Outer Continental Shelf Drilling

IMPACTS TO AIR, WATER, WILDLIFE, COASTAL ECONOMIES AND CLIMATE

There are over 5600 offshore oil and gas platforms in the United States and over 27,000 miles of pipelines in the areas of the Gulf of Mexico already open to drilling. These major industrial facilities have tremendous impacts on the ocean floor, water and air quality, and fragile marine ecosystems.

Thunder Horse Platform after Hurricane Dennis. MMS.

Ocean Floor. Drilling infrastructure permanently alters ocean floor habitats. Drill rig footprints, undersea pipelines, dredging ship channels, and dumped drill cuttings-- the rock material dug out of the oil or gas well-- are often contaminated with drilling fluid used to lubricate and regulate the pressure in drilling operations. The fluid contains petroleum products and heavy metals. Strewn on the ocean floor, contaminated sediments can be carried by currents over a mile from the rig, sharply reducing populations of small bottom-dwelling creatures that are important to the rest of the food chain and biomagnifying toxic contaminants in fish we eat.

Spills, Leaks and Catastrophes. Even with safety protocols in place, leaks and spills are inevitable— each year U.S. drilling operations send an average of 880,000 gallons of oil into the ocean. Then there are the unanticipated catastrophes. In 2005, Hurricanes Katrina and Rita destroyed 113 of the oil platforms in the Gulf of Mexico and damaged 457 pipelines. Hurricane damage caused at least 124 different spills, totaling over 17,700 barrels (743,000 gallons) of petroleum products. Oil is toxic to the plants and microscopic animals that form the basis of the marine food chain. It also poisons birds, mammals and fish. Those not killed outright can suffer a slow death from debilitating illness and injury.

Coastal Economies. Even a medium sized spill can be a major economic disaster in coastal areas dependent on tourism or fishing as a major economic driver. Hundreds of thousands of existing jobs and billions of dollars of economic activity depend on clean coasts and healthy coastal waters. Routine air and water pollution from offshore rigs, coupled with industrialization in sensitive areas, can quickly undermine local economies.

Air Pollution. A 2004 inventory of air pollution in the Gulf of Mexico found that OCS oil and gas activities account for the overwhelming majority of air pollutants: 89% of carbon monoxide, 77% of NOx emissions, 72% of volatile organic compounds emissions, 69% of particulate matter emissions, and 66% of sulfur dioxide.

Invasive Species. Ships, drilling equipment and even rigs are used and relocated all around the world. Animals that colonize a rig surface in one area essentially get a "free ride" to a new habitat, where they can easily become invasive. The brown mussel (a marine species with impacts similar to zebra mussels), several species of jellyfish, barnacles and other nuisance organisms can be spread by drilling equipment.

Birds. Spills pose direct mortality dangers through oiling and poisoning by ingestion as animals try to clean themselves and as toxins build up in fish-eating birds. In addition, over 200,000 birds die annually in collisions with oil and gas platforms. Construction of new pipelines will damage sensitive coastal habitats and marshes.

Marine Mammals. Seismic surveys conducted during oil and gas exploration cause temporary or permanent hearing loss, induce behavioral changes, and even physically injure marine mammals such as whales, seals and dolphins. Construction noise from new facilities and pipelines is also likely to interfere with foraging and communication behaviors of birds and mammals. Risk of collisions with vessels and

exposure to pollutants will also increase. Exposure to petroleum causes tissue damage in the eyes, mouth, skin and lungs of marine mammals. Because they are at the top of the food chain, many marine mammals will be exposed to the dangers of bioaccumulation of organic pollutants and metals. Expansion of offshore drilling activities would further threaten imperiled species like the manatee.

Sea Turtles. Dredging of nesting beaches, collisions, and noise disruptions are all potential threats to sea turtles. Hatchlings are also particularly susceptible to oiling because they spend much of their time near the water surface, where spilled oil or tar accumulates.

Climate Change. In the face of the climate crisis, the U.S. needs to look for ways to decrease petroleum consumption, not for ways to increase it.

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