



The Bait

Drilling won't interfere with commercial fishing activity.

The Catch

Drilling platforms and equipment block access to fishing areas, degrade fish habitat, and create increased commercial vessel traffic that would make the Bay more susceptible to invasion from destructive non-native species.



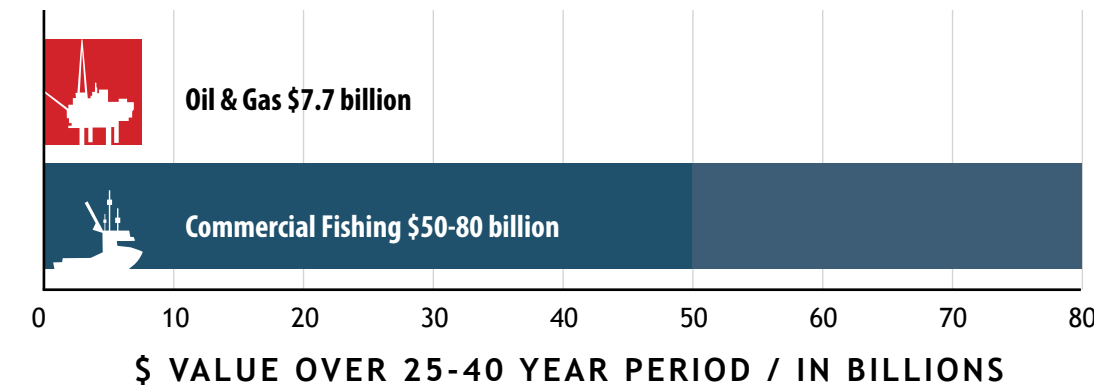
The Bait

Oil spills are rare and can be contained.

The Catch

Experience around the world in places like the Gulf of Mexico, the North Sea, and Cook Inlet prove spills and leaks are inevitable. The risk in Bristol Bay increases because of the area's severe weather and frequent volcanic and seismic activity. Severe weather and sea ice make clean-up and containment virtually impossible for much of the year.

Do the Math



Oil and Gas Just Don't Add Up

At most, oil and gas drilling is expected to bring in **\$7.7 billion** over the 25-40 years experts believe it will take to extract these finite resources from Bristol Bay and the North Aleutian Basin.

In contrast, the area's fishing industry brings in **\$2.2 billion per year**, or a total of **\$50-80 billion** over the same time period. Unlike oil and gas, fish provide a renewable resource. If properly managed, Bristol Bay fisheries won't disappear after 40 years, and they won't leave behind a trail of contamination and destruction.

Fishing has provided the cornerstone of Bristol Bay's economy for thousands of years. And it will do so for thousands more, as long as we protect it.

Join the coalition of fishermen, Native Alaskans, and conservationists working to protect Bristol Bay at www.fishbasket.org

Learn more at: www.worldwildlife.org/bristolbay



Produced by World Wildlife Fund | Kamchatka/Bering Sea Ecoregion
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D O N T ' M I X



Don't Take the Bait

ON OFFSHORE OIL & GAS DRILLING IN BRISTOL BAY

O I L & F I S H I N G D O N ' T M I X



The Bait

Seismic surveys are harmless to fisheries.

The Catch

Seismic surveys can kill fish eggs, larvae, and adults and have been shown to reduce catch rates by **50-80** percent for some species.



The Bait

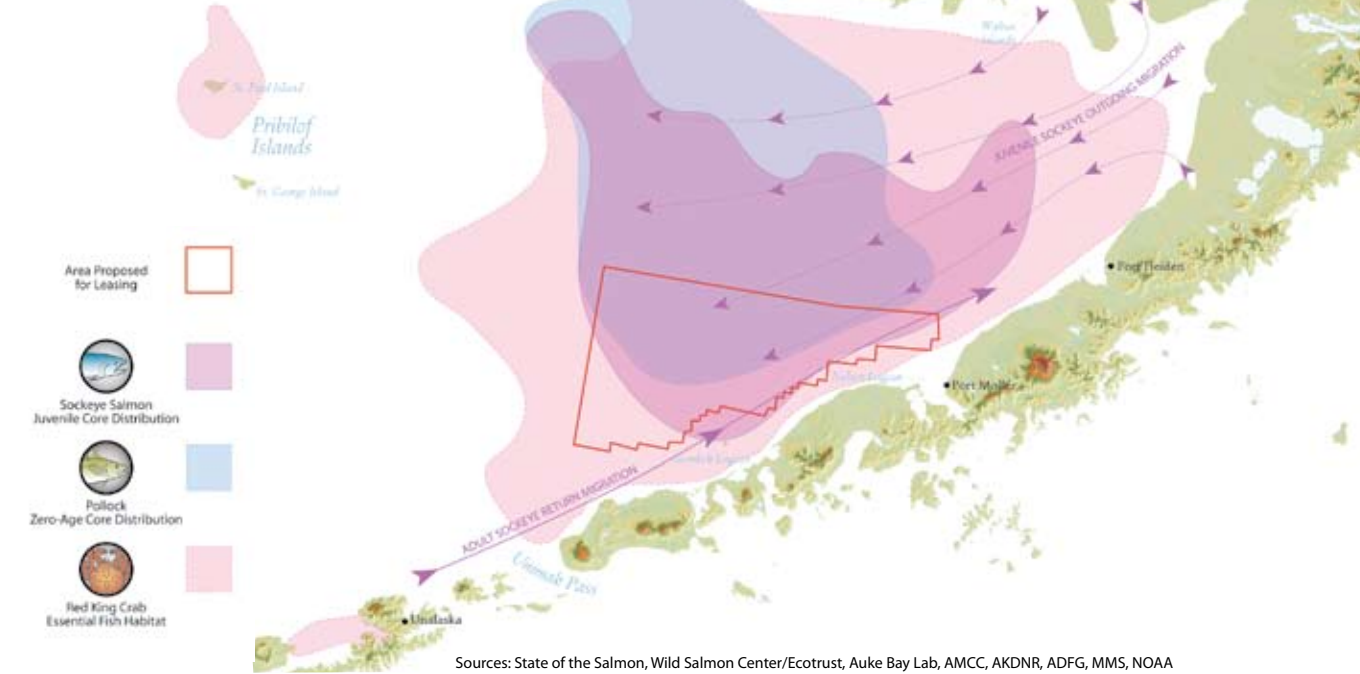
Drilling and fishing can safely coexist.

The Catch

Drilling discharges heavy metal and toxic wastes that contaminate fish habitat and impact important food sources for salmon, pollock, and crab.

O I L & F I S H I N G

Bristol Bay Fisheries



For thousands of years, fishing has defined the culture and economy of Alaska's Bristol Bay. With a bounty of sustainable resources unmatched anywhere in the world today, Bristol Bay stands out as one of the most globally important commercial fisheries on earth.

But offshore oil and gas drilling now threaten to destroy the Bay's most vital resources: its populations of wild sockeye salmon, Alaskan king crab, pollock, herring, cod and Pacific halibut that have earned these waters the moniker, "America's fish basket."

After decades of federal protection, the offshore waters of Bristol Bay and the southeast Bering Sea find themselves at the center of a proposed oil and gas lease sale. Experts agree dozens of studies are needed to determine the safety of drilling in this area, yet little funding is being provided to carry them out.

Those who support the leases would have you believe that drilling in Bristol Bay will solve our dependence on foreign oil, result in lower prices at the pump and invigorate flagging local economies. It won't.

What drilling *will* do is place a \$2.2 billion-a-year fishing industry at risk, threatening a sustainable way of life that provides nearly half of our nation's annual wild seafood catch. Opening the Bay to offshore oil and gas drilling could risk widespread contamination and destruction of fish habitat; interference and competition with local fishing activities; significantly reduced catch rates; and disturbance to critical fish populations' ability to reproduce.

What's more, it would expose the Bay to potentially devastating oil spills reminiscent of the 1989 *Exxon Valdez* fiasco, the effects of which are still being felt. Severe weather conditions and scant infrastructure make clean up of even the smallest spill in this region difficult, if not impossible.

The amount of oil and gas that could be extracted from Bristol Bay is but a tiny fraction of what's needed to address our nation's energy problems. Rather than benefitting local people or the national economy, offshore development would leave in its wake a trail of destruction threatening a far more valuable natural resource: the nation's fish supply.

D O N ' T T A K E T H E B A I T > O I L & F I S H I N G D O N ' T M I X



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"We are not so frightened of the oil coming up, from a blow out. We are more frightened of the seismic. It is something that is out of sight, out of mind,"

NILS MYKLEBUST | COMMERCIAL FISHERMAN AND REPRESENTATIVE
Norwegian Fishermen's Association

Did you know?

Damage to local fisheries from offshore oil and gas production occurs long before drilling begins, and lingers long after the last barrel of oil is shipped away.

Every step of the process - from seismic surveys to exploratory drilling to platform construction and, finally, extraction - can harm the web of aquatic ecosystems upon which fishermen rely.

Seismic surveys have been shown to reduce fish catch rates from 50-80 percent.

During the first phase of exploration, seismic surveys are used to determine the location of oil and gas deposits beneath the seafloor. Seismic tests use powerful air guns that repeatedly fire explosive, low-frequency blasts that can cause extensive hearing damage in some fish, decreasing their chances for survival and threatening their ability to reproduce.

Typical seismic surveys employ hundreds of thousands of signals blasted over a period of several weeks, covering a range of up to 600 miles. The blasts kill adult fish, larvae and eggs within close proximity; significantly damage hearing in some species, making it harder for fish to avoid predators and find prey; reduce catch rates by scaring off fish populations; and can interfere with fishing activities because of the miles-long arrays towed behind survey vessels that can become entangled in crab pots and trawl nets.



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"This is a debate between renewable resources and finite resources."

DAVID HARSILA | PRESIDENT
Alaska Independent Fishermen's Marketing Association

Drilling – even during the exploratory phase – discharges heavy metals and other toxic wastes that contaminate fish habitat, alter the seafloor and severely reduce critical food sources for salmon and other marine life.

Oil and gas extraction in Bristol Bay would release thousands of tons of contaminated drilling muds and cuttings into the ocean, leaving behind high levels of heavy metals such as mercury, cadmium, zinc, chromium and copper. These metals are toxic to sea life.

Studies in the Gulf of Mexico show that drilling discharges cause widespread, long-term harm to bottom-dwelling organisms that provide a key source of food to commercially valuable fish.

Discharges - including drilling muds, cuttings, sand and cement residue, slop oil and gas, and oil-processing wastes - also alter the seafloor and can smother clams, scallops and fish and crab eggs or larvae.

The infrastructure required for oil and gas development would block access to fishing areas, degrade vital fish habitat, disrupt fishing activities and create increased commercial vessel traffic that would make the Bay more susceptible to invasion from non-native species, threatening the survival of now-abundant fish populations.

Non-native, or "alien" species frequently hitch a ride through international waters by attaching themselves to the hulls of commercial maritime vessels and drilling equipment that has been used elsewhere. Offshore oil and gas exploration and drilling would boost international shipping traffic through Bristol Bay and leave it vulnerable to this type of biofouling.

Plans for offshore oil development in Bristol Bay include an extensive infrastructure: up to 200 production wells, up to 50 miles of onshore pipelines, six to eight offshore platforms and up to 20 exploration wells. The construction and maintenance of these operations could harm important habitat for halibut, salmon, crab and herring in the Port Moller area and on the south side of the peninsula near Balboa Bay.



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"We can't be fooled by short-term money and short-term jobs that we'd gain only to ruin the fishery that has been here for thousands of years."

VERNER WILSON
Yupik Eskimo from Dillingham, Alaska

Federal studies anticipate offshore oil and gas production in Bristol Bay would result in at least one major spill of up to 1,000 barrels and several smaller spills.

Bristol Bay fishermen can't afford to have a single oil spill despoil the Bay's waters and rich aquatic life. Yet the chances of pipelines rupturing and hampering clean-up efforts, especially during the stormy winter months, are considerable in light of Bristol Bay's severe weather conditions, and volatile seismic nature of the regions.

Even the hint or perception of polluted fish could hurt fishermen and threaten the closure of now-thriving fisheries. Russian salmon fishermen on Sakhalin Island learned this lesson the hard way, when Japanese fish buyers declined to purchase salmon from waters adjacent to a recently constructed LNG facility.

Even under favorable conditions, the technology simply does not exist to adequately contain or remove oil spilled in the subarctic, where strong currents cause it to quickly spread hundreds, even thousands, of miles and sea ice traps petroleum in inaccessible places.

We have only to look to the legacy of the *Exxon Valdez* oil spill to remember the cost to Americans: \$100 million in clean-up costs, lost jobs, and damage to the region's rich ecosystem. Alaskans continue to feel the consequences: chronic petroleum exposure has harmed salmon populations and other sea life. Researchers estimate it will take up to 30 years for mussel beds to recover.

Salmon embryos are highly sensitive to the tiniest amounts of oil. Oiling the extremely sensitive lagoons on the western Alaska Peninsula, which provide critical habitat for juvenile fish and migratory birds, would result in a major ecological disaster.



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