30 Years after the *Exxon Valdez* Disaster:
The Coast Guard's Environmental Protection Mission

by William H. Thiesen, Historian, Coast Guard Atlantic Area

USCG PHOTO

(left) Oil tanker Exxon Valdez *aground in Prince William Sound, Alaska, in 1989, where she spilled fifteen million gallons of crude oil.*

(below) The 1967 wreck of the Torrey Canyon *off the coast of Cornwall, England.*

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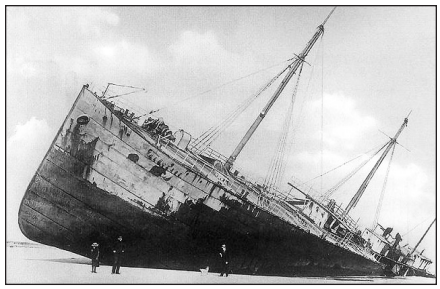
Thirty years ago on Good Friday, 24 March 1989, the 987-foot tanker *Exxon Valdez* steamed into a reef at twelve knots, opening eight of her ten oil storage tanks to the pristine waters of Prince William Sound, Alaska. The resulting spill of 15 million gallons of crude oil would be the largest discharge of oil in US waters until the *Deepwater Horizon* disaster in 2010.

The incident occurred in US navigable waters, and thus the response was overseen by the United States Coast Guard's On-Scene Coordinator. The Coast Guard would soon monitor no fewer than ten federal agencies and organizations involved in the immediate response and cleanup.

Nearly 170 years before the *Exxon Valdez* ran aground, the federal government assigned the US Revenue Cutter Service, predecessor of the modern Coast Guard, stewardship of the nation's marine environment. In 1822, Congress passed legislation tasking the Revenue Cutter Service with protecting federal preserves of live oak in Florida that were set aside for use in building US Navy warships. During the 1800s, the Revenue Cutter Service's protection of living marine resources expanded to more species on shore, in the air, and at sea, including migratory seabirds and countless forms of marine life.

The US Revenue Cutter Service's mission grew even further during the early twentieth century. Throughout the 1800s, coal had been the most regular fuel cargo carried by merchant ships, but this solid fuel did not pollute water like oil does. In 1885, construction of the first purpose-built oil tanker, *Glückauf* (German term meaning "good luck"), marked the beginning of shipping oil and other bulk chemical cargoes. Ironically, in 1893, the *Glückauf* also marked the beginning of US oil spill history when she came ashore at Fire Island, off Long Island, New York.

Throughout the twentieth century, oil and chemical shipping grew in importance and liquid petroleum products became common as both fuel for ships and fuel carried by ships. The Coast Guard's role in oil and chemical spill response officially began in 1924, when Congress passed the first Oil Pollution Act. This legislation included the first federal statutes regulating the discharge of fossil fuels from seagoing vessels. During World War II, the US government paid little attention to oil spills on the high seas, but after the war numerous oil spills occurred as the shipping of oil increased dramatically. One of the first major spills was the 1967 *Torrey Canyon* wreck in European waters, which spurred development of the first National Contingency Plan in the United States.



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(left) The 2,700-ton tanker Glückauf *(meaning "good luck") on the beach at Fire Island, Long Island, in 1893.*

By the 1970s, large tanker oil spills averaged nearly eighty per year worldwide. With these frequent environmental disasters came greater regulation of oil tankers and improved technology for responding to spills. Congress tasked the Coast Guard with monitoring unauthorized substance discharge, enforcing ballast water regulations, and ensuring that commercial vessels met US environmental safety and maintenance standards.

The Federal Water Pollution Control Act of 1972, or the Clean Water Act, established the Coast Guard's National Strike Force (NSF). The NSF began with three strike teams: Atlantic Strike Team, Gulf Strike Team, and Pacific Strike Team. In the 1970s and 1980s, the NSF's oil and chemical spill responsibility expanded under several more environmental protection laws passed by Congress. In spite of increased legislation concerning oil spills, Congress mandated no changes in tanker

construction design. Such was the regulatory environment in which the single-skinned supertanker *Exxon Valdez* was launched from a San Diego shipyard in 1986, the largest vessel built on the West Coast up to that time.

The *Exxon Valdez* oil spill occurred in the confined waters of Prince William Sound, a delicate but healthy marine ecosystem surrounded by pristine wilderness. Within thirty minutes of the grounding, a Coast Guard investigator arrived on-scene and spill contingency plans were put into effect. The Coast Guard's response comprised four cutters, four buoy tenders, nine aircraft, six oil skimmers, and six Air Deployable Anti-Pollution Transfer Systems (ADAPTS). Developed by the Coast Guard in the early 1970s, ADAPTS is still used today. Using a high-volume diesel pump and equipment, it pumps oil or other chemicals from compromised tanks into support vessels or safe storage tanks.

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Exxon Valdez, *aground and spilling oil into Prince William Sound, Alaska. The emergency response, led by the US Coast Guard assisted by numerous federal and local agencies and outside non-governmental organizations, helped mitigate the disaster. Nevertheless, the damage to the environment was catastrophic and had lasting and—in many cases—permanent ramifications ashore and at sea.*

(above) Coast Guard personnel with coastal clean-up crews in Prince William Sound.

(below) Shoreline cleanup operations in Northwest Bay, West Arm, June 1989.

NOAA

At the height of the *Exxon Valdez* response effort, nearly 2,000 men and women participated in the cleanup. A fleet of 450 vessels of all kinds and more than forty aircraft supported the abatement process. With the tiny airfield at Valdez overwhelmed by nearly 1,000 flights per day, the Coast Guard cutter *Rush* (WHEC-723) served as a floating air traffic control center. The response effort also included forty skimmers and 300,000 feet of containment booms. On Tuesday, 4 April, two weeks after the incident, *Exxon Valdez*'s tanks were emptied of oil and the stricken tanker refloated. The next day, she was towed to San Diego and soon thereafter dry-docked. After $30 million in repairs to her hull, she was returned to service as the *Exxon Mediterranean,* working overseas shipping routes for twenty more years, but she never returned to American waters.

Oil spill response and recovery improved greatly after *Exxon Valdez*. The disaster led to the passage of the Oil Pollution Act of 1990 (OPA 90). OPA 90 regulations created the Oil Spill Liability Trust Fund and codified the "polluter pays"

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An April 2010 photograph of the Deepwater Horizon *offshore oil rig after the explosion that set it on fire and caused its record-breaking oil spill in the Gulf of Mexico.*

principle. OPA 90 also required alcohol and drug abuse monitoring of licensed mariners, and established legal penalties and a claims system for oil spill remediation. It also phased in double-hull construction for tankers transiting US waters and increased federal oversight of maritime oil transportation.

Enforcement of OPA 90 and protection of US territorial waters became a vital part of the Coast Guard's mission set, leading to a more robust response capability. For example, the NSF's Atlantic Strike Team had been de-commissioned in 1986, but it was re-commissioned in 1991. That same year, the Coast Guard established the National Strike Force Coordination Center (NSFCC) increasing the NSF's level of responsiveness and support.

After the *Exxon Valdez* disaster, Coast Guard assets and personnel responded to all sorts of oil and hazardous material releases, even some beyond US territorial waters. These events included the sabotaged oil rigs of the 1990 Persian Gulf War and consequent oil spills—one of the largest discharges of oil in history. Other spills included those caused by hurricanes Floyd, Katrina, and Rita; barge and tanker oil spills of the 1990s and early 2000s. Other hazardous duties have included responses to aviation accidents, such as the 1999 Egypt Air and 2000 Alaska Airlines crashes; the 2001 anthrax attacks and 9/11 terrorist attacks; and the 2010 Haiti earthquake. Coast Guard units, including the NSF, also played a leading role in the containment and cleanup of the 2010 *Deepwater Horizon* disaster in the Gulf of Mexico.

No single event has had a more dramatic and lasting impact on the Coast Guard's environmental protection mission than the *Exxon Valdez* oil spill. The consequent regulations regarding the protection of US territorial waters and the marine resources within them have become the Coast Guard's greatest law enforcement mission since fighting the Rum War of Prohibition. Today, as part of its homeland security mission, the service minimizes human and environmental impacts of oil discharges, hazardous material releases, and other natural and manmade disasters.

The United States Coast Guard remains *Semper Paratus*, "always ready," to adapt and expand its environmental protection mission to the ever-changing natural and manmade threats to the nation and its marine environment. ⚓

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Prince William Sound, August 2010. Capt. James Cook entered the sound in 1778 and named it Sandwich Sound, after his patron, the Earl of Sandwich. The editors of Cook's maps changed the name to honor Prince William, who would later become King William IV.