

## THE SANTA MONICA BAY RESTORATION PROJECT

In 1988, the Environmental Protection Agency and the State of California recognized Santa Monica Bay as a natural resource that must be protected and preserved. The Santa Monica Bay Restoration Project (SMBRP) was formed under the National Estuary Program to identify the pollution problems of the Bay, develop solutions and secure funding to put these solutions into action.

The SMBRP brings together a wide range of viewpoints on its *Management Committee*, the Project's decision-making body. Its membership includes representatives from federal, state and local government entities, environmental groups, industry and the general public — more than 50 members in total. The *Technical Advisory Committee* is primarily made up of scientists. Its role is to ensure that the Project's leadership has the scientific and technical information needed to make sound decisions. The *Public Advisory Committee* includes interested members of the public and helps SMBRP educate and involve citizens in solving the Bay's environmental problems.

Together, these three committees form the SMBRP *Management Conference*. Its purpose is to address the questions that so many have asked about Santa Monica Bay:

- Is it safe to swim in Santa Monica Bay?
- Is it safe to eat the fish caught in the waters of Santa Monica Bay?
- Are the fish and wildlife protected?
- What is the future of Santa Monica Bay?

The answers to these questions — and others — will be included in the Project's *Bay Restoration Plan*.

## BAY FISH AND WILDLIFE

Santa Monica Bay is home to many types of wildlife. It also serves as an essential migration stopover for many others.

**LIFE IN THE OPEN OCEAN** The open-ocean (or *pelagic*) community includes all marine life from the sea surface to the ocean floor. Size doesn't matter in this habitat: microscopic plankton, schools of fish and large marine mammals are all found here. Common open-ocean fishes in the Bay include Pacific mackerel, northern anchovy and Pacific bonito. Sea mammals such as gray whales, bottlenose dolphins and California sea lions also frequent the Bay. Local seabirds such as grebes, gulls and the California brown pelican feed in the pelagic realm and rest on land.

**LIFE ON THE OCEAN FLOOR** The bottom-dwelling (or *benthic*) community is made up of hundreds of plant, fish and invertebrate species. There are both rocky and soft bottom areas, each supporting its own type of marine life. California halibut, Dover sole, clams and sea urchins are all benthic residents.

**WETLANDS** Bay wetlands include salt and brackish (slightly salty) marshes, lagoons and mudflats. These areas are an essential habitat for resident and migratory birds, fish and invertebrates. Wetlands host a variety of vegetation, and the mudflats support many species of clams, snails and crabs. In addition, wetlands filter sediments and pollutants from the water, act as barriers against floods, and serve as nurseries for the oceans. The surviving Bay wetlands are *Ballona Wetlands*, *Ballona Lagoon* and *Malibu Lagoon*.

## RECREATION BY THE BAY

Southern California's culture has been linked to its beaches for decades. Names like Zuma, Malibu and Manhattan Beach — not to mention Santa Monica — bring to mind images of sandy beaches and year-round fun in the sun.

About 60 million people flock to Santa Monica Bay shores each year to enjoy a multitude of activities. Board and body surfing, swimming, diving and snorkeling are all popular water sports. On the beaches, people play volleyball and sunbathe, while others ride bikes along the Bay's 21-mile bike path. The International Surf Festival, a fixture since 1962, offers beachgoers the chance to participate in everything from fishing derbies and pier-to-pier swims to sand castle-building contests and outrigger canoe races. In addition to the beaches, the two marinas on the Bay are busy with weekend sailors, chartered harbor cruises, and sportfishing expeditions. Fishermen often catch their evening meals from one of the Bay's six piers.

Rising dramatically behind the northern half of the Bay is the *Santa Monica Mountains National Recreation Area*, a vast wilderness of more than 80,000 acres. It boasts a variety of activities for outdoor enthusiasts, including rock climbing, bird-watching, hiking and horseback riding.

## POLLUTION IN THE BAY

In addition to supporting abundant marine life and providing a recreational wonderland, Santa Monica Bay has been used for other purposes which have led to its current degraded state. Numerous substances enter the waters of Santa Monica Bay. Some are harmless, but many damage the Bay's environment.

**MUNICIPAL AND INDUSTRIAL DISCHARGES** There are six municipal and industrial sources that directly discharge into the Bay. They include two municipal sewage treatment plants and an oil refinery, all of which release treated wastewater into the Bay, and three power generating stations which use seawater to cool condensers. Each of these sources is required to meet state and federal standards for its wastewater.

Historically, the two sewage treatment plants have represented the Bay's greatest pollution problem. Thanks to improved technology and stronger laws, the quality of their wastewaters has improved significantly since the 1970s.

**CONTAMINATED SEDIMENTS** Unfortunately, chemicals discharged before the 1970s, such as DDT and PCBs, continue to make their presence felt in Santa Monica Bay. These chemicals break down slowly in the environment — traces can still be found in ocean sediments and even in the tissue of several types of marine life, most notably the species of fish known as the *white croaker*.

**URBAN RUNOFF** Of all sources of pollution, urban runoff is the most unpredictable. It carries a wide variety of contaminants via our massive storm drain system directly to the Bay without treatment. Entirely separate from the sewer system, storm drains were originally built to divert rainwater from city streets to the ocean. During a major storm, the volume of untreated runoff can increase nearly 1,000 times. Unfortunately, storm drains also collect carelessly discarded substances such as litter, motor oil, animal waste, fertilizer and pesticides. At the beach, this urban runoff often flows across the sand, posing potential risks to beach-goers.

**NON-POINT SOURCES** Other sources of pollution aside from municipal and industrial discharges and storm drains are called non-point sources. These sources introduce contaminants into the Bay in an irregular and far-reaching manner. Non-point sources include air pollution, legal and illegal ocean dumping, operation and maintenance of recreational vessels, natural crude oil seeps, marine debris and materials carried by ocean currents.

## THE BAY RESTORATION PLAN

The Bay Restoration Plan will mark a first: a comprehensive blueprint for restoring and protecting Santa Monica Bay. The goals of the Bay Restoration Plan are:

- To restore past beneficial uses of the Bay and protect future and present uses of the Bay.
- To improve or eliminate discharges into the Bay environment that may adversely affect wetlands, biologically sensitive sites or areas important for water contact sports or sport fishing.
- To improve water quality to a point where it does not threaten indigenous marine life or human health.

To aid in preparing the Plan, the SMBRP has created subcommittees to deal with the critical issues of urban runoff, municipal and industrial wastewater discharges, marine habitat, wetlands restoration and watershed management. They will also help to sort fact from folklore regarding the public health risks of eating Santa Monica Bay seafood and swimming in Santa Monica Bay waters. Already, these subcommittees have developed ideas that the SMBRP is *putting into action*.

The SMBRP has brought together an impressive variety of experts, and their knowledge is being applied to the challenge of how best to restore Santa Monica Bay. Next on the agenda: establishing funding sources to bring the solutions to life.