# Future Offshore Gulf of Mexico Oil & Gas

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Presentation to
Beyond the Horizon Conference
Marine Mote Lab, Sarasota, Florida
May 12, 2011

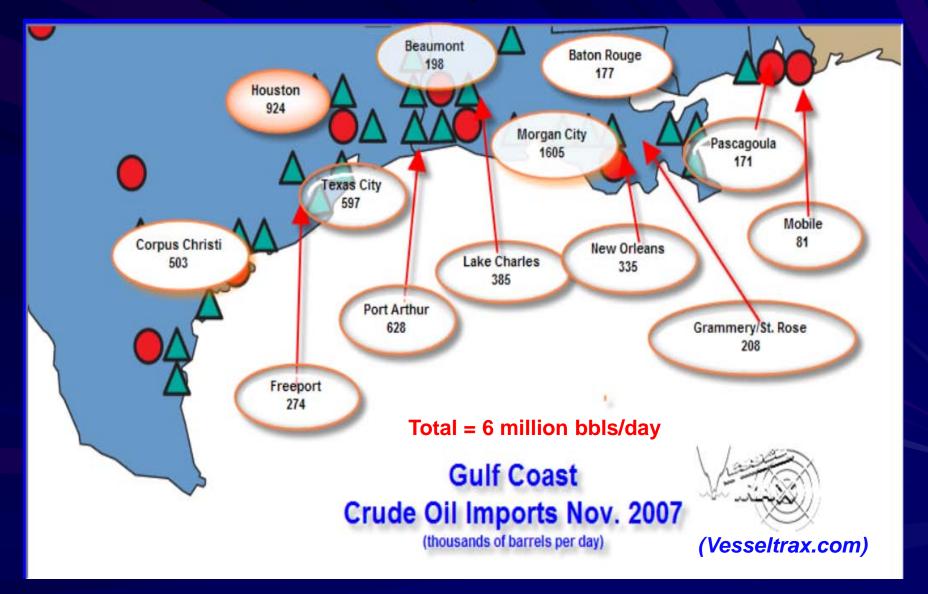
## **U.S. Oil Consumption & Supply**

U.S. OIL DEMAND	Million Barrels/Day	Trillion Gallons/Year
U.S. Gasoline	9.5	146
U.S. Distillate & Fuel Oil	4	61
U.S. Jet Fuel & Kerosine	1.4	21
U.S. Residual & Bunker	0.6	9
U.S. Others - Chem, Lubes, etc.	4.5	69
Total U.S. Oil Demand	20	307
		0
Total World Oil Demand	86	1,318
Total World Oil Supply	86	1,318
U.S. OIL SUPPLY	Million Barrels/Day	Trillion Gallons/Year
U.S. Gulf Offshore Oil Production	1.5	23
U.S. Non-Gulf Oil & NGL Prod.	6	92
Gulf Coast Tanker Crude Imports	5	77
East Coast Tanker Crude Imports	1	15
West Coast Tanker Crude Imports	1	15
Refined Tanker & Pipeline Imports	2.3	35
N.A. Imports	1.5	23
Other supply	1.7	26
Total U.S. Oil Supply	20	307

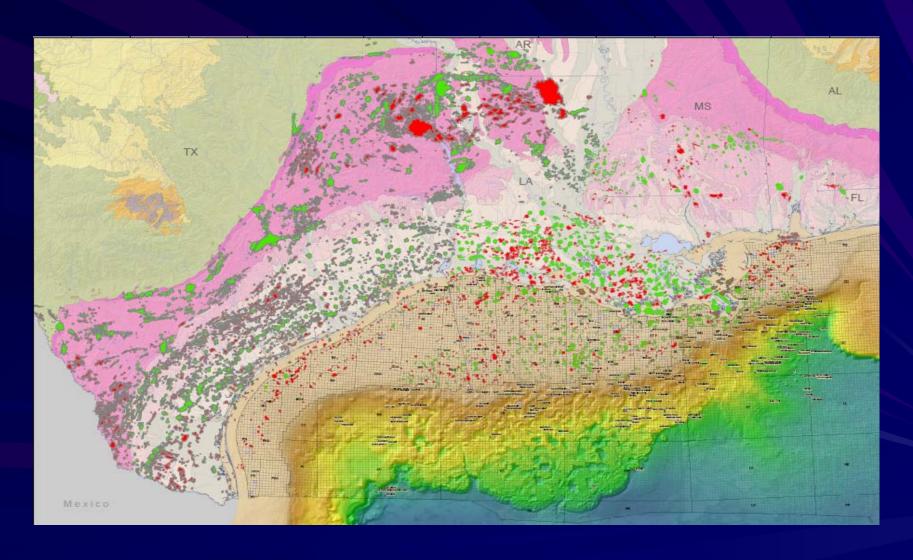
# About 50+ Tankers in US Gulf of Mexico offloading 252 million gallons every single day



# **Gulf Coast Daily Tanker Oil Imports to Refineries**



## **Gulf of Mexico Oil & Gas Fields**



#### Offshore Gulf of Mexico Oil & Gas

#### **Historical Production**

14+ Billion Bbls Oil and 150+ Trillion cu-ft Natural Gas (1.7 Trillion gallons of oil equivalent)

#### **Productive Fields' Remaining Producible Reserves**

14+ Billion Bbls Oil and 60+ Trillion cu-ft Natural Gas (1 Trillion gallons of oil equivalent)

#### <u>Undiscovered Oil & Gas (BOEMRE Mean Estimate)</u>

45+ Billion Bbls Oil AND 230+ Trillion cu-ft Natural Gas (3.5 trillion gallons of oil equivalent)

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25% of US Daily Oil Production – 14% of US Daily Gas Production

## Oil & Gas Activity in GOM

**100+ Offshore Operators – 500+ Offshore Companies** 

**50,000+ Direct Offshore Workers** 

500,000+ "Involved" Workers on Gulf Coast

60+ Years of Drilling & Production 55,000+ wells drilled to date 4,000+ deepwater (500'+ water depth) wells 400+ ultradeepwater (5,000'+ water depth) wells

# Only 60 Movible Offshore Drilling Units (MODU) Working in the GOM in May 2011









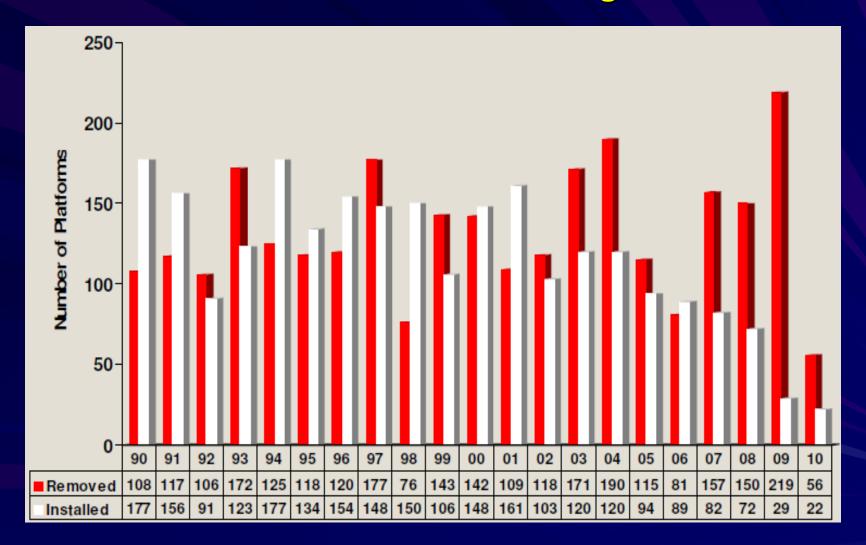
#### **Platforms & Caissons**



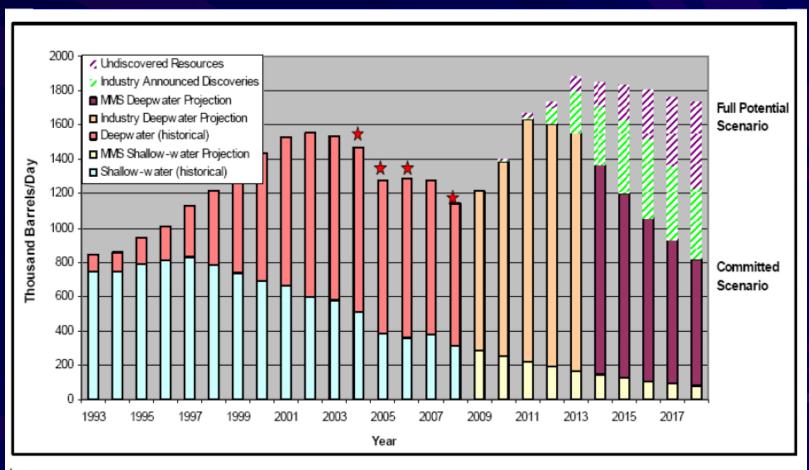


2,500+ Fixed Leg Platforms – 1,000+ Single Well Caissons

# Platform Installation & Removals by Year "Idle Iron Platforms" or Useful Longterm Reefs?

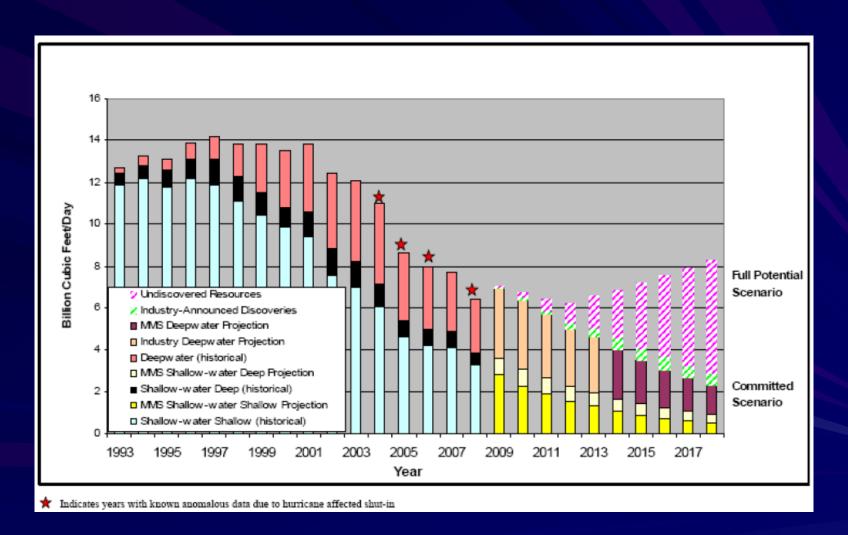


#### **Oil Production 1993 - 2018**

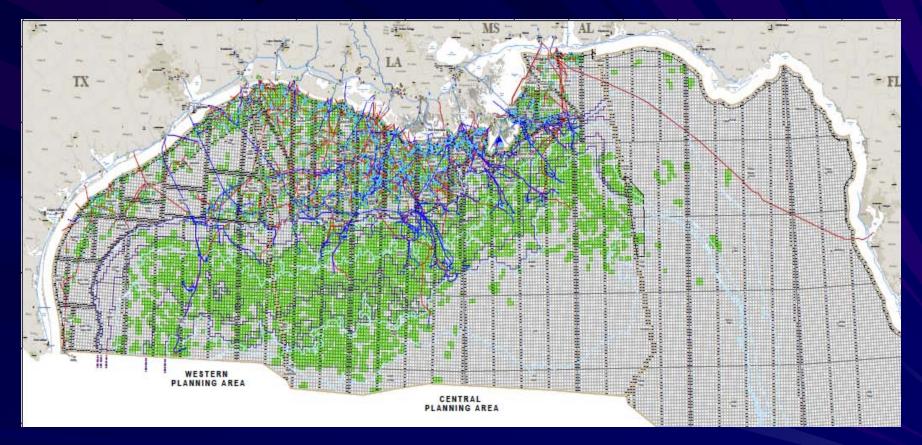


Indicates years with known anomalous data due to hurricane affected shut-in

#### **Gas Production 1993 - 2018**



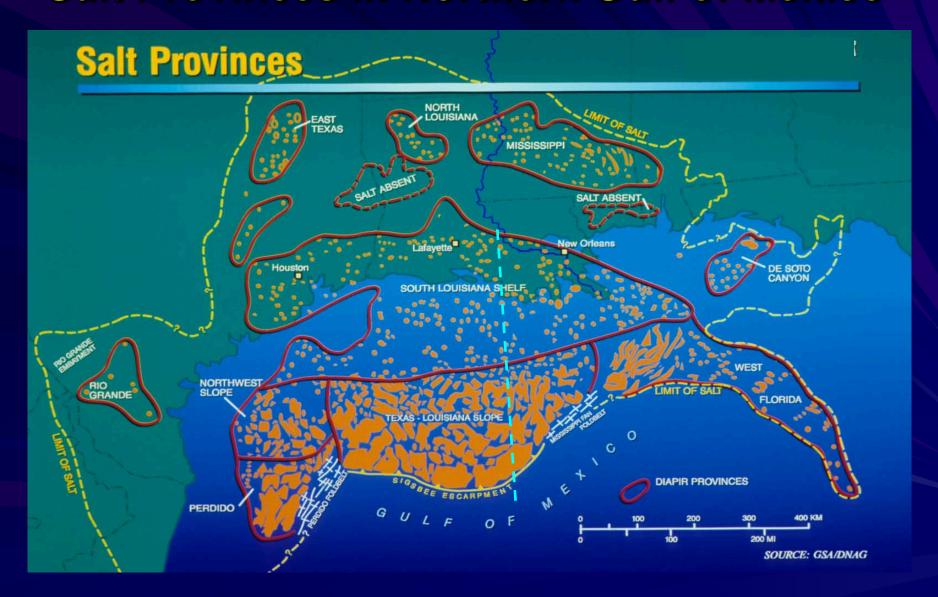
### **To Explore – Must have Leases**



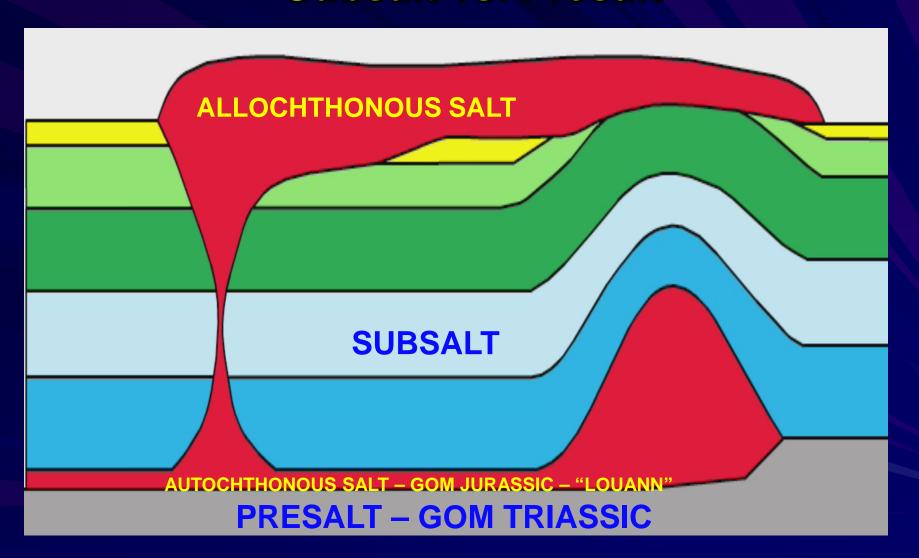
6,269 Active Federal Leases - 33.6 million acres leased

(per BOEMRE website May 2011)

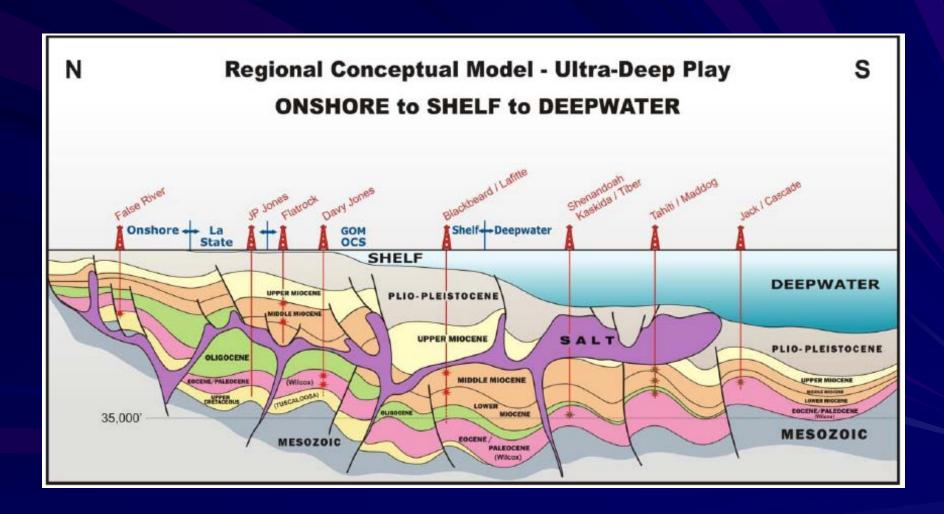
#### Salt Provinces in Northern Gulf of Mexico



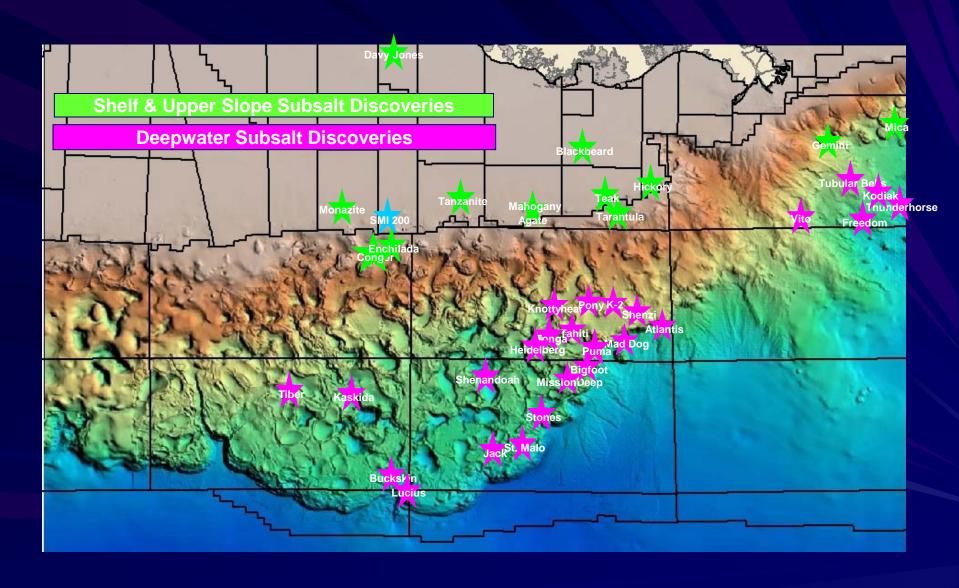
#### Subsalt vs. Presalt



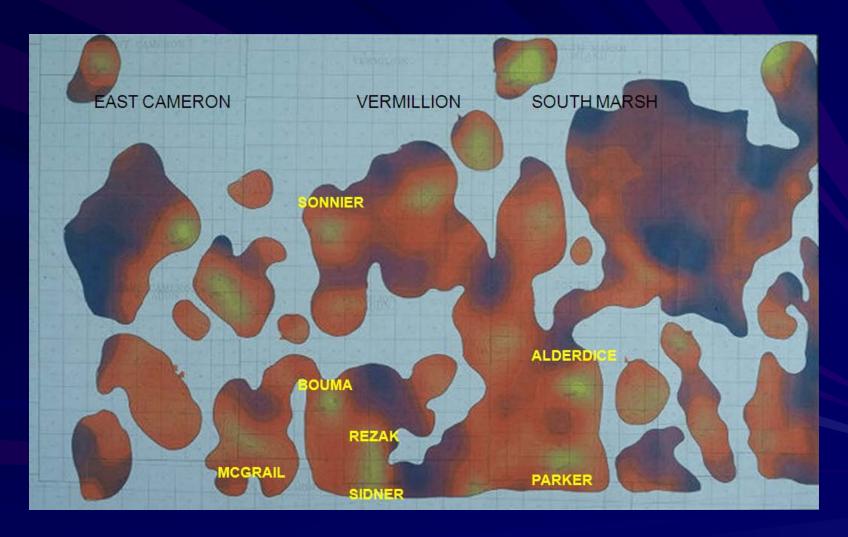
## **Subsalt Deep Drilling Grows GOM**



#### **U.S. Gulf of Mexico Subsalt Discoveries**



#### **Bank Salt Domes connected to Big Salt Sheets**



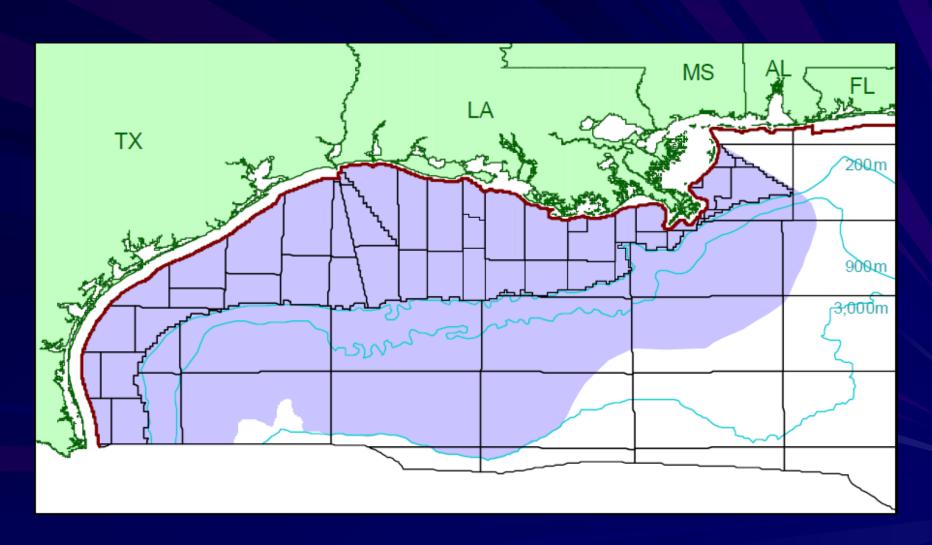
### **Huge GOM Natural Oil Seeps**





(from NASA Earth Observatory news release from February 3, 2009 per Geology.com)

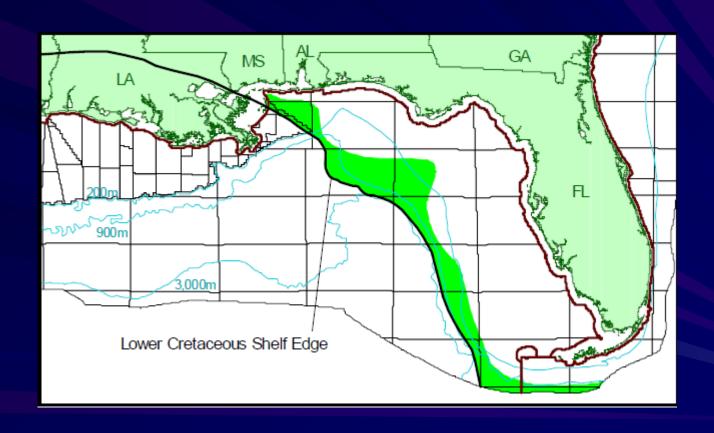
## **Deep Miocene Play**



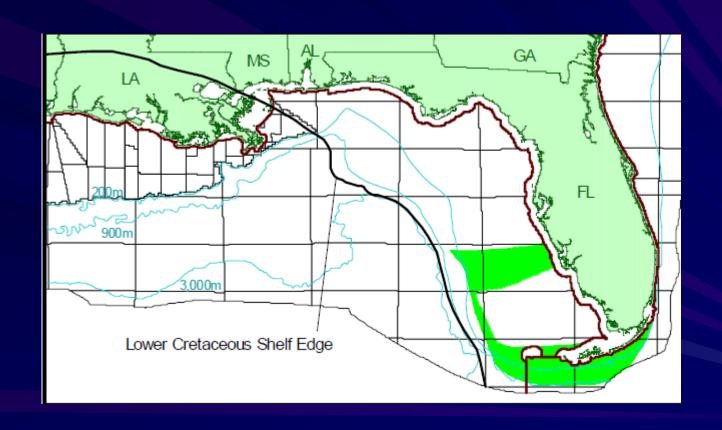
## **Deep Lower Tertiary Play**



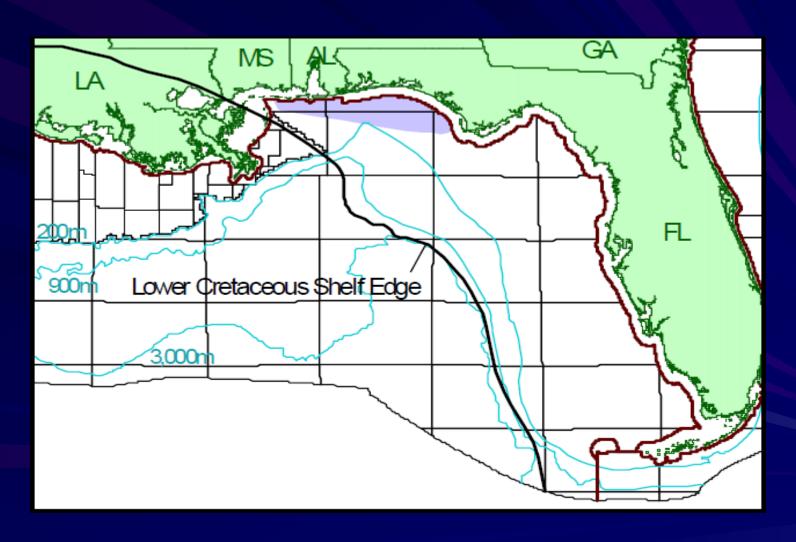
# Lower Cretaceous Carbonate Shelf Margin Play



# Lower Cretaceous Sunniland Carbonate Play

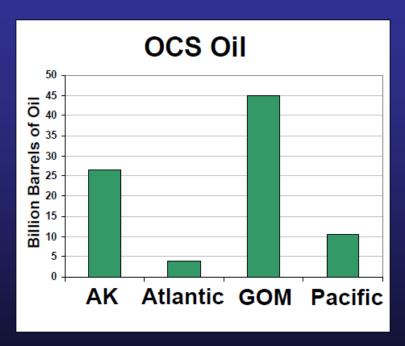


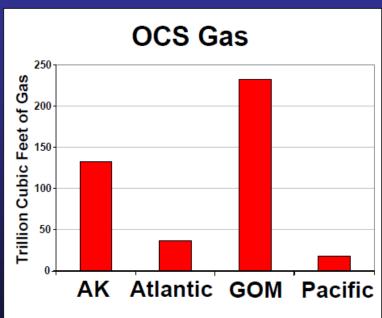
### **Upper Jurassic Norphlet Gas Sands**



# America's Future Offshore Oil & Gas? Gulf of Mexico is Giant! Alaska/Arctic perhaps is even more?

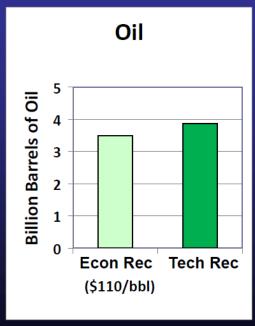
Undiscovered Technically Recoverable
Oil and Gas Resources
2006 National Assessment Results





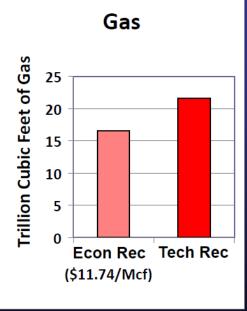
# Florida's Future Main Gas Supply? Now is from Jurassic-Norphlet off Alabama Will need same JN Gas off Florida Panhandle!

## Eastern Gulf of Mexico OCS Area Undiscovered Oil and Gas Resources



Oil Resources:

2.8 - 5.5 billion barrels



Gas Resources:

18 – 26 Trillion Cubic Feet

# Florida Oil & Gas Consumption & Supply

3<sup>rd</sup> Biggest Oil Consuming State 900,000 barrels per day 1.3 billion gallons per year

6th Biggest Natural Gas Consuming State
2.8 BCF per day
1 TCF per year
Gulfstream 36" Pipeline – Mobile-Tampa – 1 BCF per day

**Natural Gas now powers many of the Electricity Plants** 

Florida produces less than .1% of its daily consumption

Is that good for Florida?

Source: IPAA website

# To the Memory of the Horizon 11