

THIRTY YEARS AGO, the noted marine scientist Carleton Ray coined the term "Marine Revolution," which describes human dependency on the ocean and implies a major change in the way man regards and exploits the sea. He predicted that the Marine Revolution would take its place beside the Agricultural and Industrial Revolutions in altering basic human behavior on the planet. Over the years this concept has advanced and faded, like an ocean tide, within the collective consciousness.

Today, there is a sense that things are changing and that perhaps this tide is coming in for good. The ocean is on everyone's minds, if not their lips. The coral reefs are dying. The fish are disappearing. The ocean is in trouble. We can't go swimming when it rains. What is this? What do we do?

In Santa Barbara, the "What do we do?" question has become a very loud shriek. Perhaps in Santa Barbara, the seeds of a marine revolution are being sowed. The natives have gotten restless about the state of their ocean, and they are taking matters into their own hands. Their demonstrations, parades and public shouting may have contributed to the recent passage of Measure B, a ballot initiative that passed overwhelmingly in the November election. This measure, which may be the only initiative of its kind in California, increases the city's

hotel bed tax by two percent and earmarks the money raised—an estimated \$2 million a year—for cleaning up local creeks, beaches and the ocean.

Local citizens, and the tourists who come here, know that the ocean is special in these parts-and that there is more to this uniqueness than someone's imagination. This uniqueness has resulted from a combination of situation and geography. Where the California coast runs along a general north-south axis, at Point Conception it cuts sharply to the east for about 50 miles. Paralleling this east-west stretch are four islands— San Miguel, Santa Rosa, Santa Cruz and Anacapa. These islands form the Santa Barbara Channel, and they create a sense of sheltered sea. You do not get this cozy feeling standing on any other California beach where you look out onto a horizon with no limits and no borders. Before oil was discovered in the Santa Barbara Channel, the possibilities in this piece of ocean seemed endless and everyone had a field day.

Fishermen went out for boatloads of swordfish, shark, halibut, sea bass, lobster and abalone. The shrimpers dragged for shrimp, and urchins were developed into a valuable fishery export to Japan. Then, oil was discovered beneath the seafloor and up went the offshore oil platforms. Some Santa Barbara residents complained; others said, "Oh, they look like Christmas trees, they're okay."

With oil development, the cozy sense of enclosure created by the offshore islands became a limited space, and one activity was perceived as damaging to the activity of another. Fishermen argued that the oil company practice of underwater sonic testing scattered their fish, and that their nets were hanging up on abandoned pipelines. They complained about the dumping of drill mud, a toxic sludge used by oil companies to keep pressure on the drill pipe during drilling. This free-for-all came to a screeching halt at noon on January 29, 1969, when beneath Union Oil platform "A" there was an undersea eruption, followed by 5,000 barrels of oil a day emptying through five cracks in the bottom of the Channel. At the end of it all, the ghastly mess had hit the shoreline and the Santa Barbara harbor-and also the consciousness of the world. Seven weeks later, President Nixon stood on Leadbetter Beach, looked out to sea, and said, "The Santa Barbara incident has frankly touched the conscience of the American people."

This "touched conscience" of the American people turned into environmental legislation introduced to U.S. Congress, and what began in Santa Barbara became a worldwide environmen-

> tal movement. In 1972, the Clean damage to Planet Earth.

> As strange as it may seem now, the environmental movement with all its newsworthy Sturm und Drang totally overlooked a silent menace growing underwater, out of

That is, until the winter of 1998, when the beaches began to close. Stuff nobody wants to swim in. Stuff nobody wants to talk about.

In Santa Barbara, the reaction to this menace was as instan-

mental groups like the Environmental Defense Center, Community Environmental Council and Surfrider Foundation got busier. Then Heal the Ocean came along and spread the news that state and county environmental health agencies were doing nothing about the problem, and published a newspaper story quoting officials who said they had no money or intention to do anything about the problem.

There was an immediate demonstration at the county administration building, during which angry people carried signs that said things like, "Ocean or Outhouse?" Dressed as sea animals, children and adults CONTINUED ON PAGE 115

## Santa Barbara's Marine Revolutionaries

Heal the Ocean is a citizens action group, whose focus is solely on bacterial and viral pollution of Santa Barbara's beaches and nearshore ocean waters. Its five-point platform aims at sewage disposal, failing septic systems, harbor dredging, the Tajiguas landfill and urban runoff. The group is one of the few in the nation to conduct regular DNA/virus tests of seawater. www.healtheocean.org

Environmental Defense Center is a consortium of lawyers tackling numerous issues of environmental degradation, including estuary and watershed abuse and seawall and coastal zone construction.

## Community Environmental Council has

been instrumental in the creation of the South Coast Watershed Resource Center, an interactive educational center opening at Arroyo Burro Beach this spring. Its "Creek Watchers" program is continually expanding and may be included in the science curriculum of some middle school classes.

Surfrider Foundaton is an international organization focused on coastal degradation, beach access and other coastal issues. The local chapter has been instrumental in stenciling "no dumping" signs on storm drains throughout the area.

**Urban Creeks Council conducts creek** walks to determine sources of contamination that end up in the sea.

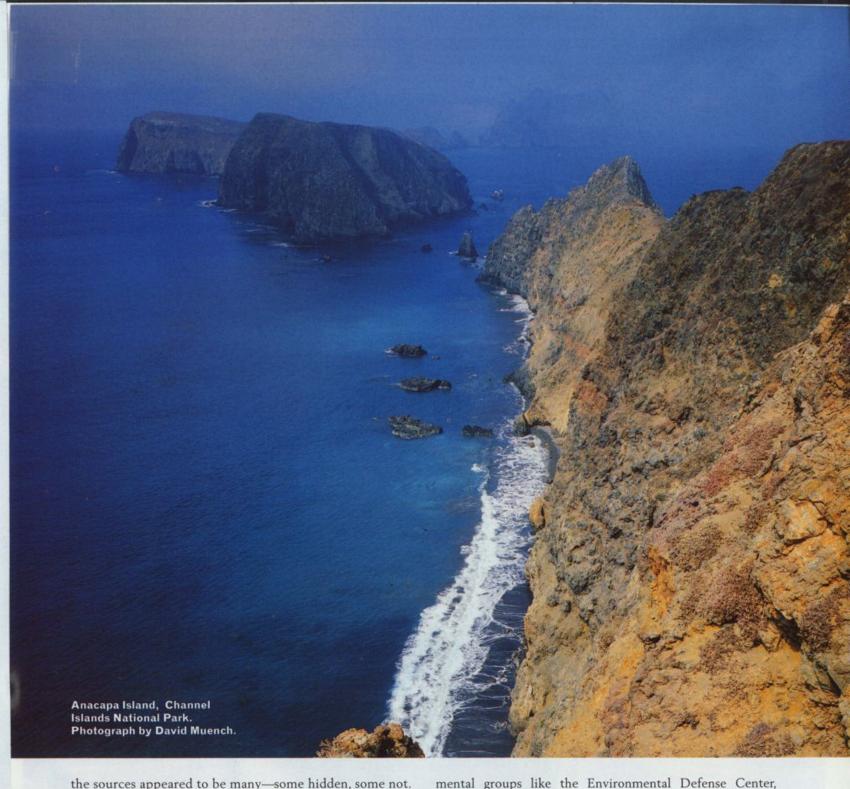
Ocean Futures is a Santa Barbara nonprofit organization dedicated to worldwide public education about ocean conservation. Formed through a merger with the Jean-Michel Cousteau Institute, its latest project is Ambassadors of the Environment, an educational program that targets young people to take on the stewardship of the ocean, www.oceanfutures.org

Water Act became law. Our beautiful ocean, with its spouting whales, leaping dolphins and spreading burnt magenta sunsets, set a serious stage for global awakening to the fact that man was doing irreparable

sight and out of mind.

High bacteria counts. Coliform.

Unlike the 1969 oil spill, where everything happened in an instant, this health disaster arrived invisibly. And it has proven much more insidious. The bacterial broth was causing rashes, infections and illnesses, and



one solution, and that this mess is going to be very expensive

to clean up. Santa Barbara is not unique to this problem. Since 1995, more than half of Southern California's shoreline—from Santa Barbara to San Diego-has been labeled unsafe for swimming after rainstorms because of bacteria carried to the ocean by urban runoff. Bacterial "hits" have been discovered not only near storm drains, but everywhere else, too.

taneous as the reaction to the 1969 oil spill. Local environ-

It didn't take long to realize that there is no one source, no

Heal the Ocean started its own environmental DNA testing and found that there were dangerous viruses in the ocean on days that the county bacterial tests indicated the ocean was fine for swimming.

Catholic, Greek Orthodox, Jewish, Bud-

dhist, Chumash Indian and Krishna

faiths, among others.

Overnight, Santa Barbara became a hotbed of ocean politics. Tired of law-makers blaming the problem on homeless encampments, unruly dogs on the beach and people throwing things into creeks, citizens began taking matters into their own hands. They were fed up with endless power point presentations and proposed studies. "When are you going to do something about this?" they asked.

Bureaucrats continued to drone on about the importance of public education, so the citizens did their own research and identified a number of pollution sources that had nothing to do with homeless encampments or dogs. The short list included 9,000 septic systems throughout the county, many on beaches and next to creeks, leaking sewer lines, the decay of sewer laterals made of a tarpaper-encased cardboard product known as "orangeburg," and the legal dumping of treated sewage from outfall pipes that end in the surf zone. There was the problem of garbage rinsed from the streets into storm drains that empty into the ocean. Illegal creek dumping was also a source.

## OCEAN BLUES

The citizens began hiring university testing labs and talked to homeowners on failing septic systems, to help them get off these systems and onto public sewer.

The Marine Revolution was on.

Sometimes the problems on the list seemed too monumental, and too expensive, to fix. Yet the impatient citizens of Santa Barbara continued to push. "Get moving," they said. "Go ahead, spend some money on this!"

Lo and behold, legislators began reacting. Santa Barbara County created Project Clean Water, which got \$650,000 in the beginning, and focused its efforts on public education, the problems with the homeless and dogs, and testing of creeks. State Assemblywoman Hannah-Beth Jackson, who is ardent and bold on the subject of ocean pollution, put through a bill in Sacramento that this year boosts Project Clean Water's budget to \$2 million per year. Also, Project Clean Water began studies of storm drain devices to catch garbage and other gunk. Project Clean Water also built an information house at Arroyo Burro Beach, where people can go to get information about pollution-at a cost that has mushroomed to \$566,000.

During all this, the City of Santa Barbara was scratching its head as to where it would get the money to handle its own problems of street cleaning and storm drain pollution. It needed money to restore creeks that had been abused for years. County money is not city money, and the city had to get moving.

The answer came with the overwhelming passage of Measure B last November. While environmentalists were happy to see \$2 million dedicated to their ocean and creeks, they still didn't trust the bureaucracy and how it might squander this money on items like public information booths. Prior to the November election, they crowded into city chambers and essentially told City OCEAN BLUES

Council, "We will support Measure B if you let us oversee how you spend this money!" The Council agreed that a Citizens Advisory Committee would be formed, to oversee the expenditure of the \$2 million.

There has been noise already about the City using some of this money to study storm drains—to which citizens have reacted by cleaning storm drains themselves. "These storm drains don't need to be studied," the citizens said. "They need to be cleaned with rake and shove!!"

It is revolutionary that Santa Barbara is one of the few communities in this country that has ever passed a measure to raise money for the battle of ocean and creek pollution. But if the wheels of bureaucracy continue to move like dinosaurs through the La Brea Tarpits, the citizens are prepared to strike-and they will strike again and again until they get what they want-a clean and respected ocean. Measure B may help and it may not; the citizens are not waiting to see. They continue to work on their own, because they believe in the necessity of a Marine Revolution such as Carleton Ray described 30 years agothe necessity of changing the way in which we view, and treat, the ocean.

The revolutionaries believe it can be done in Santa Barbara, because so many people love the ocean here. They believe Santa Barbara can be a model for other communities across the country. Already, the activities of Heal the Ocean have been cited in Congress. At Heal the Ocean's first fundraiser at the Coral Casino in 1998, the acclaimed Jean-Michel Cousteau stated it this way:

"If Santa Barbara can't do it, nobody else is going to do it," he said. "The world is watching Santa Barbara perhaps more closely than you think." •

Hillary Hauser, a longtime ocean adventure/political journalist, is executive director of Heal the Ocean.