

Deepwater Expansion

Deepwater Exploration

and Production











Presentation Topics

- Oil and gas expansion
- Deep water versus shallow water
- Technology advancement and new risks

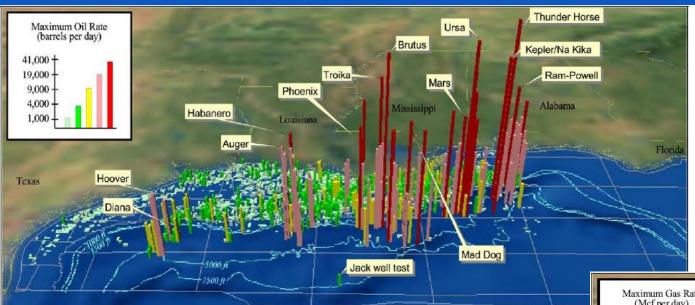


Introduction

- Oil and Gas (O&G) industry has shifted to deepwater exploration and production over time in the Gulf of Mexico OCS region
- Rig location movement from 1990 to 2015
- Risks posed by deepwater expansion (water depths greater than 1,000 ft.)
- Advancements in seismic and drilling technologies contributed to increased drilling activities in deepwater offshore region and harsh environments
- Deepwater drilling typically costs much more than shallow water drilling

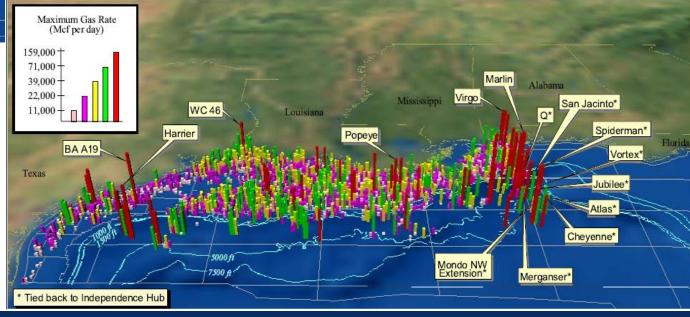


Gulf of Mexico Oil and Gas Production Rates in 2007



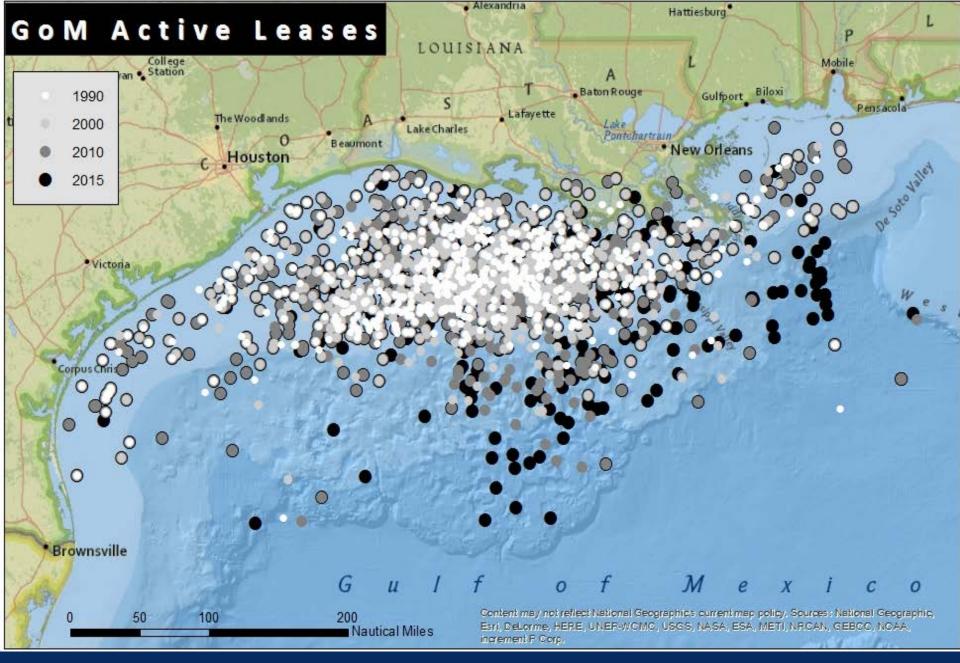
Oil Production in the GoM

Gas Production in the GoM



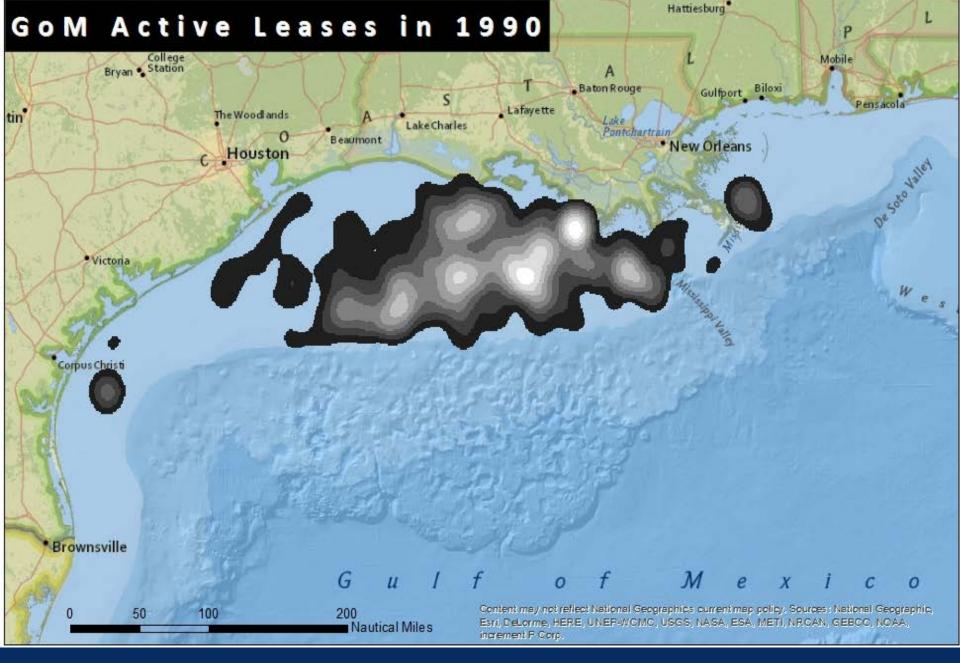


Gulf of Mexico Active Leases from 1990 to 2015



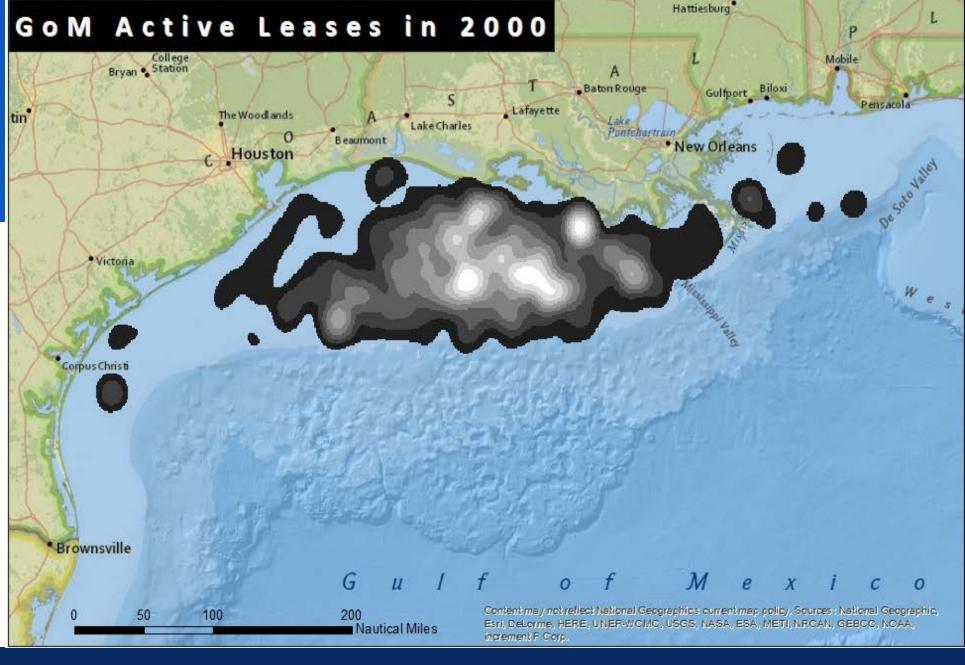


Gulf of Mexico Active Leases: 1990





Gulf of Mexico Active Leases: 2000



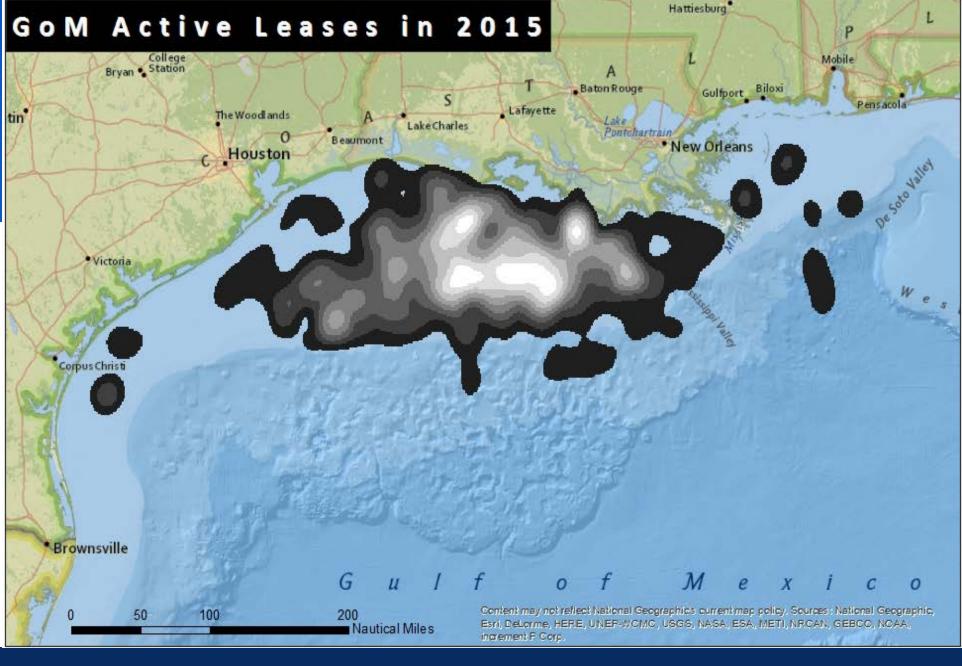


Gulf of Mexico Active Leases: 2010



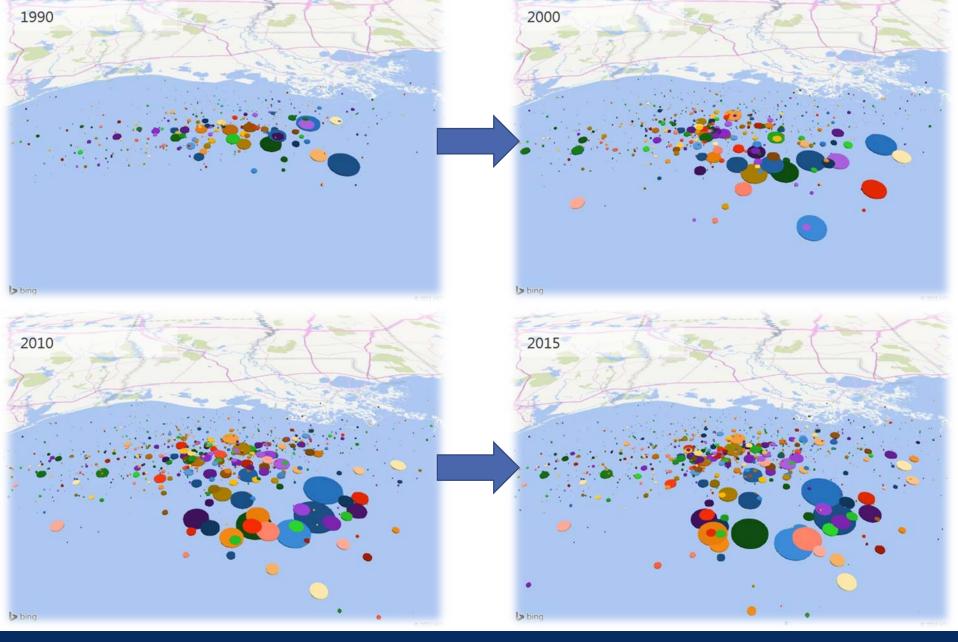


Gulf of Mexico Active Leases: 2015





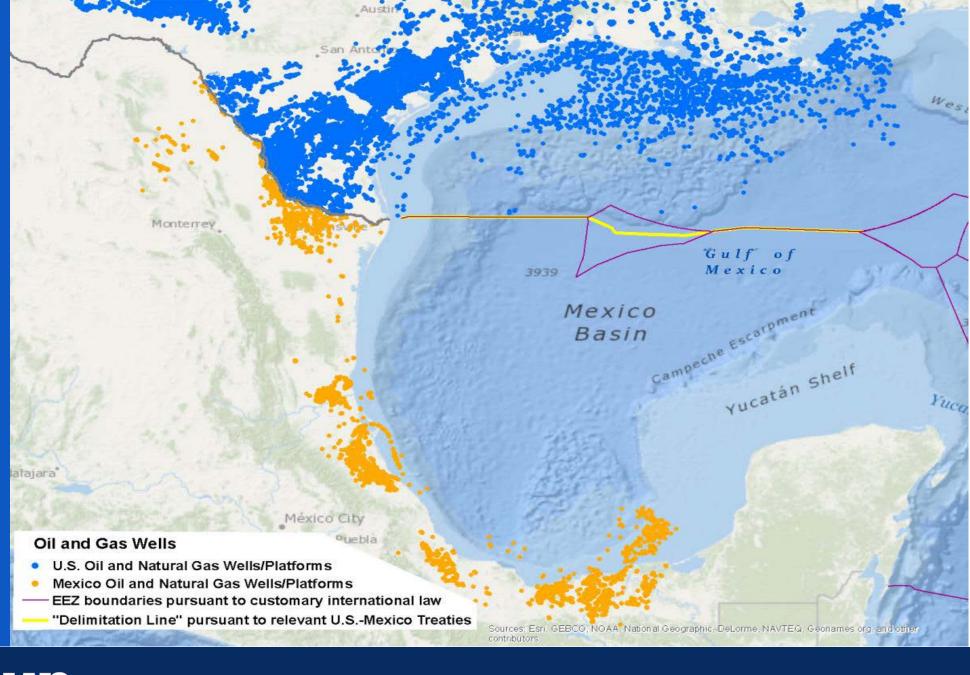
Gulf of Mexico Active Leases by Size of Company in 2015





U.S. and Mexican O&G Operations in the Gulf of Mexico

(Seelke et. al., 2015)





Changes in the Oil and Gas Market

Technology Advancements

- OSV improvements such as high engine power, towing capacity and carrying capacity
- Maneuverable rigs
- Larger ships

Potential Impacts

- More maritime accidents
- More water and air pollution
- More response needs

Questions?

