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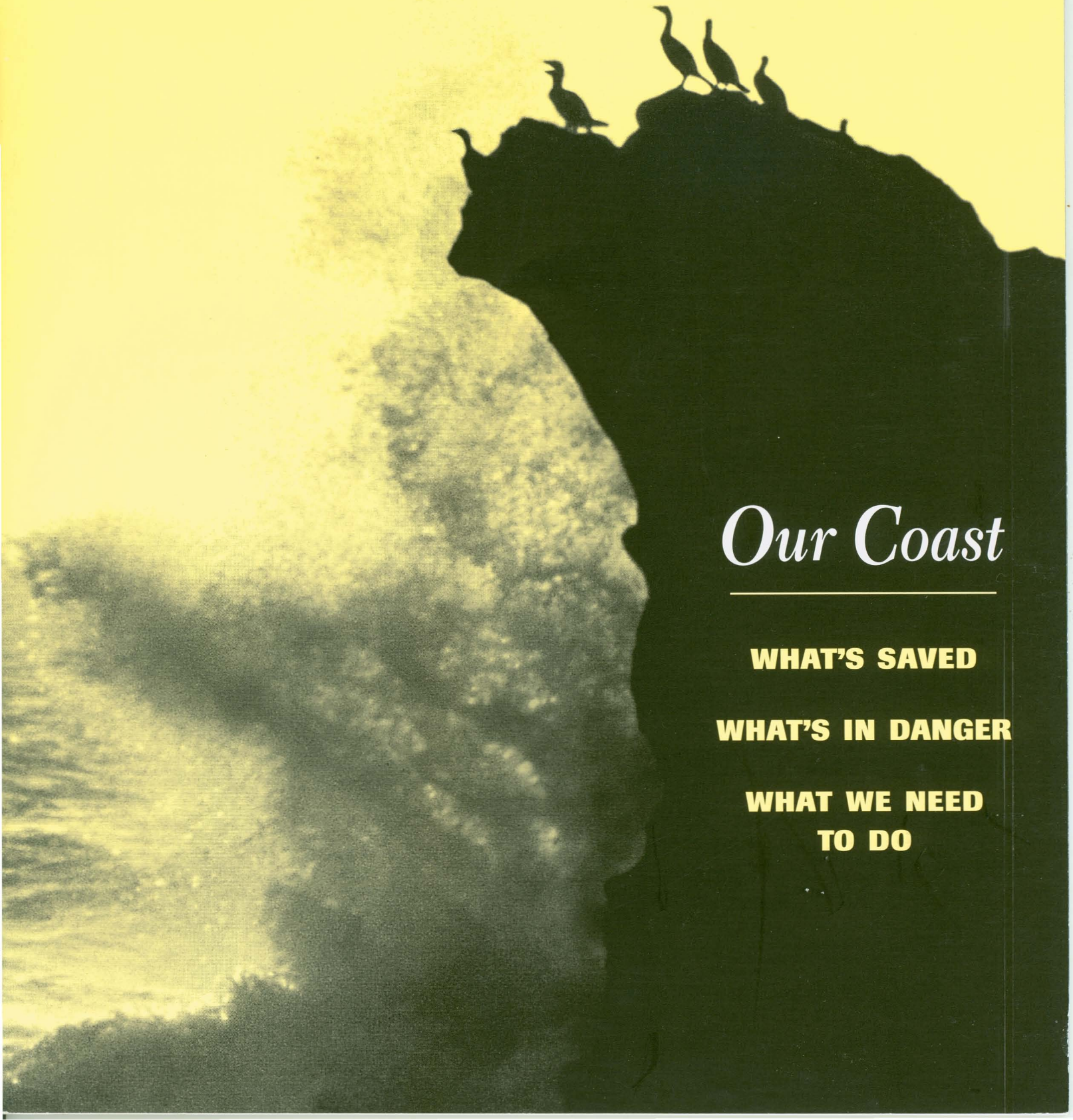

Our Coast

WHAT'S SAVED

WHAT'S IN DANGER

WHAT WE NEED TO DO

ABOUT THE COASTAL CONSERVANCY

The Coastal Conservancy is a state agency working to preserve, improve, and restore public access and natural resources along the coast and on San Francisco Bay. It builds trails and walkways, purchases threatened coastal land from willing sellers, enhances and restores wetlands and watersheds, protects open space and farmland, supports commercial fishing, helps cities develop and improve waterfronts, and crafts innovative solutions to land use conflicts. The Conservancy undertakes projects in partnership with nonprofit organizations, landowners, local governments, and other public agencies. It is funded primarily by bonds authorized by California voters.

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Cover and Inside Back Cover: Cormorants on Seal Rock at Pillar Point, on Half Moon Bay. Kip Evans is a research diver, PADI scuba instructor, and education coordinator for the Monterey Bay National Marine Sanctuary's Water Quality Protection Program. He is also a professional photographer who has worked extensively on California's coast, both under water and along the shore.

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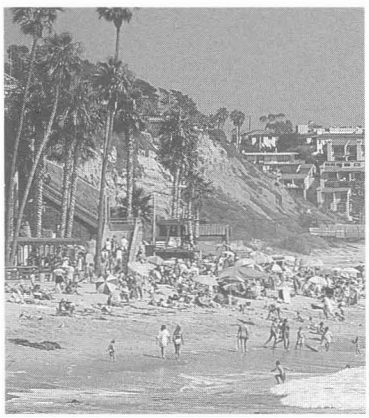

COASTAL CONSERVANCY

CALIFORNIA'S *beautiful coastline serves as a commons for all the people.*

Citizens of this state, who are of vastly diverse ethnic backgrounds and political philosophies, in 1972 passed Proposition 20, the Coastal Initiative. In so doing, they boldly declared that the coast is "a distinct and valuable natural resource belonging to all the people."

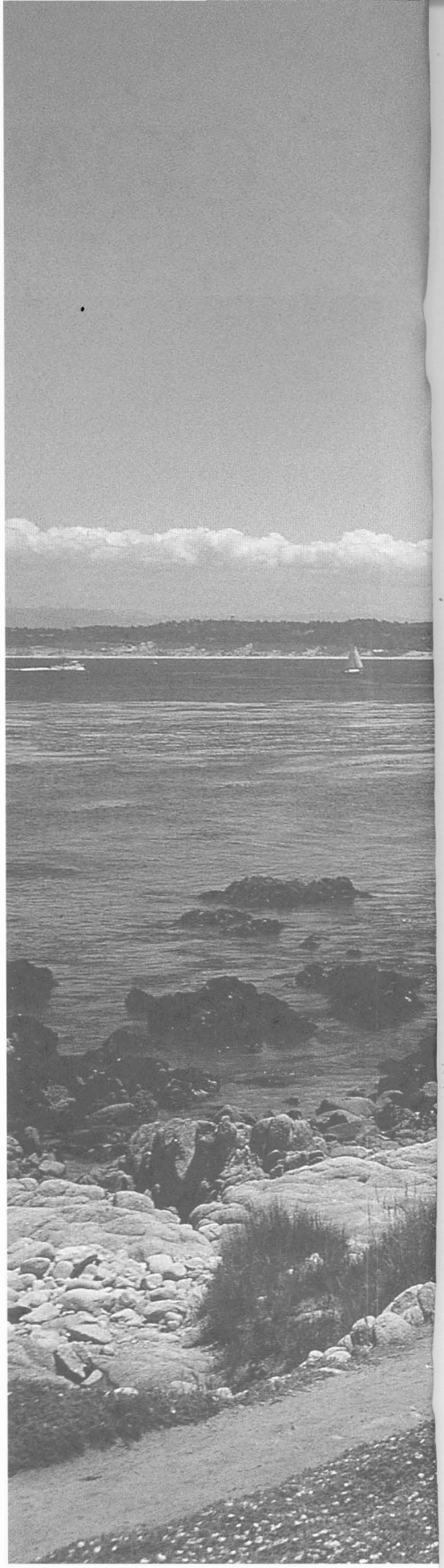
Since then, the Coastal Commission has carried out the spirit of that declaration by successfully insisting on public access to the state-owned tidelands and beaches. It has also worked to protect open space, landscapes, and viewsheds that characterize the California coast, and to preserve coastal wetlands and other wildlife habitat. The Commission is the only state land use planning agency with regulatory jurisdiction along the state's entire length. Its work has been complemented by that of the Coastal Conservancy, a nonregulatory agency, which has completed hundreds of projects, working with citizens through local land trusts and other organizations.

The flagship role of the Coastal Commission in the next twenty years is to reestablish its independence from interests that would exploit the commons. The Commission should constantly remind itself that it protects the equivalent of a public trust created by the original grassroots initiative. The Commission is therefore obliged to respect the citizen's voice in the public hearing process.

Citizens have a unique and parallel responsibility. They must stand watch over local and state-wide decisions that are detrimental to the coastline and work for funding measures that underwrite preservation and restoration of the coastal commons for all of us.

—Bill Kortum

Bill Kortum, retired large-animal veterinarian, has been a leader in the coastal protection movement from its inception. He lives in Sonoma County, where he continues to work to realize the vision of the coastal commons.



KIP EVEANS

The State of the Coast

Has the Coastal Act Worked?

PHYLLIS M. FABER

SINCE THE California Coastal Initiative went into effect in January 1973, the California Coastal Commission has processed more than 100,000 permits and approved 95 percent. Does this mean that all the work to protect the coast has been an exercise in futility?

Mel Lane, the Commission's first chairman, commented after the 1976 Coastal Act was enacted: "We have been handed an impossible law, but we are going to make it work." Now, after more than two decades, it is time for a critical look at California's coastal zone management.

The State *of the* Coast

THE LAW IS NOT PERFECT—we can all agree to that. But has it made a difference? It incorporates the goals of the Coastal Initiative, but has it served those goals? What has been gained by the passionate effort to save the coast, and the years of effort by Coastal Commissioners and their devoted staff to manage our 1,100-mile shoreline in keeping with the Coastal Act? What problems cry out for attention? What should the next steps be?

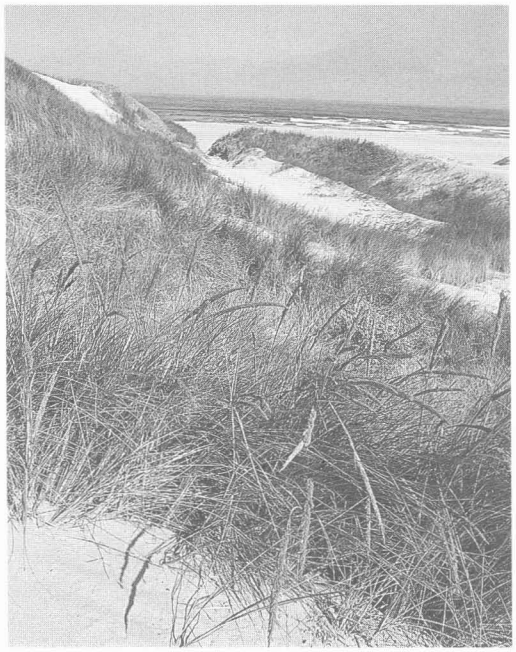
Proposition 20, the 1992 voter initiative, was unprecedented in its breadth. No other state or nation had undertaken such far-reaching coastal planning. Even today this legislation, formally known as the California Coastal Zone Conservation Act of 1972, sets a standard. Not only were natural resources and the marine environment protected, but other elements, such as energy facility siting, public access, visitor facilities, agriculture, transportation, visual resources, and priorities for balanced development were addressed.

BUMPERSTICKER COURTESY OF CHARLES RHINEHART, C.O.A.A.S.T.

Proposition 20 established the Coastal Commission to regulate development and to formulate a California Coastal Plan within four years. Public hearings and heated debate over permits created a pressing sense of reality within the ongoing planning process. One of the great strengths of California's coastal planning program is the extensive public involvement that accompanied its formation. Following the passage of the 1976 Coastal Act, which incorporated principles from Proposition 20, each coastal community was required to develop a Local Coastal Plan (LCP) for its section of coastline. These plans, which must conform to state law, contain a vision for maintaining coastal resources on a parcel-by-parcel basis. Once an LCP is certified by the Coastal Commission, local authorities assume the permitting function. The issuance or nonissuance of permits, as well as permit conditions, can be appealed to the Commission.

Twenty years later, it's time to appraise what in all this pioneering effort to protect the coast has worked and what has not.

A wild expanse of dunes and beaches has been protected in San Luis Obispo and Santa Barbara Counties.



LIZA RIDDLE

"Here's the Beach!"

Hank Ketchum, famous for "Dennis the Menace," lent his talents to the campaign for Proposition 20.

What Are the Major Accomplishments?

- Perhaps the greatest accomplishment of the Coastal Acts (1972 and 1976) and of those who have worked to achieve their intent has been the development of a consistent approach to coastal land use planning and the putting into place of a mechanism for resolving conflicts that arise.
- An unmeasurable accomplishment has been the amount of development that has *not* been proposed. Developers now can look at a certified LCP and get a good sense of what will and will not fly. No one today would try to build another Sea Ranch or Bodega Harbour, which locked up miles of scenic coast. Caltrans now has guidelines for maintaining the character of coastal Highway 1. It will never be a six-lane highway; according to the law, along the coast it is to remain a two-lane road. There is a plan and a vision for each stretch of the coast, set into coastal plans.
- Overall development has been reduced in numerous places by resubdivision and lot consolidation. More than 1,000 lots were consolidated or removed at Lake Earl in Del Norte County, for example, to protect the lake and its dunes, and just recently, lots were eliminated or consolidated at Oxnard Shores in Ventura County to protect dunes and public access.
- Much prime habitat along the coast has been acquired thanks to unprecedented cooperation among local, state, and federal agencies. Several nonprofit land trusts have sprung up to protect local resources, including the Big Sur, Marin Agricultural,

and Mendocino Land Trusts. The Santa Monica Mountains Conservancy has protected vast amounts of coastal land.

■ The coast of California is among the most accessible in the world. Many new accessways have been built, and others have been improved. As of 1996, the Coastal Commission had obtained more than 1,272 offers to dedicate access easements (OTDs) across private property as conditions for development permits. To be opened to public use, these rights-of-way must be accepted by a public agency or suitable nonprofit organization, and some agency or group must agree to open and manage the accessways. (See *Coast & Ocean*, Summer 1995.) Only about 20 percent of the OTDs have been accepted so far, and it is not known how many are actually open. Unless funding becomes available and agencies or organizations agree to open and manage these rights-of-way, opportunities may be lost.

■ Stream and river restorations have been skillfully negotiated and funded by the Coastal Conservancy. In Mendocino, Sonoma, and Marin Counties, for instance, watershed projects have repaired overgrazed stream banks and restored habitat for fish. Lagoons in San Diego have benefited from Commission protection and Conservancy enhancement projects.

■ Wetland losses have been limited, and in this there is much of which to be proud. The restored Arcata Marsh, which uses treated effluent to create habitat, has attracted national attention. From north to south, many formerly threatened marsh ecosystems are healthy today. Humboldt Bay, Tomales Bay, Pescadero, Elkhorn Slough, Morro Bay, Newport Bay, the San Diego lagoons, and the Tijuana Estuary are all beneficiaries of coastal protection and enhancement.

PROTECTING AGRICULTURE in the coastal zone has been one of the toughest assignments. The protective policies of the 1976 Act have worked in many places, such as Marin, Sonoma, and San Luis Obispo Counties, but they have been less successful to the south where development pressures are more intense. San Diego County has given up trying to protect agriculture, with the result that few of the great flower fields at Carlsbad remain.

Overall, the record of accomplishments is impressive. And it is paying off economically as well. Tourism and outdoor recreation are major California industries. People from all around the world come to enjoy the gorgeous California coastline.

What Problems Need Fixing?

AS PETER DOUGLAS, the current executive director of the Coastal Commission, points out (p. 10), "The coast is never saved." Serious problems arise because the Commission's juris-

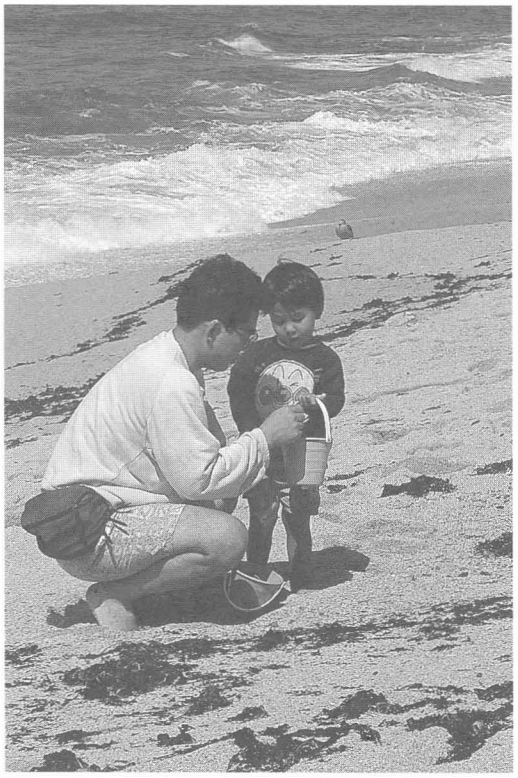
CALIFORNIA COASTAL COMMISSION

More than 30 years ago, Oceanic Properties, Inc., set out to transform a 10-mile stretch of Sonoma County's open coast into a 5,200-unit complex of homes and condominiums. If built as planned, Sea Ranch would have become the largest community between San Francisco and Eureka. Despite award-winning design features, Sea Ranch became a catalyst for the 1972 "Save Our Coast" voter initiative. Major issues were the scale of the development, loss of public access to several beaches, obstruction of views, and effects on traffic along two-lane Highway 1. The Coastal Commission was able to scale down the project by 50 percent. After years of battle, limited beach access has been provided.

The State *of the* Coast

diction extends only along a narrow strip of the coast defined by an arbitrary line on a map drawn in Sacramento. Other problems are of a cumulative nature or are political. Each of these shortcomings urgently needs to be addressed.

■ The coastal zone boundary is not a geophysical one; it was politically drawn and is based on inadequate planning. Notably, major parts of coastal watersheds are excluded. Yet many coastal problems originate outside the coastal zone. Road building and other housing construction severely affect downstream wetlands, streams, and rivers. Forestry practices in the upper watersheds destroy fish-spawning streams and estuarine wetlands. The inability to manage whole watersheds remains one of the most severe problems for the coast. A "next step" for California should be to address this issue.



CAROL ARNOLD

■ Seaward as well, jurisdictional boundaries fail to match ecosystem needs. The nation's waters extend for 200 miles, but the state's control extends only three miles. The health of ocean waters and fisheries suffers from the gaps created by differing laws and mixed jurisdictions. Comprehensive ocean planning should be a high priority for Californians and the nation.

■ The Coastal Act provides no mechanism to address the cumulative impacts of all the separate coastal development projects. Such problems are assuming ever-greater importance as California's population continues to grow and varied development pressures increase in intensity.

In Mendocino, for example, lots are being split and more and more houses are being built on the fragile coastal terraces. In Malibu, houses are being built—or rebuilt to larger size—on hazardous sites. Some communities contain growth, at least for a while, by setting urban limit lines. But when is there enough development? Can we agree on what is enough, and can we bind future generations? If not, can we preserve a coast noted for its beauty and public accessibility?

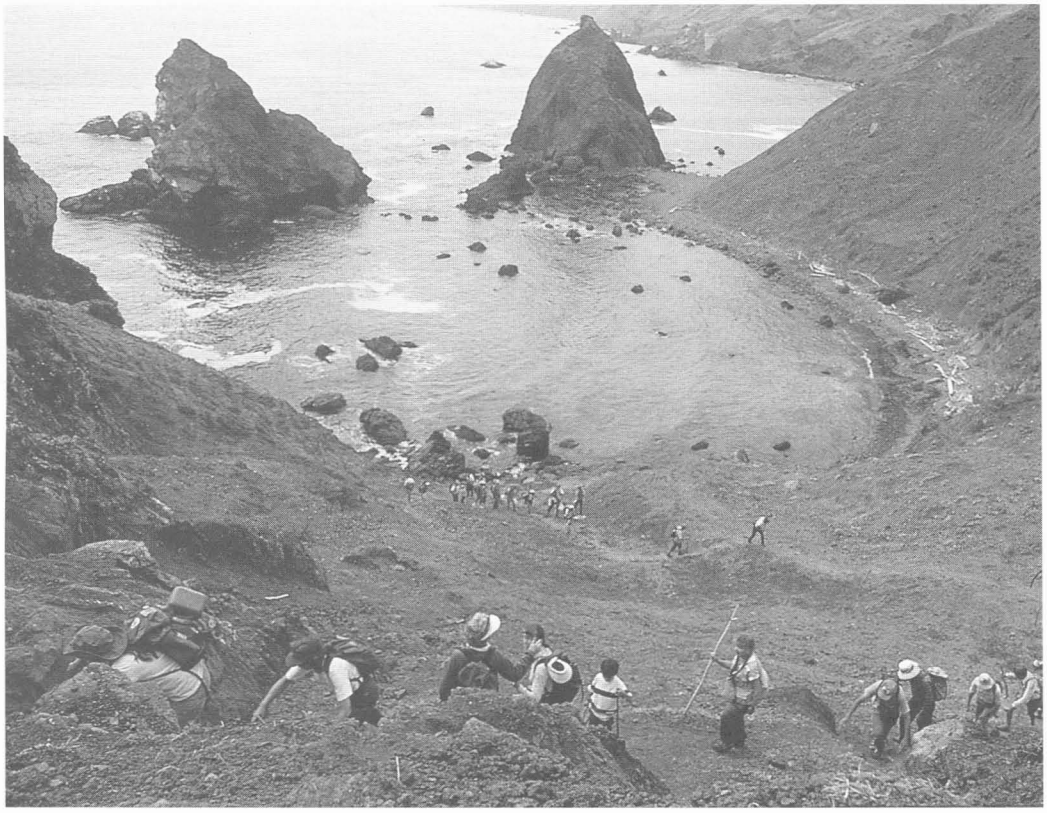
■ Beaches are disappearing and great stretches of the coast are washing away. California has an eroding, retreating coast: that is its natural character. But with development right to the edges of bluff tops, there is no room for retreat without property damage. As homeowners build seawalls, place riprap on the shore, and fortify crumbling cliffs, adjacent stretches of shore become more vulnerable and more shoreline armament is demanded. Cumulatively, shoreline fortifications seriously detract from the public's beach experience. This ongoing problem is difficult to address on a permit-by-permit basis.

■ How can the demand for energy and coastal protection be balanced? Do we need more nuclear power facilities, and if so, can we tolerate their potential dangers? Today, public utilities are being deregulated. As utility companies become more competitive and less profitable, can or will they pay for mitigations from undesirable impacts on coastal resources?

Can we be assured of the safety of oil drilling along the coast? Offshore oil development has a priority under the Coastal Act, yet oil spills are regular events. How can the underground leaks and oil spills that occur in decaying facilities created in the 1930s to 1950s, such as those near Avila on the central coast, be remediated, and who will pay? Can requirements for pipeline transfer and consolidation solve the problem? These are very complex problems, made more difficult by the privatization of public resources and the shift toward a global economy.

■ While the 1976 Coastal Act called for each jurisdiction to create a Local Coastal Plan that would be certified by the Commission, 16 percent of local governments have failed to carry out the mandate, largely because of the political heat involved in complying with the Act's protective provisions. Until LCPs are completed and certified, the Coastal Commission and its staff must continue to process all permits in these jurisdictions. This is a heavy burden for the Commission, which has had its budget slashed by a hostile governor and legislature, depriving it of resources needed to carry out the coastal mandate.

■ The 1976 Coastal Act does not provide for a review process to address new or unfore-



PEETER VILMS

Unmatched views were protected when the Coastal Conservancy acquired the 273-acre Black Ranch property in Sonoma County. A one-mile wheelchair-accessible loop trail and viewing platform have been built.

seen problems, such as polluted runoff, and there is no meaningful mechanism to review or update LCPs. Driven by statutory deadlines of the permitting process, lacking essential resources, and operating with a minimal staff, the Commission can give little emphasis to long-range planning. Because of tight budget restrictions, in-house staff in general lacks expertise in subjects such as marine biology, hydrology, geology, and water quality control. Thus important linkages between science and public policy are lost.

■ Since 1976, one of the most distracting and difficult problems in our Coastal Zone Management Program has been the politicization of the Coastal Commission. Increasingly, members are selected for their political views or their campaign contributions to appointing authorities, not for their commitment to carrying out the coastal law, or their interest in coastal issues. Too often, this situation has led to decisions based on political considerations rather than the merits of an application. The rapid turnover of Commissioners—which is likely to be exacerbated by term limits in the legislature—undermines the quality of the Commission's work and increases the influence of partisan politics. As a result, the Commission presently suffers from a lack of continuity and an inability to develop a long-range view.

It's Time for the Next Step

DURING THE 1960s it became increasingly clear that California's wild, open, and beautiful coast was not surviving the great population influx. Proposition 20 was passed by citizens frustrated by the repeated failure of the legislature to adopt protective legislation. Voters wanted their coast safeguarded. They wanted access to beaches. They wanted some form of coastal management.

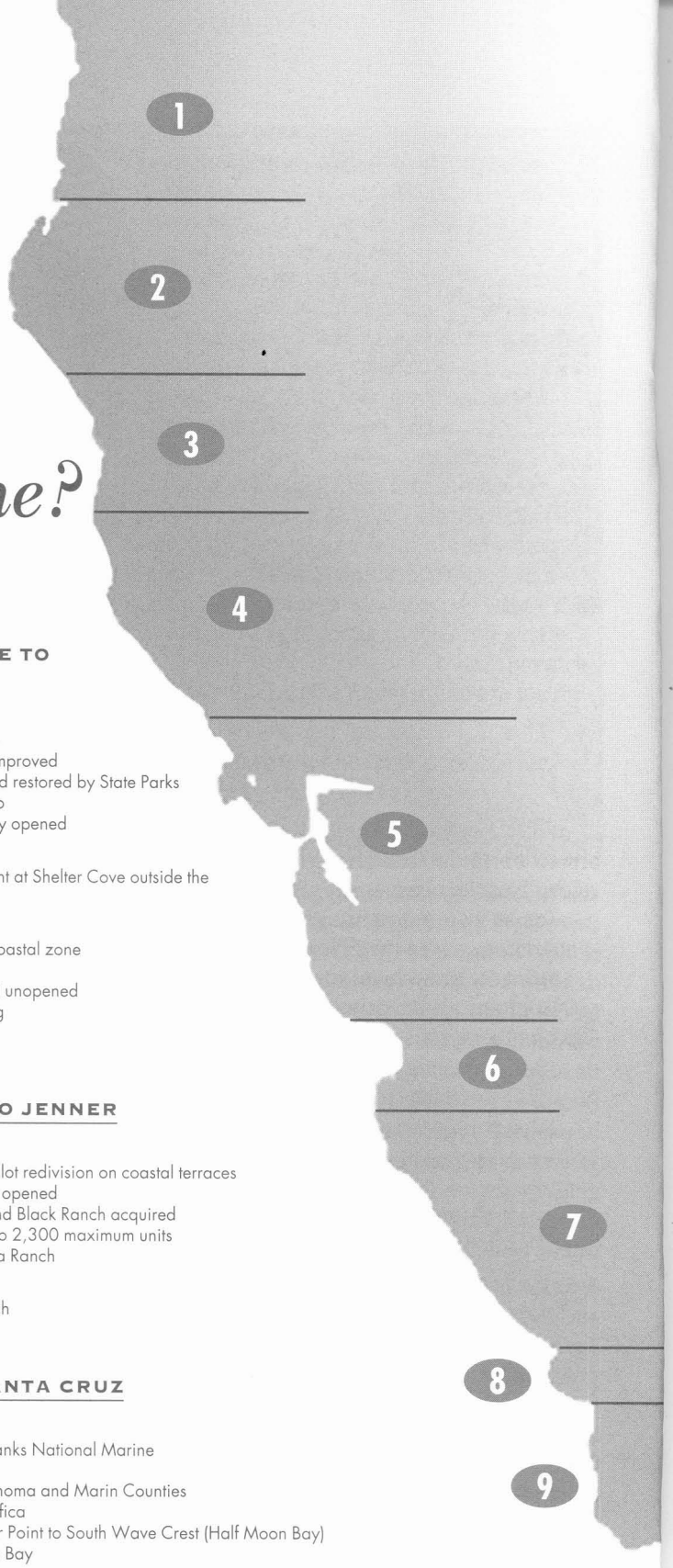
For all the problems and limitations, the 1976 Coastal Act has preserved much of the health and beauty of the coast's natural communities. This has been achieved with the blood, sweat, and tears of a loyal Coastal Commission staff, many Coastal Commissioners, devoted public supporters, and the communities that have created and implemented workable LCPs The time has come for the state's leadership and the public to look at "next steps" to address cumulative issues and consider the future. The coast of California deserves no less. ■

Phyllis M. Faber is a founding member of the League of Coastal Protection and a former chairman of the North Central Coastal Commission.

The State *of the* Coast

How Far Have We Come?

A tally of successes, failures, and unresolved issues from 23 years of coastal zone management, based on the goals detailed in the California Coastal Plan: The net gains in resources protection are impressive, although many problems remain, and new ones have surfaced.



1 NORTH COAST: SMITH RIVER TO ARCATA

Accomplishments
- Habitat acquired along the Smith River, Freshwater, Stone, and Big Lagoons
- Lots consolidated at Lakes Earl & Talawa
- Urban limit line set for Crescent City
- Dunes protected at Mad River
- Visitor serving facilities increased

Losses
- Timbering practices in watersheds beyond coastal zone damaging streams and wetlands
- ORVs are destroying dune formations

Unresolved issues
- Undeveloped lots remain at Lake Earl and Lake Talawa

2 HUMBOLDT BAY: NORTH & SOUTH SPITS, ARCATA, EUREKA

Accomplishments
- Pocket marshes consolidated; balance achieved between farmed and tidal wetlands
- Dunes acquired
- National Wildlife Refuge expanded on South Spit
- Federal lease sales for oil exploration withdrawn (North Coast to Monterey Bay)
- Arcata marsh created; now a world-famous wildlife refuge

Losses
- Industrial development on North Spit
- Unregulated ORVs and illegal residents on South Spit

Unresolved issues
- Industrial zoning in LCP on South Spit
- Agricultural damage to riparian areas
- Unpermitted tree removal to increase pastures

3 SHELTER COVE TO MENDOCINO

Accomplishments
- Key lots acquired at Shelter Cove
- Access to Sinkyone Wilderness improved
- Some logged areas stabilized and restored by State Parks
- Urban limit line set for Mendocino
- Mendocino Bay public accessway opened

Losses
- Cumulative impact of development at Shelter Cove outside the coastal zone

Unresolved issues
- Timbering practices outside the coastal zone
- Acquisition of old-growth forests
- Dedicated public accessways still unopened
- Parcel subdivisions are increasing
- Highway capacity

4 MENDOCINO TO JENNER

Accomplishments
- Development density reduced by lot redivision on coastal terraces
- Moat Creek and Gualala Access opened
- Fort Ross visitor center opened and Black Ranch acquired
- Sea Ranch reduced from 5,200 to 2,300 maximum units
- Beach accessways opened at Sea Ranch

Unresolved issues
- Tree-cutting program at Sea Ranch

5 JENNER TO SANTA CRUZ

Accomplishments
- Gulf of Farallones and Cordell Banks National Marine Sanctuaries established
- Agriculture zoning holding in Sonoma and Marin Counties
- San Pedro Creek restored at Pacifica
- Public access provided from Pillar Point to South Wave Crest (Half Moon Bay)
- Urban limit line set for Half Moon Bay

Losses
- Intensified development at Half Moon Bay with loss of agriculture

Unresolved issues
- Intervention in sedimentation of Bolinas Lagoon
- Development of North Wave Crest bluff top
- Open space at Half Moon Bay
- Future of Cascade Ranch

6 SANTA CRUZ TO MONTEREY

Accomplishments
- Elkhorn Slough Estuarine Research Reserve established
- Santa Cruz Pier and accessways improved
- Monterey Bay National Marine Sanctuary designated
- Dune access protected in Sand City
- Public access provided from Monterey pier to Pacific Grove
- Farmlands protected
- Paper subdivision acquired; reducing development

Losses
- Nutrient and siltation entering sanctuary from intensified agriculture
- Dune areas in Monterey subdivided/developed
- Railroad right-of-way lost for public access

Unresolved issues
- Urban limit line for Santa Cruz
- Management of Salinas River dunes
- Protection of Monterey pine forests
- Acquisition of dune and special habitat areas

7 BIG SUR TO MORRO BAY

Accomplishments
- Garrapata area acquired for open space
- Cumulative development reduced, TDC program
- Mining standards developed
- Agriculture protected by conservation easements
- Visitor serving facilities increased

Losses
- Subdivisions permitted on farmland beyond Cambria
- Wetlands degraded by deep well draw-down
- Rerouting of Highway 1 inland on Hearst Ranch, vista points closed

Unresolved issues
- TDC program and habitat acquisitions
- Expansion of range of elephant seals

8 MORRO BAY/LOS OSOS

Accomplishments
- Waterfront access improved

Losses
- Despite extensive watershed management, development leaves too little buffer for Morro Bay
- Too much cumulative residential development with inadequate water supply

Unresolved issues
- Potential water overdraft
- Development in kangaroo rat habitat
- Siltation basin maintenance for bay ecosystem

9 PORT SAN LUIS TO ISLA VISTA

Accomplishments
- Sites for energy development consolidated
- Bike path from Gaviota to Santa Barbara built
- 3.7-mile Pat Stebbins public access trail completed

Losses
- Siting of new refinery inappropriate (facility is not coastal related)
- Extensive grading at Gaviota

Unresolved issues
- Abandonment of oil wells, subterranean oil spills at Avila
- On-shore use of pipelines for refineries rather than off-shore tankers
- No access to Hollister Ranch

10 SANTA BARBARA TO VENTURA

Accomplishments
- Stearns Wharf improved
- Standards set for concentration of development and for air quality
- Rules for on-shore development of oil applied off-shore
- University long-range plan developed
- Carpenteria marsh preserved
- Shoreline access provided at McGrath, Mandalay, and Ventura beaches
- Wilcox property acquired

Losses
- Continued beach erosion with no ocean resource plan and continuing shoreline armament
- Intensity of development
- Development along Carpenteria sand spit

Unresolved issues
- Unified approach to regional shoreline erosion
- Siltation of Santa Barbara harbor

11 OXNARD TO SANTA MONICA

Accomplishments
- Development at Oxnard Shores reduced and clustered
- Nicholas canyon & Zuma beach public access provided
- Development intensity reduced in Santa Monica Mountains; no new subdivisions outside of designated areas
- Major backbone trail of Santa Monica National Recreation Area almost completed
- 20% of small vacant lots retired at Malibu

Losses
- Firing range at Mugu Lagoon expanded
- Houses built in hazardous areas
- Access, trail systems, and regulation of already subdivided lots limited by Supreme Court

Unresolved issues
- A workable TDC program
- Intensity of development
- Access and visitor-serving facilities
- Public access to Pt. Dumas headland

12 VENICE TO LONG BEACH

Accomplishments
- Major wetland acreage at Ballona Creek to be enhanced and protected
- Dunes at Playa del Rey protected
- City/county cooperated on design and access for waterfront
- Public amenities increased at Marine World

Losses
- No LCP for Venice or LA County
- Intensified use in Marina del Rey
- Inadequate visitor-serving facilities

Unresolved issues
- Restoration of Ballona Wetlands
- 300-acre butterfly habitat restoration

13 LONG BEACH TO SAN DIEGO COUNTY

Accomplishments
- Mitigations for Port of LA dredging and fill impacts
- Public access and visitor facilities improved
- Upper Newport Bay marsh restoration completed
- Beaches acquired along Irvine coast

Losses
- 900 houses permitted in Bolsa Chica wetlands
- Intensified development in Upper Newport Bay watershed

Unresolved issues
- Acquisition of Bolsa Chica by public agencies
- Restoration program for Bolsa Chica
- Erosion control in Upper Bay watershed
- Development of Dana Point headlands

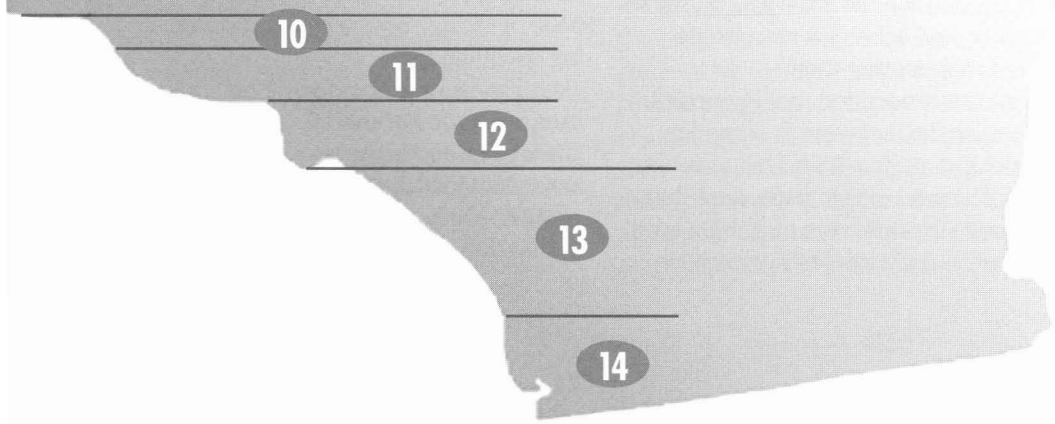
14 SAN DIEGO COUNTY

Accomplishments
- Quality of Agua Hedionda, Batiquitos, San Elijo, Los Peñasquitos, and San Dieguito lagoons protected and enhanced by various public acquisitions
- Buena Vista Lagoon acquired and visitor center provided
- Extensive shoreline access provisions and height limits set for Port of San Diego
- Sweetwater marsh restored and interpretive center provided
- Marina at Chula Vista expanded
- Tijuana Estuary designated as National Estuarine Reserve with interpretive center
- Tijuana River wastewater project undertaken

Losses
- Severe beach erosion on Oceanside beaches
- Freeway approval encroaching on wetlands
- Interchange at Los Peñasquitos encroaching on wetland
- Cumulative development in watershed and floodplains of lagoons

Unresolved issues
- Bluff erosion threatening houses and reducing sand supplies for beaches
- Funding for restoration of lagoons
- Mitigation for San Onofre nuclear power plant impacts on kelp beds

—Compiled by Phyllis M. Faber, League for Coastal Protection



The State of the Coast

"never saved... always being saved"

PETER DOUGLAS TALKS WITH *COAST & OCEAN* about today's coast and its future in light of the coastal management program's first 23 years, and of his own experience as the third and longest-serving executive director of the California Coastal Commission.

C&O: I'd like to invite you to survey the coast from a lighthouse tower that allows a view across time, back as far as 1972 and forward as far as the fog allows. What's the state of the coast, as you see it? Did the "Save the Coast" voter initiative and the California Coastal Act actually save the coast?

PETER DOUGLAS: The coast is never saved. Like any coveted geography, it's always *being* saved. Coastal management is a dynamic process working with competing forces that gather on the coast and trying to balance them and achieve a reasonable accommodation among them.

There's a misconception that Proposition 20 and the Coastal Act were designed to bring development to a halt. That was not the intent. The goal was to make sure that development—be it private or public—did not preempt the best interests of current and future generations; that certain public values and interests were protected, including public access and recreation, important land- and seascapes, and significant landforms and habitats. [This pioneering legislation] was a forerunner of the concept of promoting environmentally sustainable development, a concept in vogue today. It came about largely as a reaction to the rapidity of change, which was disorderly and threatening in the 1960s and '70s. We have succeeded in substantially slowing the pace of change on the coast, and in reshaping its character.

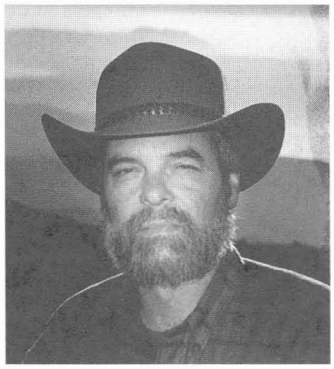
Our most important achievements are things you do *not* see: For example, wetlands not filled, opportunities for public access not lost, spectacular seascapes not spoiled, speculative subdivisions not permitted, offshore oil drilling and leasing not

approved, two-lane coastal Highway 1 not widened. These intangible, invisible, and nonquantifiable consequences constitute the most significant accomplishments of California's coastal management program.

Other intangible but major achievements include the positive change in attitude among public and private property managers and decision makers. The notion that we share a stewardship responsibility toward the coast is now widely accepted. Partnerships among state and local governments have worked very well. Many individuals are willing to do their share, and there is strong public support for coastal management at the state level.

C&O: Let's continue looking at the major successes, then move on to failures, and finally focus on trends and issues that trouble you most right now.

PD: The pace of coastal development has not only slowed down, its quality has substantially improved, when you consider densities, height, bulk, interference with public views, and opportunities for public access. After the Commission started making decisions, developers went back to drawing boards and came back with better projects, taking Coastal Act policies into account. We haven't permitted one new speculative subdivision since 1972—not one of those planned in the '50s and '60s by buying up old ranches. We've allowed new subdivisions, but only when properly planned and in places with an existing infrastructure. Many pre-Coastal Act speculative subdivisions were subsequently purchased for park use. Point Reyes National Seashore is a good example of non-appropriate subdivisions purchased and now parkland. To enable as many people as possible to enjoy the coast, visitor service and recreational proposals, such as hotels, motels, and campgrounds, were given priority over development for exclusively private use.



KAYA MEANS

Peter Douglas

C&O: I've heard it argued that developers have benefited from Coastal Act requirements.

PD: Tremendous benefits were realized by property owners and project proponents who got the message that they needed to become more creative and more sensitive to the coastal environment. People at the Irvine Company and other major developers have told us that their projects turned out to be much more appealing because of our requirements. The acquisition of thousands of acres of coastal lands for parks also added value to coastal developments that were nearby. To be able to live next to a preserved stretch of coastline is pretty special.

For those who make a living off the coast, especially in tourism, the benefits have been incredible. We are often asked: How in the world has California been able to preserve its coastline? The answer, in large part, is the Coastal Act.

California's is one of the most accessible coastlines in the world. You can get to most of it by car or on foot. Because it's so accessible, and much of it is so wild, many people come from all over the world to spend lots of money to see it. The California coast is world-famous for its wildness—notwithstanding population growth and development pressures. People wouldn't come to Big Sur or the North Coast if a lot of hotels and private homes were there, spoiling the views and sense of wilderness.

Plans that would have made Highway 1 a four-lane road for most of its length have not been carried out. That was specifically prohibited in the Coastal Act, and it's been very important in keeping the coast as attractive as it is. It's been hard to hold the line, though. There was a big fight over the freeway on the Monterey Peninsula, the stretch through Marina and Sand City. The Commission originally denied it, but political pressure was so great it was ultimately approved.

Overall, [coastal management] in California is working well. That is evidenced by the fact over 85 percent of the coast is now covered by certified, fully approved local coastal programs [LCPs] where local governments are issuing coastal permits. The Commission only sees appeals in about three percent of the cases that could be appealed. That says to me that local governments are accepting the challenge and

"...major developers have told us that their projects turned out to be much more appealing because of our requirements."

The State *of the* Coast

responsibility as full partners in managing California's coastal resources for the benefit of all people.

As for accomplishments that are more readily apparent, there are, above all, the new public access and recreational facilities and opportunities, both on public and private lands—not just access to beaches, but also to trails, picnic facilities, campgrounds, showers, boat launching ramps. Significant public access improvements on the Del Monte Forest shoreline, for example—access to Stillwater Cove, picnic areas, bathrooms, and parking areas—largely were required by the Commission in its approval of the Spanish Bay resort and other projects there.

An informed eye will note other positive changes. In the Santa Barbara Channel, facilities for processing and transporting offshore oil and gas have been consolidated. Without the coastal program, they would have continued to proliferate.

In southern California, industrial ports put plans to fill thousands of acres of ocean waters on hold while we pressed for more efficient use of existing uplands. We were able to reduce the amount of new fill substantially, without stopping the ports from proceeding with necessary modernization projects.

C&O: What about the other side of the coin? What of failures or shortcomings? What are the thorniest issues?

PD: A major weakness in the program is our inability to insure that needed updates are made in previously approved LCPs. For example, many do not include provisions to address polluted runoff to the ocean.

Another failing is our inability to provide the funding and mechanisms necessary to implement the public access components of the LCPs. We have many outstanding offers to dedicate public access easements that haven't been accepted due to a lack of funding support for nonprofits or local governments that are willing to open and maintain these accessways. (See *Coast & Ocean*, Summer 1995).

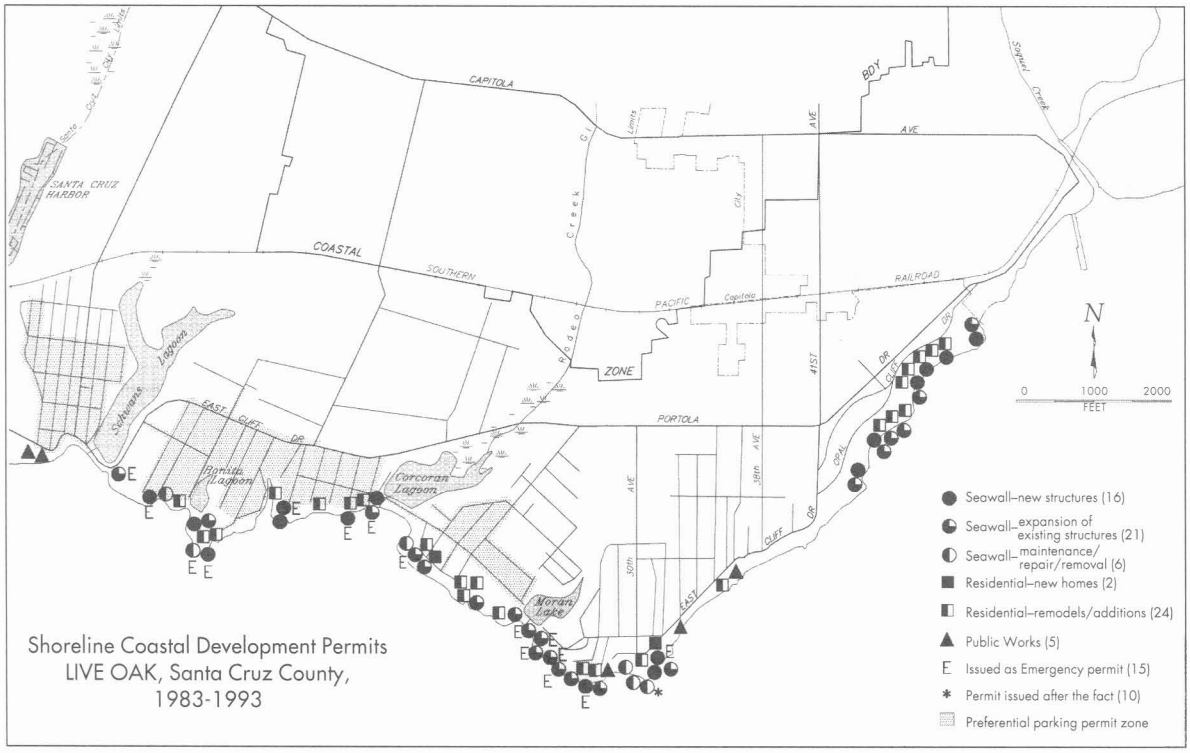
C&O: Do you see any hope on the horizon for this?

PD: Oh, yes. The Commission sponsored legislation to earmark coastal permit fees for the Coastal Conservancy to use as grants for opening and maintaining new accessways. Also, now that we have succeeded in getting our coastal whale's tail license plate authorized, proceeds from that will help. There is no question these accessways will become a priority as the population continues to grow.

As for thorny issues, high among them is dealing with the problem of cumulative impacts of development decisions. A lot of [permit] decisions continue to be made on a case-by-case basis, although cumulatively they can eliminate public resources and public values. Take shoreline protective works, for example: each one, by itself, does not show significant impacts to the public shore. But when you look at them together, you see that a significant amount of beach area has been lost to hard structures. Addressing cumulative impacts was an integral part of the Coastal Plan, but it's been difficult to implement. The tyranny of small decisions is

Many small, individual decisions, made during one decade, have had major cumulative impacts on the shoreline.

CALIFORNIA COASTAL COMMISSION



Shoreline Coastal Development Permits
LIVE OAK, Santa Cruz County,
1983-1993

LEO HETZEL

still with us. When a homeowner asks to build a seawall to protect his house from being washed away, his individual, personal need will often be more persuasive than the argument in behalf of the larger public.

Or consider public access. The situation has improved markedly since 1972, but has not kept pace with the needs of a growing population. As a result, there are more problems with traffic and parking, and tremendous clashes of interests between local residents and visitors. These realities translate into political pressures at the local level that then come to the Commission for resolution. Pressures are mounting to make infrastructure improvements and to restrict access to them through preferential parking programs, beach closures, parking lot closures, and beach curfews. The Commission has very carefully struggled with these conflicting demands, and we know these issues will only intensify in the future.

Beaches are being used more and more by local government to generate revenues.

C&O: Does the outcome depend on the makeup of the Commission?

PD: It always does. The Coastal Commission is made up of 12 individuals who represent a broad diversity of philosophies, views, opinions, and judgments, and where they're coming from—also where the appointing authority is coming from—will determine the types of decisions that are made.

C&O: The Commission recently approved a blufftop complex of officers' housing at Camp Pendleton, right above a beautiful beach and the world-famous Trestles surfbreak. Commission staff recommended that the Marines try to find a more suitable site on the large base, but the Commission went against staff. It's hard to see how this fits with the Coastal Act.

PD: We have a division of responsibilities in the coastal program. We, the staff, make the best professional call we can, and use a strict reading of the Coastal Act as a guide. It's up to the Commissioners, who are the policy makers, to make the judgments in a particular matter. If there are tradeoffs to be made, that's for the Commission to decide. The Marines did make some adjustments, they scaled the project down, and set the buildings back from the bluff edge. The Commission concluded that the modified project was consistent with the Coastal Act "to the maximum extent feasible"—the standard in our law.

C&O: What other issues are troubling?

PD: Beaches are being used more and more by local government to generate revenues. Volleyball tournaments, art festivals, farmers' markets, and other kinds of temporary events are becoming substantial moneymakers, not only for their sponsors but also for local government. People are finding that their favorite beaches are being preempted by these so-called temporary events; the events are lasting longer, and

LEO HETZEL

Top: View is south toward San Onofre State Beach ("Trestles Beach") from old Pacific Coast Highway.
Above: Blufftop trail, with housing development site behind the fence.

The State *of the* Coast

STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION

What was to be done about Devil's Slide, this slide-prone stretch of Highway 1 north of Half Moon Bay? For more than a decade Caltrans tried to build a much wider road over Montara Mountain. The proposal met with fierce opposition from citizens who argued that the existing road could be improved. The battle moved through the courts, without resolution. Then, at last, a new way out of the thicket was brought to the fore by a fresh group of citizens who joined the fight. They proposed that a two-lane tunnel be cut through the mountain. In November 1996, an astonishing three-fourths of the county's voters endorsed that solution.

the intervals between them are getting shorter. We're getting major complaints from people who say, hey, we're losing our beach half the year. It's happening in Manhattan Beach, Hermosa Beach, Santa Cruz, Santa Barbara, and other beach communities. Concerns have been raised at San Onofre State Park, where the state allows surfing tournaments. During such events, surf and beach areas are off-limits for anyone not part of the surfing contest. Such clashes are clearly going to become more intense in the future.

C&O: Who makes decisions on the use of beaches for events?

PD: Local governments and, on state beaches, State Parks. The Coastal Commission may become involved through appeals and in other ways. We have guidelines for the exclusion of temporary events from coastal permitting requirements. But we may have to adjust these guidelines. We're revisiting this issue now.

C&O: Do you see a growing tendency to use parks and beaches for commercial purposes?

PD: Yes. Los Angeles County took over state beaches after a pretty nasty fight, and part of the deal was that these beaches were not to be used for commercial purposes. Several months ago the Commission denied permits for the placement of kiosks and sun shelters with information and advertising on beaches. There was a lot of controversy. The County has been granted reconsideration on these permits, and they're back on our agenda for April. The County agreed to move these structures off the beach, and agreed that all funds raised from the advertising will be earmarked for beach recreation facilities and maintenance—in addition to, rather than as replacement for, existing funding. Our staff is recommending approval.

If you want to look at national trends, as the return-to-local-control movement picks up momentum, local governments are expected to carry increasing financial burdens without adequate attention to how they are going to pay for for them. We are seeing expectations that are totally unrealistic. The realities of this trend will come

Bolsa Chica Quandary

EVEN WITH the the Coastal Act in place to guide development, the disposition of many coastal properties remains a complicated and contentious business. The law is subject to interpretation, coastal commissioners are courted for their votes, other statutes and public agencies bear on land use options, citizens groups campaign for their interests. Tremendous financial and staff resources must be mobilized to resolve disputes.

Bolsa Chica historic wetlands, outlined above, with roads in the oilfield. The Coastal Commission approved 900 units of housing in the lowlands and 2,500 more on the mesa, seen in the foreground.

Each of these factors has been in play at Bolsa Chica, where a 25-year conflict finally appears to be near resolution. Bolsa Chica is a complex of 1,300 acres of historic wetlands and 300 acres of mesa in Orange County, surrounded by the City of Huntington Beach. Although much of the lowland acreage is isolated from tidal circulation and there is an active oil field on the site, the remaining wetlands teem with shorebirds and waterfowl. The state has already acquired 300 acres, 150 of which are the site of a spectacularly successful wetland restoration project. Local citizens have campaigned tirelessly for protection and restoration of the remaining 1,000 lowland acres, led by the Amigos de Bolsa Chica and joined more recently by the Bolsa Chica Land Trust and others.

The principal private owner of both the mesa and the lowlands has been equally persistent in pursuing development in this affluent, densely populated area. In January 1996, acting against the recommendation of its staff, the Coastal Commission voted to allow 900 houses on 180 acres of the lowlands, as well as 2,500 units on the mesa, with remaining lowlands to be restored.

The lowland site approved for development is interspersed with wetlands. Commission staff had advised that housing in coastal wetlands is not allowed under the Coastal Act. Various citizens groups have since sued the Commission. Soon after the Commission acted, it held hearings to consider firing its executive director, Peter Douglas. A deluge of public support for Douglas followed, and the matter was tabled. The change of speakership in the State Assembly, coupled with the changes in the speaker's appointees to the Commission, seems to have quieted the challenge.

Volunteer docents lead popular wetland tours.

Meanwhile, a coalition of public agencies has been working to secure protection for the contested lowlands through nonregulatory means. As of January 1997, a deal appears to be likely. It involves eight state and federal agencies, the ports of Los Angeles and Long Beach, and the principal landowner, Koll Real Estate Group. Koll is willing to sell 880 acres of the lowlands, including 140 acres on which the Commission has approved construction of housing. The ports will provide almost all the funding—$67.75 million as of this writing—to acquire the property and restore wetlands on 600 acres. Restoration of the remaining 280 acres must wait until oil extraction facilities are removed, in 15 years or so. The Coastal Conservancy is providing $1.5 million, including $500,000 granted by the U.S. Fish and Wildlife Service, and additional funding is being sought.

In exchange for funding wetland restoration, the ports will secure 454 acres of mitigation credit to offset impacts of filling marine habitat in San Pedro Harbor. The ports need to undertake this development to remain competitive with other West Coast ports, but must provide mitigation for adverse impacts on fish and wildlife habitat.

All the agencies that must act to complete this deal have done so. The last issue to be resolved hinges on responsibility for cleaning up contaminants on the site. Even though the current oil field operator has begun cleanup, additional work is needed to comply with state and federal statutes before wetland restoration begins. The parties to the project hope that this last issue, perhaps the most complex and challenging of all, can be resolved in time to acquire the property by the end of February.

If this deal goes through as planned, those who have fought long and hard for these wetlands will have won a substantial victory: Another 880 acres of historic wetlands will be protected permanently. Some 600 acres of wetlands will be restored, providing vital habitat for resident and migratory shorebirds and waterfowl, marine fisheries, and the many other species that rely upon scarce coastal wetlands for their continued existence. An additional 280 acres will be held in public ownership for future restoration. As part of the deal, the ports will receive mitigation credit that will enable them to undertake development that is vital to the state's economy.

—Melanie Denninger

PHOTOS: AMIGOS DE BOLSA CHICA

The State *of the* Coast

home to roost in a few years, so the move toward commercialization of beaches, and the clashes about that, will continue to be very significant issues for us. Agencies like the Coastal Commission, which keep in mind state policies and public values and interests, are going to be very important as local government tries desperately to make money so it can provide its constituents the services they demand.

C&O: The coastal zone is very narrow; many coastal problems originate upstream. Could it be that the Coastal Act has become outdated?

AERO PHOTOGRAPHERS, ED BRADY

Bodega Bay, in Sonoma County, was the scene of many battles. (View is toward the southwest.) In 1962, citizens stopped the building of a nuclear power plant on Bodega Head (top left) after excavation had already begun. The "hole in the head," has filled with water and is popular with birds, as well as with hikers and bicyclists using the three-mile shoreline trail. The trail was built by the Coastal Conservancy. Spud Point Marina, another Conservancy project (center right), serves commercial fishermen and recreational boats.

PD: The coastal zone boundary is politically based. It started out being scientifically based—geomorphologic considerations were used in the Coastal Plan of 1975—but political map drawing quickly took over. As a result, entire watersheds are not included. The Coastal Plan called for including all watersheds, but no one was going to go 30 miles or more inland in Los Angeles, for example.

But the Coastal Act is clearly not outdated. On the contrary, it's more important and necessary than ever. The beauty of this law is that it is largely adaptable and of evolving relevance. That does *not* mean that it can't be improved; it can and should be. But the nature of the problems the Act addresses has not changed, only their dimensions have changed. Local government tends to give priority to local needs, issues, and concerns. Local infrastructure and fiscal needs tend to override regional or extra-local interests and values. That is why the Act provides for a continuing greater-than-local state management presence.

Certainly the failure of coastal zone boundaries to embrace watersheds is a major weakness in the Coastal Act. But we can address watershed issues within the legal and institutional framework we have. On this point, I think it is important to warn about the fallacy of "systems" thinking as a panacea for our coastal environmental problems. The focus on "big picture" issues, "systems," and long-range planning is fine so long as it recognizes that resources have to be protected *where they exist.* In coastal management you have to protect wetlands and other habitat, public access, agricultural lands, land- and seascapes where they are. You have to focus on hazards where they are. It does little good to simply voice concerns about the forest if you are losing the trees.

C&O: What are a few other conflicts and dilemmas you see ahead?

PD: The clash of interests between public and private rights and coastal residents and visitors; growing pressure to expand urban development beyond previously established urban-rural limits as the search for funding at the local level becomes more desperate. There is also the challenge of preserving "community character" and cultural resources in areas being recycled (going through gentrification).

C&O: And the Commission, with existing powers, can address these issues?

PD: To some extent, yes. Land use change proposals will require approval from the Commission as amendments to local coastal programs. If zoning to protect agriculture is challenged, for example, by breaking up large ranches, that will result in very significant confrontations. We can expect it in the not too distant future.

C&O: Do you have what you need to confront these issues effectively?

PD: The most important element is public attitude. Will there be apathy and indifference, or awareness and active support? What's necessary is public involvement, public understanding, and public support for continued, effective coastal management; and beyond that, obviously, the resources necessary to do the job—fiscal resources and technical expertise. We are confronted right now with a serious

dilemma. The courts have substantially restricted the ability of land use management agencies to carry out their mandate and are demanding more technical precision in terms of the basis for regulatory decisions. Yet competition for limited fiscal resources is so fierce that funding for planning and management agencies is being reduced at all levels of government. So the tools aren't there to do what the courts say we have to do in the way of technically based decision-making. Unless we get those tools it will be virtually impossible for us to do our job of protecting human and natural community values along the coast.

C&O: Then those who would defeat the coastal program would win?

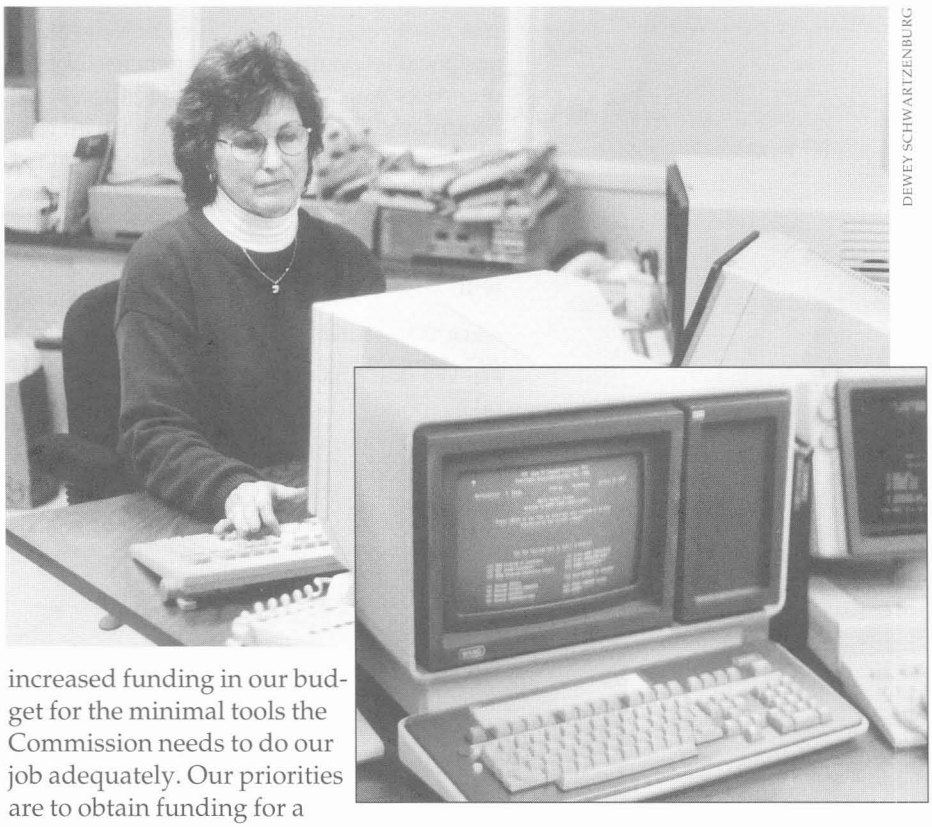
PD: There will be no "winners." The end result will be more litigation—a kind of obstacle course for development and orderly growth that's not in the best interest of the development community either. The legal requirements are still there and must be met. As long as the integrity of the Coastal Act is maintained, it's in the best interest of the development community to support adequate funding for the Commission to do its job. Historically we have had that support. During the [Gov. George] Deukmejian years, when he was cutting our budget with devastating regularity, it was the development community that stepped forward and said, "Wait a minute, as long as these requirements are on the books, you've got to give the Commission the resources to process our permits and do its regulatory job." So that dynamic will continue to be a factor.

And then, obviously, we will have to be even more creative in finding solutions to problems, sharing resources between state and local government, state and federal agencies, and integrating the various levels of governance, both horizontally and vertically. We can't afford the turf wars and duplication of effort so common in the past. Cooperation and coordination have been improving greatly, and as we develop our information technologies and capabilities to collect, track, and utilize data, we are much better able to apply those resources in an efficient and effective manner.

C&O: New tools like GIS [Geographic Information Systems] must help.

PD: We don't have GIS for daily application. We don't have a computer system that's networked. We don't have e-mail. We have WANGs that others threw out the window over a decade ago. One of our top priorities is to step out of the technological stone age. For example, it is imperative that we know what research is being done in areas of concern to us. If someone is monitoring water quality or runoff in a particular area, that research could serve multiple purposes if we knew about it sufficiently in advance to be able to tweak it or adjust it in such a way that multiple benefits could be derived from it. We accept the reality that we must do more with less. We have to engage that challenge and turn it to our advantage as we continue to "sell" the coastal program to the public and the legislature. The Commission has done a terrific job of making a few dollars go a long way toward carrying out the public's mandate to protect the coast.

We have asked the governor for increased funding in our budget for the minimal tools the Commission needs to do our job adequately. Our priorities are to obtain funding for a new computer system that links our offices and connects us with other public agencies; to build staff expertise in water quality, geology and mapping; to provide technical assistance to local governments completing and implementing LCPs; and to move forward with public access improvements. We were delighted that the governor's Coastal Initiative in his 1997-98 budget identified some of these needs for support.



DEWEY SCHWARTZENBURG

Don't try to e-mail your message to the Coastal Commission. Its ancient computer system does not allow staff to talk with each other or with the outside world. Noreen Clouse, the system's manager, works with three different platforms, including the Wang VS 65 system, with "dumb" terminals and centrally located software and files.

Unfortunately, several critical areas, such as Commission staffing to carry forward California's federally mandated coastal nonpoint source pollution control program, were not addressed.

C&O: Do you have the capacity you need to enforce your decisions?

PD: We didn't have the means until a few years ago, when the administration made enforcement a priority. Previously, we were criticized for lack of enforcement. We now have three full-time staff here who do enforcement, and people in each district office work part-time on it. We were down to one person to deal with literally hundreds of violation complaints. And that's another area where the answer is not only in tools, such as the power to issue cease-and-desist orders, or the ability to issue restoration orders instead of having to go to court. The better way to deal with enforcement is through task forces of federal, state, and local law enforcement agencies, like the one we established in the Santa Monica Mountains. We meet regularly with all the law enforcement agencies, share information, and coordinate resources. We need to take a similar approach in other regions, and we need additional funding to deal with enforcement.

C&O: What holds you back?

PD: We don't have the support resources. It takes money to save money. A good example is the water quality protection program for the Monterey Bay National Marine Sanctuary. (See *Coast & Ocean*, Autumn 1996.) It takes money to put such a program together, but once you get it together the savings are incredible and the program efficiencies are remarkable.

C&O: So overall, what's the future for California's coast?

PD: The public cares deeply about the coast and ocean. A profound, almost mystical bond has been forged between people and the coastal ocean. When it's threatened, the public responds in passionate defense. The amazing last-second success of the new coastal protection whale tail license plate is only one recent example of public support for coastal conservation. Over 2,000 plates were purchased in two days to meet the statutory year-end deadline of 5,000 sold. As I said before, the coast is never finally saved, it's always *being* saved. Because the biggest threat is public apathy, I am very optimistic. But to complement public activism it is important that citizens understand the issues that affect the health of our coast and ocean.

California's coastal program has compiled a remarkable record of accomplishment. Along with thoughtful and effective planning and regulation must come other strategies, such as public acquisition and restoration. Much remains to be done. We are working with other agencies as we build on the proud legacy we have already created for the benefit of current and future generations. ■

Rasa Gustaitis, editor of California Coast & Ocean, *interviewed Peter Douglas .*

RICHARD RETECKI

The fjord-like Estero Americano is part of the Gulf of the Farrallones National Marine Sanctuary and lies within the United Nations Central Coast International Biosphere Preserve. To help protect it, the Sonoma Land Trust and the Coastal Conservancy bought 86 acres of wetlands near Bodega Bay in December 1996.

FRANK BALTHIS

Ahead: A More Crowded Coast

MICHAEL L. FISCHER

SOME ACTIVISTS SAY conservation is like guerrilla warfare, in that you have to keep at it. The danger never goes away. Land use decision makers have a saying that echoes that idea: "A permit denied is simply a decision delayed." It's quite apt when applied to the Coastal Commission's work.

Just as the Pacific Ocean's waves unceasingly wash against our shores, so the challenges that confront coastal managers keep returning, in ever-changing but similar forms. Erecting regulatory barriers against them is essential but, ultimately, as futile as trying to keep our "collision coast" from moving inland by arming our seacliffs. That may buy time, but it's no long-term solution. We need to tap our imaginations and invent new and positive ways to meet the challenge and serve the future.

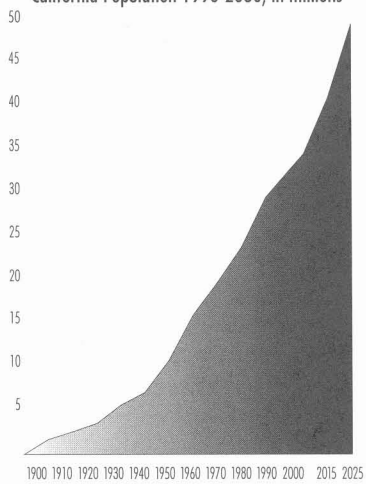
Anyone who has read a management handbook will recall this advice: Know your customers, focus on their needs, serve them well. For coastal managers, that's a tall order. Among our principal customers are future generations—future generations of all the species that depend on coastal zone resources for life itself, for a livelihood, or for spiritual enrichment.

The future is, of course, unknowable. We do know, however, that it will bring enormous population growth and development pressures. California's population, now 32 million, is expected to double to 64 million by the year 2040—that's little more than one generation from now.

Unless we drastically change the way we do things, we will need to double in a little over 40 years all that we have built in the state's short history: all the urban growth, all the subdivisions, all the roads, schools, the energy and other facilities we have today. Breathtaking. In a way, exhilarating. For those dedicated to coastal protection, threatening. Challenging. Because the coast is so beautiful, because clean air blows in from the ocean, because the coastal climate is more temperate than that of inland areas, the pressures to build on the coast will be far more intense than ever before.

Several years ago, a group of 40 of us who have been active in California coastal issues collaborated on a report, *Coastal Agenda 2000: Protecting and Managing California's*

California Population 1990-2030, in millions



Source: U.S. Census Bureau

At top, San Clemente beach

The State *of the* Coast

Among the many people who have given leadership, direction, and inspiration to California's coastal protection program are a few whose lives have ended. In particular, the Coastal Commission and the Coastal Conservancy remember:

Pat Callahan
John Cimolino
Don Coppock
Hank Doerfling
Jeff Frautschy
Duane Garrett
Bill Grader
Lenard Grote
Malcolm Love
Dwight May
Don McInnis
Darlene Micheltree
Dave Odell
Tom Pratte
Erv Renner
Pat Stebbins
Michael Wornum

Coast in the 21st Century. The report was prepared for the David and Lucile Packard Foundation as they looked ahead to establish their funding priorities. The three objectives that emerged in that report provide a useful outline for considering the changes and improvements we must make in our coastal program in the service of an expanding and increasingly diverse population:

1. Reestablish a firm, diverse, and sophisticated citizen base for coastal protection. Without that, governmental attention and commitment will waver. Even in good times, government actions alone will never protect the California coast.

2. Develop new partnerships among public agencies and private organizations. The terms "integrated coastal management," "sustainable development," "reinventing government," and "ecosystem management" offer nebulous direction. But these are sound concepts, and require that we forge new ways of doing the public's business. We must connect the economy to the environment; local agencies to the state and federal; general interests to the neighborhood; the neighborhood to the watershed; the future to the present.

3. Bridge the land/ocean interface. It's only a slight exaggeration to say that land use managers know nothing about the marine environment, and fisheries managers or marine scientists know nothing about private property rights and land use management. Coastal land and marine management must be coordinated. To do so will demand a series of projects that require those concerned with each area separately to collaborate over time.

There is one more very important point. Will Rogers put it this way: "Invest in land. They ain't makin' any more of it."

This generation has a duty to invest in purchasing coastal land for the benefit of coming generations. When viewed from a future perspective, current prices are incredibly low. If we wait, scenic, habitat, and recreational property will quite probably be lost to development or become too expensive to acquire. Bond issues are an appropriate—even essential—ingredient in our coastal management program. They also pass some of the cost on to the future.

One final reflection as we look ahead from our first 25 years of California coastal protection efforts: What a miracle, what a magnificent success it has been, by and large! In your mind's eye, take a trip along a favorite stretch of coastline—whether it be Humboldt Bay, the San Mateo coast, Big Sur, Nipomo Dunes, Malibu, or the San Diego lagoons. Remember how beautiful the coast was 25 years ago and note how much of that beauty—even immediately adjacent to major metropolitan areas—is still here today.

It hasn't stayed that way by accident. We all owe an immense debt of gratitude to the literally tens of thousands of Californians who have actively participated: city and county planning staffers, local planning commissioners, councilmembers, supervisors, landowners, architects, and citizens who have attended thousands of meetings—or voted in local elections—to help arrive at policy decisions that have, in fact, protected the coast. Since that probably includes everyone who will read these words, thank you! ■

Michael L. Fischer is the executive officer of the Coastal Conservancy. He was executive director of the Coastal Commission from 1978 to 1985.

JIM KING

Construction began in January on the connector channel, a Coastal Conservancy and U. S. Fish and Wildlife Service project to improve circulation in the Tijuana Estuary's Oneonta Slough, seen here looking west toward Seacoast Drive in Imperial Beach.

Redwood Parks

DOING MORE WITH LESS

NOAH TILGHMAN & RAY MURRAY

IT'S THE END OF A ROUTINE DAY for Park Ranger Richard French, and he's driving back to his living quarters in Prairie Creek Redwoods State Park. You know he's a State Parks ranger by his buff-colored Stetson and the forest-green uniform with the prowling grizzly bear shoulder patch. But what's this? The arrowhead symbol of the National Park Service is emblazoned on the door of his car.

No, you're not mixed up, and neither is this ranger. He is a member of the Rainbow Patrol, which serves both state and federal redwood parks on California's north coast. Today he worked with National Park staff rescuing a stranded hiker in a remote part of Prairie Creek State Park; he also saw to it that drinking water was supplied from a state park system to the Wolf Creek Outdoor School in the adjoining national park. He is now driving on a state park road that most recently has been maintained by a National Parks crew. He is assigned where he is most needed, regardless of whether it's on state or federal park land.

The Rainbow Patrol was set up in keeping with a unique state and federal partnership, which has brought an unprecedented level of cooperation in California's northernmost redwood parks within the past two years, saving park agencies' resources and improving services to the public. The goal of the partnership, according to a statement by Bill Ehorn and Bill Beat, recently retired superintendents of Redwood National and State Parks, is "to jointly manage the parks in order to provide maximum resource protection and the best visitor services possible into the 21st century."

In spring 1994, park officials signed a memorandum of understanding that covers parkland from north of Crescent City near the Oregon border to southeast of Orick deep into the Redwood Creek watershed. Nearly half of this parkland is in the State Parks system (Jedediah Smith, Prairie Creek, and Del Norte Coast Redwoods State Parks), the rest is in Redwood National Park. The entire area has been renamed Redwood National and State Parks, but it continues in state and federal ownership, as before.

Similar arrangements have been initiated in the San Francisco Bay Area and at Point Reyes, where national and state park lands are in close proximity. In the Santa Monica Mountains the State Parks/National Park Service partnership has expanded to include the Santa Monica Mountains Conservancy.

When resources are threatened—as recently when state highway improvements on the north coast might have destroyed up to 183 old-growth redwoods—the partners are discovering that their combined voices are more effective than separate expressions of concern might be. Design changes were achieved, and improvements will not harm the trees.

In 1968, when Congress established Redwood National Park, the enabling legislation envisioned a 74,451-acre national park that would incorporate the 34,780 acres of towering redwoods and pristine beaches of the state parks, which far-sighted Californians had established beginning in the early 1920s. The assumption that state lands would go to the federal government led to an adversarial relationship between the National and State Parks and hampered cooperation.

Under the partnership agreement, some supervisory and resource staff have been reassigned to common work

VALERIE WINEMILLER

locations, and projects of mutual benefit—such as connecting and repairing trails—have been undertaken jointly to lower costs. Savings are to be reinvested within the participating park units.

As a result, a national park interpreter may now greet you at a state park visitor center (or vice versa) and provide brochures describing all the parks within the partnership. Maintenance crews may pick up trash from your state park campground while en route to a national park site. This is good sense. Some friction could not be avoided in the adjustment, of course, but state and federal staff try to remember that each can do more with less by working together. ■

Noah Tilghman is senior park and recreation specialist, Restoration Management Division, California State Parks. Ray Murray is chief, Division of Planning, Grants, and Environmental Quality, Pacific/Great Basin, National Park Service.

Where to learn more? Visit the Redwoods National and State Parks home page at http://www.nps.gov/redw/

To the Rescue of the Southern Steelhead

WESLEY MARX

PHOTOS: ED HENKE

Top, Ed Henke with steelhead to 28" taken in summer 1946 in the Ventura River. Bottom: Ben Henke with steelhead to 22" taken in July 1945 in lower Coyote Creek, a tributary to the Ventura River.

MORE THAN 70 YEARS AGO, the dam on Malibu Creek severed a remarkable oceangoing fish from its shallow spawning grounds. Today that dam is being considered for demolition to protect this fish from extinction. This twist of fate stems from recent, long-overdue attention to a unique member of the Pacific salmon family, the southern steelhead, and to its primary birthplace, the coastal streams of southern California.

To the casual passerby, southern California's coastal streams seem to be resting places for stray grocery carts, bald tires, and other modern junk mired in puny trickles of scum water. They are places where, as Mark Twain once observed, you are more likely to get dusty than wet. But Ed Henke, a former San Francisco 49er who grew up in Ventura, remembers that in the 1940s, when he was a boy, creeks and rivers teemed with life. "Steelhead would come up the [Ventura] river by the thousands," he recalls. "We would line the banks and catch a dozen at a time."

Until the late 1940s, up to 50,000 steelhead would converge on coastal rivers between the Santa Ynez in Santa Barbara County and Rio Santo Domingo in northern Baja California, according to the National Marine Fisheries Service. By the 1960s, however, Ed Henke and other anglers had a choice of retiring their steelhead rigs or traveling north. (Henke now lives in Ashland, Oregon.) Dams and water diversions had turned southern California's life-giving streams into death traps. Silt runoff from

CALIFORNIA TROUT

Malibu Creek steelhead being released, Valentine's Day, 1993

development was burying gravel spawning beds; willows that had shaded streams were replaced by concrete embankments; and water temperatures rose above levels steelhead can tolerate. Some dam permits called for fishways to enable steelhead to reach upstream spawning grounds, but to many people such requirements reflected only wishful thinking and were fiscally irresponsible. The southern steelhead was by now so rare, someone quipped it was a "stealth fish"—harder to spot than the highly secret Stealth Bomber.

Extinction seemed near at hand for the southern steelhead, and yet occasional sightings persisted. Today remnant runs still exist in the Santa Ynez, Ventura, and Santa Clara systems, and in Malibu Creek, which is now the southernmost run.

It now appears that what a short time ago seemed inevitable may yet be prevented. Work is under way to restore life to southern rivers and creeks, including Malibu Creek. Serious consideration has been given to the possibility of removing the silted-in Rindge Dam, built in 1925 to impound water for a ranch. The now useless 100-foot-high concrete arch dam, built without fish ladders, today belongs to the state as part of Malibu Creek State Park. Its demolition would allow five miles of critical upstream habitat to be restored for steelhead.

GENETIC DIFFERENCES

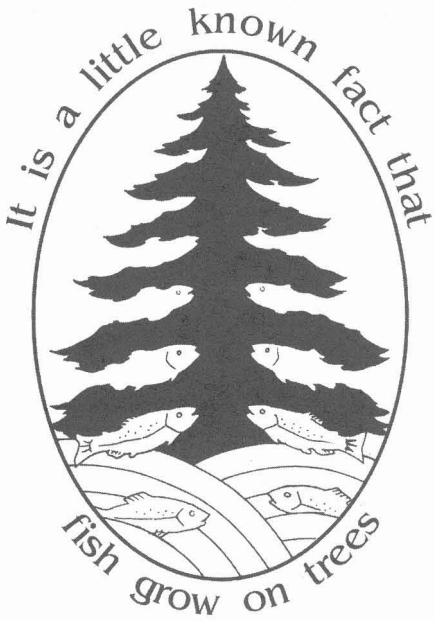
AMONG OTHER ENCOURAGING developments is a 1994 study by Jennifer Nielsen, a genetic ecologist at Stanford University's Hopkins Marine Station in Pacific Grove, who found that the southern steelhead are genetically distinct from northern populations, and that they have a higher level of genetic diversity. This greater diversity level indicates that the southern steelhead have evolved over a longer period of time and are a more ancestral population than the northern steelhead.

This study became more than academically relevant after the Oregon Natural Resources Council, with support from California Trout and Trout Unlimited, secured an order from the federal District Court of Northern California in March 1996 requiring the National Marine Fisheries Service to list the steelhead runs along the entire

The southern steelhead was by now so rare, someone quipped it was a "stealth fish"—harder to spot than the highly secret Stealth Bomber.

Pacific Coast as endangered or threatened under the federal Endangered Species Act. In July 1996 the Fisheries Service proposed such a listing and named southern steelhead as the most endangered population unit. A final determination will be made sometime in 1997. If the listing occurs, the Fisheries Service must develop and enforce a recovery plan in cooperation with state and local agencies.

Another salmon is destined for high stakes political attention as well. In October 1996, the Fisheries Service declared that runs of the coho salmon were threatened along the central California coast, from San Lorenzo River in Santa Cruz County to Ten Mile River in Mendocino County. By April 1997, the Service must also determine whether to list coho runs in northern California. Between the proposed listings for steelhead and the final listings for coho, virtually every coastal watershed from Malibu north to the Oregon border will need to have a meaningful recovery plan. The salmon and its human defenders can no longer be written off as political and legal non-entities.



PACIFIC STATES MARINE FISHERIES COMMISSION

Trees, shrubs and grasses along the streambank and in the floodplain help provide shade and food, protect the bank from erosion, and maintain water flows.

The recovery plan need not start from scratch. In February 1996, prodded by environmental and fishing organizations, the California Department of Fish and Game completed a statewide steelhead restoration plan. Stream by stream in southern California, the plan recommends fishways, flow regimes that recognize fish needs, screening of irrigation diversions, and restoration of spawning and rearing habitat. Such efforts would be incorporated into watershed plans being developed for systems like the Santa Clara River (see Summer 1996 *Coast & Ocean*). If included in a federal recovery plan, such measures could gain added funding and regulatory support. Because steelhead streams flow through the Los Padres and other National Forests, the U.S. Forest Service is already helping to fund Nielsen's genetic work. Both Fish and Game and the state Water Resources Control Board have authority to require water districts to mitigate damage to the state's fish stocks, the plan notes.

The restoration plan named both the Rindge Dam on Malibu Creek and the sand-stuffed Matilija Dam on the Ventura River as candidates for removal. The Matilija Dam blocks access to 10 miles of prime habitat. The silt that rendered these dams useless would have value if used to replenish sand-starved beaches or in construction projects, although, of course, moving it would not be easy. In the case of Malibu Creek, a county road leading from the base of the dam to the Pacific Coast Highway, 2.5 miles away, could provide coastal access to trucks, which is a good first step. In a 1995 report, the U.S. Bureau of Reclamation concluded that if and when a demolition project is undertaken, the sand behind the dam should be moved by truck, rather than slurries, to avoid damage to downstream habitat.

SAND FROM DAM TO BEACHES?

BEACHES ALONG MALIBU, including two state beaches—Las Tunas and Topanga—have been narrowing, and portions of the Pacific Coast Highway could be undermined. The Department of Fish and Game found that up to 70 percent of the 800,000 cubic yards of silt and sand behind the Rindge Dam is suitable for placement on beaches, and that it also has commercial value. An analysis conducted for the Department in 1994 found that sand behind the dam meets Environmental Protection Agency standards for beach placement.

Cost estimates for removing the dam and the sand behind it range from $5 million to $15 million, depending in part on how much sand is to be sold. No agency, or group of agencies, has yet developed a funding plan. We have more experience in building dams than in dismantling them. The cost-benefit ratio might turn out to be quite favorable if the economic benefits of restored beaches and restored steelhead are taken into account. A single fish can be

WESLEY MARX

Malibu Lagoon (left, behind the beach) is often polluted.

Malibu Creek and Lagoon to be Studied

MALIBU CREEK DRAINS a 105-square-mile watershed and pours water laden with nitrates and sediment into Malibu Lagoon. During dry months a sandbar builds up at the mouth of the creek, keeping this polluted water from flowing out into the ocean. For some years, the State Parks Department has dealt with the resulting problems, including algae blooms, by breaching the sandbar mechanically from time to time.

This practice was stopped recently for lack of the necessary Coastal Commission permit. It had caused a public outcry because the sudden release of polluted water into the surf zone was perceived as a health threat. An epidemiological study has shown unacceptably high human health risk to swimmers off the beach at the mouth of the creek. The effects of the breaching on the remnant southern steelhead run in the creek are not well-understood, nor is it clear what the effects of stopping the practice will be. To answer these and other questions, and to develop better management practices for the lagoon and the lower creek, the Coastal Conservancy has launched a comprehensive study, adding $100,000 to funds it has assembled from the Santa Monica Bay Foundation and the Environmental Protection Agency. The study, to begin in early 1997, will result in a management and enhancement plan to inform and guide action. The Santa Monica Bay Restoration Project has chosen Malibu Creek's watershed as its pilot for planning and restoration. The results of the Conservancy's study will be incorporated into the Restoration Project's work.

—*Julia McIver*

WESLEY MARX

Malibu Creek, with Pacific Coast Highway bridge.

Statewide, a doubling of the steelhead population, now estimated at 250,000, could add $37.5 million annually to the state economy. Increasing the sport catch in the Ventura River to 1,000 adult fish would generate an estimated $600,000 annually.

worth $75 to $300, based on sport fishing business revenues, i.e., fishing and outdoor equipment, lodging, guide services, and restaurant meals. Statewide, a doubling of the steelhead population, now estimated at 250,000, could add $37.5 million annually to the state economy. Increasing the sport catch in the Ventura River to 1,000 adult fish would generate an estimated $600,000 annually. Steelhead fishing is now limited to catch-and-release with barbless hooks during the non-spawning season (May through December) on the Ventura River and the other southern California streams with remnant steelhead runs. Historically, the size of the Ventura run was 5,000. In time, as stream restoration continues and the species recovers, steelhead could be reintroduced to streams south of Malibu, including Santa Margarita and San Mateo in San Diego County.

Steelhead need clear, clean water and use the entire stream system, so measures to protect them would benefit a broad spectrum of life. "The southern streams harbor other native fish that are endangered too," says Camm Swift, a fish biologist at Loyola Marymount University. The Fish and Wildlife Service, which is responsible for freshwater fish under the Endangered Species Act, has so listed the unarmored three-spine stickleback and may soon add the Santa Ana sucker.

Some water agencies claim that there is not enough water to spare for fish, endangered or not. "People can't drink fish," Frederick Gientke, manager of the United Water Conservation District in Ventura County told the *Los Angeles Times* in the wake of the proposed steelhead listing. To Jim Edmondson, executive director of California Trout, however, there is no water-versus-fish conflict. He notes that "under court order, the Los Angeles Department of Water and Power was required to restore flows to shrinking Mono Lake. The Department implemented measures like water conservation and reclamation to make up for the loss. The lake is now recovering," and Los Angeles is not going thirsty.

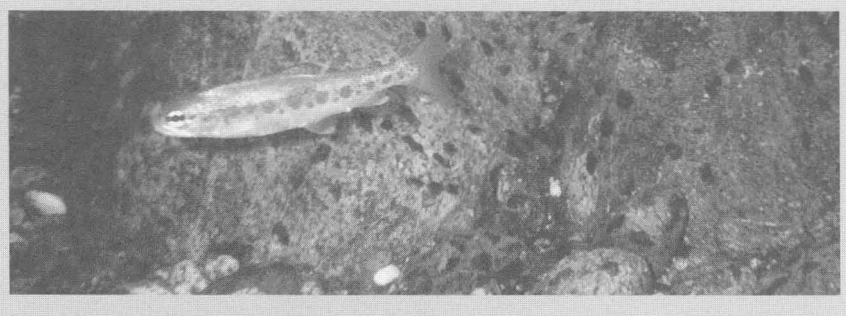
What happens if the recommendations in the state recovery plan remain paper bound? "We may have to go to court again," Edmondson says. "Under the Public Trust Doctrine, the state is obligated to protect public resources, including fish." ■

Wesley Marx, a frequent contributor to Coast & Ocean, *has written widely on ocean conservation issues. His books include* The Frail Ocean *and* Acts of God, Acts of Man.

Steelhead Life Cycle

STEELHEAD ARE A SPECIES OF PACIFIC SALMON that have adapted to the extreme changes of southern California rivers, whose headwaters may not have access to the ocean for several years at a time.

During hot, dry summers, portions of the streambeds dry up and sandbars build up at their mouths. By late fall, adult steelhead begin to arrive



CHRIS MARX

from the ocean, strong after two or three years of foraging. They mill at the ocean side of the sandbar until winter rains bring enough water down to breach the bar. Then they ascend to their upstream spawning grounds. By summer, their tiny progeny seek out deep pools in the stream and also move into the lagoon that has formed behind the bar. Steelhead do not have any set age for migration, and some may mature and spawn without ever leaving fresh water. These resident freshwater forms are usually called rainbow trout. Most stay in streams from one to four years before migrating to the ocean, where they mature.

Young steelhead enter ocean pastures with the rush of rain-swollen streams, even as their parents ascend once again to spawn, changing color from ocean silver to iridescent stream red. Unlike other salmon, steelhead do not necessarily die after spawning. Some repeat the cycle three or four times. Also unlike salmon, they can stray from one stream to another, depending on adequate flows and timely bar openings.

Even this flexibility does not enable steelhead to adapt to massive human disturbance of watersheds.

New Hope for San Francisco Bay Wetlands

A Joint Venture Fledges

NANCY SCHAEFER

A PAIR OF WHITE-TAILED KITES performed acrobatics against a clear sky as heavy equipment, squeaking and clanking, swarmed the construction site on the Hayward shoreline, reshaping 364 acres of diked baylands for the return of the tides. A crowd of some 70 people had gathered on a levee nearby to celebrate two events: the beginning of the restoration of Oro Loma marsh, and the formation of a new coalition, the San Francisco Bay Joint Venture.

This broad-based alliance, which aims to protect, restore, increase, and enhance wetlands around San Francisco Bay, is the 15th joint venture to be established in North America since 1986. That year, the governments of the U.S. and Canada signed an historic agreement, the North American Waterfowl Management Plan, to recover and safeguard waterfowl populations by protecting and restoring the wetlands and associated ecosystems upon which they depend. Mexico signed on in 1994. The plan called for the creation of public/private partnerships or joint ventures as vehicles for accomplishing the ambitious goals it had established.

The San Francisco Bay Joint Venture includes public agencies, environmental organizations, business representatives, and agricultural interests. It is funded by the Coastal Conservancy, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, National Park Service, and the California Resources Agency. Funding from the Trust for Public Land is also anticipated. Its establishment, and the September 25 Oro Loma marsh groundbreaking, mark a growing trend toward collaboration on wetland projects.

With public funding dwindling while the cost of wetland protection rises, no single entity can do much on its own, especially in areas where land values are high, the shoreline is choked by industry and urban development, and toxic cleanup costs can be exorbitant. The Oro Loma project exemplifies the obstacles that must be overcome.

After many years of wetland destruction, the tide has turned in San Francisco Bay. More than 40 projects to restore, protect, or enhance wetlands are under way or planned. If all are completed, tidal wetlands could be increased by as much as 60 percent.

In the early 1980s, plans for industrial development on this acreage were suspended after vigorous citizen protest. Several agencies joined forces to establish the Hayward Area Shoreline Planning Agency. Through the efforts of this agency, public ownership was ensured for much of the Hayward shoreline, including parts of Oro Loma. The East Bay Regional Park District purchased the rest of the marsh site in 1991, working with the Fish and Wildlife Service, Wildlife Conservation Board, Coastal Conservancy, City of Hayward, and Oro Loma Sanitary District.

The next step was to improve habitat on the newly acquired baylands. In 1989, representatives of government agencies joined concerned citizens to form the nine-member Seasonal Wetlands Enhancement Committee (SWEC) to wrestle with this task. Pipelines, transmission towers, and a trail running through the property were studied, as well as mosquitoes, which breed in moist cracks in the clay during dry summer months, and are a potential health hazard. Because conventional mosquito abatement techniques, such as discing or chemical spraying, can harm habitat and wildlife, an alternative method had to be found.

SWEC undertook an extensive planning process, funded by the Coastal Conservancy. After evaluating a range of enhancement alternatives, the group agreed on a plan. The site will be restored as a tidal marsh. Mosquitoes will be controlled by managing water levels. A bridge will be built to allow the Bay Trail to cross the new marsh.

Work is under way, under the guidance of the East Bay Regional Park District. The levee that separates the marsh from the bay is scheduled to be breached by summer 1997, allowing the tides to return.

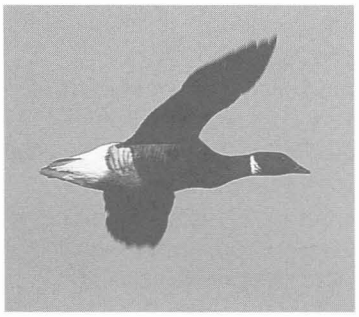
Partners in the planning, acquisition, and restoration of this marsh also include the California Department of Parks and Recreation, Alameda County Flood Control District, Alameda County Mosquito Abatement District, Hayward Area Recreation and Park District, the Golden Gate Chapter of the California Audubon Society, and a private corporation, KL-75, LLC, which contributed funds toward the site's acquisition to mitigate impacts of one of its projects on other bay wetlands. The restoration plan was developed by Levine-Fricke, an environmental consulting firm, working with the project partners. ■

For more information, contact Nancy Schaefer, coordinator of the San Francisco Bay Joint Venture, Coastal Conservancy, 1330 Broadway, 11th Floor, Oakland, CA 94612, 510-286-6767.

Brant Are On Their Way: *An E-Mail Story*

"My heart goes where the wild goose goes. . ." Who has not felt a restlessness and longing at the sight of the great migrations across the skies? Some lucky students in Alaska, Washington, Oregon, and Mexico can now do more than sing about it. They have been linked by e-mail to monitor the migration of some 130,000 Pacific black brant, the small dark geese that feed on eelgrass and can fly all the way from the Alaskan peninsula to Baja California in an amazing 52 hours. The Brant Project is funded by the U.S. Fish and Wildlife Service, the Lannan Foundation, *pro esteros,* Ducks Unlimited of Mexico, and participating school districts. A leading role in the project is being played by *pro esteros,* a bi-national citizens organization dedicated to conservation of the esturaries of Baja California.

PHOTOS: TOP AND CENTER: GARY KRAMER; BOTTOM: ERIC NELSON, HUMBOLDT BAY NATIONAL WILDLIFE RESERVE



BRANT ARE ON THE WAY

SUBJECT: Brant are on their way
DATE: Thu, 24 Oct 1996 15:29:46
FROM: Cold Bay School (Alaska)@ aol.com
TO: proester@telnor.net,
the coosbay school@ore.us,
alex@padillbay.gov,
Canadianschools@qBay.net,
folks@noaa.gov, folks@fws.gov

The students of Cold Bay school wish to report that the brant started to leave at 9:30 GMT on 23 October, 1996. The weather at Cold Bay was overcast with winds gusting to 42 mph at 288 degrees. The temperature was approximately 35 degrees F. Those in *pro esteros* can expect to see brant arriving approximately 52 hours after departure from Cold Bay. Keep us informed of your sightings. —*Cold Bay students*

SUBJECT: Brant are on their way
DATE: Thu, 24 Oct 96 15:04:00
FROM: the coosbay school@ ore.us
TO: Cold Bay School (Alaska)@ aol.com,
proester@telnor.net,
alex@padillbay.gov,
Canadianschools@qBay.net,
folks@noaa.gov, folks@fws.gov
TO: All

Great! We were really excited to hear the news. Best of luck!!!!!!!!!

SUBJECT: Report from San Quintín
DATE: Wed, 6 Nov 96 13:32:58
TO: All
FROM: Proesteros <proester@telnor.net>
HI EVERYONE:

This is our report from San Quintín (the school is not yet hooked up for e-mail): Brant were first spotted in San Quintín on October 26. On Friday we went to see them. The weather was very bad, with strong winds and rain. One of the local guides told us that with that kind of weather, the brant were outside the bay, where they can find a few beds of eelgrass, and the brant will enter the bay with the low tide.

We received reports of 182 brant north of Scammon's Lagoon, and around 200 in Guerrero Negro Bay. We hope to have the e-mail for the school next week.

—pro esteros *office Ensenada*

SUBJECT: Brant drink water
DATE: Wed, 6 Nov 96 13:34:22
FROM: alex@padillabay.gov
TO: All
DEAR BRANT MONITORS:

I have been wondering about brant geese spending so much time on and over salt water. Can anyone tell me if brant drink fresh water or salt water? —*Sincerely, Alex*

SUBJECT: RE: Brant drink water
DATE: Thu, 7 Nov 96 13:57:23
FROM: Neil@qBay.net
TO: alex@padillabay.gov

Brant are true sea geese and thus have salt glands that enable them to drink seawater. The paired salt glands are near the base of the bill and the eye sockets. Blood transfers excess salt to the glands which remove the salt and send it to the nasal cavity where it is released through the nostrils. I have, however, seen brant many times concentrating near small creeks and areas of freshwater runoff and have watched them apparently drinking, so unlike some seabirds (e.g., petrels), they can apparently drink both fresh and salt water.

—*Regards, Neil*

SUBJECT: San Quintín—the brant are here!
DATE: Wed, 13 Nov 96 14:04
FROM: SanQuintín<proester@telnor.net>
TO: All
HELLO TO EVERYONE:

We are the students at the high school near Bahía San Quintín. We have just connected our e-mail so sorry we did not report in person earlier. This is the very first electronic mail ever to go out of San Quintín!

We were unable to spot the brant the first day they arrived, because the weather was very bad. But two days later, some of us were able to find some of the geese, and since then more and more brant have arrived at the bay.

—*San Quintín students*

SUBJECT: Many brant are here
DATE: Mon, 2 Dec 96 10:02
FROM: San Quintín<proester@telnor.net>
TO: All
HELLO TO THE BRANT GROUP:

Right now there are over 20,000 brant in the bays at San Quintín. The scientists from SEMARNAP (Secretary for the Environment, Natural Resources, and Fisheries of Mexico) and from the Biosphere Reserve (Vizcaino) counted them.

Also, they told us that there are a few thousand *Branta* around the wetlands of Guerrero Negro and the Vizcaino Reserve to the south.

—*San Quintín students*

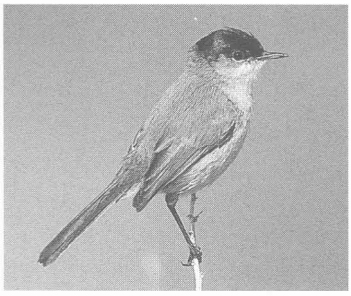
SUBJECT: Report from San Quintín
DATE: Wed, 4 Dec 96 13:12
FROM: San Quintín<proester@telnor.net>
TO: All
HI EVERYONE:

Having the computer hooked to e-mail has created a lot of excitement in San Quintín. Everyone comes in to the school to see how it works. The students tell them about our monitoring project and how important the wetlands are for the brant.

Also, I am pleased to report that the Secretary of Tourism for the State of Baja California (Norte), having heard about our brant project, has just announced that he will include the annual arrival of the *Branta* in his brochure of important eco-tourist attractions for our state.

—pro esteros *office Ensenada* ■

Return migration is expected at the end of March. Visit the brant home page at: **www.be.wednet.edu/blackbrandt** *or send e-mail to* frede@charleston.coosbay.k12.or.us, *or* alex@padillabay.gov *or contact* pro esteros *at:* proester@telnor.net 5187 Saddlebrook Drive, Oakland 94619, (510) 482-2867. *Some e-mail addresses in this article, which has been adapted from the* pro esteros *newsletter, have been altered.*



California gnatcatcher. Right: The Santa Margarita River, last free-flowing river in southern California, meets the ocean at Camp Pendleton Marine Corps Base.

FAR LEFT: JAMES R. GALLAGHER/SEA & SAGE AUDUBON LIBRARY; RIGHT: KIM STERRETT

Ecosystem Management: *Progress or Eyewash?*

MARC BEYELER AND ELENA EGER

FROM HIS HOME ABOVE THE mountain hamlet of Julian, nestled in the Peninsular Range Province 50 miles northeast of the San Diego shore, Michael Beck, a county planning commissioner and conservationist, enjoys a 100-mile east-west view on a clear day. In a single sweep of his gaze he can see the Salton Sea, the Anza-Borrego Desert, and the ocean beyond Del Mar and La Jolla.

The three-block-long town (population 2,700), dating back to the Gold Rush, is surrounded by state parks and natural forests. Economically, it depends on tourism, and is famous for its apples, fine apple pie, and its snow. Geographically it's in the transition zone between desert and foothills, at the headwaters of the San Dieguito River, which empties into the ocean at Del Mar.

For a decade, Beck has watched development creeping eastward from the coast toward the foothills. He had already seen this process once, growing up in Cucamonga, San Bernardino County. The pastoral landscape had been plowed under and paved over, and his native town strangled by "quintessential urban sprawl," he says. In Julian he rediscovered what his childhood landscape had lost: "a healthy natural environment and a strong sense of community." So he moved here 11 years ago. But now, as he once again watches the oncoming destruction, Beck realizes that no matter how hard a community tries to protect its values, it cannot, on its own, stem the tide of regional growth and development.

Beck came to the conclusion that vast landscapes, such as those he sees outside his windows, can only be preserved through large-scale ecosystem management. In 1991 he became a founder of the Endangered Habitats League, which sup-

SAN DIEGUITO RIVER PARK

Top: The San Dieguito River Estuary once looked much like the Santa Margarita Estuary. Work is now under way to protect what is left of natural habitat here, especially in the San Dieguito Lagoon (seen in part at bottom right), southeast of Del Mar.
Bottom: A vanishing sagebrush landscape, seen in 1986. At left, looking east/southeast from Del Mar Heights Road, east of Del Mar. A housing development now occupies the site where the photographer stood. (Turn the page to see what happened to the land.) The landscape seen at right is also covered with buildings now.

KIMBALL/NANESSENCE

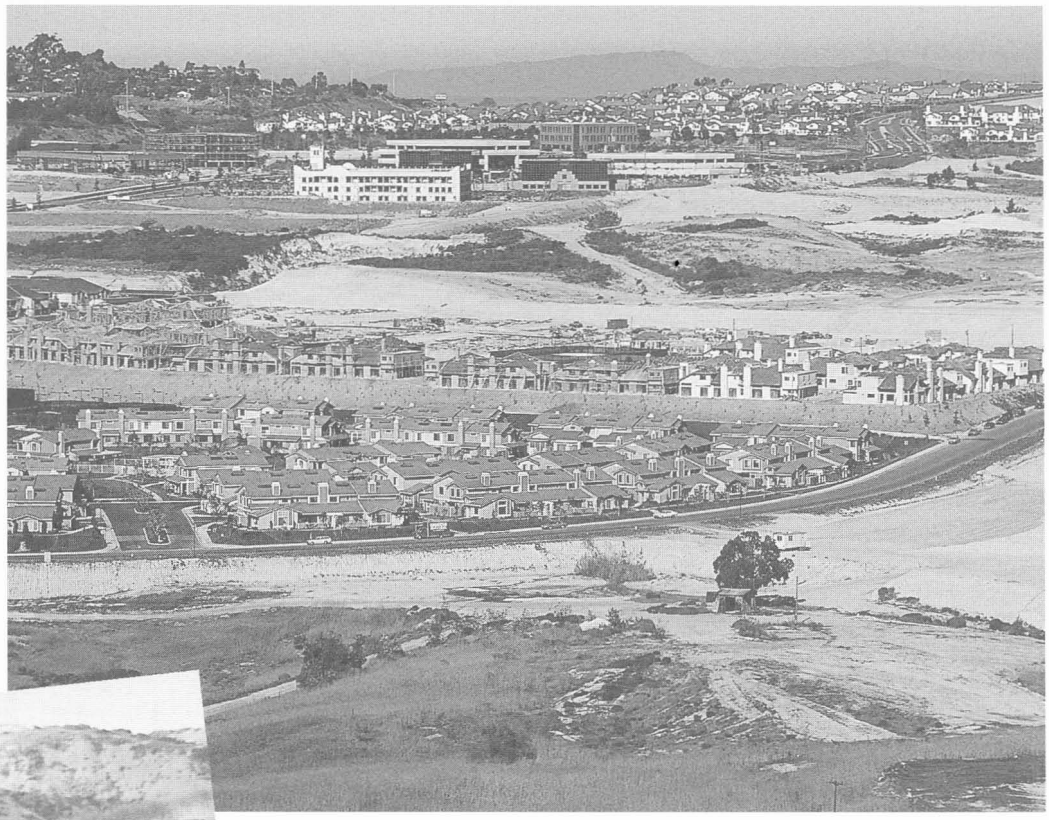
ports bioregional environmental strategies that encompass entire landscapes. The League's members include more than 30 conservation organizations, primarily in the highly urbanized and fragmented five-county region of southern California. Beck is now the League's San Diego County coordinator.

WHAT, EXACTLY, IS ECOSYSTEM MANAGEMENT?

IT IS NOW WIDELY UNDERSTOOD that the focus of conservation efforts needs to be expanded. To protect individual species, habitats of sufficient size are required (see Summer 1990 *Coast & Ocean* for article on wildlife corridors); to protect wetlands, land-use practices in the upper watersheds may have to be improved; to reduce water pollution offshore, numerous watersheds may have to be considered (see Summer 1996 *Coast & Ocean*). In all such conservation efforts, it is imperative that human beings be considered part of the landscape.

Conservation planning has begun to focus on large-scale processes in broadly defined eco- or bioregions, multiple watershed areas, and hydrologic basins. While watershed management is a favorite concept today, close on its heels is ecosystem management. Both concepts reflect a growing consensus about the limits of current regulatory approaches, the opportunities presented by new technologies, especially Geographic Information Systems (GIS), and various advances in environmental science and policy.

Top: Looking north/northwest toward the area seen, a few months earlier, on the previous page. Now freeways and buildings cover almost all the landscape.
Bottom: Where the cattle stand in this picture, taken in the early 1980s in what was the Los Peñasquitos Canyon Preserve, there is now a four-lane parkway, Sorrento Valley Boulevard. "Developers illegally flattened and graded a tributary canyon and mesa above the preserve," says photographer Chuck Kimball. "Lopez Canyon and a historic ranch house disappeared from the face of the earth."



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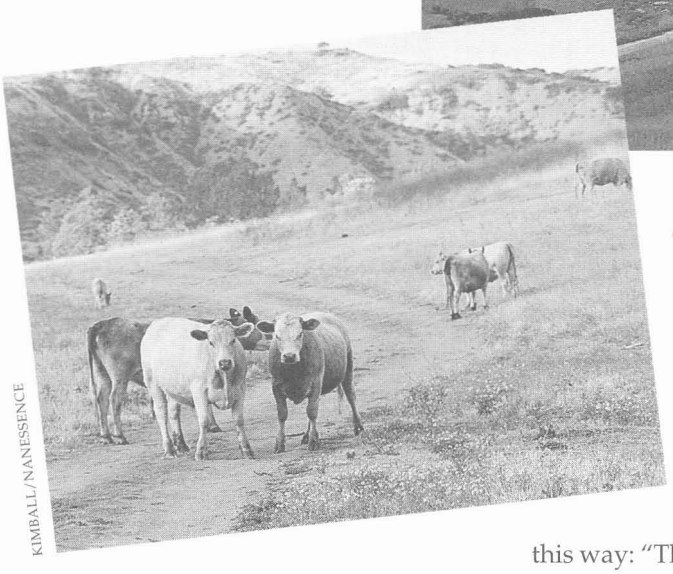


KIMBALL/NANESSENCE

Because the concept of ecosystem management is evolving, no single definition has yet gained wide acceptance. The *Keystone National Policy Dialogue on Ecosystem Management, Final Report, October 1996,* sums it up this way: "The idea of an ecosystem management approach is to address large-scale, long-term, complex problems by blending ecological, economic, and social goals, and by acknowledging that people are integral, interacting parts of nature."

Ed Grumbine, director of the Sierra Institute at the University of California, Santa Cruz, writing in the March 1994 issue of *Conservation Biology,* offers this working definition: "Ecosystem management integrates scientific knowledge of ecological relationships within a complex sociopolitical and values framework toward the general goal of protecting native ecosystem integrity over the long run."

Major ecosystem planning efforts along the California coast include the Natural Communities Conservation Planning (NCCP) program and the California-federal Bay-Delta Program. The NCCP is the largest and most advanced among the California programs, and the Endangered Habitats League is active in shaping it.

California Resources Secretary Douglas Wheeler launched the NCCP program in 1991 to avert "regulatory gridlock" and "species-by-species" battles. The program has two interdependent goals. The first is to protect habitat so as to benefit many species, not just those already listed as threatened and endangered, and thereby prevent others from declining to the point where they require special protection. The second is to offer some protection to landowners and developers who participate in NCCP programs. The program has attracted nationwide attention. "Integrated habitat conservation of this magnitude and degree has occurred nowhere else in the United States," Wheeler has said.

HOW REALISTIC ARE THESE GOALS?

IS THE NCCP A PATHBREAKING conservation program, or a political ploy to circumvent the federal and state Endangered Species Acts? Skeptics say the program could serve as a tool for dismantling environmental legislation without replacing the protection it offers. Joel Reynolds,

senior attorney for the Natural Resources Defense Council (NRDC), a national environmental organization, argued in an October 1995 talk at the California State Bar's annual Environmental Law Institute that current NCCP efforts lack adequate scientific peer review and offer too few opportunities for public participation. He charged that landowners are given overly broad (and possibly illegal) assurances that no changes will be required in the scope and scale of existing measures to protect and preserve habitat, and that NCCP does not insure that plans will be carried out because it does not guarantee necessary funding.

Beck agrees there are reasons for wariness but believes that the NCCP approach holds great promise. What shape the program assumes will depend on who plays an active role in the shaping. "We're in favor of the NCCP program, but at the same time we have been strong critics from its day one," he says. "The League's role has been one of stakeholder and constructive critic. Our objective has been to help fashion a legitimate ecosystem reserve—if that is possible—out of the mix of land use, politics, economics, and biology."

"As a strictly voluntary program without scientific oversight, the early NCCP appeared to promise a political solution but not, from our perspective, an ecological one," Beck continues. As the program has unfolded, moreover, he has found that it is different in each of the five counties involved. "In each case our support, or lack of it, is based on scrutiny of the biological integrity of the plan and feasibility of implementation," he says.

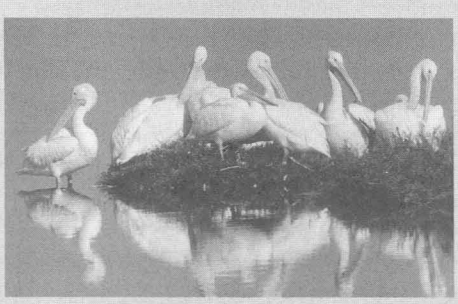
The future will depend on whether these initiatives are supported by high-priority attention, funding, and hard work based on a powerful vision.

ACROSS NATIONAL BOUNDARIES

BECAUSE NATIONAL boundaries cut across ecosystem boundaries, some of the new large-scale initiatives are necessarily international.

Standing in Borderfield State Park, in the shadow of the recently built ten-foot-high border fence, Kaare Kjos of the Environmental Committee of Tijuana–San Diego explains that "if we are to solve these complex problems, we must achieve new transboundary partnerships."

As he speaks, Kaare is confronted by the sounds of sirens, shorebirds, pounding surf, and helicopters clattering in the distance. To the north is the expanse of the Tijuana Estuary, and beyond, the urban sprawl of San Diego. To the south is the border wall and the Tijuana metropolis. The U.S. Environmental Protection Agency has named this region, of all those along the U.S.-Mexico border, as most in need of land-use planning and environmental problem-solving. Economic growth here is being threatened by lack of environmental protections. (See articles in *Coast & Ocean*, Summer 1993 and Winter/Spring 1994.)



PETER KNAPP

White pelicans know no national borders.

Water pollution is a major problem not only on the border between San Diego County and Tijuana but also to the north, in the Vancouver-Seattle-Tacoma area, which straddles the border between British Columbia and the State of Washington. Economic and population growth in the area has come with environmental degradation that includes urban sprawl, land use and transportation problems, and water pollution. The busiest border-crossing station on the continent is also here. Major growth industries include tourism, high technology, and Pacific Rim trade.

In 1994, British Columbia and Washington State signed an environmental cooperation agreement, grounded in the shared understanding that "environmental concerns and impacts respect neither physical nor political boundaries." The British Columbia/Washington Environmental Cooperation Council established a Marine Science Panel, which has presented a report on the current condition and trends in shared waters. Joint attention is now being given to these issues.

Among other binational efforts that address transborder marine pollution is the Programme of Action for the Protection of the Marine Environment from Land-Based Activities, negotiated in 1995 by the governments of Canada, Mexico, and the United States. Representatives of the three nations have selected two binational marine ecosystems as sites for projects, in the Gulf of Maine and in southern California–Baja California. The California project will seek to develop a strategy that encourages cooperative and collaborative partnerships, including the areas of coastal management and watershed and ecosystem planning. These partnerships are to link public agencies, local communities, businesses, and nonprofit organizations across the U.S.–Mexico border. The Coastal Conservancy is participating in the southern California project.

Protecting habitat values and restoring degraded habitats is time-consuming, often costly, and a practice for which the scientific techniques are still emerging.

SD&E lineman Alvin White helped to move a nest that a pair of red-tailed hawks had built in a dangerous location. The previous year a fledgling hatched by the same pair here had been electrocuted by touching a power line. The arm of the pole was extended another five feet so the next could be moved away from the line.

TED WALTON

GNATCATCHER LISTING OPENS THE WAY

IN 1993, THE STATE'S INTEREST in making the NCCP program work was heightened by the U.S. Fish and Wildlife Service's proposal to list the California gnatcatcher as threatened under the Endangered Species Act. What's left of this small bird's habitat in southern California, coastal sage scrub, is also the region's prime real estate. Development interests had a great stake in averting prolonged battles about habitat for this or any other species that might become a candidate for federal or state listing. Driven by a fear of costly court fights and delays, different interests welcomed the opportunity to seek broad agreement on a conservation approach that would benefit not only this small bird but multiple species and at the same time remove onerous regulatory requirements.

Now five years old, the NCCP program's local and state projects are concluding the planning stages and taking the first steps toward land acquisition and preservation. These processes are very complex, involving landowners and developers; federal, state, county, and municipal governments; and numerous nongovernmental advocacy and community organizations.

If plans requiring significant acquisition and enhancement of habitat lands are realized, they will help to resolve some of the most important land use planning problems in California. The pace and scale of development will be affected within some of the state's fastest-growing areas. Large-scale economic and employment benefits will result as new protection measures replace the time-consuming and costly species-by-species battles that have characterized development in this region for the past decade or more. In addition, many supporters of the NCCP effort believe that these current ecosystem-based plans will achieve better results than single-species efforts, which have failed to significantly protect and preserve species of concern within the past two decades.

The program's success will depend in large part on the interest and cooperation of landowners, public and private, who will have the most difficult challenges and most important stewardship functions. Protecting habitat values and restoring degraded habitats is time-consuming, often costly, and a practice for which the scientific techniques are still emerging.

HOW IT'S WORKING

THE FIVE-COUNTY AREA of the NCCP program is divided into regions and subregions. Progress is uneven. Los Angeles County has a small program on the Palos Verdes Peninsula. San Bernardino and Riverside Counties are considering NCCP programs for their regions. Orange County has two subregional programs, and San Diego County has three, at different stages of development. In the northern and southern subregions, multihabitat conservation plans are moving ahead, while in the eastern subregion the program is in its infancy.

One of the most energetic and substantial participants in the NCCP is the San Diego Gas & Electric Company (SDG&E), one of the county's largest landowners and employers. Its 4,000-square-mile service area contains about 75 percent of California's remaining gnatcatcher habitat. (This small bird also lives in Riverside, Orange, and Los Angeles Counties.) SDG&E was the first to complete a subregional conservation plan for multiple habitat and species protection, and by 1995 had successfully negotiated approval by federal and state regulatory agencies. This freed the company for 55 years from the requirement to obtain a permit from the U.S. Fish

and Wildlife Service and the California Department of Fish and Game each time it undertook to expand or repair any part of its energy infrastructure in areas protected by the federal and state Endangered Species Acts. The two agencies will monitor the plan's effectiveness. After 25 years the impacts on habitat will be reviewed, and at that time the mitigation requirements for those impacts can be modified. Separate, case-by-case permits will continue to be required for extraordinary expansions of the system, such as building a generating plant.

As part of its conservation plan, SDG&E has purchased two parcels of land—a total of 240 acres—selected from a list provided by the U.S. Fish and Wildlife Service and California Fish and Game as significant habitat areas, and turned them over to the agencies. This "conservation bank" is intended to mitigate unavoidable habitat damage by company activities during the next 55 years. However, "the most important mitigation measures in SDG&E's permit are the avoidance of impacts whenever possible," explained Don Rose, supervisor of land planning and natural resources for the utility. A newly published employee field guide, *Environmentally Sensitive Construction and Maintenance,* contains substantial changes in standard practices. For example, materials and crews must enter particularly sensitive areas by helicopter. Each field employee is required to take training in these practices.

In another NCCP effort in San Diego County, the U.S. Department of the Interior is working to establish a 50,000-acre wildlife refuge study area in the Otay-Sweetwater region near the California-Mexico border. The Bureau of Land Management is investigating the possibility of land trades to protect valuable habitat adjacent to this proposed refuge. Efforts are also under way to create a 150,000-acre regional preserve in the northern coastal zone, which, says Michael Beck, is even more fragmented than the southern zone.

All this is meant to secure contiguous habitat for the gnatcatcher and about 80 other species, mitigating the damage that will occur as population grows and economic development continues elsewhere in the coastal scrub of San Diego. In theory, both wildlife and development interests will benefit more than if mitigation continued to be required piecemeal. The regulatory process will be streamlined, and the gnatcatcher's prospects of survival will be better within a large protected habitat area than it would be among small preserves scattered throughout the vast urbanized landscape.

The NCCP initiative is one of several launched by Resources Secretary Wheeler to move California's fragmented conservation efforts toward synergistic cooperation. In 1991 he established the California Biodiversity Council, composed of representatives of 35 state, federal, and local agencies, which meets to exchange information, explore themes of common interest, and encourage regional efforts to promote biodiversity conservation consistent with economic development. Can California, and its coastal neighbors, protect environmental quality and natural resources in the face of rapid population growth and economic development? The current initiatives in ecosystem and bioregional planning offer some hope. The future will depend on whether they are supported by high-priority attention, funding, and hard work based on a powerful vision. ■

Marc Beyeler and Elena Eger are Coastal Conservancy staff members. They are working with the North American Commission for Environmental Cooperation on a pilot project to address land-based sources of marine pollution within the southern California Bight.

Rick Peterson, Terry Nebel, Tom Duncan, and John Hernandez (left to right) took field trips to learn how to identify sensitive plant and animal species. These three property management representatives and environmental surveyors now help train other SDG&E employees in habitat protection.

TED WALTON

A QUARTERLY newsletter, *Biodiversity News,* is available gratis from the Resources Agency, 1416 Ninth Street, Room 131, Sacramento, CA 95814, (916) 653-6560. The *Keystone National Policy Dialogue on Ecosystem Management, Final Report, October 1996,* is available from The Keystone Center, P.O. Box 8606, Keystone, CO 80435, (970) 468-5822, e-mail: tkcspp@keystone.org

GRAND FUTURE FOR CRISSY FIELD IN SAN FRANCISCO PRESIDIO

A $16 MILLION PLAN TO create a unique park on San Francisco's northern waterfront moved forward when the Coastal Conservancy committed $495,000 toward restoring dunes and a tidal marsh at Crissy Field.

The Conservancy's funds, approved December 5, will go toward recreating some of the natural landscape on the 100-acre site, which extends from the southern base of the Golden Gate Bridge east to the Marina Green, and is highly popular.

This stretch of shoreline along the Golden Gate was a dunescape edged by a tidal marsh until it was filled to build a race track for the 1915 Panama-Pacific International Exposition. Soon after, 28 acres of the site were converted to a grassy airstrip, the Army's first coastal defense airfield on the Pacific shore. Its name honors Major Dana Crissy, who was killed after taking off from this runway during a 1919 transcontinental air race. The field was decommissioned in 1936 and is now part of the Golden Gate National Recreation Area, along with the rest of the San Francisco Presidio. However, today one-third of the 100-acre site remains fenced off and disused.

The sandy beach, backed by remnants of the original dunes, is a magnet for San Franciscans and visitors, and the offshore waters provide world-class conditions for boardsailing (windsurfing). Between the beach and the fenced-off area runs the 1.25-mile Golden Gate Promenade, linking the Marina Green with historic Fort Point, under the Golden Gate Bridge. A walk along the Promenade, or along the beach, is a breezy and exhilarating experience. It offers views of Angel Island and the Marin headlands, and a sense of refreshing wildness within the city.

The plan will improve public access and restore natural resources at Crissy Field. The beach will be extended as rubble is removed from the shore. The Promenade will be improved. The original configuration of the landing strip will be restored and the old 28-acre field will become a meadow where people can fly kites, sit in the sun, and play with their children and dogs (off leash, if well-behaved). Acres of asphalt will be replaced with a 20-acre marsh, and dunes will be planted with native grasses. A boardwalk will enable people to walk or wheel across the marsh and dunes, and will provide educational opportunities for schoolchildren.

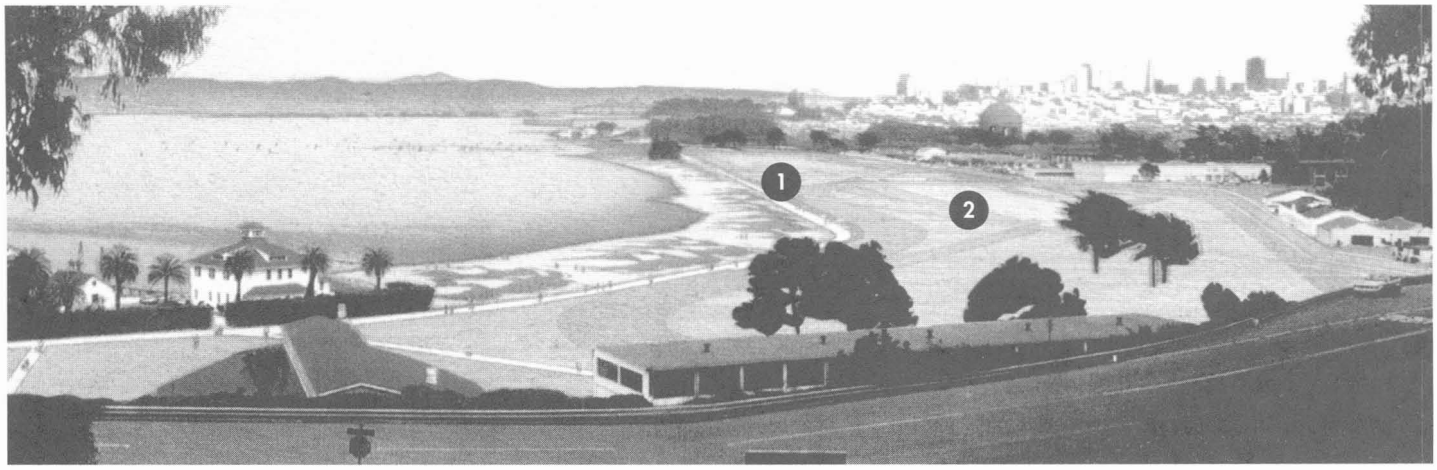
The Golden Gate National Parks Association has committed itself to raising $13 million from private sources to fund the bulk of the restoration plan. The City and County of San Francisco has committed $2.5 to $3 million for the marsh restoration, as mitigation for filling degraded wetlands at San Francisco International Airport. The wetland and dune restoration is scheduled to begin in spring 1998. The Conservancy's funding for this project had broad support, which included Congresswoman Nancy Pelosi, State Senator John Burton, the San Francisco chapter of the Sierra Club, and the California Waterfowl Association.

CARMEL RIVER MOUTH IMPROVEMENTS

UP TO $200,000 IN Coastal Conservancy funding will go to the Monterey Peninsula Regional Park District for a project that will restore and enhance wetlands at the mouth of the Carmel River, provide public access, and manage floodwaters on about 200 acres west of Highway One. Habitat for imperiled steelhead will be expanded and improved.

South of the river and directly west of Highway One is a 155-acre field owned by the State Parks Department and leased for artichoke growing. It will be restored as wildlife habitat. The Coastal Conservancy's funds will go toward preparing final specific plans for the restoration of a riparian forest on 110 acres of the field, dredging of

Plan for Crissy Field, looking east from above Fort Point. Wetland (1) will be restored east of the historic airfield (2).



CHRISTOPHER GRUBBS/GGNRA

PHOTO COURTESY MARIN AUDUBON SOCIETY

Marin Wetland Restored

The Marin Audubon Society has completed a 2.5-acre wetland restoration project on the north fork of Gallinas Creek in San Rafael, Marin County, on state-owned land. Funds from the U.S. Fish and Wildlife Service and the federal EPA were provided to the Society by the Coastal Conservancy. The project restored tidal wetlands, tidal channels, brackish seasonal wetlands, two wildlife islands, and upland habitat.

the lagoon near the river's mouth, evaluation of flood management alternatives, and trail construction. Currently, Caltrans is removing a levee on the south bank of the river and restoring riparian wetlands on the remaining 40 acres of the field. This restoration will improve conditions for steelhead in the lagoon, and for the many species of visiting birds, while alleviating flood problems on nearby developed land.

Current flood control operations in the Carmel River require breaching of the sand bar at the river's mouth to release water to the ocean. This action can harm juvenile steelhead that reside in the lagoon. To reduce the frequency of breaching, floodwaters will be allowed to overflow the restored wetlands.

The Carmel River lagoon and marsh attract a wide variety of birds (and birders). Many sightings of birds outside their usual range have been reported here. The completion of this restoration project should attract even more avian life. New trails and a footbridge will make the area more accessible, and will link Coastal Trail segments north and south of the Carmel River. The Coastal Conservancy has long been involved in the planning effort for the lower Carmel River.

Securing the Future of a Giant Coastal Ranch

THE COASTAL CONSERVANCY committed $100,000 to the Peninsula Open Space Trust (POST) to plan for the future of the 5,600-acre Cloverdale Coastal Ranch, the largest privately owned ranch in San Mateo County. POST acquired a three-year option to purchase the ranch at a bargain price of $7 million in May 1996, and is raising the funds necessary to accomplish the purchase. The Conservancy's funding, approved in December, will be used to develop a detailed conservation and restoration plan for the entire property.

Cloverdale Ranch, directly north of Año Nuevo State Reserve, contains redwood and fir forests, 250 acres of prime farmland, 14 miles of creeks, over a mile-and-a-half of ocean frontage, estuaries, tide pools, grasslands, and coastal bluffs with spectacular views of the ocean and Pigeon Point Lighthouse. Steelhead and one of the few coho salmon runs that remain south of San Francisco are supported by Gazos Creek, which flows through the property.

Also part of the property are eight legal parcels on the ocean side of Highway One, which could be developed under current zoning and coastal regulations. Acquisition of the ranch by POST, together with the preparation of a comprehensive plan for the property, will ensure that future uses will be in character with the unspoiled nature of the area. ■

UPPER NEWPORT BAY PROTECTION

THE HEALTH OF SOUTHERN California's largest functioning saltmarsh ecosystem, in upper Newport Bay, is being undermined by excessive sediment flowing down San Diego Creek, which flows through Tustin and Irvine. Sediment buildup in the bay has destroyed underwater habitat and turned mudflats into vegetated marsh, vegetated marsh into uplands. Tidal circulation has been reduced and algae blooms have spread in some areas, nourished by fertilizers in the runoff water flowing into the creek. In some areas of the 3.5-mile-long upper bay, water has turned pea green, and its surface is covered with floating green mats.

The Coastal Conservancy has allocated $140,000 to Orange County to alleviate this problem, and to improve water quality and fish habitat. The funds will add to over $500,000 already contributed by Orange County and the City of Newport Beach for work preparatory to constructing a new sediment-collecting basin in the bay. Construction of this basin will cost an estimated $5 million. Funds are expected from the state and/or private sources. A $10 million endowment has been proposed, to provide for periodic dredging of the basin.

The Department of Fish and Game

manages 752 acres of the 1,000-acre bay as an ecological reserve.

YEAH, YOU DID IT!

THANKS TO AN ELEVENTH-HOUR surge of orders, the California Coastal Commission has met its deadline to secure the "Whale Tail" coastal protection automobile license plate.

For the plate to be produced, 5,000 orders were required by the last day of 1996. As late as December 24, that goal seemed almost out of reach: only 2,200 orders had been received in the 14 months since the campaign to sell the plates began. In the final days before the statutory deadline, supporters rallied to the cause, pouring in 2,800 more orders. Regular Commission business stopped as planners and managers took turns answering phones. Just before 5 p.m. on New Year's Eve, the plate was won.

Since then, many more drivers have decided to go coastal. By mid-January the total number of orders was close to 6,000. The price is $50 for the first year, $40 when renewing. Personalized coastal plates are available for $90 for the first year, $65 when renewing. A portion of the first year cost and all of the renewal fee is tax-deductible. Sales will support a variety of coastal education and conservation programs.

To order a whale tail plate now, call 1-800-COAST-4U (282-7848). Before long, the Department of Motor Vehicles will be ready to take the orders.

MAPPING MALIBU CREEK POLLUTION SOURCES

WITH A GRANT OF $118,000 from the Coastal Conservancy, a two-year program is being developed by Heal the Bay, a nonprofit organization, to train volunteers to identify and map pollution sources in the Malibu Creek watershed. The information collected will be provided to landowners and cities in the watershed and to government agencies, so that new ways can be developed to keep polluted water from causing health hazards in Malibu Lagoon, which is next to Surfrider State Beach. (See pp. 22 to 26 for more on Malibu Creek.)

NONPROFIT GRANTS—ROUND TWO

THE COASTAL CONSERVANCY awarded grants ranging from $500 to $10,000 to 20 nonprofit organizations last August. Projects ranged from organizing watershed restoration efforts in Humboldt County, to helping fourth-graders restore a creek that flows into San Francisco Bay, to doing preliminary work toward land acquisitions in San Diego County.

Land trusts and other nonprofit land conservation organizations interested in applying for the second round of nonprofit grants can obtain application guidelines from the Conservancy. Proposals must be submitted by March 21. A total of $130,000 will be awarded in this round.

To be eligible, projects must meet two criteria. They must fall within the Conservancy's jurisdiction (the coastal zone, San Francisco Bay, or certain coastal watersheds), and they must directly protect significant natural habitat.

Call Janet Diehl or Lisa Ames at (510) 286-1015 to discuss potential projects before you apply, and to receive the new guidelines.

MORE GRANT MONEY

THE TRUST FOR PUBLIC Land (TPL) will award $37,000 in grants to California land trusts and $23,400 to land trusts in Hawaii for projects that increase the ability of local land protection organizations to preserve open space. Contact Herb Grench by phone or FAX at (415) 321-7995, or leave messages at (415) 495-5660 to request applications and revised guidelines. These grants are funded by the David and Lucile Packard Foundation. ■

More Legal Protection for Trail Providers

COASTAL CONSERVANCY

EFFORTS TO OPEN PUBLIC accessways to the shore have often been blocked, or slowed down, by worries about lawsuits. Public agencies, nonprofit organizations, and private landowners have for years been expressing concerns about the possibility that someone using a trail might be injured and sue the owner or operator. Despite the existence of statutes that protect from liability those who provide access for recreational use, these worries have persisted. Now another level of protection has been added.

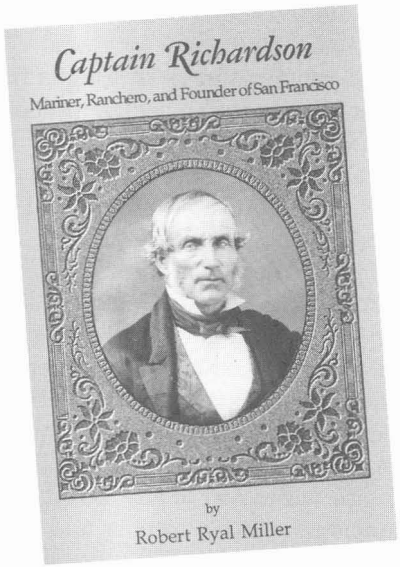
A new law, effective January 1, 1997, permits the State Board of Control to pay claims of reasonable attorneys' fees by owners of real property and public entities who prevail in court over someone who claims injury on a recreational trail. The maximum allowed per claim is $25,000, and the total annual maximum that can be paid out is $100,000. (See Civil Code, Sec. 846.1.)

This legislation was introduced last year as AB2291 by Assemblyman Wally Knox of Los Angeles County after the California Coastal Commission directed its staff to work with the legislature on the problem. We hope that this additional protection will encourage more agencies, groups, and landowners to step forward and help to open more access to the coast.

—Linda Locklin, access program manager, California Coastal Commission

Captain Richardson: Mariner, Ranchero, and Founder of San Francisco, *by Robert Ryal Miller. La Loma Press, 1636 La Loma Avenue, Berkeley, CA, 1996. 228 pp., $30 (cloth, limited edition, available from publisher).*

CAPTAIN WILLIAM ANTONIO Richardson is all but forgotten today, except that his name appears haphazardly attached to places around San Francisco Bay. Thousands of commuters cross the Richardson Bay Bridge daily; thousands more, having crossed the Golden Gate Bridge,



approach San Francisco along Richardson Way. A few of them may perhaps wonder about the name.

As described by Robert Ryal Miller, professor emeritus of history at California State University, Hayward, Richardson was a foremost pioneer in California development. Miller considers him to be the founder of both San Francisco and Sausalito. In 1822 he laid out the pueblo of Yerba Buena, which became San Francisco. He lived in a tent, and later a house with a fence to keep out mountain lions and bears, at what is now 827 Grant Avenue. Miller writes that Richardson also was the first to lay out the towns of Sonoma and San Diego, and the first to chart the waters of San Francisco Bay. As a ship's captain he was well-known for his excellent knowledge of coastal waters. He was the man to see if you wanted to ship a load of horses, hay, or hides from Los Angeles to Peru, or north to the presidio at what is now San Francisco.

This carefully researched short book establishes Richardson's importance in California history and fills gaps in our knowledge of the pre-Gold Rush years.

—*Margot Patterson Doss*

California Wildlife Viewing Guide, 2nd Edition, *by Jeanne L. Clark. Falcon Press, Helena and Billings, MT, 1996. 192 pp., $12.95 (paper).*

THE REVISED AND EXPANDED second edition of this useful handbook is substantially larger and more attractive than the first edition, published in 1992. More than 50 new sites are included (a total of 200), many photographs have been added, the color and printing are greatly improved, and information has, of course, been updated.

The compact *California Wildlife Viewing Guide* can serve as a delightful companion during any automobile or bicycle trip in the state. You can plan your trip around it, or simply take it along to consult as you go. It was produced as part of the National Watchable Wildlife Program, a partnership of government agencies and private organizations dedicated to promoting wildlife-related recreational, educational, and conservation opportunities. Each site was selected with the help of experts from many agencies and organizations. Each entry includes a site description, access information, and a listing of species to be seen, as well as viewing tips, maps, and photographs. Whether you are headed for the wilderness of the Mojave Desert or visiting the comfortable urban shores of Oakland's Lake Merritt, this book can enrich your experience, and add to your apprecia-

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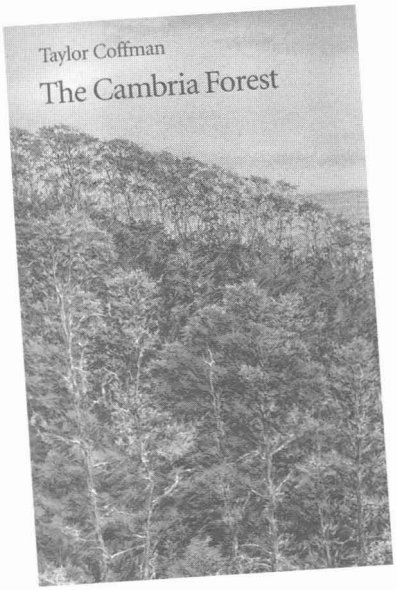
tion of California's natural heritage. It's well worth the price, even if you have the first edition. From each book sold, $1 goes to wildlife conservation efforts in California. —*HMH*

The Cambria Forest, *by Taylor Coffman. Coastal Heritage Press, Cambria, CA, 1995. 77 pp., $12.00 (paper).*

THE LOVE OF A PARTICULAR region, together with life-long observation and study of its native life forms, imparts a special warmth and unique character to a description of that place. Taylor Coffman focuses these qualities even more particularly upon a single species, the Monterey pine, *Pinus radiata,* as it occurs in the archipelagic or "island" forests around Cambria, in San Luis Obispo County. His work includes investigations in geology, climatology, and paleobotany, as well as historical accounts and personal observations, in an attempt to discover what causes the unique patterning of natural forests of these uncommon trees. Only about 11,000 acres of natural Monterey pine forest exist in the world, in five limited locations: Cambria, Monterey, and Point Año Nuevo in California, and Cedros and Guadalupe Islands, off Baja California.



In this handsomely designed small volume, the text is complemented by plentiful maps, drawings, and a cover painting, all by local artists, giving the whole an exceptionally integrated feel.
— *Hal Hughes*

52 Adventures In and Around Los Angeles, *by Lynn Gordon. Chronicle Books, San Francisco, 1996. $6.95.*

THIS IS A TRAVEL guide in the form of a pack of playing cards. Each card describes an "adventure" that requires little planning or money, merely a map. This item is not for the *serious* traveler, but it could be a fun way for a visitor to get to know Los Angeles or for a resident to discover new places. Each 2 1/4" x 3 1/2" card has a snappy title and is informative, within the limits of space. "Point Break," for example, gives pointers for Malibu beachside rambles; "The Shore Thing" suggests activities on or near the Santa Monica Pier; and "Dead Stars Society" tells where to go to see the final resting places of movie stars.
—*Christopher Kroll*

The Case Against the Global Economy, *edited by Jerry Mander and Edward Goldsmith. Sierra Club Books, San Francisco, 1996. 550 pp., $28.00 (cloth).*

CONVENTIONAL AND MEDIA wisdom has it that the defining innovation of the late twentieth century is the computer. A plausible alternative view, offered by this book, is that a more important evolution is occurring as the economies of countries and continents are interwoven into a global economy. This development is being aided by quick, cheap global communications and transportation, by globally interconnected computers, by the spread of a near-universal television culture, and by the nearly unchallenged ascendancy of capitalist economic doctrine. Organizing structures are provided by the World Trade Organization, the World Bank, GATT, NAFTA, and many other regional trade agreements, but especially by globe-spanning corporations.

Unlike the revolution in information technology, which exists in binary space and virtual reality, the global economy has real impacts on real people, real forests, real economies, and real cultures. The authors represented in this book argue that increased world trade is responsible for massive environmental damage, lower wages and living standards in both the developed countries and the third world, the destruction of local cultures throughout the world, the theft (through patenting) of life forms from indigenous peoples, the spread of infectious disease, undermining of small-town businesses, the potential for global financial collapse, the polarizing of Mexican society, and even the theft of body parts. They write of the "new corporate tyranny" and its environmental destruction as "unparalleled criminality."

You get the drift. The book starts out with an enormously compelling observation—that our infatuation with global free trade has been insufficiently examined, its risks minimized, and that media coverage has been largely fawning. But its editors then overembellish the theme with a mix of eco-liberal rhetoric, neo-militia paranoia, and a very large dollop of unproven assertions. It will resonate most strongly with true believers, and probably won't sway many of the high proportion of our national leaders and media representatives who have deep and perhaps unexamined faith in global free trade. It is at least provocative and a good step beyond Ross Perot's "giant sucking sound" analysis under which this theme has labored. ■

Dean Myszinski has directed the establishment of the California Research Bureau in the California State Library for the last five years. The Bureau is modeled on the Congressional Research Service at the Library of Congress. It provides policy research services to both houses of the legislature and the governor's office.

to the flight of
birds the arm
motions distances
appear, this is
all in order
this is the way the voice is
in the world
this way the
voice is in
motion,
spreading its
wings

—*Trane DeVore*

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