



## Testimony to the South Carolina House Environmental Affairs Subcommittee

Peg Howell, Spokesperson for SODA – Stop Offshore Drilling in the Atlantic

April 10, 2019

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Honorable Committee Chairman Hiott, Subcommittee Chairman Chumley and Subcommittee Members, thank you for the opportunity to speak with you today. We especially appreciate the opportunity to speak with members who were not part of the 2017 Ad Hoc Committee on Offshore Drilling hearings. I have submitted my testimony from those hearings as well as my testimony to the US House Subcommittee on Energy and Mineral Resources.

My name is Peg Howell. I have a Bachelor of Science degree in Petroleum Engineering and graduated at the top of my class. I was the first female “Company Man” in the Gulf of Mexico. The Company Man is the person on the rig who is in charge of the drilling operation, something like a plant manager. I have worked for Mobil, Marathon, and Chevron oil companies in the US and in the North Sea. I also hold an MBA from Harvard University and have run my own consulting business for 25 years. Because I have seen firsthand the impact of the oil and gas industry, I have been asked to be the SODA spokesperson.

**SODA – Stop Offshore Drilling in the Atlantic** - was formed in February 2015 as an all-volunteer, non-partisan, grassroots effort of citizens along the South Carolina coast who share a mission to STOP seismic surveys and offshore drilling in the Atlantic. We are comprised of a core team of 10 folks and an active network of well over 3200 South Carolinians. No one is paid for the work they do for SODA. We are not an environmental group; our sole focus is this one issue.

For the last four years we have presented to thousands of citizens and elected officials the facts about the inevitably disastrous impact on our coastal & state economy, health, property, and way of life which will be caused by offshore drilling and the accompanying onshore industrialization. We have held small- and large-scale meetings and events from Pawleys Island to Charleston, Columbia, Greenville and Spartanburg; and from Atlanta, along the Mid- and South- Atlantic coast to the halls of Congress.

**We are here today to support H.3087** – South Carolina’s best and most definitive action to protect our coast. By “our coast” we don’t only mean “the goose that laid the golden egg,” as Governor McMaster has called it. It is also the home of our state’s history – our family’s histories – and our children and grandchildren’s memories. When we say “the coast”, we mean the property that is owned by people across the state as well as that owned by the people who live and work along the coast. When we say “our coast” we mean the estuaries that are the nursery for all creatures great and small; the harbors and bays that house our working waterfronts; the ocean, rivers and marshes that are home to our fish and shellfish industry and where everyone loves to boat, fish and hunt; and of course, the beaches that people from across the state and the world come to enjoy and create memories that last for generations.

Here is a petition containing 3671 signatures of residents, property owners and tourists, gathered one at a time in person at SODA events — from across the state. And we gather more every week – dozens more were just gathered at 2 events last Sunday.

Here's a photo of the folks we spoke with on Sunday evening at an event sponsored by the Gullah Geechee Chamber of Commerce. We are showing you this picture to remind you of the tens of thousands of South Carolinians each of you represents who treasure our precious coast. They count on you to do the right thing for them and for our state's future.



## The Facts

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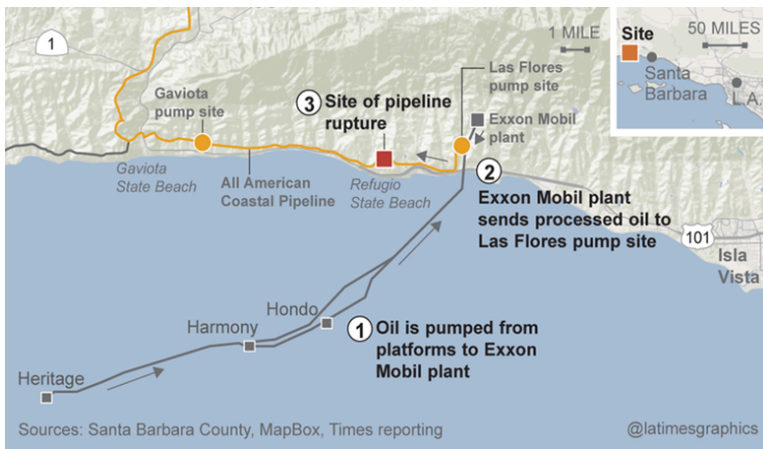
As South Carolinians, we are fortunate to be able to make decisions about offshore drilling, seismic surveys and onshore infrastructure, based on *over 50 years* of evidence and experience about the impacts of the oil and gas industry around the world. We don't need to guess what may happen or get emotional and fearful. We know exactly what has happened to the Gulf of Mexico and the coast of Southern California, and what will certainly happen to the Atlantic coast if we open our state to offshore drilling.

## The Big Picture

Let's begin by asking, "why does the petroleum industry want to explore for oil and gas in the Atlantic -- now?"

The Gulf of Mexico and California coasts share similar stories with somewhat different outcomes. Oil and gas development in the Gulf of Mexico and the California coast was embraced by political leaders over 60 years ago. However, when California experienced the first major oil spill off Santa Barbara in 1969, they began to fight to stop offshore drilling. It took them until 1982 to get the Federal government to stop leasing new areas off their coast, but much damage had already been done and continues today as those wells and structures that are now 35 to 50 years old continue to produce - and leak. Because once the Federal government issues drilling leases, the oil and gas companies can produce from them as long as there are reserves. In fact, the original companies can sell their leases to other, oftentimes, less well-equipped companies. On Memorial Day weekend 2015, there was a big pipeline rupture which oiled 9 miles of the California coast. Two state parks

were closed and tourism revenues on one of the busiest weekends of the year plummeted. The small company that was responsible for the leak filed bankruptcy, and the State of California – the people of California - must now spend nearly \$350 Million to plug and abandon those wells and structure.<sup>1</sup> California continues to try to extract itself from the dangers of the oil and gas industry and will do so for decades to come.



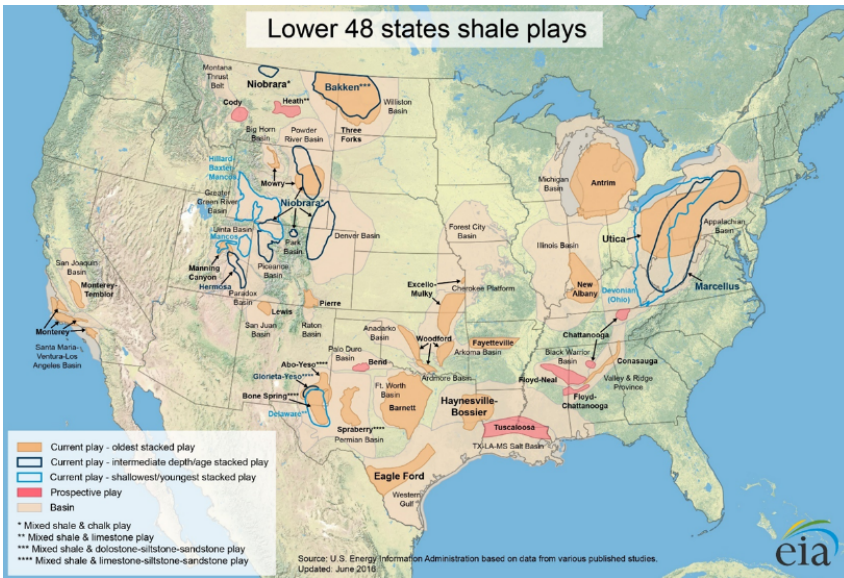
On the other hand, the Gulf of Mexico continues to expand its oil and gas development both with new leases offshore, and new onshore infrastructure, like liquified natural gas (LNG) export terminals.

We appreciate and have benefited from the petroleum products like gasoline, jet fuel, motor oil, and propane as well as thousands of other products like plastics and petrochemicals which are produced from petroleum feedstock that have helped America grow this last half century. And as we consider opening up the Atlantic to oil and gas development, we need to examine if this is the right thing to do NOW.

We must also consider the damage that comes with this industry. We know the people of the Gulf have suffered from the extensive harm this industry has brought to their rivers, marshes, air and water quality, personal property, health, childhood wellbeing and way of life. This damage continues even as production in the Gulf has declined dramatically.

Just two weeks ago, it was announced that the City of New Orleans has joined six southern Louisiana parishes by filing a lawsuit against oil and gas companies over their role in coastal land loss.<sup>2</sup> One article state that “the suit, echoes other efforts to hold the energy industry accountable for damage done to wetlands and marshes through decades of drilling and dredging. By wearing away those natural protective barriers, the industry has contributed to making New Orleans more vulnerable to storm surge and threatens the very existence of the city.” New Orleans is located about 70 miles from the Louisiana coast, about the same distance as Columbia is from the Port of Charleston. Do we want this future for South Carolina?

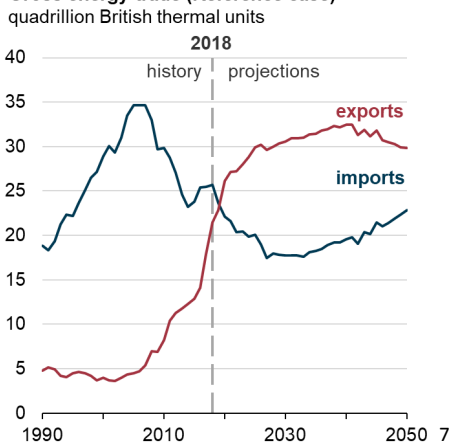
Today only 4% of the US’s dry natural gas production and 18% of the US’s crude oil production comes from federal waters in the Gulf of Mexico.<sup>3</sup> However, the US has become the world’s largest producer of oil and natural gas and will become a net energy exporter in 2020 and will remain so through 2050.<sup>4</sup> How? Because over the last decade, fracking and horizontal drilling have opened up huge onshore resources across our country – known as the Shale Revolution.



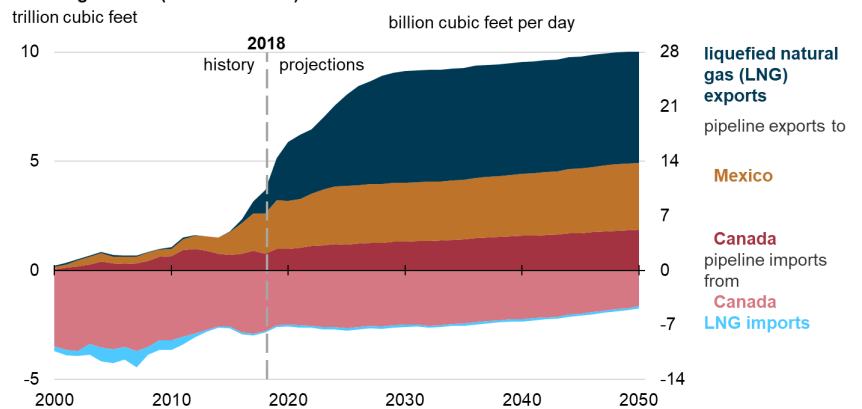
In fact, the Permian Basin alone (in west Texas and southeast New Mexico) is estimated to have 10 times the amount of oil and gas reserves as the entire Atlantic offshore.

The US now produces so much oil and gas that in December 2015, Congress voted to allow crude oil exports for the first time since the Arab oil embargoes of the 1970s. The United States became a net natural gas exporter in 2017,<sup>5</sup> and will continue to increase natural gas exports through 2050.<sup>6</sup>

**Gross energy trade (Reference case)**



**Natural gas trade (Reference case)**



What does this mean for South Carolina? The US *doesn't need* any reserves that might be discovered in the Atlantic.

Well then, why does the petroleum industry want to explore and develop the potential Atlantic oil and gas reserves -- now? Because they need to continue to find new reserves to increase their profits and stock price. Oil and gas companies want operating bases along our coast as much as they want Atlantic reserves – a much-needed launch pad which will enable them to export petroleum overseas – especially to Europe – much cheaper than from the Gulf. And the Federal government wants to open the Atlantic because they want the rents and royalties they receive from offshore drilling. The problem, however, is that the Atlantic coast states – including South Carolina – will take *all* the risk.

## Risk vs. Reward

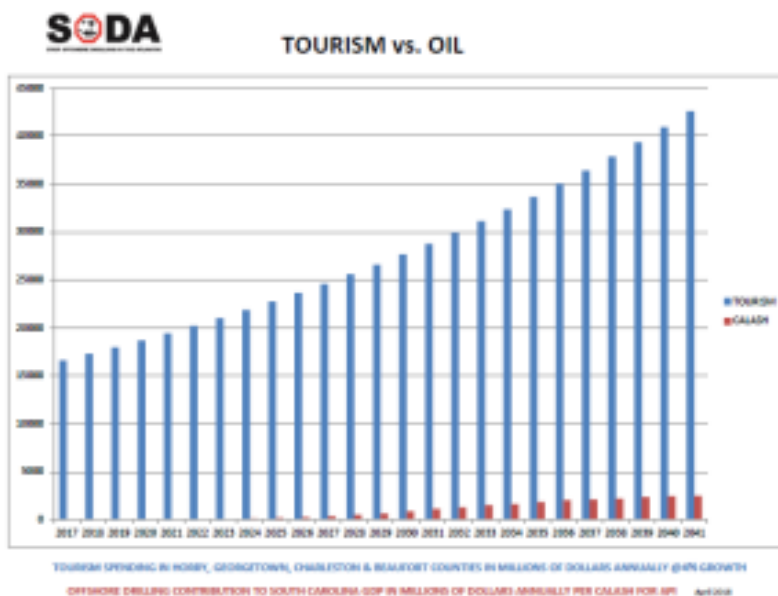
Every good business decision requires an economic analysis of the potential income stream vs. the risks associate with that income. The American Petroleum Institute (API) has issued two studies over the last 6 years, the Quest Report in 2013 and last year's Calash Report. In the Quest Report, the API promises the State of South Carolina over 35,000 jobs and \$3.7 billion in oil and gas revenue by 2035 (or, 20 years from beginning of the analysis).<sup>8</sup> The Calash study added \$1.5 billion in cumulative state and local tax revenues across the 20 year forecast period.<sup>9</sup>

We hope you have studied the assumptions in these API studies (is your copy as dog-eared as mine?):

The Quest report assumes:

- **New revenues** will come to South Carolina via "Revenue-sharing" = **\$3.7 Billion** (cumulative to 2035), *but President Trump has said there **will be no revenue sharing with Atlantic states***
- **There will be 35,000 new jobs in South Carolina by 2035, but**
  - **Total jobs numbers are significantly inflated; based on drilling 690 wells**
  - **70% of the wells will be drilled in deep water, the most dangerous type of drilling**
  - *The jobs will be filled by highly trained and very experienced offshore operations personnel, likely from the Gulf Coast. **They will not be "local" jobs***
  - **Oil field workers are nomads and work on rotational schedules. They will not move to SC and not contribute to the local economy on their time off**

An economic study completed by SODA economists and engineers clearly demonstrates that the best-case scenario for South Carolina revenues based on the Quest and Calash studies compared with a very conservative estimate of tourism revenues demonstrates that our South Carolina coast tourism economy is worth at least 25 times more than revenue from offshore drilling. **Coastal tourism is at least 25 times more valuable than offshore drilling.**



In addition, **South Carolina’s coastal tourism revenue** (from Horry, Georgetown, Charleston & Beaufort) **averages 25 times more than the coastal tourism revenue from Louisiana’s eight coastal parishes** (counties).

Parish	Tourism Spending, \$Millions	
	2015	2016
Cameron	\$ 3	\$ 2
Iberia	\$ 49	\$ 46
Lafourche	\$ 75	\$ 77
Plaquemines	\$ 106	\$ 99
St. Bernard	\$ 76	\$ 64
St. Mary	\$ 61	\$ 59
Terrebonne	\$ 224	\$ 190
Vermilion	\$ 29	\$ 27
<b>LA Coastal Total</b>	<b>\$ 622</b>	<b>\$ 563</b>
<b>SC Coastal Total</b>	<b>\$ 14,342</b>	<b>\$ 15,421</b>

And the average land value per household in the mid and south Atlantic (NC, SC, GA) is \$126,600 compared to the average value on the Gulf Coast (LA, MS, AL) of \$28,300 – again, **Atlantic coast residential property is 4.5 times more valuable than Gulf Coast residential property.**<sup>10</sup>

Finally, Georgetown County and the cities of Georgetown and Pawleys Island, like all the other municipalities along the coast, have passed resolutions opposing offshore drilling, seismic surveys and the onshore infrastructure that goes with it.

Georgetown does not want to become the next Port Fourchon:



**Port of Georgetown, SC**



**Port Fourchon, LA**



**Port Fourchon before Hurricane Katrina**

**Port Fourchon after Hurricane Katrina**

If there is time, I want to make two more points which I expect you have heard from at least one legislator who supports drilling off our coast:

1. You can't explore for just natural gas and it isn't clean and environmentally friendly
2. Offshore drilling in the Atlantic won't improve the fishing

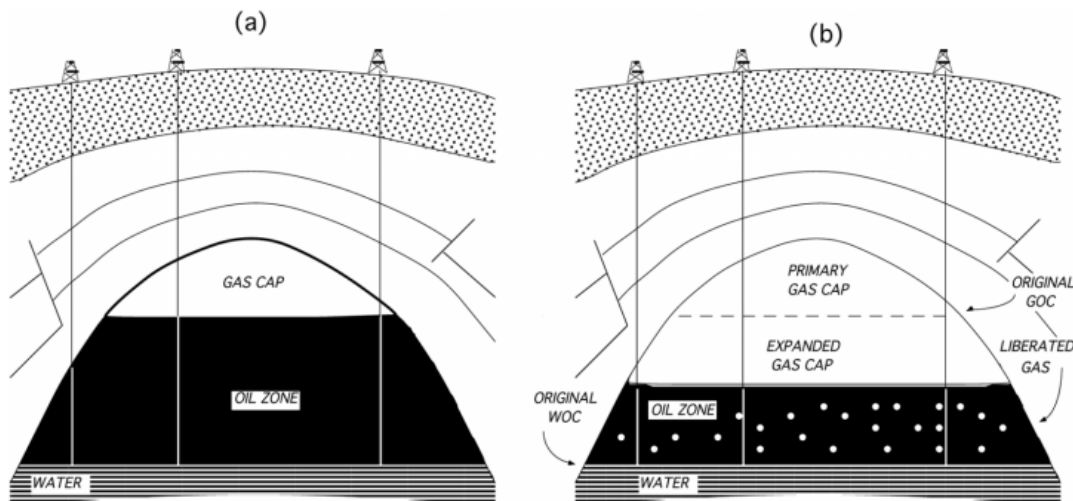
**1. You can't explore for just natural gas; it isn't clean and environmentally friendly**

It isn't possible to explore ONLY for natural gas. When exploration wells are drilled, there are only two possible outcomes. You either find some combination of oil, natural gas and/or water - or you find nothing (a "dry hole").

When oil and gas are discovered together in a reservoir, by Federal regulation,<sup>11</sup> the oil is produced before the natural gas in order to maximize ultimate recovery. This is because when oil and gas occur together in a reservoir, as the oil is produced, the pressure in the reservoir decreases and the gas cap expands, which helps remove the oil (essentially pushing it out of the pore spaces in the rocks), thereby maximizing the recovery.

This illustration may help:<sup>12</sup>

**Fig. 1 – Distribution of water, oil, and gas in a segregating-gas-cap reservoir: (a) before production and (b) during depletion.**

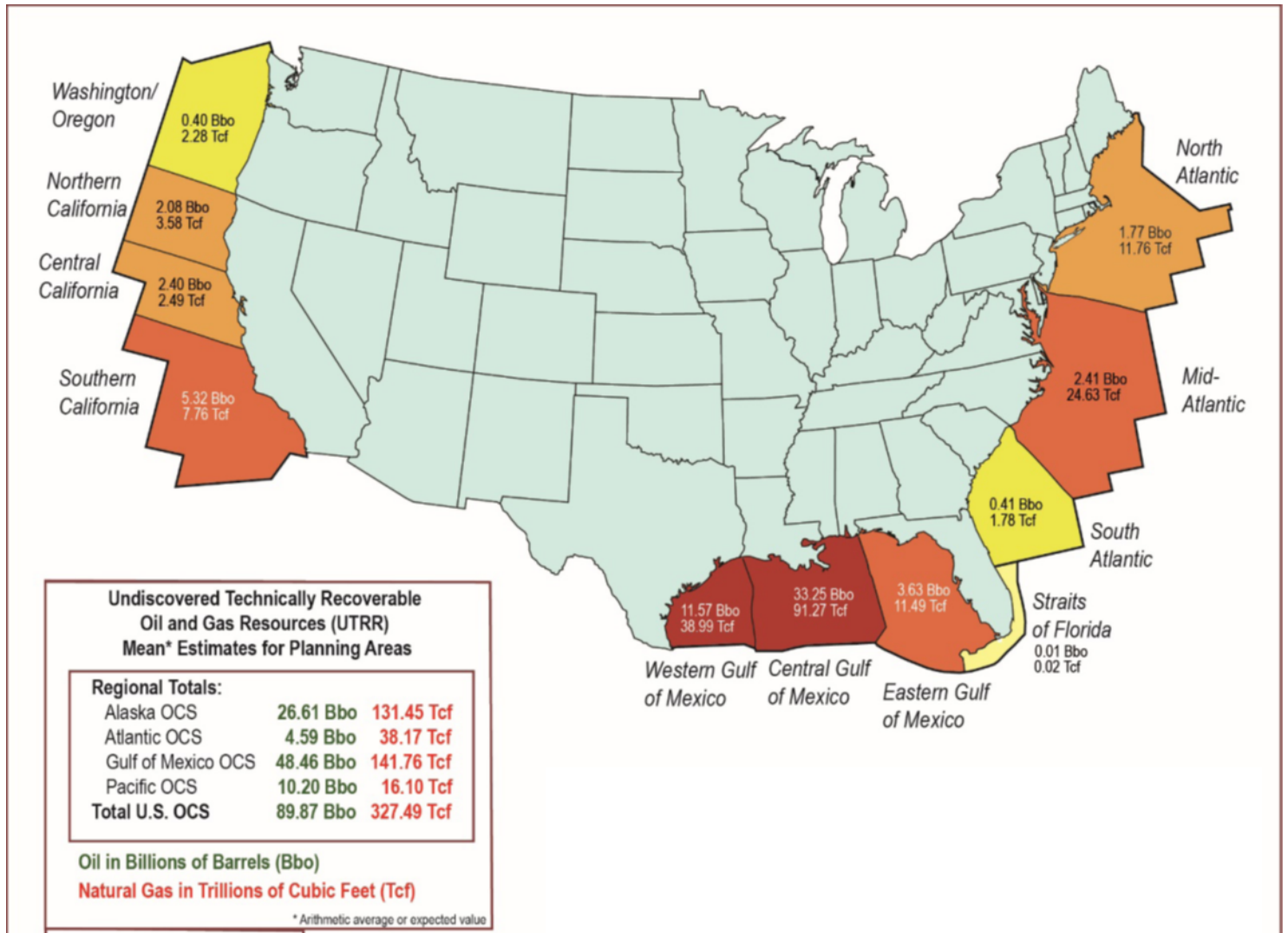


And this is what a natural gas blowout looks like (July 2013, Gulf of Mexico):<sup>13</sup> Not very clean or safe.



From US Bureau of Safety and Environmental Enforcement

According to BOEM, there is both oil and gas off our coast:<sup>14</sup>



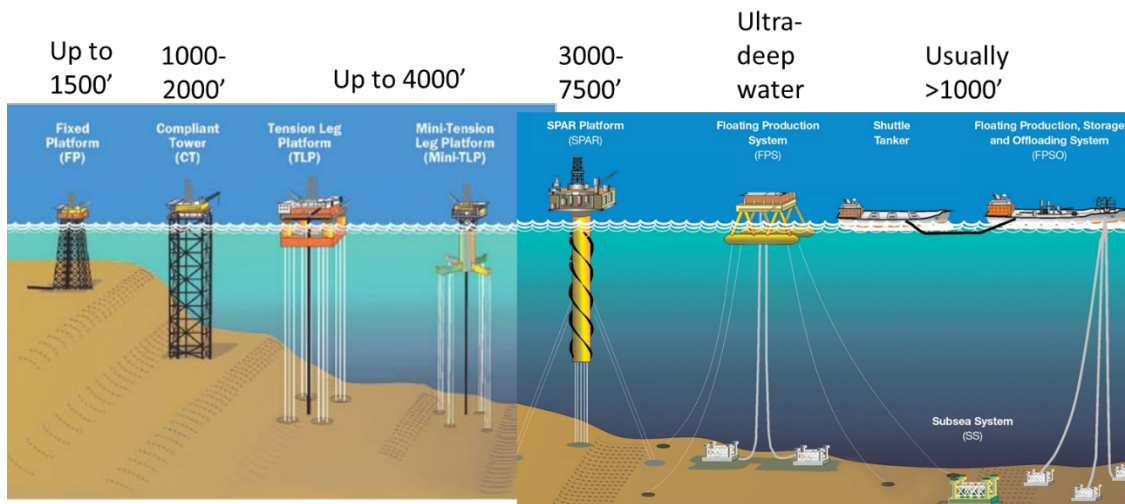


## 2. Offshore drilling in the Atlantic won't improve the fishing

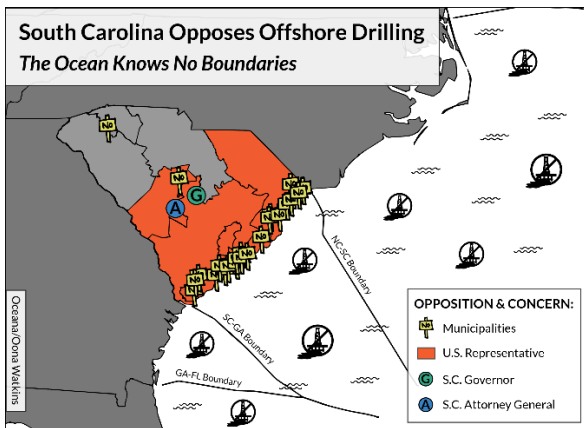
As the API/Quest Report indicates, the primary interest in the Atlantic is deep water drilling. In deep water, there are no permanent structures set. Wells are drilled from drill ships or other floating rigs, then are completed subsea (on the ocean floor) instead of on a structure. Fish are attracted in the Gulf to the structures which act as artificial reefs. No structures, no fish.



The Atwood Achiever Deepwater Drillship



Finally, for those of you who say, “if there is going to be drilling in the Atlantic (say, off North Carolina), we want our share.” SODA believes our job is not to encourage oil and gas development off the coast of NC, because the good people of NC don't want it either. Because the Federal boundary between our states slopes toward our South Carolina coast, we need to do everything we can to stop NC offshore drilling and onshore infrastructure, because the ocean (and oil spills) know no boundaries.



Other states, like our southern neighbor, Georgia, are passing bills like H.3087 NOW. As you know, the next draft of the Proposed Federal Leasing Program is due out at any moment. While we have been extremely fortunate to have Governor McMaster and Attorney General Wilson, as well as Congressmen Cunningham, Rice, Clyburn and Wilson voice their opposition to offshore drilling to the Administration, we do not know if we will be protected. **H.3087 is our best hope for protecting our precious and valuable coast.**

We want to thank Reps. McCoy, Hewitt and Williams, along with the 25 other representatives who co-sponsored this bill. The people of South Carolina are counting on you to do the right thing – for our coast and our future. **Vote FOR H.3087. This IS YOUR LEGACY.**

<sup>1</sup> <https://www.latimes.com/projects/la-me-platform-holly/>

<sup>2</sup> “New Orleans files lawsuit against oil and gas companies, Entergy to pay to restore wetlands,” by Jeff Adelson, *The New Orleans Advocate*, March 29, 2019, [https://www.theadvocate.com/new\\_orleans/news/article\\_58243372-5278-11e9-be64-eb9d99e22006.html](https://www.theadvocate.com/new_orleans/news/article_58243372-5278-11e9-be64-eb9d99e22006.html)

<sup>3</sup> [https://www.eia.gov/special/gulf\\_of\\_mexico/data.php](https://www.eia.gov/special/gulf_of_mexico/data.php)

<sup>4</sup> US Energy Information Administration, Annual Energy Outlook 2019, [www.eia.gov/aeo](http://www.eia.gov/aeo), p.8

<sup>5</sup> *Ibid.*, p. 10.

<sup>6</sup> *Ibid.*, p. 15.

<sup>7</sup> *Ibid.*, p. 9.

<sup>8</sup> API Quest Report, “The Economic Benefits of Increasing US Access to Offshore Oil and Natural Gas Resources in the Atlantic,” December 2013, p. 63.

<sup>9</sup> API Calash Report, “The Economic Impacts of Allowing Access to the Atlantic OCS for Oil and Natural Gas Exploration and Development Supplement: Projected State, Local and Federal Tax Receipts,” April 2018, p. 17

<sup>10</sup> “Offshore Drilling Vs. Tourism,” SODA Economic Analysis by Terry Munson, Tom Stickler & Ian McClaren, September 2015 and January 2018.

<sup>11</sup> Refer to relevant regulations here:

<https://www.gpo.gov/fdsys/pkg/CFR-2013-title30-vol2/pdf/CFR-2013-title30-vol2-sec250-1150.pdf>

**§ 250.1150 What are the general reservoir production requirements?**

You must produce wells and reservoirs at rates that provide for economic development while **maximizing ultimate recovery** and without adversely affecting correlative rights.

<https://www.gpo.gov/fdsys/pkg/CFR-2013-title30-vol2/pdf/CFR-2013-title30-vol2-sec250-1157.pdf>

**§ 250.1157 How do I receive approval to produce gas-cap gas from an oil reservoir with an associated gas cap?**

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(a) You must request and receive approval from the Regional Supervisor:

(1) Before producing gas-cap gas from each completion in an oil reservoir that is known to have an associated gas cap.

(2) To continue production from a well if the oil reservoir is not initially known to have an associated gas cap, but the oil well begins to show characteristics of a gas well.

(b) For either request, you must submit the service fee listed in §250.125, according to the instructions in § 250.126, and the supporting information, as listed in the table in §250.1167, with your request.

(c) The Regional Supervisor will determine whether your request **maximizes ultimate recovery**.

<sup>12</sup> [http://petrowiki.org/Gas\\_cap\\_drive\\_reservoirs](http://petrowiki.org/Gas_cap_drive_reservoirs)

<sup>13</sup> <http://www.ogj.com/articles/2015/09/bsee-crew-mistakes-caused-2013-gas-well-blowout-fire-in-gulf.html>