

**Statement of
Margaret S. Howell
Founder
Stop Offshore Drilling in the Atlantic**

**House Committee on Natural Resources
Subcommittee on Energy and Mineral Resources
Hearing on “Evaluating Federal Offshore Oil and Gas Development on the Outer Continental Shelf”**

July 12, 2017

APPENDIX

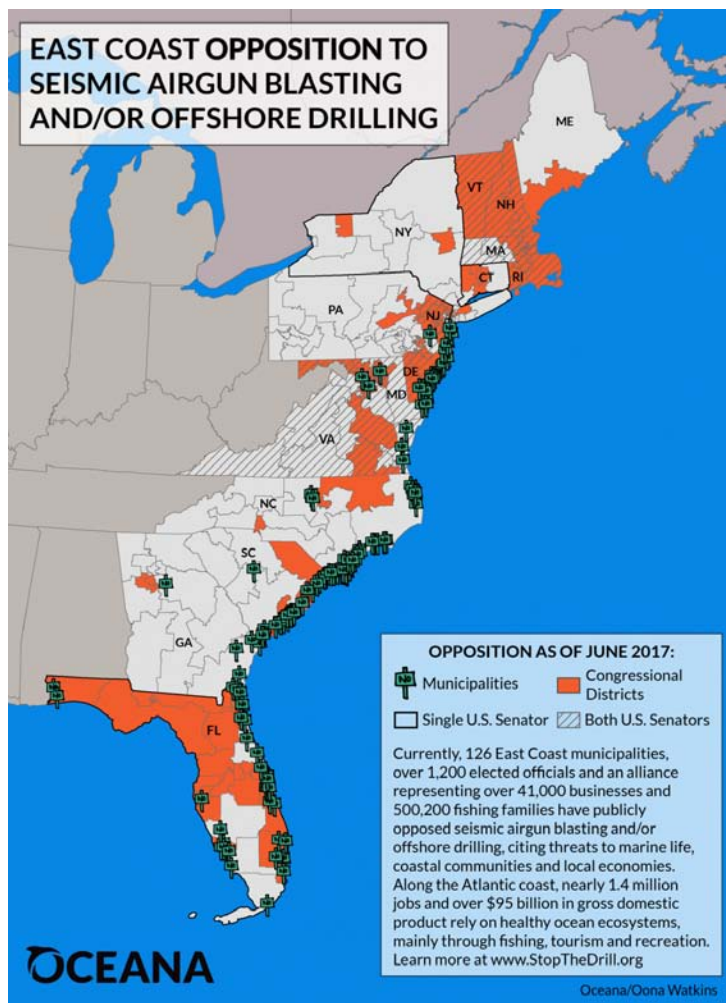


Figure 1. Growing East Coast Opposition to Seismic Airgun Surveys and Offshore Drilling



Figure 2. Peg Howell, "Company Man" on her first rig

Offshore drilling

An opportunity for economic growth

By BOB ANDERSON

I recently had the pleasure of attending an offshore energy conference to learn about the exploration and extraction of natural gas and oil from our Outer Continental Shelf. The Continental Shelf is the area from the shoreline out to the edge of the slope that falls into the deep ocean, a distance of about 60 miles off of our coastline. The water depth on the shelf reaches about 100 feet. Evidently, based on past experience and ocean floor research, the most likely place to find oil and natural gas deposits is along the foot of the slope in deep water. The area of the OCS is slightly smaller than the on-shore area of our state or about 19.3 million acres.

So what does this have to do with Georgetown County? The short answer is that with our natural port being the only centrally located port along our South Carolina coastline, other than Charleston which is concentrating on major import/export shipping, we are the logical place to be the center for exploration and extraction of natural gas and crude oil. Due to limitations on the length of this article, I cannot get into much detail, but over the coming months, we plan on sharing much more information about potential economic impact on our county and where we are in the process of production.

I do want to point out a few of the interesting and informative topics that were discussed. You should know that a recent survey determined that 77 percent of South Carolina voters are in favor of offshore drilling. As for a time line, we are currently at the end (December 2013) of an environmental impact study being done by the Department of the Interior. If that goes well, Interior will allow seismic surveys to be conducted on the OCS. The last surveys were done 30 years

ago, and with the advances in survey technology, it is expected that we will discover many more areas of interest. In the past, three in 10 exploration wells were successful, but with current two- and three-dimensional seismic survey techniques, the success ratio has jumped to seven in 10 saving millions of dollars.

Once the survey phase is complete, the drilling and extraction phase can begin. The leasing program by the Department of the Interior for the South Atlantic Region and the revenue sharing and leasing legislation by Congress for drilling will take place from 2017 through 2022. We can expect as many as 5,000 new jobs during the construction phase. I was also made aware of efforts by folks at the University of South Carolina to establish a new earth and ocean sciences laboratory. What better place than Georgetown County, given our natural port for easy access to the OCS and our existing campuses: Horry-Georgetown Tech and Coastal Carolina.

Something else that I found interesting is the fact that crude oil and natural gas are renewable resources. They are organic compounds made up of carbon, hydrogen and oxygen. The temperatures and pressures found on the ocean floor provide an environment which transforms these elements into the hydrocarbons known as natural gas and crude oil. These compounds are being released naturally into our environment every day.

Speaking of the environment, I need to share a few things that I learned on that subject. Will we see the drill rigs when they are actually in the drilling phase? An 80-foot-high platform would have to be within 15 miles of the coast before you could see it with binoculars because of the over-the-horizon/line-of-sight phenomenon, and as I men-

tioned earlier, the probable places of interest will be at the slope 60 miles offshore.

What about accident risk mitigation? Since the Deepwater Horizon accident, the oil and gas industry has made significant progress in the area of safety and environmentally-responsible operations. I will get into the details of that in another article, but as a technical guy, I was very impressed with the technological innovations that are currently available and what is being developed. Seabed production facilities and pipelines to carry product to shore or inland terminals will be a reality when the first wells are drilled. This means that there will be no structures on the surface once the well is drilled.

As I have explained, this will not happen over night, and there will be bridges to cross at the federal level before this can come to fruition, but I am very excited about what this can mean to our county. This undertaking will require a new workforce ranging from Ph.Ds in science and engineering to deck hands on the support vessels working the rigs.

Making this happen will not be easy. There is and will be a strong lobby by the hardcore environmentalists to defeat our efforts to make this happen at the federal, state and local level. If you believe that drilling along the coast of South Carolina is good for the country, state and Georgetown County, you had better be prepared to get personally involved and assist all of our politicians. We will have to fight at every crossing for energy independence and a flourishing local economy. The opposition will be organized, well funded and as passionate as we are.

■
The writer represents County Council District 6.

Figure 3. Coastal Observer Op-Ed Oct. 2013

House District 108 | Questions for Stephen Goldfinch

Environment: *How can the state balance the environment and economic development in offshore oil and gas exploration?*

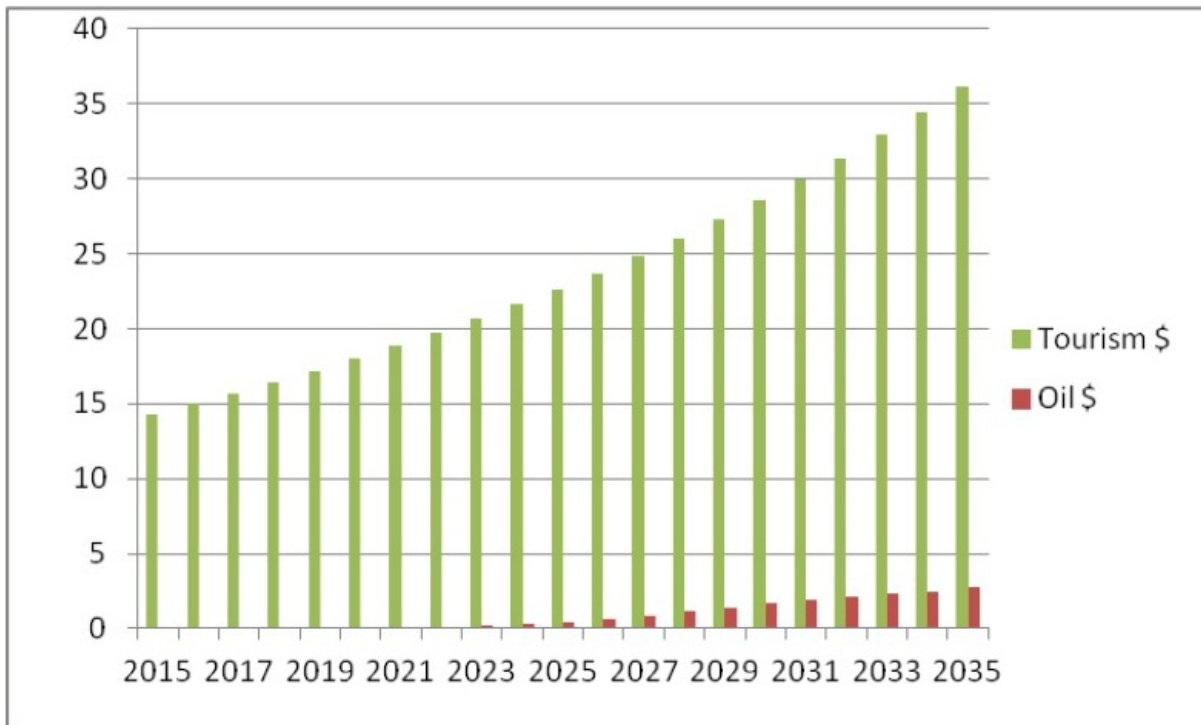
Goldfinch: All the geologists say every bit of the natural resources we have — there appears to be no oil; it's all natural gas — is 60 miles offshore. I don't care what high-rise you get in, you are not going to see it 60 miles offshore. It's not going to jeopardize tourism.

I will say this: I would not support it if it was within eyesight of the shore. We have a tremendous tourism economy here. We can't do anything to jeopardize it. If they need to put it 15 miles offshore or further, that's what they have to do if they want to come to South Carolina. We've got a main gas line that terminates at the Georgetown port. That's a tremendous opportunity.

The federal government has permitted us for seismic testing. If they find what they think is offshore, Georgetown is the perfect port for operations. I visited Louisiana and saw a working well. Shrimpers were happy. Clammers were happy. We fished all around oil and gas rigs. I didn't see any problems out there. This whole idea that seismic testing is going to kill all the dolphins: I saw dolphins swimming around the boat doing seismic testing in Louisiana.

Figure 4. Coastal Observer Oct. 30, 2014

Would you risk South Carolina's tourism industry for a few barrels of oil?



Projected Contributions to South Carolina's statewide economy from Oil Drilling vs. Tourism revenues in Horry, Georgetown, Charleston & Beaufort counties for each year from 2015 – 2035 in Billions of Dollars.

Sources; (a) Projected Contributions to SC from Oil are taken from Table 23 in Quest Report to American Petroleum Institute, Dec 2013. (b) Tourism revenues are taken from a detailed report on the economics of Offshore Drilling vs. Tourism (available at www.drilldownsc.com/#!tvo/c1sav). Tourism revenues were calculated using data from SC Department of Parks, Recreations and Tourism, and from Myrtle Beach Area Chamber of Commerce.

Figure 5. Tourism vs. Oil (TVO) Report

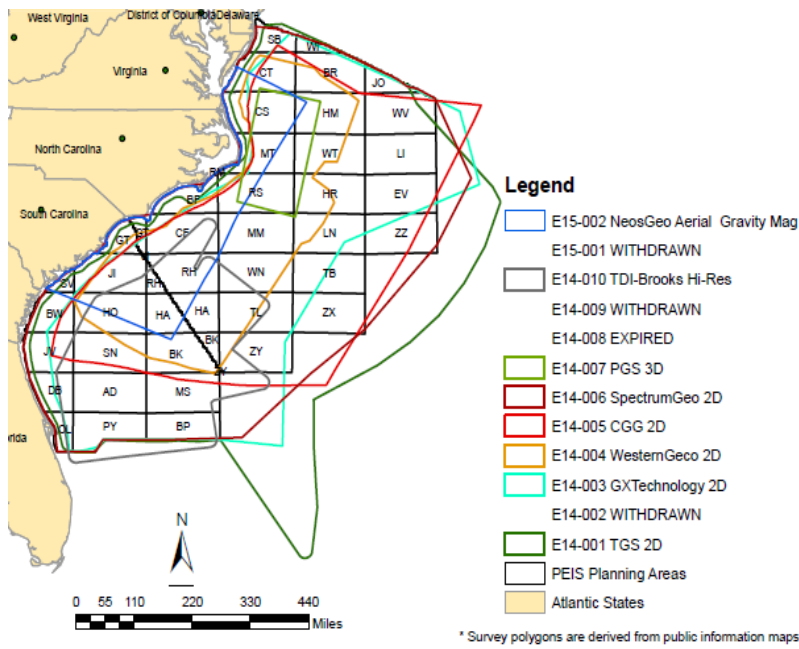


Figure 6. Five 2D seismic permit applications

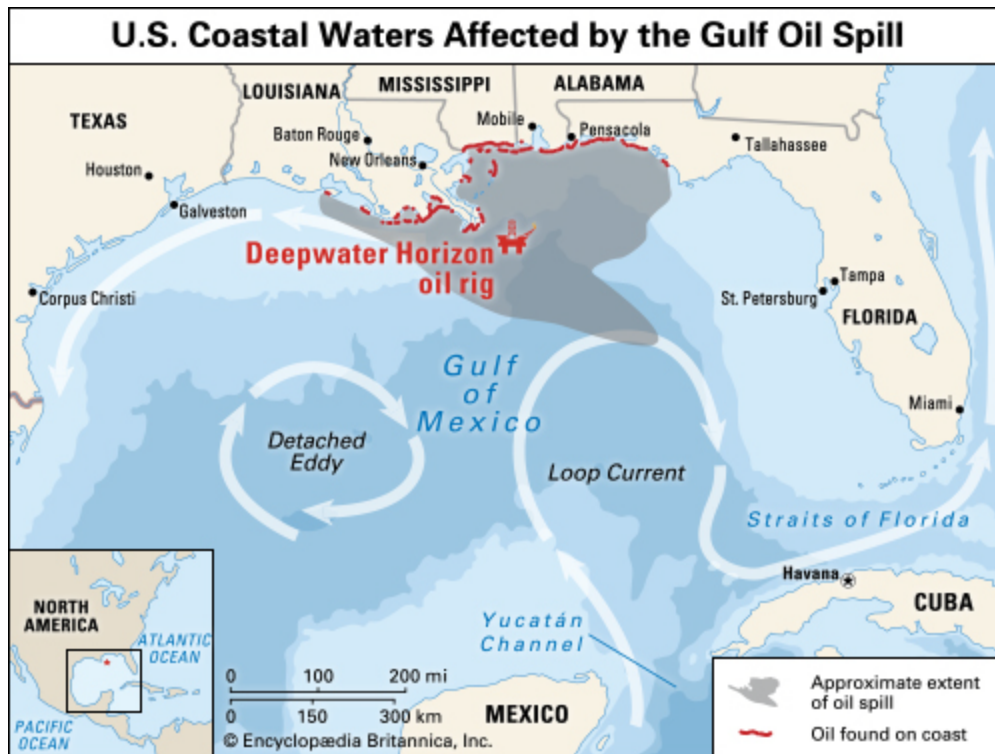


Figure 7. Coastal impact of Deepwater Horizon disaster

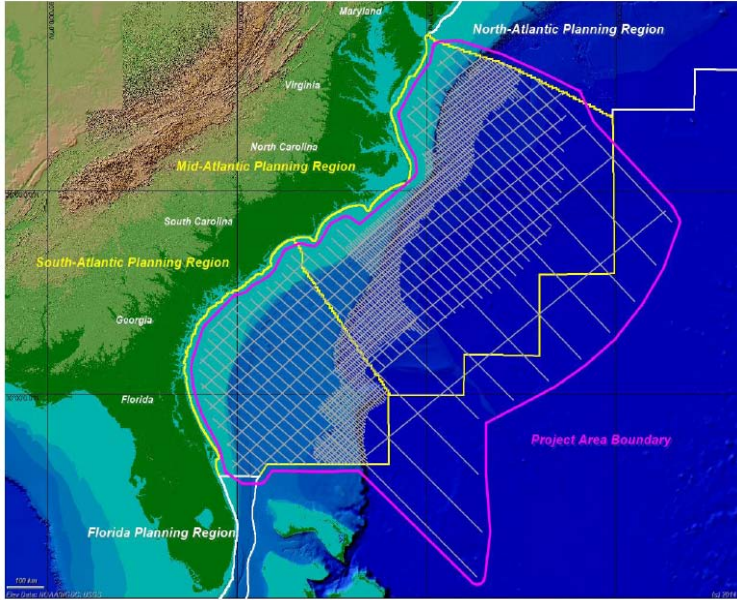


Figure 8. Atlantic bathymetry showing escarpment. Yellow lines = BOEM planning areas. Hatched lines indicate just one proposed seismic survey.

Every United States coast...

where offshore drilling has taken place has suffered **multiple massive spills** and **billions of dollars in damages**

The Atlantic coast would be no different

- Exxon Valdez**
11 million gallons
March 1989
- Santa Barbara**
3 million gallons
January 1969
- Santa Barbara pipeline break** oil on 9 miles of beach
May 2015
- Galveston Bay oil spills** are routine -- averages 285 spills a year.
- Oil Rig Explosion**
Kills 4 in Gulf of Mexico
April 2015
- Taylor Platform**
Destroyed by Ivan
Leaking oil since 2004
- Deepwater Horizon**
210 million gallons
April 2010
- Hurricane Katrina**
9 million gallons oil
100 rigs destroyed
450 pipeline breaks
August 2005

Figure 9. Every U.S. coast has been damaged – except the Atlantic

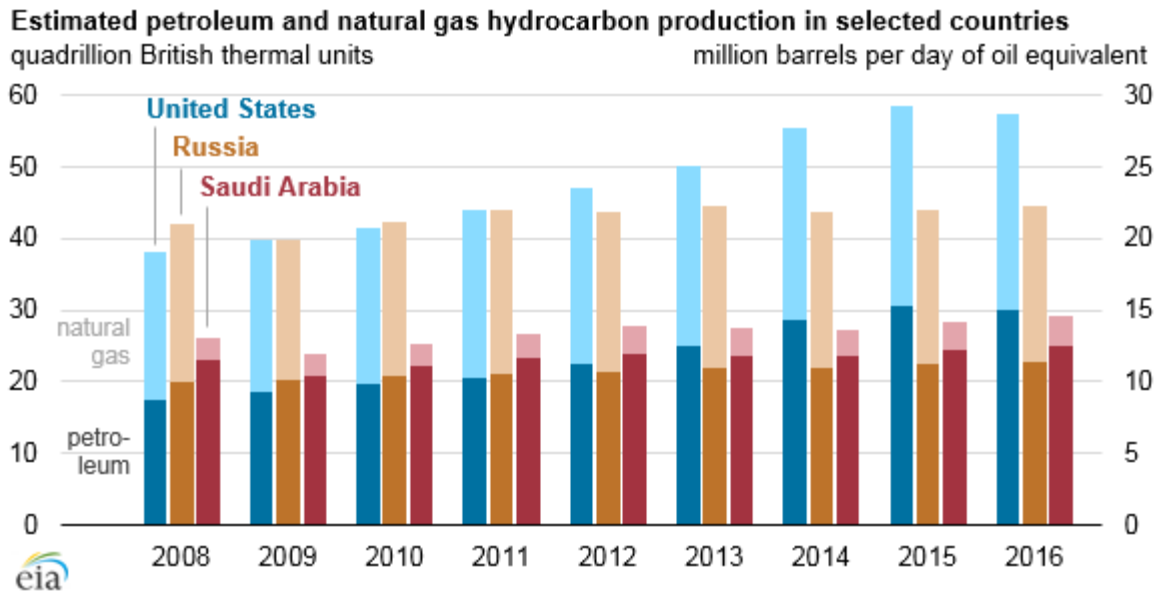
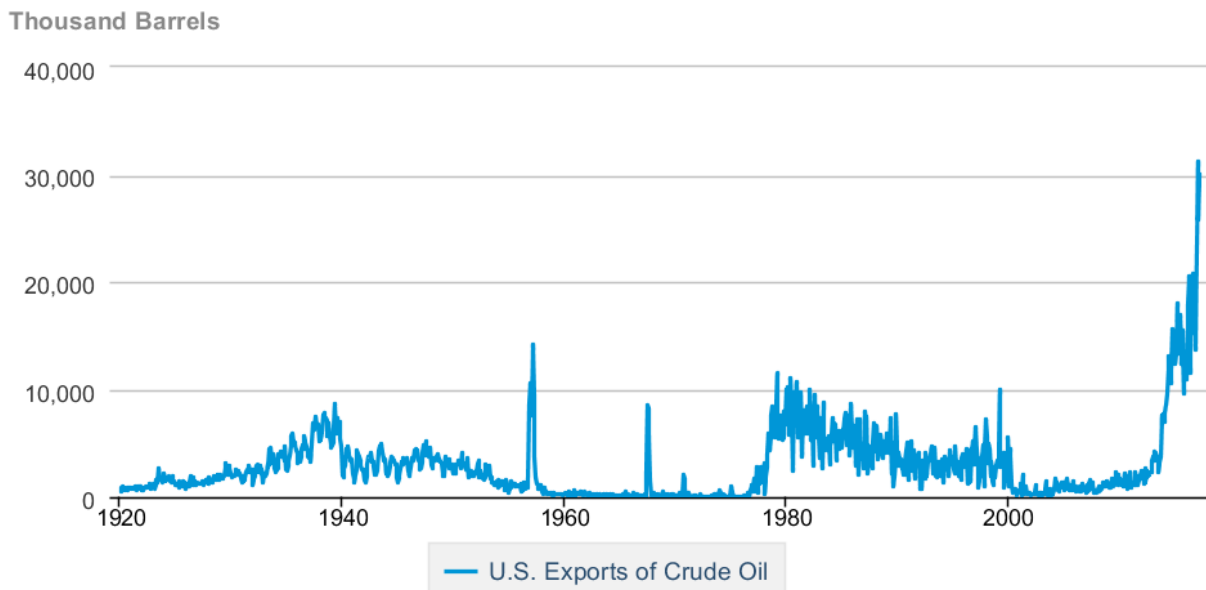


Figure 10. U.S. Energy Dominance

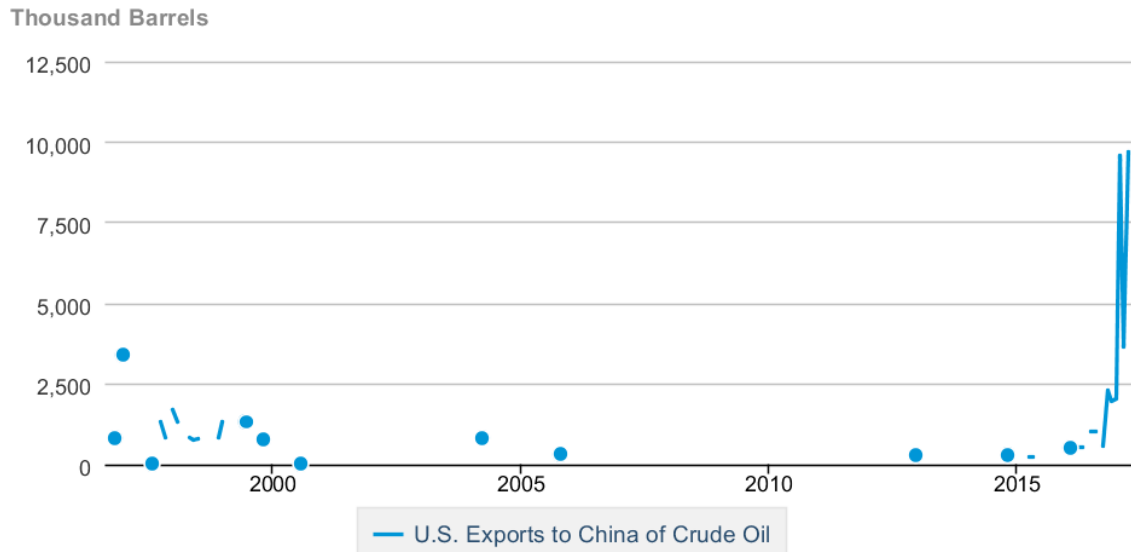
U.S. Exports of Crude Oil



eia Source: U.S. Energy Information Administration

Figure 11. Crude Oil exports increase since Dec. 2015

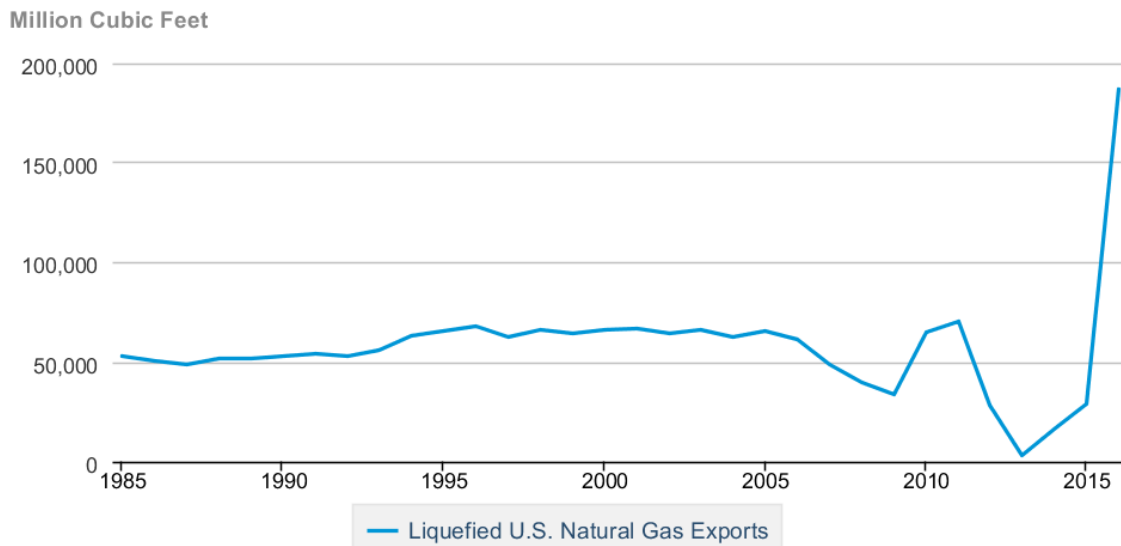
U.S. Exports to China of Crude Oil



 Source: U.S. Energy Information Administration

Figure 12. US Crude Oil Exports to China

Liquefied U.S. Natural Gas Exports



 Source: U.S. Energy Information Administration

Figure 13. US LNG Exports



Figure 14. Port Fourchon, Louisiana - the impact of offshore infrastructure

The 2017 KIDS COUNT Data Book's overall score for Gulf and Mid- and South Atlantic states

State	Overall Rank Of the 50 US states	Economic Well-Being Rank	Education Rank	Health Rank	Family and Community Rank
Virginia	10	12	7	16	13
Maryland	16	15	12	30	20
Delaware	23	29	23	14	26
North Carolina	33	37	22	31	36
South Carolina	39	33	37	34	37
Florida	40	45	31	44	35
Texas	41	32	30	39	47
Georgia	42	44	34	38	41
Alabama	44	38	42	42	43
Louisiana	48	49	47	49	48
Mississippi	50	50	48	48	50

Figure 15. Gulf of Mexico oil & gas- producing states are some of the lowest ranked for Child Well-Being by State, Annie E. Casey Foundation, 2017.



The Atlantic from North Litchfield Beach, South Carolina.

Photo credit: John W. Thomas

ENDNOTES

¹http://www.postandcourier.com/opinion/letters_to_editor/letter-seismic-testing/article_afba5e44-5299-11e7-a1a5-4be4ae320b7d.html?utm_medium=social&utm_source=facebook&utm_campaign=user-share

¹ Coastal Observer, “House District 108: Questions for Stephen Goldfinch,” October 30, 2014

¹ Coastal Observer, “Offshore Drilling, An Opportunity for Economic Growth” by Bob Anderson, former Georgetown County Councilmember, District 6, October 24, 2013

¹ <http://www.drilldownsc.com/#!/tvo/c1sav>

¹ Geological & Geophysical Data Acquisition, Outer Continental Shelf Through 1997, George Dellagiarino, Patricia Fulton, Keith Meekins and David Zinzer, US DOI MMS, OCS Statistical Report MMS 98-0027

¹ <https://www.reuters.com/article/france-cgg-idUSL8N1JB6H8>

¹ <https://www.nature.com/articles/s41559-017-0195>

¹ http://usa.oceana.org/sites/default/files/deepwater_horizon_anniversary_report_updated_4-28.pdf

¹ <https://www.bsee.gov/sites/bsee.gov/files/reports/incident-and-investigations/spills-greater-than-50-barrels1964-2012-as-of-august-3-2012.pdf>

¹ https://www.doi.gov/sites/doi.gov/files/migrated/budget/appropriations/2016/upload/FY2016_NRDA_Greenbook.pdf

¹ <https://www.fastcompany.com/40406093/how-satellite-data-caught-gulf-oil-companies-hiding-enormous-oil-spills>

¹ The Economic Benefits of Increasing U.S. Access to Offshore Oil and Natural Gas Resources in the Atlantic, authored by Quest Offshore Resources, December 2013

¹ <http://gcaptain.com/maersk-venturer-begins-drilling-worlds-deepest-well/>

¹ <https://www.oilandgas360.com/despite-oil-downturn-u-s-ranks-no-1/>

¹ <https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MCREXUS1&f=M>

¹ https://www.eia.gov/dnav/pet/pet_move_expc_dc_NUS-Z00_mbb1_m.htm

¹ <https://www.oilandgas360.com/despite-oil-downturn-u-s-ranks-no-1/>

¹ <https://www.eia.gov/todayinenergy/detail.php?id=31532>

¹ http://thehill.com/policy/energy-environment/334811-budgets-oil-provisions-divide-congress-white-house?utm_source=&utm_medium=email&utm_campaign=8890

¹ <https://www.eia.gov/outlooks/steo/report/natgas.cfm>

¹ <http://www.aecf.org/resources/2017-kids-count-data-book/?gclid=CPzat7Wm-tQCFc1LDQoduaQGcw>

¹ <http://www.ogj.com/articles/2017/06/boem-to-identify-california-offshore-platform-decommissioning-issues.html>

¹ <http://www.mercurynews.com/2017/04/17/first-california-offshore-oil-platform-to-be-removed-in-20-years/>

¹ <https://www.nytimes.com/2017/07/05/opinion/trump-oil-drilling-energy-gulf.html?smid=fb-share>

¹ <http://news.nationalgeographic.com/2015/04/150420-bp-gulf-oil-spill-safety-five-years-later/>