CALIFORNIA
Waterfront Age
SPRING 1986 VOL. 2 NO. 2

Santa Cruz Beach Boardwalk

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CALIFORNIA WATERFRONTAGE (ISSN 8756-0852) is published four times a year by the California State Coastal Conservancy in association with the San Francisco Bay Chapter, Oceanic Society and is funded in part by a grant from the U.S. Department of Commerce, Office of Coastal Resource Management. Mechanicals produced by Miller Freeman Inc. Photographic work by Gamma Photo Lab. Printed by Warren's Waller Press Inc. Copyright ©1986 State Coastal Conservancy, all rights reserved. No part of this issue may be reproduced by any mechanical, photographic, or electronic process or otherwise copied for public or private use without written permission of the publisher. All opinions expressed are the responsibility of the authors, and do not necessarily reflect the positions, official or otherwise, of either the State Coastal Conservancy or the San Francisco Bay Chapter, Oceanic Society. To receive the magazine, send name, organization, address, and affiliation to CALIFORNIA WATERFRONTAGE, San Francisco Bay Chapter, Oceanic Society, Fort Mason Center, Building E, San Francisco, CA 94123. Direct all other correspondence, including editorial submissions, to CALIFORNIA WATERFRONTAGE, State Coastal Conservancy, 1330 Broadway, Suite 1100, Oakland, CA 94612. Telephone (415) 464-1015. For information on the programs and projects of the State Coastal Conservancy, contact the Conservancy at the address or telephone number above.

FROM THE EXECUTIVE OFFICE

by Peter Grenell

A FREQUENTLY encountered yet incorrect assumption is that economic development and environmental protection are mutually exclusive. Leaders of many countries seeking to improve their living standards through Western-style development have concluded that their countries "cannot afford" to invest concurrently in both environmental quality and job- and revenue-producing development. Short-range dislocations, however real, tend to outweigh long-range impacts and benefits.

Much of this debate overlooks the complementary nature of environmentally sound development. In an urban waterfront context, for example, amenity does pay, sometimes handsomely. This perceptual gap arises when the scope for resolving land use conflicts is viewed too narrowly. Taking into account all concerned interests in such a dispute and reaching solutions which are economically feasible—both prerequisites to successful resolution—requires one to explore a broad range of alternatives which may involve elements beyond the immediate focus of conflict.

Some examples of the need for such a broader approach are provided by some recent and ongoing coastal land use situations. At Cascade Ranch, adjacent to the popular Año Nuevo elephant seal reserve on the San Mateo County coast, needs for more public recreational facilities conflicted with existing agricultural uses and habitat concerns. Simply providing large amounts of public funds would not solve the problem. New alternatives, involving a restructuring of roles and financial commitments of participating entities and a painstaking identification of different land use options, had to be devised by the State Coastal Conservancy working together with several private nonprofit organizations, state and local government agencies, and the private sector. A mutually acceptable solution then had to be agreed upon through extensive negotiations among the concerned parties. What began as an attempt to preserve open space from development has evolved into a success story in which public use of this scenic coastal area will be assured through a variety of day use and overnight accommodations. Existing agricultural activities will be retained and enhanced through improved water supplies, and compatible visitor-serving development, which will help make the entire project financially feasible, will be encouraged.

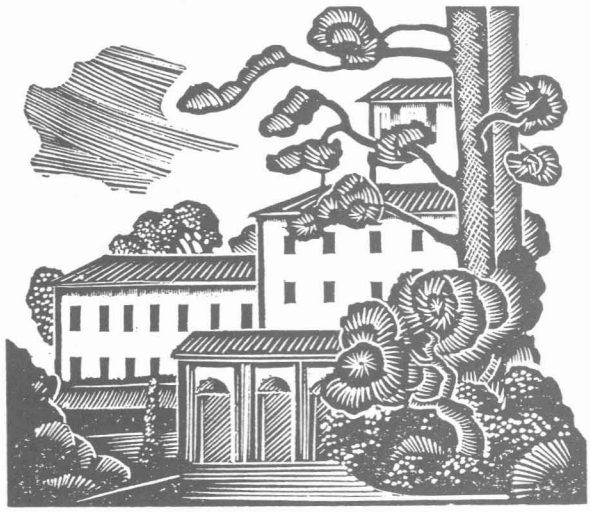
Wetland mitigation programs are another realm where a broader outlook is often required. Off-site mitigation of proposed waterfront development impacts is increasingly being considered as an acceptable approach where regulatory agencies determine on-site mitigation is infeasible. While a controversial subject, off-site mitigation does appear to have some legitimacy—assuming that it can be satisfactorily carried out—in highly developed urban situations with little remaining scope for wetland preservation or restoration.

The Port of Los Angeles proposes to mitigate habitat losses from significant new proposed marine industrial development by restoring one of the last remaining coastal wetlands in San Diego County, Batiquitos Lagoon. Mitigation as close to the source of environmental impacts as possible is preferred. In this case, state and federal wildlife agencies agreed that mitigation at some distance from the project was acceptable, given the lack of available sites close to the proposed development. Because of the environmental significance of the lagoon and the high cost of its restoration, the solution recently worked out in principle by the port, the wildlife agencies, the private project developer, the City of Carlsbad (where Batiquitos is located), local environmental groups, private land

owners, and other state agencies, again with Coastal Conservancy assistance, appears to be resolving an otherwise intractable situation in a way which benefits both a critical coastal resource and provides for development needs.

Yet another difficult coastal land use conflict exists on California's spectacular north coast in Mendocino County. This one concerns the Sinkyone Wilderness, an area which has been extensively logged over many years but which still contains some old-growth redwoods, including the Sally Bell Grove. The dispute pits those concerned with saving scarce jobs and revenues in a rural county against those whose goal is preservation of the old trees and restoration of the wilderness. A solution to this extremely sensitive and complex problem almost certainly must lie in directly considering the long-term countywide economic situation. Confining the scope for resolution to the site itself will not enable generation of alternatives sufficient to resolve all of the specific issues involved. Use of the proposed Rural Renaissance program will be explored along with a variety of broader options. Here again, the Coastal Conservancy has been approached to assist in facilitating a solution.

As the population grows and development pressure mounts on natural areas and resources, we are faced with an increasing need to design and structure our development patterns in a way that eliminates or reduces the need for much costlier remedial measures later on, when it may be too late. In a world of limited resources, it is clearly not economically wise to foul one's own nest; nor is it possible to use up resources and move on—there's nowhere to go. A powerful tool in the search for solutions is the broad-based analysis of alternatives beyond the immediate focus of concern, aimed at widening the scope of negotiation and based on the assumption that development and environmental enhancement can be compatible more often than is generally accepted. □



Recreation Planning for Crissy Field

Windsurfers can be seen at many locations around the state, but perhaps no area has been affected by the increasing popularity of the sport as much as Crissy Field in the Golden Gate National Recreation Area (GGNRA), on San Francisco Bay. This old landing strip in the Presidio was discovered by windsurfers in the early 1980s. Now as many as 400 of them launch from the beach at Crissy Field during the spring and summer season, when thermal winds under the Golden Gate provide excellent conditions for expert windsurfers.

Although they represent a colorful group, windsurfers are only one of a number of people who use Crissy Field, and there is potential for even greater use. Thousands of walkers, joggers, and bicyclists use the shorefront trail between Aquatic Park and Fort Point, coming and going almost continuously. Fishermen join the crowd when the tides are right.

Crissy Field is a small area: only forty-five acres are included within the GGNRA. Most of the use focuses on the shore and the shoreline trail, and much of the site is covered with asphalt and rarely used. However, that asphalt has historically been used for overflow parking for the entire San Francisco bayfront, accommodating at times as many as 2,000 cars. Now the GGNRA is working on a plan to accommodate the increasing number of users and enhance the natural values of the site. This planning effort is being sponsored by the Golden Gate National Park Association, a nonprofit support organization to the GGNRA. Participants in the effort included the People for Peace Foundation and the Crissy Field Collaboration.

The initial plan was prepared by renowned Japanese architect Katsuo Saito in collaboration with John Northmore Roberts, a local landscape architect. The design received positive reviews last fall in the San Francisco papers, and more detailed planning is now underway. The plans involve a blending of natural and manmade elements at the field and so far include ambitious proposals for dune restoration, replanting, a small lagoon, lawn areas, and a seasonal wetland area, as well as continued windsurfing, fishing, and access trails. Visitor amenities such as benches, picnic spots, and restrooms are also planned. The amount and location of parking remains one of the largest issues, along with the proposals that the army has for their adjacent holdings within the Presidio.

The army's plans for land adjacent to Crissy has brought considerable public attention to the area and demonstrated how strongly the public cares about the field. The army's proposals to redevelop and modernize their commissary and barracks will open up ten acres of land now covered by buildings for GGNRA use but also involve substantial construction immediately adjacent to the GGNRA boundary. The army has begun work on a new post office, the first phase of the overall development. Much of the proposed development is within areas designated as "open space" in San Francisco's adopted plan and is subject to federal requirements that development be compatible with the GGNRA. An initial proposal to locate a Burger King on the Presidio/Crissy Field border may well serve as a symbol to galvanize citizen opposition and will likely result in the army modifying its plans. The heightened concern for this well-used and well-loved shoreline resulted in the Sierra Club Legal Defense Fund's securing a federal court injunction to stop construction of the post office facility.

Crissy Field.

The final outcome of both the military and National Park Service plans for Crissy Field is still uncertain. But one thing is clear: waterfront space in San Francisco is clearly a precious commodity that local residents want to maintain. Through the efforts of the Golden Gate National Park Association, an improvement plan for Crissy should be completed this spring and available for public review. For information about eventual public hearings on this plan by the park's Citizen Advisory Committee, contact the GGNRA headquarters in Building 201 at Fort Mason.

—Jim McGrath

Coastal Conservancy's Recent Waterfront Projects

DeMartin House hostel

Visitors to the North Coast will have a new choice of overnight accommodations as a result of the Conservancy's December 1985 approval of a grant of up to $118,737 to the Golden Gate Council of the American Youth Hostels for renovation of the DeMartin House in Redwood National Park. The DeMartin House, located directly across from False Klamath Cove on the Del Norte coast, is the second new hostel funded by the Conservancy's Hostel Program, established to aid in the creation of a string of hostels along the entire California coast. Individuals both elderly and young, families, school groups, and a wide variety of organizations are among the people who enjoy these low-cost accommodations. The DeMartin House hostel, located adjacent to a north-south coastal bicycle route and a forty-mile coastal hiking trail, is supported by the community as a healthy addition to the local tourist industry.

Avalon access

Also in December, the Conservancy authorized a grant of up to $80,000 to the City of Avalon on Catalina Island for access improvements to the city pier as part of an overall pier restoration project. The improvements encompass the expansion of an existing restroom facility to provide full access for the handicapped, complete renovation of the restroom structure, and the addition of solar heated showers for beach and harbor users. The project is complementary to a larger pier restoration effort which involves replacing and repairing the pilings and replacing the decking. The City of Avalon is contemplating a comprehensive renovation program for the city's waterfront with potential Conservancy participation, of which this project would form a major part.

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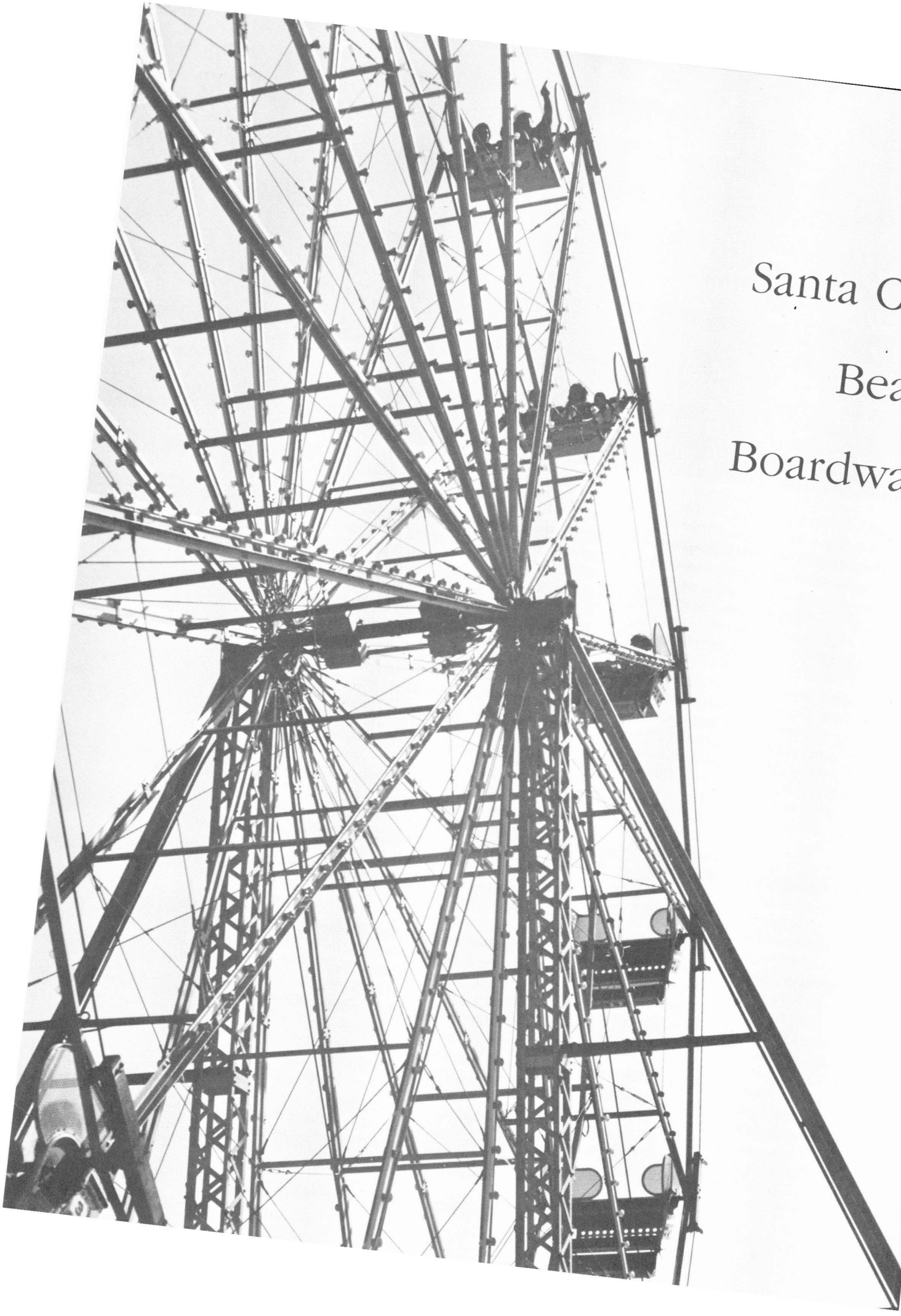


Santa Cruz Beach Boardwalk

Survival of the Funnest

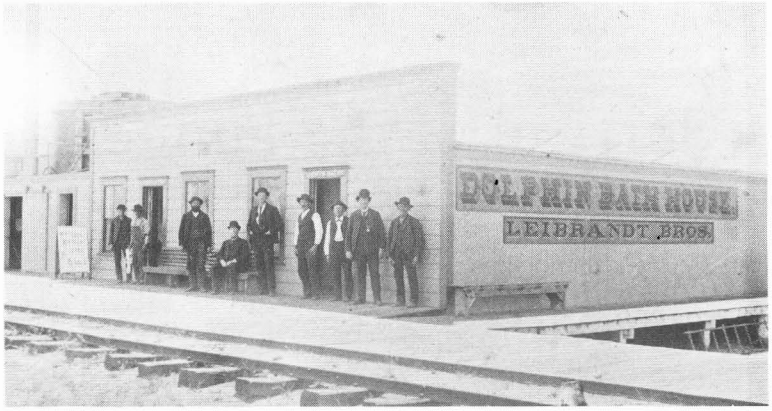
By Andrew Schiffrin

PACIFIC OCEAN PARK in Santa Monica, Nu-Pike in Long Beach, Playland in San Francisco, Belmont Park in San Diego—the list of large beachfront amusement parks on the California coast that are now gone is a long one. One might have been forgiven for assuming that they would eventually be joined by the Santa Cruz Beach Boardwalk. For years, the boardwalk (owned by the Santa Cruz Seaside Company) seemed a quaint anachronism; and some local officials predicted a slow deterioration, followed finally by closure and increased pressures for conversion to other uses.

It appears, however, that the Santa Cruz Beach Boardwalk is not only healthy but vigorously so. The number of visitors—judging by the pressure on parking areas nearby—looks to be increasing every year, and the Seaside Company is buying up major properties in the adjacent area for long-term investments. In 1981 the company undertook a $10 million renovation of the Cocoanut Grove ballroom and converted it into a small-scale, high-quality convention and banquet facility. Gary Kyriazi, in *The Great American Amusement Parks* (Citadel Press, 1976), calls the boardwalk "without doubt . . . the best and most beautiful seaside amusement park in the nation." How has the Santa Cruz amusement park, which is not even located in a large city, continued to prosper while other coastal parks have gone under?

Although many factors contribute to its success, the Santa Cruz Beach Boardwalk is both a social phenomenon and an economic reality. The nature of the park's market and the value of its land are two important reasons for the park's success. Its ability to continue to draw customers and its inability to convert to a "higher and better" land use maintain its vitality.

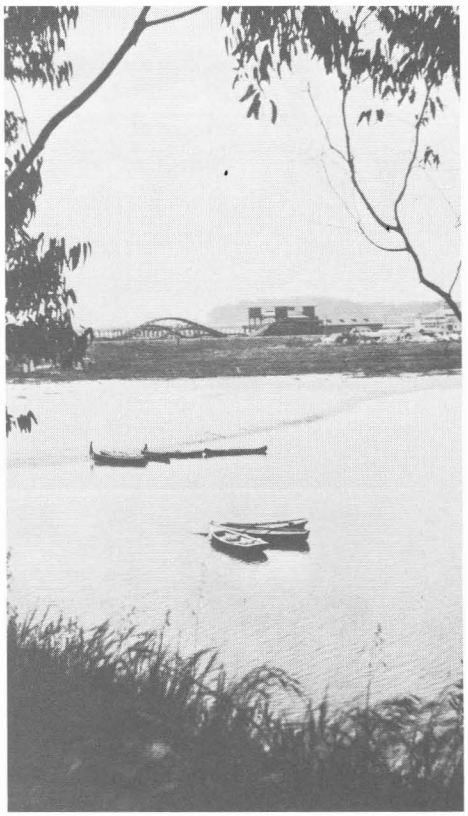
This page, top: The Leibrandt brothers pose in front of their bathhouse in 1888. The construction of John Leibrandt's bathhouse is credited with drawing tourists to Santa Cruz for the first time. Bottom: Entertainment on the boardwalk began with Fred Swanton's Neptune Casino in 1904. Opposite, bottom: The Neptune Casino burned down in 1906 and was succeeded by the Cocoanut Grove ballroom, which stands to this day. Top: The Scenic Railroad roller coaster, seen here across the San Lorenzo River, was the boardwalk's first ride.



TOURISTS FIRST started coming to Santa Cruz in 1865, when John Leibrandt built a public bathhouse near the mouth of the San Lorenzo River. Other bathhouses soon followed, catering to those seeking the "natural medicine" of a dip in salt water and needing a place to change. (Women in those days swam covered ankles to neck in wool suits that weighed twenty pounds when wet.) By the end of the nineteenth century, plans were being laid for a casino and boardwalk based on the Coney Island and Atlantic City models.

Fred Swanton's Neptune Casino opened in 1904. Twenty-two months later, on June 22, 1906, it was destroyed by fire; but by October of the same year Swanton was laying the foundation for another. The new Cocoanut Grove ballroom, along with an indoor swimming pool, a pleasure pier, and a boardwalk, opened in June of 1907. The boardwalk's centerpiece attraction, the Giant Dipper roller coaster, opened in 1924 and continues to thrill riders today.

During the 1930s, tourists from the San Francisco Bay Area, ninety miles north of Santa Cruz, could take the Southern Pacific Railroad's "Suntan Special" right to the front gate of the boardwalk. They came to hear the greatest names of the Big Band era play at the Cocoanut Grove—Artie Shaw, Benny Goodman, and the Dorsey brothers. Across the country, meanwhile, most other amusement parks were falling on hard times. As income shrank during the Depression, and as the automobile opened up new recreational possibilities, traditional parks lost some of their appeal. By 1936, the 1,500 parks that had existed in 1919 had dwindled to about five hundred.



The boardwalk weathered the challenge from television to remain a popular destination in the 1950s.

The end of World War II gave a boost to those which remained, but the renaissance was short-lived. To some extent it seems easy to explain the demise of amusement parks in terms of changing cultural values or, more precisely, the growing sophistication of the middle class: as people had more money to spend after World War II, they determined to spend it on what they considered higher quality entertainments. By this time, though, many of the older parks had a seedy, run-down appearance and unsavory reputation—not entirely undeserved. The new amusement parks needed a strong theme, expensive advertising, and a cover price to keep out the riffraff.

At just about the same time, a new competitor arrived on the scene to undermine attendance. "New amusement parks were being planned again in the late 1940s, but the television craze of the early 1950s put people back into their homes, and the amusement industry, right along with the motion picture industry, suddenly looked bleak again. [Kyriazi]" Television offered a cheap alternative and led people to expect more glitz and flash from their amusements—"show biz" quality.

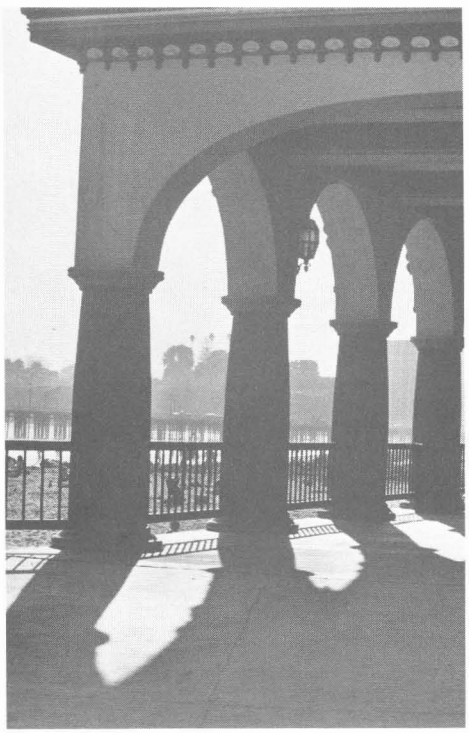
Disneyland, which burst on the scene in the mid 1950s, and the array of theme parks which followed not only had these qualities but also offered cleanliness, safety, and lavishly landscaped outdoor environments. Many traditional amusement parks, faced with a carny image, old and deteriorating facilities, and problems with rowdy teenagers, were unable to compete and started a downward slide.

A 1977 ARTICLE in *Theatre Arts* by cultural historian Brooks McNamara explained the closing of the Palisades Amusement Park across the Hudson River from New York City: "The combination of escalating land values near the city and the increasingly bad press accorded traditional amusement parks have made Palisades worth less as an operating business than the land on which it stood—the story repeated all over America from World War II onward."

Certainly, skyrocketing land values over the last twenty years along the coast in California's metropolitan areas have played a major role in the loss of the other coastal amusement parks. The market demand to convert these relatively large parcels of land to other uses offering a significantly higher return can easily be seen as overwhelming the cash flow potential from a difficult- and expensive-to-run amusement park.

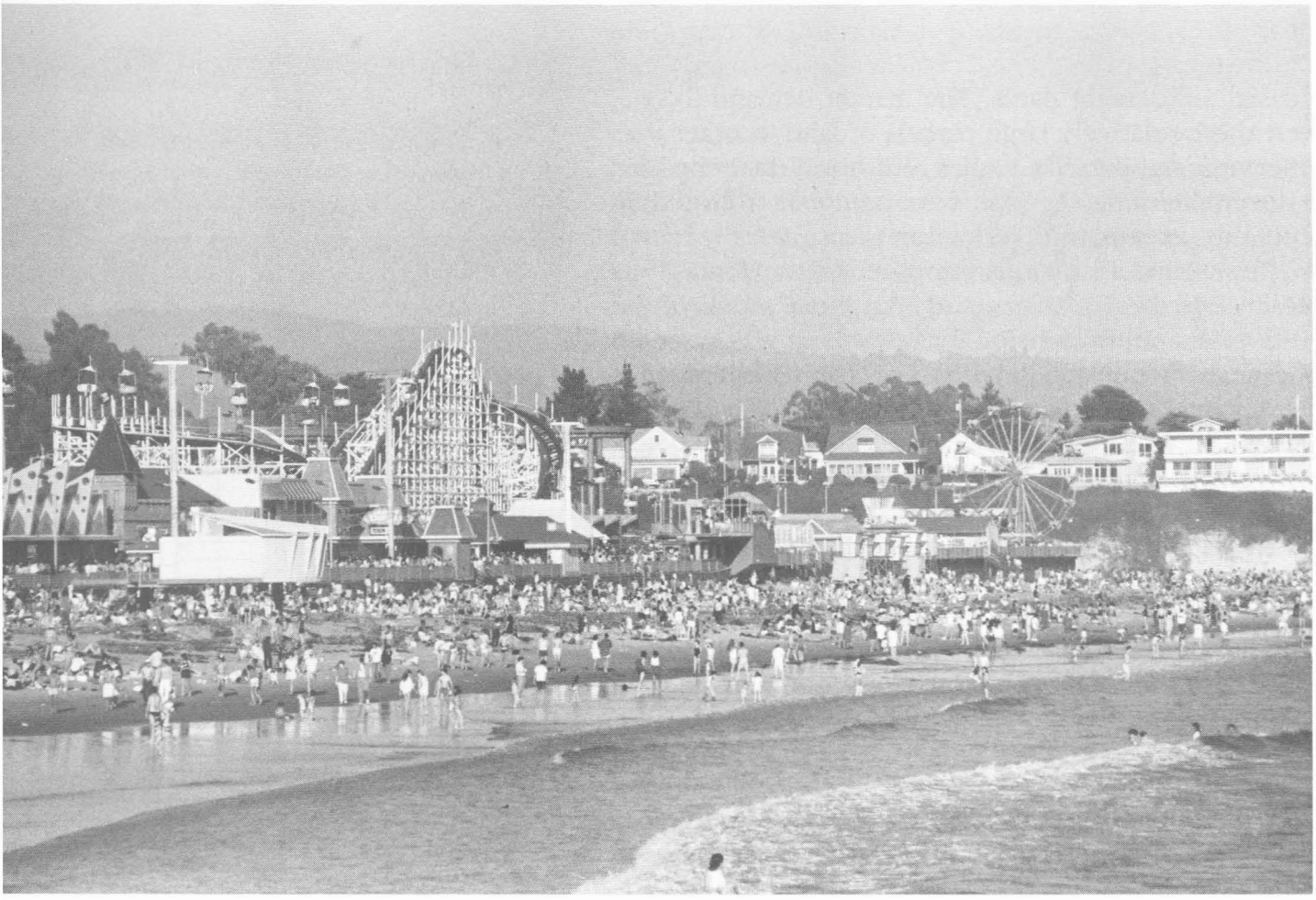
These same factors also applied to the Santa Cruz Beach Boardwalk, however. Throughout much of the 1960s, the political vision for Santa Cruz was based on the desire for major growth. The 1964 General Plan anticipated major freeways running through the city and connecting to the beachfront areas, a major new University of California campus, a population of 100,000 by 1985 (it is now about 44,000), and major hotel development along the ocean front from the Municipal Wharf very near the amusement park to Lighthouse Field about a mile away. A major development for Lighthouse Field (to consist of a seven-story Hilton Hotel, convention center, shopping center, and housing project) was actively pursued into the early 1970s.

The political leadership at that time was closely allied with the business leadership and welcomed not only the independent growth of Santa Cruz but its close integration, through a freeway over the mountains, with the Santa Clara Valley.



There are two aspects of land value that are relevant here—the market demand for the land in an alternate use and the political possibility of converting it to that use. Looking first at the potential of the boardwalk property in residential and/or hotel uses, it seems likely that, given the growth pressures in Santa Cruz, the demand for such uses in that location would be strong, if the land were available. Charles Canfield, the current president of the Seaside Company, cites the shape and size of the boardwalk's land—a narrow strip between the railroad and the sea, in places only seventy feet wide—as a factor in reducing the demand for the property. Other observers, however, dismiss the importance of the odd shape, agreeing that any bit of coastal real estate has to be considered desirable. Although the level of demand is probably less than it would be in San Francisco and Long Beach, it has still been significant.

Below: The boardwalk today continues to attract up to 2 million visitors a year. Opposite: The Giant Dipper was built in 1924 and remains the park's premier attraction.



Canfield gives much of the credit for the boardwalk's survival to his father, Laurence, who became president of the company in 1952. According to Charles, his father had grown up in Santa Cruz and liked the challenge of keeping the park alive. Many other parks had been family owned, he explained, but as they were passed from one generation to the next, interest in the operations was spread out, and infighting among the family members resulted. Finally, with no one left with the will to maintain the parks in the face of adversity, the families sold out.

The boardwalk's Ferris wheel looms over beachgoers.

Under Laurence's stewardship, the 1950s and 1960s were a time of reinvestment and expansion rather than consolidation and loss cutting. Management took some chances, but they were taken on the basis of careful long-range projections and studies. The rebuilding effort was aimed at increasing security, keeping the facilities clean, and catering to families. The park is actively patrolled by a low-key but effective security force, and aside from a few hassles from bikers in the early 1960s, crowd problems never got out of hand. The boardwalk is perceived as—and is, in fact—a safe and congenial place for the well-behaved family to visit and, maybe even more important economically, for parents to allow their teenagers to visit.

While the company invests in a major new ride every few years, which is the industry standard, they are not extravagant about it. Some amusement parks sought to change with the times and added themes, entertainment, animals, etc. The Seaside Company has not done this to any great extent. They have worked for modest growth by providing a high-quality traditional amusement park rather than by spending a fortune on massive improvements which then require a surge in attendance to pay for them.

Finally, the Santa Cruz Beach Boardwalk has served as an amusement area for Bay Area residents since the turn of the century, and while over the last 30 years the public in general has become less interested in this kind of amusement park, the increased population, particularly in the San Jose area, has provided a rapidly growing base of support. The sound management policies of the Seaside Company have allowed them to continue to attract these potential customers, and the attendance now runs 1.5 to 2 million visitors per year.

While the Seaside Company was managing to stave off economic pressures, another factor in the demand for alternate uses was changing. The pressure to convert land is, to some extent at least, a function of the political process. The high-growth vision of the sixties, if carried out, would have increased tremendously the demand for conversion of the amusement park. While the market for the amusement park itself would have grown, the increased population, better access, and the lack of centrally located coastal locations would have created massive pressures for conversion.

THE VISION of sustained civic growth began to fall apart in the early seventies. First, the Route 17 freeway connection to San Jose was rejected by the County Board of Supervisors. The Lighthouse Point project was voted down at the city polls and, finally, by the Coastal Commission. The beach loop linking Highway 1, Route 17, and the boardwalk, and other major development projects never got off the ground. The advocates for low growth and environmental protection, calling for the preservation of Santa Cruz's small town quality, found support within the traditional community as well as from the students which the founding of the university in 1965 had brought to town.

In 1979, a growth management initiative passed, strictly limiting annual growth within the city and establishing a greenbelt of major parcels on its fringes to be protected from urban development until 1990. Finally in 1981, when a majority was elected to the City Council which supported low growth (it had been a minority since 1973), the transformation in vision was complete.

The current political leadership is committed not only to low growth but also to the preservation of the city's existing neighborhoods and "quality of life." High-rise residential projects and hotels along the beachfront are antithetical to that vision. It is probably clear to all concerned that any proposal to convert the amusement park to such uses would be soundly defeated.

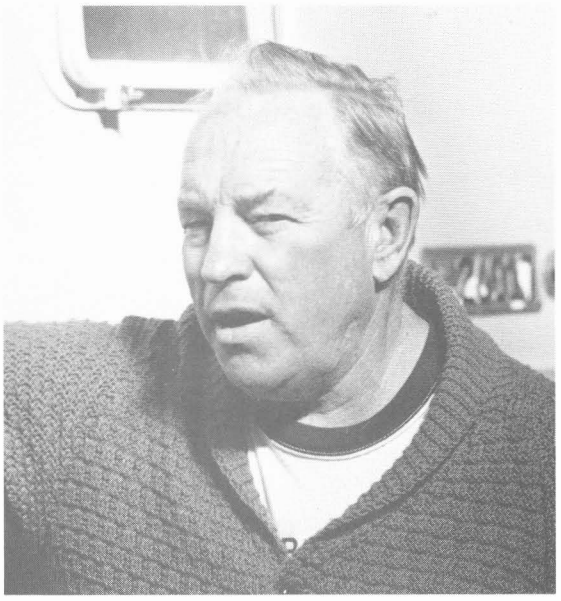
There are, then, two major reasons why the Santa Cruz Beach Boardwalk continues to thrive while the other coastal amusement parks have disappeared. First, it is blessed with competent and dedicated management which operates a park still attractive to large numbers of people. And second, the value of the land must respect the political values in the community. The predominant political values in the Santa Cruz community of low growth and preservation of a small town feeling have prevented the increase in land value which would stimulate conversion. In the other coastal communities it was possible to obtain approval for the conversion of their amusement parks: the proponents could make economic arguments to which the cities responded. In Santa Cruz, however, these arguments would now be rejected.

The Santa Cruz waterfront offers its residents as well as the people of California their only remaining chance to sun themselves on the beach, watch the pelicans glide over the ocean, and scream their hearts out on a roller coaster—all in the same afternoon. □

Andrew Schiffrin is the administrative assistant to a Santa Cruz County supervisor and teaches in the Environmental Studies Department at the University of California at Santa Cruz. Historical research and editorial assistance for this article provided by Jake Widman.

Southern California: Paradise in Peril

An Interview with Dr. Rimmon Fay



Editor's Note: *The length of this interview is matched by the breadth of its subject's experience. Dr. Rimmon Fay grew up on the shore of Santa Monica Bay and has been a diver most of his life. For almost thirty years he has operated Pacific Bio-Marine, which provides marine specimens for scientific research. While operating this business, he obtained a Ph.D. in biochemistry from UCLA, and he also works part-time as a Los Angeles County lifeguard. In addition, he served six years as a regional and state coastal commissioner.*

If Venice were Cannery Row, Rim Fay would be its Doc Ricketts. Tom Mikkelsen and Don Neuwirth conducted the interview.

California WaterfrontAge: *In 1972 you did an assessment of the offshore environment of the Los Angeles metropolitan region for the Southern California Association of Governments. Since that time (coincident with the creation of the Coastal Commission), how has the near-shore environment changed?*

Rimmon Fay: First of all, looking at it from the standpoint of land use management, the problems don't begin in the ocean: the problems begin on the land and are transferred into the ocean—ofttimes not very responsibly. And once the problems are broadcast in the marine environment, they're virtually intractable. Once it's released, there isn't any practical way to go out and reverse the damage, to clean it up.

California, with its 1,100 miles of coastline, has the most difficult problems of all the coastal states because of its large population and the tremendous variety of habitats found along this shoreline. It's a natural treasure just for its diversity, but it's a treasure that's being virtually loved to death. The County of Los Angeles is the largest, most populous county in the state of California, and it is also probably the major industrial county in the state. These factors alone—population and industry—would assure that you would have regulatory problems on your shoreline. Just trying to get the public down there to enjoy that shoreline would be a regulatory problem in itself, but trying to maintain the quality of the environment so that the public resources can be protected assures that there will be tremendous problems.

How would you describe the evolution of the waterfront recreational patterns during the last twenty years in southern California?

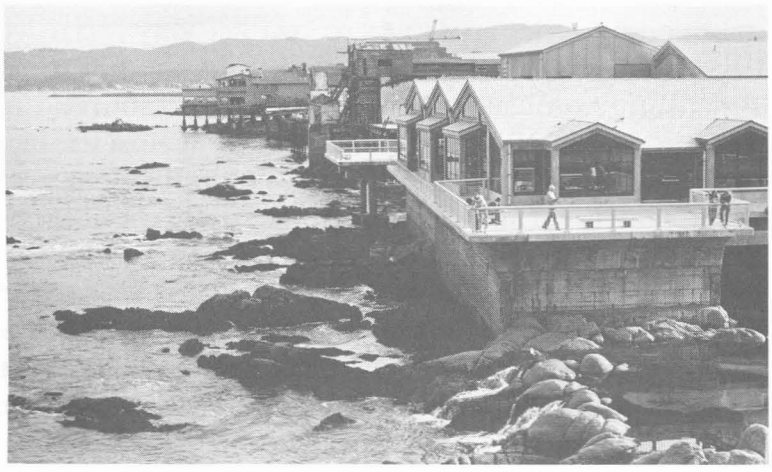
There's been a surprising change in the pattern of recreational activity along the shoreline in the last twenty years. Skindiving is a year-round activity: in fact, the best diving is in the fall and early winter months. Surfing is also a year-round and almost a dawn-to-dusk activity—sometimes before sunup and after sundown. There's been a change in the style of surfboards, from the longer planklike designs down to these shorter ones that allow surfing virtually anyplace there's a wave that'll break. Recreational boating has expanded tremendously with additional marinas and especially

the advent of reliable trailer-borne craft. So you see a great deal of water use by recreational boaters. The development of the coastal bikeways has been probably the greatest single innovation and has brought in thousands of people who otherwise would probably not visit the beach. Before, if they were going to cycle, they'd have gone somewhere else, but the bike paths have opened up a lot of (again, year-round) activity.

So the really important thing here, I think, is to suggest that the pattern of activity at beaches has expanded. There is far more off-season use compared to thirty years ago when beach season began in Easter and ended on Labor Day.

Do you see any trends as to the future; anything that you see that will be a new or a changed kind of recreational use of the coast?

There's no question but what expansion and lengthening of the bike paths will sustain more intensive use of those particular facilities. Restoration of coastal wetlands for educational and natural resource values will increase passive recreational use. There will probably be an expansion of whale watching and a continued interest in the extraordinary nature of marine mammals. Certainly marine mammals themselves have become far more common. There should be expanded opportunities for education in marine sciences, which again would be more of a year-round use. The Los Angeles area could well do with a major public aquarium—something which has been lacking for a long time—and the Monterey Bay Aquarium has shown



Monterey Bay Aquarium.

what good thought and planning can do to make an aquarium a magnet for attracting people into the area. The Monterey Bay Aquarium's annual attendance is as much as the Vancouver, Seattle, and Tacoma Aquariums combined. It's the greatest single successful development on the coast.

What about the Cabrillo Marine Museum?

Sorely underutilized. They put that aquarium in where there's one of the few launch ramps in the Port of Los Angeles, and where there's just a small beach at the end of the Harbor Freeway. It's a beautiful little facility, but it's a beautiful little facility in an area where they can't do what has been done in Monterey Bay. They could never sustain that kind of intensity of use, and it's one of these unfortunate conflicts that you see so often along the shoreline—public interest in a facility satisfied by putting in something small but in an area which is really not suited to very intensive use.

Do you see any internal or inherent conflicts in recreational use from the scientific point of view?

There are isolated instances where the impact of recreational use has been very severe. One example would be in Elkhorn Slough, where there used to be a pretty fair bed of intertidal eel grass, and people would go in there and dig for clams. Well, they'd dig out the clams, and they'd spread the sand on top of the eel grass, and pretty soon they had dug up and buried enough of the eel grass that the eel grass bed died out and there were no more clams.

In certain other areas where you get very intensive harvesting of abalone and clams out of the intertidal zone, the exploitation is more than the resource can tolerate. You have to put that, however, against the fact that the ability of the shoreline here to produce marine life has declined appreciably. At one time, the aboriginal peoples that lived here lived almost exclusively off the productivity of the shoreline. If it was a bad year for fisheries, as the early missionaries noted, it was a bad year for the Indians; they had it pretty tough. But a lot of those Indians lived almost exclusively off of what they got out of the ocean. The production of marine

life has declined, both in diversity and total quantity, by such a margin that aboriginal people couldn't make it today.

As for some of the other uses: surf fishing has a negligible impact. Tide pools—if the people learn that if they want to look under a rock, they should remember to put the rock back where it came from, the impact is not too bad. But they can't do what they did at Duxbury reef, where they decided they were going to eat the foreign clams that bored in the rock and went out with crowbars and hammers. Pretty soon you could see them just carving the top of the reef right on down. That kind of intensive and abusive use can't be tolerated, and it takes a lot of management.

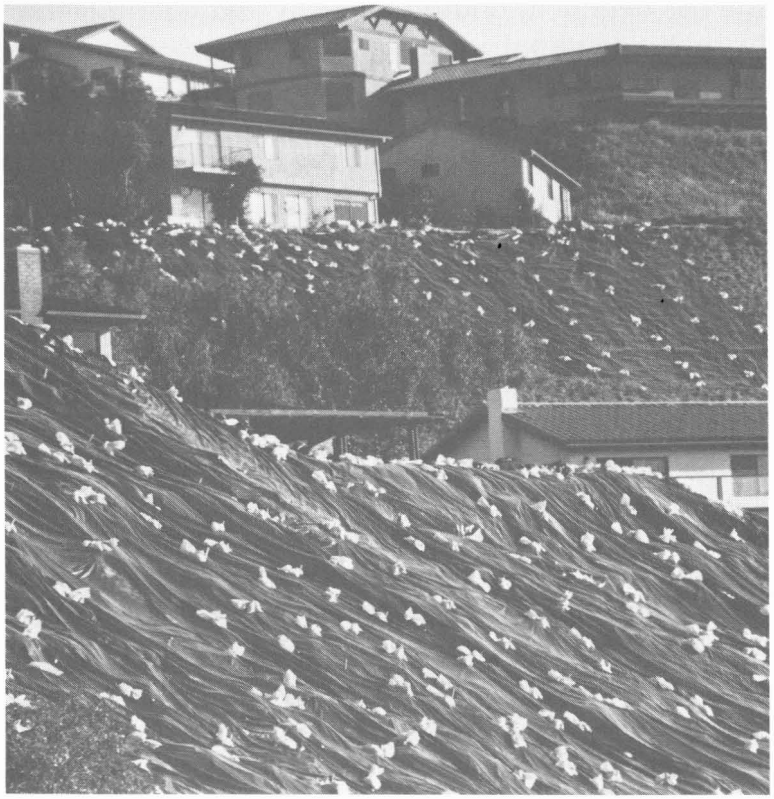
On major sandy beaches, human impact is negligible. On sand dunes, though, you've got another problem. The sand dune vegetation is pretty vulnerable, and it doesn't take a whole lot of people tramping over a sand dune to do a lot of damage.

From your experience as a policy maker with your scientific background, would you say that there is any evidence that the coastal landowners' fears about the environmental effect of the use of the sandy beaches by the public for active sports, picnicking, and such have proved valid? Or has it really been a charade on the part of the people who have the shoreline themselves?

Well, the complaint which came before us most frequently on the Regional Coastal Commission was that somebody who had a view of the ocean was going to lose a portion of that view because someone else was going to put in some sort of a development. I thought about that one time, and I decided that if these people, who are so concerned about losing their view of the ocean, would do something to protect the ocean, we wouldn't need a coastal commission.

What you discover is that there's a tremendous human drive to be able to see the ocean. It's a very commercially acceptable thing for a real estate person to say, "Buy your piece of the shoreline! Have that piece of the shoreline for yourself!" And that coastal experience is a very personal and very private thing with practically everyone I've ever come in contact with. So I can understand that they don't want other people

Antierosion devices cover this San Clemente hillside.



coming along and getting between them and the ocean. I've heard a spectrum of arguments about why people shouldn't have to share their bit of the ocean, all of them specious as far as the legal issue of the right of the public to the shoreline goes, and all of them failing to take into account that if something is done along the shoreline to protect coastal resources or to restore them or whatever, that's a public expenditure from which we all derive some benefit. I never heard anybody who had a section of that shoreline coming in and saying, when their house was eroding away in a heavy sea, "Don't send in the public troops!" We had the National Guard, we had the fire department, we had all kinds of equipment down there to protect those houses when they were washing away in Malibu. The very same people who were saying, "Don't let the people walk along the shoreline in Malibu," wanted us to use public resources to protect their own houses.

So I think there's a huge inconsistency here. On the one hand, I can understand completely people wanting to say, "That's my segment of the shoreline and that's my view of the ocean and I want to have it." On the other hand, that ocean is there for all of us. That's common property, and nobody can own it.

Now that almost five years have passed since you were a coastal commissioner, do you have any reflections on the Coastal Commission?

It's a hard problem. The Coastal Commission was—is—a grand experiment, a continuing experiment, in land use management. And the public has not yet come to grips with the importance of this issue as a national or statewide objective. Land use problems still remain at the local level and are most aggressively pursued by those people who feel they have a financial stake in the outcome. I reflect upon my years with the Coastal Commission as being six years of outstanding exposure to greed, and I look at the problems of trying to manage the shoreline for public objectives as something which was way low in the priority of the agency. The agency was dealing with a clientele which kept dragging it off into considerations of personal greed at the expense of what the agency was created to deal with.

I think that, in all my experience with public agencies, at any level of government, I never ran into a staff which was more involved with its mission and with trying to get on with the job that it was created to attend to. And had it not been for that tremendous dedication on the part of the staff, the commission would probably have foundered completely.

And there's one other thing that the public doesn't realize. The problem of serving on that commission, which during the first four years had the broadest powers of any public agency ever created in the history of California, was that the commissioners themselves were dealing faster—and I think more fairly—with the issues that they had to consider than any other government agency in the history of California. And it still is a terrible burden for the commissioners on the Coastal Commission to deal with the complexity of issues that they have to face in the time available to them, especially with the woefully diminished staff support that's available.

"I reflect upon my years with the Coastal Commission as being six years of outstanding exposure to greed. . . . The agency was dealing with a clientele which kept dragging it off into considerations of personal greed at the expense of what the agency was created to deal with."

There often seems to be a start and stop phenomenon, where government and the people get concerned about these issues, and they pass laws and provide funds, and then they pull back. You get a decreased effort to meet the standards, and the standards are altered. Is this a continuous problem or just a swing of the pendulum?

"The Clean Water Act gave us deadline dates by when secondary waste treatment would be the law and sludge discharges would be removed from the ocean. Those deadlines have passed, and we see no new deadlines."

I guess it's a matter of how fast you think these things should happen. Do you believe that the law's the law, and it should be obeyed, and things should happen by a certain time, or do you believe that in these environmental matters, the law is pretty elastic and that it's only a suggestion? The Clean Water Act gave us deadline dates by which secondary waste treatment would be the law and sludge discharges would be removed from the ocean. Those deadlines have passed, and we see no new deadlines. No one is saying, Okay, we didn't make it by 1983 but we will make it by 1990 or 1995 or something like that. We don't even have anything going at the present time. It's very discouraging because the agencies that have been responsible for preventing the problems in water quality from ever developing are the same agencies who today are not

giving us any way out of the problems that we're in. We'd be far better off, I think, if the agencies responsible here had said that by a certain date certain water quality measures would be implemented and that there would be fines or penalties or something if they're not. There might be some forgiveness in court, but the law would be respected.

The problem that I have is that these are public resources which are being degraded and their values diminished by not having appropriate environmental controls. And every day that they continue to be abused, they are degraded and diminished by that much more. The economic resources of the country are being squandered through mismanagement and the lack of enforcement of appropriate and justifiable regulation. And we can't afford to squander our resources.

Erosion threatens the roadbed at Sunset Cliffs in San Diego.

For four hundred years, this nation was a net exporter of fish and fisheries products. For the past forty years, it's been a net importer of fish and fisheries products. Fisheries were one of the major reasons people were attracted to the North American continent to begin with. For years the Portuguese came over and fished the Georges Bank area and took the fish back. And when the Russians came over. . . . But no longer. The Slavs and the Italians and the Portuguese moved into southern California and fished Monterey and L.A. Harbor and San Diego. There were generations of fishermen that had done that, had come from the old country and had kept up their ways. To a huge extent, the resource was eroded right out from under them by pollution, coastal mismanagement, loss of wetlands, etc. I think that's a severe economic loss to this area.

Specifically in terms of the economics, how has it affected the marine specimen business that you're engaged in?

That's a difficult question to answer. We know that in some areas, we can't collect the specimens because they're debilitated. We know that in some areas where these animals formerly existed, pollution has resulted in a reduction of their numbers. But that's not an absolute thing. If we can't find them in one place because of degradation in habitat quality, we can go and find them in another. It just makes it harder. The pollution problem makes it harder to work; it makes it more uncertain.

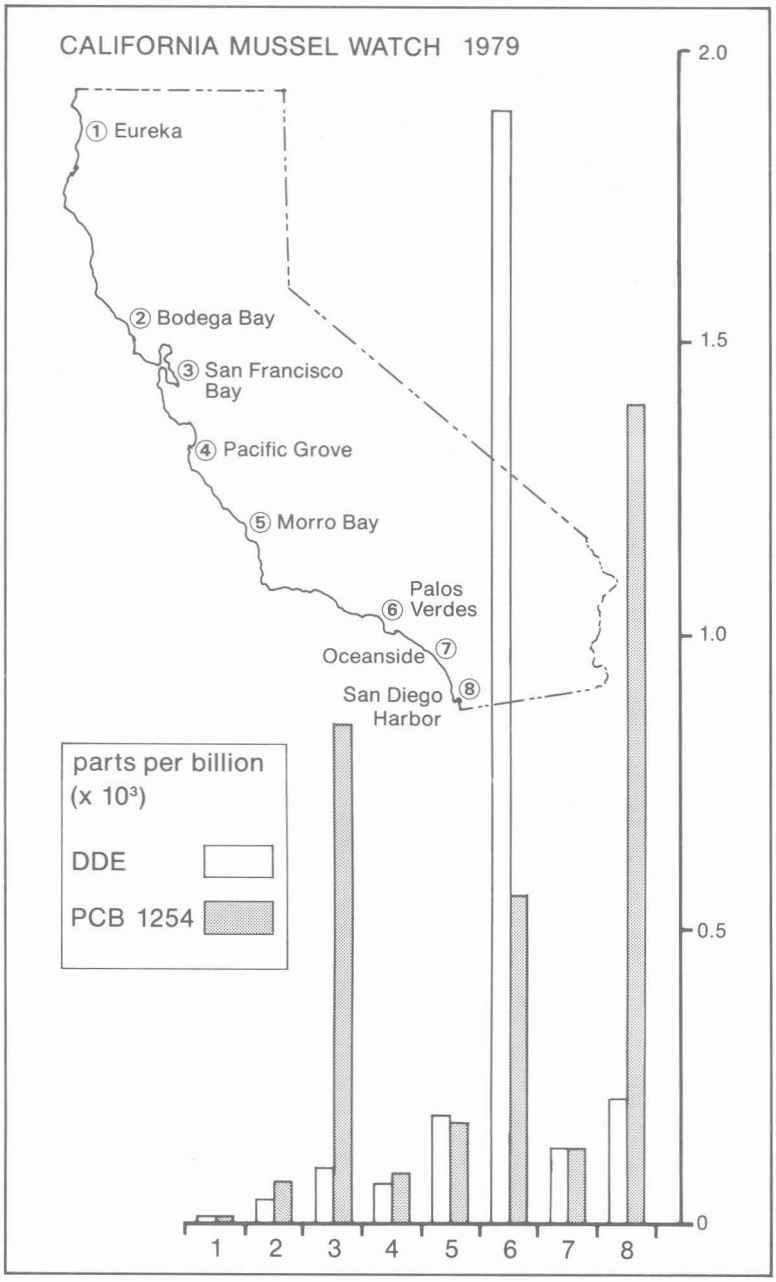
The commercial fishermen are out there to catch large quantities of a given organism, and they don't have to land them live in most cases. But the nature of our service is that we provide live specimens of specific marine organisms; we deal in ones and twos and threes. It's a very different game. I think it demands that we pay a lot more attention to what is happening in that particular environment. The average commercial fisherman doesn't have that intimate contact. He's not getting into the water. He's not really looking at what happening down there. If the fish aren't there, he'll say, well, the currents are going the wrong way, or the tide is the wrong way, or it's the wrong phase of the moon, or something like that. It's a different sensitivity, a different level of sensitivity.

What issues—singular issues—do you think are the most important facing the southern California coast today that people will have to confront in the next two years?

I've always been closest to the problems of water quality, because my training's in bacteriology and chemistry and I assume that I understand, technically, a lot of these problems. I know what these substances are doing to marine life, and I see problems in water quality continuing to be major issues of concern. And I'll say further that they compromise all other uses of the resource. If we cannot protect the health of the public that swims in the ocean or the ability of the organisms to survive there in a healthy and reproductive condition, then their existence is being compromised and their value as a resource is being diminished.

"At other sites, such as Commencement Bay in Washington (which is a Superfund site), the *highest* concentrations of pollutants found in fish and shellfish tissues are lower than the *lowest* concentrations found in fishes off southern California."

Ironically, we're getting a better grasp of the problems with water quality. The Department of Fish and Game's mussel watch program seems to be producing useful information. We know that contamination problems in the waters of southern California are such that it is impossible to collect specimens of fish and shellfish that do not have an unnatural burden of pollutants in their tissues. In other words, there is no control area from which uncontaminated specimens of marine organisms can be collected for purposes of comparison. We know that at other sites, such as Commencement Bay in Washington (which is a Superfund site), the highest concentrations of pollutants found in fish and shellfish tissues are lower than the lowest concentrations found in fishes off southern California.



Opposite: The Marine Mammal Research Group, based in Costa Mesa, performs necropsies on stranded, dead sea lions and dolphins like this one, washed up on Bolsa Chica State Beach in October 1985. They have found record levels of DDT and other pathogens; other researchers have discovered tumors and abcesses. Left: Results of the California Mussel Watch, a program to detect marine contaminants by examining mussel tissues, show high levels of DDE—a degradation product of DDT—and PCBs extending from the Palos Verdes peninsula to San Diego. Below: After the Sorrento Valley pumping station faltered, signs like this appeared along Los Panasquitos Lagoon, north of San Diego.

Doesn't that make kind of a self-evident conclusion, that even though you don't have a control group to compare to, the levels that you're starting with are so high that they should indicate a problem to anybody? But without this scientific baseline, you're not able to assert that there is a problem at all.

Some people, it's true, have been saying that there isn't any real problem out there, and don't worry about it, and sewage is good food for fish, and metals are nontoxic to marine animals, and go ahead and do it. And of course the evidence is that there are severe problems that are extraordinarily difficult to get a handle on because of the scope of the impact.

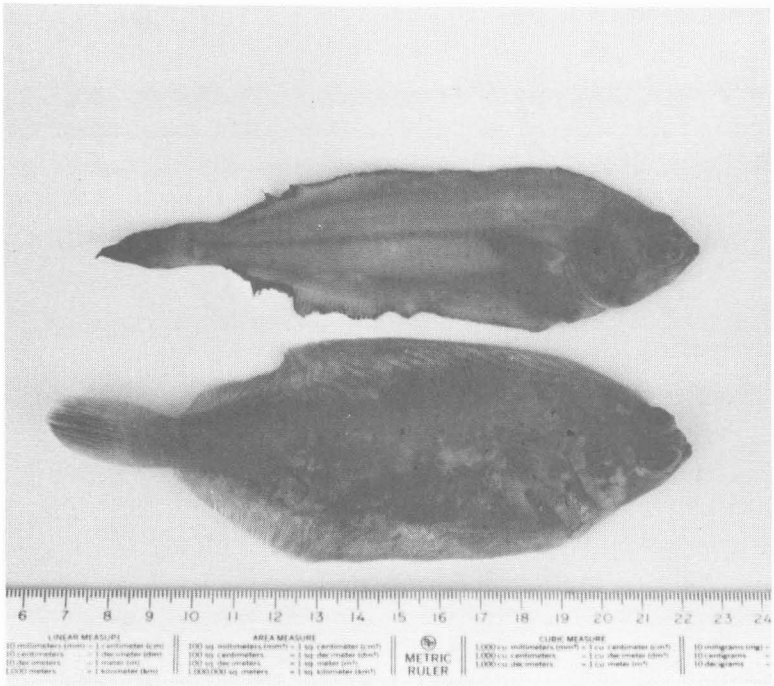
Imperial Beach, San Diego.

Could you give us a thumbnail sketch of the problems you're talking about?

If we consider the area from the border with Mexico north to Point Conception and do a hasty inventory of the problems that exist there, we find they begin with the rapid growth of Tijuana and the fact that the city has not been successful in dealing with its sewage disposal. That remains an issue because of the sewage overflows that come down and contaminate Imperial Beach. There's also a need to protect the Tijuana slough, which now rests largely in the public sector and represents one of the notable achievements of the Coastal Conservancy.

Moving further north, San Diego Bay continues to have problems in water quality, with the main contributor apparently being the United States Navy. Off Point Loma is a sewer outfall from the City of San Diego. It's impossible, with the current extensive rapid growth in that area, to effect adequate wastewater treatment and to protect the marine environment. So there's evidence of increasing abundance of coliform bacteria and declining distribution and abundance of the kelp bed at that site.

The biological condition of Mission Bay continues to deteriorate as there are periodic sewage spills in that body of water. The coastline of northern San Diego County is experiencing severe problems from poorly controlled growth, including increased erosion of the shoreline which is undermining and endangering several coastal structures. There are problems of relaxation of waste controls, a notable case being the Encina Sewage Treatment Plant, where some thirty million dollars of public money was spent to upgrade the treatment plant to secondary treatment level; and then they successfully applied for a waiver to allow them to regress to the primary level of waste treatment.



Dover sole collected near the Palos Verdes and the Hyperion (Santa Monica Bay) sewage outfalls show evidence of fin erosion (top) compared to healthy fish (bottom).

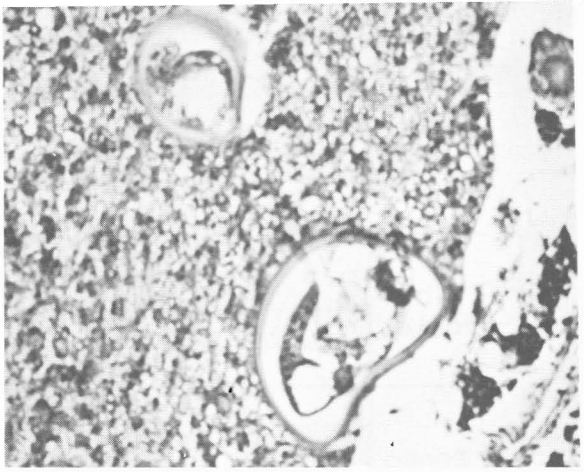
There are a number of wetlands in San Diego County, all of which are vulnerable to poorly planned development of the land in their drainage areas. Increased rates of erosion threaten the integrity of those habitats. Northern San Diego County is also the site of the San Onofre Nuclear Reactor, which has a suite of problems besetting its operation, including anomalies observed with sand crabs on the shoreline and apparent reduction in the San Onofre kelp bed, a critical habitat in southern California.

The San Onofre nuclear power plant.

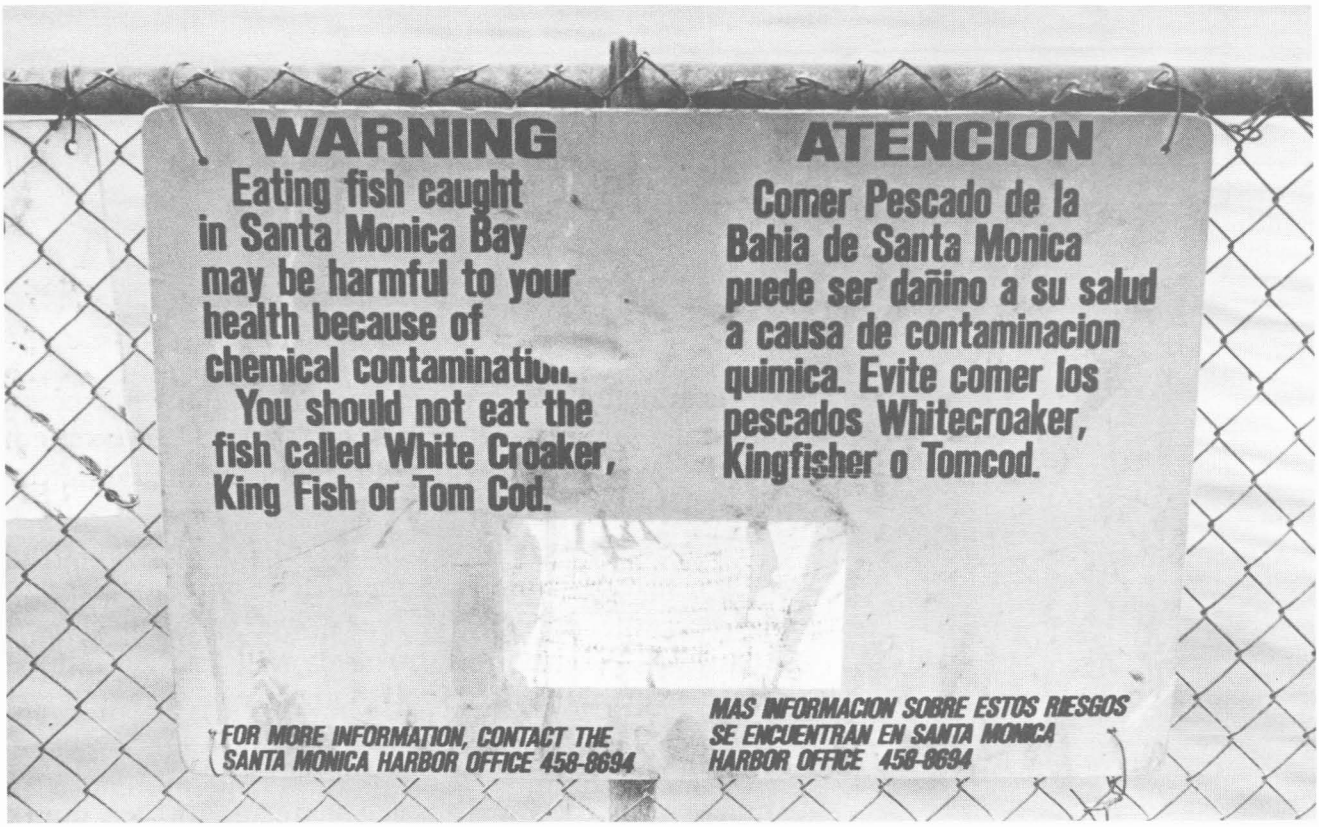
The City of San Clemente has taken a notable step forward in implementing secondary waste treatment, and similar efforts have resulted in secondary waste treatment being adopted in the Dana Point area with the Aliso Water Management Agency and the South Laguna Discharge.

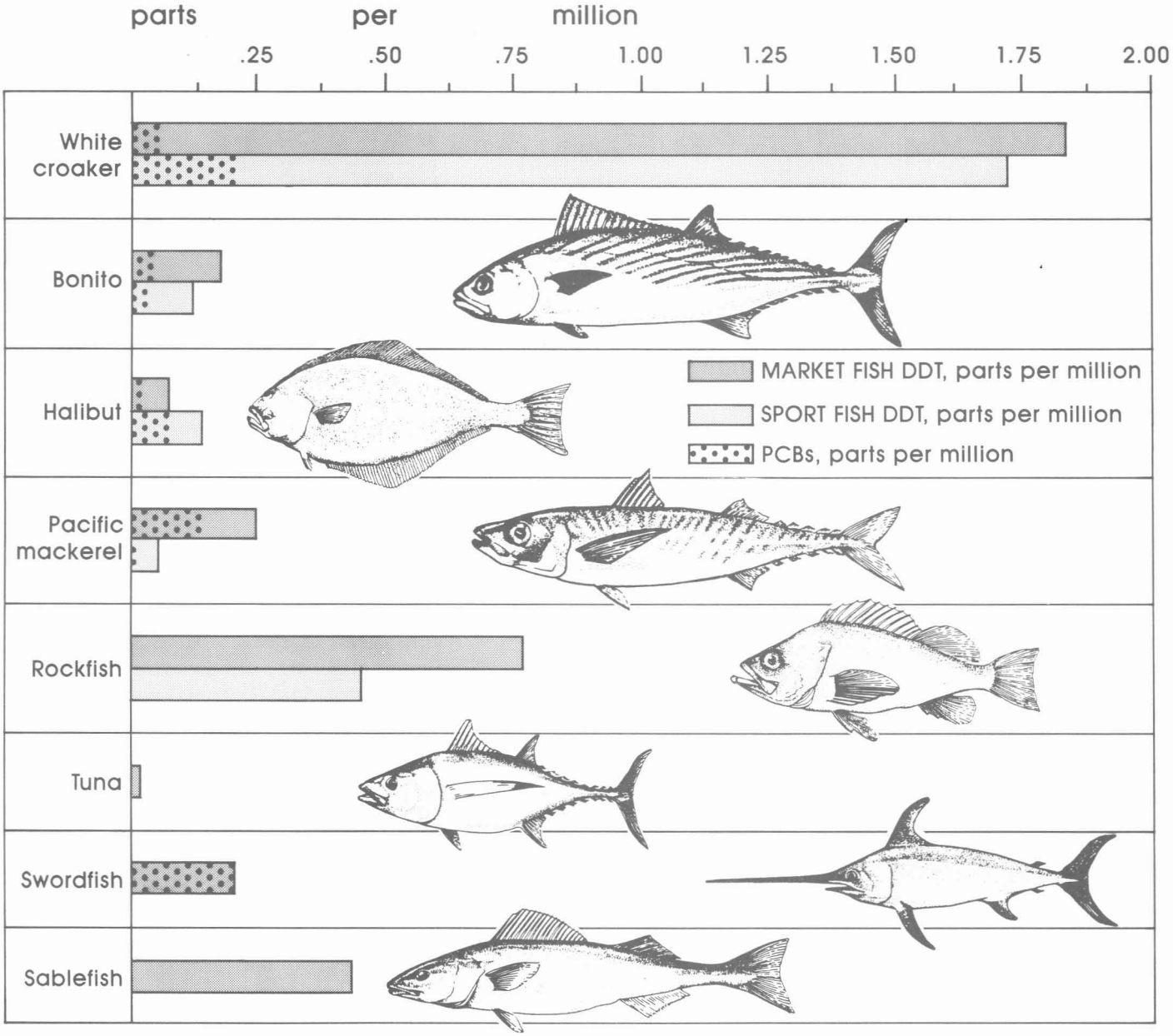
In Newport Bay there remain severe problems with the integrity of the upper Newport Beach wetlands as a result of increased development in the drainage area and sediment accumulating in upper Newport Bay. There's an unresolved problem with the Orange County Sanitation Districts, which continue to entertain the notion of discharging sludge to the ocean, something which is contrary to national law.

There are the unresolved planning problems with the management and future of the Bolsa Chica wetlands, which are vulnerable to planned development in that area, and conflicts over land use with the marina. If an ocean entrance is in fact constructed downstream from the Bolsa Chica sea entrance, it would be expected to cause additional erosion problems downstream and exacerbate the already severe problems in Newport Beach.



Above: In one study, Pacific killifish were exposed to benzo(a)pyrene (BaP), a byproduct of incomplete combusion and petroleum usage, introduced into the marine environment through shipping, oil spillage, and land runoff. While BaP, a known carcinogen in mammals, did not induce tumors in the fish, the livers of exposed specimens showed an increased level of infestation by parasites, as shown here. This finding is considered evidence that the fish's immunological response had been depressed by the BaP. Below: Signs on the Venice Pier warn against eating fish caught in Santa Monica Bay.

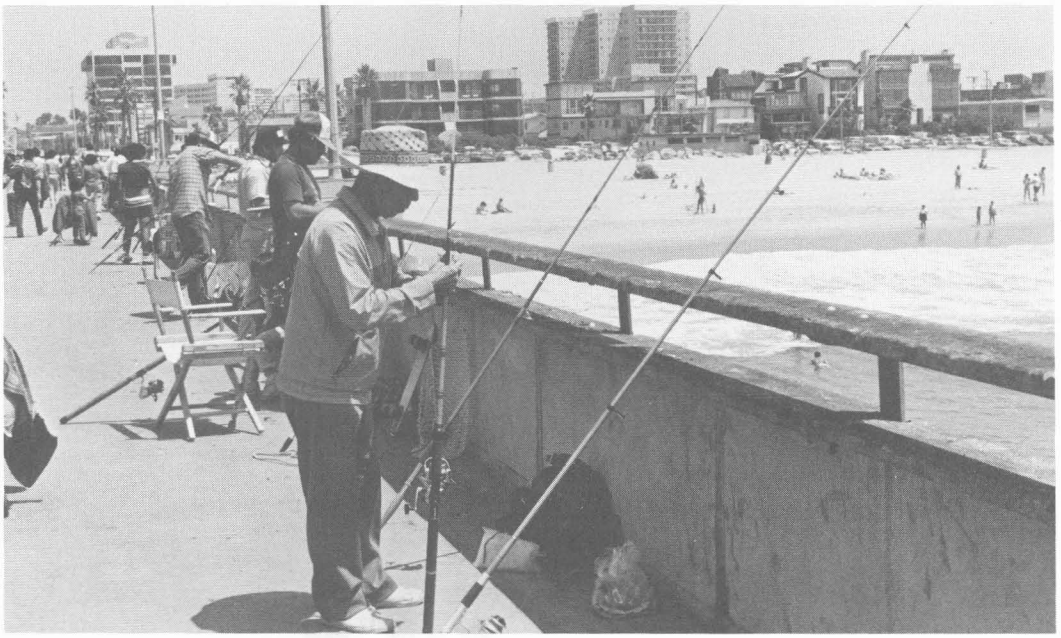


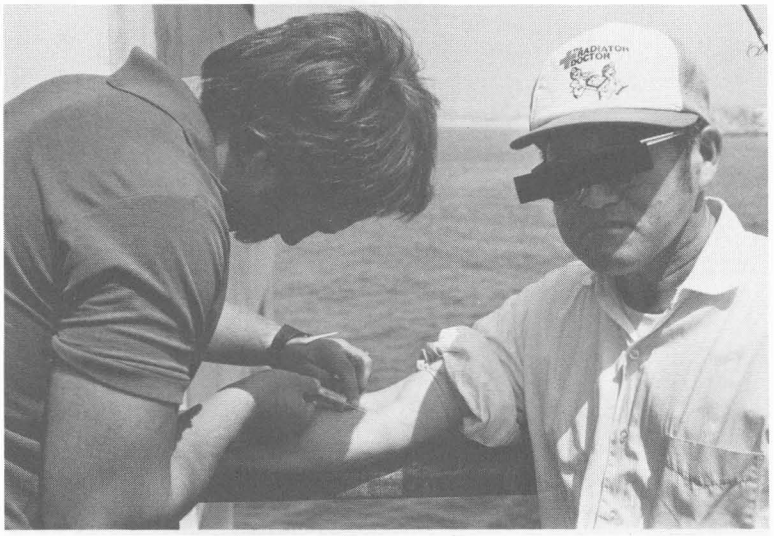


Huntington Harbor was not adequately protected from the input of sediments, and they have a problem with what to do with the sediments to be dredged from the harbor.

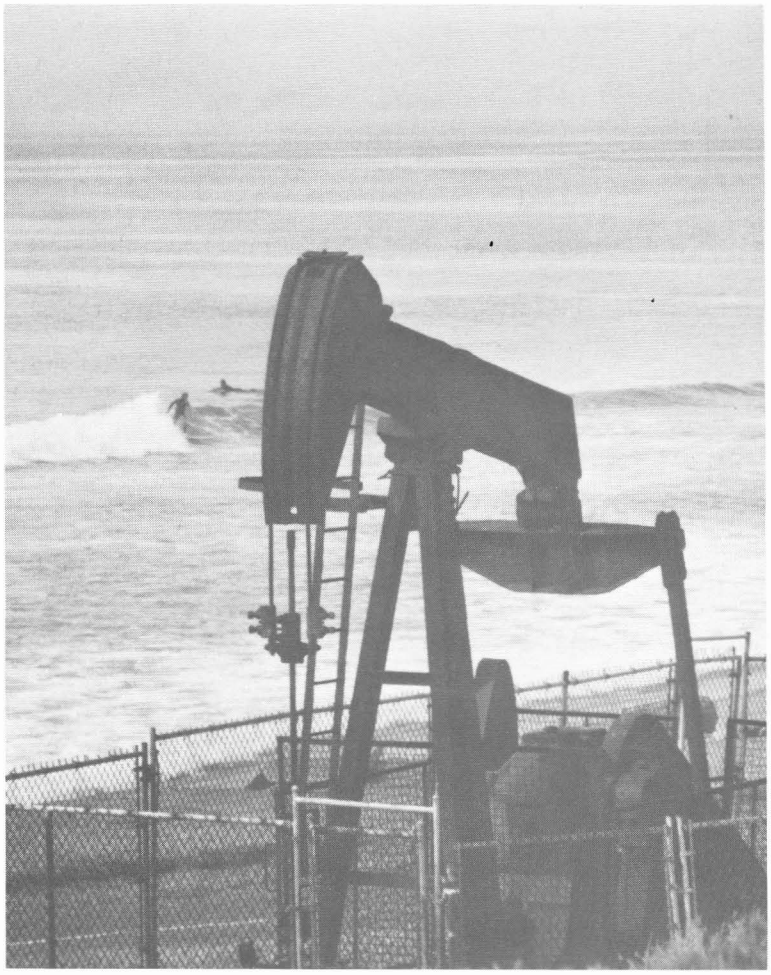
There are several problems facing Los Angeles–Long Beach harbors from additional development planned for that area, especially the massive landfill proposed for the L.A. harbor side, which will further reduce circulation in the harbor and intensify the existing water quality problems.

Partial upgrading of waste treatment and disposal practices off the Palos Verdes peninsula by the County





Opposite: Signs on piers along the Los Angeles county coastline warn sport fishermen against eating fish caught nearby (see page 33), but an analysis of fish sold at markets through the L.A. area showed contamination levels comparable to those found in fish caught off the piers. This page: In a study of the human health consequences of eating contaminated fish, blood samples were taken from sixteen fishermen who ate the fish they caught and five people who did not eat local fish. One subject, a 58-year-old Japanese man (bottom) who has fished Venice Pier (top) three to five times a month for fifteen years, showed a blood level of DDT of 60 parts per billion; those who didn't eat local fish showed 11 ppb.



Oil drilling north of Huntington Beach.

Sanitation Districts of Los Angeles has resulted in a notable restoration of kelp beds at that site. There is empirical evidence that the waste discharges at that location were originally responsible for the loss of the kelp in that area, because only since the waste discharges have been upgraded in quality has the kelp been able to reestablish itself. And along with that reestablishment, many other organisms associated with the kelp bed are now once again found in that area, but in no way in numbers approximating their abundance that existed before the infamous pollution incident at that site.

How long did it take for the reestablishment to occur?

About five years, and it's really ongoing. The kelp coverage is expanding a little bit more every year, but it will be limited definitely by the upper boundary of the

waste field. So until they can improve their wastewater quality there, it's my opinion that the kelp will never resume its former distribution, which once went out to the hundred-foot depth or further.

With the waste discharges in Cannery Row, it took about twenty-five years before people regarded that as a healthy offshore area.

Yes, that area's really robust now.

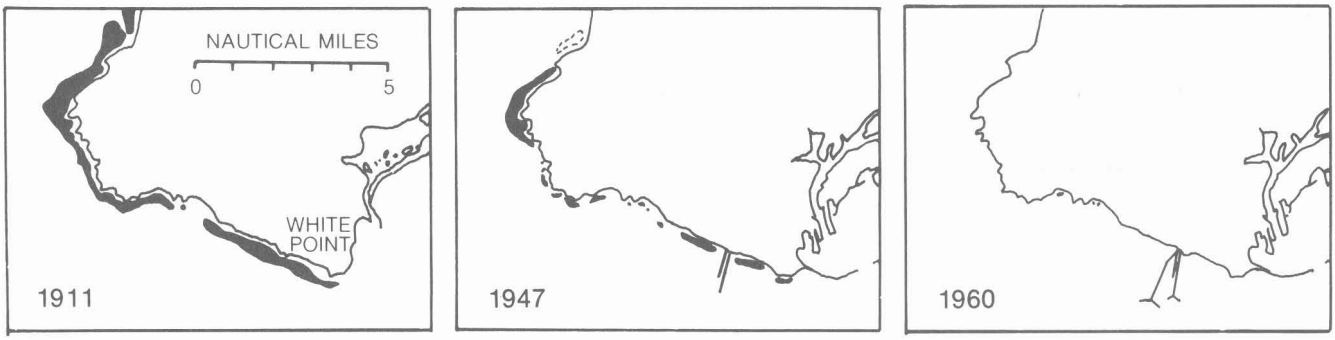
Santa Monica Bay continues to be abused by waste discharges from the City of Los Angeles. There's a serious problem with industrial waste discharges, mainly from the Chevron refinery, and with other discharges

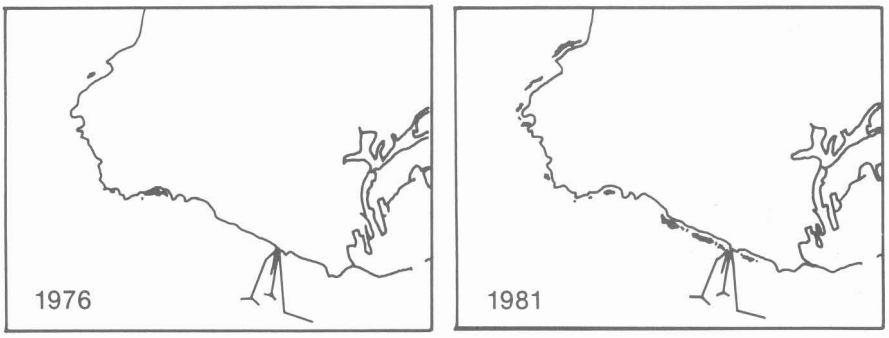
After a recent, relatively small oil spill from a leaking barge, more than 2,300 oil-soaked birds were brought into humane societies and wildlife centers from San Luis Obispo to Marin. Officials estimate that three to ten birds died at sea for every one that reached the shore.

that come down the storm drain channels. Notable in Santa Monica Bay has been at least an initial move to preserve the Del Rey sand dunes—the last area of sand dunes left on the whole of the shoreline of southern California, which from Santa Monica Bay south is known as a "bluff and peninsular coast characterized by sand dunes." It's a critical habitat and well worthy of preservation and enhancement.

Adverse impacts of water quality in Santa Monica Bay manifest themselves through the restricted distribution of kelp, reduction in the abundance of shellfish and fish, diseased fishes, and contamination by chemicals that are regarded as being a threat to the health of human beings.

The issues over the Ballona wetlands remain largely unresolved, although some planning is underway by the Audubon Society. It's not clear precisely what objectives, what criteria, are going to be met, so a great deal of uncertainty remains for the Ballona wetlands area.





Kelp beds (shown in black) off the Palos Verdes peninsula virtually disappeared over the period 1960–1975, coincident with waste discharges at White Point. Only since waste treatment practices there have been upgraded has the kelp been able to reestablish itself.

Moving up the coast, another sewer outfall is projected for the Malibu area. Present planning for that area would increase the population of the Malibu neighborhood nearly threefold and result in severe problems in waste control and treatment because of the geological nature of that segment of the shoreline.

The Santa Barbara basin, taken as a whole, has a number of problems besetting it: coastal erosion in some locations, such as Surfside Village, and accumulation of sand where it is not wanted, in the harbors at Channel Islands Marina and off the Ventura Keys Marina. There are opportunities for wetlands enhancement and restoration in both Ventura and Santa Barbara counties, but there's an enormous conflict in land use and marine use resulting from the placement of oil production facilities in the Santa Barbara channel and the desire of the oil companies to encroach upon the Channel Islands. There remains severe congestion at Port Hueneme, the only shore facility to deal with the oil supply and service vessels there, although a few of those vessels do sail from the Montecito area and a few more from the area of the Elwood Pier; still the majority of the heavy vessel traffic must go through Port Hueneme.

Is that a sort of a thumbnail sketch?

That's an article in itself. Are there other problems besides water quality that you want to mention?

The next most serious problem—from a natural resource standpoint—will probably continue to be the matter of protecting the coastal wetlands, because the patterns of development around these wetlands are going to continue to intensify. There's still, nationwide, a movement of people into the coastal zone. Populations in the coastal zones are continuing to grow at disproportional rates to the other parts of the country, and we're going to see this issue as one of continuing importance, because as development occurs, rates of runoff and erosion accelerate, and wetlands are vulnerable to that.

A related problem will be providing access to the shoreline. As more and more coastal land is developed, there will be problems of the public getting to the shoreline. □

Ebb and Flow

continued from page 5

CUWARFA resolutions

In further action in December, the Conservancy approved an "initial resolution" for the City of Long Beach Tidelands Agency Shoreline Development project, which declares that the projects may qualify for tax-exempt revenue bond financing under the California Urban Waterfront Area Restoration Financing Authority Act and encourages the applicants to submit detailed project plans for Conservancy consideration. Two more initial resolutions were approved in February 1986: one for the City of Redondo Beach's King Harbor project (Los Angeles County) and the other for the King Harbor Limited's Inn at King Harbor project (Los Angeles County).

Oceanside pier

In February 1986, the Conservancy authorized a reimbursable grant of up to $1.6 million to the City of Oceanside for the reconstruction of the storm-damaged Oceanside Municipal Pier. In combination with federal disaster-relief assistance, a $500,000 grant from the State Wildlife Conservation Board, and direct local expenditures, the Conservancy loan will provide the funds needed to complete the $4 million total reconstruction of the pier. A public pier has existed in Oceanside since 1893, and the Municipal Pier attracted over one million visitors annually before it was severely damaged by winter storms in 1978/79 and 1982/83. The new wooden pier will be 1,600 feet long, and will include benches, public restrooms, fishing support facilities, and a small restaurant. The pier reconstruction is based on extensive engineering design work, and the structure will be substantially reinforced to withstand the effects of erosion and wave action.

The pier reconstruction is the final step in the Conservancy's Oceanside Strand Restoration project, a successful ten-year collaboration between the state and the city to revitalize the formerly depressed Oceanside Strand area. The Conservancy had already provided a total of $1.4 million to the city in grants and loans for projects in this area, and the city has attracted substantial new revenue-generating private investment into the area while developing a new beachfront park and other public recreation facilities.

Ocean Boulevard, San Diego—Phase II

Also in February, the Conservancy authorized a grant of up to $120,960 to the City of San Diego for public access improvements as part of the second phase of the Ocean Boulevard Master Plan, affecting a six-block segment of Ocean Boulevard in the Pacific Beach community of the city. In 1984, the city completed the first phase of the improvements, located immediately north of Crystal Pier; phase two is just south of the pier. The Conservancy will fund two project components, a pedestrian-bicycle path and a concrete stairway from the path to the beach below a small bluff. The city will contribute an additional $349,040 to the phase two improvements.

California Urban Waterfront Revenue Bond Program Status Report

Program overview

In the past year, the State Coastal Conservancy has been actively involved in developing and approving urban waterfront projects that could use California Urban Waterfront Area Restoration Financing Authority (CUWARFA) tax-exempt revenue bonds. In establishing CUWARFA, the legislature sought to provide "an economically feasible method of financing urban waterfront restoration." Under the CUWARFA Act, financing is available for both publicly and privately sponsored projects that provide visitor-serving commercial facilities; transient visitor accommodations; waterfront-dependent industries; public utility systems; mass transit and transportation facilities; and public recreation and shoreline access facilities including parks, stairways, piers and wharves, boat berthing facilities, parking facilities, visitor service centers, and interpretive centers.

The implementation of the CUWARFA Act is the joint responsibility of the Financing Authority and the Coastal Conservancy. No project can obtain revenue bond financing from CUWARFA unless it (1) has been first approved by the Coastal Conservancy and (2) is within an area for which an urban waterfront restoration plan has also been approved by the Conservancy. In approving an urban waterfront restoration plan, the Conservancy must find that the plan provides for public access or recreation, promotes environmental enhancement and design excellence, and has the potential for employment development and economic stimulation.

The Financing Authority is responsible for reviewing the financial feasibility and eligibility of urban waterfront projects and for ensuring adequate financial safeguards. No revenues or credit of the State of California are pledged to repayment of the bonds. Bond repayment must come from project revenues.

1985 activities

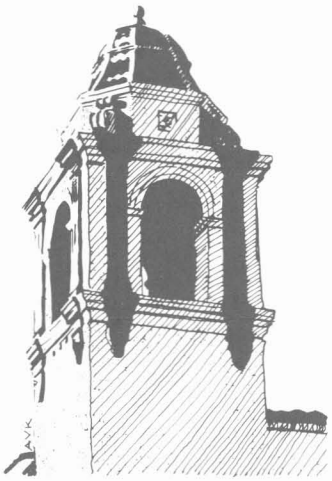
In 1985, the Coastal Conservancy initially approved nearly a dozen projects and/or waterfront restoration plans. The projects approved to date represent a total of nearly $100 million in financing. These approved projects have included both publicly sponsored projects and private development projects open to public use. Projects approved would provide new or expanded visitor-serving facilities as well as public recreation and access improvements, including public parking.

More than four dozen projects were reviewed for potential revenue bond financing in 1985. The Coastal Conservancy staff continues to respond to a large number of project inquiries and project proposals and expects the number of approvals to increase in 1986.

Federal tax law implications

Several complex public projects initiated in 1985 are expected to be approved in the coming year. At the same time, there will likely be fewer private projects. Under current federal tax law, many private projects will be eliminated at the end of 1986. Proposed federal tax law changes contained in the Tax Reform Act of 1985 (HR. 3838, passed in December by the House of Representatives), while allowing continued "small issue industrial development bonds," would restrict and/or eliminate many private revenue bond offerings, creating great uncertainty regarding the "marketability" of many bond projects as tax-exempt issues.

The effective date of HR. 3838 was January 1, 1986. Any bonds issued in the current year will need to comply with the provisions of the 1985 Tax Reform Act as well as with the present law. Under the new bill, tax-exempt financing will not be allowed for several types of projects for which urban waterfront financing has been sought, such as sports facilities (including boat marinas), community convention facilities, parking facilities, and industrial parks. The new allocation system set forth in



HR. 3838 may have an adverse impact on projects which continue to qualify because of an emphasis on housing projects, which are not eligible for CUWARFA financing.

CUWARFA has the authority to issue taxable bonds and is currently exploring the use of this financing.

Approved projects:

The list of projects which gained initial approval in 1985 includes:

- Crescent City Harbor Urban Waterfront Restoration Plan, Crescent City, Del Norte County;
- Pismo Beach Urban Waterfront Restoration Plan, City of Pismo Beach, San Luis Obispo County;
- Avalon Canyon Resort/Recreation Urban Waterfront Restoration Plan, City of Avalon, Los Angeles County;
- Crescent City Pacific Whiting Plant: fish processing plant, Crescent City, Del Norte County (Crescent City Harbor District, applicant);
- Inn at Morro Bay: visitor-serving hotel renovation, City of Morro Bay, San Luis Obispo County (Inn at Morro Bay Associates);
- Monterey Plaza Parking Garage: visitor-serving parking, public access improvement, City of Monterey, Monterey County (Cannery Row Plaza Associates);
- Delta King: historic restoration, entertainment complex, City of Sacramento, Sacramento County (The Riverboat Delta King, Inc.);
- Las Casitas: visitor-serving hotel renovation/expansion, public recreation facility, City of Avalon, Los Angeles County (Las Casitas Catalina Corporation);
- Edgemar/Santa Monica Museum: mixed-use retail commercial facility/museum complex, City of Santa Monica, Los Angeles County (Edgemar Development Partnership);
- Queensway Bay: public parking, public access, and shoreline erosion control, City of Long Beach, Los Angeles County (Wrather Properties Development, Inc.);
- Tidelands Shoreline: public park, access, and parking facilities, City of Long Beach, Los Angeles County (Long Beach Tidelands Agency);
- King Harbor Improvement: public park, access, and harbor improvement facilities, City of Redondo Beach, Los Angeles County (City of Redondo Beach);
- Inn at King Harbor: visitor-serving hotel, access, and recreation facilities, City of Redondo Beach, Los Angeles County (King Harbor, Ltd.).

For further information about the CUWARFA program, interested persons may contact:

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—Marc Beyeler

BOOK REVIEWS

A Look Aloft

The Bridge Builders: Photographs and Documents of the Raising of the San Francisco Bay Bridge 1934-1936. Peter Stackpole. Pomegranate Artbooks, Box 980, Corte Madera, 1984. $15.00 (paper).

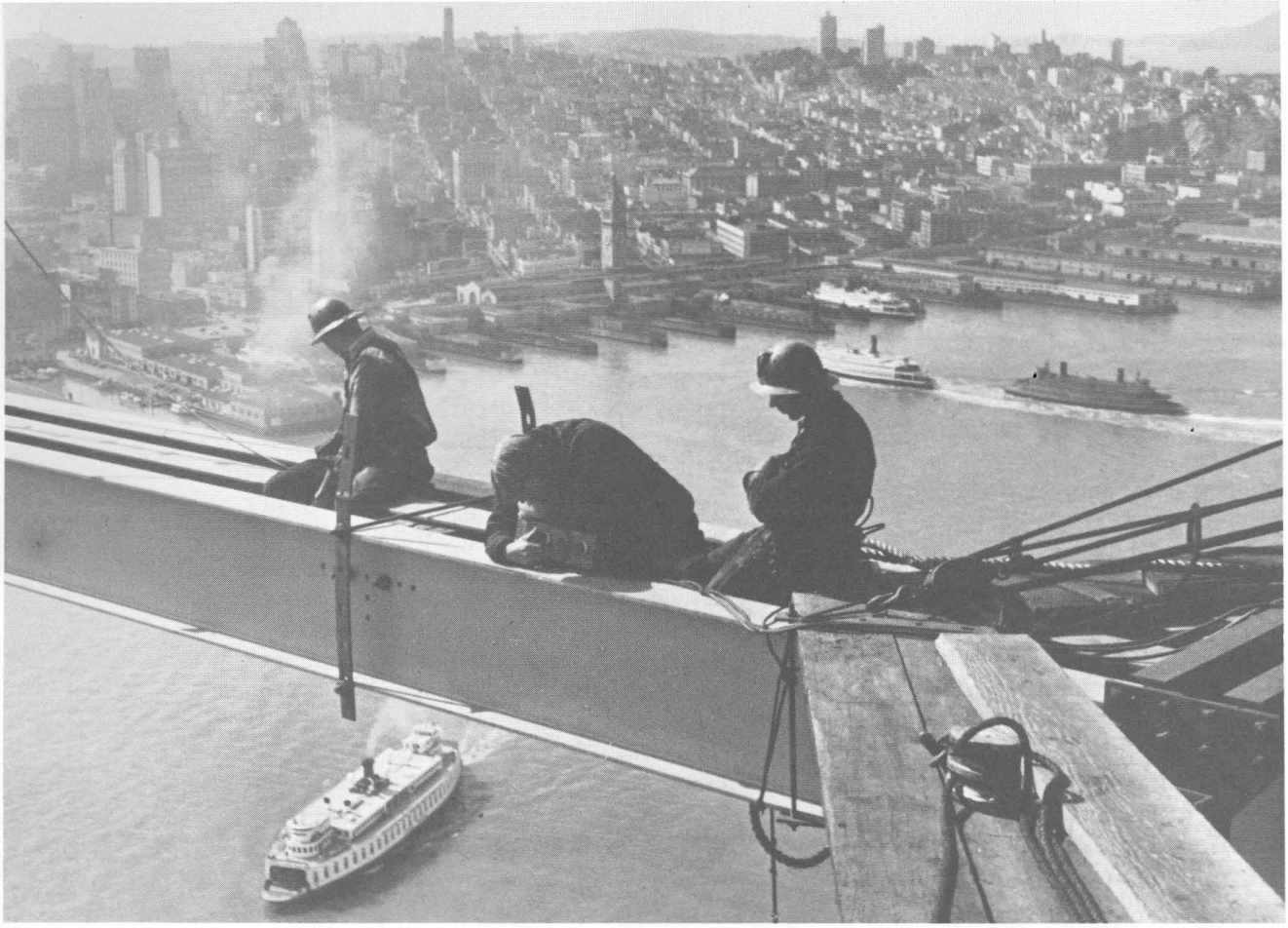
In the fall of 1934, the towers of the San Francisco–Oakland Bay Bridge were just beginning to rise out of the water from their mammoth concrete foundations. Young Peter Stackpole, just two years out of high school, was suddenly inspired as he passed beneath the construction on a ferry. That same afternoon, he was climbing around on the struts and girders with his camera, snapping pictures of the workmen and the huge pieces of steel that dwarfed them. Stackpole spent the next two years with the bridgemen, and the fruits of that moment of inspiration have now found their first full publication. *The Bridge Builders* collects eighty-one images covering the raising of the bridge from the installation of the third section of one of the towers to a view of the open, traffic-laden bridge at night.

Stackpole had picked up the camera in 1929 when he "switched hobbies with a junior high school chum." Shortly thereafter he began his journalistic career working without pay for the *Oakland Post-Enquirer*. From the beginning, he was most interested in "candid" shots and close-ups, so different from the stiff portraits produced by the standard Speed Graphic and Graflex cameras of the time that required tripods and flash powder. Stackpole preferred his 35mm Leica and was determined to prove that he could get results from the smaller format that would equal those from the 8x10 view cameras.

In the case of his bridge photographs, he got results that would have been impossible with a bigger, bulkier camera. Balancing on girders, inching along catwalks, Stackpole provides us with dizzying glimpses of the danger and thrill of working 450 feet above the deep, cold bay. Twenty-three men died during the bridge construction, and the book (dedicated to those who died) treats their deaths as matter-of-factly—but not cavalierly—as the bridgemen were forced to. We are told the story of the men who slid down 500 feet of rope to reach the paymaster's office before everybody else, and we are shown the ropes dangling from the top of the towers; we also see the smiling face of one of these daredevils at the pay window, one who later died when he slid down a rope that was too oily. These men's deaths are accorded the respect they deserve without being sensationalized.

The book is also a primer in construction techniques. A close look at the photographs reveals the tools and debris scattered around the work site. The pictures are arranged in chronological order and preceded by a conversation with bridgeman Joe Walton. Notes on the photographs and a glossary of bridge-building terms follow the plates. The reader comes away with a real appreciation of what the American Society of Civil Engineers named one of the Seven Wonders of Engineering.

Stackpole's story is told in his own introductory reminiscence and in a somewhat worshipful and rambling afterword by Anita Ventura Mozley. In 1935, Stackpole exhibited a selection of his bridge prints at the San Francisco Museum of (Modern) Art, and the July 1935 issue of *Vanity Fair* carried a feature on the project. Subsequent work as a stringer for *Time* led to an invitation to put together some photographic stories



for a new magazine. When *Life* made its debut in 1936, Peter Stackpole was on the masthead as a staff photographer and continued to work there for the next twenty-five years.

The Bridge Builders is handsomely designed by Bonnie Jean Smetts and beautifully printed. The book stands as both the record of a fine photographer's early work and a fascinating and awe-inspiring document of a spectacular achievement.

—*Jake Widman*

Oil On Troubled Waters

Coastal Crude in a Sea of Conflict. Robert E. Kallman and Eugene D. Wheeler. Pathfinder Publishing, 1984. $12.95 (hardcover), $7.95 (paper).

Coastal Crude in a Sea of Conflict purports to be an account of the history of and current controversy over drilling for oil in the Santa Barbara Channel. The authors claim that their goal in writing this book is to shed light on the issues so that the public can have a better understanding of what kind of policy is desirable for the channel and other similar offshore drilling areas. What they fail to admit is that their policy is one of unabashed support for quick, cheap oil development wherever an oil company wants it. Anyone who disagrees in the slightest with this extreme view is characterized as an "environmentalist," a term that is not used with endearment.

If this little book were the work of an oil company, I could accept its biased viewpoint as inevitable in a public relations document. But more objectivity should be demanded from Robert E. Kallman, a Santa Barbara County Supervisor, and Eugene D. Wheeler, a coastal planning consultant. Even so, I suspect that an oil company would demand that the glaring inaccuracies and editorial unevenness be remedied before agreeing to publish this work under a corporate seal.

The book begins with a speculative account of what life in the United States would be like if a war in the Middle East cut off most of our foreign oil supplies.

Beyond using this bit of science fiction to suggest that even a national emergency would not bring environmentalists to their senses, the authors apparently intend this account to convince the reader that the only way to prevent the horrible future they have conjured up is to allow unlimited oil drilling off all U.S. coastlines. The fallacy in this argument is that under even the most expansive projections, future U.S. offshore production won't replace the amount of onshore production that is drying up. Not even the oil industry suggests that the slogan of "energy independence" is remotely possible.

So long as we rely so heavily on petroleum-based energy sources, the United States must contend with the fact that it will become increasingly an oil-importing nation. While there is every reason to keep the amount of oil we have to import to a minimum, the authors do their readers a terrible disservice by implying that we can stop worrying about Middle Eastern terrorists if only we are willing to look at more oil derricks.

While any account of oil drilling in the Santa Barbara Channel would not be complete without a discussion of the massive 1969 oil spill, the authors seem to have included this subject reluctantly. They lead into their short coverage of the spill with the observation that other than this one incident, there haven't been any serious mishaps. Their concluding remark is that the spill was ugly while it lasted, but there was no significant environmental damage and the oil industry learned from its mistake. The authors seem to feel that the citizen protests after the spill caused about as much of a problem as the spill itself, since they give each about equal coverage.

Since the authors dislike environmentalists in general, it comes as no surprise that they particularly hate the California Coastal Commission. This position is not without irony, since both men served on the commission. To advance their views, they use every opportunity they can to criticize the commission. Unfortunately, to support their outrage, they have resorted to misstatements, omissions, and distortions. While this technique is not unusual in demagoguery, in this case it is offensive from a literary perspective: the authors are so sloppy, their many contradictions make their falsifications quite apparent.

In one instance, the Coastal Commission is blamed for delaying Exxon's development of a channel oil field for thirteen years. We are never told that eight of the thirteen years had passed before Exxon applied for a commission permit. Later we do learn that the commission did in fact issue Exxon a permit. But the authors contend that Exxon could not accept the permit because it onerously required the company to transport its oil by pipeline if one were ever built, something Exxon believed would never happen. A passing reference in another chapter makes it quite clear that the pipeline is about to be built. Elsewhere, ARCO is described as having accepted a commission permit condition requiring the company to recover gas from natural cracks in the sea bottom only in order to avoid years of litigation. The company is then given considerable praise for the success of the idea.

Even when the commission and the authors are in agreement, they won't admit it. To deal with the problems and controversy in the Santa Barbara Channel, the authors suggest that a long-term oil production plan should be formulated. Their only reference to their nemesis comes when they note that "an independent commission like the California Coastal Commission should never be considered" as the body to formulate the plan. In fact, the commission also recommended the development of such a plan and even shared the authors' view that the Coastal Commission should not be the primary draftsman of the plan. Unfortunately, the idea was rejected both by former California Environmental Affairs Secretary Gordon Duffy, who wrote the foreword for this book, and by the U.S. Interior Department, where Mr. Kallman now works on offshore oil issues.

This book is not all bad. There is an

interesting discussion of the history of channel oil development and some helpful graphics. Unfortunately, these few bright spots are overshadowed by the book's haphazard organization, flawed writing, inaccurate information, and notable absence of objectivity.

With the increasing effort to open the whole of the California coastline to oil exploration and development, the public would benefit from a thorough and objective analysis of the Santa Barbara Channel experience. What is needed is a Santa Barbara work comparable in quality to Malcolm and Pam Baldwin's *Lessons From the North Sea*. Extensive research and the analysis of seasoned professionals will be needed to handle complex issues like the regulation of onshore air pollution from offshore drilling, the toxicity of drilling muds, aesthetic criteria for drilling in scenic areas, and the limited effectiveness of oil spill recovery equipment. Since *Coastal Crude* does not touch on some of these important issues and fails to properly assess those few issues it chooses to discuss, it should not even be included in a bibliography of "serious publications" on the Santa Barbara Channel.

—*William Travis*

Early Years

Chinese Gold: The Chinese in the Monterey Bay Region. Sandy Lydon. Capitola Book Company, 1985. $29.95 cloth, $18.95 paper.

Chinese influence on the history and development of the West Coast of the United States predates the arrival of Christopher Columbus by seven years short of a millennium. The fabled land of *Fu-sang*, claimed discovery of a Chinese Buddhist monk named Hui-Shen in the year 499 A.D., has been identified, albeit tentatively, as the coastline of California. In the late eighteenth century, explorer Juan Bautista de Anza found along the shoreline of Monterey Bay what he called "no doubt, an oriental boat." And more recent historians, among them Charles Chapman, have written that the notion of an early Chinese landing along the Pacific coast was more than fanciful conjecture: Oriental mariners had only to sail into the steady clockwise current of the Black Tide to be borne around the entire circumference of the ocean, not always an intentional nor a desirable voyage. "There is said to be an authentic record," wrote Chapman, "of some sixty Oriental craft which were driven across the Pacific in the eighteenth and nineteenth centuries."

The first verifiable history of the Chinese immigrants on the Pacific Coast, however, begins with a scant handful of Asians in the opening months of the California Gold Rush. The allure of precious yellow metal in abundance was instant and universal, and the Chinese immigrants upon arrival in California found a physical environment strikingly similar to their homeland. Coincidentally, an increase in political and economic upheaval that racked China, and particularly Kwangtung Province, in the preceding decade provided an added incentive for young sons of old families to set their sights across the vast Pacific to the land of *Gum Shan*, the "Golden Mountain."

It is this legacy and the subsequent settlement and acculturization of the Chinese along the temperate, generous coastline of California's Monterey Bay that forms the historic telling of *Chinese Gold: The Chinese in the Monterey Bay Region* by Aptos historian and educator Sandy Lydon. A comprehensive, illuminating, and profusely illustrated book, *Chinese Gold* intertwines existing histories of the Chinese with personal interviews with first- and second-generation Chinese-Americans, presenting for the first time a chronicle of one of the most controversial and vital settlements in the history and culture of California. It focuses most particularly on the Chinatowns of Monterey, Watsonville, Santa Cruz, Salinas, and the rugged and bountiful Pacific shore north from Big Sur to the harbor and beaches of Santa Cruz.

"The first [Chinese] colonists to the Monterey Bay Area came not from the Sierra gold fields or San Francisco," writes Lydon, "they came directly from China." A pocket of wood shanties along the rocky shore near Point Lobos and around Carmel Bay formed the first fishing villages of the area, where the ocean was harvested for its rich yield of clams, abalone, and shallow-water fish ignored by white settlers, a sea life that thrived in the nutrient-loaded waters. Lydon makes the point that the Chinese immigrants to California were more often pioneers than mere "coolie labor" used to farm the inland agricultural valleys, and had by 1870 established a host of cash industries along the coast until they were either uprooted or harassed by white neighbors. Not content with a second-class lot in life, the Chinese immigrants responded to discrimination with a proud sense of justice spiced with wisdom, tenacity, and nonviolent resistance and, when justice failed elsewhere, in the courtrooms of California and the nation.

Lydon has documented with text, pictures, and personal testimonies from surviving founders of twentieth-century Chinese communities a profound history of courageous and innovative people whose cultural contributions have only of late been recognized. In the course of his exhaustive research, Lydon spent hours upon hours in conversation with older Chinese residents of the tiny communities throughout the Monterey area, and the many individuals whose lives and labors helped shape the future of the region lend a sense of "personal history" that captures the spirit of a people as well as the history of a county. Copiously illustrated with a superb selection of rare maps, pamphlets, and photographs—the latter fully identified by person, place, and date, which contributes greatly to a genealogical perspective as well—*Chinese Gold* fills a significant gap in the complex and often controversial annals of California.

One regrettable fault that *Chinese Gold* suffers from is in the production. A hefty, square book, it has the look and

feel of a textbook: columns of type comprise barely half the page width and are printed on an uncomfortably thin, coated paper stock that makes for difficult reading and poor visual attraction. Weighing in at more than 500 pages, the book can quite easily become ponderous in its presentation and thus all the more difficult to enjoy for its vast and complete historical scope of the Monterey Bay Area.

—*Wayne Saroyan*

So Cal on Foot

The Beach Towns: A Walker's Guide to Los Angeles's Beach Communities. Robert John Pierron. Chronicle Books, 1985. $7.95.

California Coastal Trails; Volume I: Mexican Border to Big Sur. John McKinney. Capra Press, 1983. $8.95.

Walkers and hikers in Southern California have two new guidebooks by which to try out the latest shoe fashions along the coast. For the Gucci and Topsider crowd there is *The Beach Towns: A Walker's Guide to Los Angeles's Beach Communities*. Those who prefer Timberland boots and bare feet will enjoy *California Coastal Trails*. Both books are excellent descriptions of the southern California coast, but from very different perspectives. *The Beach Towns* leads the walker and reader into the exotic culture and architecture of Los Angeles while the *Coastal Trails* volume avoids development to present as natural a route as possible.

The Beach Towns guide comprises thirteen leisurely strolls (two to four hours long) through commercial and residential centers from Pacific Palisades to San Pedro. Historical, architectural, and cultural backgrounds on each "village" are provided, and each site on the walk is fully described. The cosmopolitan nature of these communities is presented in rich detail. Santa Monica, Venice, Manhattan Beach, Palos Verdes, and San Pedro are portrayed accurately and attractively. Clear maps and directions also help.

However, the omission of Long Beach and a slightly disorienting organization should be remedied in future revisions. The City of Long Beach has revitalized its downtown and linked it to a restored waterfront by a pedestrian mall and boardwalk. This massive redevelopment effort has eliminated some of Long Beach's seedy charm, but the projects offer walkers many new opportunities to enjoy the harbor views while eating and shopping. The book would be better balanced if Long Beach's grittiness were included beside the gentility of the other towns. Perhaps if the various background descriptions of the waterfront villages were combined, they would be less repetitious and the walks could be shortened. Some walks are out of geographic sequence, and some entries appear more than once. This minor disorientation is outweighed by the guide's overall honesty and enthusiasm.

In *California Coastal Trails*, a path from the Mexican border to Big Sur is laid out, even while public officials consider a statewide coastal trail only a noble concept. As pristine a path as possible is described with all necessary provisions regarding property rights included. By seizing the initiative, this book might become a self-fulfilling prophecy. This unofficial trail is as accurate as it is audacious. It includes back country hills and river and stream corridors as well as the waterfront. The itinerary tries to ignore development, but the built environment and the natural environment are briefly described. The wilderness ethos of the book unfortunately precluded mention of sources of food or provisions. An overview and a detailed route of the trail are elaborated for each county segment by over fifty specific day hikes. The material is simple and well presented.

Walkers in search of wildlife or lifestyle will appreciate these guides. They provide a real service by encouraging public enjoyment of Southern California's waterfront.

—*Don Neuwirth* □

Masthead Changes

Because of an internal reorganization of the State Coastal Conservancy, Donald B. Neuwirth is no longer Editor-in-Chief of *WaterfrontAge*. Peter Grenell, the Executive Officer of the Conservancy, has assumed direct editorial management of the magazine. Mr. Neuwirth is now the Coastal Access Program Manager for the agency.

This is also the final issue for Anna Victoria Kondolf, our Art Director. Ms. Kondolf was the original designer of the magazine and created its format and visual style. She is relocating to the East Coast, where she will join her mother in a lighting design business.

Illustration credits

Mallette Dean, page 3, from *Monterey Peninsula*, Federal Writer's Project, 1941.
Anna Victoria Kondolf, pages 27(map), 29 (map, after Michael Martin et al., California Department of Fish & Game), 34 (graph, after the *L.A. Weekly*), 38 (map, after Wheeler North), 40, and 42.
Amy Pertschuk, page 34 (fish, from the *California Seafood Cookbook*).

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