

Drilling for Oil in the Atlantic and Eastern Gulf: A Dead End Idea

For more than 25 years, the Atlantic coast and eastern Gulf have been off-limits to offshore oil and gas drilling. The South's beaches and marshlands have been largely unspoiled and unpolluted, supporting tourism centers and commercial fisheries that are among the most productive in the world.

In 2008, when congressional and presidential prohibitions on offshore drilling ended, the U.S. Minerals Management Service (MMS) announced plans to move forward with a lease sale off Virginia's coast and proposed expanding oil and gas drilling offshore in the Atlantic, Gulf and Alaska. The Obama Administration announced in April 2010 that it would proceed with the Virginia sale and begin the process to allow drilling in the Mid- and South Atlantic (Maryland through north Florida), the eastern Gulf, and several places in Alaska.

Then the Deepwater Horizon oil rig—an example of the oil and gas industry's 21st-century technology—exploded in the Gulf. The environmental catastrophe has brought into stark focus the inherent dangers of offshore drilling to coastal communities and natural resources.

The small amounts of oil and gas estimated in the Mid- and South Atlantic and eastern Gulf are not worth the tremendous risk to the region's coastal communities, rich fisheries, clean beaches and other natural resources. There are cleaner, safer ways to power America.

Too Little, Too Late

The MMS estimates the Mid- and South Atlantic combined holds only about three months supply of oil (1.91 billion barrels) and ten months supply of gas (18.99 trillion cubic feet) at current rates of consumption nationwide.

- Of that, the proposed Virginia lease sale holds just six days supply of oil (130 million barrels) and 18 days supply of gas (1,140 billion cubic feet).
- If production started in 2011—much sooner than is feasible under current circumstances—it would have no impact on domestic oil and gas prices until at least 2030, and even then any such impact would be “insignificant,” according to the federal Energy Information Administration.¹

Environmental Threats

The long-term, widespread environmental and economic destruction from major oil spills like the Deepwater disaster is indisputable. But blowouts and other catastrophes are just one way

that drilling off the Atlantic Outer Continental Shelf could harm marine life and coastal communities.

- According to the National Academy of Sciences, a single well produces between 1,500 and 2,000 tons of waste material, including ground rock and drilling “muds”—a dense liquid used to operate rigs which contains toxic pollutants, such as mercury, lead, chromium, barium, arsenic and cadmium. Dumped on the ocean floor, the debris damages marine habitat; the toxic muds can be carried by currents over a mile from the rig, contaminating small bottom-dwelling organisms that form the foundation of the marine food chain.
- A 2004 inventory shows that drilling rigs release tons of nitrogen oxides, carbon monoxide, sulfur dioxide, and volatile organic compounds each year. These compounds are the basic ingredients of smog, haze, and other air pollution.²

Threats on Land

Crude oil and raw natural gas both must be refined to convert them to fuel for our homes, cars and factories. Refineries pipelines and distribution facilities pollute our air and water daily.

- Such infrastructure would, in all likelihood, have to be built on the coast in Virginia, North Carolina, South Carolina and/or Georgia to process oil and gas collected off the Southern coast.
- An average U.S. refinery—about the size of several hundred football fields—releases more than 11,000 gallons of oil or fumes into the water and air daily. These releases include hydrocarbons, sulfur dioxide, carbon monoxide, and soot, which cause major health and environmental problems.³

Wildlife Impacts

The Mid- and South Atlantic coast is a globally significant area for migration of birds, sea turtles, and marine mammals. The region also contains some of the most productive areas for commercial fisheries in the country—the Chesapeake Bay, Albemarle-Pamlico Sound, and the unique “Charleston bump” on the ocean floor off South Carolina. Onshore and offshore oil and gas development could have devastating impacts on mammals, fish and other wildlife.

- The North Atlantic right whale, one of the most critically endangered species in the world, migrates along the Atlantic coast twice a year; its only breeding grounds lie off Georgia and northern Florida. Other marine mammals of special concern include the humpback whale, beaked whale, and the bottlenose dolphin.
- The Mid- and South Atlantic shore provides breeding grounds and stopover points for a wide variety of federal- and state-listed sea turtles and shorebirds, which attract thousands of tourists throughout the year.
- Noise, light, and underwater vibrations generated by seismic surveys, vessel traffic, pile driving, drilling, and construction would negatively impact marine species, many of which rely on

sound to feed and navigate. Vessel strikes are another serious threat for whales, dolphins, and manatees.

Economic Impact

Seismic testing, oil spills, contamination from toxic drilling muds, impacts of onshore infrastructure, and other environmental damage from oil and gas development would impact both the commercial fishing and the tourism upon which the coastal communities of the Mid- and South Atlantic and eastern Gulf rely.

- The Mid-Atlantic Fishery Management Council has classified the coast from New York to North Carolina as “essential fish habitat” for several species, including summer flounder, scup, black sea bass, bluefish, Atlantic surfclam, Atlantic mackerel, Atlantic butterfish, golden tilefish, spiny dogfish, and tilefish.
- In 2008, there was \$262.8 million worth of commercial fish landings in Virginia, North Carolina, South Carolina, and Georgia, according to NOAA,⁴ which could suffer losses due to impacts of oil and gas development:
 - Virginia: \$149.5 million
 - North Carolina: \$86.8 million
 - South Carolina: \$17.5 million
 - Georgia: \$9.0 million
- The blue crab population, a signature species for Virginia, is fast dwindling. Toxic pollution from oil and gas operations on the Outer Continental Shelf, where blue crab larvae develop, could devastate the species.
- According to the American Sportfishing Association⁵, saltwater sport fishing in 2006 accounted for thousands of jobs and millions of dollars to coastal economies:
 - Virginia: 5,541 jobs and \$945 million
 - North Carolina: 9,735 jobs and \$1.74 billion
 - South Carolina: 11,896 jobs and \$2.07 billion
 - Georgia: 2,010 jobs and \$428 million
- Coastal communities which rely largely on tourism could suffer as a result of

potential development of refineries, pipelines, roads or other onshore infrastructure, as well as declining fish and marine species, not to mention the dire economic impacts of a catastrophic spill.

- Tourism provides 30,000 jobs on North Carolina's Outer Banks.⁶ In South Carolina's Myrtle Beach area, it provides 39,100 jobs.⁷
- In 2007, the 18 Virginia cities and counties of the Chesapeake Bay and coast brought in approximately \$4.25 billion in tourism revenue, according to the Virginia Tourism Corporation.
- The potential loss of certain military operations, a driving force of Virginia's coastal economy, due to conflicts with drilling could cost the state some \$1.9 billion yearly and 15,000 jobs—more if additional forces are moved.⁸

Other Factors

The Mid- and South Atlantic and eastern Gulf are extremely vulnerable to hurricanes and tropical storms, which can wreak havoc on offshore drilling operations and onshore infrastructure.

- After Hurricanes Katrina and Rita, the U.S. Coast Guard coordinated the cleanup of more than 8 million gallons of spilled oil. There were six major and four medium oil spills, as well as more than 1,000 minor oil spills throughout the Gulf region.⁹ To put that in perspective, the Exxon Valdez oil spill in 1989 amounted to 11 million gallons; the Deepwater Horizon spilled *more than 200 million gallons*.
- As the Gulf blowout illustrates, the risk to the environment is substantially higher due to complications of drilling in deeper waters. The Deepwater Horizon well was 5,000 feet below sea level (and another 18,000 feet into rock). The majority of sea floor covered by the proposed Virginia lease sale, which begins 50 miles from shore and covers 3 million acres, is deeper than the Horizon well by at least 250 feet.

- In a report this year, the Department of Defense said 9% of the Mid-Atlantic and 10% of the South Atlantic should be off-limits to oil and gas development because it would conflict with crucial training, testing and other military operations; additional area would be subject to strict DOD stipulations based on military needs.¹⁰
- In Virginia, DOD said 72% of the proposed lease area should be off-limits due to conflicts with the Norfolk Naval Station, the world's largest navy base.
- NASA, which operates the Wallops Flight Facility off the Virginia coast, also has expressed serious concerns about conflicts that drilling would present for its space launch operations.¹¹
- MMS has a dismal record for enforcing laws and regulations, and has been fraught with scandal and accusations of bribery over the last several years. It's now clear the agency has had a policy of rubber-stamping plans for drilling operations without environmental review as required under the National Environmental Policy Act, including for the Deepwater Horizon rig. On May 19, Secretary of the Interior Ken Salazar signed a Secretarial Order to restructure MMS and divide its conflicting missions among three separate entities to start to address these problems.

What's Needed

Fossil fuel use is dirty and dangerous, beginning with extraction. We simply can't afford any more accidents. The U.S. must put its considerable technological and entrepreneurial muscle to the challenge of developing clean, sustainable energy sources to fuel America's future, including offshore wind and ocean tides, solar, geothermal, cellulosic fuel, sustainably sourced biomass, energy efficiency, and other clean sources.

- The Atlantic Outer Continental Shelf has more renewable energy potential compared to the Gulf of Mexico, Pacific, and Alaska, particularly near high-energy demand areas.

- The Virginia Coastal Energy Research Consortium has several projects underway to explore offshore wind power and has identified large areas of powerful Class 6 winds that could supply at least 20% of Virginia's annual electricity demand.
- Southern states can meet significant levels of energy needs through tapping renewable sources within their own borders, including offshore and onshore wind, rooftop solar, small hydropower, combined heat and power, and geothermal, according to the Institute for Local Self-Reliance:¹²
 - Virginia: 177%
 - North Carolina: 237%
 - South Carolina: 236%
 - Georgia: 34%
 - Alabama: 25%
- A June 2009 study by the University of Massachusetts at Amherst and the Center

for American Progress¹³ found that shifting \$150 billion in government and private investment from fossil fuels to clean energy technology would create an estimated 1.7 million jobs in America in the next decade, including more than 44,000 jobs in Virginia, 51,210 in North Carolina, 24,757 in South Carolina, and 58,816 in Georgia—significantly more than offshore drilling's best estimates.

- A May 7 poll showed that 61% of 2010 voters support action by Congress to invest in domestic energy sources and encourage companies to use and develop clean energy.¹⁴

Now is the time to act.

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¹ Energy Information Administration, "Impacts of Increased Access to Oil and Natural Gas Resources in the Lower 48 Federal Outer Continental Shelf," in Annual Energy Outlook 2007; <http://www.eia.doe.gov/oiaf/aeo/otheranalysis/ongr.html>

² A 2004 inventory of air pollution in the Gulf of Mexico found that offshore drilling account for 89% of carbon monoxide, 77% of NOx emissions, 72% of volatile organic compounds emissions, 69% of particulate matter emissions, and 66% of sulfur dioxide.

³ Paul R. Epstein and Jessie Selber, eds., Oil: A Lifecycle Analysis of its Health and Environmental Impacts 5, available at <http://chge.med.harvard.edu/publications/documents/oilfullreport.pdf>.

⁴ National Marine Fisheries Service, Annual Commercial Landing Statistics; http://www.st.nmfs.noaa.gov/st1/commercial/landings/annual_landings.html

⁵ American Sportfishing Association, "Sportfishing in American: An Economic Engine and Conservation Powerhouse," at 10 2008; <http://www.asafishing.org/images/statistics/resources/Sportfishing%20in%20America%20Rev.%207%202008.pdf>

⁶ Outer Banks Chamber of Commerce, <http://www.outerbankschamber.com/relocation/employment.cfm>

⁷ Monique Newton, *Myrtle Beach Tourism Holds Line in Tough Times*, Sun News, Aug. 29, 2009, available at <http://www.thesunnews.com/106/story/1043535.html>

⁸ Joe Bouchard, retired Navy Captain and former commander of Naval Station Norfolk; an expert on military basing and encroachment who worked on these issues in the Pentagon and at the White House; https://www.cnrc.navy.mil/cnrma/Programs/CommandandStaff/PublicAffairs/StatisticalReport/CNIC_051188

⁹ Department of Homeland Security, *The First Year After Hurricane Katrina: What the Federal Government Did*; web page last updated Oct. 16, 2008; http://www.dhs.gov/xfoia/archives/gc_1157649340100.shtm

¹⁰ Report on the compatibility of Department of Defense activities with oil and gas resource development on the Outer Continental Shelf; http://www.acq.osd.mil/ie/offshore/dod_ocs_rept_02152010_release.pdf

¹¹ NASA, Comments on the 5-Year Outer Continental Shelf Oil and Gas Leasing Program 2010-2015 (21 Sept. 2009). Also, at the April 29, 2010 hearing in Norfolk on the proposed Programmatic EIS for seismic activities in the Mid- and South Atlantic, a NASA representative reiterated these concerns.

¹² Institute for Local Self-Reliance, New Rules Project, "Energy Self-Reliant States, Second and Expanded Edition," October 2009; <http://www.newrules.org/energy/publications/energy-selfreliant-states-second-and-expanded-edition>

¹³ University of Massachusetts at Amherst and Center for American Progress; "The Economic Benefits of Investing in Clean Energy," June 2009; http://www.americanprogress.org/issues/2009/06/clean_energy.html

¹⁴ Benenson Strategy Group; May 7, 2010, for Clean Energy Workgroup; http://www.bsgco.com/releases/CEW_BSG_memo.pdf