

Completing the
California
Coastal Trail



Completing the California Coastal Trail



DON NIERLICH



January 2003

This report is prepared pursuant to Chapter 446, Statutes of 2001.



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Mary Nichols, Secretary for Resources

Members of the Coastal Conservancy

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Sam Schuchat, Executive Officer

State Coastal Conservancy

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January 31, 2003

To the Members of the Legislature:

This report is submitted pursuant to Senate Bill 908 of 2001.

Completing the California Coastal Trail provides a strategic blueprint for a recreational facility that will have lasting value for California. The Coastal Trail will enable Californians to enjoy our coastal treasures and will attract visitors from around the world. The costs of accomplishing this are reasonable and the benefits manifest.

I believe that continuing investment in public access to California's coastline and parks is essential to maintain and improve our quality of life. As the State's population continues to grow, more recreational facilities will be needed; well-designed hiking, biking, and equestrian trails provide urban residents with opportunities to enjoy nature without imperiling sensitive habitat areas. State bond funds approved by California voters in 2000 and 2002 should enable the Coastal Conservancy, State Parks, the Wildlife Conservation Board, and other State agencies to complete many of the needed improvements within the next few years.

The California Coastal Trail is a concept that has captured the imagination of public officials at all levels of government. Inherent in a project of this scope, substantial physical and administrative obstacles lie ahead; we look forward to working with our State, local, and federal partners and the private sector to meet these challenges. In doing so, the support that this project has received from local community groups should be rewarded with an implementation program that reflects the highest quality of design and environmental protection.

We greatly appreciate the assistance provided to this planning effort by the many local volunteers associated with Coastwalk, and for the collaboration of our colleagues at State Parks and the Coastal Commission.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Sam Schuchat".

Sam Schuchat
Executive Officer

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Preparing This Report

THE LEGISLATURE AND the Governor directed the Coastal Conservancy, through SB908 of 2001, to report on a proposed trail that would stretch 1,300 miles along the entire California coast, across dozens of political jurisdictions, and to develop that report within a thirteen-month period (by January 31, 2003).

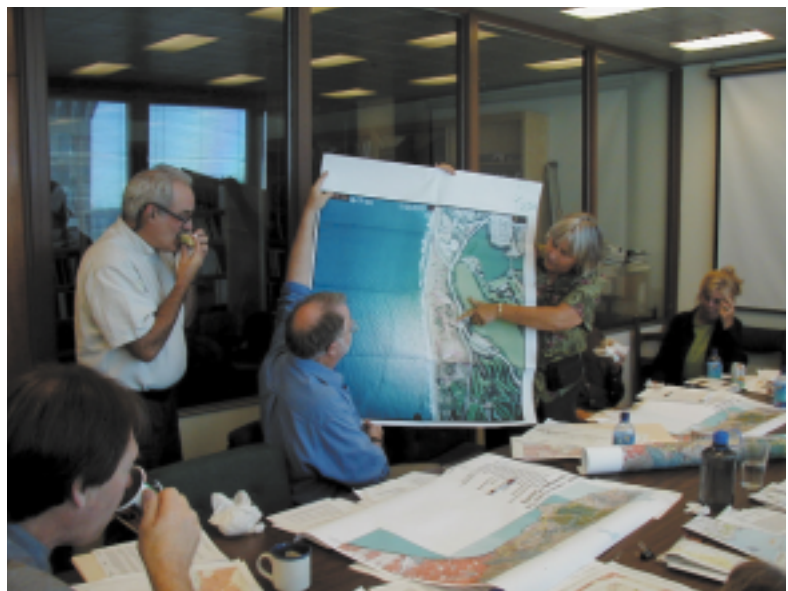
To meet this challenge, the Conservancy relied principally on two sources of information: (1) the Local Coastal Programs adopted by 60 local governments, further elaborated through interviews with staff members of these local agencies and the Coastal Commission; and (2) the two-volume *Hiking the California Coastal Trail* (by Bob Lorentzen and Richard Nichols) developed by the non-profit organization Coastwalk, Inc., and further elaborated through many site visits conducted by Coastwalk volunteers.

The collection and initial analysis of this information was principally conducted by Coastal Conservancy staff and mapped under the management of the Technical Services Division of the California Coastal Commission.

To evaluate policy issues regarding development of the Coastal Trail, and to develop recommendations regarding priority actions necessary to complete the trail, staff members of the Coastal Conservancy, the State Parks Department, and the Coastal Commission have worked in on-going consultation with the staff and board members of Coastwalk. This group met monthly during 2002 to oversee the production of this report.



DON NIERLICH



DON NIERLICH

The Coastal Trail Working Group

Goals for the California Coastal Trail

AS AN INITIAL STEP in defining what will be required to complete the Coastal Trail, the “Coastal Trail Working Group” (Coastal Conservancy, State Parks, Coastal Commission and Coastwalk, Inc.) agreed on the following:

Definition of the California Coastal Trail

A continuous public right-of-way along the California coastline; a trail designed to foster appreciation and stewardship of the scenic and natural resources of the coast through hiking and other complementary modes of nonmotorized transportation.

Objectives in Completing the California Coastal Trail

1. Provide a continuous trail as close to the ocean as possible, with connections to the shoreline (“vertical access”) at appropriate intervals and sufficient transportation access to encourage public use.
2. Foster cooperation between State, local, and federal public agencies in the planning, design, signing, and implementation of the Coastal Trail.
3. Increase public awareness of the costs and benefits associated with completion of the Coastal Trail.
4. Assure that the location and design of the Coastal Trail is consistent with



RICHARD NICHOLS

Hikers at Klamath River Overlook, Del Norte County



CARLA CHENAULT

Pfeiffer Beach, Big Sur

the policies of the California Coastal Act and local coastal programs, and is respectful of the rights of private landowners.

5. Design the California Coastal Trail to provide a valuable experience for the user by protecting the natural environment and cultural resources while providing public access to beaches, scenic vistas, wildlife viewing areas, recreational or interpretive facilities, and other points of interest.
6. Create linkages to other trail systems and to units of the State Park system, and use the Coastal Trail system to increase accessibility to coastal resources from urban population centers.



LINDA HANES

Fort Ross, Sonoma County

A Brief History of the California Coastal Trail

THE COAST OF CALIFORNIA has been used as a trail for as long as people have inhabited the land. Native tribes residing near the coast on a permanent or seasonal basis used the readily accessible beaches and coastal grassland bluffs as transportation and trading routes, and many subsequent visitors have trod those same paths.

The Portolá expedition of 1769 marked the first overland journey by Europeans along the California coast. This was followed a few years later by the de Anza expeditions. This latter effort is now commemorated by the Juan Bautista de Anza National Historic Trail, which shares part of its route with the Coastal Trail. In 1910 and 1911, J. Smeaton Chase explored the California coast on horseback. His record of this journey, published as *California Coast Trails*, describes the pleasure of traveling “within sight of the sea and within sound of its wise, admonitory voice.” More recently, in 1996, a determined band from the nonprofit group Coastwalk hiked the entire California coast to demonstrate that it was possible to do so despite many impediments.

In 2003, Coastwalk members plan to repeat this feat, again hiking the whole coast from Oregon to Mexico.

Policy makers and coastal managers have long planned for a continuous coastal trail in California. The Coastal Act of 1976 required local jurisdictions to identify an alignment for the California Coastal Trail in their Local Coastal Programs. In 1972, Proposition 20 provided that “A hiking, bicycle, and equestrian



Red Hill Trail, Sonoma County

DON NIERLICH



Coastwalk Whole Coast Hike, 1996

RICHARD NICHOLS



COURTESY OF THE MANHATTAN BEACH HISTORICAL SOCIETY

Early Manhattan Beach Pier

trails system shall be established along or near the coast” and that “ideally the trails system should be continuous and located near the shoreline.”

The California Coastal Trail was designated California's Millennium Legacy Trail in 1999 by Governor Davis and the White House Millennium Trail Council, encouraging federal agencies to assist in developing it.

State legislation in 2001 aimed at a focused effort to complete the Coastal Trail. Assembly Concurrent Resolution 20 (Pavley) declares the Coastal Trail an official state trail and urges the Coastal Commission and Coastal Conservancy to work collaboratively to complete it. Senate Bill 908 (Chesbro) charges the Coastal Conservancy, in cooperation with the Coastal Commission and State Parks Department, to submit to the Legislature a plan that describes how the Coastal Trail may be completed by 2008.



MARC BEYELER

Present-day Manhattan Beach Pier

Perspectives on Designing the Coastal Trail

What Should the Coastal Trail Be?

RICHARD NICHOLS

Executive Director, Coastwalk

PASSAGE OF SB 908, the Coastal Trail bill, was preceded by almost 20 years of advocacy by Coastwalk. Coastwalk brought this vision into public awareness by introducing people to the California Coastal Trail and the wonders of the coast with hiking and camping excursions in all 15 coastal counties. The task of Coastwalk, a non-profit citizens' organization, has been to educate the public, elected officials, and state agencies in the values and benefits of a continuous trail along the state's entire shoreline.

Hikers find inspiration and pleasure in walking a simple path along an interesting route. Coastwalk envisions a 1,300-mile hiking trail linking California's northern and southern borders through some of the planet's great landscapes; a trail that will extend along beaches, bluffs, and roadsides, through ancient redwood forests, over sand dunes, mountains, and cactus-covered hillsides, through towns, cities, parks, and historic sites. Respecting and protecting the terrain, the California Coastal Trail will vary widely, according to the character of the landscape and the built environment. In many areas it will be a path for hikers and equestrians through wilderness and along beaches; in other areas it will be a paved, urban pathway,



LINDA HANES

Sonoma State Beach

accessible to bicyclists, skaters, wheelchair riders, and others using nonmotorized transportation. It will be a braided trail in many places, designed as a cohesive system to accommodate many people and different uses.

The uniqueness of the California Coastal Trail derives from its proximity to the sea. The seashore offers openness and a sense of space that will encourage people to leave cars behind and explore this rare environment on

foot. The Coastal Trail will rival any long-distance trail in the world for scenic beauty, diverse landscapes and interesting locations.

Whether strolling along the Venice Beach boardwalk or contemplating a sunset from a secluded beach on the north coast, people who use the trail will enjoy and respect this fragile and unforgettable coastline, and wish to conserve it for future generations.



STEVE HORN

East Beach Coastal Trail, City of Santa Barbara

Principles for Designing the Coastal Trail

LEE OTTER

Central Coast District, California Coastal Commission

LINDA LOCKLIN

Coastal Access Program, California Coastal Commission

THE COASTAL COMMISSION and local communities have been working since 1972 to increase public access to the shoreline. Many, many opinions have been expressed regarding the appropriate design of public access facilities, and many proposals have been put forward for the establishment of a single set of standards for public trails along the California coast. These suggested standards generally address such topics as trail width, surfacing, setbacks from the edge of the coastal bluff, trail furniture, signing, and necessary accommodations for the needs of various user groups. The topic that seems to stimulate the most heartfelt and animated discussions, however, is the trail alignment, namely, just where should the trail go?

To answer this question in regard to the Coastal Trail we must know what user groups the trail will be designed to accommodate: hikers? bicyclists? mountain bikes or road bikes? people in wheelchairs? equestrians? We must also consider seasonal variations, such as beaches that are narrower in winter, nesting season for snowy plovers and least terns, and the elephant seal migration.

In the case of the Coastal Trail, existing development patterns or other constraints along some parts of the coast may dictate that more than one user mode will be obliged to share a single-trail alignment. But in areas that are subject to intensive use, experience has



DEWITT JONES

taught us that parallel tracks may be needed to accommodate different modes and to minimize conflicts. Experience has also shown us that if the trail is to be accepted and supported by our coastal communities, it must be adapted to local circumstances and sensibilities. One size does not fit all, nor would any single standardized model work for the entire Coastal Trail.

Therefore the Coastal Trail will be comprised of many differing segments,

each with its own character, reflecting the great diversity and variety found among our coastal communities. The trail also needs to be adaptable to environmental constraints, which may vary immensely over the course of a year. The challenge is to provide an orderly alignment to the trail system while at the same time allowing for community individuality. Thus, to assure a consistent high level of quality and connectivity throughout the length of the state, common principles are needed.

To meet this need, and to provide a framework for the task of identifying the route of the trail, Coastal Commission staff has drafted a set of Coastal Trail alignment principles, based on shared values. These principles are: proximity to the sea, connectivity, integrity, respect, and feasibility. Each of these principles, explained below, is based on the following premise:

The Coastal Trail is not a single designated pathway spanning the length of California's shoreline. It should be envisioned as a yarn comprised of several different but roughly parallel threads—here widely separated, there drawn together—with each thread being a particular trail alignment or trail improvement that responds to a specific need or accommodates a particular purpose. One thread may be for beach walkers, another for bicyclists, another may be merely an interim or temporary alignment, or may be placed where it is because of topography, land ownership, or natural barrier. Some threads may be seasonal paths to detour around a snowy plover nesting site, circumvent a sprayed agricultural field, or bypass winter high water where a fast-flowing river cuts a barrier across the beach. Yet when we step back, we can see that all the threads form a coherent whole.

The following principles of alignment would apply to all of the different components of the California Coastal Trail:

Proximity

Wherever feasible, the Coastal Trail should be within sight, sound, or at least the scent of the sea. The traveler should have a persisting awareness of the Pacific Ocean. It is the presence of the ocean that distinguishes the seaside trail from other visitor destinations.

Connectivity

The trail should effectively link starting points to destinations. Like pearls on a string, our parks, ports, communities, schools, trailheads, bus stops, visitor attractions, inns, campgrounds, restaurants, and other recreational assets are strung along the edge of our coast. They are already connected by roads, streets, and highways. Our challenge is to create alternative non-automotive connections that are sufficiently appealing to draw travelers out of their automobiles.



CARLA CHENAULT

Coastal Trail at Moonstone Beach, San Luis Obispo County



JOHN BRENNAN



ROBERT BUELTMAN

Integrity

The Coastal Trail should be continuous and separated from motor traffic. Continuity is vitally important: if a chain is missing a link, it is useless. Where such separation is absent, the safety, pleasure, and character of the trail are impaired. Appropriate separation can take many forms. Substantial horizontal distance is generally the most desirable, thus avoiding the sight, sound, and scent of the internal combustion engine. Separation is also possible through vertical displacements of gradient, underpasses, vegetative buffer strips, barrier rails, and other means.

Respect

The trail must be located and designed with a healthy regard for the protection of natural habitats, cultural and archaeological features, private property rights, neighborhoods, and agricultural operations along the way. Manmade features such as boardwalks, guidewires, and fencing can be used to protect wetlands, dunes, archaeological sites, and agricul-

tural fields. Screening fences and vegetative barriers not only protect residential privacy but may also minimize disturbance of sensitive bird habitats.

Respect also requires understanding that this trail will exist in a context of other trail designations, including the Pacific Coast Bike Route, Humboldt Bay Trail, Lost Coast Trail, San Mateo Coastside Trail, Monterey Bay Sanctuary Scenic Trail, Santa Monica Mountains Backbone Trail, Los Angeles South Bay Bicycle Trail, etc. Providing a clear identity for the Coastal Trail on maps, signs, and brochures should not compete with or displace these existing trail identities. Where the Coastal Trail alignment incorporates or is a component of these other trails, the Coastal Trail should be no more than a concurrent designation.

Feasibility

To achieve timely, tangible results with the resources that are available, both interim and long-term alignments of the Coastal Trail will need to be identified.

What Would Be the Public Benefits of Completing the Coastal Trail?

OUTDOOR ACTIVITIES are engrained in the culture of California and are a key attraction to the 300 million people who make California the “most visited state in America.” The completed California Coastal Trail will be a state resource and a national treasure. Because of the diversity of the California coast, this trail will draw a far more varied mix of visitors than is usually found among trail enthusiasts.

Long-distance trails provide far-reaching benefits to the communities through which they pass. Trails have significant, well-documented quality-of-life benefits to health, the economy, and the environment.

Economic Benefits

Studies indicate that trails are an economic boon for communities.

The American Hiking Society's fact sheet, *The Economic Benefits of Hiking*, states, “In the year 2000, almost one-third of Americans, that's 67 million people, went hiking. The USDA Forest Service is predicting a steep increase in backpacking and hiking . . . over the next 50 years.” The report goes on to say, “communities are recognizing the economic, social, and health benefits of trails and hiking . . . [and] Revenues generated from trail-related recreation and sports activities provide substantial income and employment opportunities.”



Venice Beach Boardwalk

DON NIERLICH

Many studies support these conclusions:

- In 2000 Americans spent \$213 million on hiking boots, \$284 million on backpacks, \$78 million on tents, and \$86 million on sleeping bags, according to the American Hiking Society.
- Recreational trails were described as the second-most-important community amenity in a 2002 survey of potential home purchasers conducted by the American Association of Homebuilders, and a 1995 study by American Lives, Inc. found that homebuyers rated proximity to walking and bicycle paths as the third-most-important factor in choosing a home.
- A 1995 survey of real estate agents in the Denver metropolitan area indicated that 73 percent of the agents believed that a nearby recreational trail would make it easier to sell a home.
- A study in Boulder, Colorado indicated that the average value of a home adjacent to a park area with trails would be one-third greater than the value of the same property 3,200 feet away from the park.
- In a 1998 National Park Service survey, 61 businesses located along the 35-mile Missouri State Trail reported that the trail was having a positive effect on their business.

The California Coastal Trail promises to deliver the benefits indicated in these studies. On the rural north coast, where traditional resource-dependent economies are in decline, scenic and open-space values are high and tourism is on the rise. Long-distance trails serve to attract visitors who will spend money at restaurants, hotels, campgrounds, retail stores, and movie theatres.

In the more urban coastal communities of central and southern California, public beaches and scenic open space enhance the quality of residential life and help to provide a competitive edge in the effort to attract new employers. The commercial tourism industry in these areas, already a strong component of regional economies, is also strengthened by continuing public investment in accessible recreational amenities.

Environmental Protection and Enhancement

If well-designed and managed, the California Coastal Trail can be a powerful tool for conserving the environment, protecting habitat, and providing public access to natural areas in the coastal zone.

- Trails provide corridors for animals to travel between protected habitat areas.
- Established, marked trails help to channel human use so as to minimize impacts, enabling people to experience environmentally sensitive areas without damaging those resources.



A trail designed to protect sensitive habitat

PHILIP SADLER

- Bringing people into closer contact with natural resources will foster an appreciation of environmental values and provide opportunities to encourage environmental stewardship through interpretive programs and trailside materials.
- By encouraging nonmotorized transportation, trails may reduce the release of carbon dioxide and other pollutants. (Over one year, substituting human-powered transportation for two miles of daily driving will spare the air of 730 pounds of carbon dioxide emissions.)
- Development of the Coastal Trail will be subject to all regulatory requirements of the California Coastal Act, assuring an appropriate balance between public use and the protection of sensitive natural resources.



Lupine, Sonoma County

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Quality-of-Life Benefits

Recreation

The noun “recreation” is defined as “refreshment of one’s mind or body through some activity that amuses or stimulates.” The verb “recreate” is defined “to refresh mentally or physically.” For millions of people these definitions convey the very reason they use trails. Hiking and other forms of outdoor activity have an immediate and positive effect on physical, mental, and spiritual well-being.

Pleasant surroundings such as greenways, parks, and tree-lined streets in cities, and open space, farms, parks, and wilderness areas in the country, only heighten these benefits. Human desire to actively connect with nature not only benefits human well-being, but benefits the lives and habitats of other creatures. Aldo Leopold said in *A Sand County Almanac*, “When we see land as a community to which we belong, we may



Free recreation for children, youth, and adults along Venice Beach

DON NIERLICH

begin to use it with love and respect.”

Trails lead many people to the idea that we humans must save the land and all the creatures on it.

Recreational activities also benefit communities. They enhance a community’s sense of place, strengthen families, build support for parks and trails, add to economic diversity and health, and lower the cost of skyrocketing health care.

Recreation, then, has a much deeper meaning than just “having fun.” Recreation contributes to personal health and encourages respect for nature. People are happier; communities are stronger.

People who love the coast come to respect its fragile beauty, people who walk the coast want to share it with others in an environmentally sensitive way, and the Coastal Trail can inspire these sentiments.

Transportation

The concept of using trails for transportation—moving oneself or things from one place to another—rather than for recreation, is not readily understood or accepted in a culture dominated by the automobile. We as a culture have drifted away from the idea of using our own energy instead of fossil fuel to transport ourselves. Polls have shown that many people would bike to work if trails existed. Studies have indicated that half of all trips are for three miles or under. If we as a society turn from the regular use of the automobile and either walk or ride to work, our health will improve, stress related to traffic congestion will drop, air quality will improve, we will have less reliance on fossil fuels, and we will save money by using our own bodies instead of automobiles.



STEVE HORN

Bicycling on the Coastal Trail in Los Angeles County

Public Health Benefits

A multitude of scientific studies prove that regular exercise is good for mind and body. The American Heart Association suggests that a vigorous 30 to 60 minute walk three or four times a week can help to control weight, prevent heart disease, decrease hypertension, relieve stress and depression, slow the aging process, prevent and control diabetes, improve arthritis and relieve back pain. It is surprising to learn that in spite of this conclusive evidence only about fifteen percent of American adults participate in even moderate regular exercise.

Simply put, it is invigorating and energizing to be in nature. As Francesca Lyman writes in an article in the Trust for Public Land's *Land and People* magazine, there is "a growing body of evidence in a variety of disciplines—from biology to environmental psychology to landscape architecture—that natural surroundings may make us humans healthi-

er, and maybe even happier and smarter." This connection between trails, nature, and health, as embodied in the Trails and Greenways movement to create greenways in and around cities, has been understood by outdoor adventurers and "nature lovers" for years.

Now, through improving accessibility to coastline trails, there is an opportunity for many more people to experience these healthful benefits. In a society in which many people are overweight and chronic illness such as heart disease is rising, a lack of convenient access to recreational opportunities is commonly cited as a barrier to regular exercise. The Coastal Trail will be close to millions of homes and workplaces and it can provide a low-cost exercise alternative to indoor fitness facilities. Along with the many other trails systems that are slowly growing, the Coastal Trail can make a significant contribution to encouraging physical fitness and reducing public health costs.

What Would Be the Public Costs of Completing and Operating the Coastal Trail?

THE CALIFORNIA COASTAL Trail will offer experiences that range from a stroll on a sandy beach to roller skating on a concrete esplanade; and from a horseback ride through deep forest to a hike along a barren bluff. To provide these public recreational experiences a variety of financial commitments are required, including both one-time capital outlay for acquisition of new rights-of-way, construction of a variety of trail surfaces, installation of directional and interpretive signs, improvements to numerous public highways, etc., and ongoing expenditures for supervising public use of these facilities and planning for their maintenance and repair.

While the costs of specific trail improvement projects will vary from site to site, by comparison with the known costs of recent acquisition and trail improvement projects it is possible to provide a reliable estimate of the total capital outlay costs necessary to complete the Coastal Trail in accordance with the recommendations made in this report.

Acquisition and Construction

For the purpose of providing a planning estimate, the principal capital outlay costs of completing the Coastal Trail may be described for the following categories:



KEN MCKOWEN

The California Conservation Corps works on wilderness trails.



PEETER VILMS

California Conservation Corps workers construct trails throughout the state.

- **Acquisition of new right-of-way for nonmotorized trails**, including both (a) fee title acquisitions and (b) acquisition of trail easements only;
- **Construction of new trails**, including both (a) hard-surface, all-weather, fully accessible pathways and (b) rural trails of lesser surfacing and utility;
- **Improvements to highway shoulders** to enable nonmotorized traffic to use these routes safely;
- **Installation of signs**, for directional and interpretive purposes; and
- **Planning, design, environmental analyses, and permitting** for all of the above.

These categories do not take into account unique conditions that may add substantially to the cost of completing the trail, or the indirect costs of recreational support facilities that may be associated with trails. These would include the **construction of urban waterfront esplanades** for high-volume traffic areas; the **construction of bridging, stairways, boardwalks, raised embankments, etc.**, that may be needed to provide trail continuity in difficult topographic conditions or areas of unusual environmental sensitivity; and the **construction of parking facilities, restrooms, and other access support amenities**. Even for planning purposes, these extraordinary costs cannot be estimated with any

degree of accuracy in advance of specific project designs.

Figure 1 (below) indicates the estimated number of miles within each county for which capital improvements would be required in order to complete the trail as recommended in this report.

Figure 2 (following page) indicates the estimated cost of carrying out each category of activity. A range of costs has been provided for each category of capital outlay activity, reflecting the variety of circumstances along the 1,300 mile trail route. These cost estimates have been derived from actual Coastal Conservancy project expenditures representative of each type of action, adjusted for inflation to current dollars. Estimated costs of “land acquisition” assume the purchase of public trail rights-of-way only, whether

by easement or fee title, not the total cost of acquiring larger coastal parcels.

These are rough estimates of capital outlay costs, for planning purposes. Reflecting that, a range of costs has been provided. More accurate cost estimates would require the completion of site-specific studies—whether appraisals of property or designs and environmental analyses for construction—beyond the scope of this report. Nonetheless, some basic conclusions may be drawn about the capital outlay costs of completing the Coastal Trail:

- Given the sensitivity of the Coastal Trail route, costs of planning, design, environmental analysis, and permitting will be substantial, and at many sites may exceed the costs of physical construction.

Figure 1. Improvements Needed to Complete the Coastal Trail: Estimated Linear Miles by County

County	Highway Corridor Improvements	Acquisition/ Construction on Private Lands	Construction on Public Lands	Current Improvements Adequate	Totals
Del Norte	4 miles	4 miles	17 miles	46 miles	71 miles
Humboldt	3 miles	50 miles	9 miles	92 miles	154 miles
Mendocino	54 miles	25 miles	7 miles	41 miles	127 miles
Sonoma	26 miles	7 miles	4 miles	25 miles	62 miles
Marin	17 miles	9 miles	66 miles	58 miles	150 miles
San Francisco	—	—	2 miles	9 miles	11 miles
San Mateo	21 miles	14 miles	33 miles	18 miles	86 miles
Santa Cruz	6 miles	20 miles	10 miles	7 miles	43 miles
Monterey	22 miles	20 miles	53 miles	34 miles	129 miles
San Luis Obispo	—	44 miles	7 miles	43 miles	94 miles
Santa Barbara	37 miles	31 miles	3 miles	17 miles	88 miles
Ventura	21 miles	—	6 miles	25 miles	52 miles
Los Angeles	22 miles	5 miles	25 miles	34 miles	86 miles
Orange	11 miles	3 miles	3 miles	28 miles	45 miles
San Diego	1 miles	37 miles	—	71 miles	109 miles
TOTAL	245 miles	269 miles	245 miles	548 miles	1307 miles

**Figure 2. Estimated Capital Outlay Costs to Complete the Coastal Trail, by County
(Estimate in Thousands of Dollars)**

County	Highway Corridor Improvements ¹	Acquisition of New Right-of-Way ²	Trail Construction			Totals ⁶	
			Hard Surface ³	Rural ⁴	Signing ⁵		
Del Norte	\$600	\$200	\$1,900	\$6,500	\$1,200	\$60	\$10,260
Humboldt	\$500	\$2,200	\$22,500	\$22,400	\$700	\$140	\$46,240
Mendocino	\$8,100	\$1,100	\$11,300	\$1,200	\$3,800	\$70	\$24,470
Sonoma	\$3,900	\$300	\$3,000	\$500	\$3,900	\$60	\$11,360
Marin	\$2,600	\$400	\$3,900	\$6,900	\$9,700	\$170	\$23,270
San Francisco	—	—	—	\$900	\$50	\$10	\$960
San Mateo	\$3,200	\$600	\$6,400	\$5,900	\$1,800	\$50	\$17,350
Santa Cruz	\$1,000	\$900	\$9,100	\$4,700	\$3,200	\$60	\$18,060
Monterey	\$3,300	\$900	\$9,100	\$20,200	\$5,800	\$160	\$38,560
San Luis Obispo	—	\$2,000	\$20,000	\$3,200	\$5,700	\$100	\$29,000
Santa Barbara	\$5,600	\$1,400	\$14,000	\$6,000	\$2,500	\$60	\$28,160
Ventura	\$3,200	—	—	\$2,400	—	\$20	\$5,620
Los Angeles	\$3,400	\$200	\$2,100	\$20,600	\$100	\$100	\$26,300
Orange	\$1,600	\$200	\$1,600	\$6,700	—	\$40	\$9,940
San Diego	\$200	\$1,600	\$16,500	\$15,200	—	\$100	\$32,000
TOTAL	\$37,200	\$12,000	\$121,400	\$123,300	\$38,450	\$1,200	\$321,550

Notes:

- 1 Estimated cost per mile of trail: \$150,000. Assumes four-foot paved improvement to existing highway right-of-way with minimal grading; includes all planning, design, and permitting costs.
- 2 Estimated cost per mile of trail: \$45,000 to \$450,000. Assumes twenty-five foot trail corridor, approximately three acres per linear mile; range includes rural and suburban average values.
- 3 Estimated cost per mile of trail: \$400,000. Assumes four-foot asphalt path with limited grading; includes all planning, design, and permitting costs.
- 4 Estimated cost per mile of trail: \$130,000. Assumes five-foot natural surface trail with minimal grading; includes all planning, design and permitting costs.
- 5 Assumes approximately one sign per mile of trail. The estimated cost for existing trail segments is \$500 per sign, assuming Coastal Trail demarcation will be attached to existing signs. The cost for segments identified as “Needs Substantial Improvements” is \$1500 per sign.
- 6 Using the upper range of estimated acquisition costs.

- Costs of acquisition of new public rights-of-way needed to extend the trail across current private lands typically will not be stand-alone costs. Most of the shorefront properties across which the Coastal Trail will extend are sites of multiple resources (e.g., scenic, habitat, recreation) for which public acquisition would be a priority even without the Coastal Trail route, and the total cost of public acquisition of these sites will be much greater than the amount indicated as needed for the Coastal Trail alone.

This suggests that it may be more accurate to view the new trail rights-of-way not as a new public cost, but as a public benefit that would add to the reasons for public purchase of coastal resource properties.

Operation and Maintenance

The administrative costs of supporting use of public trail facilities fall into three general categories:

- **Personnel and equipment to provide supervision and management of trail systems**
- **Personnel and equipment to maintain and repair trail systems**
- **Creating and distributing descriptive and guidance information**

Because substantial portions of the Coastal Trail already exist within public parklands, the added administrative costs associated with completing the Coastal Trail would be principally for the management of newly acquired trail rights-of-way.

Future public costs of operating the Coastal Trail should be controlled through a program encouraging local community volunteer participation in trail operation and maintenance efforts. This would be consistent with successful programs that already exist, such as Caltrans' Adopt-a-Highway program and the Coastal Commission's Adopt-a-Beach program. Volunteer participation would also be compatible with the increasing involvement of nonprofit community land trusts in the acquisition of coastal resource lands that would provide trail corridors. A statewide program fostering volunteer trail management can draw on the successful experience of the largest public trail system in the United States: the 2,100-mile Appalachian Trail, which



Volunteer trail crew ends a hard day's work.

for its development, operation, and management relies on a volunteer organization of more than 4,000 trails activists.

The State should use the Internet as a means of organizing and encouraging volunteer participation in management of the Coastal Trail, and for distributing information to potential trail users. In conjunction with nonprofit advocacy groups representing segments of the principal user groups (e.g., hikers, bicyclists, equestrians, persons with disabilities) and with public and private tourism advocates, it should be possible over time to provide a significant portion of the cost of an Internet site through non-State contributions. A relatively small State investment in developing the initial format and content of an electronic Coastal Trail information portal would provide the foundation for a long-term program of public involvement that would reduce State costs and maximize benefits of the trail.

Issues and Constraints: Challenges to Completing the Coastal Trail

Environmental Impacts and Resource Concerns

THE COAST OF CALIFORNIA has many identities—sandy beaches, expansive blufftop grasslands, wilderness forests, open farmlands, and dense urban areas. As the Coastal Trail passes through these varied landscapes, it will mirror its surroundings: a paved path along the beach that is a valuable recreational

asset on the vibrant Los Angeles waterfront would be inappropriate for the redwood forests of Del Norte County.

- Providing trail designs that are appropriate to local contexts may be the most difficult aspect of implementing the Coastal Trail concept. Under the general heading of “environmental impact,” several distinct issues should be recognized:



CARLA CHENAUIT

Too many people can harm sensitive tidepool inhabitants.

PLOVERS

Western snowy plovers are small shorebirds that breed on Pacific coast beaches from Mexico to Washington. The Pacific coast population was listed as threatened under the federal Endangered Species Act. Declining populations are primarily a result of habitat loss due to urbanization. Of the remaining population of plovers, 70–80 percent nest on California beaches. Plovers seek many of the same characteristics in a breeding beach that humans seek for recreation. Plover habitat consists primarily of coastal wetlands and coastal dunes. Plovers nest in the sand high on the beach where they will easily be able to detect predators. Joggers, off-leash dogs, all-terrain vehicles, and even kite flyers conflict with Plover nesting.

Nesting season for Plovers is from March to September. In an attempt to recover plover populations, portions of beach are periodically closed to afford greater protection. Beach closures may necessitate the designation of alternative routes for portions of the Coastal Trail that pass close to nesting sites during times of the year most critical to plover breeding.



KEN GARDINER

Western snowy plover, Pescadero Beach

- The shoreline is habitat to a great variety of marine and terrestrial plants and animals, and many of these species are threatened or endangered as a result of habitat loss through human intervention. Pre-European cultural artifacts are also found on many nearshore sites. Trail routing and construction will be required to meet stringent regulatory standards and to avoid or minimize potential impacts to sensitive habitats. To realize the basic vision of a continuous near-shore trail, extraordinary design efforts will be required to protect these resource areas.
 - Within or adjacent to sensitive habitat areas, trail improvements can help to channel public use so as to minimize impacts. The installation of a wooden boardwalk within a sensitive dune system or adjacent to a wetland may increase total public access yet result in fewer environmental impacts than uncontrolled, informal access. Projects using such designs should include plans to monitor the impacts of public use, to identify any further mitigation needs, and to aid in future designs.
 - Development of the Coastal Trail system should include an emphasis on public education. Through well-designed directional signing and interesting interpretive displays, in conjunction with the efforts of site docents, it should be feasible to provide substantial public access opportunities even at highly sensitive sites. Strong volunteer organizations can assist public agencies to manage public use, and to conduct long-term monitoring studies.
- Many rare and endangered animal species seek protection along the beaches of California to breed and raise their young. Northern elephant seals, which were hunted nearly to extinction in the 1800s, now return every year to several

California beaches to breed and raise their pups. California least terns and western snowy plovers lay their eggs on sandy beaches. Wetland and tidepool creatures reside in the intertidal area throughout the year. With an increased understanding of the threats to natural habitat that may accompany human use, a variety of legal protections have been adopted for these sensitive areas. Some of these, now and in the future, will directly affect the ability of the public to use the beach. Already, access to some areas along the coast includes seasonal detours due to seal pupping or snowy plover nesting, while at other sites use permits or docent-led access programs may restrict entry to a few persons per day.

People are more likely to want to protect what they are able to see. Encouraging public access that includes learning about these ecosystems is the best way to create a community of coastal stewards. The coastal environment is home to one of the most com-

plex ecosystems on earth, and the Coastal Trail should highlight its riches. Completing the Coastal Trail should help to manage the impacts of visitors on that environment, helping to protect the resources that make the California coast a wondrous place.



ANTHONY GALVAN

Northern elephant seal with pup



CARLA CHENAUIT

Wildlife watchers need to be taught or reminded not to disturb wild animals, such as these elephant seals in San Luis Obispo County.

Legal, Administrative, and Institutional Concerns

WHILE THE CALIFORNIA Coastal Trail will provide countless direct and indirect benefits to California residents and visitors, some complex issues associated with the California Coastal Trail Project also must be considered.

Private Development

Perhaps the greatest challenge is presented by the extensive private development atop coastal bluffs and along beaches that has taken place in recent decades. Homes and other structures, including revetments and seawalls, built behind beaches and atop bluffs along some reaches of the coast, have diminished public access and also reduced the availability of land required to complete the Coastal Trail. In some coastal areas, homes or protective structures have been erected directly on the beach, diminishing beach width and fixing the landward boundary of beaches that would naturally migrate inland. In many areas seawalls are suspected of aggravating beach erosion. Diminished beaches allow fewer opportunities for coastal recreation and less room for the Coastal Trail. As the sea level rises, shoreline homes may be protected but some beaches will be flooded and lost to the public.

A major goal of the Coastal Trail is to bring people to the coast. Where shoreline structures prevent passage along a beach or bluff, trail users will be compelled to use routes farther inland, perhaps beyond the sight and sound of the sea. One of the challenges for Coastal Trail proponents will be to find a balance between coastal property owners' rights and the rights of the rest of California's residents and visitors to access and enjoy the coast.



RICHARD NICHOLS

Structures on the beach limit continuous access.



DON NIERLICH

Houses on the beach may block access to the public shore at high tide.



PEETER VILMS

Beach structures may put hikers in danger when waves are high.

Public and Quasi-Public Development

Both the United States armed forces and various privately or publicly owned utilities occupy large portions of the coast from which the public is excluded, largely because of concerns about security. Diablo Canyon Power Plant, Vandenberg Air Force Base, Point Mugu Naval Air Weapons Station, and Camp Pendleton Marine Corps Base are some of the largest coastal landholders in this category, occupying significant swaths of oceanfront.

In these situations, State agencies need to work in cooperation with public or private landholders to provide the maximum degree of public access that is consistent with security requirements. Although access may not be possible in the foreseeable future, a dialogue must be maintained, so that if an opportunity does arise, the agencies will be ready for it. This approach has proved successful on Monterey Bay: the U.S. Army is in the process of turning over Fort Ord to the State Parks Department.

Conflicts among Users

Hikers, joggers, bicyclists, equestrians, wheelchair users, roller-bladers, and others seek improved coastal recreation opportunities. Every effort will be made to include all user groups and make the California Coastal Trail as inclusive as possible. However, not all areas will be able to accommodate all modes of recreation. Topography and other natural features will impose some constraints and in some places only a footpath may be possible.

In many areas it should be possible to accommodate different modes of use through establishing separate routes, thus reducing user conflicts. For example, in Marin County, the proposed Cross-Marin Trail from Point Reyes to the Golden Gate Bridge is being promot-



In Half Moon Bay, walkers and bicyclists share the trail with equestrians.

PEETER VILMS

ed by bicycle advocacy groups as a solution to the restriction on vehicular use within the Point Reyes National Seashore wilderness area. In Sinkyone State Park, the wilderness designation limits access to the trail near the shore to hikers and equestrians but, in keeping with the “braided trail” concept, a primitive roadway along the rugged hills can provide a parallel course for mountain bikers. In areas of the south coast, the sandy beach may be the preferred route for hikers, while proposed rails-to-trails conversions provide a near-shore multi-use facility.

Specific limitations on trail uses are generally the responsibility of local management entities, whether federal, State, or local agencies. In developing the Coastal Trail system, the State can support these management efforts by providing assistance with user education, assisting enforcement efforts, and developing sufficient facilities to meet a wide range of user demands.

Where multiple modes of use are permitted along a single route, public agencies should seek the involvement of user advocacy groups to disseminate

information about rules and resource constraints. Public education and peer pressure are likely to be the most effective means of keeping the traffic within acceptable environmental parameters and encouraging respect and courtesy along the trail.

Interagency Coordination

Maintaining interagency coordination is essential if the Coastal Trail is to be completed successfully. Core participants in the planning process will need to maintain communications with local jurisdictions, park districts, and land trusts who are, and will be, implementing trail projects. The existence of many interested groups can be advantageous to seeing a project completed, but it can also cause misunderstandings and delays if communication is not maintained. Ultimately, the best Coastal Trail alignment will be one that includes all interested parties in the planning process.

Railroad Rights-of-Way

Conflicts arise when public trails must cross railroad rights-of-way to reach the shoreline, and at many locations existing tracks create barriers to legal access. Railroad operators, aware of safety and liability issues, make great efforts to ensure that trains will not endanger people or property, frequently seeking to maintain physical barriers and generally resisting new grade crossings. To facilitate access along the coast, the possibility of establishing more railroad crossings needs to be investigated. Engineered structures enabling nonmotorized passage over or under the railroad are expensive, but may also be the safest alternative.

At the same time, adaptation or conversion of railroad rights-of-way may provide unique opportunities to develop continuous paths for nonmotorized travel at relatively low cost. Local efforts are now under way to convert some of the coastal



RICHARD NICHOLS

Crossing rivers on a railroad trestle may be hazardous to walkers.

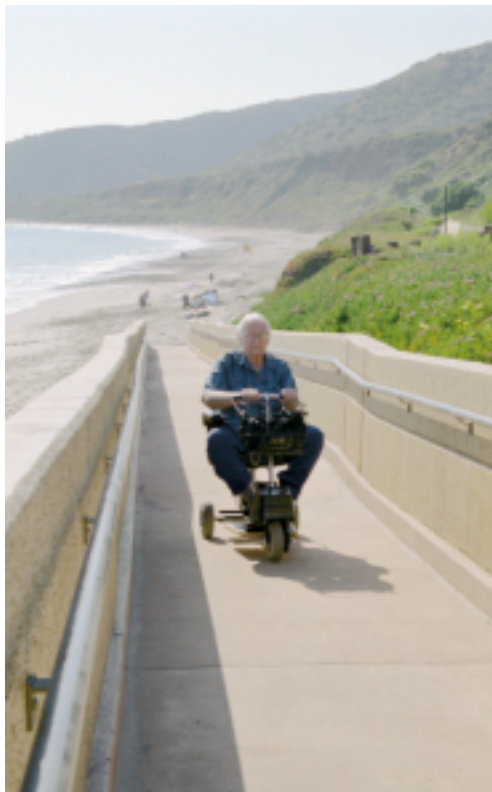
railroad rights-of-way to recreation trail corridors, with potential major adaptation projects under consideration in Santa Cruz, Orange, and San Diego Counties.

The Americans with Disabilities Act

The California Coastal Trail is a public facility and therefore must comply with the Americans with Disabilities Act (ADA). The federal Access Board, the agency responsible for developing ADA accessibility standards, is currently working to develop guidelines for outdoor recreation facilities. The Access Board has had some difficulty in establishing ADA design guidelines for trails, especially in seeking to balance the need for man-made improvements that improve access with the desire to maintain the natural features of trails. In

2003, the Access Board is expected to release its outdoor recreation guidelines for public comment and will include with them an analysis of the costs and benefits of implementing the proposed guidelines.

In the absence of formal guidelines, new Coastal Trail segments should be



Nicholas Canyon County Beach



Mother's Beach



Leo Carrillo State Park

designed to provide access to multiple users where topography permits, and signs should provide information regarding the physical condition of the trail ahead. Information such as slope, surface type, and width can tell users whether the trail meets their accessibility needs. This information should be collected and disseminated for new Coastal Trail segments as they are completed.

State Highways 1 and 101: The California Department of Transportation and the California Coastal Trail

The California Department of Transportation (Caltrans) has been providing infrastructure for the movement of the state's populace and commerce for over 100 years. Today's transportation system, owned and maintained by Caltrans, has evolved from dirt supply roads used by California's miners and merchants in the early 1850s into a 15,000-mile network throughout the state, supporting both motorized and nonmotorized travel.

As the California State Highway system provides a continuous coastal route along Highways 1 and 101, the Coastal Trail will provide a continuous coastal route for nonmotorized travel. Although the objective of the Coastal Trail is to provide a non-highway route, in some areas along the coast there are very limited opportunities to develop any trail outside of the existing roadway corridor. The limitations may be due to topography, existing private development, or environmental sensitivity. In cases where State Highways provide the only feasible alternative for continuous travel along the coast, it is essential that trail advocates and parks agencies work cooperatively with Caltrans to develop solutions that will support all modes of travel. These solutions may be varied, ranging from shoulder improvements along State Highways 1 and 101 to the



LINDA HANES

Hikers on the highway shoulder: State Highway 1 in Mendocino County



RICHARD NICHOLS

Hikers have to share the narrow Bixby Bridge in Big Sur with highway traffic.



CARLA CHENAULT

Caltrans signs warn motorists to respect bicyclists who share the highways.



STEVE HORN

Sharing the right-of-way with motor vehicles, Santa Barbara County

development of a separated, off-road facility for nonmotorized users within a Caltrans right-of-way.

Caltrans has been very supportive of nonmotorized users along State facilities and has worked to establish safe travel conditions for all users. Projects include the Pacific Coast Bicycle Route, which identifies a route for bicyclists from the Oregon border to the Mexico border along existing coastal roadways. Additional support of alternate modes of

transportation is evident in the publication of “Accommodating Nonmotorized Travel” (DD-64) and other documents providing guidelines for signing and design of nonmotorized facilities.

There is also significant State and federal transportation legislation that allocates transportation funds to support infrastructure for nonmotorized travel, in particular the federal Transportation Equity Act for the Twenty-First Century (“TEA-21”).

Horses and Bicycles on the Coastal Trail

Coastal Bicycle Travel

CHRIS MORFAS

Executive Director, California
Bicycle Coalition

WHILE MANY TRAILS provide useful recreational bicycling opportunities, cyclists traveling along the coast are best served by ensuring that roads accommodate them properly and that motorists are encouraged to share the road with them.

Recreational trails can serve families that enjoy short bike rides as part of car trips. Paved trails should meet Caltrans standards, so that bicyclists can safely share those facilities with joggers, skaters, parents with baby strollers, etc. Generally, unpaved trails can be enjoyed by both bicyclists and hikers if this dual use is expected and approached with courtesy by all. Signs indicating destinations,



SUNSHINE

points of interest, and approaching road intersections are very helpful.

Improving coastal roads to include bicyclists is challenging. While many urban streets or rural highways can be provided with a wide outside lane, bike lane, or shoulder, efforts to widen coastal roads—frequently located within or adjacent to sensitive natural areas—can be enormously expensive and environmentally undesirable. Nevertheless, many sections of State Highway 101 and State Highway 1 could be made safer for bicyclists, and California can see some well-designed examples of how to do it along Highway 101 on the Oregon coast.

Perhaps the most cost-effective way to enhance coastal bicycle travel would be by modifying the behavior of motorists. Reducing speed limits to enhance the safety of pedestrians and bicyclists, permissible under California law, could



JON VAN COOPS

Parts of Caltrans's coast-long Pacific Coast Bike Route will serve as Coastal Trail bicycle paths.

establish a more cooperative roadway environment.

Attitudes matter, too. Bicyclists traveling along the coast tend to be highly skilled and very capable of safely sharing roads with motorists, so long as motorists recognize a bicyclist's right to use the roadway. Travel lanes on coastal roads are often narrow, and the California Vehicle Code allows a bicyclist to use the full travel lane if that lane is too narrow for a motorist to pass a bicyclist without leaving the lane. The recognition by motorists of the need to share the road is especially important for southbound bicyclists who, if they fall off the right side of the road, may never be heard from again. The role of law enforcement in reminding motorists that bicyclists do indeed belong on roadways is vital. In most instances, as long as motorists are willing to slow for a few seconds to execute a safe pass, bicyclists and motorists can both safely enjoy the wondrous beauty that is the California coastal experience. For more information on this topic, you can reach the California Bicycle Coalition at www.calbike.org.

The Coastal Trail Should Include Equestrian Uses

RUTH GERSON

President, Santa Monica Mountains Trails Council

EQUESTRIAN TRAILS groups have been involved for many years in advocating for expanded opportunities for access to public lands. The equestrian community can support the proposed California Coastal Trail if all agencies concerned with designing and completing the trail will bear in mind and plan for the needs of horses and riders.

Advocates for trails should endorse the effort to develop a multi-use trail. If the California Coastal Trail is presented



CARLA CHENAULT

Bicyclists use the Coastal Trail for recreation and transportation.



GORDON LEON

On a wilderness trail in Rancho Palos Verdes, Los Angeles County

as a hiking trail that will consider other trail users as an afterthought, then the project has a built-in bias. To be open-minded to suggestions for a true multi-use Coastal Trail, you need to honestly consider the range of uses typical of a multi-user facility, with the most commonly accepted ones being hiking, bicycling, and horseback riding. Other types of trail users may also need to be identified and accommodated.

To address the needs of equestrian users, the Coastal Trail should provide:

- Ready access to the Coastal Trail from local feeder/connector trails, including wide dirt shoulders along local roads and roadway underpasses;
- Trailhead parking that is a short distance from the trail and offers safe access to the trail;
- Parking facilities that are large enough for trucks and trailers, as equestrians cannot access the trail if they cannot park their rigs;
- Opportunities for overnight camping along the trail, so that users may fully enjoy the experience of sunrises and sunsets, marine vistas, and wildlife, without having to drive their vehicles every day;
- Trailheads that are not paved and are not excessively rocky or slippery;
- A trail that is away from the sounds and dangers of roads and major highways as much as possible; and
- Connections with other trails systems that have been designed to accommodate equestrian use, including the ones already recognized for their scenic and historic values, such as the Juan Bautista de Anza Trail, the Santa Monica Mountains Backbone Trail, and the California Riding and Hiking Trail.

Another important consideration for developing the Coastal Trail would be to emphasize continued public access to lands that are already in public ownership. Where County Parks, State Parks, and Federal Parks already have land



Rancho Palos Verdes

GORDON LEON

along the coast, it would be advantageous to align the trail through those public lands.

As the Coastal Trail project moves along, public hearings should be held with plenty of advance notice to encourage attendance. The public benefits from attending presentations by the responsible agency, and everyone benefits from the discussion that ensues from those presentations.

The Santa Monica Mountains Trails Council has been involved for 30 years with expanding public access in the Santa Monica Mountains, working closely with California State Parks, the Santa Monica Mountains Conservancy, and the National Park Service. We appreciate the opportunity to add the voice of the equestrian community to the effort to develop and maintain a public trail system along the California coast.

Creating an Image for the Coastal Trail: A Signing and Graphics Program

THE CALIFORNIA COASTAL Trail will be a statewide feature linking many distinctive communities along the California coastline. Because of its length and the wide variety of landscapes through which the Coastal Trail will run, the creation of a coordinated signing program is of central importance. Certainly, signs will be needed to guide trail users and provide them with practical information. More essential, however, is the need to weave the diverse strands and segments of the trail into a unified whole.

Our challenge is to identify and define the Coastal Trail conceptually as a single entity in a manner that is flexible enough to accommodate the wide variety of landscapes, jurisdictions, and user groups encompassed by the California Coastal Trail. The following goals, objectives, and standards have been formulated to address this challenge.

Primary Goals:

- Create a graphic identity for the Coastal Trail.
- Designate the route of the Coastal Trail.
- Preserve the scenic beauty of the California coastline.

Accomplishing these goals will entail the installation of stand-alone signs that identify the route and provide comprehensive information, as well as the placement of small “blazes” or insignias that can be added to existing trail markers. At the same time, it is important



Too many signs can detract from the enjoyment of a trail.

that signing efforts not contribute to visual clutter and degrade scenic resources.

Objectives of the Signing Program for the California Coastal Trail:

- Present necessary information in a manner that is clear, informative, and sensitive to the scenic beauty of natural and man-made landscapes.
- Create a variety of sign formats that can be easily and inexpensively integrated with existing signing programs.
- Comply with local land use regulations and Coastal Act requirements.
- Provide local jurisdictions with signing guidelines.

- Supplement, not replace, local trail designations.
- Avoid the proliferation of duplicate signs.

The intent of a statewide signing program should be to coordinate with public land managers in those areas where the Coastal Trail follows the route of an existing trail system. However, certain general standards can be applied to most portions of the Coastal Trail regardless of location or jurisdiction.

General Standards:

- Identification signs for the Coastal Trail should be placed at all staging areas, trailheads, junctions, and special features.
- Signage along major inland connecting trails should direct users to the Coastal Trail.
- The location of CCT staging areas should be indicated from highways and major roadways.
- Signs should use international symbols as much as possible.
- ADA-compliant portions of the trail should be clearly indicated.

Completing the Coastal Trail will be a years-long project involving hundreds of public agencies and nonprofit organizations and millions of dollars. The signing program is as integral to completing the trail as the acquisition of rights-of-way and the construction of pathways. In order to assure that the goals of the signing program are met, it is recommended that the following actions be undertaken within the next year.

Priority Actions:

- Conduct a design competition to develop a graphic identifier (logo) for the Coastal Trail.



Signs like this one at Marina del Rey, Los Angeles County, indicate public accessways to beaches.

DON NIERLICH

- Develop detailed signing standards in close cooperation with federal, State, and local agencies having jurisdiction over portions of the trail.
- Work with federal, State, and local jurisdictions to display the Coastal Trail logo on existing portions of the trail.
- Initiate discussions with Caltrans to develop a signing program for State Highways 1 and 101 where those are the principal route of the Coastal Trail.

Recommendations for Action: Statewide Policy Initiatives

THE ADMINISTRATION and the Legislature should consider the following:

1. **Commitment to Completing the Coastal Trail.** The State should consider making a long-term commitment to completing the Coastal Trail, including designating funding sources for completion, maintenance, and repair. The Legislature should consider designating a portion of the State's share of the federal Land and Water Conservation Fund for this purpose.
2. **Integrate the Coastal Trail into State Transportation Plans.** The California Transportation Commission should consider incorporating the Coastal Trail into the State Transportation Improvement Program, and Caltrans should consider emphasizing improvements to nonmotorized traffic safety. Where Highways 1 or 101 provide links in the Coastal Trail, the Coastal Conservancy and the Coastal Commission should work with Caltrans to identify priority sites and design feasible means of implementing shoulder widening and other improvements for nonmotorized traffic safety.
3. **Use the Coastal Trail to Increase Accessibility to State Recreational Facilities.** The Coastal Trail should be incorporated into the State Outdoor Recreation Plan as a State facility, pursuant to ACR20. State Parks should complete its evaluation of accessibility conditions along the principal trail routes within park units to identify priority areas for actions that would increase accessibility for children, seniors, and persons with disabilities, including both trail improvements and informational signing.
4. **All State Programs Should Support Completing the Coastal Trail.** Whenever a State agency uses or grants funds as a part of a land acquisition project within the coastal zone, the acquiring agency or organization should provide an easement for nonmotorized public passage along the existing or potential route of the Coastal Trail.
5. **Eliminate Shoreline Obstructions.** Wherever practical, existing man-made structures that impede public access along the shoreline should be removed or redesigned to facilitate public access. To avoid the loss of public recreational access where new shoreline development is proposed, the State Lands Commission should provide review and comment as requested by the Coastal Commission regarding the current location of the mean high tide line.

Recommendations for Action: Projects to Implement the Coastal Trail

TO COMPLETE SIGNIFICANT portions of the California Coastal Trail within each coastal county, the following projects (listed from north to south) should be accomplished over the next three years:

Del Norte County

1. Work with private landowners to design improvements at the border crossing to create a clear continuity in the Coastal Trail from California to Oregon.
2. Encourage Caltrans to design improvements for pedestrians and bicycles at the crossings of the Smith River and the Klamath River along State Highway 101.
3. Design and build multi-use trails across the recently acquired Point St. George headland, connecting Crescent City with Tolowa Dunes State Park.
4. Complete the pedestrian and bicycle access improvements described in the Crescent City Harbor Trail Study.
5. Support State Parks in their effort to provide inland trails within the recently acquired Mill Creek property to connect with the coastal trail.

Humboldt County

1. Support implementation of the Humboldt Bay Trails Feasibility Study to develop a continuous trail system around the east side of Humboldt Bay.
2. Complete the extension of the Hammond Trail from the Mad River bridge south, developing links to Arcata and Eureka.



A site on the future Crescent City Harbor Trail, Del Norte County

DIANE MUTCHIE



The Hammond Trail is being extended in Humboldt County.

LINDA HANES

3. Restore the Hammond Trail pedestrian/bicycle bridge across the Mad River.
4. Using abandoned railroad right-of-way, develop the Annie and Mary Trail to encourage nonmotorized access to the coast by linking Arcata with Blue Lake and other inland communities.
5. Work with private landowners to acquire public access rights at several locations from Centerville Beach to Cape Mendocino.
6. Encourage Caltrans to design improvements for pedestrians and bicycles on the bridges crossing the Eel River and Mattole River.



JEN RICE

Completed section of the Annie and Mary Trail, Humboldt County

Mendocino County

1. Work with private landowners to acquire public access rights and improve a trail corridor connecting

Usal Road and Westport-Union Landing State Park.

2. State Parks should complete restoration of the Pudding Creek trestle to connect MacKerricher State Park with the city of Fort Bragg.



RIXANNE WEHREN

Pudding Creek trestle, Mendocino County



MENDOCINO LAND TRUST

Caspar State Beach, Mendocino County



POINT CABRILLO LIGHTKEEPERS ASSOCIATION

Point Cabrillo Light Station, Mendocino County

3. Complete a system of trail improvements separate from State Highway 1 that will connect Russian Gulch State Park, Point Cabrillo Reserve, Caspar Headlands, Caspar State Beach, and Jug Handle State Reserve.
 4. Work with private landowners to acquire public access rights along the bluffs from Dark Gulch to Albion Cove and the Albion Headlands.
 5. Work with private landowners to acquire public access rights and improve a trail corridor connecting Manchester State Beach and the Point Arena Pier.
3. Work with private landowners to acquire additional public access rights west of State Highway 1 extending northward from Salt Point State Park, for the development of a blufftop trail and recreational support facilities.

Park and Fort Ross State Historic Park to provide safe pedestrian access west of State Highway 1.

Sonoma County

1. Work with private landowners to acquire public access rights and improve a trail corridor connecting Salt Point State Park, Stillwater Cove Regional Park, and Fort Ross Historic State Park, consistent with the recommendations of the North Russian River Parcel Analysis Study.
2. Encourage State Parks to extend the existing trails within Salt Point State



LINDA HANES

Salt Point, Sonoma County

4. Provide safe pedestrian access separate from State Highway 1 through the extension of the Kortum Trail between the Sonoma Coast State Beaches units at Wright's Beach and North Salmon Creek Beach.
5. Complete a design plan for pedestrian and bicycle access through the

community of Bodega Bay, including specific land acquisition and improvements needed to alleviate the current safety problems along State Highway 1.

6. Work with private landowners to acquire public access rights between Bodega Bay and Estero Americano.



DON NIERLICH

View from Kortum Trail, Sonoma County



JAMIE SCHMIDT

State Highway 1, Bodega Bay, Sonoma County



JON BREYFOGLE

Blufftop near the Estero Americano, Sonoma County

Marin County

1. Work with private landowners to acquire public access rights between Estero Americano and Dillon Beach.
2. Work with private landowners to obtain trail easements across the protected open space east of Tomales Bay, and install improvements needed to minimize conflicts with working ranchlands.
3. Work with the Golden Gate National Recreation Area (GGNRA) and State Parks to acquire parcels east of Tomales Bay and west of State Highway 1.
4. Work with Point Reyes National Seashore to connect existing trails through the park to create a continuous trail from the northern to southern extents of the park.
5. Encourage the GGNRA to develop trails closer to the coast where topography permits.



CARLA CHENAULT



CARLA CHENAULT

At Tomales Bay, in Marin County, hikers can walk among cattle as they traverse active ranch lands.



CARLA CHENAULT

View of Tomales Bay from Highway 1, Marin County

San Francisco County

1. Assist the National Park Service to design and construct a trail along Lincoln Boulevard between State Highway 1 and Baker Beach.
2. Encourage the U.S. Army Corps of Engineers to ensure permanent public trail and bicycle access as part of any effort to control beach erosion south of Sloat Boulevard.
3. Construct stairs over the wastewater outfall pipe on the beach below Fort Funston.

San Mateo County

1. Work with public and private landowners to design and construct a trail west of Skyline Boulevard from the San Francisco County line south to Pacifica.
2. Encourage Caltrans to assure pedestrian and bicycle access along the abandoned State Highway 1 right-of-way at Devil's Slide, and transfer this property to the GGNRA for permanent management.
3. Encourage the National Park Service and the City of Pacifica to design and construct trail segments on the public properties at Mori Point and the Pedro Point Headlands.
4. Work with San Mateo County and private landowners to design and construct a trail on the landward portion of the Fitzgerald Marine Reserve.
5. Design and construct trail improvements along the existing public trail easements on Cowell Ranch and Purisima Farms, and transfer these easements to State Parks or another suitable agency for permanent management.



STAN BLUHM

Wastewater outfall on the beach below Fort Funston, San Francisco County



PRENTISS WILLIAMS

Devil's Slide, San Mateo County



Artist's rendition of the proposed trail at Whaler's Cove, San Mateo County

6. Work with the Peninsula Open Space Trust to facilitate transfer to State Parks of the Whaler's Cove and Bolsa Point properties, and encourage State Parks to design and construct trail improvements on these properties.
7. Work with State Parks to design and construct a trail west of State Highway 1 through Año Nuevo State Park that will avoid degrading sensitive habitat areas.
4. Work with Santa Cruz County to identify a trail alignment through Live Oak and work with the County, State Parks, and private landowners to identify a trail alignment from Capitola to the County line.
5. Encourage and assist in the completion of the Monterey Bay Sanctuary Scenic Trail.
6. Work with the U.S. Army Corps of Engineers and Santa Cruz and Monterey Counties to complete the trail systems along both sides of the Pajaro River and connect them to the Coastal Trail.

Santa Cruz County

1. Work with the Santa Cruz County Regional Transportation Commission to acquire the former railroad right-of-way and develop the multi-use trail from Davenport to Watsonville.
2. Complete the environmental analysis and design of a principal trail alignment through the former Coast Dairies property in cooperation with the Trust for Public Land and others, and construct the trail.
3. Work with State Parks to complete the coastal trail segment across the Gray Whale Ranch property and open the property to the public.



Railroad corridor, Santa Cruz County



CARLA CHENAULT

View of Gray Whale Ranch from below Wilder Ranch State Park, Santa Cruz County

Monterey County

1. Encourage and assist in the completion of the Monterey Bay Sanctuary Scenic Trail.
2. Encourage the Pebble Beach Company to maintain public access to the existing trail systems in the Del Monte Forest and between Asilomar and Carmel Beach, and to improve nonmotorized access along 17-Mile Drive between Cypress Point and Forest Lake Road, and provide public financial assistance to facilitate such use.
3. Encourage Caltrans to complete the Coast Highway Management Plan and



LEE OTTER

Bicyclist on Highway 1 in Big Sur, Monterey County

improve pedestrian and cycling safety along State Highway 1 in Big Sur.

4. Encourage the development of a trail network through Palo Corona Ranch that will provide connections to the coast.
5. Provide a public trail connection from Andrew Molera State Park across Deer Ridge to Pfeiffer Beach.
6. Assist State Parks to reestablish the Coastal Trail through Garrapata State Park.
7. Encourage the U. S. Forest Service to develop a trail through the forest and along the seaward slope between State Highway 1 and the Coast Ridge Trail.



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Informal trails at the Estero Bluffs Property, San Luis Obispo County

rights and develop a blufftop trail along the Harmony Coast between South Cambria and the Estero Bluffs property.

San Luis Obispo County

1. Design a public trail west of State Highway 1 from the Monterey County line south to San Simeon to provide safe pedestrian access that will avoid degrading sensitive habitat areas, and work with private landowners to acquire necessary access rights.
2. Implement the East-West Ranch Management Plan to develop a public trail and support facilities providing access to this recently acquired property.
3. Work with public and private landowners to acquire public access
4. Assist State Parks to develop a trail and associated access facilities on the recently acquired Estero Bluffs property.
5. Construct the Morro Bay Waterfront Boardwalk along the east side of the Morro Bay National Estuary.
6. Support State Parks' work with private landowners to acquire and develop a public trail corridor through the Irish Hills, connecting Montaña de Oro State Park with Avila Beach, as a feasible near-term alternative to a coastal blufftop trail through the Diablo Canyon Power Plant property.



CARLA CHENAULT

Beach closure for security concerns, Diablo Canyon Power Plant, San Luis Obispo County

Santa Barbara County

1. Work with private landowners to acquire public access rights west of Highway 101 between Jalama County Park and Gaviota State Park.
2. Work with private landowners to acquire public access rights west of Highway 101 between Refugio State Park and Gaviota State Park.

- 3. Assist Santa Barbara County to design and implement pedestrian and bicycle trail improvements parallel to Highway 101 along the Gaviota Coast.
- 4. Assist Caltrans in evaluating and improving nonmotorized access opportunities along the Highway 101 corridor between Rincon Beach County Park and Carpinteria State Beach.

- 3. Restore the pedestrian and bicycle pathway damaged by erosion at Surfers' Point (County Fairgrounds).

Ventura County

- 1. Assist Caltrans in evaluating and improving nonmotorized access opportunities along the Highway 101 corridor between the County line and Mussel Shoals.
- 2. Design a recreational access trail along the Santa Clara River to encourage nonmotorized access to the coast from inland cities.



Eroded shoreline at Surfer's Point, Ventura County

STEVE HORN



Along the route of the proposed river parkway, Santa Clara River, Ventura County

COURTESY PETER BRAND



AIRPHOTO USA

Aerial view of Ormond Beach, Ventura County

4. Encourage the U.S. Navy to provide a shoreline public access connection on the Naval Construction Battalion Center, Port Hueneme, consistent with military security requirements.
 5. Provide pedestrian and bicycle paths in conjunction with planning for restoration of the Ormond Beach wetlands, to connect with the trail in Port Hueneme.
 6. Work with the City of Oxnard to design and construct recreational support facilities at the terminus of Arnold Road to improve beach access opportunities and avoid impacts to sensitive habitat areas.
3. Link the inland portions of the Santa Monica Mountains National Recreation Area with the coast by assisting the National Park Service, State Parks, the Santa Monica Mountains Conservancy, and the City of Malibu to acquire necessary rights-of-way and develop improvements to complete the Coastal Slope Trail.
 4. Extend the pedestrian/bicycle path from Washington Street to the north jetty of Marina del Rey, and support the seasonal ferry service for pedestrians and cyclists across the channel to Playa del Rey.

Los Angeles County

1. Assist Caltrans in evaluating and improving nonmotorized access along the State Highway 1 corridor from Leo Carrillo State Beach to the beginning of the South Bay Bicycle Path near Temescal Canyon. Encourage Caltrans and local agencies to extend bicycle and pedestrian improvements through Malibu.
2. Facilitate continuous lateral access along the Malibu shoreline from Leo Carrillo State Beach to the city limit.



DON NIERLICH

State Highway 1 corridor, Malibu coastline, Los Angeles County



DON NIERLICH

Coastlink Ferry demonstration project, Los Angeles County

5. Assist the Cities of Los Angeles and Long Beach in providing a continuous pedestrian and bicycle trail around the western and northern edge of the harbor area from Cabrillo Beach to the Los Angeles River Trail.



DON NIERLICH

Marina del Rey bicycle path, Los Angeles County

Orange County

1. Implement the planned State Highway 1 improvements between Seal Beach and Anderson Street in Huntington Beach to create a separated nonmotorized trail.
2. Encourage local agency efforts to work with private landowners and acquire public access rights necessary to provide a trail connection to the coast from Aliso Creek Regional Park.
3. Encourage local agency land acquisitions, trail design, and development to provide a public access connection to the coast from Laguna Coast Wilderness Park.
4. Complete improvements of “missing links” to provide safe pedestrian and bicycle access adjacent to State Highway 1 between the cities of Laguna Beach and Dana Point.



CARLA CHENAULT

Crystal Cove State Park, Orange County, serves as a coastal connection to Laguna Coast Wilderness Park.

5. Support the effort by the City of San Clemente to provide a safe pedestrian and bicycle trail along the railroad right-of-way west of State Highway 1.

San Diego County

1. Encourage the U.S. Marine Corps to reopen the Camp Pendleton coastal bicycle trail when consistent with military security requirements, and to consider opening this trail to pedestrian use.
2. Support local agency efforts to develop a safe pedestrian and bicycle trail along the railroad right-of-way west of State Highway 1 between the cities of Carlsbad and Del Mar.
3. Design a recreational access trail along the San Diego River to encourage nonmotorized access to the coast from inland cities.
4. Complete improvement of the Bayshore Bikeway around South San Diego Bay.
5. Design and construct a trail linking Border Field State Park with the San Ysidro community and the city of Imperial Beach, in conjunction with planning for habitat restoration within the Tijuana River Estuary.



JIM KING

Tijuana River National Estuarine Research Reserve, San Diego County



JIM KING

Beach at Border Field State Park, San Diego County

What Do the Map Symbols Mean?



Needs Substantial Improvements (red line)

In these areas, substantial public actions are needed to: (1) acquire and develop new rights-of-way to establish the location of the California Coastal Trail; or (2) increase accessibility through major new trail improvements on existing public lands.

Improvements Adequate (green line)

In these areas the location of the California Coastal Trail is well established and open to the public, and major improvements to increase accessibility are unnecessary or infeasible.

Pacific Coast Bicycle Route (blue dotted line)

The route of the Pacific Coast Bicycle Route established by the Department of Transportation

Connecting Trails (thin black line)

Major trails promoting nonmotorized access to the coast from inland communities, including both existing trail systems and those currently in planning or development

Continuous Shoreline Passage (blue hatched shading)

These portions of the California coast, including both sandy beach and rocky shorefront, are open to the public and continuously passable for able-bodied persons during most tides and times of the year. (NOTE: This designation does not imply a lack of need for additional points of vertical access to the shoreline.)

Parklands (pink areas)

These areas include federal, State, and local parklands.

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For further information and updates
on the California Coastal Trail, see:
www.californiacoastaltrail.info

