

Offshore Oil and Gas Leasing, Exploration, and Development

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The Ocean Conservancy's Position

From exploration to development, oil and gas operations have the potential to change marine ecosystems irreversibly, along with the quality of life of those who live, work, or vacation near the coast. The Ocean Conservancy believes that employing and extending federal moratoria on offshore oil and gas development can help to protect sensitive habitats. Where oil and gas development is permitted, all projects must be subject to rigorous environmental assessment, monitoring, and review by all interested stakeholders. In all areas, oil and gas operations must fully mitigate impacts and minimize risks to marine ecosystems and wildlife.



Background

Catastrophic spills have demonstrated the potentially huge costs to ocean areas and wildlife. Yet spills represent only a small portion of the consequences of such operations. In the 1940s, advances in drilling technology enabled oil companies to drill wells from offshore platforms. In 1953, Congress enacted legislation authorizing federal leasing of submerged outer continental shelf (OCS) lands. The first federal OCS lease sale was conducted in 1966. Three years later, a drilling mistake resulted in a well blowout off Santa Barbara, California, spreading over four million gallons of crude black oil across 125 miles of California coastline. Attempts to control the flow and contain the spilled oil were fruitless. Shoreline cleanup was limited to spreading straw on the beaches and steam cleaning the intertidal rocks. Massive numbers of dead birds and other animals

littered the beaches. The tourist economy slumped. Following the blowout, drilling on the OCS was halted pending review and revision of federal drilling regulations.

Federal drilling activities continued on the OCS in the early 1970s with increased regulation, including a review process under the newly enacted National Environmental Policy Act, and under other relevant state and federal laws. Still, accidents continue to occur. Since the *Exxon Valdez* disaster in Alaska's Prince William Sound, U.S. and international laws have required the phase-in of double-hulled tankers to transport oil. Yet today, more than half of the world's 10,000 tankers are single-hulled—often dubbed “environmental time bombs.” Moreover, even without these accidents, day-to-day oil and gas operations represent a major source of both water and air pollution.

To protect sensitive areas, Congress established a

moratorium on drilling in certain areas off northern and central California in 1982. In 1990, President George H.W. Bush issued an executive order that prohibited leasing in additional areas. President Bill Clinton strengthened these protections in 1998. Currently, many areas of the OCS, such as the national marine sanctuaries, are protected from offshore oil development through a mix of congressional and presidential actions. These moratoria have consistently received broad bipartisan support, but they are not permanent, and can be reversed by future acts of Congress or presidential orders. Moreover, many important and sensitive marine areas are still not protected by moratoria, including areas off Alaska, and previously leased, but never developed, areas off California.

Rationale

The Ocean Conservancy's position on offshore oil and gas operations reflects our concerns about their potential for significant adverse ecological impacts including, but not limited to:

Catastrophic Oil and Gas Accidents

Accidents inevitably happen. Spills serve as sobering reminders that the world's heavy reliance on nonrenewable energy carries devastating environmental risks. From 1980 to 1999, at least three million gallons of oil were spilled from offshore operations.¹ In 1998 alone, 511 spills from oil platforms resulted in 65,547 gallons of oil spilled into U.S. waters.² Worse, according to a U.S.



Photo: National Oceanic and Atmospheric Administration (NOAA).
Oiled seabird.

Department of the Interior estimate, an average of only five to 15 percent of spilled oil is recovered, and in some places, oil spill recovery operations have never succeeded at all. Underwater storage tanks and transportation pipelines carrying oil, gas, and condensates can also fail. Material and welding defects, pipe erosion, tectonic movements, and damage from anchors and bottom trawls have all caused leaks.

Marine mammals, sea birds, fish, shellfish, and other sea life are extremely vulnerable to oil pollution. Birds and mammals ingest oil and die, or become so coated with oil that they freeze or drown. Furthermore, long-term toxic effects on sea life can impair a population's reproductive success for generations. Recent studies have shown that tiny amounts of oil—as little as one part per billion—can harm pink salmon and herring and cause salmon eggs to fail.³ Coastal economies that depend upon fisheries and tourism are likewise devastated.

Water and Air Pollution

Practically all stages and operations of offshore oil and gas production are accompanied by discharges of liquid, solid, and gaseous wastes. Pollutants released into ocean waters include excavation materials and seafloor dredges, drilling muds, production waters, and contaminants such as mercury, lead, cadmium, and radioactive elements such as radium. These are often discharged untreated.

Air emissions likewise occur at all stages of the industry's activity. According to one estimate, the average offshore platform generates more than 50 tons of nitrogen oxides, 11 tons of carbon monoxide, eight tons of sulfur dioxide, and 38 tons of volatile organic hydrocarbons per year.⁴

Noise Pollution

Noise pollution is perhaps the least understood impact of oil and gas development. Before drilling ever takes place, seismic testing—using noisy shock waves to determine what lies beneath the seabed—floods the ocean with noise pollution. Scientists have documented significant shifts in the behavior of great whales as a result of this practice. Researchers have found that fishing is much less successful during and after seismic testing.



Photo: NOAA.

Oil platform blowout,
Timbalier Bay, Louisiana.

Cumulative Impacts on Coastal Resources

Offshore platforms are one small part of a much larger infrastructure that can cover thousands of miles. Pipelines, refineries, roads, docks, and other onshore buildings can fragment important coastal habitats. For instance, pipelines crossing coastal wetlands in the Gulf of Mexico are estimated to have destroyed more coastal salt marsh than exists in the area from New Jersey through Maine.⁵ Property values in coastal economies tend to decrease proportionally with an increase in offshore development. Platforms and associated development also disrupt scenic views and can compromise local tourism operations.

The Ocean Conservancy's Plan for the Future

Given the devastating impacts posed by oil and gas development, The Ocean Conservancy will work to ensure that important coastal and marine habitats are protected by:

- > supporting existing moratoria and future initiatives to protect sensitive areas from offshore oil and gas development;
- > supporting the right of states to review any offshore development to ensure compliance with states' environmental protection laws;
- > participating in the Minerals Management Service OCS Policy Committee to advise the Department of the Interior on our position on OCS policies;
- > opposing legislation that provides incentives for, or encourages, harmful offshore oil and gas operations;
- > working to minimize the risks associated with oil and gas development, and to require stronger impact assessment for individual projects; and
- > supporting a national long-range energy policy that emphasizes conservation and renewable energy sources.

Endnotes

¹ Minerals Management Service, 2000. Gulf of Mexico OCS Oil and Gas Lease Sale 181, Draft Environmental Impact Statement (DEIS), p. IV-50.

² U.S. Coast Guard, "Pollution incidents in and around U.S. waters," 1998. <http://www.uscg.mil/hq/g-m/nmc/response/stats/chpt1998.pdf>.

³ Marguerite Holloway, "Oil on Water," *Scientific American*, March 1999. www.sciam.com.

⁴ Minerals Management Service, 2000. Gulf of Mexico OCS Oil and Gas Lease Sale 181, Draft Environmental Impact Statement (DEIS), p. IV-40.

⁵ D. F. Boesch and N. N. Rabalais, Eds., *Long-term Effects of Offshore Oil and Gas Development*. (New York: Elsevier Applied Science, 1987).