

COASTAL RESOURCES AT RISK



Closed beaches...
polluted waters...
unsafe seafood...
destroyed habitats.

We have all heard about these problems, and we know the cause: today, almost half the U.S. population lives in coastal

areas, and growth there proceeds at about four times the national average. As more and more people move to the coast, they need jobs, homes, and services. Industry and business expands; highways and shopping centers are built. These highly developed urban and suburban communities place tremendous stress on our coasts' essential natural resources.

Courtesy of Center for Marine Conservation

Wetlands — swamps, marshes, bogs and similar areas where water meets the land — improve water

quality, reduce flood and storm damage, provide important fish and wildlife habitat, and offer recreational opportunities. Yet, over the past 200 years, nearly half the original acreage of wetlands in coastal areas has been lost—dredged, filled, or otherwise destroyed—to make way for human activity. In 1989, income from coastal commercial fisheries neared \$2 billion. Nevertheless, important fisheries, such as striped bass, salmon, oysters, and dungeness crab continue to decline. Pollution and habitat degradation threaten not only the health and productivity of coastal environments, but also human health and economic security.

Sources and Impacts of Degradation

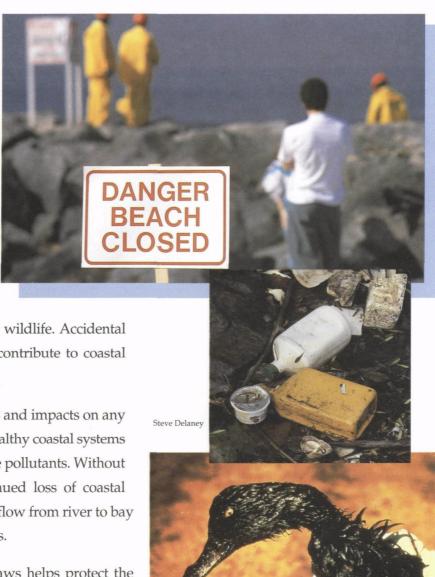
Coastal degradation has diverse sources, many of which are regulated by federal laws. Inadequately treated municipal and industrial wastewater releases bacteria, chemicals, heavy metals, and organic pollutants into our waterways. During heavy rains, combined-sewer overflows send untreated sewage and stormwater directly into coastal waters. These overflows often contain improperly disposed household wastes such as disinfectants, fertilizers, and insecticides,

as well as oil, silt, and debris from roads, parking lots, and construction sites. Air pollution also causes water pollution—prevailing winds and rain carry toxic soot and gases out over the coast where they settle down into the water. Eventually, chemical and biological contaminants can accumulate in the edible tissues of fish and other wildlife to levels considered unsafe for human consumption. Unauthorized modification or elimination of wetlands and other important natural areas can increase sedimentation, pollution, and flooding, as

well as reduce food and habitat available for wildlife. Accidental spills and illegal "midnight dumpers" also contribute to coastal pollution and degradation.

The cumulative effect of numerous pollutants and impacts on any water body can be especially harmful. Even healthy coastal systems have a limited capacity to absorb or neutralize pollutants. Without proper protective measures in place, continued loss of coastal habitats and contamination of waters as they flow from river to bay to ocean eventually degrade entire ecosystems.

Vigorous enforcement of federal and state laws helps protect the nation's coastal environments. Several federal agencies, including the Environmental Protection Agency (EPA), the National Oceanic and Atmospheric Administration (NOAA), the Army Corps of En-



Courtesy of Center for Marine Conservation

gineers (COE), the U.S. Coast Guard (USCG), the Department of the Interior (DOI), and the Department of Justice (Justice) work with state and local authorities to enforce pertinent laws. To be most effective, the agencies strive to eliminate violations within entire watersheds and not simply prosecute individual violators. The cases described in this brochure illustrate the federal government's expanding efforts to promote coordination among responsible agencies and more effective enforcement of the laws that protect our coasts.

FEDERAL LAWS PROTECT COASTAL RESOURCES

Federal and state agencies administer coastal protection programs and act as stewards for coastal resources. Their authority derives in part from several key federal laws.



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The Clean Water Act (CWA) authorizes the government to set limitations on the discharge of pollutants into the nation's waters and to enforce these limitations by seeking penalties, fines, injunctions, and imprisonment against violators.

The Oil Pollution Act of 1990 (OPA) imposes substantial penalties and liability for oil spills. Violators are liable for the costs of cleanup and restoration of natural resources, as well as compensation for injury to real or personal property and for loss of use of natural resources.

The Comprehensive Environmental Response, Compensation, and Liability

Act (CERCLA), also known as the "Superfund Act," authorizes the government to compel potentially responsible parties to clean up or contain hazardous wastes. The Act also allows federal, state, and Indian Tribal governments to recover the costs of investigations, cleanups, and remedial efforts, and to serve as trustees of the nation's natural resources. As trustees, the governments may seek compensation from polluters for injuries to natural resources, and use that compensation to restore the injured resources.

The Resource Conservation and Recovery Act (RCRA) authorizes the government to require permits for hazardous waste management and demand cleanup of contaminated lands and waters. Violators are subject to administrative, civil, or criminal actions.

The Marine Protection, Research, and Sanctuaries Act (MPRSA) regulates the dumping of material into ocean waters and prohibits ocean dumping without a permit. Violators are subject to administrative and criminal penalties. The Act was amended in 1988 to make the ocean dumping of sewage sludge or industrial waste unlawful after December 31, 1991. Under the Act, violators of National Marine Sanctuary Regulations are subject to administrative penalties. The Act also allows the federal government to seek and use compensatory funds for the enhancement and restoration of injured National Marine Sanctuary resources.

The Act to Prevent Pollution from Ships (APPS) regulates the discharge of oil, noxious liquid substances, and garbage generated during the normal operations of vessels, and implements the international treaty on prevention of pollution by ships, known as MARPOL. Among other things, APPS prohibits ships from discharging plastic wastes. Violators are subject to civil or criminal penalties.

The Clean Air Act of 1990 (CAA) regulates emissions from industrial plants including toxic chemicals such as mercury, lead, sulfur dioxide, and nitrous oxides that can settle from the atmosphere into the water. Violators are subject to administrative, civil, or criminal actions.

The Rivers and Harbors Act of 1899, also known as "The Refuse Act," prohibits the discharge of refuse of any kind into navigable waters, their tributaries or upon their banks. Violators are subject to penalties up to \$2500 a day. The Act also provides for imprisonment for up to one year.

AN INTEGRATED APPROACH TO ENFORCEMENT

Federal agencies are now joining forces and targeting whole coastal systems — from rivers to bays to coastlines — for comprehensive enforcement actions.

Federal, state, and local laws provide government agencies with a wide range of tools to protect the nation's coastal resources and, thus, to promote their vitality. Traditionally, each agency has followed its own mandate, and great strides have been made to restrict the discharge of specific wastes and protect particular resources.

Integrated actions by federal, state, and local agencies strengthen law enforcement capabilities, allowing the agencies to build on each other's expertise and authority. Increasingly, the federal agencies are working towards greater cooperation among all concerned parties, including state and local governments and regional, interagency partnerships. Often local residents also help by detecting and reporting violations, monitoring water quality, and bringing enforcement suits.

Other partnership programs also strive to protect ecological, economic, and esthetic values of our coastal areas. These programs enlist public and private organizations to carry out research on, planning for, education about, and implementation of coastal protection. Some examples are: the National Estuary Program, the Nonpoint Source Management Program, the Coastal Zone Management Program, Coastal America, the Chesapeake Bay Program, the Great Lakes Program, and the Gulf of Mexico Program.

The federal agencies are broadening their approach, taking actions to correct the harmful, cumulative effects of multiple pollutant sources within watersheds. As a result, existing pollution problems will be resolved and future problems will be deterred more effectively. Ultimately, the health of vitally important coastal environments will be better protected.



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ENFORCING THE LAWS

PUGET SOUND, WASHINGTON

The Urban Bay Action Program is a hallmark of cooperative efforts to protect the coast. Initiated by the Puget Sound Estuary Program, teams of federal, state, and local agency staff work with citizens and businesses to control sources of contamination to Puget Sound. The teams educate, offer technical assistance, and seek voluntary cleanups. They also use their regulatory authority to carry out field inspections, negotiate site cleanups, and enforce discharge permits. A geographic focus is the key to success.

Recent enforcement actions illustrate federal support of this focus:

- In Elliott Bay, the Justice Department, on behalf of NOAA, filed a civil claim against the City of Seattle and the Municipality of Metropolitan Seattle for natural resource injuries allegedly caused by contaminants in combined-sewer overflow discharges.
- On Harbor Island, in Elliott Bay, several EPA-initiated consent orders required that studies be carried out to determine the best methods to clean up contaminated sediments.
- In Commencement Bay, the U.S. and the State of Washington brought civil actions for cleanup of contaminated sediments, as well as natural resource damage claims against both private and public entities.

SAN FRANCISCO BAY, CALIFORNIA

Wetlands are essential in any estuary for habitat, for flood control and for cleansing waters. The few remaining wetlands in San Francisco Bay are protected by implementation of spill-prevention plans and stringent controls on dredging and filling. In April 1988, a spill of more than 400,000 gallons from a Shell Oil storage tank oiled 150 acres of wetlands and roughly 50 miles of San Francisco Bay shoreline. Hundreds of birds and numerous mammals died. Federal, state, and local agencies worked quickly to develop the case, focusing on violations of Shell's spill-prevention plan. Shell agreed to pay more than \$2 million in civil penalties and \$17.7 million for natural resource damages and state and local government claims.

Protecting the coast was also an issue in a recent ocean dumping enforcement action. Settling an administrative case brought by EPA for violation of the Marine Protection Research and Sanctuaries Act (MPRSA), the Port of Oakland agreed to pay \$150,000 in penalties for dredging and dumping 8,800 cubic yards of sediments into the ocean.

GRAND CALUMET RIVER, INDIANA

In 1990, by targeting several violators in a region and enforcing multiple federal laws, federal agencies broke ground in improving the water quality of the Grand Calumet River, which flows into Lake Michigan. Responding to EPA charges of repeated Clean Water Act violations, the USX Corporation of Gary, Indiana, agreed—in a precedent setting consent decree—to pay \$9.1 million to clean up contaminated sediments and satisfy civil penalties. USX was also required to upgrade its wastewater treatment facilities. Meanwhile, as a result of EPA investigations, Justice filed several civil environmental cases seeking to require location and remediation of water pollution sources, contaminated sediments, and hazardous wastes improperly disposed of in and around the Grand Calumet River.



GULF OF MEXICO

In June 1990, the rapid response of the Coast Guard, EPA, NOAA, the Texas Water Commission, and several private entities averted a potentially catastrophic oil spill. While offloading crude oil to another ship off the Texas coast, an explosion took place on board the tanker MEGA BORG. Within hours, federal and state agents took action to control both the dramatic fire and the resultant spill. The vessel and its remaining cargo were eventually salvaged and towed into port. Under federal law, the vessel owner paid \$3.9 million in cleanup costs. The owner also provided funding for investigations of possible injuries to natural resources.

Over the past decade, EPA, the Justice Department and the Gulf Coast states have successfully taken many actions to ensure that municipalities improve treatment of wastewater, for example:

- In 1989, the City of Houston agreed to spend about \$800 million by 1997 to study and develop systems to eliminate wetweather bypasses and overflows of wastewater. The new systems will greatly reduce pollutants to Galveston Bay.
- In 1991, the City of Houston, in settlement of permit violation charges, agreed to pay a \$50,000 penalty and \$800,000 to study the presence and effects of toxics in the lower Houston Ship Channel and Upper Galveston Bay.

OFFSHORE WATERS

Constant surveillance and enforcement of restrictions on the discharge of garbage from vessels reduces the threat of entanglement, starvation, and suffocation for many marine animals. Federal regulations prohibit the discharge of plastics by vessels in any waters and establish certain distances from shore for the discharge of other types of garbage by vessels.

The Coast Guard, on patrol off the Texas coast, witnessed people on board another vessel dumping plastic into the water. The owner of the vessel was subsequently fined for illegal discharge of plastic.

In another case, the Coast Guard Cutter TAHOMA was on fisheries law enforcement patrol in the North Atlantic. As the Cutter approached a fishing vessel for boarding, the fishermen cut their plastic nets to avoid being caught bringing in an illegal catch. Since the nets were released into the water, the vessel owner was cited and fined.

PENOBSCOT RIVER, MAINE

Combined-sewer overflow (CSO) discharges are a major source of debris, urban pollutants, and biological contaminants in our waterways leading to the coasts. Such discharges occur during heavy rainstorms when municipal wastewater treatment plants are overloaded with both stormwater and sewage, forcing the discharge of untreated wastes and runoff into coastal waters. For many older cities with outdated sewer systems, CSOs are a complex problem with no easy or inexpensive solution. A case involving the city of Bangor, Maine, on the Penobscot River, exemplifies intergovernmental actions to curb pollution from CSOs. In 1991, the Justice Department, on behalf of EPA, and the State of Maine settled a suit against the city for violations of the Clean Water Act. The consent decree requires that Bangor pay a civil penalty, upgrade its wastewater treatment plant, and eliminate untreated wastewater discharges from CSOs. It also requires the city to develop both a long-term plan for CSO compliance with state and federal regulations and an interim plan for CSO management.

ARTHUR KILL, NEW YORK AND NEW JERSEY

In January 1990, a large oil spill in the Arthur Kill spurred an exceptional effort by federal, state, and local agencies to press charges against the responsible party and obtain compensation for damaged resources. A ruptured Exxon Corporation pipeline leaked 567,000 gallons of No. 2 heating oil into the estuary and set back the recovery of habitat and wildlife that has been slowly recuperating from previous environmental degradation. Pleading guilty to federal criminal charges and settling all civil claims, Exxon agreed to pay \$15 million. Much of the money will be used to acquire wetlands, restore natural resources, and reimburse the agencies for spill-related expenses. In addition, to reduce the risk of future spills, several federal agencies (including DOI, EPA, NOAA and USCG), New York, New Jersey, local government, industry groups, and terminal operators are cooperating to inspect and improve facilities and operational procedures.

CHESAPEAKE BAY, MARYLAND AND VIRGINIA

A strong federal-state focus on reducing illegal wastewater discharges is expected to improve water quality in the Chesapeake Bay. A joint effort undertaken in 1990 by EPA and the states of Maryland, Virginia, and Pennsylvania cut in half the number of municipal and industrial wastewater dischargers on EPA's list of Significant Non-Compliers. At the same time, with cooperation from the Department of Defense, 90 percent of those federal facilities that had serious violations as of December 1989 either resolved those violations or established formal compliance schedules.

Federal agencies also have cracked down on environmental crimes in the Bay area. In May 1990, responding to prosecution brought by the Justice Department, on behalf of COE and EPA, the owner of a 3,200-acre private estate on Maryland's Eastern Shore pleaded guilty to illegally filling 86 acres of wetlands on his estate. He was fined \$1 million and ordered to pay \$1 million in restitution, and required to preserve 2,500 acres of his estate. In January 1991, the project manager, who supervised the fill activity, was found guilty of knowingly filling wetlands without a permit, despite repeated warnings that permits are required. He was sentenced to serve six months in jail, 4 months home detention, and an additional year probation.

CITIZENS MAKE A DIFFERENCE

At Home — Many people make a personal commitment to prevent pollution and comply with laws that protect our nation's waters. They conserve water, recycle used motor oil, and properly dispose of hazardous materials, such as pesticides, fertilizers, and cleaning products.

In the Community — Some citizens patrol waterbodies looking for and reporting possible violations. For example, the Puget Soundkeeper, who is trained in sampling and chain-of-evidence procedures, spotted a milky pond originating from an industrial outfall. He called appropriate authorities, and his tip led to an enforcement action. Dumping of highly alkaline cement waste was halted and the responsible party was fined \$150,000.

Citizens also collect water quality data that can help build cases against potential polluters. In Minnesota, for example, information collected by volunteers pointed out the need for further study by the state pollution control agency. The study led to a successful enforcement action and, as a result, phosphorus discharges to the lake were reduced.

Thousands of volunteers participate in beach cleanups every year. They collect and categorize metal, glass, paper, and 23 kinds of plastic debris. They also record information on stranded or entangled wildlife. In part, beach cleanup data led to ratification of the international treaty that prohibits the dumping of plastics at sea.

For more information or to report a possible violation, call your local or state environmental protection, natural resources, or health departments or contact one of the following federal agencies:

U.S. Coast Guard

1849 C St., N.W.

2100 Second St., S.W.

Coastal Enforcement Initiative

Washington, DC 20593-0001

Office of Environmental Affairs

Coastal Enforcement Initiative

Department of the Interior

Washington, DC 20240

Marine and Environmental Protection Division

U.S. Environmental Protection Agency Office of Water Coastal Enforcement Initiative 401 M Street, S.W. Washington, DC 20460

National Oceanic and Atmospheric Administration Damage Assessment and Restoration Program Coastal Enforcement Initiative 6001 Executive Blvd. Room 425 Rockville, MD 20852

Army Corps of Engineers Coastal Enforcement Initiative 20 Massachusetts Ave., N.W. Washington, DC 20314-1000

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