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RECREATIONAL ACCESS TO THE COASTAL ZONE



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RECREATIONAL ACCESS TO THE COASTAL ZONE

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PREFACE

This volume contains discussion papers presented at a March 1979 conference on recreational access to the coastal zone. The papers focussed on various public policy problems associated with the provision of recreational access to the coast: the need for access, the alternative ways of providing access, and the costs of doing so. To ensure a balanced discussion, attendance at the conference included a wide range of persons: public officials, journalists, lawyers, environmentalists, developers, and designers. Both theoretical issues and case studies were discussed.

We anticipate that this volume will be useful to at least three distinct audiences. For citizen's groups and interest groups it will serve as an introduction to the complexity of the recreational access issue. To public officials it will highlight the range of public perspectives that exist. For academic audiences we hope this publication will be useful as an introductory text in classes in environmental affairs.

The conference was sponsored by the Sea Grant Marine Advisory Programs at the University of Southern California and the University of California, with financial assistance from the Pacific Sea Grant Advisory Program (PASCAP). The Sea Grant Programs at USC and UC support a variety of marine and marine-related research. A part of that support is rendered by the two Marine Advisory Services, which are charged with providing an information link between university research in these fields and the public and with initiating public discussion of marine-related issues.

The editors wish to express their appreciation to a number of individuals from each of the participating universities who have made especially notable contributions to this project.

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SUMMARY

Planning

There is no single formula for developing and implementing a recreational access program. Recreational access is a multi-dimensional marine policy issue which must be assessed cooperatively by the various levels of government. The approach utilized to provide for access opportunities will depend in large part upon a jurisdiction's sophistication in dealing with user demand in the planning area.

The state-of-the-art in recreational access planning is crude when compared to other types of functional planning. In part this is because there is a lack of agreement among planners, managers, and policy makers as to what constitutes adequate access. Contributing to this confusion is the lack of basic definitions, measures, theory, and precedent upon which to base a recreational access plan.

Coastal recreational access programs and policies usually have a narrow planning perspective and as such have often been inadequate and ineffective efforts. Programs and policies have generally focused on cross-coast access to the beach, relied on the automobile to provide transportational access; and have been concerned with the amount of access being provided rather than the quality of the recreational experience to different user groups.

Providing a diverse set of access opportunities and recreational experiences is more important than trying to maximize access everywhere along the coast. The varying sensitivity of coastal environments, the pluralistic nature of recreational satisfaction, minimization of social conflicts, and energy efficiency all recommend for a diverse and non-uniform provision of coastal recreational access. The sensitivity of coastal environments to disturbance and the quality of the recreation experience can indicate the number of people who should have access to site at any one time. However, carrying capacity is often more of a myth than a reality, the concept rarely works except in fragile environments which are very sensitive to disturbance and areas where low intensity recreation activity is the priority use.

More energies should be spent on influencing behavior by controlling factors which affect recreationist decisions — where to go, what to do, and how long to stay — and less energies spent on regulating use and related behavior once the recreationist is on the coast.

Attempting to provide for and accommodate the peak recreational access demands will usually not be a cost effective solution and may often have adverse social and environmental impacts.

Coastal recreational access should be perceived as a system consisting of at least five interacting processes; shoreline access (getting from the road to the shoreline), long-shore access (distribution along the coast), visual access (the view of the ocean and coastline), inter-regional access (movement between inland areas and the coastal zone), and intra-coastal access (transportation and parking within the coastal zone).

Planning and Transportation

Recreational access is often limited by the highway network's traffic capacity and the amount of available parking. The coastal access program should be designed in concert with the capacity of the regional and local transportation system to minimize congestion, air and noise pollution, and overcrowding of recreation facilities. The amount of parking should be consistent with the capacity of the beach resource and the type of recreational experience the government agency seeks to provide.

Public transit should be considered and encouraged (through subsidies) whenever economically and socially feasible since it offers the following comparative advantages to private automobile transportation: energy conservation, reduced need for construction of parking lots and roads, reduced traffic congestion, reduced noise and smog emissions, better control of recreational distribution to fit the resources, and more recreational opportunities for people without automobiles.

Implementation

Implementation has mainly relied on permit conditions, prescriptive rights, the exercise of public trust, and public sector financing for acquisition and development of sites. In the past, access programs have been acquisition oriented. Given the present fiscal climate, programs need broadening into other arrangements such as leasing, land banking, trading, and demonstration grants. Acquisition approaches to beach recreation are generally inapplicable in intensely developed coastlines.

Governmental units need to recognize the existing and potential role of the private sector in providing recreational access such as charter boats, restaurants, and hotels. The private sector should be more involved in access programs. Public funds for acquiring and managing access programs are expected to decrease in the future relative to the increasing need for such programs. In many cases the private sector can provide access and recreational opportunities more efficiently and effectively than government efforts.

Greater private sector involvement may require the exclusion of the public from some areas in order to provide new or additional public access in other areas. Such tradeoff arrangement should be designed to make the public funds go further while providing greater recreation access opportunities. Restoration of wetlands, for example, may involve the commercial development of degraded or marginally productive areas in order to finance the enhancement of other wetland areas.

Public accessways gained by imposing conditions on developments that propose to locate on coastal lands have often not been made available to the public because a government agency or a private organization has not assumed the responsibility for site development and maintenance. Conditioning coastal development to provide accessways must be coupled with public and private programs to provide the necessary site development as well as continual maintenance. In budgeting access programs and setting acquisition priorities, it must be recognized that the costs of acquiring accessways are often less than the required follow through costs of site development and maintenance. Government units should be aware of the hidden costs of providing recreational access such as maintenance, policing, trash removal, and administration.

Poorly planned and managed access programs will often produce bitter social conflicts among the following groups: neighborhood residents, visiting recreationists, recreation interest groups, merchants dependent on visitor patronage, and merchants relying on local patronage.

Maps should be produced by the management agency depicting the location of accessways, the facilities provided, and the types of recreational opportunities at each site.

Program Monitoring and Evaluation

Access objectives should be as specific as possible in order to guide program activities and serve as criteria for program evaluation.

Planners need to be a little less concerned with simply providing access and more concerned with the nature of the experiences being provided by the program. Recreational access to the coast should be measured in terms of user satisfaction. Space does not constitute service. The quality of the experience is more important than how much access is being provided. Access is a tool for providing recreation opportunity and not an end in itself. In the future satisfactions rather than access ways may in fact be the scarce commodity.

Periodic inventories should be made of all coastal accessways and related facilities provided by the various government programs. The inventory will provide both a basis for enforcement actions and an information base on the relative success of types of access provision for reference in future permitting activities.

IT ISN'T WORKING¹

Tom Harris, Environmental Affairs Writer
San Jose Mercury News

A funny thing happened to me on my way to the coast, as the script writers are wont to say. I missed it. I meant I went right past it.

I did, however, take particular note of all the nice new buildings, the miles of charming landscape screening, the security patrols and gates at Malibu, and the lovely cattle chutes and leafletting guards at Broad Beach. Thrilling. Really great.

And the LCP's — astounding. Local government in a planning partnership with the Legislature . . . Now if that isn't enough to make an environmentalist's blood run cold, I don't know what would.

Partnership: now there is an interesting word. It prompts me to recite Harris' first law of labelling: "Any organization that includes the words 'environment' and 'economy' in its title will inevitably ignore the former. My second law on the same subject is that any group that identifies itself in title as seeking 'balance' usually doesn't. So much for California's Council on Environmental and Economic Balance. Would that its persistent opposition to coastal protection could be dismissed so easily.

Further on 'partnership': During a recent meeting in Santa Monica, Coastal Commission Executive Director Michael Fischer told a group of citizen coastal warriors that "the partnership on the coast is working well," in reference to the LCP process drafted by the Legislature in the midnight massacre, in 1976, of what had been the California Coastal Zone Conservation Act of 1972.

That brings to mind a third law that needs reciting here: Anytime the Legislature reworks an initiative passed by the voters — in the name of cementing that mandate into law — what usually gets cemented is the intent of the people and it usually winds up at the bottom of the river — not in the law journals.

You bet the partnership is working — and that is what scares me. The Legislature, save for a few brave souls in the Assembly, never wanted a coastal conservation act in the first place. They beat it down year after year in Sacramento until the people — more than 55% of them — took things into their own hands in 1972. Proof of the accuracy of that statement came in 1976 when then-Senator Randy Collier stripped the name "conservation" from the Coastal Conservation Act. At least he was honest about his intentions. Said Mr. Collier: "This is no conservation act. It's a regulatory act." Huzza. That it certainly was.

The people acted because it was at the local government level, for years dominated by the real estate and corporate interests, that the most violence was done to the coastline's sensitive ecosystem and scenic beauty. The Legislature reversed the correction of Proposition 20, rejected a definitive management plan that had been drafted with more public involvement than any other document in the state's history, and turned the planning process back to local government.

Now some of you undoubtedly will defend that repository of long-range planning excellence, claiming that the Coastal Commission still rules with an iron fist over the contents of those plans and that the built-in veto of the state board as a final court of appeal is reassurance enough. Well, good luck. Anytime such matters of interpretation are involved, the outcome hangs entirely on the balance (there's that word again) of competing interests on the commissions who determine the acceptability of those plans and how closely they comply with the policy mandates of the 1976 Act. While it may be a bit early to pass final judgement on the makeup of those tribunals, I think we can get an idea of where it's going when we see instead of Mel Lane or Brad Lundborg at the helm, we see Doril Wright. And we see people like Rim Fey bounced from the South Coast panel, and commissioners like Naomi Schwartz, Judy Roesner, Margo Feuhr and others under heavy attack in the current reappointment lobbying.

But, let's get back to my "funny thing on the way to the coast" beginning. Nearly a year ago, I started out on what I thought then was a reasonable, simply, and straightforward assignment. Six years after the people voted resoundingly to "protect, preserve and restore" the coast, it seemed like a good idea to check on how well that job had been done. Just a simple assessment and review, thought I. Certainly

¹This talk by Tom Harris was the keynote address for the conference.

there would be earlier reviews and evaluations to pluck some juicy quotes from, good hard data to paraphrase and, perhaps in a moment of weakness, pirate.

What a shock. Four and one-half numbing months later, the answers came, but not from any simple reading of detailed studies and reviews because there were none. No one or no agency had bothered to conduct a critical assessment or review of just what the process had yielded. I will not apologize for presumption when I so label the six-part series we published in mid-October as "Coastline in Crisis," for that certainly is what we found.

There is no way I can report, even in summary, the results of that effort in the little time remaining. Nor, perhaps should I attempt to. You are here to design the actual bureaucratic mechanisms to deal with one of the glaring flaws we discovered: a leaky access system but I think I must try to give you even a brief glimpse of what the overall coastal picture is. I confess, at the outset, this is not your basic, everyday piece of objective reporting. I am speaking now, not writing. And I speak as more of an advocate than a disinterested, dispassionate "objective reporter." And that is the price I extract for such appearances. The only coin I ask or accept, is that of unshelved advocacy. There is nothing wrong with advocacy as long as the speaker identifies his bias. And because presentation thus far has been so subtle (ahem) I will unabashedly identify my bias as for the coast and its threatened resources — not for the Coastal Alliance, that at this very moment is resurrecting from the dead; not for the Sierra Club and its coastwatchers. But for the coast itself. If a legal scholar can write passionately on "Should Treds Have Standing?" then I can, with equal commitment and vigor, ask "Who Speaks for the Coast" not in the political or rhetorical sense, but in the pure biologic and humanistic sense.

Indeed, who does speak for the coast and its finely meshed systems when the result of uncoordinated, undisciplined local planning will be a virtually unbroken sea wall from Santa Barbara to the Mexican border? Whoever it is, the message isn't getting through. I said at the start of this rhetorical journey that "It Isn't Working." Now, you tell me, is it: When one community erects a rock groin to trap sand that merely robs the next beach downshore, is that working?

When the Department of Parks and Recreation spend only \$25.8 million of \$155 million voted by the people for coastal park acquisition and inflation tears away at what the balance will buy because of soaring land costs, is that working? Is the idea of more public ownership of what always should have been a public resource being enacted?

When perhaps as many as 450 hard-fought-for public accessways have reverted back to their original owners because they were not properly acquired even after they were dedicated by permit applicants . . . and as many as 1,000 or more threatened with that loss unless someone comes to their rescue quickly, is that working? Is the partnership working, which refuses on one hand, to accept these vital pathways to the beach, for liability and maintenance, while refusing to finance their acceptance and development, on the other? The painful and obvious answer is: You bet your groin it is.

When more than 95 percent of 47,000-plus applications to construct have been approved since the people said they wanted less and less of that, is it working?

Well, not to be too rhetorical, suffice it to say that what you see is not always what you get. Not that that will come as any great shock to the voters of California, but it is a point worth making, if only to drive home to the voters that the job of coastal protection — my what a fine, handsome ring that has to it — is unfinished.

I made a point earlier about the carefully masterminded machinations of the Legislature once the public is finally stirred to indignation. With the sad performance of post-Proposition 13 behind us, let us not forget Proposition 15 — the late great Nuclear Safeguards Initiative. Just when it was about to pass the mighty minds of Sacramento purposefully torpedoed it with a set of hastily drawn — and purposefully flawed — laws that, predictably, were later struck down as unconstitutional. But they certainly did fulfill the measure of their creation. Proposition 15 lost when it otherwise most certainly have won.

Well, to end, why this anti-Legislative diatribe you might ask? What has that to do with a bunch of bureaucrats earnestly fumbling around for a way to understand and then implement these kinds of confused orders from on high? A good question, I respond. Niftily, and not hardly by any coincidence, I just happen to have an answer right here. Not THE answer, I hasten to add. Just an answer — just a meager plea that as you flesh out and firm up the skeletal foundation with which you have been presented, err, if you must, on the side of the party that is most in need and least represented: the golden, sandy beaches and those who crave to frolic on them; the shifting dunes and the fragile ecologic community that survives there; the promontories, the already steeply-eroding bluffs.

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Section 1

**ACCESS THROUGH PERMITS,
PUBLIC TRUST, AND
PRESCRIPTIVE RIGHTS**

INTRODUCTION

If one were to list and rank the factors that led to the passage of both state and federal coastal zone management legislation, the provision of recreational access to the coasts would probably be at the top of the list. The legitimacy of coastal zone management as a government enterprise largely rests on the need to protect and increase public access rights and opportunities. The conference's keynote address as well as the papers by Tulk, Dall, and Dickert reiterate these points. The papers of the first session, however, point out the numerous difficulties of providing public access. The California Coastal Commission and counterpart agencies in other states have found public access to be a large two-edged sword. As noted by Tulk and Dall, while the Coastal Commission receives much of its political support from the public access issue, much of the most visible and vehement opposition arises from the commission's attempts to provide public access by means of its permit decisions or its involvement in the development of local coastal management programs. One measure of opposition to the commission's access policies is the four lawsuits on access conditions that are now pending.

Provision of recreation access to the coast is usually accomplished by means of acquisition programs, land use zoning, conditioning of development permits, determination of prescriptive rights, and the exercise of public trust over sovereign lands. In the first session the distinction was made between *ad hoc* approaches and planning approaches. Generally, conditioning permits, determining prescriptive rights and public trust lands are *ad hoc* approaches, and as such have inherent problems. Limitations to *ad hoc* measures are discussed in both papers by Dall and Dickert. Acquisition programs and land use zoning usually characterize the planning approach to the provision of public access. Planning techniques also have numerous limitations — as noted by several papers in the following sessions (see Cullinan, Gold, and Ditton).

The problem of implementing the *ad hoc* approaches, particularly conditions imposed on development permits, was the most revealing point in the first session. Harris' keynote speech, Tulk's and Dall's papers on the Coastal Commission, and Dickert's analysis of the San Francisco Bay Conservation and Development Commission (BCDC) focus on the implementation problem of permit conditioning. It is amazing that only a smattering of public access ways can be found along the California coast despite seven years of Coastal Commission permit activity. In this time period, the commission has issued approximately 700 development permits that included access conditions. In essence the access ways are on paper but not on the ground and therefore are unusable by the public. It is also interesting to note that after 14 years of issuing shoreline development permits, BCDC is just getting around to evaluating the extent to which access conditions in the permits they have issued have been complied with by the shoreline developers and property owners.

Recognition and articulation of the implementation problem by the conference has perhaps to some degree assisted in resolving the California coast's paper access predicament. Last September the legislature passed an act (AB 989) to break the implementation impasse. The entire act is reproduced as Appendix B. The 12 coastal states that have programs similar to California are also experiencing many of the same problems in implementing access conditions on coastal development permits.

A second conclusion drawn from the session is the need to integrate planning and *ad hoc* approaches into an access program since they are mutually supportive activities. Papers by Dickert and Dall (as well as Watson's in session 2) present persuasive arguments why the *ad hoc* approaches and planning measures must be joined to create an effective access program. All five means of providing public access should act as mutually supportive components in an overall program. Too great a reliance on either the *ad hoc* approaches or the planning techniques will make it difficult to achieve the objectives of a public access program. It appears that the political opposition coastal agencies have created in their attempts to provide access is largely attributable to the failure to weave together the planning and *ad hoc* approaches. Dickert's paper portrays coastal access as a system composed of three interacting elements: shoreline access (getting from the road to the shoreline), intracoastal access (distribution along the coast), and inter regional access (inland areas to the coast and/or between coastal regions). The *ad hoc* approaches by-and-large deal with getting people from the road to the shoreline. Dickert's paper and Burke's paper in session 3 point out that transportation, recreation, and land use planning are needed to back up and integrate site access programs. A recreational access program that is not integrated with local transportation, recreation, and land use plans is likely to be an exercise in futility.

Although all the session's speakers agree that providing and increasing public access to the coast is a desirable social objective (public access is a motherhood concept as objectives go), there was a consensus that access should not, nor could not, be provided at equivalent levels in all areas. Natural resource values, sensitive environments, health and safety hazards, and security considerations make many areas along the coast either unsuitable for public access or accessible on a restricted entry and closely controlled basis. In addition to the questions of the geographical distribution and intensity of access, there is the thorny issue of social equity. What groups are benefitting and being adversely affected by coastal access programs?

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PUBLIC ACCESS THROUGH THE PERMIT PROCESS CALIFORNIA COASTAL ACT OF 1976

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Introduction

The right of the public to reach the publicly owned tidelands is a constitutionally protected right; Article X Section 4 of the California Constitution states:

No individual, partnership, or corporation claiming or possessing the frontage or tidal lands of a harbor, bay, inlet, estuary, or other navigable water in this state shall be permitted to exclude the right of way to such water whenever such law as will give the *most liberal construction* to this provision so that access to the navigable waters of his state shall *always be attainable* for the people thereof. (Emphasis Added)

Assuring that this right is protected is one of the most basic goals of the Coastal Act of 1976 (Section 30210).

The California Coastal Act of 1976 itself exists largely as a result of public outrage expressed in the early 1970s due to the lack of public access to and along the shoreline. In response to the increasing rate of development along the 1,100 miles of the California Coastline and the concomitant loss of public access to the state-owned tidelands, in 1972 the voters of California passed the Coastal Zone Conservation Act of 1972 (Proposition 20). From 1973 through 1976, as part of its regulatory function, the Coastal Zone Conservation Commission granted permits for development along the shoreline subject to conditions requiring the provision of public access to and along the shoreline. As noted in the *Coastal Plan*, such access provisions were and are still necessary to offset the impacts that development along the shoreline have on the public's ability to get to the state owned tidelands:

Along the immediate shoreline, homes, businesses, and industries have often cut off existing public access to the coastline, have used up available road capacity and off-street parking, and have precluded use of the coastline area for recreation. Development back from the shoreline also affects the ability of residents and tourists to get to and use the coast. In addition to its impact on transportation systems serving the coast, development can reduce upland recreation opportunities that would otherwise relieve demand on the shoreline.

This approach of requiring provision of public access through the regulatory process was carried through to the California Coastal Act of 1976. In adopting the Coastal Act, the legislature declared that public access to and along the shoreline be maximized (Section 30001.5(c)). In light of the burdens stated in the Coastal Plan that private development along the shoreline may have on public access, Section 30212 requires that: "Public access from the nearest public roadway to the shoreline and along the coast shall be provided in *new development* projects. . . ." Again through the permitting process, the Coastal Commission has attempted to maximize public access to the California coast. After seven years of regulation, the question is now being asked, how effective has the Coastal Commission been in fulfilling this mandate?

The Permit Process

All projects requiring a coastal development permit must comply with the public access provisions of Chapter 3 of the Coastal Act. Generally, in new development projects located between the first public road and the sea, access to and/or along the shoreline is required to assure that the right of public access is guaranteed now and in the future. In the summer of 1979, the commission adopted an expanded set of guidelines which, based on seven years of experience, set forth a summary of commission interpretation of the public access provisions of the Act and the ways in which developments may comply with these provisions. Although the legal mechanisms to carry out the intent of such conditions have been modified, the basic requirements for provision of lateral and vertical access dedications have remained constant.

Lateral access dedications provide for public access and use along the shoreline. A 25-ft-wide accessway along the dry sandy beach for passive recreational use by the public has been found by the Commission sufficient to offset the burden new development projects generally impose on public access. This 25-ft-wide minimum has been established as the necessary width to allow reasonable use by the public of the state-owned tidelands. In some instances this may be reduced to protect adjacent resources or to protect the privacy rights of adjacent property owners. However, where the proposed project would, either by itself or in conjunction with others, similarly impose unusual burdens on the public's ability to use the shoreline, at the present time or in the future, additional area for public access and public use of the shoreline may be required to offset the additional burden imposed on the public's constitutionally protected right of public access resulting from the project.

Vertical access dedications are required to provide access from the first public roadway to the shoreline. New development proposed on sites located between the first public road and the sea may be required to provide vertical access under the mandates of Section 30212 of the Coastal Act. In determining where vertical access should be required, the Commission considers the nature of the burden on public access created by the project, the new public need to gain access to the shoreline in a given area, the physical constraints of the site including but not limited to, safety hazards, existence of fragile coastal resources and current agricultural uses, the location of support facilities such as parking areas, and the privacy needs of the residents of the project site.

In accord with Section 30214 of the Act, in determining the amount and types of uses appropriate for a given accessway, the commission considers the protection of habitat values of the site, topographic constraints of the site, the recreational needs of the public, and the privacy rights of the landowner. In most instances, restrictions on uses of accessways dedicated in accordance with permit conditions may also be imposed by the accepting agency or association with the approval of the executive director to provide for more effective maintenance of the accessway. Example of use limitations are: (1) pass and re-pass; (2) passive recreational uses (e.g. walking, swimming, jogging, sunbathing, fishing, etc.); and (3) active recreational uses (full range of beach oriented activities).

As discussed previously, public access to and along the shoreline must be provided in "new development" projects located between the first public roadway and sea. Section 30212 of the Coastal Act provides that following exceptions to that requirement:

1. It is inconsistent with the public safety, military security needs, or the protection of fragile coastal resources;
2. Adequate access exists nearby; or
3. Agriculture would be adversely affected.

In some instances by limiting the amount, type or hours of use of an accessway, public access may be provided consistent with public safety and protection of agriculture and fragile resources. Where it is impossible to provide any amount of public access without adversely affecting agriculture or fragile coastal resources or jeopardizing public safety or security needs, or if adequate access exists nearby, no provision for public accessways is required to find the project consistent with Section 30212 of the Coastal Act.

In addition to requiring dedications of accessways in connection with new development projects, the Commission is mandated to protect public access established through historic use and legislative authorization. Section 30211 of the Coastal Act provides:

Development shall not interfere with the public's right of access of the sea where acquired through use or legislative authorization, including but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

To meet the provisions of Section 30211 of the Act, where there is evidence of historic public use which has been documented through photographs or statements by users of the shoreline area, and where a proposed development could interfere with the assorted historic use, the commission protects the possible prescriptive rights. Such rights have been preserved through recordation of access agreements acknowledging the existence of public rights on the site or by siting and designing the proposed development in a manner which does not interfere with the public rights. The actions taken by the commission should not diminish the potential prescriptive rights in any way. The commission has, however, allowed development to be sited in an area of historic public use where equivalent areas for public access are provided; such compromise dedication areas should provide for equivalent area and use of the accessways. Where appropriate, the commission investigates the factual basis of the prescriptive rights claim. The commission, upon compiling such preliminary data, may request the attorney general's office to review the data advise the commission on what actions, such as litigation to quiet title in the public, should be taken. (See Discussion Paper By N. Gregory Taylor.) Also, for a more detailed discussion of the public access requirements of the Coastal Act as administered through the permit process, see the *Statewide Interpretive Guidelines on Public Access* included in Appendix A.)

Estimates indicate that through the permit process, approximately 700 accessways have been dedicated or offered for dedication (awaiting a public agency to access the grant). Only a small percentage have been opened to public use. Since the Coastal Commission itself cannot hold title to or manage property, it must rely on other public agencies to assume the costs of opening accessways obtained through the permit process. Prior to 1980, especially in light of the impacts of Proposition 13, it had been difficult to obtain the cooperation of the necessary agencies to open the accessways to public use. The result was a large number of paper accessways, little more usable public access than existed in 1972.

Opening Accessways to Public Use

Although the commission has consistently applied the access policies of the Coastal Act as described above and numerous dedications or offers of dedication have been obtained, only a small portion have, in fact, been opened to public use. Because of the limited number of accessways actually available to the public, the commission has been questioned as to whether its actions in requiring access dedication have in fact "maximized public access" in fulfillment of the expectations of the public in voting for Proposition 20 and endorsing the Coastal Act of 1976. Based largely on the current shortage of public funds and the Coastal Act requirement that dedicated accessways not be opened to public use prior to the accepting agency assuming liability and maintenance costs, the public expectation that enactment of the Coastal Act would result in immediate access to the beaches within the state has not been fulfilled. However, rather than failures in the Commission process, the inability to open the accessways has been largely due to lack of funding and co-ordination amongst local and state agencies available to administer and maintain these accessways.

New legislation [AB 989 (Kapiloff); see copy of the legislation in Appendix B] adopted in 1979 addresses these problems in opening accessways. By calling for a comprehensive access program drafted by the Department of Parks and Recreation, the Coastal Conservancy, and the Coastal Commission in consultation with local governments, the legislation provides a forum in which the problems involved in opening accessways can be addressed and solved. AB 989 also provides a mechanism for identifying appropriate agencies to maintain the accessway and establishes a funding program for improvements necessary. A survey of all accessway offered for public use through the coastal permit process — also required under this legislation — is almost completed and an evaluation of the available maintaining agencies is already underway. The continuation of the permit process, the detailed review of access needs through the local coastal program planning process, and the implementation of the access program through this new legislation provide the complete range of projects to finally accomplish the major goal of the Act — **MAXIMUM PUBLIC ACCESS TO THE STATE OWNED TIDELANDS.**

PUBLIC TRUST AND PRESCRIPTIVE RIGHTS

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Introduction

The California Coastal Act of 1976¹ requires that maximum public access shall be provided: "consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse."²

The first session of this conference is an examination of the various means through which the access requirements of the Coastal Act can be accomplished. There are essentially three ways to require or obtain recognition of public access rights. They are: (1) exercise of the police power; (2) exercise of the public trust over sovereign lands; and (3) recognition of public access rights acquired by the doctrine of public prescriptive rights. The latter two of these means will be discussed in this presentation.

The purpose of this paper will be to briefly:

1. Define the public trust and prescriptive rights doctrine in light of public access in the Coastal Zone,
2. Discuss the problems in identifying lands which are subject to such rights under either concept

First, it should be noted that assertions are frequently made regarding lands which are subject to the public trust over sovereign tide and submerged lands and to public prescriptive rights. These assertions often are made without an adequate understanding of either doctrine and an adequate investigation as to whether there is a sound factual basis for the claim. With a proper understanding of the doctrines and adequate factual investigation prior to making such assertions, much of the controversy regarding these matters can be avoided. In many instances, it will be found that the doctrines are inapplicable or there is no factual basis for the assertion. In any event, it should be emphasized that these must be a thorough study before either of these doctrines can be a thorough study before either of these doctrines can be successfully used to impose public access requirements in the Coastal Zone.

Where valid facts exist for the existence or imposition of public access on one of these two bases, upholding such rights is on a firmer footing than requirements imposed solely by the exercise of the police power. The reason for this is the fact that such access rights are an assertion of a publicly owned real property right.

In order to assess the effect of the public trust over sovereign lands and public prescriptive rights doctrines on public access matters in the coastal zone, it is necessary to examine each separately.

Public Trust Over Sovereign Lands

The public trust which is referred to in this context is the trust over sovereign tide and submerged lands.

When California was admitted to the Union in 1850, it received title to the tide and submerged lands within its boundaries to be held subject to a public trust for purposes of commerce, navigation and fisheries.³ These purposes have been interpreted by the Supreme Court of California:

... to include the right to fish, hunt, bathe, swim, to use for boating and general recreation purposes the navigable waters of the state, and to use the bottom of the navigable waters for anchoring, standing, or other purposes. (See *Bohn v. Albertson*

(1951) 107 Cal. App. 2d 738 [238 P.2d 128]; *Forestier v. Johnson*, supra, 164 Cal. 24; *Munninghoff v. Wisconsin Conservation Comm'n.* (1948) 255 Wis. 252 [38 N.W.2d 712]; *Jackvony v. Powel* (1941) 67 R.I. 218 [21 A.2d 554]; *Nelson v. De Long* (1942) 213 Minn. 425 [7 N.W.2d 342]; *Proctor v. Wells* (1869) 103 Mass. 216.) . . .

The public uses to which tidelands are subject are sufficiently flexible to encompass changing public needs. In administering the trust the state is not burdened with an outmoded classification favoring one mode of utilization over another. (*Colberg, Inc. v. State of California ex rel. Dept. Pub. Wks.*, 67 Cal. 2d 408, 421-422 [62 Cal.Rptr. 401, 432 P.2d 3].)

There is a growing public recognition that one of the most important public uses of the tidelands — a use encompassed within the tidelands trust — is the preservation of those lands in their natural state, so that they may serve as ecological units for scientific study, as open space, and as environments which provide food and habitat for birds and marine life, and which favorably affect the scenery and climate of the area. It is not necessary to here define precisely all the public uses which encumber tidelands." *Marks v. Whitney* (1971) 6 Cal.3d 251, 259-60; 98 Cal.Rptr. 790, 796; 491 P.2d 374, 380.

It is well established that the public uses of lands subject to this public trust include public access to adjacent waterways. Indeed, there is a clearly enunciated policy in the California Constitution in favor of allowing the public access to shoreline areas.⁴

The greatest problem presented in this regard is identifying lands which are subject to the public trust as opposed to adjacent uplands.

Sovereign tide and submerged lands, in the coastal zone, are by definition those lands located below the ordinary high water mark of the ocean, including bays, inlets and tributaries.⁵ This definition is deceptively simple. In fact, it involves a very complex study to determine the location of the boundaries of trust lands.

Being a water boundary, the upland boundary of sovereign lands is subject to change so long as conditions remain unaffected by man. When man affects the shoreline locations by such activities as fill and construction of groins, breakwaters, piers or other structures, the boundary becomes fixed in the last location of the ordinary high water mark before such activity (where areas seaward of that mark have been filled or have become dry as a result of artificially caused accretions). In such instances the public trust continues to exist over filled sovereign lands and such lands which are above the present ordinary high tide line as a result of accretions artificially caused.⁶ From this it is seen that determining the upland boundary of sovereign lands involves an historical and engineering evaluation. It is beyond the scope of this paper to get into a thorough examination of the various aspects of this determination other than to broadly indicate the complexity of the problem.

The California State Lands Commission has prepared a series of maps for use of the California Coastal Commissions which identify areas which *may* be subject to the sovereign public trust. These have been nicknamed the "Red Line Maps." They may be inspected at the State Lands Commission office in Sacramento or in the Coastal Commission office for the particular area of interest. If a parcel of property is situated near or seaward of the Red Line on these maps, an interested person should check with the State Lands Commission for a determination as to whether it is sovereign lands. It should be emphasized that these maps do not identify which lands are in fact sovereign lands but merely give an indication of where such lands may exist.

Before leaving this point on the location of sovereign lands, two additional matters should be noted.

First, wetland areas may exist landward of the ordinary high water mark which may not be subject to the public trust over sovereign lands. For example, the definition of wetlands in the California Coastal Act of 1976 as follows:

"Wetland" means lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens. Public Resources Code § 30121.

A broader definition of wetlands is contained in several federal statutes and regulations concerning the coastal zone and water quality. Typical of the federal definition is that set forth in the federal Executive Order implementing the National Environmental Policy Act of 1969 regarding Protection of Wetlands, which provides:

The terms 'wetlands' means those areas that are inundated by surface or ground water with a frequency sufficient to support and under normal circumstances does or would support a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds. Executive Order No. 11990; § 7 (c), May 24, 1977, 42 Fed.Reg. 26961.⁷

From the foregoing wetland definitions, it is seen that not all wetland areas are subject to the sovereign land public trust since portions thereof are located above the ordinary high water mark.

Finally, the Legislature may terminate or authorize the termination of the public trust over reclaimed sovereign lands in appropriate circumstances.⁸ Therefore, a check must be made to determine whether the trust has been terminated over particular parcels of property. The State Lands Commission should be contacted in California regarding such information.

Since private title to lands adjacent to the open coast stops at the ordinary high water mark, public trust questions regarding access generally do not arise in connection with private development permit applications in such areas. (The location of the ordinary high water mark for boundary purposes may arise, however.) Public trust questions usually will arise in connection with private coastal permit applications in bays and estuaries.⁹ The reason for this is the fact that during the early days of Statehood, tidelands were patented to private parties by the State of California. Virtually all of these patented lands are located in the bay and estuaries of the coastal zone. Thus, private title interests in these areas may extend to the ordinary low water mark where patents affecting such lands validly exist. It is important to note that even though the tidelands were sold to private parties the courts have consistently ruled that the State retained a public trust easement for commerce, navigation and fisheries over such lands. The public agency having administrative authority over such lands may exercise this easement for purposes within the public trust without payment of compensation to the private patentee or his successors in interest, except where existing improvements are affected. (Where there are existing improvements, the agency exercising the easement must pay for the value of improvements affected.)¹⁰ The question of compensation does not arise in connection with private coastal permit applications since it is exempted by statute and affects improvements which are to be constructed.¹¹ In addition, the imposition of conditions in granting a private coastal permit may involve the reasonable exercise of the police power as well as the public trust.

Enactment of the California Coastal Act of 1976, insofar as it affects sovereign tide and submerged lands, is an exercise of the public trust existing over such lands.¹² These lands are of such a unique quality under the Act that even after adoption of Local Coastal Plans an appeal of a local coastal permit can be taken to the California Coastal Commission where sovereign public trust lands are involved in a permit application.¹³ Although the State Lands Commission is the agency responsible for the management of state sovereign land title interest,¹⁴ it is clear that the Coastal Commission shares public trust authority over these interests and may exercise its regulatory power over these lands.¹⁵ Thus, the Coastal Commission may impose conditions with respect to use thereof, including public access requirements. This should be done in coordination with the State Lands Commission, however, since the Lands Commission has the responsibility for the management of such an accessway. (Where sovereign lands have been granted by the State to a local agency, in trust, the management responsibility would be with that agency rather than the Lands Commission.)

Where a decision is made to require public access across sovereign tide and submerged lands, based upon an exercise of the public trust, the accessway may be located on any portion of the lands involved. This is in sharp distinction to the situation where public access rights have been acquired by the doctrine of public prescriptive rights. In the latter situation, the accessways are located where the public use has occurred.

Public Prescriptive Rights

In contrast to public trust rights which exist as a result of the type of land involved, public prescriptive rights arise from long continued public use of a specific area. Therefore, these access rights are taken where you find them and cannot be created in the course of the permit process. When such rights are found to exist in lands which are involved in a permit application, the California Coastal Act of 1976 requires that:

Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation. California Public Resources Code § 30211.

Therefore, it is important to resolve the question of whether public prescriptive rights exist over property involved in a permit request.

Before examining the elements necessary to establish public prescriptive rights in property, it is most necessary to emphasize the importance of a thorough factual investigation. Without such a study, it is impossible to make a determination regarding the existence of such public rights. It should be noted that in a large majority of cases reviewed by the state in the last several years, public use of the areas involved was found to not be sufficient to give rise to such rights. However, the significance of those areas where it was concluded that such rights exist more than justifies all of the investigations.

Within the constraints imposed upon this presentation, it is impossible to thoroughly cover this subject. Therefore, it is recommended that those persons actually involved in public prescriptive rights investigations obtain a copy of the "Implied Dedication and Prescriptive Rights Manual Relating to California Coastal Commission Matters" prepared by the California Attorney General's Office. Copies of the Manual may be obtained from the California Coastal Commission office in San Francisco or from the Attorney General's Office in Los Angeles.

This paper will be limited to a discussion of the basic doctrine and a few of the key points which should be noted in an investigation.¹⁶

The public may acquire the right to use property either by permission of the owner or by using the property without permission. The permissive use, whether by actual dedication or dedication by acquiescence, does not normally cause difficulty. However, determining whether the public has acquired a right of access through use adverse to the owner's interest is frequently difficult and controversial.

A right of access through use is, essentially, an easement over real property which comes into being without the explicit consent of the owner. The acquisition of such an easement by the public is referred to as an "implied dedication." The doctrine of implied dedication was confirmed and explained by the California Supreme Court in *Gion v. City of Santa Cruz* (1970) 2 Cal.3d 29. The right acquired is also referred to as a public prescriptive easement, or easement by prescription. This term recognizes the fact that the use must continue for the length of the "prescriptive period," before an easement comes into being.

The rule that an owner may lose rights in real property if it is used without consent for the prescriptive period derives from the common law. It discourages "absentee landlords" and prevents a landowner from a long-delayed assertion of rights. The rule establishes a statute of limitation, after which the owner cannot assert normal full ownership rights to terminate an adverse use. In the western United States, where actual use of land is encouraged, the prescriptive period is generally shorter than in more heavily populated eastern states. In California the prescriptive period is five years.

For the public to obtain an easement by way of implied dedication, it must be shown that:

1. The public has used the land for the prescriptive period of five years as if it were public land,
2. Without asking or receiving permission from the owner.
3. With the actual or presumed knowledge of the owner,
4. Without significant objection or bona fide attempts by the fee owner to prevent or halt such use.

Some refinements of these basic principles are:

1. To prove implied dedication, the public must produce evidence that persons have used the land for the prescriptive five-year period, without permission and without effective interference as they would have used public land; e.g., if the land is a beach or shoreline area, the public must show that the land was used as if it were a public recreational area.
2. The use should be substantial rather than minimal. Where there is a dispute as to whether the use is substantial, the dispute is to be determined by the trier of fact, i.e., the trial court.
3. Evidence that a governmental agency maintained or expended funds on the land is significant, but is not indispensable.
4. The use must be by the public at large as opposed to merely a limited number of persons who belong to some identifiable group. For example, the fact that the only use of the land was by the owners of abutting property does not raise an inference that the general public had such a right.
5. Although the use must be continual, it need not be continuous. Thus, seasonal fluctuations in use are not sufficient to prevent an implied dedication.

6. The sufficiency of the owner's acts of interference depends on the character of the land and the nature of public use, and such interference must be more than minimal and ineffectual. If the owner has made any significant attempts to halt public use prior to expiration of the prescriptive period, the sufficiency of such attempts is to be determined by the trier of fact, i.e., the trial court. (Future acquisition of public prescriptive rights may be prevented by owners utilizing Civil Code sections 1009, 1008 and 813.)

The courts have recognized the strong public policy favoring access to the shoreline, and have been more willing to find implied dedication for that purpose than when dealing with inland properties. Similarly, the Legislature has referred in Public Resources Code section 30211 to "access to the sea" (including use of beaches) but has not specifically prohibited interference with other types of access acquired by use.

A further distinction between inland and coastal properties was drawn by the Legislature subsequent to the *Gion* decision when it enacted Civil Code section 1009 which may be summarized as follows:

1. If the lands are located more than 1,000 yards from the Pacific Ocean and its bays and inlets, unless there has been a written, irrevocable offer of dedication or unless a governmental entity has improved, cleaned, or maintained the lands, the five years of continual public use must have occurred prior to March 4, 1972.

2. With regard to coastal properties presently being used by the public, the landowner has had the power (since March 4, 1972) to prevent future creation of public rights by implied dedication by posting signs containing the language set forth in Civil Code section 1008, and renewing the same, if they are removed, at least once a year; by annually publishing such language, or by recording a notice of consent to public use (as provided in Civil Code section 813). These devices operate prospectively only.

Section 1009 of the Civil Code was enacted following *Gion* to provide procedures to prevent public prescriptive rights from arising in the future as to certain inland properties and to allow all private owners to permit future public use of their lands without such a dedication occurring.

There are two important provisions which should be emphasized, however.

First, subdivision (e) of section 1009 specifically provides that the section's provisions prohibiting implied dedication rights of the public arising in the future "... shall not apply to any coastal property which lies within 1,000 yards inland of the mean high tide line of the Pacific ocean. . . ."

Second, section 1009 was not intended by the Legislature to have any effect on public prescriptive rights existing on the effective date of the Statute (March 4, 1972). This is explicitly seen from section 3 of the statute enacting Civil Code section 1009 which states:

Sec. 3. This act shall not be construed to amend or affect the provisions of Sections 11610.5 and 11610.7 of the Business and Professions Code or Section 5943 of the Fish and Game Code nor shall it diminish any public rights of access to navigable waters conferred by Section 2 of Article XV of the California Constitution nor shall it diminish any public rights to fish from or upon public lands of the state or in the waters thereof conferred by Section 25 of Article I of the California Constitution, nor shall this act be construed to affect, diminish or extinguish any right or rights vested as of the effective date hereof by reason of express or implied dedication or otherwise. (Stats. 1971, ch. 941, § 3, emphasis added.)

Therefore, public use of property for the prescriptive period prior to the enactment of section 1009 or utilization of applicable procedures set forth in the section, is sufficient to establish public rights in the property. The section does not abrogate any such vested public rights. [It should be noted that provisions for recordation and posting of real property have been available since 1963 and 1965, respectively. See Civil Code sections 813, 1008.]

In December 1977, the Second District Court of Appeal handed down a decision affirming the existence of a public recreational easement over two beachfront properties. The opinion in the case, *City of Long Beach v. Daugherty* (1977) 75 Cal. App.3d 972, was noteworthy in that it clarified some issues concerning the existence of implied dedication:

1. A prior decision establishing the title to and boundaries of private beachfront property adjoining public tidelands does not prevent a subsequent finding of a public recreational easement. The two issues are separate and not necessarily related.

2. The fact that other access to a public beach exists does not prevent the establishment of a public recreational easement over a particular beachfront property.

3. To establish "adverse use" by the public as an element of implied dedication, all that must be shown is that "persons used the property believing the public had a right to such use." No specific finding of the public's "rightful belief" need be shown.

4. From evidence of use of a beach as a whole, it can be inferred that such evidence relates to and includes property comprising a certain portion of the whole beach.

It is essential that an adequate investigation be made where the possibility of public prescriptive rights exists before any conclusions are drawn. The procedure to be followed is set forth in the Coastal Commission manual referred to previously.

The most important items to check initially are:

1. Has the private owner complied with the terms of Civil Code sections 1009, 1008 or 813? If so, the prescriptive rights investigation must focus on the period of time prior to such action was taken.

2. Has there been a formal dedication of the property? If so, there is no necessity of a prescriptive rights investigation.¹⁷

3. Has there been maintenance of the property by a governmental agency? If so, there is an excellent likelihood of public prescriptive rights and the maintaining agency will be an excellent source of information.

4. Is the area used by a small identifiable group (such as neighboring property owners) as opposed to the public? If so, a private rather than a public easement may have been created.

5. What is the degree of use by the public? If it is infrequent and by relatively small numbers of the public, the chances of finding public prescriptive rights in such situations are slim. However, all circumstances should be evaluated in this connection because the degree of use required may vary.

Before concluding this discussion one additional situation should be noted. That is where both the Coastal Commission staff and private owner agree that public prescriptive rights should be relocated to better accommodate the public and private interests. There is not prescribed procedure for this situation. When it occurs in California, the Attorney General's Office should be contacted to work out a mutually agreeable resolution of the matter.

References

1. California Public Resources Code § 30000 *et seq.*
2. California Public Resources Code § 30210.
3. *Marks v. Whitney* (1971) 6 Cal.3d 251, 258 fn. 5; 98 Cal.Rptr. 790, 795 fn. 5; 491 P.2d 374, 379 fn. 5.
4. *Gion v. City of Santa Cruz* (1970) 2 Cal.3d 29, 39; 84 Cal.Rptr. 162, 163; 475 P.2d 50, 51.
5. *Marks v. Whitney*, *supra*, at pp. 257-58, including fn. 5.
6. *City of Long Beach v. Mansell* (1970) 3 Cal.3d 462, 469 fn. 4, 482-85; 91 Cal.Rptr. 23, 28, fn. 4, 24; 476 P.2d 423, 428, fn. 4, 424.
7. Similar definitions are found in 33 C.F.R. § 323.2(c); 43 Fed. Reg. No. 190, § 4(a) September 29, 1978; see also definition of wetlands in California Public Resources Code § 5812(a).
8. *Marks v. Whitney*, *supra*, at p. 269, 98 Cal.Rptr. at p. 791; 491 P.2d at p. 375.
9. Permit applications from public agencies holding title to filled sovereign lands along the open coast or in bays and estuaries would also raise the issue of whether public access should be required as a condition of a coastal permit.
10. *Newcomb v. City of Newport Beach* (1936) 7 Cal.2d 393; 60 P.2d 825; California Public Resources Code § 6312; See also, *People v. California Fish Co.* (1913) 166 Cal. 576, 599.
11. California Public Resources Code § 6312.
12. See, *People ex rel. S.F. Bay etc. Com. v. Town of Emeryville* (1969) 69 Cal.2d 533, 549; 72 Cal. Rptr. 790, 797-798; 446 P.2d 790, 797.
13. California Public Resources Code § 30603.
14. California Public Resources Code § 30416.
15. California Public Resources Code §§ 30601, 30603.
16. The following discussion is a brief summarization of the aforementioned Implied Dedication Manual. A bibliography concerning public prescriptive rights follows this article.
17. An example of such dedication is where such access has been dedicated in the course of a subdivision approval pursuant to California Government Code § 66478.2, 66478.3, 66478.11, 66478.12, 66478.13.

Recommended Readings

1. *Gion v. City of Santa Cruz* (1970) 2 Cal.3d 29; 84 Cal.Rptr. 162; 475 P.2d 50
2. *City of Long Beach v. Daugherty* (1977) 75 Cal.App.3d 972; 142 Cal.Rptr. 593
3. *County of Orange v. Chandler-Sherman* (1976) 54 Cal.App.3d 561; 126 Cal.Rptr. 765
4. *Richmond Ramblers Motorcycle Club v. Western Title Guaranty Co.* (1975) 47 Cal.App.3d 747; 121 Cal.Rptr. 308
5. Civil Code sections 801-813, inclusive; 846; 1007-1009, inclusive
6. Briscoe and Stevens, *Gion After Seven Years: Revolution or Evolution?* (1977) 53 Los Angeles Bar J. 207
7. 7 San Diego Law Review 605 (1970)
8. 44 So. California Law Review 1092 (1971)
9. 22 Stanford Law Review 587 (1970)
10. 59 California Law Review 231 (1971)
11. 11 Santa Clara Lawyer 327 (1971)
12. 4 Loyola Law Review 438 (1971)
13. 47 California State Bar Journal 415 (1972)
14. *Public Use of Coastal Beaches*, D. W. Owens, and D. J. Brower, University of North Carolina Sea Grant program Publication, UNC-SG-76-08, 1976, pp. 335 (a good synopsis of law and policy affecting public use of beaches).
15. *Marks v. Whitney* (1971) 6 Cal.3d 251; 98 Cal.Rptr. 790; 491 P.2d 374
16. *City of Long Beach v. Mansell* (1970) 3 Cal.3d 507; 90 Cal.Rptr. 729; 476 P.2d 97
17. *County of Orange v. Heim* (1973) 30 Cal.App.3d 694; 106 Cal.Rptr. 825
[See law review articles cited in above cases.]
18. Sullivan, *Legal Issues In Public Trust Enforcement* (1977) [Pamphlet published by The Committee on the Office of the Attorney General of the National Association of Attorneys General Foundation — 3901 Barrett Drive, Raleigh, North Carolina 27609]
19. Comment, *California Beach Access: The Mexican Law and The Public Trust* (1972); 2 Ecol.L.Q. 571
20. Taylor, *Patented Tidelands: A Naked Fee – Marks v. Whitney and the Public Trust Easement* (1972); 47 California State Bar J. 421
21. Note, *The Public Trust in Tidal Areas: A Sometimes Submerged Traditional Doctrine*, 79 Yale L.J. 762 (1970); Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention*, 68 Mich.L.Rev. 471 (1970); Comment, *Private Fills in Navigable Waters: A Common Law Approach*, 60 Cal.L.Rev. 225 (1972). See also Note, *Navigation Servitude*, 2 Colum.J. of Law & Soc.Prob. 75 (1966).
22. Littman, *Tidelands: Trusts, Easements, Custom and Implied Dedication* (1977) 10 Natural Resources Lawyer 279

PUBLIC ACCESS TO THE COAST: POLICY OR PROGRAM?

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Increased public access to and along the coast is the *raison d'être* for the California coastal program and is one of its highest priorities.¹ Not only was the 1972 Coastal Initiative (Proposition 20) proposed to the voters as the way to keep beaches and state tidelands from becoming locked up by private shoreline development such as the Sea Ranch or Malibu Colony, but both the 1972 Coastal Zone Conservation Act and the 1976 Coastal Act which superseded it provide for "maximum" public access to beaches and other coastline areas.²

The first- and second-generation coastal acts have both relied on a combination of regulation, planning, and state acquisitions of private lands to achieve the high aspirations of providing access to the coast for all people.³ It is remarkable, however, that although the state and regional commissions have devoted literally thousands of hours to making more than 600 sometimes highly controversial permit and planning decisions intended to increase public access, painfully few accessways have been opened to the public as a result of them.

The Sierra Club has participated in many of these proceedings and brought a not insignificant number of appeals from regional commission decisions to assure that otherwise-approved shoreline development be conditioned to provide appropriate levels of public access to and along the coast. It has been our position that pursuant to Section 4, Article X of the state constitution, the beaches and rocky tidelines are public and ought therefore to be in fact accessible to the public, although access levels at specific locations should be based on the ability of coastal resources to sustain that use over time. However, all of the structural solutions to access along the coastline will never really work unless we begin to educate people on the uses and abuses of coastal resources and environments. It simply does no one any good to open an accessway to a beach and then, as has been the case in northern Mendocino County, watch people in four-wheel-drive vehicles shoot the seals that haul out on the beach; or for us to accept the annoyance of a littered Zuma Beach.

The Coastal Commission should heed the experience of the San Francisco Bay Commission (BCDC). BCDC published a little pamphlet that is widely distributed throughout the San Francisco Bay area and is frequently referred to by many people in this area. The pamphlet indicates all the access points along San Francisco Bay. It is portable; you can put it in your backpack, you can carry it around, kids can read it because the print is big, the BCDC is favorably mentioned. The point is, the citizen who wants to gain access to San Francisco Bay has in one very small document literally a lexicon or an atlas that indicates the location of access points, with instructions on how to best use or limit the use of resources.

The need for increased public access seems clear to us. The demand for shoreline space in which to pursue water sports, beach recreation, fishing, sight-seeing, birding, and walking or hiking has grown significantly in the past two decades. That unfilled need is quantitatively best expressed by the tens of thousands of urban beach-goers who are turned away annually because sandy beaches and their facilities are overcrowded. Qualitatively, the need is expressed most clearly when the solitary hiker along the rugged North Coast is confronted with the locked gate across a traditional path that now leads through a second-house subdivision.

The Sierra Club in the past two years therefore has become rather concerned that as the demonstrated need for increased public access to the coast remains and grows, the coastal program has not been able to deliver increased access. With the exception of perhaps two dozen accessways that have

been opened in conjunction with commercial or visitor-serving developments that had planned them as integral parts of the project, but restricted to private use; the vast number of offers to dedicate were allowed to languish in the files of the bureaucracy. Only in 1979 did the commission and the conservancy begin to even inventory the offers of dedication and commit staff and fiscal resources to implementing them.⁴

Even in 1980, there is no unified access program that integrates the continuing and prospective offers of dedication, local coastal program access components, and State Department of Parks and Recreation planning, acquisition, and development efforts. Lacking most notably is a clearly articulated objective towards which these several parts may lead: a statewide coastal trail, a system of regional trail networks, or a scenic trails corridor. As a result, local governments are for the most part preparing local coastal program access components that rely on previous commission ad hoc permit decisions (to the extent cities and counties willingly recognize them at all) and the policy mandate of the statute, but neither they nor the commission relate them to adjoining jurisdictions or an express statewide objective for coastal access.

Similarly, the linkage between the Coastal Zone Conservation Commission's land acquisition recommendations, made in 1976 and not formally updated since then although the Legislature annually has enacted new park acquisition legislation, and the implementing actions of the Department of Parks and Recreation, has been tenuous where it has not actually been difficult. The department, ever jealous of its embattled position, has repeatedly resisted the recommendations of the commission and has substituted its own acquisition and development priorities.⁵ Existing coastal parks and beaches have variously been expanded, of course, and several new ones have been acquired, but the actions of the department have only poorly meshed with the inarticulated objectives of the coastal program.

Partly because of these difficulties, public access to and along the coast has been notably politicized by those generally opposing increased access, while many of the strongest supporters of Proposition 20 have receded from their high levels of participation in the coastal program. The unnecessary amendments to the Coastal Act in 1979, which essentially incorporated the commission's access guidelines into the statute, and the flurry of proposed legislation to exempt all single-family house development, including the ability of the commission to condition it with public accessways, are indicative of the political milieu in which the coastal program after seven years finds itself.⁶ It may be indicative of these tempestuous times that a bill introduced in the 1980 legislative session to exempt the Sea Ranch subdivision from the commission's adopted access requirements may become a bill that mandates an access program upon that project. In either case, it suggests that given its present authority and the lack of an integrated, multi-agency access program, the commission's (and some of its supporters') high aspirations substantially exceed its realistic ability to perform.

References

1. Janet Adams, "Proposition 20 — a Citizen's Campaign," *Syracuse Law Review* 24 (3):1019-1046, Summer 1973.
2. California Coastal Zone Conservation Act, Sec. 27301 (c) (4), 27103 (3), California Coastal Act, Sec. 30210-30251, 30252 30500 (a) 30604 (c).
3. *Ibid.*, Sec. 3001.5 (c), 37301 (c) (4).
4. California Coastal Commission, Staff Recommendation, on California Coastal Conservancy's access actions, February 18, 1979.
5. California Dept. of Parks and Recreation, *Parks Plan*, 1980.
6. California Assembly Bill 117, AB 643 (Calvo) re: guidelines, California Senate Bill 776 (Cusanovich) exempt of all single family houses. (The bill was not enacted.)

LIMITS TO THE *AD HOC* APPROACH

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Access to coastal zone resources, possibly more than any other single factor, has been a major impetus for coastal zone management in California and other coastal states. The California Coastal Act declares that "maximum access . . . and recreational opportunity shall be provided for all the people. The major means for providing recreational access under the Coastal Act are through conditions imposed on permits issued for development and public acquisition of lands by local, state or federal agencies. Permit review is especially important in California because more than 60 percent of the California coast presently exists in private ownership and the imposition of permit conditions may be the only means of obtaining permanent access unless substantial areas are acquired. Large scale acquisition currently remains problematic given the level of funding available from state bond issues and local funds.

Permit review on a project-by-project basis is an *ad hoc* approach to the provision of recreational access because it relies solely upon the merits of potential access in a single development project. Project proposals within any one geographic area may occur over a period of several years making it difficult to link together access acquired in two different projects.

Limitations of the Permit Review Process

Reactive Rather than Positive

Perhaps the most pervasive limitation of the permit process is that the Coastal Commission must react to proposals on a case-by-case basis. The permit process has normally resulted in placing conditions upon the development of a single parcel, for example limiting the area to be developed or placing specific conditions upon the visual appearance of a structure. Recreation access has been approached by requiring dedications of lateral accessways or, for example, reducing the overall density of a project in order to project parking for recreational users. The across the board application of the "maximum feasible" public access criteria may not lead to continuous access along the entire coast or provide access where need or demand may be the greatest. Options for providing access on a case-by-case basis will be limited by the size and configuration of the parcel or the type of proposed land use (e.g., it may be easier to provide access within commercial rather than residential development projects).

A basic problem in the *ad hoc* review process is the absence of a frame of reference from which to decide how much access is enough. The review of a single project is an unlikely place to begin analysis of the regional demand for recreation or determination of the remaining capacity of a coastal highway. In the absence of adequate analysis of these questions there will be no way to determine the importance of a proposal to acquire additional access within specific areas of coastal zone. For example, the above approach will make it difficult, if not impossible to link together accessways gained by permit conditions into a regional or statewide coastal trails system.

Monitoring Access Conditions

Similar to many other areas of regulatory practice, recreational access requires monitoring in order to assure compliance with permit conditions. Monitoring is a particularly difficult problem in case-by-case review because projects may be reviewed and approved within many different geographic areas or two or more counties at any one time. Project construction delays may also confound orderly monitoring of permit conditions. Further, limitations of staff availability and time have curtailed the systematic pursuit of permit condition monitoring on the California coast. At the time of this conference, the California Coastal Commission had little idea of the amount, location, and quality of recreational access which has been provided over the last six years through permit conditions. For the past six years much of the recreational access dedicated through permit review has been hypothetical. By January 1, 1981, however, the California Coastal Commission must prepare a coastal access inventory which shall be updated on a continuing basis. The inventory is to include a brief description of the type of access provided, access constraints, access facility ownership, and resources or uses for which access is provided or suitable.

The Coastal Commission is not alone in relying solely upon the good faith effort of the project proponent. It was not until mid-1978 — almost ten years after the creation of the San Francisco Bay Commission — that BCDC began review of compliance with permit conditions placed on projects around the San Francisco Bay.¹² One study undertaken for BCDC concludes that “permit conditions, which are often not very specific, are most likely to induce compliance during the first few months after the permit is granted. After a few months have passed the permittee may conclude that BCDC is merely a “paper tiger,” imposing no sanction for noncompliance with permit conditions.³

Because of the lack of permit monitoring on the coast to date, local governments should be encouraged to include the determination of compliance with permit conditions, as one component in the inventory of existing access within their jurisdictions. At the very least, the compliance inventory will both establish a basis for enforcement actions as well as provide an information base on the relative success of types of access provision for reference in future permit letting activities.

Judging Access in Permit Review

Another problem in project by project review is the difficulty of judging the *quality* of access which will result from the final built project on the basis of the documentation normally submitted. Quality here refers to the type of improvements (e.g., stairways, walkways, signing, etc.) required and necessary in order to make the accessway fully usable by the public. Maintenance of accessways will also play an important role in the quality of access provided. Review of a sample of project plans submitted to the Coastal Commission⁴ indicates a high degree of variability in the detail provided for respective projects. The review of these projects suggests that most often the Coastal Commission has incorporated as a condition of the permit approval that more detailed site plans be submitted by the applicant prior to beginning construction. This approach in effect postpones consideration of the quality of the access to a point in the development review process where it will be difficult to negotiate major adjustment in the site plan in order to accommodate access conditions.

Dimensions of Public Access

In order to further characterize the limits of the ad hoc approach, it is useful to distinguish between three dimensions of public access. These three dimensions include: inter-regional access, intra-coastal access, and shoreline access.

Inter-Regional Access

Inter-regional access is defined as the ease of movement between inland areas and the coastal zone. Inter-regional access is the major determinant of the relative coastal accessibility of major population centers within the state. The important questions here concern the interpretation of meaning of “maximum access” in terms of allocation of funds for the purchase of coastal lands or the conditions imposed upon projects on a statewide basis. For example, in California, should the same requirements for coastal access be applied to permits on the northern California coast in areas remote from population centers as in Los Angeles?

Federal and state agencies charged with land acquisition have set policies over the past few years requiring that greater priority be given to large scale land acquisition within and adjacent to metropolitan areas. In practice, however, most public land management agencies have been forced into a

position of responding most to the threat of development on a site by site basis rather than basing acquisition priorities upon the adjacency to metropolitan areas.

Consideration of the inter-regional access dimension in the permit review process will require the development of design guidelines and criteria which reflect the differences in rural or urban character within various areas of the state. In the local coastal program ("LCP") review process, this will mean that unless the Coastal Commission develops priorities for the amount, location and type of access within urban and rural areas it will be impossible to judge the degree of conformance of LCP with Coastal Act policies.

Intra-coastal Accessibility

The intra-coastal dimension of accessibility includes consideration of the portion of public service capacity reserved for recreational use, the relative composition (public/private) of land uses located within the coastal zone, and the limitations posed by parking and vehicular/transit service within the coastal zone area. Several studies developed by the Coastal Commission and others⁵ have addressed the capacity of public service systems as a factor which may limit the accessibility of the coastal zone for recreational use. The most frequently cited example appears to be the Sea Ranch development on the Sonoma County coast. In this case, even though the commission may be able to require dedications for lateral access throughout the development, the capacity of Highway One may limit the transportation access of coastal recreationists when the development is fully built-out. Another example is the Half Moon Bay subregion of San Mateo County, where more than 50 percent of the shoreline within the area is currently in public ownership. Here the recreational use of the existing public beach and tideland areas would be limited by local resident trips if both residential development builds out to the levels permitted by zoning and if the present highway network is not expanded.

These examples point to the fact that planning for recreational access must proceed in tandem with planning for the intra-coastal transportation network. Considerations of highway capacity, parking, congestion of existing residential neighborhoods, and the expansion of the public transportation system to serve recreational uses must play an important role in the development of the local coastal programs.

Shoreline Access

Much of the recent literature^{6,7,8} and guidelines⁹ have focused upon the shoreline access dimension. Shoreline access includes: vertical access — between the first public road and the shoreline and lateral access along the shoreline. As pointed out in relation to monitoring, the main problem here is the need to consider the quality of the access in terms of the recreational experience provided, as well as the total amount being provided. Among the factors which will determine quality of recreational experience within a specific access area are: the extent to which the area feels public, the types of facilities provided that would encourage recreational use, the relationship between the access area and other public recreational areas, and the compatibility of public use with existing natural features which may be adversely affected by overuse.

Conclusion

What can local governments and the Coastal Commission do to make the permit review process and the subsequent coastal development permit process more effective in dealing with the provision of recreational access? First, an ongoing geographic information base delineating access area is needed both to provide information to the public and to ensure that review of access conditions in a single permit can be related to other access within the surrounding area. The local coastal program process should establish clear priority areas for acquisition and dedications in order that the permit review process can operate within an established policy base. Finally, the local coastal program should develop the basis for considering the capacities of existing and potential public service systems in order to balance the availability of shoreline access with the intra-coastal transportation system.

References

1. Parallel to this effort a guide to public accessways in San Francisco Bay was prepared by BCDC (1978). The guidebook includes maps and descriptions of public accessways on the entire San Francisco Bay shoreline. Such a guidebook or atlas could be prepared by local governments as part of their local coastal program or a regionally based effort should be undertaken by the Coastal Commission.
2. San Francisco Bay Conservation and Development Commission, "Bay Plan Evaluation Project: Appearance, Design and Public Access," June, 1974.
3. San Francisco Bay Conservation and Development Commission, "Public Access in the San Francisco Bay Region" (brochure) 1978
4. Rosencranz, Armin, "Security and Maintenance: The Underside of Public Access," Report to the San Francisco Bay Conservation and Development Commission, June, 1978.
5. The sample includes twelve projects appealed to the state Coastal Commission, where access was a determining factor in the permit appeal. The projects are representative of all regional commission jurisdictions, as well as covering the time period from 1974-present.
6. Dickert, Thomas and Jens Sorenson, *Collaborative Land Use Planning for the Coastal Zone: A Process for Local Program Development*, Institute of Marine Resources, IMR 76-14, La Jolla, March, 1978.
7. Ditton, Robert B. and Mark Stephens, *Coastal Recreation: A Handbook for Planners and Managers*, U.S. Department of Commerce NOAA, Office of Coastal Zone Management, Washington, D.C., January, 1976.
8. Nixon, Dennis, "Public Access to the Shoreline: The Rhode Island Example," *Coastal Zone Management Journal*, Volume 4, Numbers 1/2, 1978.
9. Owens, David W. and David J. Brower, *Public use of Coastal Beaches*, University of North Carolina Sea Grant Publication, No. UNC-SG-76-08, August 1976.
10. California Coastal Commission, "Statewide Interpretive Guidelines — Public Access (Shoreline)," adopted June 21, 1979.

Recommended Readings

1. California Coastal Zone Conservation Commission, *California Coastal Plan*, 1975.
2. California Coastal Zone Conservation Commission, "Recommended Coastal Properties for Public Acquisition," San Francisco, March 1976.
3. California, Department of Parks and Recreation, California Outdoor Recreation Resources Plan, February 1974.
4. California, Office of the Attorney General, "Implied Dedication and Prescriptive Rights Manual Relating to California Coastal Commission Matters," n.d. Sacramento, California.
5. Comprehensive Planning Organization of the San Diego Region, "The San Diego Regional Coastal Access Study," San Diego, June 1978.
6. INTASA, "Planning for Coastal Recreation Opportunities Near Large Urban Areas," Office of Water Research and Technology, Washington, D.C., July 1975.
7. U.S. Department of Interior, Bureau of Outdoor Recreation, "How Effective Are Your Community Recreation Services?" Washington, D.C., April 1973.

Section 2

DETERMINING EXISTING ACCESS

INTRODUCTION

The conference was designed to examine coastal recreational access from a number of perspectives. It is recognized that an access program must consist of at least three components: analysis of existing access and how it is used; determination of access opportunities and needs; and an implementation package of laws and acquisition strategies. The second session focuses on analysis of existing access and determination of access opportunities and needs. These two topics were also briefly discussed in the first session. Watson's description of the San Francisco Bay Conservation and Development Commission's (BCDC) program in Session VI also focuses on determining existing access.

In terms of difficulty, determining existing access is far easier than determining access opportunities and needs. Comparison of Taylor's and Goodwin's papers with Cullinan's and Costello's papers underscore this point. Goodwin describes Seattle's determination of existing access as well as the city's program in compiling and distributing coastal access maps to the public. A similar coastal access mapping project was conducted by BCDC, as described by Watson's and Dall's papers.

Distinction is made by Goodwin between physical and visual access. The latter is usually given little regard in the development of access programs. Seeing the shore is an obvious incentive for gaining physical access. Goodwin also notes that the visual image or "a cognitive map" of the shoreline landscape will vary among the public. The cognitive maps that recreationists have of the coast may be quite different from those of planners and policy makers. This leads to the questions of whose coast is being planned and who is deciding what the coast should look like.

One conclusion drawn from the first and second sessions is the desirability for widely disseminated maps of accessways and facilities. An attractive, concise, easy to read map should achieve a number of objectives: the distribution of public use to fit more closely with site and transportation capacities along the coast, to educate recreationists and visitors so that they may make more informed decisions about alternative opportunities, and to make the public aware of the rights and responsibilities of access. It could be argued that local and regional levels of government receiving CZM funds should be required, as part of their program, to produce and update a coastal access information and mapping program for public awareness and education.

Costello's presentation identifies three reasons for developing a good data base. The access survey conducted by San Mateo County assessed the many implications of the state's access policies. The data base is also intended to assist in setting acquisition priorities; a necessity in the present realities of obtaining the most recreational opportunity for the least cost. One of the underlying themes of the conference is that provision of access is a highly political process. Costello pointed out that those adversely effected by access policies are more receptive to the program if the implementing actions are based on a comprehensive systematic, and thorough analysis of local conditions.

The session concludes with a description of California's Parks and Recreation Information System model (PARIS). The model compares historic recreation participation rates, population data, implied needs for recreation facilities, and the supply of recreation facilities. The limitations of such a modeling enterprise are discussed; again pointing out the difficulty of determining future needs for recreational access. Cullinan concludes his presentation by recommending the development of an improved statewide recreation participation model of provide four capabilities necessary for coastal recreational access planning and program evaluation.

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SEATTLE SHORELINE ACCESS AND VIEWPOINTS MAP

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Introduction

Implementing a recreational access element in state coastal management programs requires more than an objective assessment of needs, a vigorous acquisition program, and exactments of public access as conditions on permits for coastal developments; implementation must also address the cognitive aspects of coastal access. The physical presence of access to the coast is insufficient unless the public also knows where that access is located, how they can reach it, and what is there when they arrive. Coastal access maps are an important tool for informing the public on these three pieces of information.

This paper examines a coastal access mapping project carried out by the city of Seattle in 1976. The "Seattle Shoreline; Access and Viewpoints" map is described and critiqued. Lessons learned from Seattle's experience are summarized, and a checklist of criteria is presented for those attempting a similar effort in their coastal areas.

Seattle's Shoreline Access

Seattle's 80 miles of shoreline is divided among three freshwater lakes and the eastern shore of Elliott Bay and Puget Sound. The character of the shorelines varies from heavily industrialized port facilities on Harbor Island to the pristine tidelands and eroding bluffs of Magnolia; Greenlake is entirely rimmed by parkland and jogging and biking trails, while Lake Union's shore exhibits such intense uses as boat building, marinas, houseboats, offices, restaurants, and seafood processing docks. Lake Washington's shore is largely residential, but several major waterfront parks provide swimming, picnicking, and boating facilities for the half-million Seattle residents and a growing volume of tourists.

The advent of containerized oceanborne cargo and its attendant shoreside handling facilities left Seattle's central waterfront break-bulk cargo finger piers and transit sheds virtually abandoned. But both public and private investment has transformed the district into a major tourist destination; parks, specialty shops, restaurants, and a marine aquarium have moved into and between old port piers. At this moment every abandoned pier is under active redevelopment consideration or has already been changed to recreational and tourist uses.

Seattle's Shoreline Master Program (SSMP) controls the conservation, use, and reuse of all the shorelines within the city's jurisdiction. Prepared under the aegis of the Washington Shoreline Management Act, the SSMP identifies provision of public access as a major goal in both public and private development proposals. Walt Woodward's paper amplifies the role shorelines management has had in this respect, but certain unique provisions of Seattle's SSMP bear exposure here. Regulated public access is required on both public and private developments except where the uses are entirely water-dependent, or where street ends or waterways provide proximate existing access. In the central waterfront, all uses must provide 15% of the submerged lands, or 5,000 square feet, whichever is greater, for regulated public access.¹ Such access must be in the form of an "... easement or other legal agreement, of substantial waterways, corridors, plazas, transient moorage, or other areas serving as a means of view and physical approach to public waters. . . ." ² Some 15 to 20 such public access points have been established through the substantial development permit procedures since the master program went into effect in 1976.

Beyond physical access, Seattle's shorelines are visually accessible from various streets, street-ends, parks, bike trails and cross-sound ferry routes. The Pleistocene period sculpted Puget Sound's deep fjords and left north/south ridges of glacial till upon which the city has grown. From the ridge-tops and shore-facing slopes, commanding views of the lakes and Puget Sound are attained: between the ridges, however, the views are intermittent or absent entirely. In contrast, the bland grid-pattern of streets, relieved occasionally by vestigial sections of boulevards planned by Bogue and the Olmstead Bros., negate Seattle's marine and lake shorelines environment.

"Seattle's Shorelines; Access and Viewpoints" Map

To enhance both resident and visitor awareness and enjoyment of Seattle's marine and lacustrine shorelines, the Department of Community Development, using CZMA section 306 monies, inventoried existing shoreline access and mapped the results. Both physical and visual access are presented. In 1976 twenty thousand copies were printed and distributed free of charge. On the back of the map, information is presented on bus routes serving shoreline sites and viewpoints, bicycle and jogging trails, a brief description of shoreline parks, and an environmental description of the major shoreline types. A representative section of the map is reproduced in Figure 1.

In spite of its innovative design and the valuable information it contains, there are deficiencies in the map which are worth noting.

Cartography: Map symbols are quite abstract and may be difficult for some to interpret. A pictorial approach would have been more appropriate for a general public audience. Boat ramps, an important category of access for 10% of Seattle's households who own boats, are indistinguishable symbolically from minor view points.

Missing Information: The map omits three categories of public access which could have enhanced its usefulness. First, on Lake Union, there are numerous city streets ends and state waterways accessible from public streets. While most are unimproved, their omission does little to promote public awareness of their potential for access to this urban lake. Second, regulated public access points, acquired through permit procedures described above, are not shown. For example, a restaurant on Shilshoe Bay was required to provide access to the shore in front of its dining area. Since it is neither mapped, nor signed at the site, only those "in the know" would venture there unless they were restaurant patrons. Finally, major commercial bus and boat tour routes could have been mapped to complement public bus and ferry routes which were shown.

Distribution and Promulgation: The entire 20,000 copies of the map printing were quickly exhausted and no subsequent printings have been made. Opportunities to "joint venture" the printing and distribution through chambers of commerce, tourist and convention bureaus, or mass media, e.g., Sunday supplements of major newspapers, were not pursued.

Other Map Access Information

Seattle's shorelines access and viewpoints map is only one of several cartographic aids to developing a public awareness of shoreline access. A cheaper, single color map of Skagit County's public use shoreline areas, including boat launching facilities, was prepared by the county planning department using CZMA section 306 funds. The State Department of Natural Resources has updated its four-volume marine atlas,³ which provides information on parks, public tidelands, moorage and launch facilities and sports fishing areas. The marine atlas is available in volume form, or as individual map sheets at several scales.

Access Maps and Social Factors in CZM Programs

Given the prominence of the public access component in federal and state CZM statutes and regulations, maps can play an important role in implementing this element. An obvious, but important dimension of public access is the cognitive dimension: public access can be public access only if the public possesses an accurate image of the spatial distribution and location of access points. Urban geographic research has revealed wide disparity among school children of different socioeconomic backgrounds to accurately portray their "mental map" of their neighborhoods and cities. If this same disparity holds true across the whole population, then questions of social equity in access to the shorelines, considered primarily on the basis of means of transportation access to the shoreline, can also be extended to cognitive differences. Easily understandable maps, aggressively marketed among disadvantaged segments of the population, have the potential to increase awareness and utilization of

existing public access points. Further, the efficiency of utilization of public access can be enhanced if the public is aware of alternatives to the more easily remembered and popular public shoreline access points. Easily comprehensible maps can assist here, too. Radio "spots" have been used in Seattle to direct hikers and backpackers to less well-traveled trails in the Cascade Mountains. Perhaps a similar program for shoreline access could be mounted by municipal, county, or state parks departments.

Conclusions

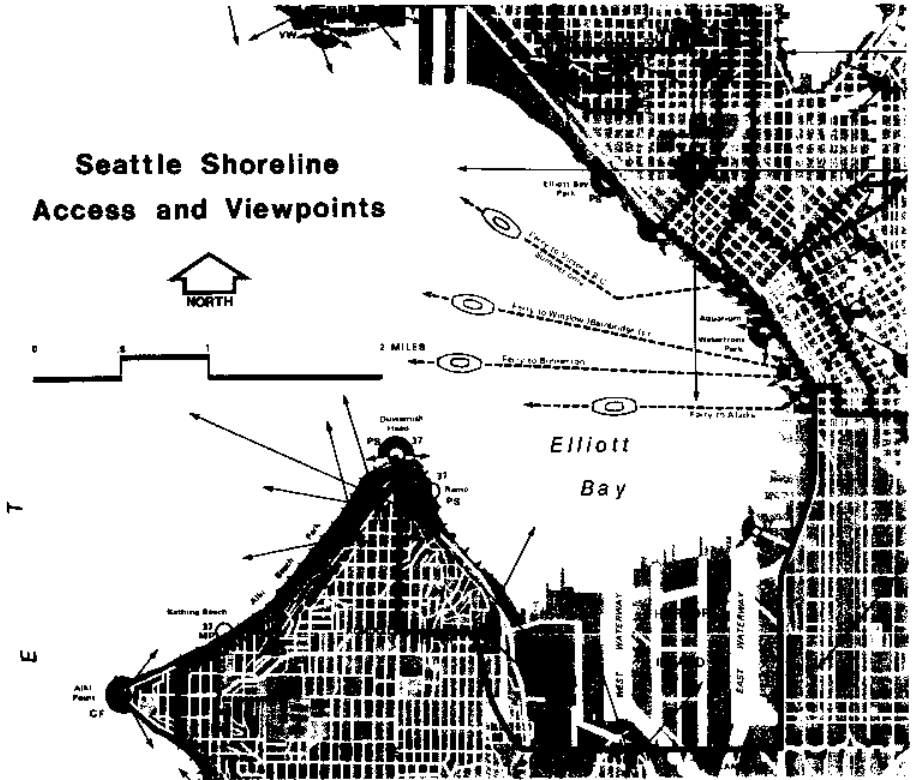
Implementation of a mandated access element in coastal management programs can be enhanced by appropriate use of cartographic aids. Where maps are designed to help the recreating public find acceptable coastal access it is important that the following criteria be met:

1. Information should be complete: In addition to public shoreline parks, lookouts, trails, etc. the map should include key, visual access points and corridors, regulated public access at private development sites, access to water for boaters, and public, commercial tour routes.
2. Information should be current: Access changes -- newly regulated public access at private developments as well as newly acquired public parks, trails and viewpoints should be incorporated in regularly updated printings of the map.
3. Information should be clearly presented: Simple, pictographic symbols, easily understood by the literate public, should be used. Draft maps should be pre-tested on sample audiences and elaborate, highly abstract symbols should be avoided.
4. Maps should be wisely distributed: Tourist and convention bureaus, chambers of commerce and other similar organizations should be approached for joint sponsorship or distribution of access maps. Sunday supplements of major newspaper might also be considered for mass publication of mapped information.
5. Maps should correspond to reality: Mapped access points should be clearly marked with standardized signs at the site, particularly in the case of regulated public access at private development sites.

References

1. Seattle Shoreline Master Plan, Section 21A, 36-38, pp. 12, 13.
2. *Ibid.*, p. 56.
3. Washington State Department of Natural Resources, Division of Marine Lands Management, Washington Marine Atlas, 1977, 4 vols.

Seattle Shoreline Access and Viewpoints



DETERMINING EXISTING SHORELINE ACCESS FOR THE SAN MATEO COUNTY SHORELINE

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Introduction

The 1976 California Coastal Act requires each local government located along the California coastline to prepare a Local Coastal Program ("LCP"). The Act requires that a Shoreline Access Component be prepared as part of the Local Coastal Program. The purpose of the Shoreline Access Component is to implement the Coastal Act Shoreline Access Policies and protect and provide public access to the shoreline.

San Mateo County has jurisdiction over most of the coastline from San Francisco south to Santa Cruz. The Coastal Act necessitated major changes in the County's approach toward shoreline access. The Act requires the provision of public access as a condition of allowing new private and public developments along the Coast. Once a local coastal program has been approved by the state, the Act gives the County review authority over development by other public agencies, such as the State Department of Parks and Recreation which owns most of the public parkland along the coast. Consequently, the county has had to develop policies to regulate public access provided by other public agencies.

This greatly expanded role for the county in regulating the provision and improvement of shoreline access generated a need for information about existing shoreline access, particularly since a major role for the Local Coastal Program is to apply the Coastal Act policies to the specific characteristics and needs of the local areas. The Local Coastal Program provided an opportunity to take a comprehensive overview of existing access to develop requirements for shoreline access based on the existing local situation. To give an example of how this worked, the Coastal Act Section 30212 states that "public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) adequate access exists nearby or (3) agriculture would be adversely affected." The county had to develop criteria to determine how to apply these exceptions.

Interpreted rigidly, these exceptions could preclude any new shoreline access along a coastline like San Mateo's which has tidepools, is backed by bluffs or bordered by agricultural lands along most of its length. We discovered, through our survey, that some of these exceptions did not create a major problem. Agricultural operations, for instance, were not found to interfere with public access to large sandy beaches of recreational importance. Either the shoreline bordering the agricultural land was a very steep bluff with little or no beach or a beach which was already accessible from nearby non-agricultural land. It was possible to establish few requirements for the provision of shoreline access in agricultural areas without limiting public recreational opportunities. Public safety was more difficult. Most sandy beaches were backed by steep bluffs. The public safety hazards had to be overcome, where it was at all possible, or substantial recreational opportunities would be lost. We focused on developing requirements for the provision and design of improvements like staircases, handrails and fences to overcome public safety hazards and provide access to these beaches.

A second important reason for wanting a solid data base was limited public funds. When we began this project, Proposition 13 had just been overwhelmingly approved by California voters. We knew public funds to provide or improve access would be very limited. We wanted to have a good inventory and assessment of existing shoreline access to establish priorities for the expenditure of public funds and insure that public money would be spent in those areas which would yield the most recreational opportunities for the least cost.

Survey Methodology

As basic data, we needed a complete description and assessment of each existing access trail and shoreline destination (beach or bluff area) along the coast. We knew the survey had to be very careful and detailed. We had seen a survey of the San Mateo County shoreline which had been done very quickly and cursorily by another public agency. The existing survey bypassed several trails which may have looked unimportant from the road but which led to large bluff or beach areas. The existing survey did not define terms as we did; for example we did not know what was meant by phrases like "unsafe," "long" or "environmentally sensitive." Staff time to undertake a detailed survey was a problem. Fortunately, we found that it was very easy to recruit student volunteers from local colleges spending a summer at the beach and while learning something about coastal planning at the same time was an adequate incentive to attract a large pool of students. Many of the students were working at other jobs, but did the survey because they found it interesting. The use of students for most of the survey work required us to be very organized and specific about our requirements. We developed survey packets for the students which contained copies of field survey sheets, definitions of terms and a list of materials to be taken on the shoreline access field survey. Initially, I went out with the students the first day and trained them how to do the survey. After several turnovers of student volunteers, I did a training session. I went carefully over the survey sheets and described the methodology. In all cases, I checked the survey sheets daily to insure that results were complete and consistent with instructions. I also field checked surveys. Field checking was done fairly quickly once the basic information was gathered.

When they went out to the field, the students took aerials of the shoreline with them. They looked at the aerials and drove slowly along the roads closest to the shoreline looking for any trail leading to the shoreline. The San Mateo County coastline is covered with informal, unimproved trails developed and maintained by public use which lead to almost all parts of the shoreline. The students filled in survey sheets which described the following three factors for all trails and the associated beaches or bluffs destinations:

1. Location: Nearest road, town, landmark; distance from Highway 1; adjacent land uses and their distance or separation by fences or other means from the access.
2. Resource characteristics: Length of trail; type of shoreline, beach or bluffs; length, width and type of beach; length, width and height of bluffs; existing improvements for access; existing public use, numbers and activities; public safety hazards and difficulty of trails.
3. Parking: Location; Existing improvements; capacity; signs (wording copied exactly); safety hazards and other problems.

Several aspects were critical for successful completion of the survey. Thoroughness was vital. Students had to stop and survey every trail, no matter how unassuming or similar to another trail it looked from the road. They had to answer all the questions for each area. Standardized definitions and criteria were necessary for consistent results. Early in our surveying, I went out to the field to look at a trail a student had evaluated as easy. The trail was steep and rocky. For the young, athletic surveyor, it was easy. For the elderly or a person carrying a child or a beach chair, it was treacherous. As a result of several similar experiences, we developed standardized definitions which all the student volunteers used. We also dropped judgment questions, such as "Is this beach suitable for public use." The answers were useless. Interestingly, most students thought very little shoreline was suitable for public use. They had discovered hidden little coves they coveted for their own use and did not want the public to disturb the environment.

We also found information on the survey sheet invaluable for locating obscure trails and beaches back in the office.

In the office, we added information from other sources to the survey sheets to complete the descriptions. These were: (1) ownership of trails, bluffs and beaches from county assessor's maps; (2) location of sensitive habitats from maps prepared for the sensitive habitat component of the local coastal program; (3) specialized activities possible at different sites from maps developed by sporting groups or information from sporting goods stores and (4) likelihood of prescriptive rights for trails on privately-owned land. To evaluate the likelihood of prescriptive rights, aerials from 1956, 1965, and 1970 were examined to determine whether current trails have existed over the 20-year period. If the trail was maintained through use and existed throughout this period, it was assumed there is a likelihood that prescriptive rights may exist. This information was very important because of the Coastal Act's emphasis on protecting prescriptive rights as mentioned by Taylor in session 1. Though

trails provided access to most beaches and bluffs of any size along the San Mateo Coast, current aeri-als were examined for the few inaccessible areas. The major focus of this investigation was on determining whether any sizeable beaches were presently inaccessible.

Evaluation of Existing Access

At the completion of the program, we had a description of the location and characteristics of existing shoreline access on volumes of separate survey sheets. To be most useful and provide an overview and comparison of trails and beaches along the Coast, this information had to be synthesized. Table I is the resulting product.

On several pages, this summary table provides a quick assessment of existing shoreline access along the San Mateo Coast. It describes and evaluates the trails and shoreline destination, their type, size, location and resource characteristics. This data is very valuable for determining access requirements for new developments.

The management considerations category of the summary table includes criteria which are very useful in determining where to spend public funds to acquire or improve an area a point raised by Dickert in paper. For example, a large sandy beach with no parking availability and little potential for increased public use in a lower priority for public funds than another long, sandy beach which has these characteristics. The evidence of a threat of loss or damage may increase the desirability of expending public funds for sites which otherwise would not be recommended for public assistance.

Again, standardized definitions were used for the criteria in this assessment table (see "Definitions"). In general, these criteria were comparative to the types of situations found along the San Mateo Coastline. For example, under the category, level of use, High Use is defined as more than 200 people at a shoreline destination on a weekday. In a more urban area, this could be a low level of use, but it is a high level of use in the largely rural San Mateo Coastline.

The access inventory and assessment process did serve the needs for which it was designed. It served as a solid basis for developing policies for the provision and improvement of access and for establishing priorities for the expenditure of public funds. It also served another purpose. The Coastal Act's requirements for shoreline access are very controversial. Many coastal residents rigorously object to them. It has been our experience, however, that the thoroughness and objectivity of our survey was well received at public meetings. Though not overcoming local objections to increasing public access to the shoreline, local residents were more receptive to policies which were based on a thorough examination of local conditions.

DEFINITIONS OF CRITERIA FOR ASSESSMENT OF SHORELINE ACCESS USED IN TABLE 1

Each trailhead from which a trail leads to a shoreline destination is included in this assessment. Shoreline destinations with only one trailhead are evaluated as a unit.

However, trails are assessed separately if there are several trailheads for a shoreline destination or any trail has different ownership from the shoreline destination. Then, all trails are evaluated as a group to develop a composite assessment of trail characteristics for a shoreline destination and to insure comparability with other shoreline destinations.

TYPE OF ACCESS

To Top of Bluff — trails go to bluff top — there are no existing access trails leading to water's edge
To Water's Edge — existing trails lead to water's edge

TYPE OF BEACH

Short rocky beach — is less than 1000 yards and predominately rocky
Short sandy beach — beach is less than 1000 yards and predominately sandy
Long rocky beach — beach is longer than 1000 yards and predominately rocky
Long sandy beach — beach is longer than 1000 yards and predominately sandy

RESOURCE CHARACTERISTICS

Size of destination

Length — linear yards of ocean front of beach or bluff

Width — above the ordinary high waterline of the beach or level bluff area

Protection from exposure — Level of protection from the open sea and winter northwest wind and water action.

Public Safety Hazards

Low — level and unobstructed, easily accessible to elderly and others for whom walking may be difficult

Medium — accessible with difficulty, but without risk of bodily harm

High — hazardous, with some risk of bodily harm

Environmental Sensitivity — Level of environmental sensitivity of the area to which access is permitted.

High — area indicated on the maps of environmentally sensitive habitat areas

Medium — bluffs, steep slopes

Low — beach and other habitats not sensitive to human intrusion

Uniqueness/Special Interest — Historic, palcontological, natural, geological — **must be outstanding and unusual** along the San Mateo Coast to be rated High.

LOCATION

Compatibility with Existing Land Use — does not conflict with existing land use

Residential

High — substantial separation by distance, grade separation or landscaping

Low — allows less than 5 feet separation between existing houses and vertical access and 10 yards separation between houses and lateral access.

Agriculture

High — fences separate access from agricultural land

Low — passes through unfenced agricultural land.

Length of Shoreline Trail

Short — less than 250 feet across and 10 feet down to shoreline destination

Medium — between 250 feet and 1/4 mile across and 10 and 50 feet down to shoreline destination

Long — more than 1/4 mile across and 50 feet down to shoreline destination

Accessibility from Highway 1

High — shoreline trail is immediately accessible from Highway 1

Medium — shoreline trail is less than 1/2 mile from Highway 1

Low — shoreline trail is greater than 1/2 mile from Highway 1

Continuity with Existing Shoreline Access

High — shoreline access trail and/or shoreline destination provides for the following:

- a. Linkage between existing public shoreline destinations.
- b. Expansion of the size of existing public shoreline destinations.
- c. Expansion of access to an existing public shoreline destination.

Low — does not fulfill one of the above functions.

Introduces New Public Access

High — no existing established public shoreline access trail or destination nearby — within 1/4 mile in both directions.

Medium — little existing established public shoreline access trail or destination nearby — within 1/4 mile, but not adjacent, in one direction only.

Low — adjacent to or included within an established public shoreline access.

Ownership — Public indicates an area is owned in fee by a public agency.

Threat of Damage — Evaluates threat of deterioration of the natural environment by continuation of existing public or private use.

Threat of Loss — Evaluates the possibility of property owner closing off the access and the likelihood of establishing prescriptive rights based on Table 2. High indicates no evidence on historic aerials. medium indicates no evidence on aerials prior to 1970.

Parking Availability

High — Areas where existing official off-street parking for more than 75 cars exists or adequate space to provide such parking exists within 1/4 mile.

Medium — Areas where official off-street parking for between 15 and 75 cars exists or could be provided.

Low — Parking for 15 cars or less.

Level of Use —

High — Many people using trail and shoreline destination on weekdays and evidence of heavy use. (More than 200 people at shoreline destination.)

Medium — Some people using trail or shoreline destination on weekdays and evidence of moderate public use. (50-200 people at shoreline destination.)

Low — No people on trail or shoreline destination on weekdays and little evidence of public use. (Less than 50 at shoreline destination)

Activities — Letter indicates activities which are already ongoing at the site or for which the site has potential established by practitioners of the sport.

Improvements Required for Public Access — Level of improvement required to provide safe public access and protect natural resources and adjacent uses.

Low — repair of existing improvements, signing

Medium — moderate improvements — improved surfacing, establishing trails in level areas and simple staircases.

High — establishing trails in hazardous or environmentally sensitive areas and staircases in very steep or fragile areas.

Potential for Increased Public Use — Areas are rated high if they could support a substantial increase in public use after improvements.

ASSESSMENT OF ACCESS TRAILS AND SHORELINE DESTINATIONS

(SEE APPENDIX A FOR COMPLETE DEFINITION OF TERMS)

SHORELINE DESTINATION	TYPE OF ACCESS	TYPE OF BEACH ^b	RESOURCE CHARACTERISTICS			LOCATION			MANAGEMENT CONSIDERATIONS								
			CHARACTERISTICS			UNIQUENESS/SPECIAL INTEREST ^d			INTRODUCES NEW PUBLIC ACCESS ^d			POTENTIAL FOR INCREASED PUBLIC USE ^d					
NUMBER ON MAP	TRAILS ^a	TO TOP OF BLUFF	TO WATER'S EDGE	SIZE OF DESTINATION ^c	PROTECTION FROM EXPOSURE ^d	PUBLIC SAFETY HAZARDS ^d	ENVIRONMENTAL SENSITIVITY ^d	LENGTH OF SHORELINE TRAIL ^e	ACCESSIBILITY FROM HIGHWAY 1 ^d	CONTINUITY WITH EXISTING SHORELINE ACCESS ^d	OWNERSHIP ^f	THREAT OF DAMAGE ^d	THREAT OF LOSS ^d	LEVEL OF EXISTING USE ^d	ACTIVITIES ^g	PARKING AVAILABILITY ^d	IMPROVEMENTS REQUIRED FOR PUBLIC ACCESS ^d
1	1	✓	B	✓	✓	H	H	H	H	H	P	X	X	M	E, N, B	M, H	H
2	1	✓		✓	✓	H	H	H	H	H	P	X	X	M	E, N, B	M, H	H
3	1	✓		✓	✓	H	H	H	H	H	P	X	X	M	E, N, B	M, H	H
4	1	✓		✓	✓	H	H	H	H	H	P	X	X	M	E, N, B	M, H	H
5	1	✓		✓	✓	H	H	H	H	H	P	X	X	M	E, N, B	M, H	H
6	1	✓		✓	✓	H	H	H	H	H	P	X	X	M	E, N, B	M, H	H
7	1	✓		✓	✓	H	H	H	H	H	P	X	X	M	E, N, B	M, H	H
8	1	✓		✓	✓	H	H	H	H	H	P	X	X	M	E, N, B	M, H	H
9	1	✓		✓	✓	H	H	H	H	H	P	X	X	M	E, N, B	M, H	H
10	1	✓		✓	✓	H	H	H	H	H	P	X	X	M	E, N, B	M, H	H
11	1	✓		✓	✓	H	H	H	H	H	P	X	X	M	E, N, B	M, H	H

^a Trails are listed separately if there are several trailheads or the trail has different ownership from the shoreline destination. Trails are numbered north to south.

^b Categories of beach background types. B indicates cliffs. C indicates cliffs. H indicates morsh. D indicates dunes. X indicates other.

^c L refers to linear yards of shoreline, W to average width.

^d H = High, M = Medium, blank square = Low.

^e Sh = Short and level, M = Medium length and steepness, Lg = Long and/or very steep.

^f P indicates private ownership. M indicates public ownership. C indicates combined public/private ownership.

^g Existing and potential activities. E indicates equestrian. H indicates hang-gliding. S indicates surfing. F indicates fishing. D indicates diving. B indicates sunbathing. Sw indicates swimming.

ASSESSMENT OF ACCESS TRAILS AND SHORELINE DESTINATIONS

(SEE APPENDIX A FOR COMPLETE DEFINITION OF TERMS)

SHORELINE DESTINATION	TYPE OF ACCESS		TYPE OF BEACH			RESOURCE CHARACTERISTICS			LOCATION			MANAGEMENT CONSIDERATIONS							
	TRAILS ^a	TO TOP OF BLUFF	TO WATER'S EDGE	SHORT ROCKY BEACH	SHORT SANDY BEACH	LONG ROCKY BEACH	LONG SANDY BEACH	SIZE OF DESTINATION ^c	PROTECTION FROM EXPOSURE ^d	PUBLIC SAFETY HAZARDS ^d	ENVIRONMENTAL SENSITIVITY ^d	UNIQUENESS/SPECIAL INTEREST ^d	COMPATIBILITY WITH EXISTING LAND USE ^d	LENGTH OF SHORELINE TRAIL ^e	ACCESSIBILITY FROM HIGHWAY ^f	CONTINUITY WITH EXISTING SHORELINE ACCESS ^g	INTRODUCES NEW PUBLIC ACCESS ^d		
NUMBER ON MAP							L	W											
12	1	✓	✓				✓	✓	✓	✓	✓	✓	✓						
	2	✓	✓																
	3	✓	✓																
	1	✓	✓				✓												
13	1	✓	✓				✓												
	2																		
14		✓	✓				✓												
15		✓	✓				✓												
	1	✓	✓																
16	1	✓	✓																
17	1	✓	✓				✓												
18	1	✓	✓				✓												
	2	✓	✓																
	3	✓	✓																

^a Trails are listed separately if there are several trailheads or the trail has different ownership from the shoreline destination. Trails are numbered north to south.

^b Categories of beach background types. 0 indicates bluffs. C indicates cliffs. M indicates marsh. D indicates dunes. X indicates other.

^c L - High, H - Medium, blank square - Low.

^d L refers to linear yards of shoreline. W to average width.

^e H - High, M - Medium, blank square - Low.

^f Pr indicates private ownership. P indicates public ownership. C indicates combined public/private ownership.

^g Existing and potential activities. E indicates equestrian. H indicates hang-gliding. S indicates surfing. F indicates fishing. D indicates diving. B indicates sunbathing. SW indicates swimming.

ASSESSMENT OF ACCESS TRAILS AND SHORELINE DESTINATIONS

(SEE APPENDIX A FOR COMPLETE DEFINITION OF TERMS)

SHORELINE DESTINATION	TYPE OF ACCESS	TYPE OF BEACH ^b	RESOURCE CHARACTERISTICS				LOCATION				MANAGEMENT CONSIDERATIONS										
			CHARACTERISTICS				LOCATION				MANAGEMENT CONSIDERATIONS										
DESTINATION NAME	TRAILS ^a	TO WATER'S EDGE	TO TOP OF BLUFF	TRAILS ^a	PROTECTION FROM EXPOSURE ^d	PUBLIC SAFETY HAZARDS ^d	ENVIRONMENTAL SENSITIVITY ^d	UNIQUENESS/SPECIAL INTEREST ^d	COMPATIBILITY WITH EXISTING LAND USE ^d	LENGTH OF SHORELINE TRAIL ^e	ACCESSIBILITY FROM HIGHWAY ¹ ^d	CONTINUITY WITH EXISTING SHORELINE ACCESS ^d	INTRODUCES NEW PUBLIC ACCESS ^d	OWNERSHIP ^f	THREAT OF DAMAGE ^d	THREAT OF LOSS ^d	LEVEL OF EXISTING USE ^d	ACTIVITIES ^g	PARKING AVAILABILITY ^d	IMPROVEMENTS REQUIRED FOR PUBLIC ACCESS ^d	POTENTIAL FOR INCREASED PUBLIC USE ^h
19 PILLAR POINT HARBOR SOUTH S. EAST SIDES OF PILLAR POINT	1	✓	✓	✓	✓		H		H	Sh		H		C		M	D, F, B				H
20 BEACH BETWEEN WESTPOINT & COLUMBIA AVENUES	1	✓	✓	✓	✓		H		H	Sh		H		C		M	Sw, B				H
21 BROADWAY RD. BEACH	4	✓	✓	✓	✓		H		H	Sh		H		C		M	Sw, B				H
22 DENNISTON CREEK BEACH	2	✓	✓	✓	✓		H		H	Sh		H		C		M	Sw, B				H
23 JOHNSON PIER A. BEACH	2	✓	✓	✓	✓		H		H	Sh		H		C		M	Sw, B				H
24 BEACH NEAR 175th EMBLETT HWY.	1	✓	✓	✓	✓		H		H	Sh		H		C		M	Sw, B				H
25 BERTINIPA LEEBE BEACH	1	✓	✓	✓	✓		H		H	Sh		H		C		M	Sw, B				H

^a Trails are listed separately if there are several trailheads or the trail has different ownership from the shoreline destination. Trails are numbered north to south.

^b Categories of beach background types. B indicates bluffs. C indicates cliffs. K indicates marsh. D indicates dunes. X indicates other.

^c L refers to linear yards of shoreline, W to average width.

^d H - High, M - Medium, blank square - Low.

^e Sh - Short and level, M - Medium length and steepness, Lg - Long and/or very steep.

^f Pr indicates private ownership. P indicates public ownership. C indicates combined public/private ownership.

^g Existing and potential activities. E indicates equestrian. H indicates hang-gliding. S indicates surfing. F indicates fishing. D indicates diving. B indicates sunbathing. Sw indicates swimming.

ASSESSMENT OF ACCESS TRAILS AND SHORELINE DESTINATIONS

(SEE APPENDIX A FOR COMPLETE DEFINITION OF TERMS)

SHORELINE DESTINATION	TYPE OF ACCESS	TYPE OF BEACH ^b	RESOURCE CHARACTERISTICS				LOCATION				MANAGEMENT CONSIDERATIONS								
			SIZE OF DESTINATION ^c		UNIQUENESS/SPECIAL INTEREST ^d	ENVIRONMENTAL SENSITIVITY ^d	PUBLIC SAFETY HAZARDS ^d	PROTECTION FROM EXPOSURE ^d	COMPATIBILITY WITH EXISTING LAND USE ^d	LENGTH OF SHORELINE TRAIL ^e	ACCESSIBILITY FROM HIGHWAY 1 ^d	CONTINUITY WITH EXISTING SHORELINE ACCESS ^d	INTRODUCES NEW PUBLIC ACCESS ^d	OWNERSHIP ^f	THREAT OF DAMAGE ^d	THREAT OF LOSS ^d	LEVEL OF EXISTING USE ^d	ACTIVITIES ^g	PARKING AVAILABILITY ^d
L	W	L	W	L															
26 COVE NORTH OF MARTIN'S BEACH	1	B	✓	✓	✓	✓	✓	✓	✓	H	Lg	H	Pr				B	H	H
27 MARTIN'S BEACH	1	B	✓	✓	✓	✓	✓	✓	✓	H	Lg	H	Pr				B, F	H	H
28 TUNITAS CREEK BEACH	1	B	✓	✓	✓	✓	✓	✓	✓	H	Lg	H	Pr				B, F	H	H
29 COVE SOUTH OF TUNITAS CREEK BEACH	1	B	✓	✓	✓	✓	✓	✓	✓	H	Lg	H	Pr				B, F	H	H
30 BEACH NORTH OF SAN GREGORIO STATE BEACH	1	B	✓	✓	✓	✓	✓	✓	✓	H	Lg	H	Pr				B, F	H	H
31 SAN GREGORIO STATE BEACH	2	B	✓	✓	✓	✓	✓	✓	✓	H	Lg	H	Pr				B, F	H	H
32 BLUFF BETWEEN SAN GREGORIO AND POPONIC STATE BEACHS	1	B	✓	✓	✓	✓	✓	✓	✓	H	Lg	H	Pr				B, F	H	H
33 BLUFFS AND BEACH BETWEEN POPONIC STATE BEACH AND PISCADRO STATE BEACHS	1	B	✓	✓	✓	✓	✓	✓	✓	H	Lg	H	Pr				B, F	H	H

^a Trails are listed separately if there are several trailheads or the trail has different ownership from the shoreline destination. Trails are numbered north to south.

^b Categories of beach background types: B indicates cove bluffs, C indicates cliffs, H indicates marsh, D indicates dunes, X indicates other.

^c L refers to linear yards of shoreline, W to average width.

^d H - High, M - Medium, blank square - Low.

^e Existing and potential activities: C indicates equestrian, H indicates hang-gliding, S indicates surfing, F indicates fishing, D indicates diving, B indicates boating, SW indicates swimming.

^f Pr indicates private ownership, P indicates public ownership, C indicates combined public/private ownership.

^g Existing and potential activities: C indicates equestrian, H indicates hang-gliding, S indicates surfing, F indicates fishing, D indicates diving, B indicates boating, SW indicates swimming.

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(SEE APPENDIX A FOR COMPLETE DEFINITION OF TERMS)

SHORELINE DESTINATION	TYPE OF ACCESS	TYPE OF BEACH ^b	RESOURCE CHARACTERISTICS				LOCATION			MANAGEMENT CONSIDERATIONS									
			CHARACTERISTICS				LOCATION			MANAGEMENT CONSIDERATIONS									
DESTINATION NAME	TRAILS ^a	TO WATER'S EDGE	TO TOP OF BLUFF	SIZE OF DESTINATION ^c				COMPATIBILITY WITH EXISTING LAND USE ^d	INTRODUCES NEW PUBLIC ACCESS ^d	CONTINUITY WITH EXISTING SHORELINE ACCESS ^d	ACCESSIBILITY FROM HIGHWAY 1 ^d	LENGTH OF SHORELINE TRAIL ^e	THREAT OF DAMAGE ^d	THREAT OF LOSS ^d	LEVEL OF EXISTING USE ^d	ACTIVITIES ^g	PARKING AVAILABILITY ^d	IMPROVEMENTS REQUIRED FOR PUBLIC ACCESS ^d	POTENTIAL FOR INCREASED PUBLIC USE ^d
				L	W	> 26 YDS.	> 10-26 YDS.												
34	PESCADERO STATE BEACH BRIDGE	1	✓	✓	✓	✓	✓	H			Sh	H	H	H	H	H	H	H	
35	COVES SOUTH OF PESCADERO CREEK BRIDGE	2						H			Sh	H	H	H	H	H	H	H	
36	BEACH SOUTH OF PESCADERO STATE BEACH	1	✓	✓	✓	✓	✓	H			Sh	H	H	H	H	H	H	H	
37	PEBBLE BEACH STATE PARK	1	✓	✓	✓	✓	✓	H			Sh	H	H	H	H	H	H	H	
38	BLUFF BETWEEN PEBBLE AND BEAN HOLLOW STATE BEACHS	1	✓	✓	✓	✓	✓	H			Sh	H	H	H	H	H	H	H	
39	BEAN HOLLOW STATE BEACH	1	✓	✓	✓	✓	✓	H			Sh	H	H	H	H	H	H	H	
40	BEACHES ALONG PIGEON POINT ROAD	1	✓	✓	✓	✓	✓	H			Sh	H	H	H	H	H	H	H	
41	ZANKEE JIM GULCH BLUFF AND BEACH NORTH OF PIGEON POINT LIGHTHOUSE	1	✓	✓	✓	✓	✓	H			Sh	H	H	H	H	H	H	H	
42	BEACH EAST OF PIGEON POINT LIGHTHOUSE	1	✓	✓	✓	✓	✓	H			Sh	H	H	H	H	H	H	H	
43	BEACHES ALONG PIGEON POINT LIGHTHOUSE	1	✓	✓	✓	✓	✓	H			Sh	H	H	H	H	H	H	H	
44	BEACH AND BLUFF 1/2 MILE SOUTH OF PIGEON POINT ROAD	1	✓	✓	✓	✓	✓	H			Sh	H	H	H	H	H	H	H	

^a Trails are listed separately if there are several trailheads or the trail has different ownership from the shoreline destination. Trails are numbered north to south.

^b Categories of beach background types. B indicates bluffs. C indicates cliffs. M indicates marsh. D indicates dunes. X indicates other.

^c L - Long and/or very steep. M - Medium length and steepness. Sg - Long and/or very steep.

^d H - High, M - Medium, blank square - Low.

^e Sh - Short and level, M - Medium length and steepness, Lg - Long and/or very steep.

^f Pr indicates private ownership. P indicates public ownership. C indicates combined public/private ownership.

^g Existing and potential activities. E indicates equestrian. H indicates hang-gliding. M indicates motor surfing. F indicates fishing. I indicates ice diving. B indicates sunbathing. SW indicates swimming.

SOME THOUGHTS AT THE STATEWIDE PERSPECTIVE

TERRENCE CULLINAN is Group Director of Marketing at the Stanford Research Center International in Menlo Park, California.

Introduction

In this section, coastal access will be viewed from the broader perspective of a large geographic model to recreation participation and practices — that of the State of California.

SRI International is the largest independent and not-for-profit research and consulting firm in the world. We do a lot of things in the "public interest," and one of those is considerable work in recreation planning. Back in 1965, we were selected to design the first comprehensive planning model for recreation facility location and siting on a Statewide basis in California — a system which has since been designated the PARIS (for Parks and Recreation Information System) model. PARIS essentially merges and compares historic recreation participation rates, merges and compares historic recreation participation rates, population data, implied (by the first two items) needs for recreation facilities, and the supply of recreation facilities, by a series of small geographic entities known as "geopieces." PARIS's net output is, in brief, facilities needs vs. facilities available; on that basis, it provides the State with a means for determining kinds, amounts, and geographics of State funds allocations for recreation projects, based on perceived needs as identified by PARIS.

PARIS also provides outputs on recreation needs to interested county, city, special district, Federal agency, and even private developer interests on an as-available basis.

The last time I saw PARIS, as the song goes, her heart was young and gay . . . but that was 1965. The system has served very well — in fact, extraordinarily well given that almost 15 years have elapsed — but is somewhat antiquated. In 1978 and 1979, SRI was asked to update the system by providing:

1. A statewide survey of recreational participation and practices, statistically valid (which we completed in the summer of 1978)
2. A method for updating the supply inventory of recreation facilities (developed in Orange County by a subcontractor, working with that county, and resulting in a report on the complexities of inventory updates and various approaches to doing it on a statewide basis)
3. Some thoughts on relevant contemporary recreation standards, by activity or facility type (also summarized in a separate report on this subject) and
4. A technical evaluation of the computerized portions of PARIS, including a comparison of PARIS with other models that have been developed to estimate recreation demand and supply balances (made in a systems report issued in 1979).

Certain related data about activities of particular socioeconomic subgroups, prospective growth in the State by areas, and the like, were also reported.

Proposition 13 then came along to cut short the total work effort, but the State is working — with limited staff and budgets — toward completing the updating of the PARIS system and following up on the initial inputs made by SRI. We and our colleagues who subcontracted with us on the project have offered support for this State effort to the maximum extent we can.

Of course, there's a silver lining in every cloud — even one with 13 sides — and as a result of the slowdown in PARIS updating, everyone involved has had time to reflect on what a state system can and can't do for such things as recreational access to the coastal zone. I would like to share my observations on this with you as my contribution to this discussion.

What a Statewide Recreation Participation Model CAN Do

A statewide participation model like PARIS can do a lot of things. On a statewide basis, it can measure carrying capacities of coastal areas, it can document who goes where for coastal activities of various sorts, it can suggest who would go where if facilities were available, and it can contribute other similar inputs. On a cost-effective basis, it can *supply the macronumbers*: giving general shortfalls or excesses, and cutting these to fairly discrete geopieces (geographic areas) — say several miles square. At that geographic level, allocations can then be made for needs: say, Los Angeles County needs x acres of miles of beachfront; Monterey to Santa Cruz needs y number of boating slips of z size; and so forth. This is a very useful function.

The statewide participation model can also *provide a working, computerized, proven, accurate (to the state-of-the-art) model available for any jurisdiction to use to manipulate its own data*: compete with *simple-to-understand manuals* for use (what data are needed, where they should be sent, in what form, etc.), and a *small central technical staff* available to (a) provide technical services to local jurisdictions as to how to do coastal zone analyses; and (b) actually mechanically run the data through the model, so each local jurisdiction does not need to have its own approach and personnel.

Finally, the Statewide Participation Model staff should include a *collection and dissemination service for new findings and activities in coastal access determinations*, with a mailing list open to all interested parties in the state, so that the research/literature search portions of a party's interests need not be duplicated time and again.

These four contributions — macronumbers, a working centrally-paid-for system usable by all, a small central technical staff, and an information collection/dissemination service — should be the state's contribution to the coastal recreation access process. These are functions that either require substantial up front monies, or benefit from a centralized concentration of capability and information which can then be shared.

What a Statewide Recreation Participation Model CANNOT Do

There are many things a statewide participation model like PARIS cannot do — at least not on a cost/effective basis. These revolve primarily around the micronumbers for small-size recreation jurisdictions or for site-specific considerations.

The determination of validity of a recreation participation sample is not the population size, as we all know, but it is the sample size. To get, say, 400 interviews to determine specific recreation use patterns in and from small areas, on a statewide basis, would require massive amounts of funds. It is far superior to have the *system* work done by the state, and the data gathering and outputs done and specified by the *concerned local jurisdiction*. We at SRI have designed a number of ways this can be done relatively inexpensively, on a community-wide basis. These ways *cannot* be implemented on a statewide basis with any degree of effectiveness, short of a massive — and economically unviable — outlay of funds.

PARIS, or any other statewide recreation model, *cannot* effectively be used to determine exact location of access points, exact carrying capacities to areas, and the like. There are too many local variables involved — political climates, attitudes toward parking (the main inhibitor to beach access), possibilities and real feasibilities of access by public transit or other non-private-auto transit, and the like. It may even, as we've seen this summer, involve an unexpected degree of ambivalence over the desirability of exposure — whether to require bathing suits, or to tolerate birthday suits, to be specific.

The appropriate relationship of local needs to state needs comes to the data gathering manipulation intersection point, in my judgement. The state should provide the back systems, the working manuals, the technical help, etc. — in essence, the road map as to how to determine needs. The actual putting of people on that road — the data gatherers, assemblers, etc. — ought to be done, and paid for, locally. The state can then run the assembled data, and provide a rational output. The local jurisdiction then again gets involved in deciding what decisions to make based on that data output — possibly with technical advice from the experienced (but unbiased) small state technical staff.

The Ugly but Useful Head of Politics

Beyond the foregoing, we need also to keep the use of models, computers, surveys, and the like in perspective. These are only sophisticated adding machines and the support services thereto. They only picture recreation needs and practices at the particular time they are used — today's survey results may be overtaken by tomorrow's cheap dune buggy, hang glider, or what have you — and demands and patterns be changed accordingly. And tomorrow's values may change fairly suddenly.

Local input, local human judgement — which, in its best terms, is reflected in a fair political process — is absolutely imperative in making truly sound judgements on a local level. Model information is just a tool — a useful and, hopefully, unbiased tool — but no more than that. Functioning politics are a most useful process in good final determinations.

Like Janus, of course, politics can operate in two directions. Many decisions are not made by a collection of Solomons, ruling in the public interest, but instead by tradeoffs among power blocs, or by Commissions stuffed with vested interests (which certainly include environmental groups), or by decision-making bodies that respond only to the 20 loudest voices in the audience at today's session. There is a distressing absence currently of individuals concerned with coastal affairs who truly wish to balance future and present needs, environmental and use needs, public and private rights. I am afraid that in the 1970's, some of those who have beaten their breasts most self-righteously in either direction are among those most responsible for the failure of responsible governance of coastal areas to have taken place.

The Hopes for the 80s

It seems to me that we should have learned from the turbulence of the 70's and the experiences of that period in coastal access and other recreation concerns, what we *do* require to optimally address these issues in the 1980's.

First, I suggest, is a rational central state system — an upgraded PARIS — which meets the four elements I suggested earlier: provides the macronumbers; finances (and gets to “debugged” state) a system to run both macronumbers and micronumbers, and provides the easy-to-understand instructions to help local jurisdictions use the system; maintains a technical staff to help local responsible parties make good analyses; and provides a centralized information dissemination service.

Second, I suggest, is a rational approach to subregional microproblems by the political jurisdiction of those regions. The state is not the mother of all data, and cannot afford (and should not be asked) to gather infinite amounts of data on local matters. If the local jurisdiction will not expend the funds to get its own needed data itself — or if that jurisdiction lacks the creativity to work with local resources in gathering it — then the state has no obligation, in my judgment, to help out. Even if an area is visited heavily by individuals from out of the area, those visitors will contribute economically to that area by their spending, and these funds can be tapped to finance needed local data gathering. Self-help at the foot-leather stage is, I submit, fiscally imperative, socially desirable, politically wise, and personally self-satisfying. Maybe this shows a primitive view of life, but I think not.

Third, I suggest, is a real attempt by those who appoint or elect governance bodies with responsibilities for coastal access, to choose individuals not on the basis of special interest, but on the basis of special capabilities to do a good job in a balanced and wise manner. This applies equally to local voters and to the Governor of the State. The record to date is spotty — at best.

Conclusion

California has the richest coastline of anywhere in the world, in my judgement, and I've seen most of the world's major coasts on either a professional or personal basis. We also have the richest collection of intelligence, technical capabilities, and — I hope — compassionate people in the world. There seems no reason why the latter can't be motivated to work together in the interest of the former. I hope that sessions such as this will move us in that direction. We will see you on the beach — providing we can get there.

Section 3

LIMITS TO RECREATIONAL ACCESS

INTRODUCTION

In this session, some of the constraints are discussed that must be recognized in the planning, implementation, and management of any recreational access scheme. Four separate but interrelated constraints are considered. Deviny *et al.* address the inherent limitations of rocky shore systems in supporting extensive recreational use. Ditton approaches the issues from the perspective of social constraints and concerns which affect recreational access. Spharler discusses the issue from an applications standpoint through his remarks on the design constraints related to improving coastal access. The session concludes with Burke, who analyzes the transportation planning limitations of coastal access.

The paper by Deviny seeks to alert planners and managers to the potential damage that sensitive coastal ecosystems can sustain as a result of unrestricted use by recreationists. The authors contend that the damage to the resource base poses several immediate and possibly equally damaging effects. They note that the immediate effects of trampling, taking, littering, etc., can upset the balance of coastal ecosystems. In some situations, the secondary effects of changes in organism populations have influenced the populations of predators, prey, and competitor organisms. The management tool of public education is discussed as a method of alleviating this condition. The success of this method has been documented in some areas, but Deviny feels that other resource protection measures besides public education are also necessary.

Ditton's paper examines a different dimension of the same issue addressed by Deviny, Ditton discusses the limits to recreational access from the perspective of planning and management for recreationists. He asks the obvious but most often overlooked question: Access for whom?

He notes that recreational access involves more than simply equating presence on site with satisfaction — that recreational access is more than just access to ocean resources. He suggests that a successful access plan must supply coastal recreation experiences that are satisfying. To accomplish this, he recommends that access plans and management efforts consider the motivations and satisfactions of recreationists. Ditton identifies research needs, and states that "we need to be a little less concerned with simply providing access and more concerned with the nature of the experience being accessed."

Spharlar's concern is with design opportunities and constraints. He addresses the issue from his years of experience with the California Department of Parks and Recreation. This department is faced with the formidable task of providing access for recreationists to the state-operated coastal units.

Spharlar's approach is dependent upon locating and siting recreational access areas. Resource characteristics, along with planning and design considerations, are given priority over the motivation and satisfaction of recreationists. It was recognized in the forum discussions that such concerns are not mutually exclusive.

Burke's paper links coastal access to the limitations imposed upon the recreationists by transportation; additionally, he expands his analysis of this issue to include the associated impact of energy conservation on any access program. Burke's analysis acknowledges the complex dimensions of access issues as discussed by Ditton, Spharlar and Deviny.

Burke states that transportation planning for coastal access requires that coastal travel behavior and network system design be cooperatively evaluated. Burke links these factors together throughout his analysis. By citing specific examples (Laguna Beach and Capitola) he shows that measures need to be developed which minimize the congestion on coastal access arterials and suggests several mechanisms that might serve to alleviate some of the congestion such as LCP comprehensive planning in which travel behavior, travel time, trip distance, vehicle operating characteristics, and indirect energy requirements are considered. Burke acknowledges that given the adversary relationship that exists between state and local governments, such an approach will not be easy. He advises planners to provide decision-makers with as many alternatives as possible in dealing with the transportation aspects of the access issue.

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AN INTRODUCTION TO THE EFFECTS OF RECREATIONAL USE ON ROCKY INTERTIDAL ECOSYSTEMS

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Rocky shore ecosystems are a recreational resource that brings many visitors to the coast. The pleasant hours spent by the curious student, the seeker of seafood, or the casual visitor constitute a strong justification for increased public access to the shore. But excessive human attention can damage these attractive ecosystems. Some immediate mechanisms of this damage are known:

Taking — Many species are taken as game or as bait for fishing. Casual visitors take souvenirs. Students on organized field trips are often assigned the task of making collections, and researchers often remove organisms for further study.

Tampering — Almost every visitor picks up a few animals for a closer look. When these organisms are not replaced in their proper microhabitat, they may die. Many species prompt endless poking and prodding, which may eventually be fatal. If a rock is turned over during the hunt for curiosities and is not replaced, the attached animals and plants are left exposed. In some cases, visitors intentionally poison tidepools with copper sulfate or chloride bleach to obtain samples or game — and all organisms suffer.

Trampling — Some species are crushed by a single human footstep; the stronger ones may survive at first, but they are eventually worn down by continuous foot traffic.

Disturbing — Species which use the rocky shore for breeding or forage may be lost if they are continually frightened away.

Littering — The food scraps, fish bait, and fish cleanings often left at the shore provide food for scavengers. The abundances of the scavenging species will rise. In extreme cases rats and even a feral cat have become permanent rocky shore residents.

Secondary Effects — All of the species on the rocky shore are interdependent parts of a balanced ecosystem. When one population changes because of taking, tampering, trampling, or littering, abundances of predators, prey, or competitors will also change.

General references to the damage abound in the literature. Ricketts, *et al.*¹ lamented the loss of intertidal organisms to wasteful collectors, and the California Coastal Zone Conservation Commission (1975)² recognized the problem of excessive use. Unfortunately, the many general descriptions have been followed by only a few quantitative studies specifically directed to the problem.

Widdowson³ surveyed intertidal seaweed populations in southern California at a set of sites which had previously been investigated by Dawson.⁴ Both he and Dawson found that the number of species was declining. Dawson mentioned collectors as a possible contributing cause. Widdowson showed in more detail that the decline at each site was correlated (by rank) with three factors: (1) human use, (2) sewage pollution, and (3) air pollution. The strongest correlation was with human use measured in terms of parking availability, length of walk, and degree of local housing development.

Chan^{5,6} studied human use specifically, including both plants and animals, in his study, emphasizing the effects of educational field trips. He compared areas of heavy, moderate, and light use, and found use was associated with reductions in abundances of mussels, rock snails, anemones, and seastars (Figure 1). Only 77 visitors per hectare visited the moderate-use area in a 5-week period, so just a few people were sufficient to cause significant change. Chan also tested the utility of a vigorous public education program. He found that the fraction of visitors collecting could be reduced by half or more, and that the number of organisms taken by each could be reduced by a like amount (Figure 2). Thus, education reduced the total number of organisms taken by about 75%. However, some people continued to collect, particularly taking attractive species like seastars.

Zedler^{7,8} investigated the effects of public use at Cabrillo National Monument in San Diego County. She observed people at the beach to determine the number present at various times and their most common activities. Many of these activities held clear potential for damage to intertidal populations; after walking, standing, and picking up animals, poking anemones was the next most common activity. She found the abundances of several species different in areas of high and low use. Changes in abundances occurred when use intensities changed. Experiments also showed specific effects from trampling and rock turning.

Zedler also discovered a more subtle effect: a change in the size distribution of the owl limpet *Lottia gigantea*. Larger individuals were considerably less abundant in an unprotected area than at the Cabrillo National Monument, where taking is restricted. Presumably, game hunters preferentially harvested the largest animals.

Methods

We have approached the problem of measuring these effects by comparing the biological communities at sites receiving various degrees of human use. The immediate difficulty was to account for differences among the communities resulting from variation in other environmental factors. We have planned to do this in three ways: (1) by surveying a large number of biological communities and isolating human use effects with a system of multivariate analysis; (2) by surveying systems before and after a significant change in the degree of human use; and (3) by comparing selected sites that are similar in all environmental characteristics except the degree of human use. At this early point in our study we can report only on a study of the third kind. We have found an example where we believe the important difference between a pair of sites is the degree of public use. We caution that our observations are preliminary, and that our subjective belief that the effect of recreational use is the primary cause of the differences in the biological community has not yet been confirmed by objective analysis of a complete data set.

We examined sites at King Harbor in Redondo Beach, California (Figure 3). One site is at the end of the outer breakwater and can be reached only by boat or by an arduous half-hour walk over the rocks. The second site is at the end of a short jetty and can easily be visited by the large numbers of people attracted to a nearby recreational complex. The two sites are otherwise quite similar. Both are made of large boulders and slope steeply to meet a sand bottom at a depth of about 3 meters. They are separated by only about 100 meters of water. The outer breakwater probably provides some protection from wave action to the jetty, but it is likely that the difference is small.

We examined the biological communities along four transects at each site. Two were placed on the protected, harbor side of each structure, and two were on each exposed area. We placed meter-square quadrants along the transects at each meter and counted the organisms present or estimated their abundances.

Results

The survey produced records for 58 species of plants and animals in a total of 43 quadrants. We did not discover a significant difference in total numbers of species present at the jetty and breakwater. Striking differences in the abundance of individual species, however, were seen. Most prominently, the exposed side of the breakwater supported a dense bed of the California mussel (*Mytilus californianus*) while we found only scattered individuals on the exposed side of the jetty. A list of species whose abundances were sharply different at the two sites was prepared.

Summary of Available Data

We have combined our own results with those of Chan⁵ and Zedler^{7,8} to produce a tentative list of those species thought to be affected by public use (Table 1). Strong evidence and obvious mechanisms exist for some; others are indicated with less certainty. A description of the evidence and discussion of possible secondary effects is included.

Conclusions

Rocky intertidal ecosystems are readily damaged by human use. Despite suggestions in the literature (California Coastal Zone Conservation Commission, 1975¹) there is no evidence that there is a "carrying capacity" below which no use effects are seen. Rather, light use causes a small amount of damage; heavy use causes serious damage. We see effects most commonly as reductions in species abundances, but a few species increase in abundance as a result of reduced competition or predation.

Because taking of organisms is a major cause of the damage, vigorous law enforcement is likely to reduce the effects of recreational use. Public education is also helpful, as demonstrated by Chan.⁵ However, although Chan's program certainly reduced damage in the area, the effects were not eliminated. Even a few careless visitors can cause significant damage.

We therefore believe that a conservation program like those used in the national forests should be developed for rocky intertidal areas. Some areas should be maintained totally free of interference to serve as species reservoirs. Other areas should be restricted to only light use, to allow public contact with "nearly natural" systems. Finally, those areas open to unrestricted public use should be closed occasionally to allow the ecosystems to recover.

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References

1. Ricketts, E.F., J. Calvin, and J. W. Hedgepeth. 1968. *Between Pacific Tides*. 4th ed. Stanford, California: Stanford University Press.
2. California Coastal Zone Conservation Commissions. 1975. California Coastal Plan. Documents and Publications Branch, Sacramento, California.
3. Widdowson, T.B. 1971. Changes in the intertidal algal flora of the Los Angeles area since the survey by E. Yale Dawson 1956-59. *Bulletin of the Southern California Academy of Sciences*, 70(1):2-16.
4. Dawson, E.Y., 1963 Chapter VIII. Intertidal algae. In, *An oceanographic and biological survey of the southern California mainland shelf*. Submitted to the California State Water Quality Control Board by Allan Hancock Foundation, University of Southern California, Los Angeles, California.
5. Chan, Gordon L. 1970. Analysis of the effects of public and educational school field trips on a marine environment — Duxbury Reef. Ph.D. Dissertation, Educational Psychology Department, University of California, Berkeley.
6. _____. 1972. Effects of visitors on a marine environment. *The American Biology Teacher*, 34(6):319-321.
7. Zedler, J.B., 1978. Public use effects in the Cabrillo National Monument intertidal zone. 1978 Project Report. Biology Department, San Diego State University, San Diego, California.
8. _____. 1976. Ecological resource inventory of the Cabrillo National Monument intertidal zone. 1976 Project Report. Biology Department, San Diego State University, San Diego, California.

Table 1

Species Affected by Public Use

Mytilus californianus (common mussel)

Chan: Much lower abundances in high-use area, 2/m² vs. 422/m² in low use area

Zedler: Lower abundances in high-use area; decreased abundance when use was increased

Devinny: Much lower abundances in high-use area

Mytilus is taken for food and bait, and may be damaged by trampling or tampering. A major predator, however, is the seastar, which is severely reduced in abundance by even light use. *Mytilus* is the keystone species of a well-developed intertidal community, and many associated species are no doubt lost with it.

Piaster sp. (seastar)

Chan: Much lower abundances in high- or moderate-use areas; 0.03/m², 0.007/m² vs. 0.9/m² in low use area

Zedler: Found only 2 specimens in a moderate-use area; probably in abundance much lower than natural areas

Devinny: Found no specimens in high- or low-use area, though many were seen on nearby inaccessible pilings

Piaster sp. is a favorite souvenir. It is taken despite the most strenuous efforts to dissuade collecting. Loss of the significant predatory activity of *Piaster* is likely to alter communities considerably.

Acanthina spirata (rock snail)

Chan: Lower abundances in high-use area; no effect in moderate-use area

Zedler: Data inconclusive for the related species, *A. lugubris*

Acanthina is an attractive snail and may be collected by casual visitors. It is an important intertidal predator.

Lottia gigantea (giant limpet)

Zedler: Found the size distribution changed in a high-use area; large specimens were absent

Devinny: Specimens over 2 cm totally absent in high-use area; common in low-use area

Lottia is taken as food, so the largest individuals disappear first. Because the large individuals defend large territories, their elimination may result in an increase in the competing populations of limpets or barnacles.

Collisella digitalis (limpet)

Zedler: Lower abundances in high-use area when *C. digitalis* was generally abundant. Experiments showed *C. digitalis* easily killed by disturbance. Average size was less in an area of heavy use

Devinny: Found lower abundances in high-use areas

Collisella digitalis is a large attractive limpet and may commonly be taken as a souvenir. If it is dislodged and not carefully replaced, it will die; like all limpets, it cannot right itself. Zedler also showed that just wiggling the shell caused a 12% mortality rate because the anti-desiccation seal with the rock was broken.

Pragmatopoma californica (sand castle worm)

Zedler: Lower abundance in high-use area

P. californica builds fragile tubes of sand and mucus. Colonies are easily crushed or broken off by a single footstep, and trampling may be the cause of loss.

Spirorbis sp. (calcareous tube worm)

Zedler: Experiments show this worm, which usually grows on the bottoms of rocks, dies within a few weeks if the rock is turned and left

Anthopleura sp. (anemone)

Chan: Much reduced abundances in areas of moderate or high use

Zedler: Increased abundance in areas of high use, despite common visitor harassment

Devinny: Reduced abundances in high-use areas

Anthopleura is poked by visitors who wish to see it retract and squirt. It seems likely that this could result in loss of some individuals, and may be the cause of the reductions seen by Chan and Devinny. The contrary results found by Zedler could result from the loss of a locally important competitor or another unknown cause.

Balanus glandula (acorn barnacle)

Zedler: Possible reductions in high-tide, high-use areas

Devinny: Lower abundances in high use areas

Balanus may be crushed by foot traffic.

Chthamalis fissus (buckshot barnacle)

Zedler: Experiments showed continuous trampling could cause significant damage. But abundances were higher in high-use areas.

Deviny: Observed bare spots on rocks commonly used as stepping stones. Overall, abundances were higher in high-use areas

Chthamalis can be destroyed by heavy foot traffic, but where the use is not severe, it is benefitted. This may result from elimination of the predator, *Piaster*, or the competitor, *Balanus*.

Pollicipes polymerus (gooseneck barnacle)

Deviny: Much lower abundances in high-use areas

Pollicipes is widely recognized as strongly associated with *Mytilus*. Its loss may be the result of the loss of the mussel. Game hunters also take *Pollicipes* as food.

Phyllospadix scouleri (surf grass)

Zedler: Abundance increased in area where use was reduced

Phyllospadix is probably damaged by trampling. It is the keystone species for a well-developed marine community, and its loss may cause loss of associated species or increases in populations of competitors.

Centroceras clavulatum (filamentous red alga)

Zedler: Higher abundance in areas of high use

Centroceras is a small alga which rapidly invades areas where the biological community has been disturbed. Zedler (1978) suggests public use may provide it with an opportunity for rapid colonization.

Coralline algae

Zedler: Lower abundances of *Corallina* spp. in areas of high use. Experiments further showed *Corallina* spp., *Jania crassa*, and *Lithothrix aspergillum* are broken or destroyed by foot traffic

Deviny: Corallines (primarily *Bossiella plumosa*) exhibited a "cropped" appearance in the high-use area where it occurred on rocks which were convenient stepping stones.

Coralline algae may be particularly susceptible to trampling because they are abundant on horizontal rock surfaces, are brittle, and grow slowly.

Gulls, sea lions

Deviny: Gulls were abundant and sea lions commonly sighted in low-use area. Occurrences were far fewer in the high use area. These are typical of higher species whose feeding or breeding may be interrupted by repeated human disturbance.

RECREATIONAL ACCESS: SOME SOCIAL CONSTRAINTS AND CONCERNS

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"Coastline in Crisis," as reprinted from the *San Jose Mercury News* was useful to me in preparing for this conference.¹ Besides providing a good overview, the article revealed what I detect to be of primary interest here — a concern with the past, present, and future impacts of private interests on collective resources. I was surprised that little was said about the coastal recreation phenomena besides apparent conflict, crowding, and a lack of facilities. This is often the case in coastal crisis pieces!

What is wrong with a situation or what we are opposed to is often more clear than what we are in favor of. Whether we have the private interests in tow or not does not mean that anybody is *really* concerned that recreational experiences are better or worse — we just have not gotten that far yet. In fact, I would submit that our approach to coastal access is really quite primitive.

While the coastal access problem is a long-standing one, many still choose to evaluate our success in overcoming the problem by pointing to the extent of shoreline miles or coastal acres in public ownership or publicly available. This preoccupation with miles and acres and number of access points or attendance figures seems to assume that satisfying recreation experiences will follow — *they may not!* This assumption is apparently safe as long as no studies are made of coastal visitors to see if their experiences measured up to their expectations. Research in other recreation and park settings (national parks, national forests, wild rivers) is demonstrating that we can no longer equate presence on the site with satisfaction and assume that everyone will respond the same way — positively² for an understanding of how user expectations can be evaluated.

The topic of access becomes slippery here: are we simply concerned with access to natural resources or with something much more, namely coastal recreation experiences that are satisfying. Are we concerned with access simply as a means to various unknown ends, or are we concerned with the ends as well? If not the latter, we need to be. Hopefully, this conference will help us to transcend legal, biological, and bureaucratic matters to explore these complex and important social concerns.

Some Social Constraints to Access

Several factors have been investigated extensively to help us better understand non-participation or reduced participation in certain outdoor recreation activities. These include: (1) the amount of time devoted to work; (2) the extent of unobligated time; (3) the cost to participate; (4) income as a determinant of participation; (5) the age of the participant; (6) the family life cycle, and (7) infirmity and disabilities. Understanding these factors will help us to better understand current visitation as well as to develop a comprehensive access system that takes these factors into account.

Likewise, we recognize that the needs of coastal community residents (recreational needs as well as other needs) often vary sharply from those of transient non-residents. Also, there are the interests of residents and lifelong residents to consider. While the public interest is clear with regard to public trust lands and waters, it is fuzzy with regard to taking into account these often-varying interests. Access for whom is a most important question. Such differentiation of users and their needs are often lost in decision-making where the main concern is for "the greatest good for the greater number."

Then there is the matter of social equity — who pays and who benefits? Are costs widely distributed and benefits narrowly distributed, or are benefits widely distributed and costs narrowly distributed, or are efforts being made toward some equitable distribution of costs and benefits? Often, recreation planners and managers are accused of protection and perpetuating the interests of the privileged. A thoroughly considered access program can move to counter this concern. But how far can it go ensuring that less fortunate people have access to a beach is one matter; access to offshore sailing and fishing is quite another! In his recent article Symonds³ helps us by asking some important questions: If access facilities were to be built, who would use them? If a permit to build a boating harbor were denied, who would be denied access to coastal waters? If a marina were to be constructed for boating access, what proportion of the general public would be excluded from other kinds of access at the particular site?

Additionally, we need to be concerned with people's willingness to pay for recreational access. While the public sector has traditionally had the major responsibility for providing certain recreation opportunities at low or no charge, the private sector has emerged as a major supplier of camping, boating, and fishing facilities and/or access. Alternately, the private sector is making no rush to take on the public sector's role as the purveyor of beaches, beach access, and related experiences. Why? Since beach access and use has been traditionally free, it is difficult to build a case for managing this recreation activity. With management attention, certain use conflicts might be avoided and people might be willing to pay more than they currently do for beach access. As prices rise, the private sector might be more willing to invest in beach access — as they have been in boating, fishing and scuba access.

Finding access to fishing and boating resources presents a contrasting set of public-private relationships. Here the private role is dominant. The private sector provides the delivery or access system to public waters i.e., the pier, party boat, or charter boat. Without private involvement, offshore waters would be reserved only for those wealthy enough to provide their own access and facilities. While the public sector enjoys resource management responsibilities offshore, it has chosen not to provide access to these resources (and probably could not accord the expenditure anyway).

Some Additional Concerns

Most articles we read today on coastal access have a definite legal bent. As a result, the issue is clear cut — the public either has access to public trust lands (through easement or fee simple acquisition) or it does not. The type of access afforded, whether it is effective, and whether it provides satisfying recreational experiences are *qualitative concerns* that are often overlooked.

Our legal focus is followed closely by matters of the environmental impact of access facilities and use. In access planning, biological matters are considered first and often exclusively. Here rests the concern with finding the elusive "magic number" called a carrying capacity. Biological scientists, who generally have been unable to provide quantitative evidence of *significant* resource degradation in recreation and park areas as a result of increased use (delicate areas aside) continue to try to make us believe that the "range science" carrying capacity analogy is worthy of our management attention⁴; the available evidence simply does not support it.

In the coastal access arena today, there appears to be little interest in people and their coastal experiences. There is little concern with the impacts of perceived crowding. More often than not in problem-solving, planners and managers resort to intuition and simply extend their own values to the situation. If a particular beach is intensively used and looks crowded to them, then it must be crowded and something should be done to alleviate the problem. Often, there is meager evidence offered in support of limiting use. This is the case where a "solution" may become the problem.

How can we plan for and manage coastal access with such a limited understanding of people? If our output concern is acres and miles of access or the number of or spacing of access ways, it is easy. If our output concern is providing experiences that are satisfying to people, greater understanding of recreational participants is essential. We need to know, for example, that the average recreationist for whom we often plan does not exist — many recreation and park plans have this erroneous focus. We need to know that there are different types of recreationists and recreation experiences within each category such as beaching, boating, and fishing. These broad generic activity labels get us into trouble. Somehow they lead us to believe that beachgoers, for example, are some large homogeneous group. To the contrary, as one of my graduate students Marty Schwartz found, beachers on Galveston Island (Texas) can be subdivided according to their motivations into several groups: (1) spiritualists, (2) naturalists, (3) status seekers, (4) individualists, (5) energetic beachers, and (6) average beachers (nothing distinctive).⁵ We need to know considerably more about those who seek access to our coasts if we are to be effective in providing access — access that is *meaningful* to people.

Instead of planning to meet the needs of the most nondescript potential coastal user (average Californian?) for the most general kind of recreational experience (going to the beach?), we need to segment our planning and management efforts based on a greater understanding of people, their motivations, and their satisfactions. What I am saying is that we need to be a little concerned with simply providing access and more concerned with the nature of the experiences being accessed. If we fail to do so, we may find in the future that satisfactions rather than access ways are in fact the scarce commodity.

Research Needs

Additional basic research is needed that focuses on the sociopsychological elements of coastal recreation experiences. Studies of beach users, for example, and their reasons for going to the beach are essential if we are to know that they are satisfied with their beaching experiences. This work will help us to identify sources of dissatisfaction which need to receive additional planning and managerial attention.

We need to know considerably more about coastal recreation users (who they are, where they come from, type of groups, social profiles, and previous coastal recreation experience). We need to evaluate people's perceptions of crowding during their coastal recreation experiences and at specific access locations. Finally, we need users' evaluation of broad management alternatives that can be used both to protect the natural resource base and to reduce perceived crowding.

References

1. Harris, Tom. 1978. "Coastline in Crisis." Reprint from San Jose Mercury News, 36 pp.
2. See work of Graefe for understanding of how user expectations and satisfactions can be evaluated. Graefe, Alan R. 1977. "Elements of Motivation and Satisfaction in the Float Trip Experience in Big Bend National Park." Unpublished Master's Thesis. Department of Recreation and Parks, Texas A&M University, 170 pp.
3. Symonds, Phillip J. 1979. "Equity in Coastal Access: Income and Spatial Effects on the Benefits of a New Boat Harbor in Metropolitan Los Angeles." *Coastal Zone Management Journal*, Vol. 5(1/2): 83-106.
4. Schreyer, Richard, Joseph W. Roggenbuck, Stephen F. McCool, Lawrence E. Royer, and Jay Miller. 1976. *The Dinosaur National Monument Whitewater River Recreation Study*. Prepared for the National Park Service, U.S. Department of the Interior. Contract No. CX12005B046, pp. 17-20, 37-45.
5. Schwartz, Martin P. 1977. "Motivational Factors Related to Beach Usage at Galveston State Park, Texas." Unpublished Master's Thesis. Department of Recreation and Parks, Texas A&M University, 159 pp.

Suggested Readings

- Brower, David J. and William Dreyfoos. 1979. "Public Access to Ocean Beaches: If You Find a Parking Space, How Do You Get to the Beach?" *Coastal Zone Management Journal*. Vol. 5(1/2):61-81.
- Ditton, Robert B. 1979. "Hightide: Ocean Access — Another View." *Coastal Zone Management Journal*. Vol. 5(1/2):1-4.
- Ditton, Robert B., John L. Seymour, and Gerald C. Swanson. 1977. *Coastal Resources Management*. Lexington, Massachusetts: D. C. Heath and Company. 196 pp.
- Graefe, Alan R. and Robert B. Ditton. 1979. "Satisfaction in Recreation: Discrepancy Theory Applied to the River Floating Experience." Unpublished Manuscript. Department of Recreation and Parks, Texas A&M University. 21 pp.
- Spaulding, Irving A. 1973. *Factors Related to Beach Use*. University of Rhode Island Sea Grant Program. Marine Technical Report Series #13. 20 pp.

DESIGN CONSTRAINTS ON PROVIDING COASTAL ACCESSWAYS

LON SPHARLER is Manager of the State Park System Planning Division of the California Departments of Parks and Recreation, Sacramento, California.

My experience with coastal accessways comes primarily from years of association with the California State Park System. Because of this perspective, I address the constraints and limitations that govern the selection and development of major accessways of state or regional significance. I will generally avoid the problems of providing small accessways within developed or developing urban or second-home communities.

The State Park System and Access

The California State Park System has as its major missions the protection and interpretation of significant examples of the state's natural and cultural heritage and the provision of large-scale outdoor recreation opportunities. It owns roughly one-fifth of California's coastline and is a major supplier of coastal access.

On January 1, 1979, the 108 coastal units in the state park system contained more than 83,000 acres with more than 206 miles of ocean frontage.

In 1978, more than 7,100 acres with about 12 miles of ocean shoreline were added to the system. This included additions to 28 units and the establishment of five new units. Many additional coastal acquisition projects are in the appraisal and negotiation stages.

In 1978, more than 35 million visits were made to the state-operated coastal units of the state park system. This does not include the use of state beaches operated by local agencies. The locally operated state beaches in Los Angeles County alone counted well over 10 million visitor days of use last year. The campgrounds at 33 coastal units of the system received over 830,000 site-nights of use last year. In addition, our sister agency, the Wildlife Conservation Board, has developed 22 fishing access sites and 9 fishing piers along the coast. These are operated by local agencies.

Type of Access

When you consider the wide variety of coastal accessways and the agility, ingenuity, and daring of many recreationists, it is difficult to say that there are any practical limitations to coastal access. In California, access sites range from high-volume-use metropolitan area swimming beaches to "wild" beaches in remote locations. Official accessways include 5-foot-wide easements between residential lots, ends of streets in older communities, small parks with parking and sanitary facilities, 25-foot-deep "pass and repass" easements paralleling the mean high tideline, promenades on city waterfronts, state beaches with parking for thousands of cars, and large resource-based coastal parks with a variety of outdoor recreation facilities.

Environmental settings include broad sandy beaches, rocky shores, sand dunes, and vertical bluffs of various heights.

Types of Planning and Design Considerations

A number of factors must be considered in locating and siting recreation access areas:

1. Natural character of the site
2. Existing and proposed land use patterns
3. User safety and health
4. Population to be served

These factors somewhat overlap, as is apparent in the subsequent discussion of the more significant problems faced in providing coastal access.

Tall Bluffs

Tall vertical bluffs are a major physical obstacle to pedestrian access. Each year, two or three people are fatally injured falling off cliffs at state areas. At one time, cliffs of moderate heights would be modified during site preparation or at least have roads or trails carved into their faces. During the past decade, such practices have been frowned upon. In a few cases, we have constructed elaborate stairways, but usually these are not economical to construct and almost impossible to maintain satisfactorily. Vertical bluffs in the 100- to 200-foot range have always been formidable.

Generally the public should be steered away from tall bluffs. However, these promontories often make excellent scenic overlooks. Such overlooks require careful development if the public is to be encouraged to use them.

Sand Dunes

Sand dunes present several problems. Roads and parking in areas of moving dunes are costly and difficult to maintain. Pedestrian traffic through fragile dune areas speeds their deterioration and accelerates the shifting of sand. The problem is compounded by the fact that dunes are attractive places to walk and play. Fencing and posting signs near parking areas and trails do some good, at least with responsible and conscientious people.

Coastal Terraces and Flood Plains

Coastal terraces and flood plains present a different kind of problem. They are flat and are ideally suited for parking lot construction. But because of the scarcity of agricultural land in the coastal zone, such land should be devoted to access parking only after other alterations have been thoroughly examined. Furthermore, the flood plains near the mouths of coastal creeks and rivers often contain sensitive wildlife habitats and archeological sites which should be protected.

Aesthetic Considerations

Obviously, accessways, especially parking areas, should be sited, designed, and landscaped to minimize their impact on the coastal scene. In most cases, blocking the ocean view is taboo. This is a matter of individual site analysis. The surrounding land use may be the determining factor. In some cases, it may be impossible to provide access parking that is acceptable from an aesthetic viewpoint.

Conflict with Neighboring Uses

Many coastal residents resent the periodic invasion of outsiders into their communities. They become especially concerned when we invite the invaders into their neighborhoods. Fencing, screening, frequent trash pickup, and frequent patrol are necessary to lower the level of local resentment and minimize the potential conflicts.

In some cases, access is not possible because of the nature of surrounding land uses. Military operations such as amphibious landings and rocket launchings sometimes result in the evacuation and temporary closure of some areas. On the other hand, our department is negotiating with the federal government to make certain military reservation beaches available for public use on a part-time basis.

Sanitary Requirements

Under California public health laws, recreational beaches must have adequate sanitary facilities. The standard is one toilet for each 500 users during maximum use periods. At least one toilet is required unless the local health officer determines that the beach is maintained primarily as an open space. The criteria used for such determination is the lack of developed access, the lack of parking facilities, the lack of lifeguard service, or when casual use does not exceed 50 people per mile of shore. The result, unfortunately, is unsightly chemical toilets up and down the coast, at least until funds can be budgeted for more permanent facilities.

Access for Special Populations

Providing access for certain user groups presents special problems.

The disabled, particularly those in wheel chairs, are normally precluded from enjoying the use of sandy beaches. At one popular Orange County beach we are experimenting with paved trails out onto the sand with turnarounds near the water line. Our engineers have also designed a vehicle which will allow a disabled person to drive out onto the sand. The design is now being reviewed by the Department of Rehabilitation.

Scuba divers have the basic requirements, but because of the weight and bulk of their equipment, they would like to have dropoff points with vehicular access almost at the water's edge. In some rocky areas a safe "launching" or water entry area is needed. The department manages several underwater park and recreation areas. During the next five years we hope to have 10 additional underwater units. In most cases, these will have special facilities to meet divers' needs.

The Automobile Problem

Perhaps the most frequently observed coastal access problem is inadequate parking. Most recreationists arrive at the coast in an automobile and want to park close to their chosen destination. A survey in San Diego County showed that less than 18% of the beach users parked not more than 1,000 feet away from their destination. High volumes of recreationists compete with residents and shoppers for parking spaces near recreation destinations. Numerous vehicles seeking limited parking intensify already serious traffic problems. Vehicles seeking parking on arterials interrupt traffic flow. Illegally parked cars blocked roadways, alleys, and driveways. Beach users often must park on the inland side of heavily travelled coastal highways when they walk across and risk being struck by oncoming cars when they cross the highway. This pedestrian traffic also slows vehicular traffic and contributes to congestion.

A 1977 study in San Diego County found that only 2 of the 19 coastal recreation destination zones had no parking problems. Seven areas had severe or frequent problems. In Los Angeles and Orange Counties, the situation becomes intolerable on weekends. In and around coast-side commercial areas traffic can be intolerable on weekdays.

While not all accessways can or should have parking facilities, most of those operated by the state park system or regional agencies should have parking areas large enough to accommodate all but peak demand levels. The amount of parking provided should also be consistent with the capacity of the beach resource and the type of recreational experience the operating agency seeks to provide.

Ingress and egress from the nearest state highway or arterial should be direct and well signed. In no case should large-scale recreation traffic be routed through narrow residential streets or congested commercial districts.

Providing inland parking areas with shuttle service to the beach has often been recommended as the solution to the parking and traffic congestion problems. Unfortunately, shuttles have not proven to be very successful to date because of a variety of economic, psychological, and perhaps institutional problems. People will not use shuttles unless the schedules are frequent and dependable. Usually inland parking is a refuge of last resort. Before settling for remote parking areas, the motorist will have already added to the congestion at preferred seaside destinations. Experimentation and research are needed to overcome the difficulties. Certainly future attempts to provide shuttle services will have to be well planned, promoted, and orchestrated.

Alternatives to Automobile Access

A full discussion of public transit problems is next on the agenda; but I would like to point out one design requirement now. Buses are large and have difficulty in turning around. On the Malibu coast, the bus line ends where buses can conveniently turn around on the narrow and heavily travelled Pacific Coast Highway. There are many good beach access areas beyond the last bus stop.

The Department tries to encourage public transit authorities to extend existing transit lines to serve our near urban parks. We are sure that this can be done economically in many areas. We also would like to experiment with state-operated shuttle service from existing transportation nodes. In order to serve inner-city youth, we are now exploring the possibility of hiring charter buses to take children from urban recreation centers to nearby state parks and beaches.

We have a dream that someday there will be a safe coastal bike trail from Oregon to Mexico. This dream includes a chain of hostels at one-day intervals where families and youth groups can spend the night. Conveniently spaced between the hostels would be campsites for those who prefer to walk the coastal trail. The completed system may be decades away, but small segments of the trail are under construction. Some of the hostels are on the drawing board, and funds are available for constructing a pilot chain of hostels between a site in Marin County and Santa Cruz. This pilot chain will utilize two recently abandoned light stations. We hope to prove that at least a portion of our metropolitan population will take advantage of the alternative means of enjoying the coast if they can be assured of safe, convenient stopping places.

In the Los Angeles basin we are cooperating with local agencies in the construction of bike trails along major flood control channels leading to the ocean. The trails pass through some of California's most densely populated communities.

Summary

Many physical and social problems are encountered in providing adequate public recreation access to our beautiful coastline. Through sound planning, careful design, and efficient management these problems can be avoided or overcome. The benefits to the public are worth the effort.

COASTAL ACCESS AND TRANSPORTATION PLANNING

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This paper addresses coastal access as an issue of congestion in or near the coastal zone. For the recreationist, congestion might be encountered on the regional highway network, on a secondary road near the coast, at a parking facility, or on the accessway to the beach. Coastal access is sometimes concerned with providing an accessway to the beach, an important part of the recreationist's path but not always the most limiting one. Local coastal residents also face congestion in their travels, and this is also part of the coastal access issue.

Coastal access and energy conservation are linked most obviously by the number, type, and distance of trips to the coastal zone. But they are also linked by the level of congestion on the paths of coastal travelers. The reduction of congestion, therefore, seems to be a desirable primary objective of any local coastal planning program. However as we shall see, this is not a simple task. Differences in the primary concerns of the participants in the comprehensive planning process and the uncertainty of future coastal travel behavior are the reality of planning for coastal access.

Causes of Congestion on Coastal Access Routes

Congestion results when traffic volumes in a highway network exceed the capacity of one or more links in the network to carry traffic in a steady flow. At this point we have a network of unstable traffic flow, or congestion. In transportation studies the status of a link as it approaches a congested state is given by the ratio of predicted traffic volume to link capacity (v/c). From a transportation planning perspective, providing coastal access is a problem of matching traffic volumes to link capacities during those periods when congestion is likely to occur.

Traffic volumes of concern in coastal access analysis occur in California primarily on summer Sundays, although peak conditions can occur at any time of year for special events. The primary attraction is a "day at the beach," and factors such as free time and weather play an important role in determining attendance patterns. In any case, there is a high latent demand for beach use, particularly in the Los Angeles region where more than 10 million persons live within a 2-hour drive of the coast.

Critical to the analysis of coastal traffic are arrival and departure patterns. Studies conducted in the San Francisco Bay Area, Orange County, and San Diego County indicate that approximately half of the coastal recreationists arrive at their destination between 11 a.m. and 1 p.m., with other arrivals dispersed throughout the day.¹ Departure patterns are not as clear although two factors tend to make the afternoon traffic peak even more pronounced than in the morning. First, activities that have different arrival patterns have similar departure patterns. For example beaches, marinas, golf courses, and other activities have similar peak departure periods, roughly 3 to 5 p.m., although their arrival patterns differ significantly for obvious reasons. Second, the California coast is known for an abrupt change in weather conditions, and late afternoon fog and chilly on-shore breezes usually send beach-lovers scrambling for their cars.²

Another important factor in the analysis of coastal access traffic is its mix — in particular, the proportion of local traffic on coastal access routes. Although it is difficult to predict the degree to which local residents will use coastal access routes for typical weekend trips, simulation of their travel activity, even at trip-generation rates half the level of those of similar inland developments, indicates a significant impact on coastal access. In some areas the majority of vehicles on coastal access routes is expected to be those of local residents.³ Consider, for example, plans to construct 50,000 dwelling units

to the south and east of Laguna Beach in Orange County, California.⁴ The area is already congested on summer weekends on Laguna Canyon Road, Pacific Coast Highway, and the San Diego freeway. Even the analysis of the impact of this build-out on future coastal access by pro-development interests indicates that it will be severe. One noteworthy point here is that there is no "accepted" method for studying the impact of local development on coastal access, or, for that matter, on recreation travel in general. Whereas the analysis of work trips is routinely taught in graduate schools and is undertaken throughout the country with U.S. Department of Transportation computer programs, prediction of recreation traffic volumes on coastal access routes is a new and often controversial area of analysis.

The *capacity* of local access arterials is limited by factors that would apply to any highway: number of lanes, topography, line of sight, width of the roadway and shoulder, and the ability to pass, especially on two-lane roads. Additional factors that are significant in the analysis of capacity for coastal access are scenic views, cross traffic and unrestricted access, traffic controls (greentime), and vehicle mix (including RVs and bicycles). In addition, destination or terminal condition can adversely affect the capacity of the transportation system as a whole. These include availability and access to parking, pedestrian traffic, and beach crowding. Although this last factor is not currently a problem in terms of total numbers, it may be with a respect to the compatibility among user groups.⁵

In addition to the requirement for a coastal access capacity in the network, the arterial, the access road, the parking or unloading area, and the facility (beach or marina) there is also a requirement to match these capacities. Thus, the acquisition and development of new coastal facilities at locations where there are few coastal access arterials or where existing routes are already overcrowded will work against a policy of providing coastal access.

Coastal Access and Energy Conservation

Five factors determine the amount of energy used in coastal access travel:

1. Travel behavior
2. Travel time
3. Trip distance
4. Vehicle operating characteristics and indirect energy requirements.

Travel behavior includes those aspects of travel that are determined by the individual: the propensity for trip-making, vehicle occupancy (car pooling, etc.), and mode selection. When gasoline supplies become limited, there will probably be shifts in travel behavior. During the 1973-1974 gasoline shortage, automobile trips for shopping and social-recreational by persons above the poverty level dropped 14% and 20%, respectively, while public transit use, walking, and auto occupancy rose. On the other hand, work behavior patterns showed little or no change during this period.⁶ There are indications that similar shifts in behavior are occurring now, especially in California, where closing of weekend gas stations is almost certain to reduce the number of vehicles traveling to the coast.

At a rate of approximately three persons per car, coastal recreation trips have had more than twice the occupancy levels of preshortage work trips. This indicates an opportunity and a willingness to share automobiles for recreation trips. It is possible that ride-sharing for coastal recreation trips will increase to the capacity of the vehicle, thereby saving energy not only through fewer vehicles but through reduced congestion.

Public reaction to the possibility of shifting modes for coastal recreation trips from auto to transit has been decidedly negative in polls conducted in Orange and San Diego Counties prior to the current energy shortage.⁷ The reasons for this resistance are the expected ones: equipment, small children, long waiting times, and general inconvenience.⁸ Another deterrent is that transit programs are usually targeted for the near-coast area; it is nearly impossible for a person who lives some distance inland to ride transit to the coast.⁹ Of the individuals who ride transit to the coast out of necessity (captured riders) it is interesting to note that the vast majority of them are from the majority group of beach users: high school and college-age individuals.¹⁰ In the past, this group has shifted from transit to auto as soon as an auto was available.¹¹ But this trend could reverse in the future as gasoline remains scarce and automobiles become relatively more expensive. Coastal transit ridership could dramatically increase from the impact of this single group. But other groups such as families with low incomes, small children, and beach equipment may not be able to take advantage of expanding transit programs and face decreasing opportunities for coastal access.

The effect of the gasoline shortage on park-and-ride programs is an unknown. Before the shortage, Capitola in Santa Cruz County operated a program that successfully reduced downtown traffic and provided access to the city beach. Also, Orange County visitors indicated that they preferred a park-and-ride plan to other measures that mitigated against the use of the auto for coastal travel.¹² The California Coastal Commission is pursuing a program of park-and-ride transit on the Orange County Coast between Newport Beach and Dana Point.

Recreational trip distances are the longest of all trip types, averaging 13 miles each way and accounting for more than 20% of the vehicle miles traveled according to the Nationwide Personal Transportation Study of 1969-1970.¹³ Coastal recreation trips in southern California appear to be longer than the national average. The average travel distance of a visitor to an Orange County Beach was found to be 18.5 miles.¹⁴ Forty percent of the Orange County beach users and as many as 10 percent of the San Diego County beach users are from Los Angeles County.¹⁵ A recent study in northern California indicated that 22% percent of the visitors to the Mendocino coast were from the San Francisco Bay area, 150 miles away.¹⁶

Travel distance is not the only criterion for gasoline consumption. When congestion occurs, as it often does in coastal travel, *travel time* and *vehicle operating characteristics* must be included in the analysis.¹⁷ The most efficient speed for an automobile varies by type, but is approximately 40 to 50 miles per hour.¹⁸ At faster speeds the engine may operate more efficiently, but wind resistance reduces the mileage:fuel ratio. At lower speeds the engine is increasingly inefficient and a certain amount of fuel is wasted in idling. Thus, under optimal fuel economy conditions, a vehicle would travel at a steady, moderate speed, a rare occurrence on a summer day in the California coastal zone. While improving the mileage:fuel ratio is certain to conserve fuel for steady-speed conditions, fuel consumption under congested conditions can be changed only by increasing the capacity of the system or by changing the network configuration. Current research by the author indicates that highway network plans based on criteria such as minimizing travel distance or access time will not necessarily result in an energy-efficient network. This is of particular importance where new highway facilities (arterials) are included in the local coastal planning program.

There are *indirect energy requirements* for each mode of coastal access above and beyond the energy consumed in propulsion. These are station and maintenance energy, construction energy, vehicle manufacture energy, and energy required to access the mode. When the indirect factors are taken into account many of the expected means for conserving energy disappear.¹⁹ Recent urban transportation studies indicate that buses and van pools are the most energy-efficient modes.²⁰ But a plausible hypothesis for coastal access is that there is little difference between autos with high occupancy levels and buses when compared on a total energy basis. Of course, for specific types of energy, such as gasoline, or when congestion effects are included, buses may be more energy-efficient. Further research is needed to access the energy impacts of different modes of coastal access.

It is difficult to predict the future of coastal access in the midst of another gasoline crisis in California. Many energy conservation proposals have an implicit bias against recreation trips. The reason for this is clear: while nearly every identifiable group in American society has pitched in to reduce energy use, the number of recreation vehicles (vans, motorhomes, and four-wheel drive vehicles), with low mileage:fuel ratios has tripled to nearly 4 million in the last eight years.²¹ Recreationists have been labeled as energy wasters!

But coastal recreationists are not necessarily to be included in this group. Their travel behavior decisions, along with effective planning for coastal access, can reduce energy consumption. Presumably the need for coastal recreation will not disappear in the face of this or any other crisis. One question then is how to provide access and conserve energy; a larger question is how to provide access, environmental quality, and social equity for each member of the public.

Comprehensive Planning

Comprehensive planning for the California coastal zone is currently underway as local governments in the coastal zone prepare their Local Coastal Programs (LCPs) for approval by the California Coastal Commission. Our previous discussion would lead us to believe that the principal objective for the transportation component of an LCP is to reduce congestion, thereby directly improving access and indirectly reducing energy consumption. In reality, the process is not that simple, and quite often the local government and the CCC wind up talking at cross purposes to one another. Table 1 shows why. A state agency, such as the California Coastal Commission, and a local government have different primary concerns when it comes to transportation. For small local governments this conflict may not appear since planning for one set of concerns often encompasses the other, or there may be strong local support for state concerns as in the case of local governments that promote tourism. But in other cases differences between state and local primary concerns for transportation planning promote an adversary relationship that is often fueled by feelings of "state interference" or "inequitable local interests."

When the issue of congestion comes up, it is an issue of who causes it and who will pay for its mitigation. When new transportation facilities are considered the local government may argue that a link is needed to meet network-wide transportation requirements and it increases access to the coast. The state may counter that the local analysis is based on work trips and that the trips on the proposed link are actually overflow trips from a shorter path in the network (using a capacity-constrained

assignment procedure) and the network should be redesigned; that the environmental degradation caused by the proposed link is not considered in the local analysis; and that it does not increase coastal access but actually entices drivers to join the existing congestion on the coast. If, on the other hand, the state wanted to build a new highway facility and local interests opposed it, one need only to think back to the 1960s to imagine the outcome.

The prospect of energy shortages adds another complicating dimension to not only planning for coastal access but to transportation planning in general. What happens to our plans if travel behavior patterns change? If the input parameters for journey-to-work, trip generation, occupancy levels, mode split, and all the other typical inputs to transportation models change, obviously their results and the plans they support will have to change. And what if these behavior patterns are changing now and continue to change in the foreseeable future? Since it would take years to collect, analyze, and disseminate the relevant information, it seems appropriate to consider transportation planning strategies that could be implemented now that would reflect the uncertainty of the moment.

First, long-term plans should leave future decision makers with as many alternatives as possible. Second, in a situation where we face energy and fiscal crises and uncertainty is high, doing nothing becomes a viable alternative. That is, congestion may decrease without the implementation of any plan, while new highway facilities may become underutilized. Third, plans should utilize existing facilities and resources in innovative ways, such as large-scale bicycling, the use of jitneys, special trains, and even cars with high occupancy levels for coastal access.

Finally, I wish there were some easy answers for all of the planners involved in coastal transportation planning in California. But the fact is that we are involved in a process that is planning over a thousand miles of coastline down to the level of changing zoning maps and specifying a future land use for every parcel of land in each coastal jurisdiction. The accompanying transportation plans must mesh coastal and inland uses, along with state and local concerns. Without the energy crisis it is an arduous task; with it, we may be attempting the impossible. If the current energy shortages become a way of life, expect that these LCPs will change in years ahead. Anticipate it if you dare.

Table 1
Primary Concerns of State Coastal Agency and Local Government Approaches to Transportation Planning in the Coastal Zone

	State Coastal Agency	Local Government
Objective	Coastal access	Economic development
Clientele	Statewide Population	Local population
Trip Type	Recreation trips	Work, shopping trips
Network	Coastal access routes	Entire network in jurisdiction
Timing	Weekend; summer	Weekday; year round
Boundary	Concerns cross jurisdictional boundaries	Concerns do not cross jurisdictional boundary; looks to regional transportation agency for analytical framework
Land use	Zoning; detailed land use in small area studies as used	Broad categories of land use used to estimate trip ends
Relationship to other sectors	Directly concerned with other issues such as environmental quality, wetlands preservation, etc.	Single sector planning; transportation measures are used for evaluation of alternative plans

References

1. California Department of Transportation, District 4, *10th Progress Report on Trip Ends Generation Research Counts*, San Francisco, July 1975; Orange County Environmental Management Agency (EMA), *Orange County Recreation Needs and Regional Parks Study, Interim Report 2* (including raw data), Santa Ana, Ca., January 1979; Comprehensive Planning Organization (CPO), *The San Diego Regional Coastal Access Study*, San Diego, September 1978.
2. California differs from other regions in the United States in this respect. The driving mechanism is the difference in air temperatures over the Pacific Ocean (50 - 60°F) and inland regions (100°F) during the summer months.
3. See J. Burke "Recreation Transportation on the California Coast," a paper presented at ASCE's *Coastal Zone 78*, San Francisco, March 14-16, 1978, for a description of analysis in three areas.
4. These are not just "paper plans." They have been approved by local authorities and have been supported by millions of dollars of "front-end money."
5. See J. Burke "Recreation Planning in the Coastal Zone: Analytical Techniques, Information and Policies," WD#278, Institute of Urban and Regional Development, University of California, Berkeley, 1977, for a discussion of these and related issues.
6. Sterns, M., "Behavioral Impacts of the Energy Shortage: Shifts in Trip-Making Characteristics," *Transportation Research Record* 592, Transportation Research Board, Washington, DC, 1976, p. 39.
7. Orange County EMA, 1979; CPO, 1978.
8. See VTN/Midwest Research Institute, *Recreation Access Study*, prepared for the U.S. Department of Transportation NTIS, PB # 241-994, 1975.
9. An important exception to this is the potential of AMTRAK to provide service from central Los Angeles and Orange Counties to the south Orange County and San Diego County beaches. If Camp Pendleton is eventually converted to a coastal recreation area it would be accessible by train for millions of Los Angeles region residents.
10. CPO, *The San Diego Regional Coastal Access Study*.
11. Martinek, D., "The Transportation Needs of Adolescents in Orange County as Related to the Use of Coastal Recreation," Cal Trans, Sacramento, Ca., 1975 (unpublished).
12. Orange County EMA, p. 66.
13. United States Bureau of Census and Federal Highway Administration, *Nationwide Personal Transportation Study*, from unpublished Tables T-1 and T-5.
14. Orange County EMA, p. 48.
15. Orange County EMA, raw data; CPO, 51;68;85;104.
16. Personal communication concerning preliminary results of the "Highway 1 Study," Jack Liebster, California Coastal Commission, San Francisco.
17. Evans, L., R. Herman, and T. Lam, "Multivariate Analysis of Traffic Factors Related to Fuel Consumption in Urban Driving," *Transportation Science*, 10(1976):205-215.
18. Claffey, P., *Running Costs of Motor Vehicles as Affected by Road Design and Traffic*, National Cooperative Highway Research Program Report No. 111, Highway Research Board, Washington, D.C., 1971.
19. Lave, C., "Transportation and Energy: Some Current Myths," *Policy Analysis*, Vol. 4, Summer 1978, 297-315.
20. U. S. Congress, Congressional Budget Office, *Urban Transportation and Energy: The Potential Savings of Different Modes*, Government Printing Office, Washington, D. C., December 1977; U. S. Senate, Comm. Env. and Public Works, Subcomm. on Transportation, *Urban Transportation and Energy: The Potential Savings of Different Modes*, Hearings, Ser. #95-H39, Government Printing Office, Oct. 5, 1977.
21. *New York Times*, August 3, 1978, p. D1.

Section 4

THE COSTS OF RECREATIONAL ACCESS



INTRODUCTION

The goal of providing access or enhancing existing access to a coastline is necessarily costly in its implementation. These costs can accrue as either public or private costs, and within each of those categories they may be further divided into direct or indirect costs. Of the three papers presented in this section, one is concerned primarily with direct costs to the public sector, one discusses the potential for offsetting public sector costs through private sector action, and one discusses the use of both of these approaches to solving a shortage of access.

Naturally the issue of cost is important in any discussion of the allocation of scarce resources, in this case the coastline. More important, however, is the reality of opportunity costs (the costs incurred by choosing to use a resource in one manner and thus foregoing the opportunity to use it in another way). This dilemma arises in two distinct instances in our coastal context. First, there are assuredly opportunity costs incurred by *any* given use of a coastline. With the passage of the Coastal Zone Management Act of 1972 (CZMA) and the California Coastal Act of 1976, however we have statements of public policy favoring the enhancement of public access to coastline. Given that policy, the issue is no longer whether the costs of providing recreational access are worth paying as compared to other non-coastal public policies. Rather, we are confronted with the question of how much public access can be provided with available public funds. Additionally, if public funds are limited and if we are agreed in a public policy sense on the pursuit of the goal of additional access, then much of the costs of providing access can be shared with the private sector?

In Section 1 we saw how access can be obtained through application of the regulatory process (i.e., permit conditioning) whereby the acquisition of land is essentially free to a local government. As we will see in the following papers, however, even such an apparently free good can result in costs of development, maintenance and liability accruing to other state agencies or to the local jurisdiction. However, neither agency may be able or willing to bear the costs of developing or maintaining accessways obtained through the regulatory process of the state coastal management agency. Thus, in the second instance we are concerned with maximizing the amount of access which can be obtained for a fixed acquisition budget.

One way out of the first dilemma is to design a state agency, make adequate funds available for its operation, and charge it with the task of purchasing land in coastal areas with the explicit purpose of providing, among other things, public access to coastal areas.

An agency known as the State Coastal Conservancy has been developed in California to achieve just such a purpose. But, according to Wolstoncroft, who is legal counsel for the Conservancy, the major problem in California is that maintenance costs of accessways so obtained are the responsibility of either the local jurisdiction or the Department of Recreation and Parks—agencies which may have limited funds for such operational expense or limited enthusiasm for such nonmandatory costs. Wolstoncroft makes the point that acquisition is only the first step in securing access to any coastal area.

As we have seen in previous sections, access means different things in different contexts. Eberhard emphasizes that in Los Angeles, with 14 miles of densely populated coastline, direct perpendicular and lateral access to the coastline is not a problem. Except for one area in Pacific Palisades, direct access to the coastline is readily available. The issue of costs in providing access is more subtle and it manifests itself in two major ways: transportation costs in getting people to the beach and land acquisition costs in providing low- and moderate-income housing opportunities in the coastal zone.

Eberhard echoes the concerns of Burke (Section 3) in discussing transportation costs in terms of the social costs imposed on a community. In the City of Los Angeles those costs may be manifested by providing large capacity streets to accommodate high levels of beach traffic which occur on as few as 20 days per year. On those 20 days, transportation facilities are congested to the extent that the overloaded streets impose a significant social cost or externality on those residing nearby, but the alternative approach is for the city to design streets with a capacity to accommodate peak loads, imposing large and perhaps inefficient capital costs on the city's budget. Eberhard's least-cost alternative is to change the travel habits of the public and to encourage greater use of public transit.

He discusses the costs of providing coastal low- and moderate-income housing in Los Angeles in a further exposition of the theme of opportunity costs, arguing that public provision of housing is not the least-cost alternative for providing this good in the coastal zone. Instead, he proposes shifting the high cost of providing such housing to the private sector, with an inclusionary zoning technique.

Applying the notion of opportunity costs to a particular project, Kuebelbeck describes a funding technique whereby a substantial portion of a currently degraded wetland in California's Orange County could be restored utilizing revenue made available from the development of housing and a marina in a portion of the wetland system. Funding limitations in the wake of Proposition 13, he argues, make it less likely that the public sector will be able to afford to purchase or maintain such areas for a single use, (for instance, nature reserves used solely for passive recreation and education).

Rather, existing funds for such projects can be stretched considerably by trading off a portion of the environmental conservation objective by allowing multiple use of the resource, in the case of this example, promoting housing and boating. In this context, an essential policy question remains, however. That is, how much is it worth to the citizens of California for a particular wetland to be preserved? Is it worth more to preserve a whole wetland, albeit in a degraded condition or is it more in the public interest to have a fully restored wetland only half as large? Kuebelbeck argues in favor of the latter.

In the following section we will see these essential questions of costs and the distribution of costs between public and private sectors arising again and again. In any coastal management program, the determination of a proper distribution of costs between the public and private sector is rarely if ever determined with any precision in laws or regulations. Instead, the issue constitutes an ongoing debate which demands well-informed judgement on the part of the public. The following three papers illustrate the complexity of the debate.

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THE STATE COASTAL CONSERVANCY'S COASTAL ACCESS PROGRAM

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Introduction

The State Coastal Conservancy was created by the California Legislature in 1976 as a division of the Resources Agency, to help protect the state's coastal resources. The Coastal Conservancy is separate and distinct from the California Coastal Commission. While the Coastal Commission is engaged in land use planning and regulation of coastal development, the Conservancy is authorized to acquire, sell, and exchange land and partial interests in land. The Conservancy was conceived as providing an alternative to the often harsh effects of the regulatory approach, at the same time avoiding the excessive costs of transferring land permanently from private to public ownership.

The Conservancy has a number of areas of responsibility, covering enhancement of coastal resource areas (including wetlands), lot consolidation projects, restoration of urban waterfronts, and a variety of other activities. One of the Conservancy's designated responsibilities is a coastal access program, the subject of this paper. In this area, the Conservancy is working with the Coastal Commission.

Background on Coastal Access Needs

The overall need for public shoreline access in California has been well documented. A 1978 National Oceanic and Atmospheric Administration (NOAA) Sea Grant study pointed out that regionally, areas with greatest concentrations of populations have the lowest proportions of publicly available lands. This national trend is reflected in California where the population is heavily concentrated in areas on the coast. With 1,272 miles of coastline, California has only about 600 miles in public ownership of which about 75 miles are restricted, e.g., military lands. With the current and anticipated demand for coast-related recreation, there is a great need to increase the amount of shoreline area directly accessible to the public. Recognizing the existence of access problems, the California Coastal Plan of 1975 declared a policy of guaranteeing the right of public access to the coast, and of taking steps to achieve this objective.

Since 1975, more has become known about the nature and severity of access problems. Of particular concern most recently has been the fact that access needs vary significantly at different points on the coast. Along the northern and central coast, for example, the most critical need is to create new access points and accessways at hitherto inaccessible or difficult-to-reach spots along the shore. Acquisition of easements and/or shoreline lands becomes especially important in this context. In southern California and other urban areas, on the other hand, the coastal zone is mostly developed, extensive public beaches exist, and some level of coastal access generally is available.

Enhancing coastal access involves both improving current accessways and access points and opening up new accessways. A great many new accessways can be created simply by making use of undeveloped ("paper") access easements, offers of dedication, etc., which landowners have recorded in order to satisfy conditions of coastal development permits issued by the Coastal Commission. In such cases, the costs of creating the accessways would exclude acquisition of the land.

Costs of operating and maintaining accessways are a function not only of size but also of the uses to which the accessways are put. Property used for recreation as well as coastal access will cost more to operate and maintain than property used for access alone. It is difficult to compute average costs of operating and maintaining accessways on property which serves a dual purpose. Such is the case with many of the accessways currently operated by the State (especially under the Department of Parks and Recreation) and localities. For instance, San Diego County's 1978 accessway costs ranged from \$2800 for a .1 acre plaza and stairway down a bluff, up to \$25,000 for an 8-acre facility with fire-rings, lifeguard headquarters, restrooms, towers, shuffleboard, and raquetball courts and a community center. (These figures include labor and general administrative overhead.) On the other hand, the community of Cayucos, in San Luis Obispo County, has indicated total annual access costs of appropriately \$4000 for operating 12 accessways — a little over \$300 apiece. These figures include 112 hours of construction, 200 hours of maintenance, \$4500 worth of materials, and some trash collection.

Legislative Mandate for the Coastal Conservancy's Access Program

Existing and recently passed legislation together provide the Conservancy and Coastal Commission with the basis for a total approach to California's coastal access needs. A summary of this mandate follows.

Coastal Act: The Coastal Act of 1976 provides the overall policy guidelines for treating the coastal access issues referred to above. The Act provides that maximum access shall be provided to the shoreline (Pub.Res.Code §30211), and that new developments shall provide public access as long as it is consistent with public safety and military security needs, or access in the area is inadequate, or agricultural lands will not be adversely affected (Pub.Res.Code §30212). These policies guide the Coastal Commission in its permit decisions requiring provision or maintenance of public access, and in the preparation of Local Coastal Programs (LCPs).

Conservancy Act and Supporting Legislation: Chapter 9 of the Conservancy Act (Pub.Res.Code §§1400-31405) calls for the implementation of a system of public accessways to and along the coastline and specifically authorizes the Conservancy to award grants to local agencies for the acquisition and initial development of accessways. Recent legislation (AB 687) has broadened the Conservancy's mandate to include direct acquisition of interests in land for purposes of providing public access. Other legislation confirms the Conservancy's principal role in implementing a system of coastal accessways. AB 989 directs the Conservancy and the Coastal Commission to develop standards for acquiring, developing and operating accessways, and innovative management and operation cost financing methods. The Commission is required to compile a coastal access inventory including known offers of dedication; using this inventory, the Conservancy and Commission are to identify the most appropriate management agencies for offers which have not been accepted, and the Conservancy will negotiate the acceptance and execute the projects. The Commission, in consultation with the Conservancy, shall at the same time prepare an estimate of the costs of development, operation, and maintenance of such accessways, as well as recommendations for funding operation and maintenance costs. The Commission shall develop alternative innovative funding techniques that take into account the appropriateness of local funding for the operation and maintenance of accessways that serve primarily local purposes.

Accomplishments of the Conservancy's Access Program up to December 1979

Pursuant to its original mandate, the Conservancy initially awarded two access grants, one to Daly City in San Mateo County for the development of Daisaku Ikeda Canyon, and one to Humboldt County to acquire a trail in McKinleyville. Recognizing that coastal access needs were too numerous to continue to be handled on an *ad hoc* basis, staff recommended, and the Conservancy adopted, an Access Grant Program in June 1979.

The Conservancy completed the first round in the Access Grant Program in the fall of 1979. Twenty-seven applications were submitted by local governments and competitively evaluated by staff; ten awards were made for access projects, with action deferred on three proposals. The grant

awards ranged up to \$15,000 for each project. The Conservancy considered only applications where the locality would accept responsibility for operation and management of the accessway.

The successful applications geographically spanned the entire coastline. Their scope also was diverse, with projects involving construction of stairways down dangerous and eroding bluffs; rebuilding a deteriorated existing stairway; providing ladder access down two seawalls and stairs down a riprap embankment; acquisition of land for lateral (parallel to the shore) blufftop access and vertical trails (perpendicular to the shore). Thus provision of new access and renovation or expansion of existing accessways were all represented in the first round of projects.

The Conservancy's coastal access activities have not been limited to the Access Grant Program. Access is an integral part of most Conservancy programs. The Conservancy's Dedications and Donations Programs were established in accordance with the Pub. Res. Code §31104.1 to (a) accept dedications of interests in land required as a condition of Coastal Commission permit approval; and (b) receive donations of interests in land by private landowners. Under these programs, the Conservancy has accepted several non-management access easements and a number of open-space easements.

Access has also been or may be provided through the Conservancy's Enhancement, Restoration, and Site Reservation Programs. In the San Dieguito Lagoon and Arcata Marsh projects, controlled access will be made possible as part of the wetland enhancement activities, and will include viewing areas, accessways and interpretive facilities. In the Conservancy's Restoration program access counts as an essential element in the form of trails through coastal developments, lateral accessways, boardwalks and parks, and in one case vertical access onto a renovated municipal pier. The Site Reservation Program can be used to preserve public access opportunities through early acquisition of important beach and blufftop parcels.

Expanded Access Program Beginning December 1979

On December 13, 1979, the Coastal Conservancy adopted several proposals leading to an expanded coastal access program. The Conservancy authorized the staff to (1) initiate a second round of access grants to localities; (2) to conclude an interagency agreement with the Coastal Commission to set forth procedures for cooperation between the two agencies in carrying out their access responsibilities, particularly under AB 989; and (3) to apply for a coastal access program grant under the Coastal Energy Impact Program (CEIP) of the Office of Coastal Zone Management, U.S. Department of Commerce. These actions, if successful, will allow the Conservancy to deal with access needs more systematically, more flexibly, and with greater breadth.

Under the expanded program, the Conservancy will choose access projects from (1) local governments' requests for assistance; (2) access opportunities, including offers of dedication, generated through the Coastal Commission permit process; (3) access requirements and provisions of LCPs; and (4) access opportunities arising under other Conservancy programs and in programs of other State agencies. Among the Conservancy's means of responding to access needs are: (1) awards of individual grants under the second round; (2) award of "block grants" using funds from CEIP, the pending SB 547, "tidelands oil revenues" currently earmarked for protection of the State's resources, etc.; (3) negotiating acceptance by other public agencies of offers to dedicate interests in land for accessways; (4) collaborating with other state agencies on funding and/or development of access projects; (5) direct acquisition of accessways by the Conservancy; and (6) assistance to local land trusts in developing coastal accessways. Thus, the Conservancy will have considerable latitude in choosing and designing access projects.

When the Conservancy approved initiation of a second round of access grants, it adopted a new set of guidelines to govern the eligibility of projects for grants. The scope of eligible projects was expanded to include certain access-related parking and bicycle paths which are needed solely for shoreline access, which serve accessways or accesspoints, respectively, and which are required because existing facilities are inadequate to meet demand. The Conservancy also revised the criteria for choosing projects to be funded. While projects to improve existing accessways will still be considered, the program emphasis will shift opening up new access opportunities such as developing "paper" access easements. Taking into account rising costs, the Conservancy increased the ceiling on grant money which can be awarded for a single project from Conservancy bond act funds, from \$15,000 to \$20,000. This amount may be augmented in some cases with funds from CEIP, tidelands oil revenues, SB 547, or other sources. The Coastal Commission is expected to provide assistance in the second round grants program in clarifying access priorities.

The Conservancy's experience in the initial round of access grants indicates that the flow of grant applications will be undiminished so long as localities continue to identify access needs through the LCP process.

The Conservancy is applying for a \$700,000 lump-sum CEIP grant, from the Coastal Commission. If the grant is awarded, the Coastal Commission and the Conservancy together will administer a program to distribute the funds to eligible localities, principally Santa Barbara, Ventura, Los Angeles, and Orange Counties. In these areas energy activities are putting pressure on existing coastal accessways by preempting the shoreline for ports and terminals, processing plants and refineries, and other related facilities. Projects funded through CEIP will be located in areas where the demand for access is most intense and where energy activities have the greatest adverse effects on access.

Other Aspects of the Conservancy's Expanded Coastal Access Program

Dedications and donations. As was mentioned earlier, the Conservancy is empowered to accept dedications and donations of interests in land for certain access purposes under Pub.Res.Code §31104.1. The access inventory which the Coastal Commission is required to prepare and maintain under AB 989 will be a source of more such dedications and donations, besides those already being generated through permit actions and private contributions.

Direct acquisition activities. Under Pub.Res.Code §31105, and under §31402 as amended by AB 989, the Conservancy is authorized to acquire interests in land for public coastal access purposes. The Conservancy can charge fees for the use of accessways which it acquires, and can use the revenues for maintenance (Pub.Res.Code §31405). In the future, the Conservancy's access program can be expected to draw on these powers. The conservancy can also now lease accessways which it acquires to any public agency for operation (Pub.Res.Code §31404). For example, the Conservancy might acquire an important accessway adjacent to a county park, and then lease it to the County for operation, to be funded by user fees. The Conservancy would undertake such a project where it meets the Access Program guidelines and criteria and where no local government has or will submit a grant application. A portion of the access funds will be reserved for these projects; and a separate program will be developed if opportunities for the projects become numerous.

Cooperation with other agencies. The Conservancy will in future collaborate with other state agencies in coastal access activities. Possible joint access projects may be grouped into four categories: (1) where the Conservancy negotiates an acceptance by the agency identified under the provisions of AB 989 (see above), of an offer of dedication or of management responsibility for an existing access easement; (2) where the Conservancy uses its authority under AB 989 to award grants for acquisition or initial development of accessways lands to any public agency having authority to acquire, develop, and operate public coastal accessways serving more than local needs; (3) where the Conservancy assists another agency in developing an access project to be funded by the other agency; and (4) where the Conservancy and the other agency jointly fund and develop an access project.

Agencies with whom the Conservancy is likely to collaborate include the Department of Parks and Recreation, the Department of Fish and Game, and CalTrans. The current access activities of these agencies may be briefly summarized. The Department of Parks and Recreation is authorized to acquire, develop, and maintain fee title or lesser interests in areas required for public access (Pub.Res.Code §31402). To date, the Department has not accepted any access easements derived from the Coastal Commission permit process. Rather, it has concentrated on providing coastal access in connection with state beaches and parks.

The Department of Fish and Game acquires land for coastal wildlife habitat areas, ecological reserves, etc., which in some cases may be appropriate for public accessways. Within Fish and Game, the Wildlife Conservation Board (WCB) provides public access in its construction of fishing piers and fishing accessways. These piers are constructed with state funds, and are afterwards operated by local governments. The Conservancy could potentially work with the WCB on local project proposals involving boardwalk or pier restoration and development.

CalTrans invites access grant applications under its bikeways programs. Approximately \$2 million per year is available under a program for bikeways closely associated with State highways; and \$360,000 for local commuter bikeways. Both of these grant programs may be expected to generate access projects.

Links with Local Land Trusts. The Conservancy has not developed a formal land trust program but works in an advisory role with active local land trusts in Humboldt and Monterey Counties. This work provides opportunities for the establishment of accessways. For example the Conservancy's extensive work with the Humboldt North Coast Land Trust implementing the provisions of AB 3008 (1978-79 Statutes, Chapter 1404) will result in the establishment of several permanent access trails at Trinidad Bay.

The Conservancy has applied to the Secretary of Resources for additional funding for these efforts. It will continue its activities on a case-by-case basis and will begin a more formal program if the current responsive approach becomes ineffective.

Conclusion

The Coastal Conservancy expects that in implementing the program outlined above the agency will acquire a pivotal role in dealing with access needs and issues along the California coast.

TRANSPORTATION PLANNING FOR RECREATIONAL ACCESS IN THE URBAN COMMUNITY

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The City of Los Angeles is a fairly dense urban community; while we do have some areas of relatively undeveloped land, most of it is in an urban context. We are not dealing with some of the problems that have been discussed, i.e., identifying the unique recreation experiences that are available. These are already well known. Nor is our issue one of the public acquiring public beaches or requiring vertical or lateral access, which seems to be a central issue in more rural areas of the state of California; for the most part, we already have both vertical and lateral access to the beach along our 14-mile coastline. Only one portion (a very small portion in the Pacific Palisades area, the Belair Bay Club) is not public beach and is not operated as a public beach. The city, then, has the beaches. But how do we get to the beaches? That question arises in a number of different forms.

One of the costs, which you are probably aware of if you are from the San Francisco area or the San Diego area, is the cost of dealing with a plethora of different agencies, such with its own unique responsibilities and its own tunnel vision. In Los Angeles, we deal with agencies such as the city's Department of Transportation, the city's Bureau of Engineering, Cal Trans, RTD, harbor departments, airport departments — each with its own set of concerns and responsibilities. Another set of costs revolve around transportation and parking. Still another is in allowing people of all incomes the opportunity to live near, and enjoy the amenities of, the coastal zone. So the access problem for us has come to include low- and moderate-income housing and how we provide it. That sets the context for the type of situation with which we deal with in a more urban setting. I would like to discuss some of the frustrations and some of the issues with which we deal as well as some of the costs that relate to those various areas.

First, let us look at the transportation issue. In an urban area, the big issue of transportation is always the work trip; we so often look at the work trip to the exclusion of the recreational trip. The question that comes before the planner is: Can you really afford to concentrate the scarce public dollar in the area of the recreation trip when the work trip is of such paramount interest? Perhaps in a more rural area the recreation trip becomes something that you can afford to spend more of your recreation or your transportation dollar on. I think there is a feeling in Los Angeles that if we solve the work trip problem, at least in part, we will be dealing with the recreation trip.

Some of the issues that come to mind relate to improvements of the Pacific Coast Highway, which, during peak traffic periods in the City of Los Angeles, is extremely clogged. The same situation exists for 20 or 30 days during the year when the beaches are highly used. The problem of having a million beach visitors on one particular day and two or three million beach visitors on another day has already been mentioned. If we have twenty or thirty days a year where our highways leading to, and our facilities at a public beach are overcrowded, is the public dollar best spent for those twenty or thirty days of the year? Or should we, as urban planners who are dealing with a city of some 465 square miles, be more concerned about our everyday problems? One of the first problems that we have to confront is, is it really worth it? What are our priorities in an urban setting? Are our priorities first with the recreation trip or first with the work trip, or some sort of blending of the two? If it is a blending of the two, how much effort should we be giving to the recreation trip versus the work trip? Of course, the scarce dollar is a big problem.

Another problem that the transportation planner deals with within an urban community is the regional versus the local orientation problem. Years ago, the City of Los Angeles developed a fantastic plan for getting people around, with a tremendous plan for a six-lane highway every mile, and interspersed between the major highway, a four-lane highway every half mile. We had a system which

was going to move cars and move cars everywhere, but since the dollar was a problem, that system was not ever completely built. In recent years, communities have become increasingly aware that the more cars you let go through their community, the more impetus there is for development, and more disruption to their community results. In the city's planning efforts for each of these communities, we would go to the community and talk with the people. They would say "We don't want a major highway here," or "we don't want a secondary highway there — all that's going to do is to destroy our community. We don't want you to mark this road here because you're going to bring people through my neighborhood and I don't want people through my neighborhood. I want my children to be out there and I want them to have a chance to play. I don't want all the traffic going down my street. I don't want that development up there on the hillside next to my community, because that's going to bring more people down and I'm going to lose my view."

So our great plans for moving people are disappearing. Our citizens are saying, look, we've had enough of development, we're tired of urban sprawl, and we don't like the social costs that are coming about as a result of additional development. As a planner, I applaud this attitude to a certain extent; but if it goes to extremes we will lose some of the real needed accesses. We have now organized ourselves to deal with communities on community-level problems. The regional orientation has completely disappeared. We have not reached a balance.

One of the real questions I have then is — whose interest is going to be served as we deal with local coastal program planning? Is it going to be the community as a whole or is it going to be the local communities through which you have to go in order to reach the recreational facilities that are available in our cities?

Everyone looks to public transportation as the answer to the problem, and certainly so do we as urban planners. But again, we are dealing with a cost problem. Right now, as you know, almost all, if not all, public transportation systems are subsidized by the government. In the City of Los Angeles we are subsidized by the Federal government and we are subsidized by the county. Even after Proposition 13, the city still contributes some funds to RTD to provide bus transportation. The amount of utilization of our buses is terribly small, so that they operate at a tremendous deficit. The question then becomes — are we going to be able to provide the bus routes to our recreational facilities? This question is one of dollars and of willingness to try. We have had some success in the area. We have been able to take people in the summer from the San Fernando Valley to our coastal beaches.

But getting people out of their automobiles and into public transportation is easier said than done. For example, if I want to get my family, all six of us, into a bus with our myriad towels, beach equipment, and everything, there are some real problems to overcome. We are going to have to change a lot of habits before people shift to public transportation. Basically, transportation issues are matters of convenience. If it is too inconvenient to use the private automobile and more convenient to use public transportation, if it is less costly to use public transportation than to use private transportation, if you can somehow change the problem of time, maybe you can induce people to change their habits. I do not think we can expect instantaneous answers in this area. People do not change their habits overnight. It's going to take education, and it's going to take time.

Another thing that will be shaping our costs in the next few years is the energy crisis that is facing us. When we had our energy crisis a few years ago, we started to think about it; but then it seemed to go away for awhile. But it looks like it's back with us. One of the major things that we have been trying to prove and have not done too successfully, is that people are going to have to find their recreational opportunities closer to home. The City of Los Angeles is very fortunate. Not only does it have its coastal zone, but it has the Santa Monica Mountains, the Santa Susanna Mountains, the San Gabriel Mountains — it has a number of potential recreation resources close by. Unfortunately, the city has very little in the way of access facilities to those resources. The federal government has committed itself to creating a Santa Monica Mountains National Recreation Area. It is going to try to develop purchased lands for recreational facilities. Because the primary impetus behind a national recreation area has been one of conservation and environmental preservation, if recreational facilities are going to be provided in this type of situation, there will have to be some give and take between the recreation interests and the environmentalists. We are going to be in for some long, hard struggles over this problem.

I also want to talk a little bit about housing. As I mentioned, one of the problems with housing has been the cost of land. Land prices in the coastal zone, and in particular in the Los Angeles area, have skyrocketed. This is basically due to a number of reasons. I do not think we can lay the blame at the Coastal Commission's feet as everybody else has. It is desirable land. It is land that is close to the coastal zone, and if the Coastal Commission had not been put in a position of having to restrict development to try to maintain some form or scale, I think the local governments would have had to be in that situation too. I know that when we did our community plans for the Brentwood/Pacific Palisades area we had to come in with the regulations and the policies to try to hold down development so that we at least maintained a certain kind of scale of community. Perhaps we were a little slower

than a lot of people would have liked us to be, but we were moving in the direction which the Coastal Commission had taken us. So I am not so sure that we can lay the total blame for the cost of development on overregulation by the Coastal Commission.

Irrespective of who is to blame, the point is that the land is extremely expensive. Is the City of Los Angeles going to take its funding for low- and moderate-income housing and is it going to pay \$25 to \$35 a square foot for land in the coastal zone, or is the money going to go to Watts, to East Los Angeles, or to other areas, say the Wilshire or the Hollywood district? We are trying to revitalize the Hollywood area now. We are spending a lot of time in the south central areas of Los Angeles trying to get new developments going and trying to provide better housing. Are we going to be spending our housing dollar on land that costs \$25 to \$35 a square foot? It seems to me that the answer is that if we want to get the most bang for the buck we probably ought not to be. What kind of tools do we have left to deal with providing low- and moderate-income housing? The first thing we can do is take a look at what we have, and we can try to reduce the incentive there is for converting the housing that we do have into higher income units. Strangely enough, we do that by making it less economical to go in and increase development. We go in and we say "Hey, you can't do any more on that land than you have done." To a certain extent, this is a holdback on converting. We're talking about \$600,000 duplexes, and we're talking about 250,000 or 400,000 single family houses on 25 x 50 foot lots. We're talking about a situation which is amazing, and I am sure some of the other coastal communities in southern California are experiencing the same things that we are. People are willing to pay these prices to live on the coast. So the Coastal Commission has been denying demolition permits — that's something that the city has never gotten around to or has had the nerve to do. There are a lot of political costs involved in that type of thing.

Perhaps inclusionary zoning is another thing that we might get involved in. The city has a token inclusionary zone of some sort which would require a certain percentage of low or moderate income housing if some of our agencies are willing to provide it. It's easily gotten out of, but I think one of the areas that we're going to get into is low and moderate income housing in the coastal zone.

Finally, I think that there are some real benefits through the whole multi-agency coastal process that we have had in the City of Los Angeles. One of the things that has perhaps made the whole thing very worthwhile is that finally different agencies are talking to each other. Some of the housing authorities are willing to talk to planners and some of the special districts are willing to talk to the planner, because they have been forced to. The local coastal program provides a role for the state agencies, at least to coordinate; and other local agencies can at least come to the local planning agency to get a permit to develop once the local coastal program is adopted. One of the things that will happen as a result of this whole LCP process is that people will have to talk to each other. At least they will have to talk to planners before the development if they want to get a coastal permit in order to develop. I think this is a very positive thing. It may result in costs in terms of additional burdens and processes that have to be gone through in order to get a project developed. That's the price of additional bureaucracy. Whenever you get into more regulation, you get into more problems relating to delays—how long does it take to get a permit? You get into issues not quite as violent as the Sohio project, but it brings to mind what can happen. It ultimately gets into how agencies can work with each other, how well agency needs and your needs can be served. It really all depends on how skilled you and they are in working through the bureaucratic maze in finally coming up with something that looks like what you originally intended. Sometimes that's the biggest problem of all.

ENHANCING RECREATIONAL ACCESS OPPORTUNITIES: DEVELOPMENT TRADEOFFS

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My firm has worked for both government agencies and private parties on coastside lands in South Africa, Mexico, the Caribbean, Florida, the Outer Banks, the Gulf states and the Pacific coast. In California, we have evaluated acquisition for recreation access on the San Mateo County Coast, San Diego, Orange County through Santa Monica mountains, Bodega, Eureka, and Crescent City — urban areas, rural areas, sparsely populated and intensely populated areas, high-value and low-value properties. We have finally arrived at defining the coastal access problems by what we call the Alice in Wonderland Syndrome and the Pogo Syndrome:

Alice in Wonderland in that "recreation access is exactly what we say it is and not one thing more;" and

Pogo in that "we have met the enemy and they is us."

What I mean by this is that everybody has his pet definition of what constitutes "recreation access," usually from a somewhat narrow, parochial viewpoint as to access. Because of vested interest groups with narrowly defined goals, it is also difficult in many cases to implement a cost effective access program.

Milton Friedman is an eminent theoretical economist. The noneconomists who have read his books or who have been privileged to attend his lectures find his sophisticated approaches complex and difficult to understand. However, it has been said that in an interview with reporters, he was asked to capsule his basic theories. His purported response was that the basic premise of his theory is that "there is no free lunch — the rest is simply elaboration of that point." In terms of recreation access opportunities, this is the major issue: there is no free lunch.

Earlier speakers have discussed the cost problems related to recreation access, including the fact that acquisition of access is only the "tip of the iceberg" when development and maintenance costs are considered. When we do not have even a good understanding of who bears the responsibility for risk and liability for the public using the access, and that such risk and liability requires insurance coverage, it is unlikely we will have a full understanding of the other costs involved.

Philosophical considerations and social goals further compound the problem. Earlier, Mr. Eberhard indicated that in Los Angeles a concept is being tried based on the premise that if parking is expensive and difficult to use, people will seek public transportation. To some degree this philosophy in terms of recreation access is also evident in some of our coastal planning. We mandate that the coast is a resource to be enjoyed by all persons, yet restrict the number of lanes of road on Highway 1 and east/west roads for them to get there, the obvious rationale being that if roads to the coast are crowded, people will use public transportation in lieu of their automobiles. If you have ever taken a family of four children under six years of age to the beach, with diaper bags, port-a-cribs, and an infinite number of changes of clothing, I submit that this reasoning is fallacious. The same applies to Grandpa and Grandma who don't see well anymore and can't walk very far, or to a cerebral palsied youngster in a wheelchair.

Economists call this concept the "Felicific Calculus" — the concept that people will "seek the easy way and avoid displeasure." This concept of economic policy was first mentioned in literature 300 years ago. It did not work then, and it does not work very well now.

Economists have historically defined things in terms of opportunity gains and losses, where public expenditures on one thing means that we lose the opportunity to acquire another. The concept of how the public spends its resources from the economist's viewpoint — economic feasibility — is based on public benefits versus public costs. How the public funds and finances the project — financial feasibility — is a second issue pursued after economic feasibility has been determined.

These two concepts, economic feasibility and financial feasibility, have historic precedence, and, with the exception of politically derived expenditure decisions, have formed the basis for the non-politically based acquisition of public lands and approvals of public multiple-purpose projects. These methods and techniques can be applied to "recreation access" provided we have a precise definition of what it means.

There is no such thing as recreation access, per se, to the coast. There is a whole spectrum of accessibility requirements for various types of recreational activities which a whole spectrum of different recreational users require. Until we define recreational access in user terms and design criteria for the broad categories of users, we will continue to debate the problem. One thing we have found is that few think in what we classify as "the art of the possible," or the "Economics of Collective Action."

Given the competing requirements for access, it is necessary to design criteria for access that maximize the aggregate benefits to all users. The problem of dealing with competing uses is not new to government. A whole body of theory and techniques has been established to evaluate multiple purpose projects. In water projects as an example, we evaluate the competition among power, agricultural, recreational, municipal, and industrial uses and fish and wildlife enhancement to maximize benefits to all purposes. We can and should apply what we have learned from these programs to the access problem.

I will cite one project where the multiple-purpose public project concept is being used — where demands are capable of being reconciled — the tradeoff concept. This project is the Bolsa Chica area at Huntington Beach. Various public uses are involved including degraded wetlands, existing beach, regional park, marina and public improvements such as a major sewer line, widening of Highway 1, bridges, and finally an existing oil field. The various interests involved want the whole area for reconstituted wetlands, wetlands and marina, some high value residential and other urban uses, ocean access, etc.

We were asked to conduct an analysis which would determine the most economically feasible public use or uses. We found that acquiring the area exclusively for 1,200 acres of reconstituted wetlands would be quite costly . . . (\$15 million to \$50 million, depending on land acquisition costs) . . . whereas a combined development of marina, expanded beach, 500 to 600 acres of wetlands and some urban development would not only satisfy competing demands but also allow the 500 to 600 acres of wetlands which are non-revenue producing to be acquired at minimum or no cost. In fact, by blending the capital construction requirements for these various uses and utilizing the investment and revenue potential from each for the benefit of non-revenue producing uses, an optimum program, including a financially and economically feasible multiple-purpose project, is possible.

In essence, rather than paying \$15 million to \$50 million for what is in reality an additional 300 to 400 acres of wetlands at Bolsa Chica, at very high land prices, it is possible to produce more than 500 acres of wetlands, a 1,750-boat marina, an expanded beach capable of handling an additional one million visitors per year, 180 acres of sheltered public water in conjunction with 50 of the 150 acres of county regional park. Put another way, are we willing to pay \$15 million to \$50 million not to have a marina and some private development.

Because of the extremely high value of the residential development involved and the funding and repayment capacity of the marina, a self-sustaining project can be developed accommodating these various competing public uses requiring coastal recreational access.

In a national perspective as to expenditures of this magnitude, we have recently been involved in a project in New Orleans where more than 15,000 acres of prime wetlands is considered endangered. One-half of the low figure of \$15 million would be sufficient to buy this 15,000 acres of endangered wetlands there versus the full \$15 million for an additional 300 to 400 acres at Bolsa Chica.

When put in a national perspective, it is difficult to rationalize an expenditure of this magnitude to solve a single-purpose objective. This project analysis and the potential tradeoffs involved have taught us a simple lesson.

Rather than setting criteria before the fact, such that no residential or marina development should be allowed and the whole area should be acquired for wetlands, it may well be that we step back and

determine whether collectively a variety of public and private purposes might be able to be structured in a way that uses the investment, funding, and revenue capability of some purposes to benefit the others, which, because of marketability, precedence, or tradition do not have investment, funding, and revenue capability.

Although coastal plans and policies now discuss vertical and horizontal access, and the coastal conservancy has recently been structured as a public acquisition vehicle, we have not come to grips with the real magnitude of the problem in terms of defining recreational access, where it should occur, how it will be developed and maintained after we acquire it, and where we are going to secure funds to acquire it. For those of us who have analyzed the costs of access and attempted to quantify it, we have what we call the one-third rule. Simply, we can expect for every \$1 we spend on acquisition, we incur an equivalent \$1 for development and a lump sum annual equivalent of \$1 for operation and maintenance.

Recently in the legislative analyst's report to the legislature, Mr. Hamm indicated his concern about the present land acquisition budgeting methods of state agencies and the contingent liability of the state from existing litigation. Proposition 13, the Spirit of 13, and the limited spending philosophy of the electorate seem to dictate that the old ways of public acquisition of land will no longer suffice since the money is or may not be available to fund all the acquisitions desired.

It may well be that the "tradeoff" philosophy inherent in the Bolsa Chica project may be the answer. This will require coordination among federal, state, and local entities to a degree not historically required or obtainable. It will also require a new ethic between government and the private landowner which builds on the enlightened self interest of both and some give and take from both.

As an example, I do not think it is realistic to expect that a landowner with a piece of property appropriate for public use would dedicate or donate an appreciable amount of the land to the public in exchange for some residential use, if a further caveat is demanded that the residential use be limited to low income housing. Neither should the landowner expect to develop without serving the public interest.

It does not seem to me either that each project will be able to incorporate all of our social goals or all of the landowners profit goals. Through the development "tradeoffs" possible in every project, we should be able to implement certain pre-determined high priority goals of both the public and private sectors within the economic, financial and fiscal framework of the particular project.

These goals will vary by location and by type of access. Until we know what California's recreation needs are, it is going to continue to be difficult to gain agreement as to the form and function of public access. By applying theories and techniques of multiple-purpose public project analysis and developing the appropriate "tradeoff" mechanisms, we may be able to make the public's money for acquisition go further and yet provide the nature and level of recreational access required by our diverse public interests.

Section 5

MANAGEMENT FOR ACCESS: CONSIDERATIONS AND STRATEGIES

INTRODUCTION

The topic of management for recreational access is addressed in this session. Panelists examine management as it relates to access objectives, user needs and requirements, and implementation strategies.

The opening paper by Ditton urges that the issue of access be viewed in a broader context than just the standard questions of: How much access is enough?; and Access for whom? He poses a variety of questions that need to be answered if one is to get beyond access for the sake of access. In an area that is replete with formulas to fit the access issue, Ditton introduces several new variables that merit the attention of planners, managers, and decisionmakers. Ditton poses questions that examine the underlying foundation upon which much of today's conventional recreational access thinking is based.

Gold's paper seeks to develop a formal planning model for coastal recreational access. Utilizing existing planning methodologies, Gold accommodates the complex and often unwieldy factors that need to be included in the planning process. His assessment concurs with and supports the findings of Dickert in Session I relative to the limits of the *ad hoc* approach. Gold's paper includes a review of the literature on recreational access. From this review he concludes that more systematic standards be developed in planning for recreational access. Building upon this literature base, Gold outlines his ideal approach in planning for recreational access.

Dreyfoos, in his paper on access planning for developed coastlines, continues the theme pursued by Gold and also examines past planning efforts in this area. In his analysis, he questions the utility of such schemes in the context to their contribution to resource managers. Dreyfoos asks: Does access planning necessarily ensure good management options? He contends that much of the recreational access planning has been and is too narrowly focused. The problem, he believes, is that all too often planners begin with the presupposition that access is a land-acquisition problem. Consequently, most plans deal only with identifying lands that are available for acquisition. This approach is rationalized by the misplaced notion that more access acquisition will provide better quality recreation and is worth the cost. Dreyfoos proposes that alternatives other than fee-simple acquisition need to be considered in providing recreational access. Like Ditton and Dickert, Dreyfoos argues for a better understanding of the full range of planning and management options that are available to ensure public access. It should be noted that Dreyfoos' perspective is primarily an urban one.

The practitioner's perspective in management for recreational access is offered by Woodward, a former chairman of Washington's Shoreline Hearings Board. Woodward's view of how the public access program is fairing under coastal management differs from that of Harris, a difference that can be attributed to the stage of development of Washington's program where local coastal programs have been completed and implemented (most of them by 1976). This might suggest that Harris' observations in California, though provocative are possibly a little premature. Woodward documents the historical development of the recreational access issue in Washington and illustrates the access situation as it existed and how it has changed in the state as a result of the activities of the Shoreline Hearings Board. He notes that the prevailing trend emphasizes increasing public access through the permit process, which has given planners and resource managers a much-needed tool in securing public access. He concedes that the process is not without its shortcomings, but he is much more optimistic in his evaluation than is Harris.

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QUESTIONS POSED BY MANAGEMENT

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Much of my work in the past 10 years has been under contract with natural resources management agencies. Many times I have gone for a ride or a walk with managers and heard their problems. Throughout the contract period we are asked many questions by the manager, and, as a result, we usually include a section in our reports called "Consulting Questions Posed by Management" where we confront these questions in a straightforward way. Our answers integrate the results of our data collection efforts, our understanding from the literature, and what occurs in other park and recreation settings.

Why do we need to manage for coastal access?

Simply having coastal land in public ownership or available under easement is not enough. All too often, public attention ceases when access is acquired. An analogy I use with my students goes like this: Failing to manage our beaches is like acquiring, planning, and developing a new state park and, when all facilities are in place, collecting all your park personnel and leaving. Park users would be on their own to do whatever they choose.

The case for managing access in national parks and forests is well established.¹ This is further evidenced by the research base available to these area managers. The very fact that we have to make a case for managing coastal access and shorelands is a clear statement of contemporary thinking.

How do we manage for "maximum access"?

As a management goal, this is pretty fuzzy! Without clearer goals and objectives, coastal access managers will find it difficult to determine what kinds of coastal access opportunities they should be providing and, therefore, what types of programs and facilities need to be instituted. Managers in many federal agencies where public policy is more clear are beginning to realize that there are many different ways to achieve their goals and are exhibiting more comprehensive solution-search behavior.

How much access is enough?

Planning standards are usually offered in response to such a question! There is generally little in the way of support for these "rules of thumb." From my perspective, this is a question to be answered through continuous monitoring of use and feedback from users.² It could be argued that we have sufficient access when perceived crowding is reduced and when users' sources of dissatisfaction with their experiences are minimal. Much can be done to alleviate these problems through management and information systems that allow people to better match themselves with the type, timing, and quality of access they desire.³

What role can the private sector play in providing public access?

We seem to forget that the private sector is already playing a major role in providing the public with coastal access. Public sector agencies seem to perpetuate this bias whenever they speak of public access needs. Their first step, more often than not, is to inventory the extent of coastal access that is in public

ownership or is available through easement. In this frame of thought, privately provided public access does not exist! Since most of the access statistics we have available are a result of this bias, perhaps our access situation is not as desperate as it might appear. In the name of doing more with less, we need to encourage rather than discourage the public access efforts of the private sector.⁴

How does the multiple-use concept fit in with regard to managing coastal access?

Multiple use means many things to many people. It can mean maximizing uses of a particular site just as easily as it can refer to maximizing single use sites within some defined larger area. Multiple use of a site through various recreation behaviors can result in inter-group conflicts between recreationists. Once these conflicts have been identified and verified through study, managers can act to separate certain behaviors in time and space. Multiple use can still be a management goal—that goal being the maintenance of variety or, better yet, a system of sites where certain recreation behaviors are specifically encouraged. The trend toward the multiple use of bridges, waste treatment plants, and highways must be acknowledged as a significant contribution to recreation access.

When we see empty or nearly deserted beaches, why not increase recreation opportunities by making better use of existing public resources? Why not get more people to the beach?

Such strategy assumes that maximizing benefits means maximizing visitors. While such logic is seductive, it has nothing to do with an individual's enjoyment of his access experience. This strategy clearly has its roots in politics where "body count" can be translated into budgets and appropriations. It is absurd to assume that every single person benefits and benefits equally, and that benefits can be accumulated *ad infinitum* (as body count increases).

Can we expect to distribute beach users to avoid crowding problems?

Probably not! Since patterns of use are highly uneven, use redistribution seems to be a worthwhile goal. However, attempts at redistribution have generally failed for several reasons. These include managers' lack of understanding of the techniques involved and generally their commitment to some uniform distribution of use which may be neither desirable nor possible. Attempts to redistribute use without regard for user differences and their resource and experience requirements may, in effect, be forcing people to accept less satisfying experiences.⁵

Shouldn't the environmental impacts of recreation use take precedence over any socio-psychological benefits that coastal recreation activities may provide?

Delicate and sensitive areas clearly need to be protected, and recreational activity in certain areas may not be compatible under any circumstances. Otherwise, environmental impacts or, better yet, changes need to be evaluated as to their magnitude or importance. Not every change is significant! For example, researchers have found that rodent fauna and birds in shoreland and campground and picnic areas weight more than they do in control areas. Further, there is a greater proportion of juveniles.⁶ What does this mean? Are these findings significant enough for us to curtail camping or picnic activity and facility development? The National Park Service has not thought so!

The concept of environmental impact should not be misused as a strategy for eliminating or reducing access. A *significant* impact needs to be demonstrated! Our concern for environmental costs should not preclude our concern for public recreational benefits.

How does the extent of access parking facilities (service capacity) relate to experience quality and crowding concerns?

A sensitive setting and significant environmental impacts or aesthetic concerns may limit parking service capacity. These matters, as well as the behavioral aspects of recreation, are generally not considered in establishing planning standards. While these latter aspects are complex components to consider in access planning, there needs to be a commitment to an access system where there is diversity in site densities as regulated and enforced through parking service capacity. Diversity in an access system is more important than trying to maximize access everywhere!

If there is no "magic number" forthcoming as a carrying capacity, how do we restrict users?

First of all, it may not be desirable to restrict users. Only through careful user-resource study that reveals overuse, crowding, or conflict should such a decision be made.⁷ Decision-making should take place within a carefully constructed management framework where goals and objectives are clear.

Fortunately, there are few preconceived ideas here, compared to other settings since there has been so little concern with coastal access management. Generally, coastal use problems are confronted with controls that are regulatory in nature (length of stay, law enforcement, and parking location and use rationing). Users often feel overly restricted and controlled. Problems can also be alleviated through manipulative techniques that are less obtrusive to users and interfere less with their perceived freedom of choice. Instead of regulating their use and related behavior, we need to influence their behavior by controlling factors that influence their decisions — where to go, what to do, and how long to stay. By influencing the visitors' choice, management personnel can unobtrusively direct users away from delicate or problem areas and direct them to areas suited to their needs! We can improve (or not improve) the access or related facilities or advertise specific attributes of an area.

Publicizing underutilized beaches can be an important management tool to increase the availability of quality beach recreation — right?

Wrong! First of all, what is an underutilized beach? The term implies that we should evaluate our success in terms of the numbers of people we attract. Also, there is the implication that there are overutilized beaches where people are crowded, and that the people may better distribute themselves with more perfect knowledge. They may, if they perceive crowding (remember that density and crowding are different), but don't count on it! A discussion of underutilized areas should not fail to recognize that beaches are leisure places that serve many functions! Instead of this single perspective, we need to achieve a multidimensional view in our planning and management.

Rather than publicizing underutilized beaches, we need to tell people more about their beaches, their entire access system, and the kinds of experiences afforded. They need to see photos that might help them to visualize the kinds of experiences they might expect to receive. They need to know something about seasonality and daily use levels so they can decide whether they would feel crowded and take steps to avoid being crowded, if they so desire.

Once we have sufficient data on our natural resource base, how do we achieve greater understanding of our user constituencies?

It's too bad it happens this way, but we have gotten used to seeing "people's concern" at the bottom of lists of research needs. Park and recreation resource managers recognize the need for data on users, their experiences, and their impacts more today than ever before. They are going to count more than ever before! User permits provide us with a feedback system. Where licensing is involved (boating and fishing), we need to have the ability to segment marine users. In addition to routine systems, researchers find on-site observation and survey research designs useful. The goal of management should be continuous monitoring of users rather than some "one-shot" study design as used in many State Conservation Outdoor Recreation Plans (SCORP) studies.⁸ Because of time and cost concerns, we researchers need to wean management away from costly research projects toward routine data collection systems.

References

1. Darling, F. Fraser and Noel D. Eichhorn. 1967. *Man and Nature in the National Parks: Reflections on Policy*. The Conservation Foundation, Washington, D.C., pp. 42-51.
2. Schmidly, David J. and Robert B. Ditton. 1976. *A Survey and Analysis of Recreational and Livestock Impact on the Riparian Zone of the Rio Grande in Big Bend National Park*. Prepared for the Office of Natural Resources, Southwest Region, National Park Service, Santa Fe, New Mexico. Contract No. CX70050442, pp. 119-131.
3. Mertens, Thomas J. 1977. *Preventing Overuse in Backcountry Recreation Areas: An Analysis of Philosophies, Strategies, and Techniques*. Unpublished Master's Professional Paper. Department of Recreation and Parks, Texas A&M University, 66 pp.
4. U.S. Department of the Interior. 1978. "Needs of Private for Profit Enterprises in Outdoor Recreation" in *1978 Nationwide Outdoor Recreation Plan, National Priority Issues-Task Force Reports*. Heritage Conservation and Recreation Service, Washington, D.C., 51 pp.
5. Schreyer, Richard. 1976. "Sociological and Political Factors in Carrying Capacity Decision Making" in *Proceedings of the National Park Service Visitor Capacity Symposium*, Ft. Worth, pp. 243-249.
6. Foin, T.C., E.O. Garton, C.W. Bowen, J.M. Everingham, R.O. Schultz. 1977. *Quantitative Studies of Visitor Impacts on Environments of Yosemite National Park, California, and Their Implications for Park Management Policy*. *Journal of Environmental Management*. 5:1-22.

7. Schwartz, Martin P. 1977. *Motivational Factors Related to Beach Usage at Galveston State Park, Texas*. Unpublished Master's Thesis. Department of Recreation and Parks, Texas A&M University, 159 pp. While density levels at Galveston Island State Park were very high, so were the satisfaction levels of visitors. Without careful study, management might have put regulations into effect which could have had an adverse impact on the beach experience.
8. SCORP studies refer to State Comprehensive Outdoor Recreation Plans as required under the Land and Waters Conservation Fund Act (PL 89-72).

Suggested Readings

- Atchison, S. WS 1977. "Some Effects of a Campground on Breeding Birds in Arizona" in *Importance, Preservation, and Management of Riparian Habitat: A Symposium*. U.S.D.A. Forest Service General Technical Report RM-43, pp. 49-51.
- Schmidly, David J. and Robert B. Ditton. 1978. *Assessing Human Impacts in Two National Park Areas of Western Texas*. Contributed paper, Conference on the Recreational Impact on Wildlands, Seattle, Washington, October 27, 32 pp.

USER NEEDS AND REQUIREMENTS¹

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It is time to rethink our approach to the planning and management of recreational access to the coastal zone in terms of user needs and requirements. An approach to recreation planning or management based on user behavior is possible. The conceptual challenge is to balance our traditional emphasis on the resource with better understanding of the coastal recreation experience. This paper outlines some places to begin and gives some examples.

Background and Issues

The issues of public recreational access to the coast have been described in several landmark studies.^{2,3,4} These studies establish the social value of coastal recreation, planning approach, management tools, and research needs to help solve the problem of public access. They conclude that the access problem "... is the maldistribution and misallocation of coastal resources ... it encompasses visual, legal, social, and economic barriers."²

Other studies have focused on the environmental impact of public access,⁵ (McHarg, 1976), problems of multiple use,⁶ carrying capacity, and recreation planning.⁷ There is strong consensus that "... site specific studies are needed to ... predict the optimum mix of coastal recreation uses and levels of use."²

Dickert and Sorenson⁷ offer the most sophisticated perspective of the problem in the context of collaborative land-use planning for the coastal zone. They conclude "... the process requires an information-rich environment where local governments and the state have a scientific or technical basis on which to prepare, review and monitor local plans." They recommend the need to "reduce policy ambiguity" and suggest that "the percentage of accessible shoreline is only a partial indicator of public access. Coastal access is far more a function of how many people have convenient access to a given stretch of the coastline than miles of publicly accessible coastline."

The *Nationwide Urban Recreation Study*⁷ (HCRS, 1978), *Nationwide Outdoor Recreation Plan*,⁸ *Coastal Plan*³, and *Comprehensive Outdoor Resources Plan*⁹ call attention to public access problems and to the need to develop more systematic standards.

The problems and issues of the local planning process are detailed in several studies which suggest a need to develop explicit policies and more precise criteria for public access.^{10,11,12} They point to the relative lack of credible standards for public access as a major factor in coastal planning issues, complaints about the permit process, and effective collaboration of state and local agencies.

Approach to Planning

The ingredients and actors common to most issues of recreational access suggest: (1) there is a significant relationship between the type of public access to the shoreline and use levels; (2) different activities require different levels of access; and (3) the quality of a coastal recreation experience is affected by the degree of public access to the shoreline.

Central questions to be answered are: (1) what is recreational access; (2) how much is enough; (3) who will benefit and who will pay; (4) who is responsible for providing public access; and (5) how should sites be managed to meet user and supplier objectives. The conceptual challenge is to translate legalistic meanings of public access into *operational* policies, criteria, and standards that can be used to plan or manage areas.

The methodological challenge is to develop generalizable measures of *effectiveness* based on user behavior and supplier capability, instead of arbitrary criteria. The research task is to develop a process, classification system, and standards which can be used to prepare or review local coastal plans. Concepts of quantity and quality can provide problem-solving alternatives that can have an impact on the local planning process.

A problem-solving approach to coastal recreation access that incorporates these ideas suggests these steps in the planning process: (1) justifying public access in human instead of environmental terms; (2) developing measures of effectiveness or performance standards for a coastal recreation experience; (3) refining these standards by public participation and agency review; (4) applying and evaluating these standards in demonstration areas; and (5) translating these standards into public policy.

The planning task is to understand and apply some basic (or radical) concepts such as:

1. Space does *not* constitute service. It offers recreation opportunity only with appropriate access, facilities, design, and management. Setting aside coastal areas for "recreation" without adequate levels of access, development, and management only accommodates a preservation objective.
2. How *good* an area or experience is, is as important as how much. In many cases, less space with better design and management will improve the quality of the recreation experience and environment. To assume that the "demand" for a coastal recreation experience is adequately met by providing substandard facilities or management that does not meet user objectives is unrealistic.
3. Users and nonusers are *people*, not statistical abstraction. Use of the mythical "average person" is not a sensitive approach to accommodating human needs, and may deny coastal access to a wide range of special populations. To ignore the needs of racial and ethnic minorities in California is unrealistic and unrepresentative. Likewise, to not project the special needs of the senior citizen, physically handicapped, mentally retarded, or poor for coastal recreation is insensitive.
4. User *satisfaction* is the essence of a coastal recreation experience. Recreation is what happens to people as a result of a park experience. People should come away from a visit to a coastal recreation area feeling "good" about themselves, others, and the environment. In this perspective, our mission as planners or managers of coastal areas is broader than resource management; it includes human development.

The Coastal Recreation Experience

Only way to view the coastal recreation experience is to consider the model of leisure behavior shown in Figure 1. This model is based on two basic concepts that are fundamental to the regional park experience and any measures of user preference and satisfaction:

1. *Resource Quality*. Objective measures of conditions which a visitor views as part of the permanent natural and man-made physical elements or facilities of an area, e.g., scenery, vegetation, water, toilets, tables, trails.
2. *User Quality*. Objective measures of conditions which visitors view as constraints (negative) or inducements (positive) to their expectations and satisfaction during a visit to an area, e.g., overcrowding, waiting, noise, conflict, fear, embarrassment, and danger, or program leadership, interpretation, information, law enforcement, and food service.

The concept of quality is based on a *behavioral* approach to the recreation experience which translates basic human needs (multiple causation theory) into three desires that condition user preference and satisfaction for a given area or activities:

1. *Resource-Directed Desires*. Contact with a natural resource, e.g., sun, sand, surf, wildlife. The degree of satisfaction depends on the quality and access to the resource.
2. *Image-Directed Desires*. The fulfillment of a desirable image, e.g., surfer or physical fitness. The degree of satisfaction depends not on the resources, but on the way others may view the resource, activity, or user.

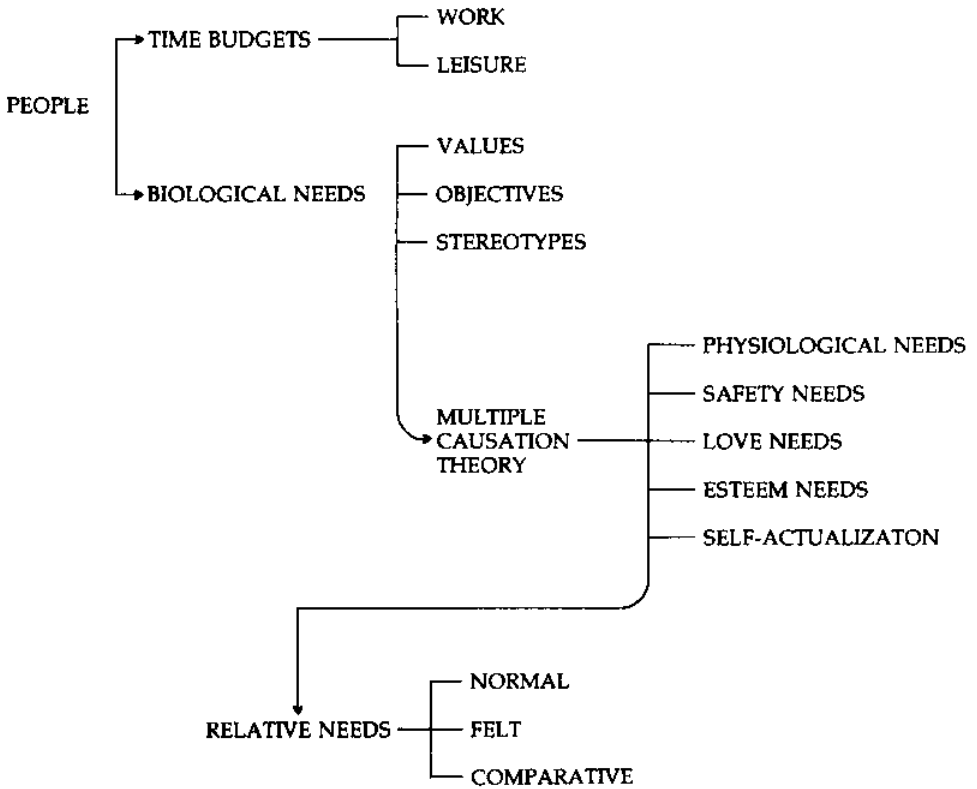
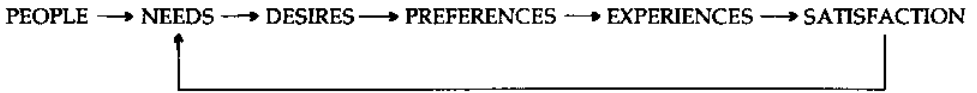


FIGURE 1
MODEL OF LEISURE BEHAVIOR

3. *Leisure-Directed Desires*. A pleasurable way to use leisure time, e.g., Sunday drive, window shopping, television, movies. The degree of satisfaction does not depend on the resource or others, but on how effectively the place or activity consumes leisure time.

In this context, user preference and user satisfaction for a coastal recreation area or experience can be described as:

4. *User Preference*. The voluntary choice of an activity or area to fulfill a desire.
5. *User Satisfaction*. the fulfillment of a desire and a preference which is normally conditioned by the user's preconceived ideas about the area, activities available, natural setting, man-made facilities, and management of the area.

The total recreation experience has five phases which can be used to measure preference and satisfaction for regional parks. These phases are commonly labeled; anticipation, travel to, on-site, travel back, and recollection. Although most managers are concerned with the "on-site" phase of the recreation experience, it is important to realize that user satisfaction is affected by *all* phases of this experience. We should begin to pay more attention to what happens off-site by providing (a) better information about what to expect in a park, (b) how to get there, (c) what to bring or do, and (d) more meaningful souvenirs of the on-site experience.

We can also classify all activities in these four categories of the on-site recreation experience and evaluate each in terms of user satisfaction:

1. *Physical recreation* which requires exertion or physical effort as the major experience of the activity.
2. *Social recreation* which involves interpersonal relations and social exchanges as the major experience of the activity.
3. *Cognitive recreation* which includes the cultural, educational, and creative-aesthetic activities which are mentally rewarding.
4. *Environment-related recreation* which requires use of a natural resource such as water, trees, and climatic conditions to provide activity opportunity.

Beyond time or visits as a measure, it is possible to view the coastal recreation experience in terms of *values* that become institutionalized as *objectives* for individuals or society. For example, these *values* and *objectives* are commonly associated with describing our "need" for outdoor recreation.

Values

Cultural values — history, heritage, beauty
Psychological values — contact with nature, spiritual feelings
Sociological values — friendship, interaction, challenge
Physiological values — health, vigor, fitness
Educational values — appreciation and understanding of nature

Objectives

Develop an appreciation for nature (stewardship)
Enhance individual satisfaction and enjoyment (pleasure)
Provide opportunity for diversion and relaxation (diversity)
Develop physical fitness (health)
Develop desirable social patterns (socialization)

These values and objectives are translated into human behavior that prompts people to use coastal recreation areas to accommodate their personal needs to:

Have contact with nature
Maintain physical health
Maintain mental health
Relieve boredom or find change
Find moral or spiritual inspiration
Achieve recognition/status

There are many other ways to explain in practical terms our need for coastal recreation, but there is no real evidence or theoretical foundation to prove any of these ideas other than the *Multiple Causation Theory of Sociology*. This theory holds that: (1) no single factor is likely to be the cause of man's actions, (2) people have five principal needs which motivate them to act or think, and (3) these needs may be listed on a rough priority scale which demands fulfillment of the first before thought is given to lesser ones. These needs are:

1. *Physiological Needs*. Those things necessary for food, shelter, and clothing must first be met.
2. *Safety Needs*. The desire for security becomes strong when people have satisfied more basic needs in minimum quantity.
3. *Love Needs*. The desire for response, affection, friendship, and congenial fellowship.
4. *Esteem Needs*. The desire for recognition by others, prestige, and freedom.
5. *Self-actualization*. The need to know, to realize oneself and one's potential ability. Its attainment is to enjoy life and satisfy oneself through new experiences, adventure, and excitement.

We measure our job performance in terms of how well it helps people meet some of these needs. For example, the needs for "personal safety, esteem, and self-actualization" can be carefully acknowledged in our planning and management of coastal recreation areas. How well we meet these needs can condition levels of user satisfaction that can have a direct impact on citizen support of coastal recreation acquisition, development, and management.

Practical Application: Field Observation

We commonly measure user satisfaction in two ways: (a) by questionnaires, interviews, or surveys taken on-site or at home, and (b) by field observation. You can use field observation to measure informally or formally user satisfaction. There are many techniques. The technique described here is useful to evaluate existing sites in terms of their intended objectives.

1. Divide the park into functional areas the supplier or designer "seemed" to have in mind.
2. Think of each designed element in the landscape as a "message" from the designer/manager to the user about what is hoped to happen there. Evaluate each message to see if it is ambiguous or clear, weak or strong. Consider these are symbolic messages from the designer and manager to potential users that can have an influence on user behavior.
3. Observe actual behavior systematically at different times and survey "behavior traces," e.g., litter, short cuts, worn areas, etc.
4. Identify discrepancies between what the designers/managers of the space were trying to communicate about expected behavior and what was actually observed happening.
5. Analyze the effectiveness of the park and make recommendations for redesigning the space based on the assumption that activities which seemed to be desired and are not provided for in the design should be accommodated (with the exception of obviously antisocial or deviant behavior).

The purpose of this technique is to provide an objective evaluation of an area that systematically studies the differences between design/management objectives and user behavior and recommend constructive changes based on fact. It forces us to ask and answer the questions: (1) how does an area *look*, and (2) how does an area *work* in terms of user objectives instead of supplier objectives.

Classification of Activities and Resources

The diverse leisure needs and lifestyles of people will require more sensitive classification systems of the experience and the resource that can aggregate or separate complementary or conflicting uses. More attention must be given to the concepts of multiple use, substitutability, use rationing, and human or natural carrying capacity. For example, we can use the usual resource-oriented typology of outdoor recreation activities or the more people-oriented typology shown in Table 1.

Translating Concepts into Plans

A behavioral approach to coastal recreation planning is possible based on the demand factors outlined in Table 2. These factors can be translated into the planning and management methods of influencing recreation use shown in Table 3. An understanding of user behavior is essential to solving the problems of overuse, nonuse and misuse of coastal recreation areas.

The result of this approach to recreation planning is a sensitive linkage of the user and the resource based on facts instead of intuition. It implies a new level of planning and management sophistication that is objective and cost-effective instead of romantic. This approach prompts us to rethink our traditional approach to supply and demand analysis.

The methodological challenge of supply and demand analysis is to relate existing and future recreation behavior (demand) to existing opportunities (supply) with a measure (standard) that indicates need (deficiency). The conceptual challenge is to develop sensitive classification systems to describe space, facilities, and services (supply) and recreation activities or experiences (demand) that can be aggregated at the neighborhood, city, and county level. Both demand and supply must be related in terms of effectiveness (quality) for general and special populations.

The identification of relative need (deficiency or surplus) should be based on performance criteria or standards other than the traditional National Recreation and Parks Association (NRPA) recreation standards. If NRPA standards are used, they should be adapted to the special requirements of each planning unit. Any measures used to determine relative need and deficiency should be:

1. Based on the latent and expressed recreation demand of the general and special populations of a planning area.
2. Attainable in the planning period by a combination of public and private action or alternatives provided.
3. Understood and supported by the public or their elected representatives.
4. Based on the leisure behavior, environment, and social values of the planning areas.
5. Measures of quality, performance, or effectiveness for a given time period, population group, and planning area.

No two communities or coastal regions need to adopt the same standard. There is no planning requirement that mandates similar standards for the diverse conditions, populations, and values that comprise the Pacific coast. To be effective, standards should satisfy these performance criteria.

People Orientation. They must reflect the needs of people in the specific area being served. Standards which are agency oriented instead of people serving are unrealistic and will undermine public support of the coastal plan.

Feasibility. They must be reasonably attainable in the planning period with projected funds. Standards which are politically, economically, or environmentally unrealistic for a particular planning period and geographic area will be extremely difficult to implement. For example, there is a vast difference between the leisure needs and resources of an affluent suburb, rural community, metropolitan area, inner city, and tourist destination area.

Practicality. They must be simple to apply, revise or project in the planning or decision process. They should be based on sound recreation planning principles and the best available information. Standards that are conditional, romantic or arbitrary will not be generalizable to similar populations or planning units.

Relevance. They must relate to the people and times. To assume a timeless set of standards for most urban areas is to not acknowledge the rapidly changing nature of cities, lifestyles, and the economy. There is no reason why standards cannot have incremental time periods or revision.

The adoption of a set of recreation standards that reflect these criteria is an important aspect of the planning process to analyze the existing and projected needs of a community or region. If properly used, standards can be a guide for estimating: (1) the amount of land and facilities required to serve general and special populations, (2) the number of people a recreation area or facility can be designed to adequately serve, and (3) the adequacy of an area of facility to accommodate the potential users in its service area.

Summary

Recreation is what happens to people as a result of a park experience. People should come away from a visit to a coastal recreation area feeling "good" about themselves, others and the environment. In this perspective, your mission as coastal planners or managers is broader than resource management. It includes human development.

Leisure behavior and especially user satisfaction is what public access to coastal recreation resources is all about. We do not have all the answers and are just starting to ask the *right* questions about why people come to coastal recreation areas, and how satisfied they are during or after a park experience. These ideas are one place to begin understanding and doing something about increasing the levels of user satisfaction in coastal zone recreation areas.

Table 1
A Typology of Tourism and Recreation Attraction Land-Use Units

Primarily Dependent upon Special Natural Resources

Beaches	Camps, organization and group
Picnic areas	Marinas, harbors, boat launching areas
Camping areas, nature	Wilderness
General scenic areas	Animal observation areas
Scenic spectaculars	Waterways
Rock collecting areas	Vacation home sites
Shell collecting areas	Prospecting sites
Hunting areas	Forest produce collecting areas
Fishing areas	Trail bike areas
Nature trail areas	Skiing and winter sports areas
Bird watching areas	Snowmobile areas
Spelunking areas	Boating, canoeing, sailing areas
Scuba/submarine exploration areas	Resorts, winter

Primarily Dependent upon Special Cultural Resources

Archaeological sites	Manufacturing plants
Museums	Outstanding institutions
Historic restorations	National shrines
Landmarks	Culturally oriented sites
Ethnic cultures	Dude ranches
Scientific wonders	Legend, lore special areas

Not Heavily Dependent upon Either Special
Natural or Cultural Resources

Concert, drama, pageant areas	Hotels, motels
Craft exhibits	Restaurants
Camping areas, urban	Information centers, rest areas
Spectator sports arenas	Playfields, playgrounds
Gold areas	Festival, parade, derby areas
Amusement parks	Marine festivals
Shopping centers	Convention centers
Night clubs	

Source: Adapted from Dennis W. Ducsik, *Shoreline for the Public*, Cambridge: MIT Press, 1974, p. 96.

Table 2
Demand Factors for a Specific Recreation Area

Factors relating to the potential recreation users:

- Total population in the service area
- Geographic distribution/density of population
- Demographic characteristics of populations
- Time budgets of population
- Leisure customs or habits of population
- Experience levels of population for specific activities
- Awareness levels of recreation opportunities
- Awareness levels of crime or deviant behavior

Factors relating to the recreation area:

- Attractiveness as judged by the user
- Management levels and practices
- Availability of alternative sites
- Carrying capacity and design load of area
- Micro-climate of the area
- Natural and physical characteristics of area

Factors relating potential users to the recreation area:

- Travel time and distance
- Travel mode, cost and convenience
- Cost of supplies or equipment to use area
- Cost of fees and charges to use areas
- Information about area
- Status or image of area

Table 3
Planning and Management Methods of Influencing Park Use

Methods of Protecting the Recreation Resource:

- Nature of facilities and access provided
- Nature and quality of resource provided
- Extension of user time periods
- Site rehabilitation to mitigate adverse human impact
- Placement of facilities to reduce use concentration
- Increase quality of facilities
- Improve design of facilities
- Improve operation of facilities
- Rotation of use areas
- Removal of facilities

Methods of Influencing the Recreation Users:

- Increase awareness of choice
- Increase awareness of behavior
- Publicize selected areas
- Re-adjust holiday timetables
- Disperse use to underutilized areas
- Extend use time periods
- Close areas partially or completely
- Limit size of groups
- Limit length of stay
- Limit types of activities permitted
- Zoning by activity, use intensity, and time
- Use rationing and reservation systems
- User fees, permits, and registration
- Guided tours and structured experiences
- Enforcement of rules and regulations
- Interpretation of site or experience
- Supervision and program leadership

References

1. This manuscript contains material abstracted from *Recreation Planning and Design*, copyright 1980 by McGraw-Hill. Permission to use it in this form is acknowledged.
2. Ditton R. B. and M. Stephens. 1976. *Coastal Recreation: A Handbook for Planners and Managers*, Office of Coastal Zone Management, NOAA, January.
3. U.S. Outdoor Recreation Resources. *National Recreation Survey*, Study Report No. 19. Washington, D.C.: U.S. Government Printing Office, 1962.
4. California Coastal Zone Conservation Commission. 1975. *California Coastal Plan*.
5. McHarg, Ian L. 1969. *Design with Nature*. Garden City: National History Press.
6. Sorenson, J. L. 1971. *Framework for Identification and Control of Resource Degradation and Conflict in the Multiple use of the Coastal Zone*. Department of Landscape Architecture, University of California, Berkeley.
7. _____ Heritage Conservation and Recreation Service. 1978. *National Urban Recreation Study*. Washington, D.C.: Government Printing Office.
8. U.S. Department of the Interior, Bureau of Outdoor Recreation. 1973. *Outdoor Recreation: A Legacy for America*. Washington, D.C.: Government Printing Office.
9. California Department of Parks and Recreation. 1974. *Comprehensive Outdoor Resources Plan*, Sacramento.
10. Dickert, T. and J. Sorenson. 1978. *Collaborative Land-Use Planning for the Coastal Zone: Volume I*, Institute of Urban and Regional Development, University of California, Berkeley.
11. Scott, S. 1978. Coastal Planning in California. *Public Affairs Report*, Institute of Governmental Studies, University of California, Berkeley.
12. Sabatier, P. 1977. State Review of Local Land-Use Decisions: The California Coastal Commission. *Coastal Zone Management Journal* 3(3):255-290.

Recommended Reading

1. Bannon, Joseph J. 1976. *Leisure Resources: Comprehensive Planning*, Englewood Cliffs, New Jersey: Prentice Hall.
2. Burke, J. E. 1977. *Recreational Planning in the Coastal Zone: Analytical Techniques, Information and Policies*. Institute of Urban and Regional Development, University of California, Berkeley.
3. Gold, Seymour M. 1972. "Nonuse of Neighborhood Parks." *Journal of the American Institute of Planners* 38(November):369-378.
4. _____ 1973. *Urban Recreation Planning*. Philadelphia: Lea & Febiger.
5. _____ 1975. "Titanic Effect on Parks and Recreation." *Parks and Recreation* (June):23-25.
6. _____ 1977. "Recreation Planning for Energy Conservation." *International Journal of Environmental Studies* 10(May):173-179.
7. _____ 1980. *Recreation Planning and Design*. New York: McGraw-Hill.
8. Hatry, Harry and Diana Dunne. 1971. *Measuring the Effectiveness of Local Government Services*. Washington, D.C.: Urban Institute.
9. Kaplan, Max. 1975. *Leisure: Theory and Policy*. New York: Wiley.
10. Lutzin, Sidney and Edward H. Storey (Eds.). 1973. *Managing Municipal Leisure Services*. Washington, D.C.: International City Management Association.
11. Mercer, David. 1973. "The Concept of Recreational Need." *Journal of Leisure Research* 5(Winter):35-50.
12. Murphy, James F. 1974. *Concept of Leisure: Philosophical Implications*. Englewood Cliffs, N.J.: Prentice Hall.
13. _____ 1975. *Recreation and Leisure Service: A Humanistic Perspective*. Dubuque, Iowa: Brown.
14. National Academy of Sciences. 1975. *Assessing Demand for Outdoor Recreation*. Washington, D.C.: Government Printing Office.
15. *State-Local Collaborative Planning: A Growing Trend in Coastal Zone Management*. 1978. Ph.D. Dissertation, University of California, Berkeley.
16. Stein, Thomas A. and Douglas Sessoms. 1977. *Recreation and Special Populations*. Boston: Holbrook Press.
17. U.S. Department of Housing and Urban Development. 1974. *Urban Recreation*. Prepared for the Nationwide Outdoor Recreation Plan by the Interdepartmental Work Group on Urban Recreation, HUD-CD-41. Washington, D.C.: Government Printing Office.

BEACH RECREATION PLANNING FOR DEVELOPED COASTLINES

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In the past few years, a substantial literature has amassed on the topic of recreational access. Those who frequent the literature will discover exhortations to increase access,¹ methodologies for acquiring access,² and suggested governmental programs to achieve the goal of more public access.³ Scanning the list of governmental access activities, one finds studies of access problems, access planning in states like California and Oregon, and access purchase programs and dedication requirements in many state and local jurisdictions. Increasingly, both the literature and governmental programs demonstrate a tendency to treat beach recreation planning and access acquisition as synonymous activities, characterized by the following presuppositions:

1. Land is available for acquisition
2. Access acquisition necessarily results in more and better quality recreation for more people
3. Access acquisition is worth what it costs

Success of governmental activities is measured quantitatively, in terms of numbers of accessways or miles of coastline open to the public. The emphasis of beach recreation planning has become a narrow, acquisitive one, focused on access.

This "more is better" approach to recreational access misses two important points concerning beach recreation. First, access is a tool, not an end in itself. In other words, access and recreation are not synonymous. Access is the means of getting people from where they are to where they want to recreate. Access thus is necessary to make beach recreation possible; but once people get to the beach, their recreational experiences are affected by a number of site and use characteristics which probably do not include access.

The second point is that the acquisitive approach to beach recreation is generally inapplicable to the developed coastline. In areas such as south Florida, southern California, and portions of New England, the mid-Atlantic and the Great Lakes states,

1. Land is either unavailable for acquisition or redevelopment, or costs more than government can readily afford.
2. Most access acquisitions will serve limited populations unless coupled with substantial transportation improvements.
3. The cost of access acquisition, coupled with service and maintenance costs, may stretch governmental resources over too many recreation sites to provide the public with high quality recreation opportunities; in other words, the tradeoff between number and quality of recreation areas may make access acquisition a poor way to spend available recreation monies.

Beach recreation in developed coastal areas is frequently characterized by the heavy use of limited areas (e. g., beach parks) and fiscal constraints on governmental operation and maintenance programs. These characteristics suggest a need to enhance and expand the recreation experiences available to the public along developed coastlines. However, the development patterns that engender these conditions also preclude the use of access acquisition as a major strategy for improving beach recreation in developed areas.

Faced with this situation, some governments in developed coastal communities have initiated a non-acquisitive approach to beach recreation planning. Traditional approaches to the access issue start with an enumeration of the various components of usable access: parking areas, roads fairly free from congestion, support facilities (e.g., restrooms) and services (e.g., lifeguards), and so forth. In this approach access planning becomes a game of balancing land and facility acquisition (capital expenses) against the acquisition of new services (operating expenses) to enhance the quality of the recreational experience. The focus is acquisitive.

In contrast, beach recreation planning in developed communities seems to have a different starting point. More closely resembling the rational planning process, this approach begins with an identification of beach users, their problems in securing quality beach recreation, and ways in which government might help resolve these problems. The focus is on making better use of existing recreation opportunities. This approach often involves the components of usable access listed above, emphasizing the quality of beach users' recreation experiences. At times, acquisition of accessways may be important, but use of this one strategy is limited to corrections of particular recreation problems. The focus is placed on recreation management, and community efforts are tailored to the local recreation situation. This approach is broader than the acquisitive one, and governmental responses are more varied and complex. Communities that have turned to the management approach have developed a wide array of strategies for improving beach recreation experiences. While developed in communities where the acquisitive approach is generally infeasible, the following management techniques can be applied to all beach recreation areas:

Beach Recreation Planning

Beach recreation planning can provide the governmental framework for implementing beach recreation management strategies. This kind of planning involves everything that impacts on the availability, quality and variety of recreation experiences available to the public. Good beach recreation planning will produce citizen and governmental commitment to a beach recreation program, in which problems are identified and analyzed, management techniques are selected, and governmental actions are prioritized.

An important component of beach recreation planning involves access. Beach recreation programs should deal with a variety of issues related to ingress and egress, including:

1. Preservation of existing access
2. Making better use of existing access
3. Acquisition of new accessways
4. Acquisition of parking areas proximate to accessways
5. Improving transportation systems to make available access more accessible to more people, such as those lacking automobile transportation

The exact focus of any particular beach access planning program will depend on the local situation: what the local access problems are, and how these can best be addressed within the available financial resources. Each of these components may be relevant to a given access problem. And conversely, acquisition may be of negligible importance in access planning, or in the larger picture of recreation management involves many different subjects, only one of which is access; and access itself involves a number of concerns, only one of which is acquisition.

Beach recreation planning, as opposed to access acquisition planning, is not a widespread phenomenon, but it is increasing in developed coastal areas. One hope for California's LCP program is that it will broaden its focus once the initial round of acquisition planning has been completed.

Reducing Congestion

A number of different kinds of congestion may characterize beach recreation along developed coastlines: beaches are crowded, parking lots are full, and roads leading to the beach are congested. Congestion is generally perceived to reduce the quality of beach recreation experiences. This is particularly true of the traffic encountered in trying to get to and from the beach.

One approach to resolve the congestion problem is to spread out the beach goers, i.e., have them go to different beaches. This strategy has been used with some success in south Florida. Researchers have found that while most residents and tourists know about the popular local beaches, many are unaware that other high quality, well-accessed beach recreation opportunities exist in the same vicinity. The

key here seems to be publicity. Periodic newspaper features, with maps of accessways and descriptions of support services/facilities available, make the resident population more aware of recreation opportunities at places where tourists are less likely to frequent. In some communities, hotels, motels and restaurants give tourist patrons Chamber of Commerce maps showing some (but not all) of the accessways and recreation facilities available. These strategies have proved successful in reducing the number of people frequenting any particular location. As a result, traffic congestion and parking problems have been reduced at the most popular beaches.

Other kinds of congestion may result from site design problems associated with accessways. At beach parks, for instance, one often observes people crowded on the beach near the spot where the walkways hits the beach. In parks where crowding occurs, one solution is to build more walkways. This simple solution seems to work surprisingly well at large beachfront parks, where people use the walkway nearest to their parking space. Because congestion problems are generally perceptual, management strategies involving landscaping and separating different uses may also yield surprisingly successful results.

Solutions to congestion problems usually involve good problem identification and imagination. At times, expensive management solutions such as land acquisition may be the only meaningful choice, but experience shows that many problems can be remedied with good staff work and less costly techniques.

Transit

In highly populated areas, transit may be a feasible strategy for helping people reach the beach. Transit can be attractive because it saves energy costs for the beach user, it can make beach recreation available to those without cars (e.g., the poor and the elderly), and it relieves both congestion and the beach goer's tensions associated with diving and finding a parking space. However, transit must be physically attractive, affordable and timely if it is to be successful. As a result, few developed coastal areas have any meaningful beach recreation transit.

One transit mode often mentioned regarding beach recreation is the shuttle bus. Shuttle systems require convenient inland parking, low prices and frequent trips. They have been studied in a number of areas. The only rumor of an operating beach shuttle system places it somewhere in New Jersey. The literature suggests that shuttle systems *should* work, given the right location. Several Florida communities which lack adequate beach area parking are exploring the use of shuttle buses running from the mainland to the beach. Perhaps these efforts will demonstrate the successful use of a beach shuttle.

Financing Support Facilities, Services and Maintenance

Many people measure the quality of beach recreation experiences by the availability of support facilities (e.g., restrooms and snackbars), services (e.g., lifeguards) and beach/accessway maintenance. These operating expenses can be very costly. As a result, programs to enhance beach recreation must recognize the problem of financing these amenities.

User fees can be a major way of paying for the accoutrements to beach recreation. The easiest way of collecting user fees is to concentrate restroom, picnic, playground and similar facilities in areas where a parking fee is charged. The parking fee can be used to help defray the cost of facilities and services. Fees charged need not be high — the idea is to cover only part, not all, of the cost of beach recreation amenities. This technique has proved very successful, and is commonly used, in south Florida.

Intergovernmental Coordination

Innovative techniques can often make quality beach recreation available to a wider recreating public. One such technique involves cooperation between inland and coastal jurisdictions. Cooperating governments have jointly developed a number of beach parks in south Florida. A system of differential parking fees allows residents of both the inland and the coastal jurisdiction to use the facilities for a cost below that charged the general public. This system developed from disputes between inland and coastal jurisdictions, when the latter objected to bearing the brunt of infrastructure services demanded by the inland beach users. Through governmental cooperation, the fiscal problems of the shorefront community have been eased, and the beach recreation experiences available to the residents of both communities have been enhanced.

Innovative Acquisition Methods

The criticisms of acquisition with which this article began emphasized the high cost of acquisition in developed coastal areas, as compared to the cost of other management techniques. These criticisms notwithstanding, acquisition of accessways or beachfront property may be a useful recreation management technique in some circumstances, particularly if the cost can be reduced. A number of governments in developed areas have experimented with innovative, less costly acquisition methods. Three that bear brief mention are leasing, trading, and use of demonstration monies.

Leasing is a short-term management technique that can provide interim recreation opportunities while other strategies are being implemented. In addition, leasing can give local government time to decide whether to acquire a particular parcel and to accumulate enough money to do so. Particularly in developed coastal areas, leasing may be the only feasible strategy for acquiring and, albeit for a limited period of time.

Trading has a number of beach recreation applications. One involves the exchange of government-owned inland property for privately-owned beachfront property of equal value. A second involves the exchange of access rights for increased density or something of similar value to the landowner. In the proper circumstance, trading can result in acquisition without burdening the cashflow of the trading government.

Demonstration monies can also be used to acquire recreational land or facilities without the use of local funds. At the present time, federal demonstration project funding may be available for some projects through the Office of Coastal Zone Management or the Coastal Energy Impact Program. In future years, other sources are likely to be available to the watchful local government.

Conclusion

The kinds of management strategies discussed above can help local governments maximize the recreational benefits to be derived from existing beaches and accessways. Along the developed coastline, most local governments will be unable to supplement these efforts with substantial new acquisitions of beaches, accessways or facilities. In areas not yet fully developed, acquisition may still be a major focus of beach recreation management. What must be remembered is that recreation, not acquisition, is the focal point of the beach user's concern. Where acquisition is unavailable or inappropriate to improve local beach recreation, a variety of management techniques can and should be employed to help meet recreation goals.

References

1. Office of Coastal Zone Management, *Shorefront Access Study*, Washington, D.C., U.S. Department of Commerce, 1979.
2. Brower et al., *Access to the Nation's Beaches: Legal and Planning Perspectives*, UNC Sea Grant Publication UNC-SG-77-18, 1978.
3. Dreyfoos, *Planning for Beach Access: A Manual for Florida Local Governments*, Ft. Lauderdale, Joint Center for Environmental & Urban Problems, 1979.

RECREATIONAL BEACH ACCESS IN WASHINGTON STATE VIA THE PERMIT PROCESS

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Sixty years ago, I can remember seeing fences stretching along property lines out into the water to the area of low tide in the state of Washington. Shoreline property owners were emboldened by the fact that their state government had been busy selling tidelands to private purchasers since 1889. Eighty-two years later, when the legislature finally halted that activity, about 60 percent of Washington state's 2,700 miles of marine shorelines was in private hands.

The grasping private owners include my family, which owns 130 precious feet of those tidelines. Recent laws and court interpretations make it certain that my family could not now erect property line fences out to the meander line. And we probably now could not even keep the public from digging clams on our beach, because such use has been historic. Ralph W. Johnson makes this all very clear in a concise monograph, *Public Rights to Private Beaches, Lakes and Streams in Washington*.¹

But the right to recreational access is one thing. Accomplishing it, at least in the face of Washington state's geography, is something else. My family's property has a 50-foot bluff. The nearest public road dead-ending on the beach is about one mile away. Many state-owned tidelands are in rocky, high-bluff areas here access is all but impossible except by boat.

That was the situation in my state when the winds of the environmental revolution swept over it as the 1960s turned into the 1970s. People were demanding not only clean water, but they also wanted to dangle their toes in it. A landmark Washington State Supreme Court decision² in 1969 did not concern itself with just taking down a fence; it ordered a massive landfill removed because it interfered with navigation! Meanwhile, particularly in Seattle, the populace was becoming restless about a Chinese Wall of apartment houses being erected along various shorelines of the city. There was fear that the people no longer could even see the water.

All of this resulted in Washington becoming one of the first states to adopt a state-local process to control development of shorelines. The Shoreline Management Act was approved in 1971. A unique feature of the Act was the creation of a quasi-judicial tribunal known as the Shorelines Hearings Board. Its purpose was to lessen the impact of permit appeals on the case-cluttered courts. I was one of the original members of the lay-oriented board, and was its chairman for a couple of years. It is from that experience that I am drawing my topic today — managing recreational access via the permit process.

The Shoreline Management Act spoke firmly and clearly about recreational access. In its policy section³ it listed seven preferential uses for shorelines of statewide significance; two of them emphasized increasing public access. Here, then, was a plan to create access via the permit process. Would it work? Let's see.

In one of the board's early decisions,⁴ one which first suffered the ignominy of a superior court reversal, only to emerge, finally and triumphantly, affirmed in a State Supreme Court decision, we upheld the over-the-water construction of a private clubhouse and restaurant on an artificially altered shoreline with existing mixed uses, including some non-water-dependent ones. The supreme court upheld our finding that access had been achieved for a large number of persons who could view the passage of boats from the restaurant windows of a private club.

Similar reasoning prompted the board, in another case, to approve a private community floating dock in Hood Canal because it provided an opportunity for substantial numbers of people, albeit not the general public, to enjoy the shorelines of the state.⁵

Would you believe that a delicatessen, which is hardly a water-dependent use, was approved by the board? It was, in a case where the food store was proposed along the shoreline in an intensively developed urban environment. The board was impressed with the fact that the delicatessen would not only be handy to weekend boaters patronizing a nearby marina, but also would provide an opportunity for the general public to get close to the water.⁶

Actual physical access by the public to the shoreline was provided in many permits approved by the board. Two examples may suffice.

One⁷ involved an office building — not a preferred use, but one that is not forbidden — on Seattle's waterfront. It won the board's approval because the proposal provided for a 26-foot-wide easement needed to complete the city of Seattle's proposed pedestrian and bicycle path that now rings a good portion of Elliott Bay.

The other case⁸ involved a project which I see every day, for it is located on my own island. Proposed was a shoreline condominium in an area that many residents of the island felt should be restricted to water-dependent uses. But there were no developers of water-dependent uses with cash in hand in sight. Meanwhile, the owner of the land won the board's approval when he proposed to admit the general public on a 24-hour-a-day basis to the beach above high tide for walking and picnicking. We made that a covenant of his permit and approved it.

I retired from the board three years ago. In that time, a significant development has occurred relative to recreational access via the permit process.

It involves the mandate in the Shoreline Management Act for the eventual development of master programs by local governments. By now, most of the cities and counties of the state have complied. One of the most difficult to achieve, as you can well imagine, was the master program for Seattle, largest city in the state. But it has been done and in it today is a firm declaration⁹ for something called "regulated public access" in the development of both public and private property.

"Regulated" means just that. Access may be denied to anyone who becomes a nuisance or who engages an illegal conduct, and the public access may be temporarily or permanently closed off if offensive conduct cannot be otherwise reasonably controlled. It may be limited to certain hours of availability and to certain types of activity.

But Seattle's "regulated public access" now is required for all public property uses; for all public property leased or rented for private, non-water-dependent uses; for 15 percent of the total water area of over-the-water construction permitted in the central waterfront district, or 5,000 square feet, whichever is greater; for most private property non-water-dependent uses, and even is required for private residential development on salt water if the development is not within 600 feet of public access to the water.

As time moves on, both local and state governments are activating mandates of the act, including providing recreational access by proposing shoreline parks and boat launching facilities. Often, however, these government agencies are being reminded forcibly that not everybody wants public access.

They are running into opposition from adjacent property owners and the twist is that the opponents are using the Shoreline Management Act to block the proposals. The irony of it all is that many who are using the act to block public access through the permit process are probably among those who, back in 1972, voted against any shoreline management proposition!

Let me cite a couple of examples.

Last fall, the Shorelines Hearings Board considered the proposal of the State Department of Natural Resources to develop a new boating campground on Griffin Bay on San Juan Island.¹⁰ The San Juan county commissioners, overriding their own planning department in response to irate nearby property owners, refused to give DNR a substantial development permit. DNR appealed to the board, which, after hearing the evidence ordered the permit to be granted with a statement that, "... the proposed development is ideally consistent with the provisions of the Master Program calling for public access and recreation on the shoreline." The ironic footnote is that San Juan County was one of those showing a strong opposition by shoreline owners to the Shoreline Management Act in the election of 1972.

The same sort of footnote can be made from the 1972 elections results in Clallam County, hard by the tidal waters of the Strait of Juan de Fuca. A gentleman we all know, John Wayne, the actor, owned considerable real estate there. He donated a large amount of his land to the Port of Port Angeles with the proviso that a boat haven be developed for public use. When the proposal was finally ready for the permit stage, boaters and those interested in opening a large portion of Sequim Bay to public access were ecstatic. But — to say it once more — not everybody wants public access. Adjoining property owners rose up in a mighty enough chorus to keep the project in litigation for several years. To make a

long story short, John Wayne's donation for a public marina today is in limbo. And the ones who have fought it to a standstill probably include among their numbers several persons who, back in 1972, opposed at the ballot box the very tool they are now using to halt the marine construction.

If all that appears to be a sour note on which to end this rambling discourse on the permit process as a tool to recreational access, may I ask you all to recall the time when once there actually were property line fences running out into the water to the line of low tide. Now, thanks to court decisions, to the adoption of the Shoreline Management Act, to a consistent thread of decisions by the Shorelines Hearings Board, and to the development of master programs by local governments, there is a continuing effort through the permit process to provide more and more recreational access to the shorelines. In sum, then, despite the fact that not everybody wants public access, it truly can be said of recreational beach access in Washington State: "You've come a long way, Baby."

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References

1. Proceedings, Conference on Shorelines Management '77, "Performance and Prospects," Washington Sea Grant, p. 33.
2. *Willbourn v. Gallagher*, 77 Wn. 2d 306, 462 P. 2d 232 (2969).
3. Revised Code of Washington 98.58.020.
4. *Ballard Elks Lodge No. 827 v. City of Seattle*, Department of Ecology, and Attorney General, Shorelines Hearings Board (hereafter SHB) No. 22, Affd. 84 Wn. 2d 551 (1974).
5. *Brachvogel, et al., and Department of Ecology and Attorney General v. Mason County and Twanoh Falls Beach Club, Inc.*, SHB No. 140.
6. *Department of Ecology and Attorney General v. City of Poulsbo and Xenos*, SHB No. 201.
7. *Smith: Department of Ecology and Attorney General v. City of Seattle and New England Fish Co.*, SHB No. 158.
8. *Davis, et al. v. City of Winslow and Amco Inv., Inc.; Department of Ecology and Attorney General*, SHB, No. 114.
9. *Seattle Shoreline Master Program Regulations*, Section 21A.36-39.
10. *Shoreline/Coastal Zone Management*, Washington State Department of Ecology, Vol. III, No. 5, November 1978, "SHB Approves Boating Campground Proposal," p. 1.

Section 6

WHAT CONSTITUTES AN ADEQUATE ACCESS PLAN?

INTRODUCTION

Throughout the discussion in the last five sections, we have implicitly assumed that recreational access to the shoreline is a policy worth our attention. As we have seen, the Coastal Zone Management Act of 1972 provides funding and policy guidance for us to pursue an understanding of the uses of coastline, but more importantly it enables states to go about a rational process of planning future uses of the coast. Much of our discussion in previous sections of this document with respect to regulatory control of access, limits to access, costs of access and management for access is germane only in the context of an existing access plan. Such a plan would set up a framework for deriving an answer to the question posed in the introduction; that is: How much access is enough?

Plans for access may differ greatly in approach from state to state as the coastal zone management program takes different forms. For instance, the Oregon Beach Law passed in 1967 gives the state highway department the responsibility for managing the coastal zone after planning is completed by the Land Conservation and Development Commission working jointly with local governments. In Washington, coastal planning takes place at the level of the local jurisdiction under broad statewide guidelines. In California coastal planning also takes place at the local level, but with much more stringent requirements for access plans than in either Oregon or Washington. The emphasis placed on access in the CZMA of 1972 leaves wide boundaries for state action, thus differences in emphasis and approach between states reflect not congressional mandate, but rather style.

In the following section we note those differences in style between the Oregon and California statewide programs. We also see another inevitable source of diversity in management programs generally, but especially in access components — the difference in perspective as to the importance of providing a given amount of recreational access, especially when that "given amount" is determined to be inadequate by the state management agency. In the following section, then, we will see a comparison of state approaches to access given by Locksley of the California Coastal Commission and by Gormsen of the Highway Division of the Oregon Department of Transportation. Eberhard, a senior city planner for the City of Los Angeles, will present the perspective of local government, Gold of the Department of Environmental Planning and Management of the University of California at Davis will give an academicians viewpoint toward access plans, and Watson of the San Francisco Bay Conservation and Development Commission will report on the progress and progress of BCDC in actually writing a public access component to the bay plan.

In her discussion of the recently adopted guidelines to local governments on writing access components to Local Coastal Programs (LCP's or local coastal plans), Locksley gives us a closeup view of the type of standards set by the state management agency for consideration by local government in the preparation of an access component of an LCP. Since access is a cornerstone policy of the California Coastal Act of 1976, it should not be surprising that considerable attention is given the subject in supplementary communication from the commission to local government. The reader may find it particularly interesting to note that while access is related to a number of other issues in the coastal act (e.g., recreation, and visitor-serving facilities, housing, locating and planning new development and

public works capacities) this document specifies commission policies only with respect to recreational access. It may also be of interest for the reader to refer to the comments made by Tulk in section one; she addresses access guidelines which have been adopted by the state coastal commission to give guidance to regional commissions in deciding access issues in the *regulatory processes*. The guidelines presented by Locksley in section 6 refer to the *planning processes*.

In the State of Oregon, as mentioned earlier, the Highway Division of the Department of Transportation has the responsibility of administering the area within the boundary of the coastal zone in cooperation with local government. Gormsen, the Beach Program Coordinator for the Division of Highways, discusses the types of recreational uses which have been made of the coastal zone under such administrative control. At least two major features distinguish the Oregon approach to recreational access from California. The Oregon coastal zone is generally narrower than in California, yet that area of beachfront in public ownership is much wider than in its southern neighbor. Given the wider expanse of the publicly owned land and the fact that such land is under the administrative control of a state rather than local agency, one might predict the wide variance in approach between the two states as demonstrated in these first two papers. Although Gormsen does not address himself to a plan *per se*, the Oregon Beach Law of 1967 may have significant import as a *de facto* plan.

In contrast to the concern at the state level, Eberhard presents a relatively new planning technique which will be utilized in preparing the LCPs for Los Angeles. That technique is known as the *specific plan*. The coastal zone of Los Angeles is divided into four separate districts with little in common between any two of them. Rather than write a single LCP which applies to all of the issues arising in each of these districts, the city has opted to prepare four distinct plans aimed at coastal act policies yet arising out of the community plans for the areas of the Pacific Palisades, Venice, Westchester/Los Angeles International Airport and San Pedro. Recreational access will be directed in each specific plan to the unique needs of the community.

In contrast to the operational needs of the state agency or planning jurisdiction, Gold discusses the components we should consider essential in an effective access plan. He sees a recreational plan as a more detailed instrument than the comprehensive (general) plan. "The comprehensive plan focuses on the overall relationship of open space and leisure services to land use and the quality of life and environment. The parks and recreation plan details these relationships and translates them into specific sites to acquire or develop for leisure oriented uses." In that respect, Gold sees coastal plans such as the local coastal plans in California as growing out of the comprehensive planning process.

Finally, Watson describes the chronology and process through which the public access component of the San Francisco Bay Conservation and Development Commission (BCDC) has evolved. In fact, the Public Access Supplement to the Bay Plan which he describes is the one of the best examples available of a public access plan which has been adopted and put into use. The San Francisco Bay with over 1000 miles of coastline and varied shoreline environments represents a microcosm of many of the issues with which the public and its policymakers will have to cope in creating access plans. In describing BCDC's access plan, Watson is able to give us the unique perspective of a public official who has been involved in writing an access plan, but he also describes the institutional setting and process through which the plan was developed. These perspectives should be of particular interest as communities throughout the country begin to write similar plans.

The conceptualization of a coastal access plan is deeply imbedded in the process by which we plan and regulate other land uses. As will be evident in the following papers, where we determine access to a broadly based concept covering equal access to beaches in heavily as well as relatively rural areas, the policies embodied in an access plan must be sufficiently flexible to respond to widely divergent physical and organizational settings. We will observe a few of the various approaches which have been developed to implement state and federal coastal management policy and we may note the wide diversity in style which characterizes this process.

Whether we subscribe to one approach or another for the formulation of access plans, it should be clear from the texture of the following papers that no single technique can cover the multitude of organizational and environmental circumstances under which access plans might be prepared.

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PROVISION OF COASTAL ACCESS IN THE LOCAL COASTAL PROGRAMS

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Foreword

Access to California's magnificent beaches and rugged shorelands has been, to many, the rallying ground for strong coastal protection laws that emerged in the 1970s. Begun through a voter initiative in 1972 and reaffirmed through legislative approval of the 1976 Coastal Act, these laws give high priority to protecting and improving access to California's coast.

The 1976 law established a state regulatory agency the California Coastal Commission, mandated to assure provision of access in new development. At present, all coastal development must receive a permit from the Coastal Commission. To approve a project, the commission must find that it meets Coastal Act access goals. The Commission's access standards are reviewed elsewhere in this volume by Janet Tulk, Permit Division Chief for the Commission.

Ultimately, regulatory responsibility over the coastal zone will be returned to local governments. All California's coastal jurisdictions are currently revising plans and ordinances to conform with Coastal Act policies in a process called Local Coastal Program (LCP) preparation. The Commission's planning staff has prepared an LCP manual as a planning aid which covers various policy areas such as access, recreation, natural resource protection, and energy.

The following guide on LCP public access element preparation supplements the LCP manual. Although improved recreational and visitor-serving facilities certainly increase access, this guide concentrates on provision of physical access to the shoreline as the essence of Coastal Act access goals. The guide reflects precedential Commission actions and includes suggestions for shoreline access land use designations, policies, and programs.

Introduction

Section 30500(a) of the Coastal Act requires that each Local Coastal Program contain a public access component "to assure that maximum, public access to the coast and public recreation area is provided:"

The Local Coastal Program Regulations further specify that this component "shall set forth in detail the kinds and intensity of uses, the reservation of public service capacities for recreation purposes where required pursuant to Public Resources Code Section 30254, and specific geographic areas proposed for direct physical access to coastal water areas as required by Public Resources Code, Sections 30210-30224 and 30604(c).

Some local governments have chosen to prepare a single plan element that addresses all of these policies, and others are preparing various plan components based on policy groupings of shoreline access, recreation and visitor serving facilities, housing, locating and planning new development, and public works capacities. Either of these approaches is acceptable under the requirements of Section 00042 of the Local Coastal Program Regulations.

One important aspect of almost all access components will be land use policies, designations, and zoning ordinances that carry out Sections 30210-30212 of the Coastal Act. These policies, which deal primarily with the provision of direct physical access to and along the shoreline, are the focus of this discussion paper.

The Local Coastal Program should (1) designate all existing and proposed areas for public access; and (2) provide a program for acquisition, improvement, and management of access areas. These aspects of an access component are discussed below.

Access Designations

The local coastal program should contain maps and a text describing the existing and proposed system of accessways. The maps should depict existing and planned recreational resources, access points, accessways, facilities (e.g., parking, transit stops, restrooms), and circulation systems (e.g., vehicular, bicycle, pedestrian). The map and text should address the concerns of type and intensity of use of access areas, location and size of lateral and vertical accessways, limitations on providing access, siting and design of development, and transportation systems for access to shoreline areas. The following discussion expands upon the way in which these concerns might be addressed in the LCP.

Uses of Access Areas

Because the types of recreational uses of the shoreline vary so much along the California coastline, it will be necessary to specify the types and intensities of uses for which accessways and access areas are intended in the LCP. For the most part, these will reflect the historic use and physical characteristics of the area. There may, however, be the opportunity for more diverse uses of coastal areas with improved facilities.

Some types of access areas use that have been specified in commission coastal development permits are walking, sitting, swimming, fishing, bicycling, equestrian uses, viewing, and tideland access. Others discussed in draft LCP reports include clamming, surfing, diving, rock climbing, beach combing, driving, dune use, picnicking, jogging, and hiking. In some cases, uses may be limited to scientific study.

Access areas need to be designed in a manner that will provide maximum public recreational opportunities for the intended uses. Because many of these uses are dependent upon continuous accessways and facility improvements, the Local Coastal Programs will offer a more complete access program than the Commission has been able to provide with its permit procedures.

The land use plan text should also specify intensity of use, such as controlled, low, moderate, or high. Areas of controlled use would have some restriction on their use, either by type, such as allowing use only for scientific purposes, or by time, allowing for use during certain times of day or seasons. Areas designated for low, moderate, or high use would have associated levels of facility development to encourage those levels of use.

Lateral Accessways

Lateral access describes access *along* the shoreline, usually a strip paralleling the water's edge, sometimes also along the top of a shoreline bluff. The width of oceanfront area available for public use should be related to local conditions and to possible public uses. The width of the accessway will depend on the topography of the parcel as well as provisions for protecting the landowners right to privacy (a buffer between the residence and the accessway has often been used). Consideration should also be given to potential inclusion in a trail or bikeway system. When a particular agency plans to accept a dedication, the accessway should meet their standards.

The width of accessways required as conditions on coastal development permits has varied from five or ten-foot wide pedestrian and bicycle paths along a beach, bluff, or lagoon, to hundreds of feet of sandy beach, depending upon the individual situation of the proposed development. In general, lateral accessways of about 25 feet in width have been deemed sufficient, but this can vary with the type of beach or bluff and the nature of the proposed development. The Local Coastal Programs, even more than the Commission permit procedures, offer the opportunity to provide an integrated system of accessways that reflect local conditions and recreational, scientific, and educational opportunities.

The Coastal Commission model conditions, findings, and offer to dedicate, prepared for use with permits involving access and recreation issues, provide a more detailed discussion of how to measure lateral accessways that could be incorporated into specific dedication requirements in the zoning phase of the Local Coastal Program.

Vertical Accessways

The term "vertical access" is used to describe access to the shoreline from a public road to the mean high tide line. In requiring dedication of vertical accessways as a condition of a development permit the Commission has considered whether there is adequate access nearby, whether access can reasonably be provided while taking into account safety and privacy concerns, and whether there is a potential for a system of lateral accessways that would require some vertical access points.

The local coastal programs should define the frequency, location and width of vertical accessways that will adequately serve the existing and proposed access areas. Maps should depict specific areas

where vertical accessways exist, or should be provided, and the text should describe conditions under which vertical access would be required as a part of development. The location and width of specific vertical access easements should take into account the overall size and topography of the parcels. The nature of adjacent development should also be considered.

The Local Coastal Program must clearly define the criteria used to determine the frequency of vertical accessways. In general, the Commission would not expect to see an overall standard such as one access point at half mile intervals. Rather, the proposed location of vertical accessways should reflect the physical potential for access, the nature of development in the area, existing use by the public, and the existing and potential unmet demand for access.

For example, in a beachfront community where the only available public parking is on the streets of the community, vertical accessways might need to be provided at frequent intervals such as one accessway for every five or ten lots. This would reduce the impact of public passage over any one lot. In other instances, where substantial public parking is available on either end of a half-mile stretch of beach, the LCP could find that no vertical accessways need to be provided through the community.

In rural areas where there will be only limited development, and provision of access might conflict with natural resource protection and agriculture, the LCP might provide a description of all areas where access would be desirable and then propose an acquisition and development program to ensure that adequate signing, parking trail improvements and fencing is provided.

Limitations on Access

The language of the California Constitution, court decisions, and the California Coastal Act all require that the public be provided with maximum access to the publicly owned tidelands. However, the Coastal Act recognizes that access must be provided "consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse." The Act also specifies that access between the first public road and the shoreline may be found to be inappropriate where (1) it is inconsistent with the public safety, military security needs, or the protection of fragile coastal resources; (2) adequate access exists nearby; or (3) where agriculture would be adversely affected. (Section 30212)

In determining appropriate locations for lateral and vertical access, local governments should consider these requirements of the Coastal Act and provide specific findings on why access would not be provided in certain areas.

While the Commission has recognized situations in which access would not be appropriate, there have been many other situations in which the negative impact can be mitigated with adequate setbacks, fencing, trail and stairway development, landscaping and regulated hours and seasons of use. The Commission expects Local Coastal Programs to include proposals for such mitigation measures where needed and to provide for various intensities of use to protect natural resources and rights of privacy.

Siting and Design of Development

In all areas where public access is an issue, development should be sited and designed to encourage public access. Structures should not be permitted to encroach on the beach areas, thereby blocking access. Buffering in the form of landscaping and adequate setbacks should be required where necessary to ensure privacy. Structures and landscaping should be sited and designed to prevent view blockage from public roads and public lands. In communities where there is limited parking, individual developments should provide adequate on-site parking and should minimize curb-cuts to retain as much on-street public parking as possible. The land use plan text should include such standards for incorporation in the zoning ordinance.

Signing

Adequate signing is a critical element to the provision of access. The Coastal Commission staff will work with the Department of Parks and Recreation and Caltrans to provide local governments with uniform standards for signing required as a condition of new development. The LCP should include a program to ensure that all existing and proposed accessways are signed in a way to encourage access.

Transportation Systems

Although a complete discussion of transportation systems for recreational access is not within the scope of this paper, local governments should be aware that such systems are an integral part of the

required access component. In many urban areas where beachfronts are either already developed or in public ownership but there are not adequate parking areas nearby, the entire access component may consist of provision of alternative transit systems. In both urban and rural areas the requirement of Section 30254 that adequate traffic capacity be reserved for recreational access will be a major constraint to development. Many local governments will need to consider the possibility of providing continuous hiking and bicycle trails to provide alternative ways of getting to and using coastal recreational resources.

Program for Provision of Shoreline Access

The LCPs will need to include a program for provision, development, and operation of accessways. Various mechanisms for carrying out an access program are discussed below. It is important that all programs for implementing a system of accessways be fully described in the land use plan portion of the local coastal program. Most of the access provisions would also be required to be implemented through the zoning phase of the LCP.

Section 30516(a) of the Coastal Act provides that:

Approval of a local coastal program shall not be withheld because of the inability of the local government to financially support or implement any policy or policies contained in this division; provided, however, that this shall not require the approval of a local coastal program allowing development not in conformity with the policies in Chapter 3 (commencing with Section 30200).

This section of the Act is reinforced by Section 00040(c) of the LCP Regulations regarding common methodology for LCPs that provides:

If the level and pattern of development recommended for the local coastal program require the phasing of public service or recreational facilities to be consistent with the requirements of the California Coastal Act of 1976, the proposed measures for implementing public service and recreational facilities shall be specifically identified.

These provisions basically mean that, where new development is dependent upon certain public improvements, or where the new development would further burden existing public facilities (parks, accessways, road or sewer capacities, etc.), the LCP must require either that the necessary improvements be provided as a condition of the development itself (such as dedication of accessways) or that the new development be keyed to the phased implementation of the capital improvements.

Where access improvement programs are not directly tied to new development (for example in an already built-out urban area or in a rural area where there will be little new development), the LCP land use should still include proposals and priorities for appropriate improvements that would be carried out as funding became available. Even though these could not be carried out directly in the zoning ordinance phase of the LCP, they would provide a basis for future capital improvement budgeting and would also enable local governments to obtain other funding, such as Coastal Conservancy grants.

Provision of Accessways

There are many ways in which coastal access can be provided through the Local Coastal Program. Offers for dedication of accessways obtained through Coastal Commission development permits can be incorporated into a local system of accessways. Local governments can require that access be provided as a condition of new development. Prescriptive rights to access gained through historic use can be established by the courts. Accessways and access areas can be purchased through various acquisition programs. In all cases development should be sited and signed to encourage public access.

Coastal Commission Permit Conditions. To meet the mandate of Section 30212 of the Coastal Act that "public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects," the Commission has required many applicants to offer to dedicate an easement as a condition of development. A complete index of these access conditions is being compiled by the State Commission legal staff. When the index is completed, the details of each of these permit conditions will be passed on to local governments.

Local governments will need to incorporate these offers to dedicate accessways into their LCP access program. If any of these offers to dedicate easements are not included in the map of existing and proposed accessways, the LCP must make specific findings as to why the accessways were considered inappropriate.

The Coastal Act states that "dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway." While local governments must demonstrate how access easements obtained through Coastal Commission and local government coastal development permits are incorporated into the access components, they will not always be the public agency to accept the easement. Many private associations, such as the Nature Conservancy, and state agencies such as the Department of Parks and Recreation, the State Lands Commission, or the Department of Fish and Game, may agree to accept the easement.

The Coastal Conservancy legislation offers a very important mechanism for acceptance of offers of dedication. Public Resources Code, Section 31104.1 states:

The conservancy shall serve as a repository for lands whose reservation is required to meet the policies and objectives of the California Coastal Act of 1976 (commencing with Section 30000) or a certified local coastal plan or program. Pursuant to this authority, the conservancy may accept dedication of fee title, easements, development rights, or other interests in lands, including interests required to provide public access to recreation and resources areas in the coastal zone.

The Conservancy has prepared guidelines for acceptance of these offers. In general, the Conservancy will be accepting accessways when they 1) serve more than local needs, and 2) where inaction would result in the loss of the accessway. Under current law, the Conservancy has no authority to develop or maintain the accessways. The Conservancy therefore would prefer to make every effort to find an agency or association willing to accept maintenance and liability responsibilities at the outset to avoid a two-stage transaction whereby the offer is first accepted by the Conservancy and later transferred to a more suitable agency.

In many cases, local governments will be the appropriate agency to accept and manage accessways. The LCP should identify the types and locations of accessways that will be accepted by local governments. Procedures for acceptance should also be included, and should specify which accessways will be opened immediately under an existing program which would be accepted but not opened until a management program is instituted. These procedures will also be used by local governments for accessways required after the LCP is certified.

Access Provided Directly As Condition of Development. When a local government's LCP is certified, the local government will assume the responsibility of issuing coastal development permits. This responsibility includes the requirement of 30604(c) that:

Every coastal development permit issued for any development between the nearest public road and the sea or the shoreline of any body of water located within the coastal zone shall include a specific finding that such development is in conformity with the public access and public recreation policies of Chapter 3 (commencing with Section 30200).

In order to make that finding, it will often be necessary for local governments to require that public access be provided as part of new development. The standards under which the access will be required must be clearly described in the Local Coastal Program.

There are three methods by which the Commission has commonly required that access be provided as a condition of new development. These methods may be useful to local government in proposing precise policies for access dedication programs in the access component. These methods are as follows:

1. **Outright Grants of Parcel**— In this instance, a portion of the land to be developed would be dedicated directly to a public agency or a private association. The agency or association would obtain all interests in the land and would assume operational costs. A grant of parcel would be most appropriate in development of a large parcel adjacent to a public park, or in a case where the project is large enough to actually provide major public recreation areas.
2. **Offers to Dedicate** — Many of the applications for coastal development permits will involve development on existing lots. The type of accessway required in these situations will usually be in the form of a lateral or vertical easement for public use, and will require acceptance of maintenance and liability responsibilities by the local government or some other agency in a comprehensive program for accessways.
3. **Deed Restriction** — Large projects such as a new subdivision, a condominium project, a large apartment project, or a commercial project such as a hotel, restaurant, or marina development offer important opportunities to provide access. Under certain circumstances, a deed restriction

may be required instead of an easement to assure public access. Because deed restrictions do not grant an actual interest in the land, they may be subject to successful challenges by subsequent purchasers. Therefore, deed restriction should only be used in certain situations such as:

- (a) residential developments where the substantial amount of use would be by the residents thereby making public management of the access difficult and undesirable; or
- (b) commercial developments where public use exists and public management would be difficult due to commercial uses and/or where restrictions on use of the access for security purposes are best managed by the owner/manager of the development.

Many local governments will find the procedure outlined in the Coastal Commission's "Public Access and Recreation Model Conditions, Findings and Offer to Dedicate" useful in preparing the zoning ordinances required in the LCP access component. The model describes standards and conditions under which access must be provided. It provides technical information on the most suitable type of offer and the format required to make that offer legally sufficient.

Use of In-Lieu Fees. Where new development would substantially increase the number of users in close proximity to public accessways and therefore reduce the opportunities for the general public to gain access to the shore, but where such development does not have direct access to the shore or is an inappropriate location for access, local governments may require in-lieu fees under the authority of the Subdivision Map Act to meet the public access and public recreation policies of the Coastal Act.

Such in-lieu fees would provide the local government with the means to purchase and develop accessways or facilities such as parking and restrooms that would relieve the burden caused by the increased number of local residents using the coastal access areas. The in-lieu fees would need to be tied to a specific access acquisition and development program.

Prescriptive Rights. Section 30211 of the Coastal Act requires that development shall not interfere with the public's right to access to the sea where acquired through use. Such a right is termed "prescriptive right." The Office of the Attorney General has prepared a manual for the California Coastal Commission to assist its staff in evaluating of potential prescriptive rights. The manual reviews pertinent cases on prescriptive rights and outlines the procedures for a preliminary investigation to determine where prescriptive right may exist or to establish the absence of such rights.

In their background work on access local planning staffs are identifying areas of public use and the type of ownership of the areas. The preliminary data collection effort described in the Prescriptive Rights Manual calls for similar types of preliminary information to identify areas where prescriptive rights might exist. More importantly, however, these areas of use by the public indicate a need for public access. The LCP should define how access will be established in each area. Where access cannot be obtained through conditions of development (particularly in rural areas), the local staffs should discuss with their city attorneys or county counsels and with the State Attorney General's office the possibility of legally pursuing prescriptive rights.

Local governments should take the following approach to areas of known or potential prescriptive rights in preparing their Local Coastal Programs:

1. Designate areas of established prescriptive rights as public accessways on their land use plan maps and texts.
2. Use their access inventory work to determine areas where potential prescriptive rights may exist.
3. Provide a development review mechanism to ensure development does not interfere with potential or existing prescriptive access rights.

With such an approach, the Coastal Commission would be able to certify the LCP without prejudice to the determination of prescriptive rights.

Purchase. Areas that local governments have identified as suitable for public access that cannot be acquired through any of the preceding mechanisms should be proposed for purchase. The recommended acquisition should be described by type of interest needed (fee simple or less than fee simple), possible funding sources, a potential acquiring agency or organization (e.g., local government, State Department of Parks and Recreation), and priority.

There may be cases where some access can be provided as a condition of development, but the parcel is of such significance to the public that outright purchase would be preferable. The access component should specify appropriate development controls for the parcel, but may also suggest that, as an alternative, the site receive consideration for acquisition.

The Coastal Conservancy Act provides an important implementation tool for Coastal Act policies. Chapter 9 of the Conservancy Act enables the Conservancy to give grants to local governments to purchase and develop accessways. It also gives broad authority to the Department of Parks and Recreation to develop and implement a system of coastal accessways.

The Park Bond Act of 1976 provided a substantial source of funds for purchase of coastal access areas. It established general procedures for local government expenditures on coastal recreation areas described in Appendix B of the LCP Manual, and also provided funds for the Coastal Conservancy to purchase accessways. A new park bond act is being suggested for the 1980 elections.

There are a variety of other funding sources available. The Commission has funded the City of Pacifica to prepare a manual describing these funding sources which will be available in a few months.

Development of Accessways

Local coastal program access components should include programs for development of accessways. In order to provide the maximum public use of an area "consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse" (Section 30210), facilities such as stairways, trails, parking, restrooms, trash receptacles, fencing, and signing are often needed. These facilities can be provided directly by developers as a condition of development, by local government through capital improvement programs, by state and federal agencies, and by private organizations. The following is a discussion of ways to provide an accessway improvement program.

Improvements Required as Condition of Development. The LCPs can require provision of accessways and development of access facilities as a condition of development to offset the burden placed by the development on the public's ability to have access to the shoreline. This would of course be based on considerations of the size of the project, the burden placed on the public by the development, and the benefits to be gained by the developer. The criteria that local government will use to determine whether and, if so, what type of improvements will be required by the developer must be clearly identified in the maps and text of the land use plan and zoning ordinance.

Local Government Programs. Local governments have traditionally provided accessway improvements through capital improvement programs and by applications for state, federal, and private funds. In some cases development might be tied directly to the completion of certain capital improvements. In any case, the LCP, by identifying needed improvements to provide parking, signing, fences, trails and other facilities will serve as the basis for CIP budgeting with the implementation schedule dependent upon availability of public funds. In addition State Park Bond Act monies and federal grant monies can often be used to fund local efforts to improve access areas, and incorporation of such a proposal into the Local Coastal Program will enhance the eligibility of certain projects for funding.

Development by Public Agencies and Private Associations

Accessways can be developed by a number of public and private agencies. The State Department of Parks and Recreation, Department of Transportation, and the Department of Fish and Game all have developed accessways on public lands. The manual on funding sources for recreational development being prepared by Pacifica should be of use in identifying other methods of development.

Operation of Accessways

Section 30212 of the Coastal Act requires that a "dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway." Therefore, it will be necessary for the LCP to contain an accessway operation program. Concerns about nuisance, protection of privacy, and natural resource protection can often be mitigated with careful regulation of accessway use. There are three aspects to operation of accessways: maintenance, policing, and liability.

Maintenance. Proper maintenance of accessways is needed to eliminate the nuisance caused by litter and hazards caused by unsafe stairways and fencing. Access areas should be designed and signed to encourage easy maintenance by users and by maintenance crews. Commission staff will work with the Department of Transportation and the State Department of Parks and Recreation to provide standards for this kind of design. The access component should also specify how each accessway is to be maintained (private association, local government, Dept. of Transportation, etc.), or should specify a procedure by which maintenance responsibilities will be assigned.

Regulation and Policing. Accessways should be designed and located to keep conflicts between public and private use and natural resources to a minimum. Times of access can be limited to certain times of day and certain seasons, such as daylight hours, and to seasons when access will not disturb wildlife functions such as breeding and migration. As with maintenance, the LCP should specify who is responsible for policing of accessways.

Liability. Section 30212 of the Coastal Act requires that accessways will not be required to be opened until some agency or association agrees to accept liability for the accessway. Sections 831.2 and 831.4 of the Government Code provide immunity to public agencies for public recreational use of public lands and recreational trails and roadways. Section 846 of the Civil Code gives similar protection to private landowners. There is a possibility of legislation that would extend this immunity to improved accessways, under both public and private ownership. Thus, in general, liability for the acceptance of unimproved accessways is strictly limited.

With certain kinds of accessways, however, it is possible that some local governments may experience increased insurance premiums. The access component should identify the impacts on local government insurance costs and incorporate them into whatever overall program they propose for operational costs.

Costs of Operating Accessways. The program for operation of accessways will be the most difficult to provide because of the ongoing costs of maintenance, policing, and liability. In the case of certain large developments (e.g., condominium project, a hotel, or a restaurant), the homeowners association or project operator should be responsible for the maintenance and liability responsibilities and costs as a condition of development. For accessways that cannot be operated as part of new development, local government should work closely with State Parks and Recreation, The Department of Transportation, and local highway and police departments to determine whether maintenance and policing can be incorporated into ongoing functions. For accessways that primarily serve residents of the coastal jurisdiction, local governments or residents might be expected to continue their traditional operational functions.

There will be instances where operational costs for a proposed access system will represent an increased financial burden to local governments. The Commission supports current efforts to provide state funds for operational costs, where these accessways would represent a significant opportunity for the public, and where the costs are not offset by increased local revenues generated by visitors.

COMPONENTS OF A RECREATION ACCESS PLAN¹

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The behavioral approach to the coastal recreation experience outlined in the paper on "User Needs and Requirements" can be applied to the process and products of coastal zone planning at the local or regional level. This paper describes the components of a recreation access plan in the context of a local park, recreation, and open space plan that should be consistent with the local coastal plan.

If properly coordinated, these plans should complement each other to develop policy opinions, guidelines and criteria for providing public access to coastal recreational access problems in terms of cause and effect, responsibility, and funding. The overload on many regional coastal recreation areas is a symptom of the lack of local recreation opportunities and a recreation plan that can be part of the local coastal plan.

The Nature of Recreation Planning

Recreation planning is a process that relates the leisure time of people to space. It is an art and science that blends the techniques of ecology, design, and the social sciences to develop alternatives for using leisure time, space, energy and money to accommodate human needs. The process results in products (plans, studies, information) that condition public policy and private initiative to provide leisure opportunities in the coastal zone.

In the broadest sense, planning is concerned with human development and the stewardship of resources by helping to relate people to their environment and each other. In a narrow sense, recreation planning is most concerned with leisure behavior and open space at the urban or regional scale.

The basic differences between traditional recreation resource planning and people-oriented recreation planning are more: complexity, compromise, controversy, variables, unpredictability, unknowns and less sophisticated methodology, lead time for planning, and precedent. The range of recreation user groups/activities in urban areas which implies: more actors in the planning process, a better understanding of the user-resource relationships, more citizen participation in reviewing plans, more intensive design, development and maintenance, better access by mass transit, bicycle, and pedestrians, and more sensitive considerations of multiple use and carrying capacity and their impacts on both the user and resource.

Both the process and products are evolving to parallel new federal, state, and Coastal Commission guidelines for local coastal plans or the recreation element of comprehensive plans. The state of the art is crude compared to other types of functional planning. It lacks the necessary definitions, measures, theory, and precedent to prepare sophisticated plans. However, this situation is rapidly changing. The traditional approach to recreation planning dominated by arbitrary standards and conventional wisdom is being replaced with some hopeful and sophisticated alternatives.

Reality Checks and Assumptions

The place to begin is a critical review of the literature and practice based on these reality checks:

1. The current state of the art is characterized by tradition. Recreation planning and design has been dominated by the use of arbitrary standards, and irrelevant concepts. Most of the ideas in current use are premised on the thinking of the 1930's about recreation and open space preservation in cities and coastal recreation areas.
2. The park and recreation field is essentially retrospective, romantic and constructive in the way it approaches problem-solving. Most recreation plans do not acknowledge or accommodate significant changes or trends in leisure lifestyles, legislation, technology, or values.
3. Demonstration and innovation are the exception in most communities. Studies of user behavior are not evident in most recreation plans. Parks and recreation is still not considered an experimental field with credible definitions, measures, or a theoretical foundation.
4. The objectives of many public park and recreation systems better accommodate the needs of the supplier than the user.
5. Most recreation plans still assume an emphasis on youth, unlimited growth, increasing personal income and mobility, cheap energy and unlimited public budgets. They project a past and present that may not be realistic in light of current trends toward an aging society, growth management, decreasing real income and a growing energy crisis.

One way to begin correcting the above deficiencies is to test these assumptions or hypotheses about the process and products, of recreation planning in practice:

1. Public parks, leisure services, and open space are vital aspects of urban form and function and essential in the coastal zone.
2. Leisure services and spaces that are well-designed, properly located, adequately maintained, and serve the needs of intended users can improve the quality of life and environment in the coastal zone.
3. The planning and design process can provide a rational basis for local action to improve the quantity and quality of leisure opportunities in the coastal zone.
4. Social research techniques can be used to measure leisure behavior in terms of preference or satisfaction for different types of activities or environments.
5. These values can be translated into dimensions of time, space, and activity for different population groups.
6. These factors can be related to the demand for and supply of existing or potential leisure opportunities to indicate need in terms of area or services for a specific activity or set of activities.
7. This need can be translated into measures of effectiveness or performance standards which reflect the values of people.
8. These measures can play an important role in the planning and decision process for the provision of leisure opportunities in the coastal zone.
9. The provision of leisure opportunities in the coastal zone can be a joint effort of the public and private sectors.
10. This effort is worthwhile in human terms and can be justified by its social, economic, political, and environmental benefits.

Professional Missions and Tasks

In a professional context, recreation planning has a mission that distinguishes it from other types of functional planning. This mission can be used to rationalize recreation planning as a function of local government. It can also be used to describe the operational tasks or responsibilities of a recreation planning unit or consultant to a public agency. This mission includes:

1. Providing objective, current and relevant information to community decision-makers about the quantity and quality of existing or potential leisure opportunities.
2. Improving the quantity and quality of the leisure experience for residents and visitors to the coastal zone.
3. Providing an optimum range, mix and location of leisure opportunities for all people.
4. Preserving or developing appropriate recreation resources to serve their highest and best use.
5. Relating recreation plans to other types of planning and the general plan.

6. Promoting public understanding and support for more effective recreation planning at all levels of government.
7. Evaluation of the effectiveness of existing and proposed public and private recreation development.
8. Encouraging public and private cooperation to provide leisure opportunities in or near cities.
9. Rationalizing existing and proposed park and recreation facilities and services.
10. Encouraging innovation, demonstration and research to improve the state of the art.

The Planning Process

Planning is a continuous and incremental process which develops guidelines for urban and regional development. The concept of development includes *preservation* or *renewal* of spaces and services. The recreation planning process results in plans, studies or information that can be used to make decisions regarding a city's changing leisure needs, problems, and opportunities.

Recreation planning is a systematic way of anticipating, causing, preventing, or monitoring change related to the provision of public and private leisure opportunities. It is a continuous process of change in response to new social values, lifestyle patterns, technology, legislation, and the availability of resources. The planning process should be:

1. *Evolutionary*. Instead of revolutionary. Radical changes may be necessary in many instances, but they will have a much greater chance of public acceptance if proposed in an incremental or demonstration program.
2. *Pluralistic*. Instead of authoritarian. The right choice is a matter of value, not fact, based on a consideration of several alternatives from individuals or groups with different objectives.
3. *Objective*. Instead of subjective. The criteria or methodology used to describe alternatives must minimize distortion of the facts even though the final decision may be based on subjective values.
4. *Realistic*. Instead of politically naive. Parks and recreation must develop a constituency to compete on their own merits in the decision-making or budget process.
5. *Humanistic*. Instead of bureaucratic. The approach to developing a plan, design, or service must be to serve people instead of the public agency responsible for providing leisure opportunities or preparing the plan.

Traditional View. The traditional view of planning is a static and linear process which follows a series of logical and consecutive steps. Planners begin with the definition of a problem and end with recommendations to solve problems. The emphasis is on the *output* or product instead of the *input* and process. A primary concern is on the *what* and *how* of planning, rather than *who* participates and *why*. The means often become ends. Implementing the plan becomes the objective instead of the way to achieve an objective.

The traditional planning process attempts to reduce complexity with arbitrary guidelines or standards to produce uniform spaces or services. Professionals superimpose their values on the process. Citizens are asked to participate in a token way by reviewing plans or proposals prepared by experts. Everything is organized and predictable in terms of timing, responsibility, and outcome. The end product of this process is usually a two-dimensional physical plan that is relatively inflexible, uniform, and unrepresentative of the values or needs of a community or region.

New View. A new view of planning sees the process as dynamic and incremental. It begins with the values, behavior, or priorities of many people and accommodates these through political compromise. The emphasis is on *input* and process. Change, controversy, compromise, and involvement at all stages of the planning process are expected. Ends are used to justify the means. Achieving these ends is more important than the plan and the methods used to prepare it.

The new view attempts to encourage diversity with criteria sensitive to the particular needs of a social group or planning area. The objective is to provide *effective* spaces or services. Professionals act as resource persons to translate human values into *alternatives* that people, or their representatives, can consider. Citizen participation is essential and taken seriously at every step in this process.

The outcome of the process is not predictable and the sequence of events may not flow smoothly or in any preconceived pattern. The end product is a set of policies, priorities, or criteria that are relatively flexible, diverse, and representative of community values.

Approaches to Planning

Both the traditional and the new view of the planning process are the intellectual basis of different approaches to recreation planning. The gap between these approaches is the cause of much of the conflict associated with the planning process.

Traditional Approach. The traditional approach emphasizes these concepts: (1) quantity over quality, (2) physical over social objectives, (3) form over function, (4) growth or development over no-growth and preservation of natural resources, and (5) the community rather than the individual. These concepts are usually reflected in: (1) the preparation of single-purpose, physical plans, (2) a terminal planning process, (3) a centralized planning function located outside the planning area, (4) long-range time horizons, and (5) rigid planning units related to political or physical boundaries.

New Approach. The new approach to planning emphasizes a different set of values which rank: (1) quality over quantity, (2) social over physical objectives, (3) function over form, (4) conservation over the development of natural resources, and (5) the individual over the community. These concepts are usually reflected in: (1) the preparation of multi-purpose policy plans, (2) a continuous planning and review process, (3) a decentralized planning function located inside the planning area, (4) short-range time horizons, (5) flexible planning units based on the resource, users, or problem.

The traditional approach is primarily concerned with costs and efficiency while the new approach is primarily concerned with benefits and effectiveness. While the traditional approach might have been adequate for dealing with the problems of the past, it is inadequate to cope with the problems of the present; and future.

Ingredients of the Planning Process

Regardless of what approach is taken to the planning process, there are some important criteria and ingredients that condition the scope, direction, and the products of this process. A serious consideration of these items at the beginning of a planning effort should increase its effectiveness.

Performance Criteria. These criteria outline what should be expected of the planning process. They can be used to give planners, decision makers, and citizens some guidelines for evaluating both the products and the process of recreation planning.

The scope of the planning process should be as broad as the concerns of the client or government it serves.

The scope and sophistication of the planning effort should be related to individual tools and resources to implement proposals.

Plans should provide the decision maker with internally consistent policy recommendations that can be implemented over time.

Plans should assess the probable consequences, costs, and benefits of alternative courses of action.

The process should be balanced in all five stages in terms of the professional and citizen effort devoted to each state.

Planning is a way to encourage more orderly urban development and rational public or private decisions. It is one means to these ends and not an end in itself.

Planning will be effective only to the extent it is understood and supported by citizens who have been realistically involved in every step of the process.

Planning is a continuous process dealing with changing opportunities, problems, and issues that require constant monitoring, evaluation, and feedback by citizen participation.

Controversy, compromise, and change are normal dimensions of the planning process which should be acknowledged by all concerned with any planning effort.

Precedent and Practice

There is no single formula for the planning process — only precedent and practice. Each situation may require or create a different approach or sequence to fit the sophistication and needs of the client, planning area, and times. If many plans are inadequate, it is because they are products of people, politics, and times — not academic abstractions. They reflect the state of an evolving art.

There are no absolutes in the planning process. However, there is a growing body of experience that points toward the success or failure of the planning process based on these ingredients:

Community Support. Administrative organization, technical expertise, cooperation, and support of the planning effort by all public agencies is as important as citizen participation. Technical advisory committees of professionals who collaborate in the planning process and resolve the institutionalized biases of different agencies or professional groups is fundamental to any planning.

Work Program. A detailed program to establish the timing and responsibility for each task is essential. The problem, planning area, planning period, and methods of data collection, analysis or reporting must be established in advance and formally agreed to by all involved in the planning effort.

Data Collection. Systematic data collection and analysis are the foundation of a sound planning program. Alternatives cannot be developed or considered without the facts. The planning process must have a credible data base to provide a context for resolving issues.

Political Compromise. The facts should provide an objective basis for the development of alternatives that can be considered in the decision process. The ultimate choice may be a matter of value instead of fact.

Developing Alternatives. The development, selection, and testing of alternatives is the most difficult part of the planning process. Achieving consensus on which alternative best reflects the preliminary goals and policies is crucial to the success of any planning effort.

Future Perspective. A bold, imaginative view of the foreseeable future based on the best available facts or interpretation of near-certain trends is essential. The planning process and plan must be future-oriented to serve as a guide for decisions.

Park and Recreation Plans

The park and recreation plan is an expression of a community's objectives, needs and priorities for leisure space, service, and facilities. It should provide a guide for public policy and private decisions related to the scope, quality, and location of leisure opportunities. The plan should be considered an important element of the comprehensive plan that details recreation needs and the implementation program to meet these needs.

The plan should be a long range, comprehensive, and policy oriented document that: (1) describes alternatives, recommendations, and guidelines for decisions related to the use and preservation of open space for recreation, and (2) makes recommendations on the acquisition, development, and management of both public and private spaces or facilities.

The plan should acknowledge the past leisure patterns of the population, describe the present use of facilities, and project future needs with words, graphics, or data that communicate the facts, outline alternatives, and propose new ideas. The plan should clearly outline what is possible, who can best provide these opportunities, and what the tangible benefits and costs of alternative types of opportunities are in a time-phased program.

Although some existing plans have focused on the public sector, outdoor space, and organized program, the trend is toward a balanced emphasis on the public and private sector, indoor and outdoor opportunities, and the integration of space, services, and facilities. In coastal areas, detailed attention should be given to the needs of tourists or non-residents.

The plan should be: (1) balanced to meet present deficiencies and future needs, (2) oriented to the projected population and economic base of a community, and (3) in scale with a community's fiscal resources or expected federal or state assistance programs to help implement the plan.

An effective plan will: (1) identify problems, (2) present relevant information on the social and physical implications of these problems in measurable human terms, (3) have problem solving

alternatives, and describe the expected results of each in terms of environmental and social impact on the planning area, and (4) rank or recommend alternatives in terms of economic, social, and political feasibility.

Planning Areas and Units

Because of the relative mobility of most users and the specialized nature of many coastal park and recreation opportunities, a "problem-shed" approach should be used to determine the planning study area. This approach prompts the solution of problems in terms of cause and effect. It describes how and where urban populations will use existing or potential coastal recreation opportunities and may have important advantages in distributing the cost of specialized facilities, e.g., a marina or fishing pier over a broader tax base.

The problem-shed may differ according to a city or a region's climate, demographic character, density, degree of development, and economic base. For example, the planning area or problem-shed is dramatically different for a tourist destination area with a natural resource focus than it is for a resident oriented community.

A recreation access plan could include the widest range of components that can contribute to a recreation experience in a coastal setting. It should include those places traditionally considered as public park and recreation opportunities such as state or local parks. But, it can also include facilities such as: shopping centers, amusement parks, theaters, restaurants, libraries, museums, airports, farmers' and flea markets, private yacht and sport clubs, community colleges, historic districts, hotel and motel districts, waterfront districts, and pedestrian malls and plazas.

This approach views the entire coastal zone as a recreation space instead of a set of isolated spaces and experiences. It integrates space and services, public and private, indoor or outdoor opportunities where appropriate and possible. It considers any place where people can experience diversity, pleasure, or enrichment as a potential leisure resource.

Components and Work Program

The basic planning task is to inventory, analyze, and project statistically valid information that relates: people (behavior), time (leisure), and activity (recreation), to space (resources), and a geographic area (planning unit) using criteria or measures (performance standards/social indicators) that are sensitive to the changing physical character, social needs, and political priorities of a community. This information can be used to identify deficiencies by planning unit and population subgroups for specific activities or spaces. It can also be used to establish regional, citywide, and neighborhood policies and programs.

The detailed requirements for the park and recreation element of a comprehensive plan are described in federal and state guidelines that should be consulted before a work program is established. However, these general requirements can be used to define the components and work program of the plan:

Introduction

- Describe objectives and scope of plan
- Define legal authority for federal/state programs
- Define agency responsible for preparation of plan
- Describe previous and future studies related to plan
- State assumptions and qualifications of plan

Existing Conditions

- Describe regional context of planning area
- Describe leisure behavior patterns of population
- Describe environmental characteristics of planning area
- Describe recreation problems and potentials/planning unit
- Describe general character of planning units

Recreation Resources

- Classify resources and opportunities
- Inventory existing land, facilities, and program
- Evaluate opportunities by planning unit
- Describe potential recreation resources/programs
- Evaluate design, access, and public safety

Demand and Use Patterns

- Inventory time budgets of population
- Analyze recreation use patterns by demographic groups
- Describe user preference/satisfaction
- Analyze causes for nonuse of existing opportunities
- Describe problems of special populations
- Assess impact of non-residents/tourists
- Assess impact of fees and charges on demand patterns
- Assess impact of access on use of facilities

Needs Analysis

- Analyze demand-supply relationships
- Develop use concepts, principles, and design criteria
- Develop space, development, and program standards
- Describe deficiencies by planning unit
- Project needs by planning period and planning unit
- Describe public/private potentials to accommodate needs

Goals, Policies and Alternatives

- Describe existing goals, objectives, and policies
- Describe desirable goals, objectives, and policies
- Analyze alternative ways to achieve desirable goals
- Describe the implications of each alternative
- Recommend one alternative
- Describe social and environmental impacts of alternatives

Implementation

- Describe public/private actions by project/planning unit
- Schedule actions by time period, planning unit, responsibility
- Estimate benefits and costs of each project or program
- Relate costs to general and capital improvement budgets
- Describe needed financing
- Describe needed new legislation or responsibility
- Describe public participation to approve and implement plan
- Describe how, when, and who will revise plan

Appendix

- Background studies
- Data and methodology
- Bibliography and sources
- Acknowledgments and credits

Relationships to Comprehensive Plan

The comprehensive plan is a general guide to the future character and development of a community. It identifies significant areas to be preserved or changed to achieve social, economic, or environmental goals. The parks and recreation plan uses the factual information, policies, and recommendations of the comprehensive plan to develop detailed policies, standards, design or management programs that will achieve the leisure objectives of residents and visitors.

The comprehensive plan focuses on the overall relationship of open space and leisure services to land use and the quality of life and environment. The parks and recreation plan details these relationships and translates them into specific sites to acquire or develop for leisure-oriented uses. It also details policies, practices, or criteria related to the design and management of these leisure spaces and services.

The comprehensive plan provides the basis for a community's recreation plan and should be completed first. It provides general concepts and goals for the social and physical development of a city or region. The recreation plan details a community's recreation needs with specific recommendations for land acquisition, facility development, operations, maintenance, and financing that are not normally part of the comprehensive plan.

If properly done, both the comprehensive plan and recreation plan will complement each other and satisfy requirements for federal and state assistance. They will provide the context and basis for the public recreation access component of a local coastal plan.

Summary

Coastal zone recreation planning requires more sensitive and sophisticated methods than the application of arbitrary standards and conventional thinking. New demands for citizen participation in the planning and design process, environmental and social impact assessment, and cost-effectiveness of public inventories will make the traditional emphasis of recreation planning seem romantic.

These demands call for rethinking the objectives, approach, and methods of recreation planning to meet the needs of the present and future. They represent an opportunity for coastal recreation planners and managers to solve the public access problems to recreation resources in the coastal zone.

Recommended Reading

1. This manuscript contains material abstracted from *Recreation Planning and Design*, copyright 1980 by McGraw-Hill. Permission to use it in this form is acknowledged.
2. Bannon, Joseph J. 1976. *Leisure Resources: Comprehensive Planning*, Englewood Cliffs, New Jersey: Prentice Hall.
3. Ditton, Robert and Mark Stephens. 1976. *Coastal Recreation: A Handbook for Planners and Managers*, Office of Coastal Zone Management, NOAA.
4. Dreyfoos, William W. 1979. *Planning for Beach Access: A Manual for Florida Local Governments*. FAU-FIU Joint Center for Environmental and Urban Problems, Ft. Lauderdale, Florida.
5. Ducsik, Dennis W. 1974. *Shoreline for the Public*, Cambridge, Mass.: MIT Press.
6. French, Jere S. 1973. *Urban Green*, Dubuque, Iowa: Kendall-Hunt.
7. Gold, Seymour M. 1972. "Nonuse of Neighborhood Parks," *Journal of the American Institute of Planners* 38(November):369-378.
8. _____ 1973. *Urban Recreation Planning*, Philadelphia: Lea & Febiger.
9. _____ 1974. "Deviant Behavior in Urban Parks," in *Leisure Today Edition of Journal of Health, Physical Education and Recreation* 45(November):50-52.
10. _____ 1977. "Recreation Planning for Energy Conservation," *International Journal of Environmental Studies* 10(May):173-179.
11. _____ 1980. *Recreation Planning and Design*, New York: McGraw-Hill.
12. Kraus, Richard and Joseph E. Curtis. 1977. *Creative Administration in Recreation and Parks*, St. Louis, Mo.: Mosby.
13. Murphy, James F. 1974. *Concept of Leisure: Philosophical Implications*, Englewood Cliffs, N.J.: Prentice Hall.
14. _____ 1975. *Recreation and Leisure Service: A Humanistic Perspective*, Dubuque, Iowa: Brown.
15. Rutledge, Albert J. 1971. *Anatomy of a Park*, New York: McGraw-Hill.
16. U.S. Department of Interior, Bureau of Outdoor Recreation. 1973. *Outdoor Recreation: A Legacy for America*, Washington, D.C.: Government Printing Office.
17. U.S. Department of Interior. 1973. *Final Environmental Statement of Nationwide Outdoor Recreation Plan*, Washington, D.C.: Government Printing Office.

18. U.S. Department of the Interior, Heritage Recreation and Conservation Service. 1978. *National Urban Recreation Study: Summary Report, Executive Report, Field Reports and Technical Reports No. 1-13*, Washington, D.C.: Government Printing Office.
19. _____ 1978. *Urban Recreation Bibliography*. National Urban Recreation Study, Technical Report No. 13.
20. U.S. Outdoor Recreation Resources Review Commission. 1962. *Outdoor Recreation for America* Washington, D.C.: Government Printing Office.
21. Whyte, William H. 1968. *The Last Landscape*, Garden City, N.Y.: Doubleday.
22. Wurman, Richard S., et al. 1972. *The Nature of Recreation*, Cambridge, Mass.: MIT Press.

THE SAN FRANCISCO BAY COMMISSION AND PUBLIC ACCESS

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Introduction

Probably because of its size and regional orientation, the activities of the Bay Commission (San Francisco Bay Conservation and Development Commission — BCDC) relative to public access are not always well known outside California. Since we have had nearly ten years of public access experience, and since I, as a landscape architect, have been closely involved with public access in my seven years at the commission, I think it is appropriate for me to first talk a little about that experience, and then to give you some background about our current effort to complete a plan for public access around the 1000-mile shoreline of San Francisco Bay. The bulk of this material was originally assembled in a paper delivered to the Coastal Zone '78 Conference held in San Francisco in March 1978, and has been updated through March 26, 1979.

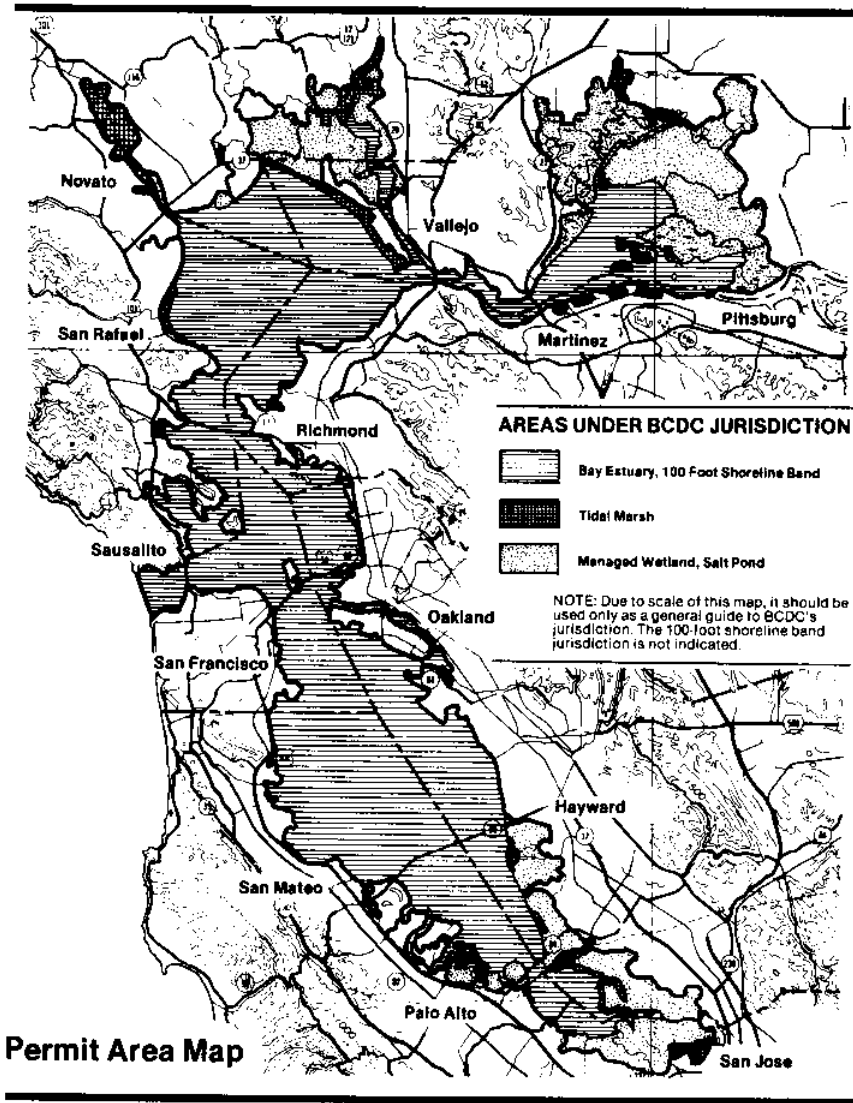
First, as you may already know, BCDC is the responsible agency for administering the Coastal Zone Management Program in the Bay Area. As a result of our involvement with the Program and the Office of Coastal Zone Management, we have been funded through the Section 305 grant program of the Coastal Act for preparation of the Public Access Plan, or as it is now known, the Public Access Supplement to the San Francisco Bay Plan. The Supplement is scheduled for Commission approval on April 5, 1979.

Now, just what is this Public Access Supplement to the Bay Plan? The Supplement is the comprehensive advisory guide to the commission and other interested parties for providing and maintaining public access to and along the shores of San Francisco Bay. Its overriding goal is to improve implementation of the commission's policy of providing maximum feasible access to the Bay through the permit process. An important secondary goal of the Supplement is to encourage and support local park and open space agencies in their plans for acquisition and development of important shoreline sites.

The Supplement consists of three essential elements, as follows: (1) The Bay Shoreline Element, with regional summary map; (2) The Appearance and Design Element, with Public Access Design Guidelines; and (3) The Implementation Element, with proposed amendments to Bay Plan Findings and Policies on Public Access, Appearance and Design, and Scenic Views. The appendices were: (A) Possible Sources of Funding for Public Access; (B) the revised General Development Guide (formerly Appendix A of the Bay Plan); (C) the Proposed Bay Plan Amendments; and (D) the Public Access Map. After approval of this final staff draft by the Commission, the Bay Plan amendments will be available separately as information to applicants and designers.

Agency Role in Public Access

As the state agency responsible for regulating development activities in and adjacent to San Francisco Bay, BCDC is guided in its decisions by (1) the McAteer-Petris Act, the state law that originally established the BCDC in 1965; and (2) the San Francisco Bay Plan, the Commission's comprehensive policy plan for San Francisco Bay adopted in 1969. In its findings and policies, the Bay Plan clearly emphasized the need for greater public use and appreciation of the region's most valuable resource — San Francisco Bay. One of the plan's most important policies — and since 1969 a



requirement of the BCDC law — is that “maximum feasible public access [to the Bay], consistent with a proposed project” must be provided in any project requiring a BCDC permit. The Commission’s permit (jurisdiction includes the waters, tidelands, and marshes of San Francisco Bay (including San Pablo Bay and Suisun Bay), and a shoreline band extending 100 feet inland from the line of highest tidal action (see Figure 1). Since the commission became a permanent agency in November 1969, nearly 15 miles of new shoreline access have been provided through the permit process (not including new access provided by public park and open space agencies).

The term “public access” means the provision of pedestrian access usually from a public thoroughfare to and along the San Francisco Bay shoreline above the highest tide. As a result of conditions set forth in a BCDC permit, public access is often on private land; it may include certain improvements, such as paving, landscaping, and street furniture; it may be subject to certain rules regarding use; and it may allow for additional uses, such as biking, fishing, picnicking, etc. An area reserved for public access pursuant to a BCDC permit is usually described in a recorded document indicating the area is restricted to public use. However, because of the small size of public access sites generally and their scattered locations, there is normally no public agency that assumes any ownership responsibility. Instead the areas remain under the ownership and responsibility of the permittee, who is usually obligated to maintain the area in an attractive condition for the public.

In determining the amount of public access and level of improvements to be provided, the commission and staff evaluate a number of factors, including the nature and cost of the project proposed by the applicants for their compliance with the commission’s requirements, including the sufficiency and design of the public access. The staff and commission are advised on public access and design issues applications for their compliance with the Commission’s requirements, including the sufficiency and design of the public access. The staff and Commission are advised on public access and design issues by the volunteer Design Review Board, composed of seven design professionals, including architects, landscape architects, and an engineer, which meets monthly to review projects.

The Need for the Plan

The nature of the development process is such that only portions of the shoreline at any one time are being developed or changed so as to require a BCDC permit. Public access obtained on a permit-by-permit basis is often discontinuous and sometimes unrelated to information about land uses or other factors beyond the scope of the immediate project. The need, therefore, was to develop a comprehensive plan for public access around the Bay and to assist both applicants and the commission in better satisfying the public access requirement of the permit process. On the recommendation of two earlier staff reports, the commission authorized staff to proceed with the Public Access Plan and adopted the planning program on January 20, 1977.

As noted above, the overriding goal of the plan is to facilitate implementation of the commission’s legal responsibility to provide maximum feasible public access to the Bay. This Plan will strengthen that requirement by assisting the commission in making public access decisions through the permit process. It will also guide decisions of other agencies with regard to acquisition or development of shoreline public access.

The Methodology — An Overview

At the outset it was decided that the final plan should be compatible with the Commission’s Bay Plan, and therefore contain overall findings and conclusions (policies), and maps (The Bay Shoreline Element) which would cover the entire Bay shoreline. The plan would also include sections on (1) guidelines for the appearance and design of public access and shoreline development, and (2) implementation, including a report on the issues of liability, maintenance, and policing (security) related to public access.

To meet the program goals and objectives, the key was to develop an efficient single purpose plan that would be sensitive to the assets and constraints imposed by the various natural, man-made, and aesthetic resources (factors) related to public access around the Bay. It seemed logical, therefore, that the plan should be based upon a resource inventory, analysis, and synthesis process, in which the staff, in cooperation with local, county, state, and federal agencies, would identify and analyze the land use, natural, and visual resources around the shoreline of the Bay. In general, the criteria for the staff’s findings and conclusions developed from the resource inventory process are based upon securing the most desirable and meaningful public access to the Bay.

In order to achieve the greatest amount of public involvement in the process, the staff and Commission held total of eight evening meetings and four public hearings on all segments of the plan. In addition, the commission was kept apprised of the plan with regular staff progress reports.

Gearing Up

Because of the extensive shoreline and limited staff resources, the decision was made early on to approach the plan incrementally, i.e., to divide the shoreline into eight manageable geographic units which could then be covered in a clockwise sequence starting in Marin County, thence north, east, south and north again, ending with San Francisco. The eight planning areas: Marin County; San Pablo Bay (Sonoma, Napa and western Solano Counties); Suisun Bay (central Solano and Contra Costa Counties); western Contra Costa County; northern Alameda County; southern Alameda County; Santa Clara and southern San Mateo Counties; and northern San Mateo County and the City and County of San Francisco.

Frankly, the choice of Marin County as the starting point had a number of advantages, including (1) it provided a representative cross section of all the types of ownerships, land uses, habitats, shorelines, and problems to be found anywhere around the Bay, (2) it is reasonably close to the BCDC offices, and (3) it is comprised of environmentally aware residents who would be generally supportive of a public access plan. Though not crucial to the success of the plan, the last factor was important in developing the momentum of support the plan might later need in those areas where the idea of public access to a public resource on private land might not be warmly received.

Process and Criteria

As already noted the preliminary findings and conclusions for each geographic portion of the Public Access Plan were to be derived from a resource inventory and analysis process in which the land use, natural, and visual resources (factors) related to the shoreline were "inventoried," i.e., mapped and described, and then analyzed, using criteria developed by the staff, as to their relationship to and effect on public access. The resource inventory and criteria for the analysis, both of which are described below, were developed based upon (1) the BCDC staff's own permit and planning experience with the shoreline and public access, (2) land use planning standards relating to compatibility of land uses, (3) a bibliography of related source material, and (4) the advice and recommendations of agencies and individuals with expertise in recreation, wildlife, and the bay.

Using the resource inventory and the analysis criteria developed for each resource, the staff then prepared three "resource analysis maps" (i.e., land use, natural resources, and visual resources) for each geographic area. Each map showed the information developed through the inventory of the resource and the results of applying the analysis criteria. Tentative conclusions as to the public access potential of various shoreline sites in relation to each resource were reached. Next the three maps were evaluated in relation to one another, and tentative overall findings and conclusions on public access and an overall draft plan map were developed for each area.

These tentative overall findings and conclusions were incorporated into a staff-prepared first draft of proposed preliminary findings and conclusions on public access for each area. This draft, and in some cases the overall resource analysis maps, were distributed to a wide variety of agencies, organizations, and individuals for comment. Extensive comments were received both at informal meetings with the staff and at the public meetings held in each area. Based on these comments, the staff prepared a second draft of proposed preliminary findings and conclusions for consideration by the commission and further consideration by the public.

Resource Inventory and Analysis

In selecting the resource factors to be inventoried and establishing the criteria for their analysis, the staff had to necessarily restrict itself to those factors that were directly related to shoreline public access as might be required as a condition of a BCDC permit. For example, though the list of land uses to be mapped is fairly typical, the criteria for their analysis are unique. Since the commission has the statutory authority to require public access as a condition of a permit there is no need to justify any "demand" for public access based upon demographic studies. Also, while surficial and bedrock geology is usually a major component of a typical natural resource inventory, the listing below omits

this general heading since it has no critical relationship to public access. However, the visible effects of surficial geology, either as shoreline characteristics or prominent landforms, do relate specifically to the nature and attractiveness of shoreline access, and were mapped and analyzed as part of the process. Also, certain geologic features such as fault zones and subsidence zones were mapped and analyzed as part of the process since they usually have an adverse effect on shoreline development.

Fortunately, the methodology of mapping and analyzing land uses and natural factors as a planning tool is well established and generally adaptable to most situations, usually with a few selected changes or deletions as noted above. However, after considerable research we found this was not the case when dealing with the visual resources of an extensive shoreline situation. Most visual resources studies, such as those undertaken by R.B. Litton, Jr., Ervin Zube, Philip Lewis, and others, are largely based on the spatial enclosure or landscape unit approach. We quickly discovered that the Bay shoreline does not lend itself to such classification. Because of their importance in identifying the most desirable public access areas, we felt it was necessary to take time to develop our own system of mapping and analysis of the visual resources affecting shoreline public access. This system is further described below.

The following are the specific resources inventoried and the analysis criteria applied to evaluate sites for their public access potential:

Land Use Resources

Land Use Inventory. The land uses listed below were mapped for each of the eight plan study areas. Existing land uses were transferred from a 1970 Housing and Urban Development/U.S. Geological Survey study for the Bay area, then updated using more recent Corps of Engineers air photos (1974) and finally spot-checked in the field. Planned land use information was also gathered from all applicable agencies and mapped.

The land use classifications used were:

1. Commercial: Businesses, motels, hotels, light industry
2. Industrial: Warehouses, piers, shipyards, radio towers, sewage plants, factories
3. Extractive: Quarries, and gravel pits, gas wells, sanitary landfill sites, etc.
4. Institutional: Schools, government offices, cemeteries, church lands, hospitals, prisons
5. Military: Open areas, security areas
6. Transportation: Highways, railroads, airports, ferry terminals, bus routes
7. Single-family residential (includes mobile home parks)
8. Multi-family residential
9. Public access recreation: Park, public marina, public golf course
10. Private Recreation: Private marinas, private golf and country clubs
11. Commercial-Recreation: Stadiums, fairgrounds, race tracks, drive-in theatres
12. Open Space: Undeveloped land, rangeland (non-cultivated)
13. Agriculture: Cultivated land, orchard
14. Marsh: Tidal, other
15. Managed wetlands: A unique use whereby diked-off areas adjacent to the Bay are managed seasonally for agricultural or duck hunting purposes
16. Salt Ponds: Another use of diked-off areas, unique to the Bay

Cultural resources, including historic and archeologic sites, were also mapped.

Land Use Analysis Criteria. The following criteria were used to analyze the compatibility and suitability of the various land uses for public access. Where planned land use differed from existing, the impact of the planned use was also recognized.

1. *Population.* Land uses that attract many people to a site such as commercial, commercial/recreation and some types of institutional complexes including schools and government offices are usually suitable for shoreline public access. Residential areas in the vicinity of the shoreline, but set back from the shore itself so as to minimize privacy conflicts, are usually compatible with and in need of public access.
2. *Minimum Development.* Land uses involving a minimum of development are often suitable for public access. These sites are (1) desirable to people as a relief from the urban environment, and (2) suitable for access because shoreline visitors have a low likelihood of disturbing the existing use. Examples of such compatible land uses are open space, agriculture, and salt ponds.

3. *Public Ownership.* Public access, consistent with the agency function, should generally be provided on sites already owned by public agencies such as wildlife refuges (seasonal use), flood control district lands and road rights-of-way.
4. *Hazard, Security.* Land uses that may present hazards to the public, such as some industries, or uses that require security, such as some military sites, are not suitable for public access.
5. *Privacy.* Existing single-family residential developments have often been designed in such a way that public access along the shoreline cannot now be provided without adversely affecting homeowner's privacy. Multi-family residential complexes have a greater likelihood of providing shoreline access with minimal privacy conflicts.
6. *Resource Management.* Uses such as managed wetlands (hunting clubs), although they provide waterfowl habitat, are usually privately owned, located in remote areas, and have appurtenant structures that are vacant for long periods. Consequently public access, if any, in areas devoted to these uses must be limited.
7. *Accessibility.* The closer a site is to a public thoroughfare the higher is its suitability for public access. The existence of a sound levee, well-defined bank or upland/marsh edge also enhances the suitability of the site for public access.
8. *Distribution of Existing Access.* A major factor in the selection of an otherwise suitable shoreline area for priority public access should be that there is presently little or no existing shoreline access in the vicinity.
9. *Continuity.* A determining factor in the selection of a suitable shoreline area should be that it would link or help link existing and/or proposed shoreline areas into larger continuous units.

Natural Resources

Natural Resources Inventory. The staff used a number of sources, including existing reports, unpublished papers, etc., to map the following natural resources that may influence shoreline public access:

1. Shoreline Characteristic: Beach, cliff, bluff, marsh, bank or other natural edge; riprap, bulkhead, pier or other artificial edge
2. Prominent Landform: Peak, hilltop, ridge, cliff, bluff, slope greater than 2:1, geologic outcrop
3. Hydrologic Feature: Stream, river, lagoon, pond, etc.
4. Vegetation (higher value for native species): Marsh, grassland, shrub, tree, urban vegetation (significantly vegetated urban areas), unique or endangered species, prominent specimen
5. Wildlife: Fishing sites, shellfish habitat, waterfowl habitat, rare and endangered species habitat, fish spawning or shrimp habitat
6. Climate: High fog incidence, high wind exposure
7. Special Features: Fault zone, landslide occurrence, tsunami hazard, subsidence zone, flood hazard

Natural Resources Analysis Criteria. The following criteria were used to analyze the capability of shoreline sites to provide public access based on the positive and/or negative characteristics of their natural resources:

1. *Accessibility.* As stated in the land use analysis, the existence of a sound levee, well-defined bank or marsh/upland edge enhances the capability of a shoreline site to provide public access. Even though the construction of a pile-supported boardwalk can effectively provide access to many natural areas, those sites with favorable existing conditions have been ranked most capable of providing access.
2. *Uniqueness/Interest.* Those sites with unique natural resources, or resources that have a high interest value often are capable of providing public access, if they are not too fragile (see below). Shoreline areas with stands of native vegetation, high populations of wildlife or interesting geologic outcrops are examples of such sites. These areas may also have educational and scientific value.
3. *Fragility.* Other shoreline sites have natural resources that are fragile and therefore are not capable of providing public access except under very controlled conditions. Marshes, critical nesting areas, seal hauling grounds, and rare and endangered species habitat are examples of sites that may be adversely affected by human use. Such sites may be acceptable for public access on a seasonal basis or with certain mitigation techniques.
4. *Hazard.* There are two distinct aspects to evaluation of "hazards" for public access:
 - (1). *Hazards of users* occur at sites with steep slopes, high cliffs or unsafe levees. These areas have a low suitability for public access unless precautions are taken.

- (2). *Hazards to development* occur at sites that lie in active fault zones or are susceptible to floods, tsunamis, subsidence or landslides. Shorelines with such characteristics are often only suitable for public access and open space because of their constraints on structures and developed facilities.

Visual Resources

Visual Resources Inventory. The inventory of visual resources, usually conducted in the field, had two objectives: (1) to identify shoreline areas that have highest visual quality, in that they provide unusually good views of the Bay and shoreline, and are attractive themselves, or both; and (2) to identify the most "visible" parts of the Bay and shoreline, i.e., those areas or physical features having the highest visual prominence.

The following are the key factors identified in the inventory:

1. *Entrance View.* A significant "first view" of the Bay; made from a principal transit corridor such as a freeway. An example would be the first view of the bay from a ridge crest.
2. *Landscape Features.* A feature is an area or point that stands out in the landscape. It tends to be a point of focus in scanning the landscape, i.e., landmarks and orientation points, such as the Golden Gate Bridge, Mount Tamalpais and San Francisco's Coit Tower.
3. *Vista Point.* A vista point is a site affording panoramic views of either a series of regional orientation points or views of a great extent of the Bay and/or shoreline. A "sequential vista point" is essentially a shoreline, path or roadway that has views of vista point quality over some linear distance.
4. *Other Factors.* *Visibility* is a measure of the frequency a site is seen, both by numbers of people and over time. A *vivid view* is one that is full of action and movement such as a sailboats on the Bay, major ships, port loading operations, and boat repair yards.

Visual Resources Analysis Criteria. As noted above the two key objectives in analyzing the visual resources of the Bay shoreline were to identify 1) sites having high visual quality; and 2) sites that have high visual prominence. The staff used the following criteria to make those determinations:

1. *Quality of Views.* Vista points and attractive shoreline areas received a "high visual quality" ranking. Shoreline with other views competing with a high quality view received a "secondary visual quality" ranking. In order to receive a high visual quality rating, sites must have at least one of the following characteristics:
 - a. Feature element or views to a feature
 - b. Distant and/or panoramic views
 - c. Natural landscape; or views to or over natural landscape, including wildlife habitat areas
 - d. Vivid or unique views
2. *High Visibility.* Highest visibility ranking went to shoreline areas seen from:
 - a. Entrance view locations
 - b. Freeways
 - c. Heavily traveled roadways
 - d. Downtown urban areas
 - e. Well-used parks, recreation sites
3. *Secondary Visibility.* Secondary visibility ranking went to areas seen from:
 - a. Adjacent well-used commercial, institutional or transportation developments
 - b. Well-used pathways

Appearance and Design Guidelines

The policies of the Bay Plan call for BCDC to adopt "design controls" and issue "detailed standards and criteria to carry out the intent of the . . . policies on public access to the Bay, and . . . publish a manual to guide developers and designers, including examples of various ways of meeting the policies . . ." The Appearance and Design Guidelines component of the Public Access Plan was prepared in response to those policies. However, the guidelines are not as detailed as the original Bay Plan authors may have conceived. Based upon earlier staff study and a report by the author (Appearance, Design and Public Access; Bay Plan Evaluation report 1974), it was determined by both the Design Review Board and staff that specific dimensional standards for the design of public access areas were neither desirable or feasible since they would inevitably be applied as the maximum that an

applicant would provide and not the minimum as intended. Moreover, the Design Board strongly felt that a good design for public access (as with all design questions) is subjective; it cannot be achieved simply through the application of dimensional standards.

However, the need has remained for general guidelines that would assist both designers and developers in providing attractive projects and suitable public access along the Bay shoreline. These design guidelines were primarily prepared by this author who, for five years, served as the staff secretary to the Design Review Board and had responsibility for review of permit applications from the standpoint of the design and appearance of the project and the public access. Through the use of graphic examples and limited narrative, the goal of this document is to convey simply to any applicant the type of design factors that should be considered when developing any project adjacent to or on the Bay.

The staff draft of this document, "Appearance and Design Element — Preliminary Findings, Conclusions and Guidelines," was presented to the commission on October 19, 1978. This second element will become part of the complete Public Access Supplement to the Bay Plan.

Implementation

As already noted, public access to the Bay is now achieved through the BCDC permit process, except for those areas where an agency acquires portions of the shoreline for public use. The Implementation Element explores other means of providing public access, such as including the Bay in an existing coastal conservancy acquisition program and investigation of BCDC's relationship to the California Constitution and the Subdivision Map Act. These proposals have been explored by the first.

The Implementation Element is based primarily on the findings and conclusions of the first two elements. The purpose of this element is to recommend specific actions to be taken by the commission or others to improve the administration of public access, to provide solutions to problems raised in the previous elements and the consultant's report (Security and Maintenance: The Underside of Public Access, by Armin Rosencranz, a report to BCDC, June, 1978), and to identify additional related issues which may require further study.

In general, BCDC permits require the permittee/developer to be responsible for maintenance (including litter control, upkeep, repairs, etc.) of public access areas, unless there is a public agency acceptable to BCDC that is willing to assume this responsibility. A BCDC staff report on public access concluded there were problems with the quality of maintenance at a number of sites. It appears that adequate maintenance is consistently provided only at those sites where the permittee/developer will directly benefit from attractive and well-kept public access. The consultant substantiated this hypothesis, provided additional background, and made recommendations for alleviating maintenance-related problems.

A further issue relating to public access areas is that of security (including fire prevention and control), including the security of those using the public access area and those living adjacent to it. Because BCDC generally requires the permittee/developer to be responsible for the security of public access areas, the commission has not been closely involved with the problems that may be encountered and more was information needed.

Some Final Notes

Now that this planning effort is nearly complete, I can look back and comment on the course of the process. In dealing with the Bay's 1000-mile shoreline, I believe the incremental approach of working on the Bay shoreline element was particularly good. By breaking the shoreline down into county-size pieces it was easier for the staff, commission and public to grasp the scope of an otherwise impossible task. This approach was especially important in involving the public in the process.

Involving the public in the planning process was both the most frustrating and gratifying part of the project; frustrating in terms of the amount of time needed to organize and hold the public meetings, and gratifying because of the general interest and support for the plan's conclusions. I am sure the support would not have been forthcoming had we not (1) met with all of the agencies in each area, and (2) regularly informed those on our extensive mailing list of the progress of the project. This point merely highlights the need for open and regular communication in any such process.

The list of recommended readings features mostly those materials related to the inventory and

analysis of resources, and in particular, visual resources. The bibliography of material used in inventorying the various factors related to public access around the Bay is too massive to list. Those interested in this specific data should contact the author at the Commission offices.

Finally, an admonition to planners and applicants, because the Bay shoreline is extensive and varied, the Supplement should not be considered a complete and final evaluation and recommendation of every part of the Bay shoreline as it relates to public access. Changes in land use and natural conditions over time create a need for detailed analysis of each shoreline site when it is being actively considered for public access by the commission or by any other agency. Also, this supplement is not intended to show every area where public access may be required as a condition of a permit application. Consequently, absence of a designation for public access in the plan does not mean that the future permit applicants will be relieved of the obligation to provide maximum feasible public access consistent with a project as required by the BCDC law.

Epilogue

The Public Access Supplement, including the Bay Plan amendments, was approved by the commission on April 5, 1979. The approved supplement will be condensed into a 24-page printed booklet for distribution to planning departments, local agencies, and interested public. The supplement's conclusions regarding the most desirable public access locations will be reproduced on a color map of San Francisco Bay for general public distribution. The Appearance and Design Guidelines will be separately reproduced for use by applicants, developers and designers involved with shoreline projects. The final printed documents will be available after September, 1979. Once these booklets are received from the State Office of Printing they will be distributed to those already on the Public Access mailing list and the regular BCDC lists. However, typewritten copies of these materials are now available from the Commission offices.

Recommended Reading

1. Appleyard, D., K. Lynch, J.R. Myer. 1964. *The View from the Road*. Cambridge, Mass.: MIT Press.
2. California Coastal Commission. 1974. *Appearance and Design*. W.H. Liskamm, primary consultant, San Francisco.
3. Eckbo, Garrett. 1950. *Landscape for Living*. F.W. Dodge Corporation, New York.
3. Lewis, Philip K. Jr., and Associates. 1968. *Regional Design for Human Impact*. Upper Mississippi Comprehensive Basin Study. Madison, Wis.: Thomas Publications.
4. _____. 1961. *Landscape analysis of the Lake Superior South Shore Area*. Department of Resource Development, Madison, Wis.
5. Litton, R. Burton. 1974. *Water and Landscape: An Aesthetic Overview of the Role of Water in the Landscape*. Litton and R.J. Tetlow, principal investigators. Water Information Center, Port Washington, N.Y.
6. _____. 1968. *Forest Landscape Description and Inventories - Basis for Land Planning and Design*. USDA Forest Service, Pacific Southwest Station, Berkeley, Ca.
7. _____ and R. Twiss. 1966. *Forest Landscape: Some Elements of Visual Analysis*. Society of American Foresters Proc., Seattle, Wash.
8. McHarg, I.L. 1969. *Design with Nature*. Garden City, N.Y.: The Natural History Press.
9. Okamoto, R., and W. Liskamm. 1967. *Appearance and Design: Principles for Design and Development of San Francisco Bay*. San Francisco Bay Conservation and Development Commission, San Francisco, Ca.
10. San Francisco Bay Conservation and Development Commission. 1969. *San Francisco Bay Plan*.
11. Simonds, John O. 1961. *Landscape Architecture*. F.W. Dodge Corporation, New York, N.Y.
12. United States Department of Agriculture. 1972a. *National Forest Landscape Management*, Vol. 1. USDA Forest Service, Handbook No. 434.
13. _____. 1972b. *The Visual Management System*. USD Forest Service, Pacific Northwest Region (R-6).
14. Zube, Ervin H. 1973. *Scenic Resources and the Landscape Continuum: Identification and Measurement*. Doctoral thesis, Geography Department, Clark University, Ann Arbor, Michigan.

ADMINISTRATION OF THE OREGON BEACH LAW

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The Oregon Beach Law was passed in 1967. The principal thing the law did was establish or set up a zone line, which is the line of demarcation between the public area and the private area. This line can be defined in both general and specific terms. In general, it is the 16-ft contour elevation line. In general, it is the first line of green growing vegetation a person encounters when they walk inland from the edge of the Pacific Ocean. Specifically, it is a precise point-to-point line which can be exactly located using standard surveying techniques. The law designates the area between the zone line and the Pacific Ocean as a public recreation area and gives the public an unlimited recreational easement to use it. In effect, it is public domain. The laws require the Highway Division to administer this area in the best interest of the public, and to protect it from abuse, trespass or degradation.

A request for a particular use or a particular type of access can be matched with the general intent of the law and certain uses can be encouraged and other uses can be discouraged through administrative control. The Highway Division receives many varied requests for many different types of access by varying users. An explanation of how these requests have been handled by the administration can provide a profile of the prevailing types of overall use which have been achieved through administrative control.

Coastal hikers The back-packing coastal hiker has proven himself to be a responsible coastal citizen. He understands and appreciates the coastal situation. As a result, we encourage this type of use. Along the North Coast, a hiking trail has been developed. It keeps the hiker next to the sea where possible, and when headlands intervene, the trail is cut through and clearly marked. The trail has regular mileposts and identification, and maps are supplied so the hiker can pre-plan his stops and resting places. The trail was made using penal institution labor. Eventually it will be extended along the entire coast. No special climbing gear is necessary; only regular outdoor clothing is needed.

Lifesaving crews The Coast Guard and other groups have made a number of spectacular lifesaving efforts in the Coastal area. They are allowed unlimited access to all parts of the public area at all times.

Marathon Runners This use is encouraged in the Coastal area. The City of Seaside, on the North Oregon Coast, has institutionalized a yearly marathon race which is well known throughout the United States. The Highway Division engineering crew helps them lay out the 26 plus mile course according to the world standard. Much of the course is directly alongside the Pacific Ocean. Thousands of runners participate in this yearly event. Encouraging use by granting permission request for this type of access is completely compatible with our administrative policy.

Dory Fishermen use a small double-ended boat which is launched from a vehicle-drawn trailer directly across the beach, through the surf, and into the sea. It must be done on the lee side of a cape. The dory boat is retrieved in the same fashion. The use and this type of access has been in continuous operation since about 1900. It involves about one mile of ocean beach frontage. Because of the historic and traditional pattern of use, there are no plans to change it. It does, however, rule out any pedestrian use on that portion of beach.

Treasure Diggers From time to time requests for permission to use machinery to dig for buried treasure at a particular point in the public area are received. If the public is not needlessly damaged or inconvenienced, and if the beach is not needlessly abused, the permission will probably be granted. To date, no treasure has been found.

Saturday afternoon beachwalker If there is one type of use that can be singled out and encouraged, it would be this one. Take the man who lives in the Willamette Valley, who starts to the beach with his wife and two children and a picnic basket and heads for the beach for a few hours of diversion. It is our hope to provide him with reasonable parking when he arrives, an adequate legal entryway conveniently located, and free access into the public area. We further hope that he can find shelter behind a friendly drift log and spend the afternoon beach walking, or perhaps flying a kite or playing ball with his children. He can do this in Oregon without paying any fee, without any reservation, and without paying tribute to anyone. The beach is simply his to use and enjoy.

Some of the Coastal communities have a similar approach by providing low-cost recreation for the beach user while he is there. One community sponsors a Sand Castle contest. The beach is divided into 10-foot squares, and any person or family can have a square. On this square, they fashion a sand castle, or sometimes an imaginative sculpture. Small prizes are awarded. Everyone realizes that the next high tide obliterates the entire effort, but that is part of the program and part of the fun. Another coastal community sponsors a kite flying contest on the beach. Kites are low-cost and require no special training to enjoy, making it an ideal form of family beach recreation. This same community operates a kit building clinic for several days before the actual contest, giving parent and child an opportunity to together design and build their own kite prior to the contest.

The foregoing uses and forms of access have been encouraged by administrative control. There are other requests which, by their nature, through administrative control, are discouraged.

Commercial Sand Removal In 1967, when the Oregon Beach Law was passed, the Highway Division inherited a large-scale sand removal operation. Large amounts of sand were regularly removed from the public beach area, and were used as an integral part of the local economy. Because this use had been in effect for many years, and because total curtailment would hurt the community it was allowed to continue, but on a gradually diminishing basis. It has now been completely curtailed. There is no commercial removal of sand or other products from any part of the public area at this time, and none is planned for the future.

Horses and Horseback Riding While these words are not mentioned in the Oregon Beach Laws, their use is governed by administrative control through the Highway Division. The flying hoofs of the horses, and the attendant manure problem both tend to be uses which are incompatible with general beach recreation. This type of access or use is generally discouraged. To prevent economic hardship to stable owners, it is being gradually curtailed in most coastal areas.

Aircraft There are no access rights of any kind in the public area for aircraft. The only legal airplane in the public area is one which has landed in an emergency. Their use of the beach is discouraged by administrative control as well as legal requirement.

Automobiles The inherent conflict between the beachwalker and the automobile both trying to use the same section of beach at the same time is recognized by most people. However, the automobile has historically and traditionally and customarily been in use on Oregon's beaches since the turn of the Century. Because of this factor, it was not prudent or advisable to suddenly stop this practice. However, by 1970, the conflict between the two competing uses (pedestrian vs. auto) became so severe that a moderating policy had to be developed. After a series of public hearings a form of compromise was reached, and that system is in use today. About one third of the available beach is completely open to vehicle use, about one third of the available beach is totally restricted to vehicle use, and about one third is either/or depending on the time of year or other factors.

Uses which defy any administrative control When a sea-going barge load of finished cut lumber founders off the Oregon coast, huge quantities of finished lumber cascade onto the beaches on the incoming tide. When this situation occurs, there is a mad scramble to lay claim to this valuable product, and usually the entire community turns out for an all hands operation. There is a very high degree of frantic heavy physical activity, usually resulting in several heart attacks, sprained backs and hernias. Regardless of what type of access restriction, regulation, or prevailing law might exist, they are all swept aside in the excitement and frenzy of the moment. Nothing would prevent them from claiming the valuable bounty from the sea.

There are three items which will be taken into account on anything connected with future access and use on the Oregon coast.

1. The administration will continue to resist the heavy pressure from the abutting coastal owner. The private coastal owner naturally trying to push out into the public area wherever he can. It is our responsibility to prevent this.
2. The administration should try to develop more parking spaces adjacent to the public areas.
3. Thanks to a fine presentation by a previous speaker here, Oregon will attempt in the future to develop a better public awareness program to inform the public of beach recreational opportunities.

The Oregon Beach Law and the administration of that law has given a magnificent gift to the people of Oregon. There has been no significant reduction in the size of the public area in the last 12 years, and none is anticipated.

The passage of the Oregon Beach Law has been hailed as landmark legislation. Certainly the general political climate in Oregon was at least partially responsible for its passage. Oregon has been a leader in the passage of other courageous laws which have been equally significant. These include the Fluoro Carbon Law, the Oregon Bottle Bill, the Marijuana Law, and the Oregon Abortion Law.

The beach operation in the future, and the control of access and use, will continue to follow the same general pattern as outlined above. It is our policy to protect and preserve this valuable and irreplaceable resource for the benefit of Oregon's present generation as well as generations to come.

AN ACCESS PLAN FOR LOS ANGELES: ONE PLANNER'S PERSPECTIVE

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I want to give a perspective on access that goes back to the definition of planning; I define planning as the "art of the possible." We deal with planning in terms of access, and we deal with access in terms of urban settings, such as the city of Los Angeles. I make a disclaimer at this point because, as I said, I do not anticipate that the problems that we have in large cities will be the same kind of problems with which some of the more rural areas will have to deal. Certainly the political and bureaucratic situations of the city of Los Angeles, as well as other large cities, differ from rural bureaucratic situations in terms of complexity. So much of what we do in Los Angeles relates to how skilled we are in the bureaucratic and political processes, in terms of identifying the goals and the real values. I think this is probably the most perplexing problem for the planner, not only in terms of recreation and access but also in terms of whose or what values we are serving. I will attempt to deal with this value problem as we go along.

As a planner in the city for the past 13 years, I can assure you that it has been very difficult to define whose values are really being served. The planner comes up with a definition of what he envisions as the public interest. He tries to define the public interest based on what he has been taught in school, what he has learned as an individual, what he has been told about the legislature's interests, and what his professional peers espouse as being those things which ought to be sought. Trying to translate these into something useful is always a problem. Certainly in Los Angeles this is a tremendous problem, as was described earlier in Norbert Dall's discussion.

There are a number of constituencies which are competing for their interests to be heard as plans are prepared. There are some environmentalists who want access limited, because with increased access there is also increased development which brings increased use of fragile resources. Then there are the development interests, since with increased access there are increased opportunities to develop.

The planner ends up trying to move his way through these various competing interest groups and wants to arrive at some sort of balance which usually ends up being mouthed in motherhood and apple pie platitudes. I am sure you are all familiar with the mother pie and applehood, as I call it.

Technically speaking, what do we do? First of all, we take a look at our transportation systems; we try to identify what we actually have on the ground. We really lack a regional look at our transportation system. This can be a difficult problem for us in the city of Los Angeles because the county of Los Angeles alone has some 77 cities. We try to look at the Southern California Association of Governments (SCAG) and some of the other agencies. SCAG, which is our local council of governments, has developed all of their data and statistics based on what they call regional statistical areas. The county of Los Angeles does not necessarily come up with things that are continuous with SCAG. Our statistical areas may not be the same in terms of how we advocate our needs, how we put them together, and so forth. Everybody else has their own thing. The major problem is trying to take all these apples and oranges and combine them in some sort of fashion which makes sense, so you can start getting an idea of what is indeed a regional transportation system and how it is functioning.

On a community-by-community basis we are somewhat successful. We have gathered a lot of data. We have been able to determine by and large what the deficiencies of our local street systems are. Our ability to predict what will happen in transportation systems in the future is perhaps not quite so certain.

Therefore, one thing we do is try to assess what our regional transportation system is. This is part of comprehensive planning. It is not just a part of coastal planning. I think you can understand in an

urban area that you cannot isolate one aspect of the transportation system. We have defined and will continue to define this in terms of our work program which we're currently putting together. We are utilizing much work that has already been done, because we do not want to re-invent the wheel.

Now, about the problem of a definition of access, which was discussed this morning. How much access is good access? Quantity does not necessarily mean quality. That is part of it. You know how much access you really want to your coastal resources. In the city of Los Angeles, I do not think this is a major problem. Perhaps it is in the Santa Monica Mountains. I don't know whether you're aware of it, but Los Angeles County certainly is. Up to some five miles in from the coast is of coastal value. Whereas we deal with the coastal zone in the city on a small basis, for most of the county of Los Angeles, we have a large hunk of the Santa Monica Mountains involved. Because of this we do have, to some extent, the problem of how much access, as access to the Santa Monica Mountains is rather limited.

But access, as I mentioned earlier, is defined to mean housing; it is defined to mean views, it is defined to mean signs; it is defined to mean a lot of things. Visual access is an important aspect. I think the problem of defining what is meant by access is one of the big problems. And it is a problem which involves a lot of controversy. The city has just recently been able to enact some sign control ordinances for small portions of Los Angeles. When we tried to do a sign control ordinance for the entire city of Los Angeles, planners were literally strung up and left to bleed for a couple of days. We have not really tried anything comprehensive since that. The reason I mention this type of thing is that the whole process is one that has been fraught with controversy, and a lot of blood is shed as we go. What we are trying to do is define exactly what we mean by access. Hopefully we will have some definition through the adoption of our work program.

I think that our next step is to identify systems of trails; whole systems for coastal access. For instance, in the planning that we have done in the Santa Monica Mountains, we have tried to go ahead and identify areas where we want trails, areas where we want equestrian centers, areas where we want different types of facilities. Our process is not based on anything that's particularly esoteric in any form or sense.

In the absence of some cookbook formulas with magic answers, we have gone to the public participation part of planning with a vengeance. Whenever we do a plan we appoint a citizen's advisory committee. We come in with all our maps and all our stories, and we sit down with a group of erudite citizens appointed by politicians who want to get re-elected and scratch our collective heads until we finally come up with a plan. Now we try to lead them through a logical process starting with the goals and objectives. But these people are usually ones who have particular points of view that they are trying to espouse, and unless your local politicians have developed relatively balanced committees to help you go through this process, you get a rather skewed type of product. Then you take the skewed product and go to public discussions and into public hearings with your commissions and your city council. All of a sudden you find that this wonderful citizen's advisory group had really messed up all kinds of things, and you really did not cover their needs or did not meet the problems that they really have.

I would like to caution the Coastal Commission on this because they want a lot of citizen participation. There are some drawbacks to the whole thing. This is not to say that it should not be pursued; we firmly believe that it should. In the long run, I think that the approach that we would take, and are taking, to our general planning, is one which tries to provide for as many possibilities as possible. We want to identify all the opportunities that are available to us. I think in the long run the problem is one of skill, not only in getting a plan through the political process. How skillful are you at implementing the plan?

In the final analysis, once the plan has been adopted. It gets down to who is going to follow it through? We've been through this process before — coming up with all of the great and wonderful words with all the wonderful symbols on the maps. Usually once it has been adopted, it sits there on a shelf. At least in the Los Angeles area, the real secret to a community plan or a specific plan that deals with the coastal access is the skill and the ability of the planner to marshal other bureaucracies — to marshal the politician, to communicate to the various constituencies that are the public, to get something going. For example, we have a national recreation area that's going to be put in the Santa Monica Mountains. We must try to be there when the decisions are being made, when the plans are being done by this other bureaucracy, so that we can influence them to follow and go in the directions that we have set forth. I was very interested in Norbert Dall's comments yesterday talking about how in the end it all winds up in the legislature. Of course he was talking largely about money, but it really ends up in the skill of the planner to accomplish these things. It relates to interpersonal skills and the ability of the planner in interpersonal situations.

In the city of Los Angeles we have one particular tool that we are using which is called a "specific plan." A specific plan in the city is a little different than the state specific plan. Not only does it come up with policies and goals, it also actually comes up with the regulations. We are able to tailor our zoning regulations for a specific area. Our particular approach is: how can we get the most bang for the dollar that's being spent? We basically said that using regulations is the way we're going to approach it, because for the two to three hundred thousand dollars that the Coastal Commission is going to give the city of Los Angeles, it is not going to produce new roads or a lot or other things. We already know where the new roads need to be; we already know where we need more parking. We don't really need a lot of new studies to tell us where the problems are. What we need is large infusions of dollars. This is the same story you've heard over time and time again.

In terms of our local coastal program, we are saying, let's take that money that is available and let's apply it in forms of regulation. This way at least the money that is being spent is going to be useful. I think that this is somewhat under false colors, because I think people expected a little bit more of the Coastal Commission and the Coastal Act. The Coastal Commission's dollars are everybody's problem. We are just trying to come up with the best use of the dollar, and I'm not sure that the answers that we're going to come up with are going to satisfy anybody.

I think that the tack that the city has taken essentially is that the problem of transportation and access is too immense in the city of Los Angeles. Imagine trying to solve the problems of Pacific Coast Highway on out to Malibu. Coming into the city, imagine trying to solve the problems of where to get the money to provide the parking in Venice. In Venice part of the access problem is a security problem. How do you protect people who want to use the Venice Beach? A lot of people want to use the beach, but how do you keep them from getting mugged as they go out to the beach? So you're getting into problems in terms of police enforcement and security. It is really one of being opportunistic, of taking your opportunities when you get there.

We're going to be involved in the political process, and it is going to largely lie upon the type of support and the type of constituency we are able to generate to support us as we go through this particular process. I only hope that the form some of you have to go through is not so fraught with politics as ours is certainly going to be, through diverse interests and powers. I am probably being a little too optimistic if I say that.

APPENDIX A

PUBLIC ACCESS (SHORELINE) INTERPRETIVE GUIDELINES

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PUBLIC ACCESS (SHORELINE)

I. INTRODUCTION – CONSTITUTIONAL PROVISIONS FOR PUBLIC ACCESS

The California Coastal Act requires that public access to and along the shoreline be maximized. This legislative mandate stated in Section 30001:5(c), is consistent with the provisions of Article X Section 4 of the California Constitution which states:

No individual, partnership, or corporation claiming or possessing the frontage or tidal lands of a harbor, bay, inlet, estuary, or other navigable water in this state shall be permitted to exclude the right of way to such water whenever it is required for *any* public purpose . . . and the Legislature shall enact such law as will give the *most liberal construction* to this provision so that access to the navigable waters of this state shall *always be attainable* for the people thereof. (Emphasis Added)

In reviewing projects to determine consistency with the Coastal Act of 1976, the Coastal Commission is required under Section 30210 to carry out the Constitutional requirements for provision of public access to the navigable waters of the state by maximizing such access. The access policies of the Coastal Act should be read to give liberal interpretation to the Constitutional provision that access to the shoreline should "always be attainable." Section 30210 of the Coastal Act provides that:

In carrying out the requirement of Section 4 of Article X of the California Constitution, *maximum* access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety, and the need to protect public rights, rights of private property owners, and natural resource areas from over use. (Emphasis Added)

Additional provisions of Chapter 3 of the Coastal Act (Sections 30211 - 30214) set forth requirements for the provision of public access which must be met in order for the Commission to find a project consistent with the provisions and policies of the Act. The following guidelines have been prepared to explain the public access provisions of the Act. These guidelines indicate when the public access provisions are applicable to a given project and the type (vertical and lateral) and amount including area and appropriate uses) of access which should be provided.

II. WHICH PROJECTS ARE SUBJECT TO THE ACCESS POLICIES OF THE COASTAL ACT OF 1976?

All projects requiring a Coastal Development Permit must comply with the public access provisions of Chapter 3 of the Coastal Act of 1976. In addition to setting forth the Constitutional provision mandating that access to the public tidelands be maximized (Section 30210), Sections 30211 and 30212 provide specific requirements to be met prior to finding a project consistent with the access provisions of the Coastal Act.

A. "Development"

Section 30211 of the Act provides that:

Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation. (Emphasis Added)

This section applies to *all* projects falling within the definition of development set forth in Section 30106 of the Act, which states:

Development means, on land, or under water, the placement or erection of any solid material or structure; discharge or disposal of any dredged material or of any gaseous, liquid, solid, or thermal waste; change in density or intensity of use of land, including but not limited to, subdivision pursuant to the Subdivision Map Act (commencing with Section 66410 of the Government Code), and any other division of land, including lot splits, except where the land division is brought about in connection with the purchase of such land by a public agency for public recreational use; change in the intensity of use of water; or access thereto; construction, reconstruction, demolition, or alteration of the size of any structure, including any facility of any private or public or municipal utility; and the removal or harvesting of major vegetation other than for agricultural purposes; kept harvesting, and timber operations which are in accordance with a timber harvesting plan submitted pursuant to the provisions of the Z'berg-Nejedly Forest Practice Act of 1973 (commencing with Section 4511).

As used in this section "structure" includes, but is not limited to, any building, road, pipe, flume, conduit, siphon, aqueduct, telephone line, and electrical power transmission and distribution line.

To meet the provisions of Section 30211 of the Act, development as defined above cannot interfere with the public right to use the sea where acquired through *historical use* or *legislative authorization*. Public prescriptive rights must, therefore, be protected wherever they exist. Where there is evidence of historic public use which has been documented through photographs or statements by users of the shoreline area, where a proposed development could interfere with the asserted historic use, the Commission should protect the possible prescriptive rights. Such rights can be preserved through recordation of access agreements acknowledging the existence of public rights on the site or by siting and designing the proposed development in a manner which does not interfere with the public rights. The actions taken by the Commission should not diminish the potential prescriptive rights in any way. The Commission may, however, allow development to be sited in an area of historic public use where equivalent areas for public access are provided; such compromise dedication areas should provide for equivalent area and use of the accessways.

Where appropriate, the Commission should investigate the factual basis of the prescriptive rights and claim and include, in the permit file, any information available to document the historic public use of the subject site. Photographs of the site showing public use and affidavits of those claiming to have used the area in question should be included. The Commission, upon compiling such preliminary data, should request the Attorney General's office to advise the Commission on what actions, such as litigation to quiet title in the public, should be taken.

Evidence of prescriptive use also indicates the need for dedication areas required under Section 30212 of the Act. Requiring dedications of historic use areas under Section 30212 would protect any public rights while avoiding public and private litigation costs over the issue of prescriptive rights in a quiet title action.

B. "New Development"

Section 30212(a) of the Coastal Act provides that:

Public access from the nearest public roadway to the shoreline and along the coast shall be provided in *new development* projects except where (1) it is consistent with public safety, military security needs, or the protection of fragile coastal resources, (2) adequate access exists nearby, or (3) agriculture would be adversely affected. Dedicated accessway shall not be required to be open to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.

A review of the history of development along the California coastline and the regulatory process relating to that development makes the basis for this access requirement clear. The public vote enacting the California Coastal Zone Conservation Act of 1972 constituted a clear legislative finding that unregulated development was individually and cumulatively precluding public access to the state owned tidelands. Under the 1972 Coastal Act, all permits as appropriate were therefore conditioned to require the provision of public access. The predecessor Commission's permit experience (e.g., Sea

Drift, Doheny State Park, Del Mar Hotel, Venice Bikeway, etc.) and its planning experience (See Coastal Plan, pages 152-158) also confirmed that private development on the shoreline caused adverse impacts on the use of the state owned tidelands by the general public.

In adopting the Coastal Plan, the Commission found:

Along the immediate shoreline, homes, businesses, and industries have often cut off existing public access to the coastline, have used up available road capacity and off-street parking, and have precluded use of the coastline area for recreation. Development back from the shoreline also affect the ability of residents and tourists to get to and use the coast. In addition to its impact on transportation systems serving the coast, development can reduce upland recreation opportunities that would otherwise relieve demand on the shoreline.

The Commission therefore recommended that private development be regulated to assure that such development does not either directly or indirectly preclude public access to the shoreline.

The language of Public Resources Code Section 30212 makes clear that the Legislature concurred with the Commission's view, and concluded that all new development resulting in any intensification of land use generates sufficient burdens on public access to require access conditions in conjunction with that development. The basis for the public access requirements of the Coastal Act can be readily discerned by analyzing the exceptions set forth in Section 30212(a)(1-3). In those exceptions, the Legislature has weighed the public policy issues involved, by defining situations where public access *itself* would be inappropriate, rather than focusing on the nature of the proposed development. For example, the exceptions for public safety and military security is a self-evident statement that access is not appropriate where personal harm to individual members of the public or the public as a whole, in the form of impaired military security, would result. Similarly, the exceptions indicate that public access requirements are not appropriate where access would adversely affect natural resources of a statewide interest (i.e., fragile coastal resources and agriculture). Each of these exceptions focuses, however, on the appropriateness of access itself, rather than on any burdens which might be generated by particular types of development. In other words, Section 30212 of the Coastal Act indicates that all new development generates access burdens and that the only situations where access is not required are where access itself would be inappropriate for public policy reasons.

Similarly, Section 30212(a)(2) required the provisions of public access "unless adequate access exists nearby." As with other exceptions noted previously this subsection of PRC 30212 assumes that public access is required and states that one of the factors to be considered in determining the appropriateness of access is the need for access. The factors that are to be assessed in determining access needs can be better understood by reviewing the potential impacts of development on access.

Private development imposes an impediment to or burden on the public's ability to gain access to or along the shoreline, either incrementally or cumulatively in the following ways: (1) physically precluding public access; (2) discourages them from visiting the shoreline in the first place because of physical proximity of development; (3) creates use conflicts in which landowners harass and intimidate the public and seek to prevent them from using tidelands based on disputes over the exact boundary between private and public ownership; (4) takes up existing road capacity and off-street parking thereby making it more difficult to gain access to and use of the coast by further congesting existing access roads and recreational areas; (5) increasing the intensity of use of beach and upland areas thereby congesting concurrently available support facilities; and (6) creating impediments to public access by placing structures along the shoreline (e.g. sea walls) that impede access or that alter shoreline processes thereby affecting the amount of beach available and even the location of the mean high tide line. In assessing the need for access, the Commission must also consider that the burdens generated by new development, in conjunction with tidal and storm conditions can create physical barriers to safe public access absent the provisions of new public accessways. Recognizing these potential impacts of development, the Legislature has thus focused the application of Section 30212 on the appropriateness (i.e., need) of access rather than on the type of development proposed.

In assessing needs, the Legislature has stated a requirement for both vertical and lateral access ("to the shoreline and along the coast"). Vertical access can generally be spaced in response to needs, as determined by present and projected usage, support services and physical constraints. Based upon the considerations, vertical accessways generally should be spaced much closer together in urban

areas than in rural areas. Lateral access serves basically two functions in terms of need: (1) the provision of lateral access can minimize the number of vertical accessways required, thereby reducing maintenance costs and limiting use conflicts with private development, that would otherwise guarantee public access to all the tidelands and (2) the provision of lateral access recognize the potential for conflicts between public and private use and creates a type of access that allows the public to move freely along all the tidelands in an area that can be clearly delineated and distinguished from private use areas (e.g. a 25 ft. area of dry sand beach at all times). Thus the "need" determination set forth in PRC 30212 (a)(2) should be measured in terms of providing access that buffers public access to the tidelands from the burdens generated on access by private development.

The Legislature has recently enacted criteria to be considered in establishing access requirements that related to the "time, place and manner of public access . . ." (PRC 30214). These criteria provide the basis for determining the type and extent of any special condition for access requirements under Section 30212. As in the case of the Section 30212(a) tests, the criteria set forth in Section 30214 focus on the appropriateness of access itself ("time, place and manner") and not on the particular impact of any proposed development. In every permit action, the commissions must therefore consider the criteria specified in Section 30214 and make findings where such criteria are applicable. These criteria focus on the physical aspects of the areas under consideration and on the type of access appropriate to the fragility of natural resources and the nature of development in the vicinity. The criteria also focus on the management aspects of providing public access.

Thus, based on the historical evidence that development along the California coast results in many different ways in the preclusion of public use of the state-owned tidelands, based on the same conclusions by the Commission in adopting the Coastal Plan, and based upon the legislative expressions in both the 1972 and 1976 Coastal Acts, the Commission concludes that all new development projects cause a sufficient burden on public access to warrant the imposition of access conditions as a condition to development, subject only to the exceptions specified by the Legislature. A finding of consistency with the public access policies of the Coastal Act accordingly can be made only if there are sufficient provisions for mitigating the burdens on impacts which the Legislature has found to be inherent in new development projects; unless one of the three stated exceptions is applicable, all new development located between the first public roadway and the shoreline must provide public access. Section 30212(a) and 30214 of the Act set the framework for determining when access is required and under what conditions. Section 30212(a) states where access is required — in developments located between the first public road and shoreline and both to and along the coast — and establishing the three categories where access is not required. Section 30214 established criteria to be considered when determining the "time, place and manner" of providing public access.

Under the previous Access Guidelines (dated July 31, 1979), the Commission indicated that certain types of developments, as defined by PRC 30106, do not create an intensification of use, do not create access conflicts and therefore should not be treated as "new development" subject to the Act's access requirements. These categories of activity, along with a category including demolition and reconstruction, have been codified by the Legislature in Section 30212(b) of the Act. The categories which by Statute are not "new development" are:

- (1) *Structures Destroyed by Natural Disaster.* Replacement of any structure pursuant to the provisions of subsection (g) of Section 30610.
- (2) *Demolition and Reconstruction.* The demolition and reconstruction of a single-family residence; provided, that the reconstructed residence shall not exceed either the floor area, height or bulk of the former structure by more than 10 percent, and that the reconstructed residence shall be sited in the same location on the affected property as the former structure.
- (3) *Improvements.* Improvements to any structure which do not change the intensity of its use, which do not increase either the floor area, height or bulk of the structure by more than 10 percent, which do not block or impede access, and which do not result in a seaward encroachment by the structure.
- (4) *Repair and Maintenance.* Any repair or maintenance activity for which the commission has determined, pursuant to Section 30610 that a coastal development permit will be required unless the regional commission or the commission determines that such activity will have an adverse impact on lateral public access along the beach.

For purposes of Section 30212, “project” must be interpreted to mean any activity constituting “new development” as defined above.

In examining new Section 30212(b), it is clear that the types of development that are not to be considered “new development” have similar characteristics. Under Section 30223(b)(1), a replacement of a structure is conditioned so that the structure must be rebuilt in the same location. Section 30212(b)(2) similarly conditions the location of “demolition and reconstruction” projects to the same location and a bulk increase of no more than 10%. Improvements under Section 30212(b)(3) are subject to certain spatial and size limitations, and are further limited to those activities “which do not block or impede access, and which do not result in a seaward encroachment by the structure.” Likewise, repair and maintenance activities are not exempt from the requirements of Section 30212(a) if “such activity will have an adverse impact on lateral public access along the beach.” Thus, none of the categories of development exempted from the requirements of Section 30212(a) allow any increase in intensity of use of any physical construction that has the potential for limiting or impinging upon public access.

Subdivision (b) of Section 30212 codifies the Commission’s historical experience, and enumerate the only categories of “development” which have previously been recognized as not allowing potential access impacts. The Commission recognizes, however, that there may be additional classes of “development” which do not result in any intensification of use and do not physically impinge upon public access; if any such classes are factually documented, the Commission will include them in the Guidelines as not “new development” for purposes of PRC 30212(a).

III. WHERE A PROJECT IS A “NEW DEVELOPMENT,” WHAT PROVISIONS FOR PUBLIC ACCESS ARE REQUIRED TO FIND THE PROJECT CONSISTENT WITH THE ACT?

A. *Lateral Access.*

Lateral access dedications provide for public access and use along the shoreline. A 25-ft wide accessway along the dry sandy beach for passive recreational use by the public has been found sufficient to offset the burden new development projects generally impose on public access (see previous discussion on New Development). This 25-ft. wide minimum has been established as the necessary width to allow reasonable use by the public of the state-owned tidelands. In some instances this may be reduced to protect adjacent resources or to protect the privacy rights of adjacent property owners (see discussion on privacy buffer). However, here the proposed project would, either by itself or in conjunction with others similarly situated, impose unusual burdens on the public’s ability to use the shoreline, at the present time or in the future, additional area for public access and public use of the shoreline may be required to balance the benefit to the additional burden imposed on the public’s constitutionally protected right of public access resulting from the project. The mechanisms and amount of public access noted in these guidelines as being necessary to meet the mandates of the Coastal Act, represent provisions which the Commission believes are reasonable conditions to fulfill the public access policies of the Coastal Act, specifically, Section 301210-30214.

1. *Description of Lateral Accessway.* The description of an accessway should provide the public and the property owner the maximum amount of certainty possible to determine here public rights of access exist. Descriptions of accessways should be made in one of the two manners detailed below. The first is to define the accessway as extending from a fixed inland point seaward to the seaward property line (the mean high tide line). The area included in this accessway would remain constant although the “useable area” of dry sand beach would fluctuate with the changes in the tide. The second mechanism for describing a lateral accessway is to set the width of the useable beach required (e.g. 25 ft.) and have this use area extend inland from the high water line. Under this latter approach the exact location of the accessway would fluctuate daily with the change in tides although the width of the accessway would remain constant. These two approaches are described as follows:

a. *Describing an Accessway From a Fixed Inland Point.* The most efficient way to describe an accessway is as a distance from a fixed line landward of and parallel to the mean high tide line and extending seaward to the seaward property line (mean high tide line). When this description is used, the area of dry sand beach may vary from wide areas of sandy beach available for public uses during the low tide conditions, to vary narrow stretches of sandy beach resulting in little area for public use during

high tide or storms. To account for the potential changes in the waterline, the area included in the accessway should be sufficient to assure that the public will have the ability to use some dry sandy beach *at all times of the year*. Because the landward boundary of this accessway is fixed, the landowners/residents of the beachfront parcels, are afforded a greater degree of certainty of where public rights exist than that additional beach area may be required to protect the public's right of access to and along the shoreline. The public also benefits from this approach, since the public and the accepting agency can more readily determine where public rights exist. However, the public trade off for this certainty is that during storms and high tides, the accessways designated may be entirely submerged.

To determine the point at which such an accessway should begin the Commission should consider the variations in the high water line during the year, the topography of the site, the location of other lateral accessways on neighboring lands and the privacy needs of the property owner. Any such fixed point should, however, give the greatest amount of assurance that the public would retain the right of access and use along the shoreline during the majority of the year.

- b. *Describing an Accessway From the High Water Line.* Where the Commission determines that it would be difficult to find a fixed inland line which would assure public access throughout the year and still grant the resident a privacy buffer (See Privacy Buffer discussion below) or where contiguous accessways are measured from the high water line, a lateral accessway may be described as beginning at the seaward property line (the mean high tide line) and extending landward a specified distance from the daily high waterline. An accessway described in this manner would provide an area of a standard width for public access; the precise location of such an accessway would fluctuate with the tide. The width of such an access area should be determined by the Commission in light of the Constitutional right to get to and along the shoreline, the need to offset any burdens the proposed development may have on the public's right of access along the shoreline, and the need to protect the right of privacy of the adjacent residents.

This method of defining the accessway assures the public a specified amount of access at all times of the year while requiring the applicant/landowner to dedicate only a limited amount of land for the provision of public access. However, as a trade-off for public assurance that some access would be available at all times of the year and the private benefit of only a limited amount of beach area required to be dedicated, neither the landowner/resident nor the public is afforded certainly as to where the public rights will be located in the future. This uncertainty may place an equal burden on the resident's ability to regulate the area not subject to the rights of public access since this area also fluctuates with the tide and the accepting agency/association's ability to establish an effective maintenance program for these access areas.

Establish an effective maintenance program for these access areas.

For the purpose of these guidelines, the daily high water line is defined as a line running parallel to the shore and marks the boundary between the wet and dry sand.

2. *Additional provisions for public access to offset burdens of the proposed project on public access.* As noted previously, in accordance with provisions of Article X Section 4 of the California Constitution, Section 30210 of the Coastal Act requires that public access to and along the shoreline be maximized. Although in many situations a 25 ft accessway or its equivalent for passive recreational use of the shoreline is sufficient to preserve the public right of access, there are projects whose burdens on public access may not be successfully mitigated with an accessway of this nature. In such circumstances, additional area for public access may be required.

In an application for a permit to construct a seawall, for example, an additional beach area generally up to the foot of the wall is required to be granted for public access and use to offset the burdens on access that will result from the construction of the retaining device.

The burden on public access by such devices stems from the impacts of seawalls in the availability of sandy beach. Shoreline protective devices, particularly vertical seawalls, have serious adverse effects on coastal resources. Such seawalls increase scour from their base and, thus, decrease the area of useable beaches. Also, because shoreline protective devices are intended to halt the landward progress of erosion, they tend to define the shoreline in areas subject to erosion. As such, they tend to limit

public passage on beaches especially at high tides and storm conditions. Further, construction of shoreline protective devices eliminates dune materials as a source of beach sand, and further limits the ability of the shoreline to migrate as it would in a natural state. Given these additional direct burdens on the availability of sandy beach and the resultant impacts on public access to the state-owned tidelands, it is only with additional provisions for public access that this burden can be sufficiently mitigated and thus that construction of such devices can be found consistent with Section 30212 of the Coastal Act [See. Inman, Douglas. Summary Report of Man's Impacts of California Coastal Zone, State of California, The Resources Agency, Department of Navigation and Ocean Development, November 1976, page 30. U.S. Army Corps of Engineers. Shoreline Protection Manual.]

In addition, here construction on parcels which historically have been subject to large amounts of public use, or, proposals to construct on parcels where cumulative impacts of buildout would result in limiting public access due to overcrowding of major coastal access roads (e.g. Highway 1, Pacific Coast Highway, Carmel Valley Road) or due to overcrowding of existing public beach areas, the applicant may also be required to dedicate additional accessways or areas for support services (e.g. parking areas) to balance the burdens to the public with the benefit to the applicant. Such additional dedications may also be required to find development consistent with the provisions of Section 30252 of the Coastal Act which provides, in part, that:

The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing non-automobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit for high-intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of onsite recreational facilities to serve the new development.

In considering the potential impacts a new development may have on public access, the Commission should review the proposals in light of the Coastal Act provisions which give priority to specific types of development on oceanfront parcels. Sections 30221 and 30222 of the Act provide that:

Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area. (30221)

The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal dependent industry.

The commitment of oceanfront lands to a non-priority use stipulated in the above quoted Sections of the Coastal Act may burden the future needs of the public by precommitment of coastal land suitable for visitor serving development to totally private use (e.g. residential developments). If potential public or commercial recreation areas are developed for non-recreational use, existing recreational areas will have to absorb the demand created by population increase or increases in leisure time that could otherwise have been absorbed by the parcel in question; moreover a parcel committed to new residential development will itself generate additional recreational demands. To offset the potential burden resulting from its commitment of such lands prior to the certification of a local coastal program which addresses the public access needs of the community, additional areas for public access or a wider range of uses allowed on the accessway provided may be required to balance the burden to the public with the benefit the applicant derives from proceeding with a non-priority development prior to completion of the planning process.

3. *Types of uses of an accessway.* In accord with Section 30214 of the Act, in determining the amount and types of uses appropriate for a given accessway, consideration should be given to the protection of habitat values of the site, topographic constraints of the site, the recreational needs of the public and the privacy rights of the landowner. Restrictions on uses of accessways dedicated in accordance with

permit conditions may be imposed by the accepting agency/association with the approval of the Executive Director to provide for more effective maintenance of the accessway. Example of use limitations are:

- a. *Pass and repass.* Where topographic constraints of the site make use of the beach dangerous, where habitat values of the shoreline would be adversely impacted by public use of the shoreline or where the accessway may encroach closer than 20 feet to a residential structure, the accessway may be limited to the right of the public to pass and repass along the access area. For the purposes of these guidelines, pass and repass is defined as the right to walk and run along the shoreline. This would provide for public access along the shoreline but would not allow for any additional use of the accessway. Because this severely limits the public's ability to enjoy the adjacent state owned tidelands by restricting the potential use of the access areas, this form of access dedication should be used only where necessary to protect the habitat values of the site, where topographic constraints warrant the restriction, or where it is necessary to protect the privacy of the landowner.
- b. *Passive and recreational uses.* Passive recreational uses include those activities normally associated with beach use (e.g. walking, swimming, jogging, sunbathing, fishing, surfing). This *does not include* use of the accessway for organized sports activities, campfires, or vehicular access for other than emergency or maintenance purposes. Most accessways required to meet the provisions of Section 30212 of the Coastal Act should provide for at least this range of uses unless the topographic constraints, habitat values, or privacy needs warrant more restrictive provisions on the use of the accessway. More restrictive uses such as limitations in hours or restrictions on use during specific seasons in order to protect habitat values may be included where such site specific impacts have been identified.
- c. *Active recreational uses.* Recreational uses include the full range of beach oriented activities. This type of use of a given accessway may be required where the burdens of the proposed projects would severely impact public recreational use of the shoreline, where the proposed development is not one of the priority uses specified in Section 30222, where the uses reflect the historic public use of the parcel (see prior discussion on prescriptive rights), where the uses allowed would be consistent with the use of the proposed project development is for a commercial or visitor serving facility or a large subdivision where the beach area is proposed as a recreation center for the subdivision, etc.) and where such uses would not significantly interfere with the privacy of the landowner (e.g. where the project is sited on a bluff above the accessway, or where the project is physically separated from the accessway by dunes, or retaining device, etc.). The accepting agency/ association with the concurrence of the Executive Director may restrict some of these uses to facilitate maintenance of these accessways.

4. *Privacy Buffer.* In determining the specific siting of an accessway, the protection of the right of privacy of the adjacent landowner should be considered. Where a residential structure is located on the beach with no physical barrier such as a seawall separating the residential structure from the accessway, the accessway should not extend any closer than 10 feet to the occupied residential structure. The range of uses within the area from 10 to 20 feet from the occupied structure may additionally be limited where the Commission determines that this is necessary to protect the privacy of the residents. In such cases, the area from 10 to 20 feet from the residential structure may be used for pass and repass with all areas seaward of the 20 ft line available for passive recreational use. In determining an appropriate access buffer, the need for privacy should be considered in light of the public right to obtain access and use along the shoreline; the buffer area should not act to preclude the public right of access to and use of the publically owned tidelands. New development should be sited a sufficient distance landward from the oceanfront to assure that the public's right to access and use of the access easement is protected. Thus, with appropriate siting limiting the encroachment of structures seaward, both the public's right of access and the residents right to privacy can be protected.

B. *Bluff Top Access.*

Where no beach area exists and a project is proposed along a shorefront bluff top lot, public access for public viewing of the shoreline rather than for access along the shoreline may be required to find the project consistent with the access provisions of Section 30212 as well as Section 30251 of the Coastal Act which provides that:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, minimize the alteration of natural landforms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreational Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

Such accessways should run along the edge of the bluff and be of a width adequate to provide safe public access along the bluff edge of the property. In reviewing the need for such accessways to grant the public the ability to enjoy the publically owned tidelands, the Commission should consider:

- a. Public safety constraints of the site, including but not limited to the stability of the bluff edge on which the accessway would be located; and
- b. Habitat values and agricultural uses which may be adversely impacted by such access and any mitigation measures, which may be used to provide access consistent with the protection of such habitat values and agricultural uses such as restrictions on the number of persons using the accessways and seasons of the year during which access may be appropriate; and
- c. Privacy rights of the subject landowner and any mitigating measures, which may be implemented to offset burdens the access may have on privacy, such as the use of a buffer area between residential structures and the accessway.

Where the Commission determines the bluff top access is appropriate and required under the provisions of the Coastal Act, the considerations set forth in the previous discussion of lateral access provisions may be applicable to the bluff top accessway conditions.

1. *Description of the accessway.* The bluff top view area should be described as an area beginning at the current bluff edge extending approximately 25 feet inland (the width of the accessway may be increased to provide for areas where heavy public use is anticipated or where use in addition to pedestrian access is proposed). Because of the potential for erosion of the bluff edge, the easement shall be allowed to be adjusted inland to the current bluff edge as the edge recedes. However, the easement should not extend any closer than 10 feet from an occupied residential structure to assure an adequate privacy buffer for the residents. The easement area should be legally described with the furthest inland extent of the easement possible referenced (i.e. beginning of the buffer area as a distance from a fixed monument (e.g. center-line of a public road).

2. *Appropriate Uses.* The use of bluff top accessways should be limited to pedestrian access and coastal viewing purposes. Where the accessway is included in a section of a coastal bicycle trail system, the use of the accessway may provide for bicycle access if such use is consistent with the public safety and the protection of resource values of the site. Any additional proposed uses of bluff top accessways should be reviewed in light of the specific needs of the area and the constraints existing on the project site.

3. *Privacy Buffer.* Where a residential structure exists on the project site or where the proposed project is for the construction of a residential structure, the accessway should be sited and designed to provide a buffer area between the accessway and the residential structure. Generally, a 10 ft. buffer between the accessway and the structure will protect the residents right to privacy where the accessway is for pedestrian use. Where additional uses for the access area are proposed, additional buffer area may be provided to offset the impacts that the additional uses, such as bicycle traffic may have on the residential use of the structure.

C. Vertical Access.

Vertical access dedications are required to provide access from the first public roadway to the shoreline. New development proposed on sites located between the first public road and the sea may be required to provide vertical access under the mandates of Section 30212 of the Coastal Act. In determining where vertical access should be required, the Commission should consider, the nature of the burden on public access created by the project (see previous discussion on new development), the

public need to gain access to the shoreline in a given area, the physical constraints of the site including but not limited to, safety hazards, existence of fragile coastal resources and current agricultural uses, the location of support facilities such as parking areas, and the privacy needs of the residents of the project site.

1. *location of vertical accessways.* The location of vertical accessways shall reflect the rights of the public to reach the shoreline in specified areas and the need to protect specific coastal resources as set forth in section 30212 of the Act. 80% of the population of the State of California lives within a two hour driving distance from the shore, with the majority of this population centered in the major metropolitan areas. In considering the siting and location of vertical accessways, the Commission should consider the areas which would be most heavily used in light of the proximity of the accessway to the major urban centers. Additional vertical accessways should be provided at frequent intervals, where the Commission determines that public use will be heaviest. The increased number of vertical accessways may be required to avoid over use of individual areas by distributing the public use to areas where support facilities can accommodate it. In rural areas, accessways may be sited at less frequency reflecting the lower intensity use of the areas due to the distance of the accessways from urban areas. In considering the need for vertical accessways in both urban and rural areas, the Commission should also consider the need to site accessways where the least amount of improvements would be required to make the access point useable by the picnic, where pocket beaches exist and alternative access to the shoreline would not be available, where support facilities exist or can be provided, and where the access corridor would have the least amount of impacts on the natural and forms in the area. In addition to vertical access across the project sites, access along existing private roads may be required to fulfill the access provisions of the Act.

Vertical access may be inappropriate on some sites where such access would have an adverse impact on fragile coastal resources and on existing agricultural operations as stated in Section 30212 of the Act. Limited forms of access may, however, be provided consistent with the protection of these resources. For example, it may be appropriate to restrict the location of vertical accessways to avoided interfering with agricultural activities and bisecting agricultural parcels, to limit the times of year the accessway is open to public use to avoid conflict with nesting seasons or other seasonal habitat values, and to institute a maintenance and monitoring program to assess the impacts of public use and proposed additional limitations on use to protect existing resources.

2. *Description of vertical accessways.* The vertical accessway should usually be sited along the borders of the project site and should extend from the road to the shoreline (or bluff edge if access is required to reach a bluff top viewing area). Where a different siting of the accessway would be more appropriate considering the topography of the site and the design of the proposed project, the accessway may be resited (e.g., along a walkway through a commercial development or along a roadway in a proposed subdivision).

A vertical accessway should be a minimum of 10 feet in width to allow for public pedestrian use of the corridor. This width may be adjusted to meet the needs of the proposed accepting agency/association. In considering the width of the vertical accessway, additional area needed for the placement of improvements should be taken into account (e.g., the need to construct stairs). Where the accessway will be used for other than pedestrian access, additional area may be required to accommodate these needs.

Where an accessway provision over private roads is required, the length of the accessway and the area of the road proposed for public use should be specifically described. The use of the road should be guaranteed by a recorded easement and should extend to a specific access point at the shoreline. The width of the accessway should be determined by the types of uses proposed i.e., vehicular access, pedestrian access).

3. *Use of the accessways.* The use of a vertical accessway along the boundary of a project site is usually limited to the public's right to pass and repass. Additional uses, such as access for bicycles, may be provided where determined that such use is appropriate. Where access along a private road is required vehicular use as well as pedestrian access may be required. In determining whether vehicular access should be provided, the distance from the entrance to the beach area and the availability of parking at the point of access to the shoreline should be considered.

4. *Privacy Buffer.* Where a vertical accessway for pedestrian use is sited on a parcel where a residential structure exists or is proposed for construction in the proposed project, the accessway should not be sited any closer than 5 feet to the residential structure. This 5 foot buffer will be provided to protect the privacy rights of the residential of the site. In some instances, resiting of the proposed project may be required to provide the needed access corridor and still allow for a buffer between the accessway and the residential structure.

D. *Exceptions of the requirement that access be provided in "new development."*

As discussed previously, public access to and along the shoreline must be provided in "new development" projects located between the first public roadway and the sea. Section 302.12 of the Coastal Act provides that following exceptions to that requirement:

1. It is inconsistent with the public safety, military security needs, or the protection of fragile coastal resources;
2. Adequate access exists nearby; or
3. Agriculture would be adversely affected.

In some instances by limiting the amount, type or hours of use of an accessway, public access may be provided consistent with public safety and protection of agriculture and agriculture and fragile resources. Where it is impossible to provide any amount of public access without adversely affecting agriculture or fragile coastal resources or jeopardizing public safety or security needs, or if adequate access exists nearby, no provision for public accessways is required to find the project consistent with Section 302.12 of the Coastal Act.

1. *Determining potential adverse impacts of public access on resources.* Potential impacts of public access on fragile coastal resources and agricultural uses existing on a site should be determined by balancing the need for public use with the potential additional private use of the accessways which will result, both individually and cumulatively, from approval of the proposed project. For example if a parcel is proposed for subdivision into 100 single family residential lots, impacts of public use on coastal resources should be reviewed in light of the use inherently generated by the private development being approved.

2. *Possible mitigation measures.* where fragile coastal resources exist on the site or where the site is currently used for agricultural purposes, and if full public access would have an adverse impact on such resources or such use, limitations on public use should be imposed to allow for public access consistent with the protection of the values of the site. Restrictions on the seasons during which public access would be allowed and the number of persons using the accessways may be imposed to mitigate impacts on the access on the fragile resources (e.g. restricting access during nesting seasons of endangered species; restricting the amount of vertical accessways thereby limiting the use of beaches with fragile resource values). In some instances, closely monitored access for scientific research by organized study groups may be allowed where less restrictive access would be detrimental to the protection of the resources of the site.

Where a proposed accessway would have a potential conflict with agricultural uses, limited public uses such as those noted for the protection of fragile resources may be required. Generally conflicts with agricultural uses arise from the siting of vertical accessways. In such cases, restricting such accessways to roadways and limiting use during seasons where the access would not interfere with the agricultural operations may be required to provide access consistent with Section 302.12. Accessways shall not create the potential for vandalism or limit agricultural practices such as spraying.

3. *What constitutes adequate access nearby?*

Although the question of whether adequate access exists nearby applies to the siting of both lateral and vertical access, the Commission has generally found that existing access along the shoreline is not adequate to serve the public needs as related to the burdens on public access imposed by new development projects due to the uniqueness of each stretch of shoreline, the need to define the area of

public use due to conflicts between the use by the public and private property owners, the fact that high tides and storms often impede the public's use of the state owned tidelands due to the inability to pass along the shoreline making each link important to assure that access to all stretches of the state owned tidelands is provided, and that the need to provide sufficient area to assure access to and along the shoreline (Section 30212) for all beach visitors without overloading any single beach area, lateral access is generally required along all stretches of sandy beach.

As discussed previously, the adequacy of available vertical access is determined by the amount of public use of the area, availability of support services, location of pocket beaches, etc.; for a more complete discussion, see discussion on siting of vertical accessways.

IV. HOW SHOULD DEDICATIONS OF PUBLIC ACCESSWAYS BE ACCOMPLISHED?

Provisions for public access should be made in one of three forms: (1) deed restrictions; (2) grant of a fee interest in the accessway; or (3) offer to dedication or grant of an access easement. The proposed use of the accessway as well as the type of project proposed should be considered in determining the appropriate mechanism for dedication of the accessway for public use.

A. *Deed Restrictions.*

In contrast to the other two mechanisms for providing public access, deed restrictions do not grant any interest in the land proposed for public access. The landowner retains all responsibility for the accessway. Deed restrictions may be appropriate in limited situations to assure that public use of a specific area is not precluded by subsequent actions of the landowner. For example, where access is required in a large residential development and the accessways will be used most often by residents of the project, the homeowners association may retain all property interest in the accessways but must allow the public the right of use. This requires the association to continue with the maintenance responsibilities associated with the operations of the accessways. Deed restrictions may also be used to assure continued public access in commercial facilities. This is generally appropriate since, for security needs of the facility, maintenance of the accessways are most effectively handled by the owner/operator of the commercial development. Deed restrictions should generally not be used for small parcels or for accessways that will require public maintenance.

B. *Grant of Fee Interest.*

In some instances, the applicant may be required to grant a portion of the property itself for public access. This is generally limited, however, to situations where the parcel is important in and of itself for access needs. The size and scope of the proposed project should be considered in determining whether the grant of a fee interest in the accessway is necessary to find the project consistent with the public access provisions of the Coastal Act. As with the grant of an easement, an agency or association approved by the Commission must accept the grant prior to its being effective. Because of time delays in obtaining an accepting agency and processing the acceptance of a grant of both fee interests and easements, offers to dedicate such interests (as described below) should be required rather than an outright grant.

C. *Grant of an easement.*

An access easement allows the public to use the accessway in accordance with the terms and conditions set forth in the grant of the easement. This right to use does constitute an enforceable interest in the land vested in the accepting agency/association. The owner of the parcel retains the ownership of the land subject to the public's interest in the area covered by the easement. Since the rights of the public are bound by the terms of the easement, the area covered by the easement and the appropriate uses must be specifically set forth in the documents conveying the interest to the accepting agency/association. Easements must be accepted by an agency or association acceptable to the Commission prior to being effective. As with the grant of a fee interest because of the time delays in accepting any interest in land, offers of dedication should be used to accomplish the conveyance.

D. Offers of Dedication.

Rather than requiring an outright dedication of a fee interest or an easement over the accessway, the Commission should require the execution of an offer to dedicate the appropriate interest. This offer, which must be recorded, can then be accepted by the appropriate agency within a significant amount of time. This mechanism assures that the appropriate interest is available for acceptance but does not impose the burden on the applicant of holding up construction of an approved project while an accepting agency is found and paper work is processed. Offers to dedicate should be irrevocable for a period not in excess of 21 years to maximize the options available to potential accepting agencies to assess the current and future need for such accessways. Until the offer is accepted, *or unless the landowner consents*, the public has no rights to use the proposed accessways unless other public rights exist in the proposed accessways.

APPENDIX B

Assembly Bill No. 989

CHAPTER _____

An act to amend Sections 31400, 31400.1, 31400.2, and 31401 of, to add Article 3 (commencing with Section 30530) to Chapter 6 of Division 20 of, and to repeal Sections 31405.5 and 31406 of, the Public Resources Code, relating to coastal accessways, and making an appropriation therefor.

LEGISLATIVE COUNSEL'S DIGEST

AB 989, Kapiloff. Public resources: coastal accessways.

(1) Existing law states that it is the intent of the Legislature to vest authority in the Department of Parks and Recreation to implement a system of public accessways to and along the state's coastline. The department is required to develop and adopt standards to guide public agencies in acquiring and developing public access to coastal resources. The State Coastal Conservancy is authorized to award grants to the department and local agencies for acquisition and initial development of public accessways to the coast.

This bill would remove this authority from the Department of Parks and Recreation and would provide that the State Coastal Conservancy shall have a principal role in implementing a system of public accessways to and along the coast, and would allow the conservancy to make grants to any public agency authorized to acquire, develop, and operate public coastal accessways. It would direct the California Coastal Commission to prepare a public coastal access program including an inventory of existing and proposed accessways and offers of dedication of property for such purpose and maps thereof. It would direct the commission to make recommendations to guide other public agencies in the identification, development, and management of public coastal accessways and to identify those agencies deemed suitable to control specific accessways for which no agency has accepted such responsibility and, together with the conservancy, assist such agencies in accepting such management responsibilities. It would direct the commission and the conservancy to report annually to the Governor and Legislature on progress in the implementation of these provisions.

(2) The bill would appropriate \$63,000 to the commission for expenditure for purposes of this bill during the 1979-80 fiscal year.

Appropriation: yes.

The people of the State of California do enact as follows:

SECTION 1. Section 31400 of the Public Resources Code is amended to read:

31400. The Legislature finds and declares that it is the policy of the state that the right of the public to access and enjoyment of the coastal resources should be effectively guaranteed. To achieve such objective, it is the intent of the Legislature that the State Coastal Conservancy have a principal role in the implementation of a system of public accessways to and along the state's coastline.

SEC. 2. Section 31400.1 of the Public Resources Code is amended to read:

31400.1 The conservancy may award grants to any public agency having authority to acquire, develop, and operate public coastal accessways for purposes of the acquisition of interests in, and for initial development of, and which are suitable for and which will be used for public accessways to and along the coast. No such grants may be awarded to any local agency unless the conservancy has first determined that the subject accessway will serve more than local public needs.

SEC. 3. Section 31400.2 of the Public Resources Code is amended to read:

31400.2 The conservancy may provide up to the total cost of the acquisition of interests in land and the initial development of public accessways by any public agency, as provided in Section 31400.1. The amount of funding provided by the conservancy shall be determined by the total amount of funding

available for coastal public accessway projects, the fiscal resources of the applicant, the urgency of the project relative to other eligible projects, and the application of factors prescribed by the conservancy for the purpose of determining project eligibility and priority in order to more effectively carry out the provisions of the division.

SEC. 4. Section 31401 of the Public Resources Code is amended to read:

31401. The conservancy shall develop and adopt standards to guide state and local public agencies and federal agencies to the extent permitted by federal law or regulations or the United States Constitution in acquiring and developing public access to coastal resources. Such standards shall be incorporated within an integrated system of public accessways to and along the state's coastline which shall become an element of the California Outdoor Recreation Resources Plan required by Section 5099.2.

SEC. 5. Section 31405.5 of the Public Resources Code is repealed.

SEC. 6. Section 31406 of the Public Resources Code is repealed.

SEC. 7. Article 3 (commencing with Section 30530) is added to Chapter 6 of Division 20 of the Public Resources Code, to read:

Article 3. Coastal Public Access Program

30530. It is the intent of the Legislature, consistent with the provisions of Chapter 9 (commencing with Section 31400) of Division 21, that a program to maximize public access to and along the coastline be prepared and implemented in a manner that ensures coordination among and the most efficient use of limited fiscal resources by federal, state, and local agencies responsible for acquisition, development, and maintenance of public coastal accessways. There is a need to coordinate public access programs so as to minimize costly duplication and conflicts and to assure that, to the extent practicable, different access programs complement one another and are incorporated with an integrated system of public accessways to and along the state's coastline. The Legislature recognizes that different public agencies are currently implementing public access programs and encourages such agencies to strengthen those programs in order to provide yet greater public benefits.

30531. The commission shall be responsible for the preparation of a public coastal access program which includes the elements set forth in this section and which, to the maximum extent practicable, is incorporated into the local coastal programs prepared, approved, and implemented pursuant to this division.

(a) On or before January 1, 1981, the commission shall prepare a coastal access inventory. The coastal access inventory shall be updated on a continuing basis and shall include, but not be limited to, the following information:

(1) A list identifying lands held or operated for the purpose of providing public access to or along the coast. Each listing shall include a brief description of the type of access provided, access constraints, access facility ownership, and resources or uses for which access is provided or suitable.

(2) A list of known offers to dedicate, accepted dedications, and other legally binding actions taken that provide opportunities for any type of public use of or access to or along the coast. Each listing shall include a brief description of the legal status of the instrument granting or otherwise providing public access, whether public access is physically available, and if not, what action is necessary to be taken to accomplish actual public use.

(3) A map showing the precise location of the listings included pursuant to paragraphs (1) and (2) of this subdivision.

(b) On or before June 1, 1980, the commission shall, in consultation with the Department of Parks and Recreation, the State Coastal Conservancy, and other appropriate public agencies, make recommendations to guide state, local, and to the extent permitted by law federal public agencies in the identification, development, and management of public accessways to and along the coast. The recommendations made pursuant to this section shall be consistent with the public access policies of this division and, with respect to recommendations relating to development of public accessways, consistent with the policy of protecting coastal resources.

(c) On or before January 1, 1981, and from time to time thereafter, the commission, in consultation, in consultation with the State Coastal Conservancy and other affected public agencies, shall identify the public agency or agencies it deems the most appropriate agency or agencies to accept responsibility for the management of those public coastal accessways listed pursuant to subdivision (a) for which no public agency has accepted such management responsibilities. In identifying the agency or agencies most appropriate to accept public access management responsibilities, the commission shall include its best estimate of costs for the development, operation, and maintenance of such accessways and shall recommend to the Governor and the Legislature a method of funding such costs. In preparing its recommendations for funding coastal accessway operation and maintenance costs, the com-

mission shall, develop alternative, innovative funding techniques that take into account the appropriateness of local funding for the operation and maintenance of accessways that serve primarily local needs. If the commission identifies a state agency as the appropriate agency to assume management responsibility and such agency does not accept such responsibility, the agency shall, by December 31 of the year in which the commission completes its report, advise the commission of its reasons why it did not or cannot accept such responsibility, the State Coastal Conservancy shall take those actions it deems appropriate, including necessary agreements, to negotiate or otherwise accomplish the acceptance of management responsibility by the agency identified by the commission.

30532. The commission may enter into agreements with or issue grants to any public agency for the purpose of assisting the commission in meeting the requirements of this article. The commission shall, to the extent available funding permits, enter into agreements with those state agencies that currently operate some form of public coastal access program for the purpose of completing the inventory required by subdivision (a) of Section 30531. The commission shall enter into an agreement with the State Coastal Conservancy to provide the funding necessary for the conservancy to carry out its responsibilities pursuant to this article and Chapter 9 (commencing with Section 31400) of Division 21.

30533. The commission, and the State Coastal Conservancy, shall on or before January 1, 1981, and on or before each January 1 thereafter, report to the Governor and the Legislature that progress made in implementing the public coastal access program established by this article. It is the intent of the Legislature that the commission, the State Coastal Conservancy, and all other appropriate public agencies proceed with all deliberate speed to implement the provisions of this article prior to the deadlines established in this article.

30534. The commission shall, within 10 days after receiving evidence of recordation of any offer to dedicate real property for access to or along the coast, which dedication was required as a condition to the issuance of a coastal development permit, forward a copy of such evidence and a description of such real property to the Department of Parks and Recreation, the State Coastal Conservancy, and the State Lands Commission.

SEC. 8. The sum of sixty-three thousand dollars (\$63,000) is hereby appropriated from the General Fund to the California Coastal Commission for preparation of a coastal access inventory, planning, development of recommendations, and other activities authorized by Article 3 (commencing with Section 30530) of Chapter 6 of Division 20 of the Public Resources Code for expenditure during the 1979-80 fiscal year.

