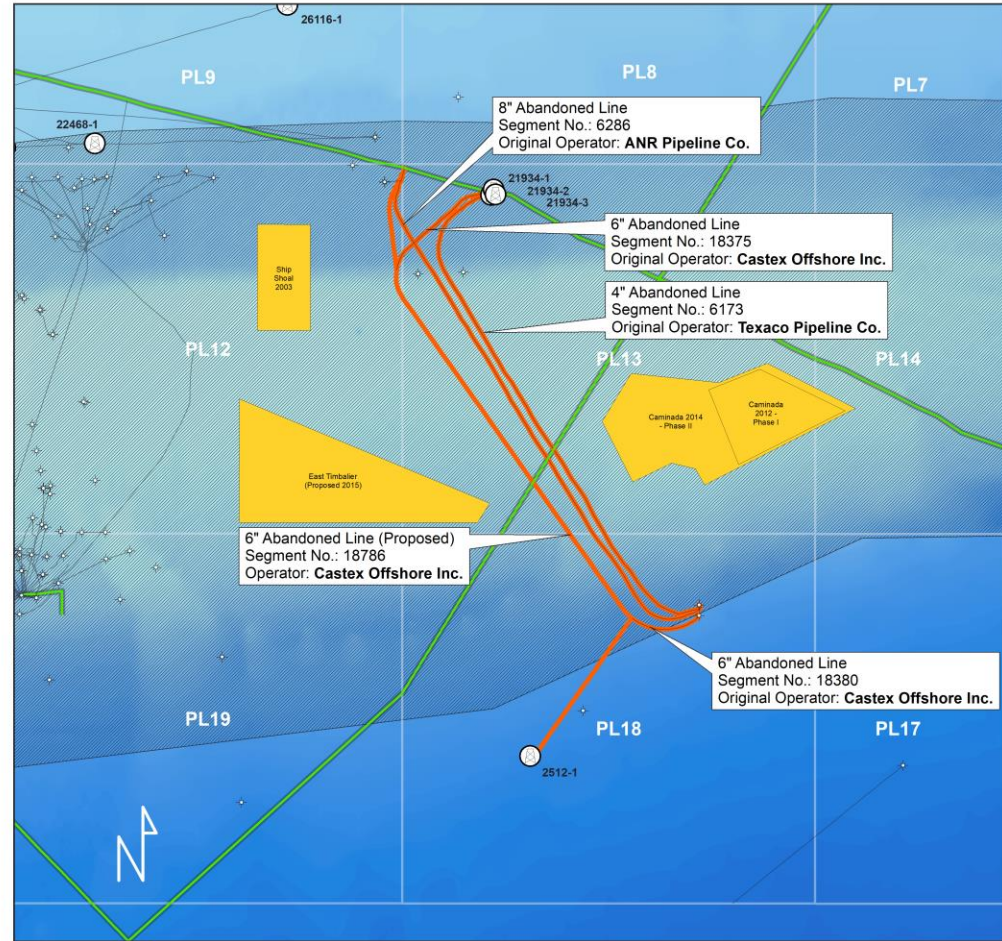


Coordination with BSEE

Oil and Gas Pipelines within Significant Sediment Resource Area (SSRA)

U.S. Outer Continental Shelf, Gulf of Mexico Region

BOEM Bureau of Ocean Energy Management



	Borehole (Surface)	<p>NAD 1927 StatePlane Louisiana Offshore FIPS 1703 Projection: Lambert Conformal Conic Datum: North American 1927 False Easting: 2,000,000.0000 False Northing: 0.0000 Central Meridian: -91.3333 Standard Parallel 1: 28.1687 Standard Parallel 2: 27.8333 Latitude Of Origin: 25.6667 Units: Foot US</p> <p>Map Scale: 1:25,000</p>
	Platform Structure	
	Abandoned O&G Pipeline within SSRA	
	Abandoned O&G Pipeline (Highlighted)	
	Active O&G Pipeline	
	Significant Sediment Resource Area (SSRA)	
	OCS Sand and Gravel Borrow Area	
	SSRA Sand Resource	
	SSRA Block	
	OCS Protraction Area	

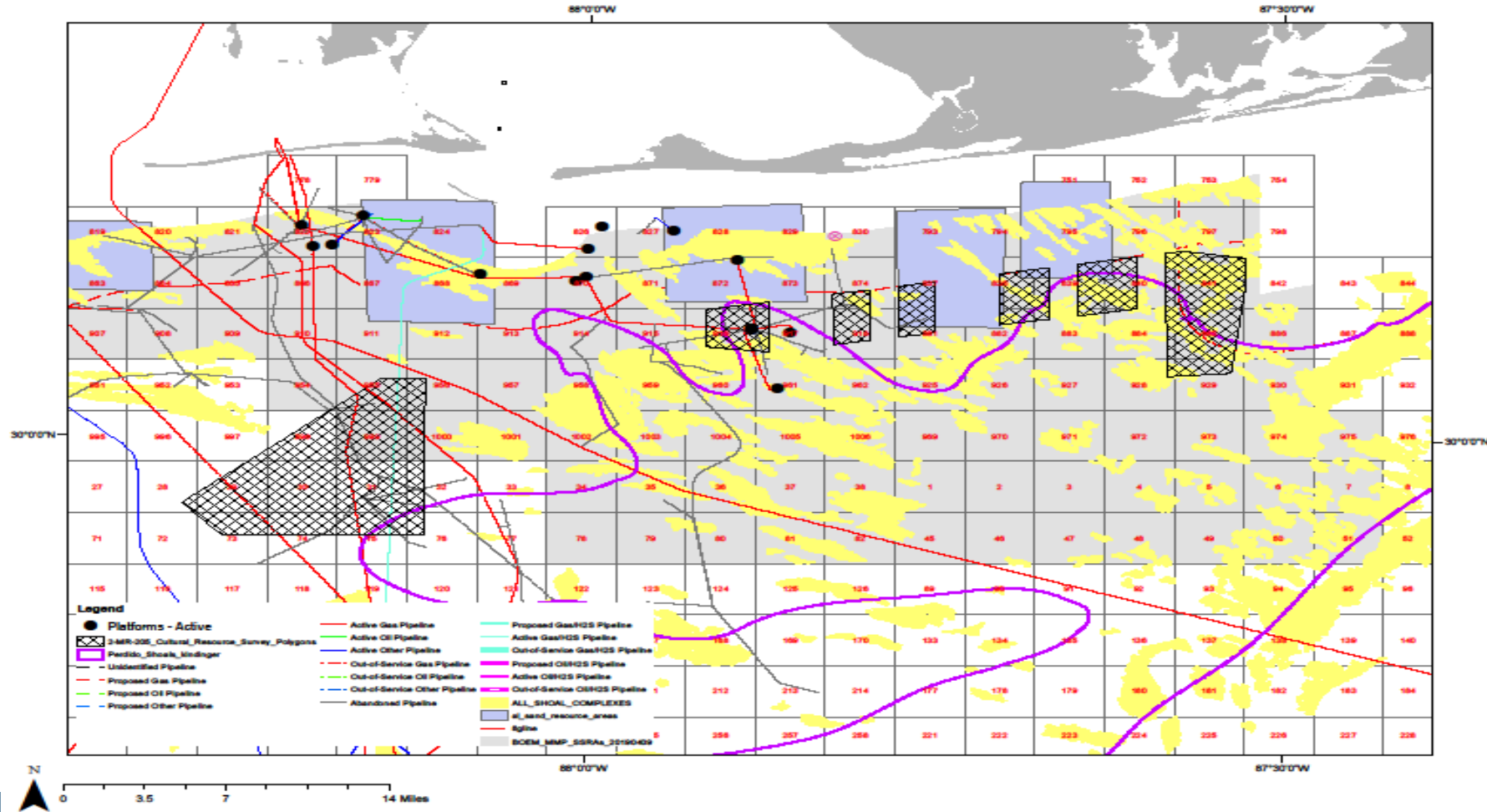
Significant OCS Sand Resources Coordination Success

Gulfwide (since 2016)

- 115 pipeline segments decommissioned by removal
- 31 pipeline segments partially removed
- 86 pipeline segments granted waiver for in-place abandonment
- 6 previously decommissioned pipeline removed (pending) on request
- ~1,200 pipelines commissioned in SSRAs

Other of Conflicts of Use

- Anchorage Basins, Artificial Reefs, Cables, Aquaculture, Renewables...



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