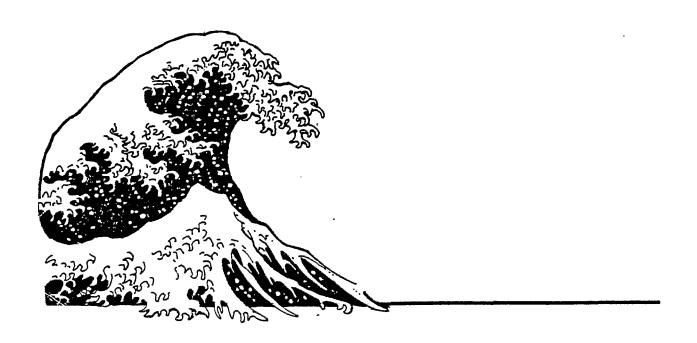
MARIN COUNTY LOCAL COASTAL PROGRAM UNIT 1 - Amended



MARIN COUNTY COMMUNITY DEVELOPMENT AGENCY 3501 Civic Center Drive, Room 308 San Rafael, California 94903

MARIN COUNTY

LOCAL COASTAL PROGRAM

UNITI

Amended

ADOPTED BY MARIN COUNTY BOARD OF SUPERVISORS

August 21, 1979

CERTIFIED BY STATE COASTAL COMMISSION

April 1, 1980

The following document is the current amended version of the 1981 Marin County LCP Unit I, which reflects all policy text amendments approved by the California Coastal Commission from 1982 to 2004. Following each amended policy а note that provides the details is Resolution(s)/Ordinance(s) passed by the Marin County Board Supervisors that proposed and adopted each text amendment, as well as the corresponding action(s) of the California Coastal Commission. information contained herein is current as of April 16, 2010, and is the most accurate portrayal of the amended LCP Policies to the best knowledge of the Marin County Community Development Agency at this time.

Original LCP Unit I Prepared by: The Marin County Comprehensive Planning Department (1979):

Marjorie Macris, AICP Director

Allen Meacham Coastal Planner

Malcolm Sproul Coastal Planner

Liz Scott/Irene Laycock Senior Typist

Larry Smith Graphics

Carol Horowitz Editor

The preparation of this planning document was funded by a grant administered by the Office of Coastal Zone Management, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1972. CZM 78-115.

Amended LCP Unit I Prepared by: The Marin County Community Development Agency (2010):

Brian Crawford Director

Thomas Lai Deputy Director

Jack Liebster Principal Planner

Kristin Drumm Senior Planner

Alisa Stevenson Assistant Planner

Don Allee Senior Clerk/Typist

TABLE OF CONTENTS

INTRODUCTIONv
I. PUBLIC ACCESS AND RECREATION 3 -
PUBLIC ACCESS3 -
Existing Public Access3 -
Proposed Access 5 -
• LCP POLICIES ON PUBLIC ACCESS 7 -
RECREATION AND VISITOR SERVING FACILITIES 11 -
• LCP POLICIES ON RECREATION AND VISITOR SERVING FACILITIES 13 -
STATE AND FEDERAL PARKLANDS 14 -
• LCP POLICIES ON STATE AND FEDERAL PARKLANDS 14 -
II. NATURAL RESOURCE PROTECTION 15 -
STREAM PROTECTION 15
Pine Gulch Creek 15 -
Redwood Creek 17 -
• LCP POLICIES ON STREAM PROTECTION 19 -
LAGOON PROTECTION21 -
• LCP POLICIES ON LAGOON PROTECTION 25 -
DUNE AND SANDY BEACH PROTECTION 28 -
• LCP POLICIES ON NATURAL DUNE AND SANDY BEACH PROTECTION 29 -
HABITAT PROTECTION 30 -
Coastal Communities - 30 -
Duxbury Reef 31 -

• LCP POLICIES ON HABITAT PROTECTION 34 -
AGRICULTURE 34 -
• LCP POLICIES ON AGRICULTURE 35 -
III. SHORELINE PROTECTION AND HAZARD AREAS 37 -
Seacliff Retreat 37 -
Seismicity 38 -
Shoreline Erosion: - 39 -
Protection of Existing Structures and County Liability 40 -
• LCP POLICIES ON SHORELINE PROTECTION AND HAZARD AREAS 40 -
IV. PUBLIC SERVICES AND NEW DEVELOPMENT 44 -
PUBLIC SERVICES 44
Water Supply 44 -
Sewage Disposal 46 -
Transportation46 -
• LCP POLICIES ON PUBLIC SERVICES 48 -
NEW DEVELOPMENT AND LAND USE 51 -
Historical Resources 51 -
Archaelogical Resources 56 -
Visual Resources 56 -
Housing 56 -
Grading 63 -

• LCP POLICIES ON NEW DEVELOPMENT AND LAND USE 64 -
LOCATION AND DENSITY OF NEW DEVELOPMENT 67 -
Priority Uses 67 -
Muir Beach 68 -
Stinson Beach 68 -
Seadrift 70 -
Bolinas 77 -
Non-Community Plan Areas 78 -
• LCP POLICIES ON LOCATION AND DENSITY OF NEW DEVELOPMENT 78 -
APPENDICES 86 -

LIST OF FIGURES Page 1: Unit 1 Local Coastal Program Boundary......-2 2: Duxbury Reef Reserve and Extension Area of Special Biological Significance-33 3: Concentrations of Low and Moderate Income Housing Units-59 4: Areas of the Seadrift Subdivision-82 -

LIST OF TABLES

		<u>Page</u>
1.	Location of Moderate Cost Housing Units in the Coastal Zone	58
2.	Coastal Housing Conditions	58
3.	Employment, Housing, Population Forecast	60
4.	Buildout Potential in Stinson Beach	69
5.	Buildout Potential in Bolinas	78

INTRODUCTION

This document is the Land Use Plan for the Local Coastal Program (LCP) for Unit I of the Coastal Zone of Marin County. The boundaries of the Unit I Coastal Zone are shown on Figure 1, and generally consist of the southern portion of Marin County's coastline, including Bolinas, Stinson Beach, and Muir Beach. Policies for the remaining portion of Marin's Coastline, Unit II, are found in a separate document.

This document was prepared pursuant to the Coastal Act of 1976, which required all coastal jurisdictions to prepare a Local Coastal Program. A local Coastal Program is "a local government's land use plans, zoning ordinances, zoning district maps, and implementing actions which, when taken together, meet the requirements of, and implement the provisions and policies" of the Coastal Act at the local level.

The purpose of the Local Coastal Program is to ensure that the local government's development plans, policies, and ordinances conform to the policies of the Coastal Act of 1976. The Act's goals are to protect and conserve the State's coastal resources and to maximize public use and enjoyment of them. The policies of the Coastal Act, Chapter 3, have formed the basis for the policies contained within this document. Where any question is raised concerning the interpretation of policies within the LCP, Chapter 3 of the Coastal Act may be used to provide clarification of LCP policies. In preparing the ordinances that will implement this LCP, minor modification to a small number of policies has been made. The implementing ordinances shall be used to provide clarification of policies as necessary.

This document is a composite of that adopted by the Board of Supervisors and the one subsequently certified by the State Coastal Commission. This revised document was completed in May, 1981.

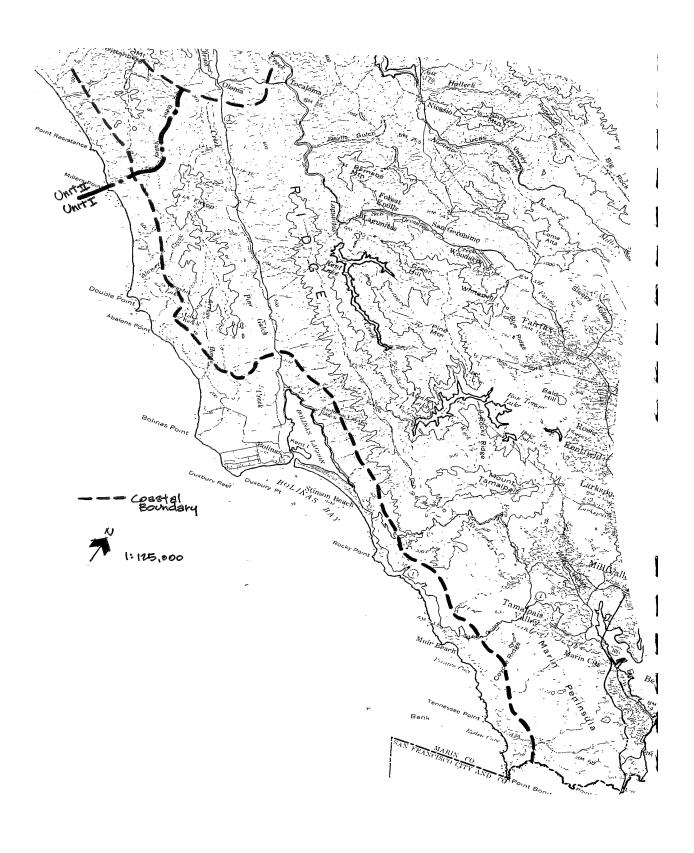


Figure 1: Unit 1 Local Coastal Program Boundary

I. PUBLIC ACCESS AND RECREATION

PUBLIC ACCESS

Existing Public Access

Virtually all lands within Unit I, with the exception of the communities of Muir Beach, Stinson Beach and Bolinas, are in public ownership for recreational purposes: the Point Reyes National Seashore, Golden Gate National Recreation Area, Mt. Tamalpais State Park and several county parks. Public access to these lands seems to be assured. Planning for proposed uses is currently taking place for both the federal and state park lands and will be completed in the near future. Public access to the shoreline bounded by the three villages and other private lands is also available.

<u>Muir Beach</u>. The shoreline at Muir Beach includes the areas known as Big Beach, Little Beach and stretches of steep rocky shoreline. The main beach or Big Beach is part of the Golden Gate National Recreation Area (GGNRA) and includes an unpaved parking lot that can accommodate 250 cars and restroom facilities. It is a short walk from this area along the shore to Little Beach, which is also open for public use. The remainder of the shoreline at Muir Beach is generally steep and inaccessible; however, in the north of this area there is a federally owned observation point (Muir Beach Overlook). The point of land which forms the westernmost extension of the Muir Beach area, Spindrift Point, is owned by the Nature Conservancy. Users of Big Beach and the observation point numbered approximately 375,000 in 1978, but this figure has fallen in 1979 to 298,000.

Stinson Beach. The shoreline at Stinson Beach is composed entirely of a broad sandy beach. Public access to Stinson Beach currently involves land owned by three different entities. The most accessible entrance to the beach is on the federal lands at the southern end of the beach. Most of the public comes to this area since it contains the only developed recreational site (picnic areas, lifeguards, etc.) and it has a large parking area which can accommodate up to 1,200 cars. Further north public access depends upon the County owned and maintained street at Calle Del Sierra, plus the private roads at Calles Del Occidente, Embarcadero, Ribera, Risaca, Onda, Padera and Pinos. These private roads are all unpaved and are periodically roped off with signs indicating that they are private lands. Nevertheless, they are a common point of access and thus there is strong evidence that prescriptive rights exist in this area. Next to the Calles are the Patios (Sonoma, Sacramento, Rafael, Jose, Joaquin, Francisco and Alamedo). These cul-de-sacs off Calle Del Arroyo are also privately owned unpaved streets. The Assessor's Parcel maps indicate that five foot wide private easements run from the patios between the lots to the paper street of Mira Vista. Indeed, one of these easements (at Jose Patio) has been dedicated to the public. However, use of the access trails in this area has been blurred by time and by development, with the consequence that the public has little awareness of the existence of these paths and public access opportunities through the Patios are minimal. At the end of the Patios is the final street before reaching the Seadrift Subdivision, Walla Vista. Walla Vista is currently being developed by private parties pursuant to the conditions imposed on Coastal Permits #179 through 182. A Quitclaim deed for Walla Vista has been conveyed to the "People of California" by the applicants, but the issue of legal title remains clouded.

Regardless of these developments, however, Walla Vista is a frequently used access point to the beach, and there is strong evidence of the existence of prescriptive rights over this area. The County owns the lot at the end of Walla Vista. Parking exists for these access points along the north side of the County owned street of Calle Del Arroyo.

An exact determination of the number of visitors to Stinson Beach each year is difficult to make because of the great amount of access that occurs in the privately owned sectors. Figures for the Federal lands indicate that 835,000 members of the public visited the Federal portion of the beach in 1978. The number of visitors dropped 17.4 percent in 1979 to 642,000. Despite this decrease the Federal parking area was closed six times that year because it had reached capacity (compared to 12 times the year before). In addition, the drop in attendance is not expected to begin a pattern of decreased visitation. (The 1979 drop is thought to be due to gasoline awareness and unseasonable weather.) Therefore, it seems safe to assume that while Stinson Beach will be able to meet public demand an overwhelming majority of the time, there will be occasions when its access areas will reach capacity. To ensure that this access situation maintains its current level of effectiveness the County has adopted a policy which requires the signing of access points at Calle del Arroyo and proposed County ownership of several more access points if access availability diminishes.

Related to the issue of access at Stinson Beach is the status of beach use at the Seadrift Subdivision. Comprising the northern 2 miles of ocean front in the Stinson Beach area, access to the beach is currently assured only within the mean high tide line. The rest of the beach is in private ownership although there is evidence to indicate that prescriptive rights do exist in this area. The Coastal Commission is attempting to establish an overall agreement with the oceanfront property owners allowing public use of the beach. The County also has a policy to this effect. In the absence of an overall agreement the Coastal Commission's policy has been to make individual applicants make irrevocable offers of dedication of an easement for lateral access on the beach. To date this has included four lots. Policy I-13(a) (see below) will continue this practice. Parking and vertical access requirements can be met by the use of existing areas in the Calles and Patios.

Public access to the inner or Bolinas Lagoon side of the Seadrift Spit is guaranteed only by walking the length of the spit on the ocean side and remaining within the mean high tide line. The policy in the Seadrift section states that no development of any lots owned by the developer (The William Kent Estate Co-) at the time of adoption of the LCP shall occur until the developer dedicates the unsubdivided 17 acres that front on Bolinas Lagoon for educational and scientific purposes. This would establish a limited public access to and along this shoreline.

Most of the remainder of the Bolinas Lagoon Shoreline is either in public ownership, GGNRA, Mt. Tamalpais State Park, County park, or is in private ownership, Audubon Canyon Ranch, which allows public access.

Bolinas The ocean shoreline in the Bolinas area is primarily in private ownership. Access to the shoreline in the downtown section is from two public roads (Wharf Road and Brighton Avenue), which terminate at the beach. Blufftop viewing of the ocean is available along much of Ocean

Parkway (although this street is not continuous since it has eroded in some areas), and a small, five car parking area and bench is provided for this purpose at the end of Overlook Drive. In the Duxbury Point area, access is primarily from the County maintained Agate Beach Park. A 30 car parking lot is provided there. North of Agate Beach to' the southern boundary of the Point Reyes National Seashore, the land is in private ownership but has been proposed for inclusion in the National Seashore. The beach area along this section of coast provides seclusion and a different. type of recreational use. Horseback riders, beach hikers and surfers have traditionally been the principal groups using this beach. Presently, the Coastal Commission's permit conditions on the Commonweal project provides for both the potential development of parking facilities and the continued use of two access paths from Mesa Road to the sea. These facilities, developed and maintained for public use, provide limited access to this rugged beach area. As a function of future investigation of both federal park management plans and agriculture uses of the lands, further determinations on the need or desirability of additional access provisions will be examined.

Proposed Access

Because much of the shoreline in Unit I is already in public ownership, provision for additional access will be limited to those lands recently authorized for addition to the National Park and public access easements on private lands in the three communities to be required as a condition of coastal permit approval.

The County's general access program for the above mentioned areas will be conducted in the following manner. In conformance with Section 30604(c) of the Coastal Act, Policy 1-1 requires that each coastal permit project located between the sea and the' first public road will be reviewed to determine what access and recreation conditions shall be imposed to meet the public access requirements of the Coastal Act. The parcel will be evaluated to determine what types of public interests may be involved, whether there is evidence of public prescriptive rights (historic public use), and the most appropriate means of guaranteeing access to beaches and recreation areas.

As Section 30212 of the Coastal Act recognizes, there are situations in which public access would not be appropriate because, for example, it would be inconsistent with the protection of fragile coastal resources, public safety or agriculture. Policy I incorporates much of the intent of Section 30202, but has also recognized that in many situations the negative impact can be mitigated with adequate setbacks, screening, trail and stairway development or regulated hours and seasons of use. Where public access is not required as a condition of development approval, specific findings must be made that none of these mitigation techniques would be feasible or desirable.

The Coastal Commission's Access Guidelines list three types of access easements which may be required as a condition of a permit. Policy 1-2 incorporates these types of easements into the County's access program. Specifically, lateral access dedications may be required for access along the shoreline on a beach or rocky shore immediately adjacent to the mean high tide to the first line of terrestrial vegetation. Where easements along blufftops are desirable for tidal viewing or trail purposes, blufftop easements will be required. Vertical access dedications can be required in conjunction with lateral or blufftop access dedications to allow public access to the shore or bluff.

Section 30211 of the Coastal Act mandates that where prescriptive rights exist, they must be protected. A legal determination of whether prescriptive rights exist can only be made by the courts; however, where evidence of possible prescriptive rights is found as a result of permit application review, the legislature's intent must be implemented by the reviewing agency. Therefore, Policy 1-3 requires easements be established as a condition of permit approval where evidence of historic public use is discovered. In accordance with the Coastal Commission's Access Guidelines, some flexibility has been incorporated into this policy to allow the resiting of accessways created by historic public use where the applicant provides equivalent areas for use elsewhere in the vicinity.

The County of Marin believes the most effective means of fulfilling Coastal Act access and recreation policies is by dedication of an easement to a specific agency. Thus, where there is a public agency that will immediately accept an easement or parcel, this method will be used. The County will be the accepting agency in -certain situations, although the obligation to open the easement will not accrue until the County has sufficient finances. It is expected that the issue of financing will be alleviated by recent legislative amendments to the Public Resources Code, which give the Coastal Conservancy the power to finance local government acquisition and development of accessways. When no agency or association is currently ready to accept the dedication, an offer to dedicate, available for 20 years, will be required. This requirement will ensure that such offers do not lapse before they receive adequate attention from potentially interested agencies. Additionally, the California Coastal Commission and Coastal Conservancy will be immediately notified of any such offers of access easements.

Pursuant to Section 30212.5 of the Coastal Act, the development of adequate access support facilities, including parking, should be distributed within the Coastal zone. As a part of access considerations, the need for and feasibility of limited size parking areas shall be determined and required. However, parking area easement dedications and/or subsequent parking area construction must be consistent with the LCP policies encouraging public transit as the primary method of accommodating future demand for access to coastal areas. Therefore, the LCP policies require the consideration of the effect and relationship of parking areas to the overriding policy of encouraging public transit. To encourage use of public transit, when it is available, parking areas may be closed, reduced in size, or not developed.

LCP POLICIES ON PUBLIC ACCESS

- 1. The County's policy is to require provisions for coastal access in all development proposals located between the sea and the first public road. This policy recognizes, however, that in certain locations public access may not be appropriate. Upon specific findings, that public access would be inconsistent with the protection of 1). public safety, 2) fragile coastal resources or 3) agricultural production or, upon specific findings that public use of an accessway would seriously interfere with the privacy of existing homes, provision for coastal access need not be required. In determining whether access is inconsistent with the above, the findings shall specifically consider whether mitigation measures such as setbacks from sensitive habitats, trail or stairway development, or regulation of time, seasons, or types of use could be developed which would adequately mitigate any potential adverse impacts of public access. A finding that an access way can be located 10 feet or more from an existing single family residence or be separated by a landscape buffer or fencing if necessary should be considered to provide adequately for the privacy of existing homes.
- 2. The provision of coastal access may include any of the following types of easements, either singularly or in a combination:
 - (a) Vertical easements to the ocean
 - (b) Lateral easements along the dry sand adjacent to tidelands
 - (c) Bluff top easements along bluffs for public viewing or trail purposes or where no continuous sandy beach exists.
- 3. Where evidence of prescriptive rights (historic public use) on a project site is determined to exist as a result of permit application review, public easements to protect the types, intensity and areas of historic use shall be established as a condition of project approval. Development may be allowed in an area which has been historically used by the public for vertical access to the beach only when equivalent access which will accommodate the same types and intensity of use has have existed on the subject site, has been assured in the same vicinity.
- 4. Construction of shoreline protection measures otherwise permitted by LCP policies shall accommodate previously existing shoreline access.
- 5. Where appropriate and feasible, parking areas should be provided in conjunction with access easements. The need for parking areas shall be evaluated based upon the parking and/or public transit opportunities available in the area. As transit service becomes available, parking capacities should be reduced or eliminated since transit opportunities reduce reliance on the private automobile.

- 6. The County will accept, and as resources permit, open access easements in the following situations:
 - (a) When the offer to dedicate an easement is made pursuant to evidence of prescriptive rights, or
 - (b) Where the offered easement is in a developed area (density of one unit per acre or higher) where a substantial amount of the use could be expected to be made by local residents.

In all other situations the County shall attempt to find appropriate agencies, including County agencies, to accept and maintain the public access easements. Whenever the County agrees to accept an access easement, the County will be responsible for maintenance and signing of the accessway. If no agency or association is immediately available to accept the grant of an easement, a 20-year irrevocable offer to dedicate the easement shall be recorded by the applicant prior to the commencement of project construction. The County shall immediately notify the California Coastal Conservancy of the existence of such offers to dedicate.

- 7. The County shall post all County owned shoreline accessways which are open and available to the public.
- 8. The County and CALTRANS shall, as resources permit, post informational signs at appropriate intersections and turning points on Highway 1, the Bolinas-Olema Road, and Mesa Road, in order to direct coastal visitors to public recreation and nature study areas in the Unit I coastal zone. Where only limited public access or use of an area can be permitted in order to protect resource areas from overuse, such signing should identify the appropriate type and levels of use which is consistent with resource protection.
- 9. Adequate public access to Stinson Beach currently exists across Federal park lands, County land at Calle Del Sierra and private land at the Calles and Walla Vista. To encourage the continuance of access availability in these areas the County shall post the existing pedestrian access easements along Calle Del Arroyo. However, should the current levels of usage be jeopardized in the future, the County shall open and maintain at least two additional pedestrian access easements on Calle Del Arroyo. One of these will be at Walla Vista; the other would be situated where appropriate in the Calles. On street parking along the northerly side of Calle Del Arroyo shall continue to be available for day-use beach access.
- 10. Public access to Duxbury Reef shall continue to be protected consistent with current State laws prohibiting the collecting of most intertidal animals.

- 11. Historic public use of the two access trails across Bolinas Mesa to the RCA beach and of the beach area itself shall be protected in accordance with the access program approved by the North Central Coast regional Commission in its action on Permit No. 31-78 (Commonweal). As provided by the conditions of the Commonweal permit approval, use of the access trails and beach areas shall be limited to the level and character of the historic use of the property (including but not limited to use for beach access, hiking, swimming, and horseback riding) in order to protect the natural resources of Duxbury Reef. Upon acceptance by a public agency of easements over the access trails, trailheads, and beach areas which are to be offered as a condition of the Commonweal permit approval, limited signing shall be provided to identify the access trails and caution trail users of the fragile coastal resources of the area.
- 12. A determination of the necessity to provide additional access trails across other large agricultural holdings on the Bolinas Mesa should be deferred pending a review of the adequacy of public access opportunities to be provided in the vicinity as part of the Golden Gate National Recreation Area General Management Plan. The necessity for additional access will be reconsidered during the Unit II planning process when appropriate land use designations for the large agricultural holdings in the Bolinas Mesa area will be developed as part of a Countywide approach to the protection of large agricultural holdings.
- 13. The provision of public access to and use of the Seadrift Beach for low-intensity recreational uses shall be assured (1) by requiring, as part of the coastal development permit process for new development projects on ocean front parcels in Subarea 1, dedications of public access consistent with the standards of the suggested settlement agreement as set forth below, and (2) by establishing an overall solution to obtaining access at Seadrift Beach through either (a) an access agreement with the property owners, (b) litigation to establish the public's prescriptive rights gained by historic use, or (3) public purchase. In order to minimize the public costs involved in acquisition or in litigation of the prescriptive rights issue, in addition to requiring dedications, obtaining an access agreement. presents the preferred approach to achieving access to the Seadrift Beach.

In order to facilitate an agreement between the County of Marin, the Coastal Commission, and beachfront property owners, the County or Coastal Commission shall offer a settlement- agreement incorporating the following provisions to the above parties for a period of 18 months from the final certification of the Unit I LCP. These provisions establish the minimum standards necessary to assure public access to Seadrift, but are not intended to represent all of the proposed terms of the agreement in its final form. Minimum standards shall be interpreted to mean that the offered agreement may provide additional access along the beach and additional amenities within the. Easement area but may not in any way diminish the public rights which would be established as a result of an agreement incorporating the following provisions.

(a) A grant to the County of Marin on behalf of the public by the agreeing property owners of a non-exclusive easement for access to and use of the beach. This easement shall include the beach area between the ocean and a line 25:: feet seaward of the toe of the Seadrift sand dunes, provided, however, that the easement shall not extend any closer than 100 feet to the rear building setback line on each ocean front lot. In addition to the above easement, the grant shall also include provision for a floating five-foot wide lateral access easement to be located landward for any wave run-up where such run-up extends further inland than the above easement. In no case, however, shall the five-foot floating easement extend inland beyond the rear building setback line or the toe of the dunes, whichever point is the farthest seaward.

In return for the grant, the agreement shall include an assurance by the state that the existence of public prescriptive rights over any portion of the property affected by the agreement will not be litigated further while the agreement is in effect.

- (b) Use of the easement area shall be limited to low-intensity recreational activities, such as strolling, sunbathing, birding, picnicking, fishing, and general viewing. Structures, camping, group sports, fire, private recreational vehicles, and horses shall be prohibited in the easement areas. Use of the five-foot lateral access easement as described above shall be limited to strolling and viewing purposes only.
- (c) The agreement shall become effective upon its signing by representatives of the Coastal Commission, the State Lands Commission, and the Attorney General on behalf of the State of California, and by no less than seventy-five (75) percent of the beachfront property owners.
- (d) The Attorney General or District Attorney may pursue litigation to establish the existence of public prescriptive rights over the beach, should the agreement not become effective within 18 months from the final certification of the Unit I LCP. Should the agreement become effective, the Attorney General may pursue such litigation on lots which have not been made a party to the agreement.
- (e) Nothing in this policy or the agreements or easements described shall be interpreted as affecting the right of the public to use any portion of the beach subject to the public trust.
- (f) In the absence of an overall agreement providing access and use along the Seadrift beach, the County, as part of coastal permit review, shall require dedications of such access per the standards of the suggested agreement.

RECREATION AND VISITOR SERVING FACILITIES

This section examines the need for and methods of providing private land uses to serve the visitor to the coast. Making land available for visitor-serving and commercial recreation facilities is a- two-pronged issue. One question is the amount of demand for such facilities in Unit I. The second question is how much land can be supplied given competing policies in the Coastal Act.

<u>Demand.</u> There are two basic groups of visitors to the Unit I Coastal Zone. The first is made up of residents of the greater Bay Area who come to Marin's coast for the day. A member of this group is not a candidate for overnight facilities, but instead comes to enjoy the beach, take a hike, take a scenic drive, browse in a few shops, or perhaps all four. This group makes up the majority of visitors to the coastal zone, according to The Visitor in Marin (page 6). The study is now a bit dated (1970), but the importance of this group is highlighted by the emphasis placed on transit in the GGNRA/PRNS General Management Plan and the Golden. Gate Recreational Travel Study.

The second basic group of visitors to Unit I is made up of residents from outside the Bay Area. These visitors are frequently traveling Highway 1 the length of the State and so pass through Marin's coastal zone. Others pass through as part of tours to Muir Woods. Some come during the summer and spend a few days-enjoying the coast.

The number of visitors needing overnight facilities is small, particularly in the non-summer months. While no firm estimate of the visitors needing overnight facilities is available, three facts indicate a low demand. First, existing motels in Stinson Beach have not been able to survive on visitor business. Of four motels in the village only one continues to do the bulk of its business with visitors. Second, Bolinas has not been able to support the half-dozen restaurants which have recently tried to remain open. Third, the physical location of Unit I suggests that overnight business is drawn to San Francisco and eastern Marin. These two areas are no more than one hour from the coastal zone (Bolinas to San Francisco), and each contains overnight facilities with broader services than those available in the coastal zone. San Francisco itself is a destination some travelers pass through Marin's coastal zone to reach.

[&]quot;Visitor-serving facilities" means overnight accommodations, food, services, shopping and amusement areas for tourists. "Commercial recreation facilities" means facilities such as riding stables, chartered fishing boats, amusement or marine parks, operated for private profit. Most commercial recreation facilities require large land or water areas, make intensive use of those areas, and therefore have significant potential adverse environmental effects. No water areas exist in Unit I which can accommodate such impacts. The only land areas capable of supporting such use are in the northern portions of Bolinas community. These lands are agriculturally productive and are therefore not suitable for conversion Section 30242 of the Act). For these reasons Commercial Recreation is not planned in Unit I.

Supply. Setting demand, aside, what land areas can be made available for visitorserving facilities? The most obvious constraint is the large proportion of Unit I land held for park purposes by the state and federal governments. A second constraint is the Coastal Act policies that protects unique communities (Section 30253 (5)). Bolinas, Stinson Beach, and Muir Beach are unique coastal communities. First, their distance from the metropolitan center and suburban communities removes them from day-to-day urban problems. Second, their physical growth is cut off by surrounding parklands. Third, their residents include significant numbers who live in these villages because of their uniqueness and who are committed to preserving a rural, isolated environment. Each of these communities is a visitor-serving use in its entirety, providing a change of pace to visitors who pass through it. Large-scale visitor facilities could undermine the uniqueness of these communities and perhaps destroy them as coastal resources. The provision of land for visitor-serving facilities must therefore be within the existing patterns of these villages. These patterns are identified on the LCP land use maps. Existing visitor-serving uses are listed in Appendix A.

In Muir Beach, the community is essentially built out and surrounding lands are planned for agricultural use. one commercial use, the Pelican Inn, exists at Highway 1 and Pacific Way. No future commercial use is recommended at Muir Beach.

In Stinson Beach commercial development adjoins Highway 1, particularly at its intersection with Calle del Mar. There are 3 vacant parcels in this area suitable for visitor-serving uses that are zoned Village Commercial Residential (VCR). Two other commercially zoned parcels further west, near the highway's intersection with Calle del Arroyo, are also available. There are no other unbuilt areas of the community that are suitably located for visitor-serving facilities.

In Bolinas, commercial uses exist along Wharf Road and Brighton Road. Five vacant parcels in this area are suitable for visitor-serving uses. A particularly unique visitor-serving facility is the Bed and Breakfast program in Bolinas. In this program, rooms and breakfast are made available to visitors in private homes. Coordination of the program is handled by the Art Gallery on Brighton Avenue. Bed and Breakfast facilities are located in individual residences scattered throughout the community. Development of visitor-serving facilities in other parts of the community would involve conversion of agricultural lands and therefore conflicts with local open space and agricultural uses.

Zoning. As a part of its community planning process, the County has developed a Village Commercial Residential (VCR) zoning district for its village core areas. The zone was developed for Stinson Beach's village core and was subsequently applied in other coastal villages, including Bolinas. The stated purposes of the Village Commercial-Residential zone are to maintain the established character of village commercial areas; promote village commercial self-sufficiency; foster opportunities for Village commercial growth; maintain a balance between resident and non-resident commercial uses; protect, without undue controls, established residential, commercial and light industrial uses, and maintain community scale.

These purposes implement the coastal policy on visitor-serving facilities as it relates to the constraints and contending policies of the Coastal Act. Combined, they encourage the maintenance of the existing commercial stock and some expansion of it consistent with the preservation of established village character and scale: those qualities that make Marin's coast a unique destination. By permitting both residential and commercial uses, flexibility is maintained by this zoning district.

The VCR zoning classification has many very positive aspects and is helpful in implementing selected Coastal Act objectives. However, the one drawback of the zone is the lack of regulatory authority to preclude residential development in favor of commercial uses in view of at least two Coastal Act sections (Section 30222 and 30254) that strongly suggest that land uses serving the coastal visitor should be provided and have priority over residential uses. In communities effectively precluded from outward expansion and with. a restricted amount of land otherwise suited for commercial uses, the possibility of losing this small potential inventory of commercial land to exclusive residential use is substantial. Instead, a more definitive, enforcement monitoring system, coupled with minor VCR ordinances changes, is necessary to find that the village commercial land use designations are consistent with the Coastal Act. Essentially, with only approximately 10 vacant parcels in VCR zoning in Unit I (5 in Stinson Beach and 5 in Bolinas) a more explicit, enforceable implementation program is necessary to both encourage and assure development of new commercial uses.

The proposed policies-are intended to retain the positive aspects of the VCR zone in order to protect the established village character of both Stinson Beach and Bolinas. The policy language, however, does provide an additional mechanism to assure that excessive numbers of the existing VCR sites are not lost to exclusive residential uses, in accordance with the land use priorities established by the Coastal Act.

LCP POLICIES ON RECREATION AND VISITOR SERVING FACILITIES

14. Commercial facilities shall be channeled into the existing properties in Bolinas and Stinson Beach zoned for VCR and commercial uses. In order to maintain the established character of the village commercial areas-, a mixture of residential and commercial uses shall be permitted within the VCR zone. The principal permitted use of the VCR zone in the two village centers shall include commercial and residential uses. Exclusive residential uses shall be a permitted use subject to coastal permit review; however, in no case shall such use be permitted on more than 25 percent of the lots that are vacant as of the certification date of LCP I (4-1-80). Replacement of any existing residential use destroyed by natural disaster shall be exempt from the above provision and shall be permitted. The development of motels and hotels in the VCR zone shall require a conditional use permit and is therefore not identified as a principal permitted use in that District.

[Amended pursuant to BOS $\dot{R}esolution$ No. 83-253 [6/14/83], approved by CCC as submitted 8/11/83]

- 15. The current Bed and Breakfast program Bolinas shall be continued, and the program shall be encouraged in the following manner:
 - (a) The County shall encourage the National Park Service and State Parks and Recreation Department to make available advertising space to those homeowners who wish to participate in the Bed and Breakfast program.
 - (b) The County shall encourage the Marin Coast Chamber of Commerce to make available advertising space to those homeowners who wish to participate in the Bed and Breakfast program.

STATE AND FEDERAL PARKLANDS

The issues of planning and management of state and federal parklands is being evaluated in Unit II of the LCP. The following are interim policies that will be followed until they are revised or superseded by the policies of LCP II.

LCP POLICIES ON STATE AND FEDERAL PARKLANDS

16. Role and Relationship of Federal Parklands to LCP Policies

The extensive amount of federal parkland within the coastal zone of Unit I provides significant opportunities for development of coastal access, recreational facilities and visitor support services. Such development opportunities reduce the need to plan for and provide such facilities on the private lands within the coastal zone. The LCP assumes that a major proportion of the access and visitor service needs within Unit I would and can be successfully integrated into federal park development and management programs.

17. Mt. Tamalpais State Park and Lands

The development of additional recreational and visitor services on those portions of the Mount Tamalpais State Park within the coastal zone, including hiking trails, equestrian trails, a "primitive" hostel at the Steep Ravine cabins and improved parking and support facilities at Red Rock are consistent with the LCP policies. Such facilities shall be similar in design, size and/or location as those proposed by the Mount Tamalpais State Park Plan. Consistent with the protection of significant resources, additional trail development to improve access to public tidelands is encouraged.

II. NATURAL RESOURCE PROTECTION

STREAM PROTECTION

Streams and riparian vegetation provide valuable and limited habitat for bird and animal life that must be protected under the policies of the Coastal Act. Riparian vegetation helps maintain a high level of water quality by filtering sediment from surface runoff and stabilizing soil on adjacent stream banks. In addition, the shading offered by streamside vegetation maintains cool streamwater temperatures for fish and promotes a favorable habitat for fish by contributing insects to the stream for food. Riparian vegetation growing at the edges of wetland areas acts as a noise and visual buffer between developed areas and wildlife habitat.

Such streams and adjacent vegetation are fragile habitats which can be easily disturbed or destroyed by stream alterations or by adjacent uses. The loss of riparian vegetation on streambanks can cause erosion and sedimentation to the stream, increased runoff, and higher streamwater temperatures which, in turn, adversely affect fish and wildlife. The proposed policies will assure protection to these fragile habitats through the establishment of limitations on stream alterations, protection of riparian vegetation, and the creation of stream buffer zones in accordance with Sections 30230, 30231, 30236, and 30240 (a) and (b) of the Coastal Act.

Two streams within Unit I are of special significance because they support annual runs of steelhead trout and silver salmon. Because of the importance of these fishery resources, the resource values of both Pine Gulch Creek and Redwood Creek are described in more detail below.

Pine Gulch Creek.

Pine Gulch Creek is an approximately 7 mile long perennial stream that drains a watershed of about 7.8 square miles. Of the 7 mile stream length, 3 miles are within the coastal zone. The portion of the stream within the coastal zone is partially within lands of the Point Reyes National Seashore, but the majority flows through the agricultural lands of Paradise Valley and the Pine Gulch Creek Delta. Upstream from the coastal zone, the creek flows entirely within lands of the Point Reyes National Seashore. Recorded flows have varied from a high of 715 cfs (cubic feet per second) to periods, during very dry years, or no recorded surface flow in late summer. The mean flow, the flow occurring 50 percent of the time, in Pine Gulch Creek is 2 cfs (Ritter, 1975).

Pine Gulch Creek is the principal source of freshwater to Bolinas Lagoon and probably contributes about one-half of the Lagoon's freshwater inflow. This flow is especially important in the summer when the remaining tributary streams dry up or are reduced to very low flows.

The stream supports annual runs of steelhead trout and silver salmon.

The stream provides good spawning and rearing habitat for both species, and is the most important steelhead and salmon stream tributary to Bolinas Lagoon. In addition to the anadromous species, there are resident populations of rainbow trout, stickleback, and sculpin.

Steelhead and silver salmon spawning migrations occur during the period from late November through April in years of normal runoff. Most upstream migration occurs during and immediately following periods of heavy storm runoff. All silver salmon die after spawning. Steelhead, however, begin a return migration to the ocean soon after completion of spawning.

Both juvenile steelhead and silver salmon require a period of residency in the stream before migrating downstream to the ocean. The length of freshwater residency may vary from one to three years or more depending on the living conditions in the stream. The major downstream migration of juvenile steelhead and silver salmon occurs during the period from February through June, depending on the water year and pattern of winter-spring runoff.

Fish habitat is physically reduced to a minimum during the low-flow period of July through October. This is the most critical time for survival of fish populations in Pine Gulch Creek. At this time, the actual physical habitat supporting fish life is at its minimum and the amount of available habitat becomes a limiting factor in the health and survival of fish populations.

Pine Gulch Creek offers excellent summer nursery habitat for juvenile salmonids and other fishery resources. Stream surveys and observations on the Creek have revealed the presence of high populations of juvenile steelhead and silver salmon during the summer and fall months. Headwater springs produce a perennial streamflow that maintains nursery habitat throughout the length of stream utilized by anadromous fishes.

ı

in addition to the anadromous resource, Pine Gulch Creek helps support a wide variety of riparian associated species. Riparian vegetation is dense, consisting of alders and willows in the overstory with a variety of understory shrub and herbaceous species. Wildlife species are especially abundant in riparian zones and virtually all species common to the riparian type could be expected here. In one of the more unusual observations, sharp-tailed sparrows have been found wintering in the Pine Gulch Creek Delta.

Diversion dams and other in-stream structures or streambed alterations can seriously delay, impede or completely block the upstream and downstream migrations of anadromous salmonids. The free passage of fish is required to maintain viable populations. The migration of steelhead and silver salmon on Pine Gulch Creek require unimpeded passage from November through June.

Water diversions can be equally harmful to the salmonid resource. This is especially critical during the low-flow period of July through October when diversions can seriously limit or completely eliminate available habitat.

There are six existing water diversions on file with the Division of Water Rights, State Water Resources Control Board for Pine Gulch Creek. A seventh diversion, by the Bolinas Community Public Utility District, is in the process of being cancelled. The existing filed users can divert approximately 1.8 cfs at maximum allowed use. There may be additional diverters using water under a riparian right, pre-1914 appropriative right, or other claim of right who have not filed with the State.

The anadromous fish resource is the most sensitive wildlife use of the Creek, but most other species found in the riparian zone are dependent on the flow of water to some extent. The diversion, reduction, or elimination of flows in the Creek will reduce the quality of the habitat for these species as well.

Land use along the Creek in the Coastal Zone includes several different agricultural zonings ranging from A-5 to A-60. The majority of the A-60 land is located west of the Creek and at the southern edge of the national seashore, and about half of it is proposed for addition to the seashore. Grazing of cattle is the principal agricultural activity on this land. The land zoned A-5 and A-10 is located in the Paradise Valley, Horseshoe Hill, and Gospel Flat section of Bolinas. Parcel sizes vary, as do the variety of agricultural uses. The Bolinas Community Plan mentions the following agricultural uses in the area: livestock grazing (cattle, horse, goat, sheep), raising other domestic animals (chickens, rabbits, bees), and both small and large scale vegetable growing.

Some agricultural practices can result in adverse impacts upon the fishery resources of the creek and ultimately upon the resource values of Bolinas Lagoon. Land erosion and resulting sedimentation can be accelerated via improper or inadequate soil conservation practices.

Redwood Creek.

Redwood Creek is an approximately 4.8 mile long perennial stream that drains a watershed of about 9.9 square miles. Of the 4.8 mile stream length, approximately one mile is within the coastal zone. The remainder of the stream flows through land owned by several public agencies including the National Park Service, State Department of Parks and Recreation, and Marin Municipal Water District... The portion of the stream within the coastal zone flows through land either owned by the Park Service in the Golden Gate National Recreation Area (GGNRA) or proposed for acquisition by them. No records of stream flow have been kept on a long term basis. Department of Fish and Game personnel measured streamflow on June 18, 1975 at two stations in the Creek. The upper station located at the southern border of Muir Woods measured 0.284 cfs (cubic feet/second). The lower station at the shoreline highway crossing measured 0.07 cfs. These flows were taken at the end of one of the driest rain seasons in this region's recorded history and probably do not represent normal flows for a mid-June period. It is more likely they represent late summer, early fall flows before the onset of the winter rains.

The stream supports annual runs of steelhead trout and silver salmon. The stream provides good spawning conditions and slightly less important juvenile rearing habitat. In addition to the anadromous species, there is also a resident population of rainbow trout in the upper reaches of the stream.

The life history and habitat requirements of steelhead and silver salmon are discussed in the section on Pine Gulch Creek and will not be repeated here. The impacts of stream alteration including diversion dams, streambed alteration, water diversions, and vegetation removal are also discussed in that section, and these impacts apply to Redwood Creek as yell as Pine Gulch Creek. The State Division of Water Rights has no record of filings made to divert water from this Creek. There may be diverters using water under a riparian right, pre-1914 appropriative right, or other claim of right who have not filed statements of Water Diversion and Use with the State. A 1976 Department of Fish and Game stream survey reported two diversions.

The section of stream, through Muir Woods National Monument represents the stream's best spawning substrate and riffle system but provides the least shelter and pool habitat. This has been a result of past bank stabilization and removal of fallen trees and branches. This results in a reduction in the number of juvenile salmonids the stream is able to support. Downstream from Muir Woods, the frequency of 1 and 2 year old salmonids increases markedly where the banks have not been riprapped and where fallen vegetation is not removed.

The approval of the Pelican Inn by the Coastal Commission included a condition that requires a water quality monitoring program of Redwood Creek be instituted. The testing will be done in the adjacent section of Redwood Creek to determine if septic effluent from the Ina is reaching the Creek.

Land use along the Creek in the coastal zone includes a mix of agricultural and residential uses. North of the Shoreline Highway Creek crossing, the land has historically supported a fresh cut flower farm. This land is now partially within the GGNRA with the remainder involved in the acquisition process.

South of the Shoreline Highway Creek crossing are a number of small lots owned by the Zen Center, Audubon Canyon Ranch, and other private owners, zoned R-A:B-2. The majority of these lots have been included for acquisition by the GGNRA in the Burton Omnibus Parks Bill. Five flood plain parcels located along Shoreline Highway, where it crosses Redwood Creek and immediately downstream, were not included in the acquisition bill. The proposed acquisition will place the entire length of the Creek in the coastal zone into public ownership with the exception of three parcels (199-181-06, 13 and 14) owned by the Zen Center, which have about 460 feet of creek frontage. The three parcels are located within the floodplain of the Creek in an area which has flooded regularly. Vegetation is primarily riparian with impressive stands of Red Alder, California Buckeye, and Willow. Wildlife species are especially abundant in riparian zones, and virtually all species common to the riparian type could be expected here.

Based on existing County zoning and standards, development of this land to the highest density allowed by zoning (10,000 sq. ft, lots) could significantly impact the Creek. It would require the removal of significant amounts of riparian vegetation, seriously reducing its value to wildlife. The installation of septic systems or similar waste disposal method would be necessary and would require a 100 foot setback from the Creek. Percolation rates acceptable to the County are not assured due to the periodic flooding and high water table of the properties.

In order to assure protection of the resource values of Redwood Creek, the privately owned parcels along the Creek should be rezoned to a minimum one-acre lot size, including those parcels proposed for acquisition by the GGNRA. Pending acquisition, such lands are still subject to the provisions of the Coastal Act and must be designated for an intensity of use consistent with the resource protection policies of the Act.

LCP POLICIES ON STREAM PROTECTION

The following policies are applicable to all USGS Blue-line Streams.

- 1. Stream impoundments and diversions shall be limited to necessary water supply projects, flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development, or developments where the primary function is the improvement of fish and wildlife habitat. Before any such activities are permitted, minimum flows necessary to maintain fish habitat and existing water quality, and to protect downstream resources (e.g. riparian vegetation, groundwater recharge areas, receiving waters, estuarine habitats, spawning areas) and other downstream users shall be determined by the Department of Fish and Game and the Division of Water Rights of the State Water Resources Control Board. New impoundments or diversions which, individually or cumulatively, would decrease streamflows below the minimum shall not be permitted.
- 2. The alteration of stream channels and banks shall be allowed only for the developments identified in Policy II-1 in order to protect streamwater quality and the volume and rate of streamflow. All such developments shall incorporate the best mitigation measures feasible, including erosion and runoff control measures and revegetation of disturbed areas with native species.
- 3. A riparian protection area and a stream buffer area shall be established for all streams within Unit I. The riparian protection area shall include all existing riparian vegetation on both sides of the stream. The stream buffer area shall extend a minimum of 50 feet from the outer edge of the riparian vegetation, but in no case shall be less than 100 feet from the banks of the stream.
- 4. No construction, alteration of land forms, or vegetation removal, shall be permitted within the riparian protection area. However, if a parcel is located entirely within the stream buffer, design review shall be

required for any proposed structure and shall consider impacts on water quality, riparian vegetation/and the rate and volume of streamflow. in general, development shall be located on that portion of the site which results in the least impact on the stream, and shall include provision for mitigation measures to control erosion and runoff and to provide restoration of disturbed areas by replanting with plant species naturally found on the site.

The following policies are applicable to Pine Gulch Creek.

- 5. The USGS should install a stream gaging station as part of the Army Corps study of Lagoon to measure creek flow below the last significant stream diversion or at a location selected by the Department of Fish and Game, This station shall be monitored by the County Employee who patrols the Duxbury Reef/Bolinas Lagoon area.
- 6. The Department of Fish and Game should begin studies to empirically determine the instream flow requirements of Pine Gulch Creek necessary to maintain the steelhead and silver salmon resource. In the event no funding is available for this work, Coastal Conservancy funds should be sought.
- 7. The County, landowners within the Pine Gulch Creek watershed, and the Soil Conservation Service should undertake a joint study to recommend agricultural uses and practices which will protect the water quality of the creek and also Bolinas Lagoon. The report should be prepared by the Soil Conservation Service. This report should also recommend alternative methods of supply water to agricultural users in the event stream diversions must be halted to protect anadromous resources. The report shall be distributed to all landowners within the watershed. SCS will be contacted to undertake the study upon adoption of this LCP. Where necessary, the findings of the study should be incorporated into the LCP as amendments. Recommended restoration techniques appropriate to permit applications should be included as conditions of permit approval.

The following policies are applicable to Redwood Creek.

- 8. The biotic resources of Redwood Creek shall be protected from intense development by the redesignation of the privately owned parcels along the Creek from 10,000 square feet lot size zoning to a 1 acre lot size zoning. (See Policy IV-27).
- 9. The USGS should install a stream gaging station to measure creek flow below the last significant stream diversion at a location selected by the National Park Service and California Department of Fish and Game. This station should be monitored by the Park Service.
- 10. The Department of Fish and Game should begin studies to empirically determine the instream flow requirements of Redwood Creek necessary to maintain the steelhead and silver salmon resource. In the event no funding is available for this work, Coastal Conservancy funds shall be sought.
- 11. The National Park Service should be encouraged to investigate the possibility of creating artificial pools through Muir Woods National

Monument to increase the streams carrying capacity of one and two year old salmonids. This would increase the number of salmonids spawning within the boundaries of the National Monument, and provide a better opportunity for the public to view salmonid reproductive behavior.

LAGOON PROTECTION

Bolinas Lagoon is a 1400 acre estuarine area composed of salt water, tidal mudflats, marshlands, and sandbars of which approximately 1100 acres are flooded by high tides. Its condition varies from a wintertime estuary to a summertime lagoon, based on the amount of freshwater runoff it receives. Pine Gulch Creek is the principal source of fresh water to the lagoon, probably contributing about one-half of the lagoon's fresh water inflow. The other fifty percent is runoff from creeks which enter the lagoon on the east side. They all flow largely through GGNRA land with flows tied closely to. the rainfall pattern. There is increased flow in winter and little or no surface flow in the summer. The Lagoon has a watershed of about 17 square miles or 10,600 acres. The majority of this land is in some form of public ownership for park use or is privately owned and maintained as a natural area (Audubon Canyon Ranch). The remaining private land is within the planning areas of the Bolinas and Stinson Beach Community Plans. Specific subjects of concern within this area are included in other portions of this report (Pine Gulch Creek, Seadrift, Bolinas Gridded Mesa, Shoreline Development).

The Lagoon has been extensively studied. Topics include its geology (Galloway, 1977), (Gluskoter, 1962 and 1969), and (Wahrhaftig, 1971); hydrology and sedimentation (Burghy, 1971), (Isselhardt and Wilde, 1968) and (Ritter, 1969 and 1973); wildlife (California Dept. of Fish and Game, 1970), (Gustafson, 1968), (Lewis and Sibley, undated), (Page and Stenzel, 1975) and (Rowntree, 1971); marine organisms (Chan, 1967), (Gustafson, 1968), (Molina and Rathburn, 1968) and many papers from the College of Marin, Bolinas Marine Station; and planning issues (Marin County Planning Dept., 1966) and {Sedway, 1971).

The Army Corps of Engineers has begun a major 5 year study of flow hydrodynamics, sedimentology, water quality, and marine and wildlife resources. They plan to produce a model that incorporates these physical processes. By varying the conditions that affect the Lagoon, it will be possible to predict the consequences of proposed actions.

The physical condition of the Lagoon has been affected by two degrading impacts in the recent past: sedimentation and pollution/contamination. Sedimentation is a natural process that all enclosed bodies of water undergo over time. Bolinas Lagoon has two principal sources of sediments: watershed erosion and sediments of a marine origin, principally the eroding Bolinas cliffs outside the mouth of the Lagoon. The exact contribution of each source has not been established, but several researchers feel the marine source is now contributing over half the current sediment load. Watershed erosion was of greater significance in the past when logging, cordwood cutting, overgrazing and poor farm management all increased sediment loads. This source of sediments has been substantially reduced with the inclusion of most watershed land into parks and a halting of poor

land management. Sedimentation will continue in the future as a natural process from the watershed but at a reduced rate. (See Chapter IV for a discussion of development standards proposed to reduce erosion and sedimentation into the Lagoon.) "

Pollution/contamination of the Lagoon has been a recent problem. Pollutants have been identified from three principal sources: watershed runoff, direct sewage discharge into the Lagoon channel, and septic system failure in the Stinson Beach area. The contribution of pollutants from the watershed has dropped substantially with the creation of the federal and state parks and the discontinuance of dairy operations. The contribution from direct sewage discharge has largely been eliminated by the construction of the Bolinas Public Utilities District (BPUD) treatment facility on the Mesa. The problem of septic failures in the Stinson Beach area has also been largely corrected through actions taken by the Regional Water Quality Control.

A quarantine was established on August 12, 1970 to address the problem of Lagoon contamination by BPUD which was discharging raw sewage into the mouth of the Lagoon. The waters of the Lagoon and the immediately adjacent open ocean were quarantined against the uses of water contact sports and shellfish harvesting. The quarantine was to remain in effect until the State and Marin County Public Health Departments determined that sewage treatment facilities adequate to prevent contamination of the Lagoon had been provided by the Bolinas Public Utility District. BPUD has completed sewage conveyance and treatment facilities which under normal operation are . adequate to prevent raw sewage contamination of the Lagoon. The State Department of Health, however, will not make a recommendation to lift the quarantine until two problems are corrected: improving a sewer line on Brighton Street that interchanges fluids with a storm drain and improving the reliability of a lift station that has failed on at least one occasion and allowed raw sewage to flow to the Lagoon. The lifting of the existing quarantine would likely be followed by a new quarantine in the southeast corner of the Lagoon, where sampling has consistently recorded high pollutant levels.

Toxic substances have also been released into the Lagoon. In efforts to control the growth of algae in the Seadrift Lagoon, the water has been treated with copper sulfate. A further treatment measure is a periodic flushing of the lagoon when the tides are of sufficient height. This flushing action of the Seadrift Lagoon releases any toxic substances from it into the Bolinas Lagoon where their effects on aquatic organisms, particularly mollusks, are extremely deleterious.

Management of Bolinas Lagoon is the responsibility of the Marin County Parks and Recreation Department. This responsibility was granted to the County in 1969 through S.B. 2295, which gave the County title to the tidelands in "Bolinas Bay". The legislative grant included numerous conditions upon which the grant was established, such that the lands be used for purposes in which there is a general Statewide interest (shallow draft vessel emergency refuge, park, recreation, fishing, preservation/restoration of biological resources). To implement this grant, the County was to prepare a management plan acceptable to the State Lands Commission and which was to be reviewed

five years after its adoption to determine if it was being implemented. This plan was prepared by the County Parks and Recreation Department and adopted by the Board of Supervisors in February, 1972. The State Lands Commission approved the plan in February, 1973. The County has prepared a five year report describing their actions in implementing the plan for review by the State Lands Commission and which has been approved by them.

The adopted Bolinas Lagoon Plan was developed with one primary goal in mind; "...that the proposals are based on the protection, conservation, and ecological health of the tidelands, while allowing education, scientific study, and recreation which will not be destructive". Elements in the plan include observation points at several locations around the Lagoon, a pedestrian/bike path system from Stinson Beach to Bolinas, an educational facility, and a limited power boat use area between the end of the Seadrift Spit to the existing Bolinas and Seadrift docks. No other developed uses were included and the majority of the Lagoon and the land immediately surrounding it was to remain undeveloped. The major recommendations and policies of the Bolinas Lagoon Plan are summarized below:

- 1. Restoration and preservation of the intertidal and subtidal marine environment is this plan's primary emphasis. Such a goal permits a dual use of the area for nature education and scientific research purposes of a character unmatched anywhere else in California, especially within the boundaries of a major metropolitan area.
- 2. Picnicking, pedestrian and bicycle paths, nature interpretation and study areas, a non-powered boat launching float and related facilities may be provided. These areas and the general setting of the lagoon will permit the pursuit of many recreational activities of Statewide significance, also including fishing, clamming and photography, for instance. Expansion of the small boat harbor facility is not recommended as being detrimental to the main.
- 3. An all weather harbor of refuge has previously been rejected because of its inordinately high cost and detrimental long term effects on the lagoon's biological community. Present boating facilities are to be retained with minor channel and related improvements aimed at perpetuating the access of shallow draft vessels to authorized areas, The Corps of Engineers is to study monitored rehabilitative dredging under its existing authority.

Since the adoption of the plan, the Bolinas Lagoon Technical Advisory Committee has been formed. The Committee consists of representatives from several institutions or agencies with a direct interest in Bolinas Lagoon and citizen representatives from Bolinas and Stinson Beach. They advise the Parks and Recreation Commission on important planning issues concerning the Lagoon. Their role and membership is further defined in the Bolinas Lagoon Five Year Report.

An important action taken on the advice of the Bolinas Lagoon Technical Advisory Committee was to initiate the actions which led to the designation of Bolinas Lagoon as a "Nature Preserve", as defined in Marin County Code 10.06. Nature preserves are County parks "...where the primary objective is

to retain the area it its natural state". This formal action implements the primary goal of the 1973 plan.

There are two remaining areas of land use resource conflict on or near the Lagoon, excluding Seadrift which is discussed in a separate section of this report. One concerns the marshy pastures south of the Pine Gulch Creek Delta. These lands have been identified by Page and Stenzel (1975) as important feeding and resting areas for shorebirds. A portion of this land has been acquired by the County, but the section adjacent to the Bolinas-Olema Road is in private ownership. The land is zoned A-10, but none of the parcels are ten acres in size. Homes are found on several of the parcels. The land known as the "Wilkins" parcel contains the majority of the significant marshy areas. Under the existing zoning, one home could be built on this land. The value of the land to shorebirds could be greatly reduced if current agricultural uses were to change.

A second area along Bolinas Lagoon where resource conflicts remain includes the lots along the northerly side of Calle del Arroyo in Stinson Beach. Many of these small (40 feet by 80 feet) lots consist of unfilled marsh area, while other parcels have been historically filled and/or now support houses.

Section 30240 of the Coastal Act requires that environmentally sensitive habitat areas be protected against any significant disruption of habitat values, that proposed development in areas adjacent to sensitive area, s be sited and designed to prevent impacts which would significantly degrade such habitat, and that the development be compatible with the continuance of the habitat areas. Based upon the preponderance of evidence that has been developed in connection with the impacts on Bolinas Lagoon of additional development in the adjacent Seadrift subdivision (where the nearest lagoon lots are located on the other side of a road and over 100 feet away from the lagoon), the type and intensity of development which would be permitted under the present zoning for existing lots northerly of Calle del Arroyo would also significantly degrade the habitat values of the adjacent marsh area and would be inconsistent with this section of the Coastal Act. Lots on Calle del Arroyo are only 80 feet in depth and are therefore severely constrained both in their suitability for the use of septic systems, and the difficulty in providing an adequate setback from the lagoon to assure that such development will not adversely impact the adjacent habitat areas.

The types of impacts that would result from such development in conflict with Section 30240 of the Act would be both indirect and direct. These impacts include the preconstruction activities, such as grading, filling, and other such activities which involve the use of heavy equipment. Such activities would significantly increase the production of sediment into the lagoon, increase the ambient noise level in the area, and would be severely disruptive of wildlife use of the adjacent marsh areas that are located less than 80 feet away. (Such activities will be even closer where development would take place on those lots which consist primarily of marsh.) Completed construction and use of structures permitted under the present A-1 zone would generate additional disturbances of the marsh wildlife, and would potentially contribute to degradation of the area's water quality through the increased coverage of the area by impervious surfaces, which would increase stormwater runoff and the quantity of heavy metals, hydrocarbons, and nitrates

discharged into the lagoon. Such development adjacent to the marsh would also increase the likelihood of increased intrusion into these habitat areas, especially by domestic pets and by the residents of the dwellings.

To mitigate these impacts this plan proposes a resource management area designation that would permit use of the property for various low-intensity activities by right and by special use permit. This designation will assure protection of the fragile resources contained within the adjacent marsh area. The uses proposed will provide for reasonable use of the property in recognition of the severe development constraints which affect development of these lots. These development constraints have generally been recognized in the existing real estate market since land values on this portion of Calle del Arroyo are less than one tenth those of similar shorefront properties in the Seadrift area. Redesignation of the property, however, will assure that the land use on the property will be consistent with the Coastal Act and that it will not encourage future speculation and the development of expectations that such lots may indeed be usable in the future for single-family development creating future pressure for such incompatible development.

The area along Calle del Arroyo has long functioned as the only location in this entire of Stinson Beach where members of the public can park on the street in order the roadway to obtain access to Seadrift Beach. Construction of structures along the northerly side of would eliminate a substantial portion of the existing parking which has historically been available to the public by the construction of driveways and by potential pre-emption of on-street parking by residents within the new houses. The proposed resource management area designation would therefore be consistent with Section 30211 of the Coastal Act, which provides that development shall not interfere with the public's right of access to the sea where acquired by use.

Construction of structures on the northerly side of Calle del Arroyo would substantially degrade public views from Calle del Arroyo into the adjacent lagoon, and would also degrade scenic views of the slopes of Bolinas Ridge which are also available from Calle del Arroyo. Therefore, the proposed designation is consistent with Section 30251 of the Coastal Act, which provides, in part, that permitted development shall be sited to protect views to and along the ocean and scenic coastal areas.

LCP POLICIES ON LAGOON PROTECTION

- 12. A single, coordinated resource management plan to guide the future use and activities in and around Bolinas Lagoon shall be developed with the involvement of the various public agencies that have specific legislative and regulatory responsibilities over different activities in and around the Lagoon. This plan would identify:
 - The level, type and location of recreational facilities and uses;
 - The level, type and location of commercial fishing and aquaculture activities;
 - The location and types of educational and scientific programs and facilities;
 - The legal and physical programs necessary to protect and enhance specific wildlife and marine resources and habitats; and
 - The management techniques, programs and responsibilities to successfully implement such a resource management plan.

Such a joint agency/organization resource planning program shall be established within 12 months of final certification of the LCP. The County of Marin would seek Coastal Commission or Conservancy funding to establish this management program.¹

- 13. Prior to the completion of the joint agency resource planning program described in Policy 11-12, above, the following policies shall apply:
 - (a) Except where modified below, the Bolinas Lagoon Plan's Policies are incorporated by reference as the LCP policies governing uses and development in and around the Lagoon.
 - (b) The diking, filling, dredging and other alterations of these wetlands shall occur only for minor public works projects and shall be in conformance with Coastal Act Section 30233. The construction of physical improvements along the Bolinas Lagoon parklands is not consistent with these Lagoon policies.
 - (c) Maintenance dredging of existing boating channels may occur prior to final recommendations of the present Army Corps of Engineers study. Additional alteration of these wetlands will be considered as an LCP amendment following review of this study's recommendations.
 - (d) Commercial extraction of marine species should be prohibited pending completion of adequate base studies and the management program. Recreational fishing activities should be monitored by the Department of Fish and Game to establish any necessary modifications in open areas or take limits.
 - (e) The Lagoon's waters continue to experience significant pollution and degraded quality from past and present adjoining land use activities. The correction of those factors contributing to poor water quality shall continue. However, until tests substantiate conclusive improvements in water quality, the health, safety and welfare of the general public require continuation of existing health quarantine for the Lagoon.
 - (f) A five mile per hour speed limit will be established within the Lagoon in order to protect wildlife habitat from disturbances and to minimize conflicts between swimmers, fishermen, naturalists, boaters, and other lagoon users. An ordinance that, at the minimum, includes such a speed limit shall be presented to the State Coastal Commission for certification within 120 days of the adoption of the land use plan.
- 14. The use of toxic substances to control algae growth in any body of water which is discharged into a public waterway shall be subject to a discharge permit from the Regional Water Quality Control Board.
- 15. The possibility of a publicly-sponsored restoration project to eliminate all vacant lots along the north side of Calle del Arroyo through acquisition or the transfer of what limited development potential such parcels may have to another area is encouraged. The Coastal Conservancy, the Audubon Society and other potentially interested agencies or organizations should be advised of the importance of pursuing such a restoration project.

¹ This project has been completed as of January, 1981.

16. Pending implementation of a restoration project for the vacant lots along the north side of Calle del Arroyo, the area shall be redesignated as a "Resource Management Area" for a use or uses consistent with the maintenance of the marsh areas located both on and adjacent to the lots. The designation of the area as a "Resource Management Area" will recognize the severe development constraints affecting these properties due to their size and location in proximity to Bolinas Lagoon, and will thus assure conformity with Sections 30233 and 30240 (a) and (b) of the Coastal Act.

Permitted uses of the Resource Management Area shall include fishing, birdwatching, photography, nature study, and other similar scientific and recreational uses. In addition, other uses may be permitted by use permit which will assure that such uses are sited and designed to be of controlled intensity and location such that they will not adversely affect the adjacent marsh area. The use permit procedure shall also assure that the uses are compatible with the character of the adjacent community. Uses which may be permitted by use permit shall include: small boat and equipment storage, non-commercial private parking, apiaries, truck farming, (provided that the application of pesticides, herbicides and other toxic chemicals is prohibited), and other uses of similar type and intensity.

Existing dwellings shall be designated non-conforming uses but shall be allowed to rebuild if damaged or destroyed by natural disaster, provided however, that the floor area, height and bulk of the new structure shall not exceed that of the destroyed structure by more than 10 percent, and that the new structure is set back as far as feasible from the wetland area. Any proposed improvement to an existing home which results in more than a 10 percent increase in internal floor area of the structure shall require a coastal permit in order to assure that such an improvement is sited and designed to minimize impacts on the adjacent marsh. Such improvements shall only be permitted if an acceptable wastewater system is provided in accordance with the applicable LCP policy, and if the improvements are located as far as feasible from the adjacent wetland area.

17. The eleven-acre Henry Wilkins property (Assessor Parcel Numbers 195290-13 and 24) is the only remaining hightide roost for shorebirds and water fowl in Bolinas Lagoon that is protected from significant disturbance, and is the only habitat adjacent to the lagoon for snipe (Capella gallinago), with a population of about 100 individuals. In addition, it is one of the few locations around the lagoon where there is a transition from salt marsh to freshwater marsh habitats and thereby adds to the total diversity of habitat areas around the lagoon. In order to protect the wetland and upland habitat values of the parcel, changes in existing grazing use of the site shall be preceded by detailed environmental investigation and shall assure protection of the habitat values of the site in accordance with other policies in the LCP. Public acquisition of the site is encouraged.

18. To the maximum extent feasible, a buffer strip, a minimum of 100 feet in width, shall be maintained in natural condition along the periphery of all wetlands as delineated by the Department of Fish and Game and in accordance with Section 30121 of the Coastal Act and with the criteria developed by the U.S. Fish and Wildlife Service. No uses other than those dependent upon the resources shall be allowed within the buffer strip.

DUNE AND SANDY BEACH PROTECTION

The natural dune formations and sandy beach areas require protection to assure consistency with several different policies of the Coastal Act. Such dunes and the sandy beach areas (formed as a result of natural shoreline processes) provide natural protection from wave runup generated from prolonged storms and high seas, and provide environmentally sensitive habitat for several species of plants and animals that have been able to adapt to the harsh environment of the shoreline and the rigors of wind, sand, and salt. Such plants form an integral part of the dune ecosystem by stabilizing dune formations and providing feeding and nesting habitat for several wildlife species. The dune and plant associations are fragile systems that are especially subject to disruption. Natural sand dunes and sandy beach areas are also part of the natural shorelines process of littoral sand transport along the coast. Sandy beach areas, while providing essential protection to upland areas from wave runup, also provide habitat area and are a valuable resource which must also be protected under the Coastal Act. Natural dune formations and sandy beach areas are located primarily in the Seadrift and Stinson Beach areas.

Section 30240 of the Coastal Act provides that environmentally sensitive habitats be protected against any significant disruption of habitat values, that proposed development in areas adjacent to sensitive areas be sited and designed to prevent impacts which would significantly degrade such habitat, and that the development be compatible with the continuance of the habitat areas.

Section 30235 of the Coastal Act specifically limits any construction that alters natural shoreline processes to situations where it is required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion and where it is designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Residential development on natural sand dunes and on sandy beach areas, if permitted, would significantly disrupt the natural shoreline process. Therefore, consistent with this policy of the Coastal Act, LCP Policies restrict residential development from natural dune areas and areas of sandy beach, since such development is not a coastal dependent use for which alteration of natural shoreline processes is permitted under the Coastal Act. Such a policy, which requires preservation of the natural system of protection from wave run-up and high seas, will also minimize the necessity for shoreline protective devices, in accordance with the policy of the Coastal Act.

Of particular concern is the protection of the natural dune formations and sandy beach area located west of the paper street Mira Vista in the

Patios of Stinson Beach, The dunes and beach area were historically subdivided into residential lots and could some day be potentially subject to pressure for development. At this time, the lots are generally owned by contiguous properties across Mira Vista, partially as protection to these lot owners to assure future protection of their existing views of the ocean. While the Stinson Beach Plan proposes to achieve protection of these dune areas through a land trade between these property owners and the land now within the street-right-of-way, such a trade now appears very difficult to implement because of uncertainty as to the ownership of the existing street-right-of-way. Lot consolidation with the contiguous lots across Mira Vista Street will assure protection of this significant dune system in a manner which simply memorializes the existing pattern of land ownership in the area.

Section 30211 of the Coastal 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.) The LCP public access policies serve to incorporate this provision of the Coastal Act policy into the LCP in order to assure that the dry sand areas along Seadrift and Stinson Beach to the first line of terrestrial vegetation shall be protected for both public use and enjoyment consistent with the protection of private property rights. These beach areas have historically received tremendous use from residents of the entire Bay Area and provide one of the sunniest, most fog-free climates of any coastal area in the immediate vicinity. Under the above cited section of the Coastal Act, such historic public use of these beach areas must be protected.

LCP POLICIES ON NATURAL DUNE AND SANDY BEACH PROTECTION

19. In order to preserve the natural sand dune formation and sandy beach habitat, and to protect potential prescriptive rights over the dry sand areas west of the Patios, development of the existing lots west of the paper street Mira Vista shall not be permitted. These lots shall be rezoned from R-1 to RSP-2.0, and contiguous ownerships across Mira Vista shall be consolidated in order to assure protection of the existing sandy beach areas. No development, including erection of fences, signs, or other structures, shall be permitted west of Mira Vista in order to preserve both the natural dune habitat values, vegetation and contours, as well as the natural sandy beach habitat, and to protect potential public prescriptive rights over the area.

The County shall continue to pursue a land trade between the lots seaward of Mira Vista and the street right-of-way as proposed in the Stinson Beach Community plan, in order to more clearly establish and define the boundaries between public and private beach areas.

20. Development of other shorefront lots within the Stinson Beach and Seadrift areas shall assure preservation of the natural sand dune formations in order to protect environmentally sensitive dune habitat and vegetation and to maintain the natural protection from wave runup that such natural dunes provide. Where no dunes are evident, any new development

on shorefront lots shall be set back behind the first line of terrestrial vegetation to the maximum extent feasible, in order to minimize the need for protective works, to protect sandy beach habitat, and to provide a buffer area between private and public use areas in order to protect both the scenic and visual character of the beach, and the public right of access to the use and enjoyment of dry sand areas.

21. No additional subdivision of beachfront lots shall be permitted in recognition of the cumulative negative impacts such divisions would have on both public and private use of the beach, except if a finding is made that such a subdivision will be consistent with the above policy. Similarly, the erection of fences, signs, or other structures seaward of any existing or proposed development and the modification of any dune or sandy beach area shall not be permitted except as provided in Chapter III of the LCP in order to protect natural shoreline processes, the scenic and visual character of the beach, and the public and private use of dry sand areas in accordance with Section 30211 of the Coastal Act.

HABITAT PROTECTION

Coastal Communities

Various resource and habitat areas have generally been identified in the community plans for the Muir Beach, Stinson Beach, and Bolinas communities, as well as in a publication entitled: "Natural Resources of the North Central Coast Region" prepared in 1975 for the North Central Coastal Commission. They include:

<u>Muir Beach</u>. The Elizabeth Terwilliger Butterfly Trees are located at Pacific Way and Lagoon Drive and consist of a grove of introduced Monterey Pine Trees. Additional Butterfly Trees are located along both sides of Pacific Way and are one of the few local resting places for Monarch Butterflies on their yearly migration. These trees are reported to contain 60,000 to 70,000 butterflies from October through February (Berhnheim, 1973).

<u>Stinson Beach</u>. The Stinson Beach community contains many large cypress trees which also provide roosting habitat for the Monarch butterflies on their annual migration. In addition, there are significant stands of native bay trees as well as an alder grove at the juncture of Stinson Creek and Bolinas Lagoon.

<u>Audubon Canyon Ranch</u>. The Ranch contains approximately 1300 acres and supports a large egret and heron rookery in the redwood grove located in Audubon Canyon.

<u>Bolinas</u>. The Bolinas area contains several important habitats which have been identified in the Bolinas Community Plan and the document "Natural Resources of the North Central Coast Region". These habitat areas are described below.

Upland Grasslands: Shorebirds of many species forage on the grassy uplands during high tides and winter storms when suitable habitat at Bolinas Lagoon is unavailable. Limited grazing of these lands does not seem to affect the habitat value of these lands and may even tend

to improve it since tall vegetation can obstruct the movements of the feeding birds.

Egret and Heron roosting areas: Trees located at the foot of Francisco Mesa and Kent Island provide roosting habitat for herons and egrets, including the Black-crowned Night Heron.

Bolinas Quail Refuge: The entire mesa became a quail refuge in the 1920's probably to provide a means of prohibiting hunting. The Coastal Scrub vegetation on the mesa provides habitat for large populations of many different species of wildlife,

Butterfly Trees: Bolinas contains several groves of introduced tree species which serve as resting places for wintering Monarch Butterflies. Although each grove is not used every year, all groves have been used in the past.

White-tailed Kite Habitat: Within the United States, the white-tailed kite is currently only found in California and is designated as a protected species by the Department of Fish and Game. Grasslands on the Bolinas Mesa and along Horseshoe Hill Road provide feeding areas for this species. The kites also use oak trees for roosting at night and as nesting sites during the breeding season.

The location of these habitat resource areas are shown on the natural resource maps on file with the Marin County Planning Department.

While some of these areas, such as the Elizabeth Terwilliger Butterfly trees and the Alder Wood in Muir Beach, are proposed for acquisition by the GGNRA, The LCP must include policies to assure their protection while the lands remain under the Commission's jurisdiction. Similarly, other resource and habitat areas exist within the Unit I area which must be protected in order to assure consistency with Section 30240 (a) and (b) of the Coastal Act.

Duxbury Reef

Duxbury Reef is an approximately 66 acre intertidal shale reef which extends for two and one-half miles off the Bolinas Peninsula. At minus tides, the exposed reefs stretch as much as one-half mile from the shore. It is the largest reef on the west coast of the United States and the largest shale reef in the country (Chan and Molina, 1969). It supports unusual and large populations of California-Mussel, rockboring invertebrates, and other marine organisms. Studies of Duxbury Reef marine invertebrates have been carried out by Chan (.1974), Chan and Molina (1969) and Gosliner and Williams (1970). Studies have also been conducted by Chan (1970, 1971) on the effects of educational use on the Reef.

The Reef has been designated a Marine Life Reserve in the California Fish and Game Code and is identified as an "Area of Special Biological Significance" by the State Water Resources Control Board. The marine reserve was established in 1972 in recognition of the special biological significance of the area. 'Basically, this means that only market and rock crabs, abalone, and those marine fish for which the Department of Fish and Game has set size, seasonal and bag limits can be taken within the boundaries of the

reserve. The limitations are contained in Section 27.20 of the Fish and Game regulations, which states:

In the Duxbury Reef area in Marin County no fish expect abalone, market crabs (Cancer spp.), rockfish (Sebastes spp.), lingcod, cabezon, perch (Embiotocidae), halibut, flounder, sole, turbot, salmon, kelp greenling, striped bass, steelhead, monkey face-eel, rock-eel, wolf-eel, and smelt (Atherinidae and Osmeridae) may be taken between the high tide mark and 1,000 feet beyond the low tide mark at any place on the coastline or any reef or rock situated between the westerly extension of the southerly boundary of the Pt. Reyes National Seashore and the southerly extension of the centerline of Kale Road in Bolinas Beach. All other fish and forms of aquatic life are protected and may not be taken without a written permit from the Department.

"Areas of Special Biological Significance" are those areas designated by the State Water Resources Control Board as requiring protection of species or biological communities to the extent that alteration of natural water quality is undesirable. The Duxbury Reef reserve is described geographically in State law as follows:

From Point 1 determined by the intersection of the mean high tide line and the southerly extension of the centerline of Kale Road at Bolinas Beach; thence northerly and westerly along a meander line following the mean high tide line to Point 2 determined by the intersection of the mean high tide line and the westerly extension of the southern boundary of Point Reyes National Seashore; thence along the westerly extension of the southern boundary of Point Reyes National Seashore to a distance of 2,000 feet beyond the mean high tide line; thence southerly and westerly parallel to the mean high tide line at a distance of 2,000 feet to the intersection with the southerly extension of Kale Road; thence along the aforesaid extension northerly to Point 1.

Figure 2 shows the location and extent of Duxbury Reef.

The Reef is currently patrolled by a representative of the County Parks and Recreation Department on a daily basis. It is on a route which includes Bolinas Lagoon and other nearby County maintained facilities, The Reef is also patrolled by two Department of Fish and Game wardens (one marine and one land based) who patrol the area routinely on a biweekly basis. More intensive coverage is given during periods of minus tides.

In the past, Duxbury Reef has been subject to over use by rock clammers and educational visitors. Rock clammers regularly chopped up the soft shale to harvest the abundant boring clams. This activity resulted in a leveling of portions of the Reef and a reduction in the available habitats (crevices) for many marine animals. Educational visitors were in the habit of collecting virtually any marine animal which they discovered (especially the larger species such as sea stars and crabs) as they moved over the Reef, greatly reducing the population levels of many species. Since the establishment of the Duxbury Reef Marine Reserve, State laws prohibiting the collecting of most intertidal animals, and the regular patrol of the reef area by

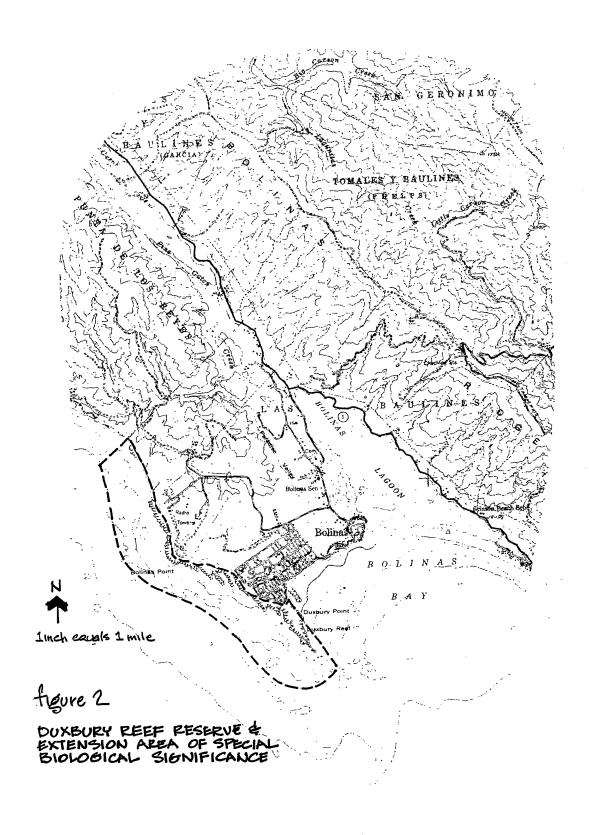


Figure 2: Duxbury Reef Reserve and Extension Area of Special Biological Significance

County of Marin Parks and Recreation Department personnel, impacts associated with human use have been greatly reduced. (Zeigler, 1978) The present level of protection and patrol coverage is adequately protecting the marine resources. The proposed expansion of the Point Reyes National Seashore to land south of the present boundary would include the north section of the Reef and would increase patrol activity by park service rangers to the least patrolled section. This will also reduce the possibility of deleterious land uses occurring on lands above the Reef.

LCP POLICIES ON HABITAT PROTECTION

- 22. Butterfly trees and other trees or vegetation identified on the natural resource maps on file with the Marin County Planning Department, which provide roosting and/or nesting habitat of wildlife, shall be considered major vegetation, and significant alteration or removal of such vegetation shall require a coastal project permit pursuant to Section 30106 of the Coastal Act. Such trees shall not be altered or removed except where they pose a threat to life or property.
- 23. Development adjacent to wildlife nesting and roosting areas shall be set back a sufficient distance to minimize impacts on the habitat area. Such development activities shall be timed so that disturbance to nesting and breeding wildlife is minimized and shall, to the extent practical, use native vegetation for landscaping.
- 24. Public access to these identified sensitive habitat areas, including the timing, intensity, and location of such access, shall be controlled to minimize disturbance to wildlife.
- 25. Fences, roads, and structures which significantly inhibit wildlife movement, particularly access to water, shall be avoided.
- 26. Upland grassland feeding areas shall be protected against any significant disruption of habitat values.
- 27. Use of Duxbury reef shall continue to be regulated in accordance with existing State laws. The area should continue to be patrolled by a representative of the County Parks and Recreation Department on a daily basis.
- 28. Invasive exotic plant species are proliferating in the Coastal Zone at the expense of native plants. In order to preserve indigenous native plant species within the Coastal Zone, development permits shall be conditioned, where applicable, to require the removal of any invasive, non-indigenous plant species such as Pampas Grass, Brooms, and Thistles.

AGRICULTURE

The issue of agricultural land use in Unit I can be examined at two levels. First, there are those larger land holdings historically mostly involved in grazing or other extensive agricultural operations. Such agricultural

operations are limited in Unit I and are concentrated around the Bolinas area. The second type of general agricultural land use consists of smaller, more intensively operated agricultural use and "rural-residential" type land use. Again, for the most part, the smaller parcel size agricultural zoning is concentrated in and around Bolinas.

Of these two general levels of agricultural land use, the first, consisting of the larger agricultural holdings on Bolinas Mesa, is presently zoned as minimum 60-acre lot size zoning. These lands, however, share the same issues and potential responses as many of the agricultural lands in Unit II. While development of appropriate LCP policy response could be attempted now, it is more appropriate and expeditious to delay consideration of this issue in Unit I and combine its consideration with Unit II's agricultural land use policy formation. This would facilitate development and application of a coordinated and consistent approach to the vital and somewhat complex issue of protection of the large agricultural holdings which exist in the County's coastal zone. This approach seems particularly appropriate given the very small proportion of such agricultural lands in Unit I.

The second type of agricultural use is much more unique to the southern part of Marin County's coastal zone, and thus can be examined as part of the Unit I approval process for conformity with the Coastal Act Sections 30241, 30242 and 30250. These sections establish as a general objective the preservation of coastal agriculture and set forth the standards of land divisions outside community areas in order to encourage the concentration of development. The LCP policies suggest the designation of these smaller agricultural lands be modified from the present A-5 and A-10 zoning to ARP-5 and ARP-10 zoning districts, respectively. Such redesignation provides project review flexibility to assist in implementing the intent of the LCP policies on protection of agriculture and wildlife habitat areas.

LCP POLICIES ON AGRICULTURE

<u>Large (.+60-acre) Agricultural Properties</u>

29. Certification of the remaining large agricultural holdings within Unit I which are greater than 60 acres in size shall be deferred until consideration of the Unit II LCP in order to facilitate development and application of a coordinated and consistent approach to the protection of large agricultural holdings within the total Marin County Coastal Zone. These areas consist of the following Assessor's Parcel Numbers:

188-090-02, 04, 05, 06, 09, 10, 11 188-120-09, 11, 15, 19 188-170-01, 06, 18, 56, 57 199-150-20, 21

Small Agricultural Holdings

30. In order to preserve the maximum amount of agricultural land, protect important upland grassland feeding areas and to promote the concentration of development in accordance with Section 30240 (a) and (b),

30241, 30242 and 30250 of the Coastal Act, the land now designated as A-5 and A-10 zoning districts shall be rezoned to APR-5 and APR-10 to encourage greater flexibility in the design of future land divisions within the area. New land divisions shall be designed to provide the maximum feasible clustering of new units and by easement or similar recorded instrument shall provide both the retention of the maximum amount of land in agricultural use and the protection of important upland feeding areas, which are identified on the resource maps on file in the Maria County Planning Department.

III. SHORELINE PROTECTION AND HAZARD AREAS

Policies within this issue group cover several areas of concern with development in selected locations of Unit I. Policy areas include bluff top setback requirements, shoreline protective works, earthquake and other geologic hazard identification, mitigation and policy programs for notice of such hazards, and disclaimers of government liability resulting from damage by subsequent geologic activities. These policies are intended to address the specific issues discussed below, as well as implement the intent of Coastal Commission policies and Coastal Act Sections 30235 and 30253.

SEACLIFF RETREAT

The major slope stability problem in the Bolinas area is the coastal sliding, which is nearly continuous along the seacliffs. In the Bolinas planning area, this includes the bluffs from the boundary of the National Seashore to the cliffs between Brighton and Wharf Road on the Little Mesa. This is virtually the entire shoreline of the Bolinas Planning Area.

Structural weaknesses, inherent in the Monterey Shale, and the energetic erosion by the surf combine to cause active landsliding of the seacliffs. The Monterey shale involved in this sliding is intensely fractured, which significantly reduces its stability. The surf along this part of the cliff is brown and muddy, showing that it is laden with material being removed from the cliff. This process occurs year round but is most severe during winter storms.

The cliffs between Brighton Street and Wharf Road are made up of the soft sediments of the Merced formation. Galloway (1977) points out that these cliffs are protected from the open sea but bear the brunt of southerly winter storms. During these storms, waves pound the soft sediments, causing extensive falls and slumps.

Retreat rates vary depending on the location, Between the downtown section of Bolinas and Duxbury Point, landsliding has caused the cliff to retreat an average of 0.3 to 0.6 meters per year (Wahrhaftig, 1970). Along the west-facing cliffs, exposed to the open sea, retreat has been monitored since 1859 and has progressed at a rate of about .75 meters/year (Galloway, 19-77). In the vicinity of-the RCA station, rates vary from one and one-half feet per year to one quarter foot per year, depending on the location (Wagner, 1977). Retreat rates on the Little Mesa average about a half a meter per year (Galloway, 1977).

Destruction of improvements and property in this area has occurred over time and will continue to do so as long as they are placed in this zone of active sliding. Wagner (1977) describes incidences of past damage. During the winter of 1977-1978 five blufftop homes were threatened by rapidly retreating cliffs. Three homes were declared unsafe by the Bolinas Fire Department and the two others will be threatened in the future. (Howe, in press). Slumping was evident in many other sections of the Bolinas Coast but did not directly threaten property.

There is a need to determine setback distances for developments near the retreating cliffs. The Coastal Commission in its Interpretive Guidelines for Marin County recommend a minimum setback of 150 feet from the blufftop for new construction. This setback is based on a retreat rate of 3 feet per year multiplied by an economic life expectancy for a structure of 50 years. They also require a geologic investigation and report for all blufftop development. The Environmental Hazards Element of the Marin Countywide Plan calls for adherence to the guidelines adopted by the Coastal Commission. The Bolinas Community Plan recommends a variable setback. From Little Mesa to Duxbury Reef, they recommend an 80 foot (two feet per year times 40 years) setback and from Duxbury Reef to Point Reyes National Seashore, they recommend a setback of 120 feet (three feet per year times 40 years). This is based on an economic life expectancy of 40 years for a structure and the retreat rates indicated in parenthesis.

While not as completely documented as Bolinas, Muir Beach's seacliffs also experience relative rapid rates of shoreline erosion. While development potential is limited to a few vacant ocean bluff lots, these lots were often earlier by-passed as representing more difficult or even dangerous building sites. Development on these lots must be carefully evaluated under the LCP policies to assure that the site can adequately support the proposed development without undue risk or the necessity to construct shoreline protective devices.

The LCP policies will assist in identification of lots where new construction would be hazardous and/or require future shoreline protection. Coordinated research and development of programs to reduce such hazards are encouraged. Since such programs are for the benefit of private properties, they should be financed primarily by those to be so benefited. The County would provide limited assistance in such organizing and reviewing such studies.

SEISMICITY

In November 1974, the Marin County Board of Supervisors passed Resolution 74-426, which implemented the requirements of the Alquist-Priolo Act as they pertained to Marin County. The Department of Public Works subsequently prepared a set of policies, "Policies and Criteria for Implementation of the Alquist-Priolo Geologic Hazard Zones Act", which are distributed to all applicants who propose projects, as defined by the Act, within the Special Study Zones. Appendix B contains the Alquist-Priolo Act and Marin County's implementing resolution and policies.

Development shall continue to be required to meet the seismic safety standards of the Alquist-Priolo Act, as it has been implemented by the County through Board of Supervisors Resolution 74-426, and the policies and criteria for its implementation developed by the Department of Public Works pursuant to resolution 74-426.

However, recent geologic studies indicate that the San Andreas Fault Zone covers a greater area than that indicated on the Alquist-Priolo Special Study

Zone maps. The zone of fault activity extends to approximately the eastern shore of Bolinas Lagoon and continues out to sea about one third the distance north of the Seadrift Gate. It was also determined that the Lagoon area is probably a graben, a block of material that is subsiding in relation to the surrounding land surface. This occurs as a result of earthquake activity.

The-County shall request the State Geologist's Office review the recent Study: "Depositional History and Fault-Related Studies, Bolinas Lagoon, California", Joel R. Bergquist, U.S.G.S. Open File Report 78-802, to determine if the Alquist-Priolo Special Study Zone should be extended in the Bolinas Lagoon vicinity.

SHORELINE EROSION: STINSON BEACH SANDSPIT

Shoreline development is located on the dunes of the Stinson Beach sandspit, a mile and a half long barrier beach that separates Bolinas Lagoon from the Pacific Ocean. The spit is characterized by a short sloping section which ordinarily contains the wash of the waves, a broad level beach section which occasionally is washed over by the runup of waves at high tide, and a set of dunes 10 to 15 feet high on which the homes are built. The dunes extend a maximum of about 50 feet from the rear of the homes; where the winter storms of 1977/78 caused extensive erosion only about 10 feet of dune remains. The height and width of the dunes were artificially, increased at the time Seadrift was developed.

The function of beaches and dunes is to act as an energy absorber; the waves break on the slope of the beach and energy is consumed as the water rushes up the slope and onto the broad, flat berms. The dunes act as the last natural barrier to flooding of the inland section during storms. They retreat in the face of storm waves and rebuild during later calm periods. During intense storm activity in natural situations, the dunes are occasionally washed over by waves. The shape of the spit is controlled by several factors, including the location of the Bolinas bluffs. Changes in these factors result in changes in the shape and size of the spit:

The winter of 1977/78 saw a series of severe storms batter the California coast. The combination of high waves, high tides and recurring storm activity led to extensive damage of coastal structures from shoreline erosion. At Stinson Beach this took the form of eroding away the beach and dune system. Eight homes in Seadrift were threatened by this erosion, and an emergency revetment was placed. Research by Howe (in press) suggests that the conditions experienced that winter were not a "freak" or rare occurrence, and areas which experienced damage will likely experience similar conditions in the future.

The section of Seadrift threatened by the shoreline erosion consisted of nine lots, one of which did not contain a home. Several emergency measures, which failed, were attempted to protect these properties before the revetment (a type of seawall, that is laid on the dune or bluff to prevent wave attack from removing sand) was constructed by the County. The seawall runs the length of the nine lots and at its highest point was 14 to 15 feet high at the time of construction. Beach replenishment over the summer has reduced this height to about 10 feet, but rock still remains exposed above the beach in front of the dunes.

As noted in the "Final Staff Report and Recommendations on Issues Raised by Development of Seadrift Subdivision, Stinson Beach", May 1978, as amended, there is a wave erosion hazard to beach front lots and homes at Seadrift. The precise extent of this hazard is not known. It is likely the hazard will vary over time, depending on the severity of the winter, and place, because of the constantly shifting nature of both the beach and off-shore sand bars. The fact that the dunes were artificially increased in size at the time Seadrift was constructed and have now been significantly reduced by last winter's storm activity with little summer replenishment could further increase this hazard.

Given the unpredictable occurrence of this hazard and its generally localized area of impact (only nine lots were significantly threatened during the winter of 1977/78), it is likely the majority of permit applications will be on an emergency basis for a small number of lots. This would result in a haphazard placement of emergency erosion control structures. How these structures would physically and visually impact the remainder of the beach could not be determined in an emergency situation.

PROTECTION OF EXISTING STRUCTURES AND COUNTY LIABILITY

In addition to policies that address development standards and new project review for areas of seacliff retreat, earthquake hazards, shoreline and dune erosion, this chapter also establishes policies that encourage investigation and development of joint programs to protect existing structures from shoreline erosion. These policies are desirable to successfully implement Coastal Act goals regarding development of shoreline protective works. Through identification of areas potentially subject to shoreline erosion, there exists an opportunity to develop programs to mitigate such hazard before emergency situations development. This provides flexibility in design techniques, financing and engineering feasibility to assure the balancing of public and private interests can be accomplished in a nonemergency period.

The policies identify strong review standards for new development in hazardous areas, coupled with attempts to adequately evaluate and respond to potential geologic hazards prior to their occurrence. The County of Marin does not accept responsibility for the protection of areas subject to shoreline erosion. Additionally, the County accepts no liability for approved development in areas identified as subject to geologic hazards. A waiver of liability would be recorded on all new development otherwise permitted by this section's policy standards.

LCP POLICIES ON SHORELINE PROTECTION AND HAZARD AREAS

1. New structure shall be set back from the Bolinas and Mir Beach bluffs a sufficient distance to ensure with reasonable certainty that they are not threatened from cliff retreat within their economic life expectancies. Adequate setback distances will be determined from information contained in required geologic reports and the setback formula established below. These setbacks will be of sufficient distance to eliminate the need for shoreline protective works.

In view of the fact that the retreat rate varies markedly along the cliffs, and that the life expectancy of different kinds of structures varies greatly, the following formula will be used to determine setbacks from the bluff for new structures:

Setback (meters) = structure life (yrs.) X retreat rate (meters/yr.) In areas where vigorous sliding is taking place, an additional 15 meters should be added as a safety factor.

The retreat rate will be determined by a complete geotechnical investigation which will be required if one or both of the following conditions are met: The building or proposed development site is within 150 feet of the blufftop, or the site is located in stability zones 2, 3 or 4 as indicated on the Slope Stability of the Bolinas Peninsula Study Area map which accompanies Wagner's 1977 report, "Geology for Planning, Western Marin County". This report and accompanying maps is incorporated by reference as part of the LCP.

2. Development shall continue to be required to meet the seismic safety standards of the Alquist-Priolo Act as it has been implemented by the County.

The County shall request that the State Geologist's Office review the recent study, "Depositional History and Fault-Related Studies, Bolinas Lagoon, California", by Joel R. Bergquist, U.S.G.S. Open File Report 78-802, to determine if the Alquist-Priolo Special Study Zone should be extended in the Bolinas Lagoon vicinity.

- 3. The County shall seek public funds to contract with the State Division of Mines and Geology to initiate a study to identify lots and/or structures threatened with cliff retreat within their economic life expectancy. The results of this study shall be incorporated into the general restoration program for the Bolinas Mesa as described in Chapter II of the LCP.
- 4. Many of the building sites in Unit I are characterized by one or more potential geologic hazards. The development of residential structures on such parcels may be subject to often sudden and destructive geologic phenomenon. The County of Marin does not encourage new residential development of such parcels and expressly states that the issuance of a coastal development permit for such property does not warrant said property's safety_ from geologic hazards. Further, the County of Marin will not accept liability for subsequent personal or property damage caused by geologic processes on said properties. To assure that the builder and subsequent purchasers are expressly aware of the policy, a "waiver of liability" shall be executed and recorded by said for short-term, emergency food, shelter, and said property owner prior to the issuance of a coastal development permit. Further, clothing, the County of Marin will not participate in emergency or disaster relief funding for properties so identified and would recommend such limitations on State and/or federal disaster/emergency grants and/or loans.

Existing geologic information indicates this geologic hazard policy shall apply to new development (excluding improvements to existing structures that would not result in an increase of 50 percent or more of internal floor area of the structure) on lots located in the following areas:

- Lands located in the "Alquist-Priolo" earthquake hazard zones, as said zones may be amended.
- Development within 300 feet of the mean high tide of the sea.
- Development on parcels with slopes averaging over 35 percent.
- All lots within the Seadrift sandspit to include the Patios, Calles and Seadrift Subdivision.

(Those lands covered by this "geologic hazards" policy are shown on the geologic hazard maps on file in the Marin County Planning Department)

- 5. The following policy from Section 30235 of the Coastal Act is incorporated into the County LCP:
 - Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline process shall be permitted when required to serve coastal-dependent uses or to protect existing structures (constructed before adoption of the LCP), or public beaches in danger from erosion and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply.
- 6. To minimize visual and sand transport impacts on Stinson Beach, any permit granted to construct erosion control structures shall require the re-establishment of the former dune contour and appearance. In case of emergency permits, the property-owner of record shall agree, in writing, that such restoration work will be accomplished within 60 days after the threat of damage has passed.
- 7. Because revetments, seawalls or other shoreline protective works can be detrimental to maintenance of natural shoreline processes and can interfere with visual enjoyment and coastal access, such works are discouraged. The County of Marin through the LCP and other documentation has identified those coastal areas potentially subject to significant wave and run-off erosion. Because such probable risk areas are identified, sufficient opportunity for private investigation and response to such hazards is available. Therefore, the County of Marin shall not finance or construct emergency shoreline protective devices for the benefit of private developments.
- 8. It shall be County policy to encourage property owners subject to ocean-front erosion hazards to develop responses to such hazards prior to emergency conditions. Where contiguous properties are subject to generally similar erosion hazards, joint program development should occur. The County will not finance such engineering studies (or any subsequent construction activities), but will seek aid from Federal

and State agencies, colleges and universities to assist private consulting engineers in such review and recommendations. Where existing community organizations or special districts are unable to provide organizational support for such area-wide joint studies, the County, upon request, will assist in the organization and administration of such privately funded studies.

9. In the absence of an overall wave hazard/shoreline erosion study, any-permit application for seawalls, riprap or other protective structures on beaches, shall be accompanied by engineering reports stating the nature and extent of wave erosion hazard along the beach area and an explanation of how the proposed protective works will mitigate the hazard, both on and off the project site. This policy shall not apply to emergency permit applications applied for within three years of the date of adoption of the LCP. Emergency permit applications after that date shall be subject to report requirement or shall specifically establish why the need for such protective devices was not foreseen.

IV. PUBLIC SERVICES AND NEW DEVELOPMENT

PUBLIC SERVICES

In determining whether existing and planned water and sewer facilities can accommodate only a limited amount of new development, it is necessary to know the current status of their services.

Water Supply

<u>Muir Beach Community Services District</u>. Because there is no potential for additional visitor-serving uses in Muir Beach, additional water use will be limited to the build out of the residential lots and increased demand from the beach park.

The District has two wells and three storage tanks. The wells draw from aquifers in Redwood Creek, whose precise magnitude and dependability are not known. During periods of droughts, normal demand may exceed estimated flow capability of these underground sources. This condition sometimes requires rationing measures. No expansion of production or storage facilities is planned.

Stinson Beach County Water District. The Water District has recently developed a Capital Improvement Plan to meet the water demands of the. community at buildout. The District's Plan (Montgomery, 1977) estimates the following demand, based on the Community Plan:

Water in Gallons per Minute (GPM)				
	1977	Ultimate		
Average Day	173	322		
Maximum Day	300	550		
Fireflow	1500	1500		
Maximum Day& Fireflow	1800	2050		
Peak	581	1057		

The District plans its service facilities on the basis of maximum day requirements (550 gallons per minute (GPM) at buildout). "Maximum day" is the average GPM for a summer holiday weekend day. "Peak" is the peak demand within that day. To meet ultimate demand, the District intends to install additional wells. The District's existing production comes from 7 stream catchments and 3 wells. The District is in the final stages of installing a new well, which will be on-line by April, 1979. The District is further planning two additional wells which will be processed and installed in a common package. At this time, these wells are expected to be on-line by June, 1980.

The exact production of these new wells will not be known until they are purged and put into operation. However the District's Improvement Plan projects that these wells, combined with improvements to the system now

being completed will provide a maximum day production of 500 GPM. Additional planned improvements to existing production catchments and wells, anticipated to be accomplished by June 1980, will raise total District maximum day production to 550 GPM, sufficient to serve the community at buildout. The District carries 740,000 gallons in storage capacity (exclusive of fire capacity).

Bolinas Public Utility District (BPUD). The District has had a moratorium on new water hook-ups in effect for the past six years, because of an insufficient water supply to meet any additional demand. Bolinas PUD draws water out of Arroyo Honda to the north of the village and stores it in two reservoirs (Woodrats I and II). The District operates on a yearly cycle: water is stored in the reservoirs during the rainy season for use during the dry summer months. Storage capacity is thus the constraint on supplying additional water. Demand and supply are now balanced on the basis of the moratorium at about 50,000,000 gallons per year.

The lifting of the moratorium is dependent on the construction of a third reservoir. The District has identified three potential dam sites north of the village. These are the Trust for Public Land, Neiman-Schell, and Holter parcels. Under a recent settlement of its legal suit with the Trust for Public Land, the District is barred for three years from constructing a reservoir on the Trust for Public Land site; it is severely restricted for seven additional years from such construction. The District is also receiving cash in this settlement which will, together with other sources, allow the District to purchase the Holter dam site.

Actual construction of the reservoir and related system improvements will require the passage of a bond election by District residents. The District Board expects to put such a bond measure on the ballot in the near future, probably for a small reservoir, allowing a small increment of new connections.

Assuming the bond election did pass, it would be at least five years before the reservoir was functioning because of lengthy design and construction lead times. The District does not expect, therefore, that additional water supplies will be available before the first five-year review of the LCP.

<u>Water Well Standards</u>. The Coastal Act provides (Section 30231) that the biological productivity and quality of coastal waters be protected through, among other mechanisms, preventing depletion of ground water supplies. Additionally, Section 30250 of the Coastal Act requires new development be served by adequate public services, including water service. Therefore, coastal developments involving development of water wells must be judged under these standards to assure the accomplishment of the Coastal Act objectives.

Sewage Disposal

<u>Bolinas Public Utility District</u>. Bolinas PUD provides sewerage treatment to the downtown village area. The treatment plant is sized for 200 household equivalents, the ultimate demand of the existing downtown service area. The District currently serves 161 household equivalents. The commercial area, within which visitor serving facilities are appropriate, is within this service area.

The District's ponding basins and spray fields cannot easily be expanded because of their location. Expansion would, therefore, be costly and the District has no current plans for such expansion.

<u>Septic System</u>. The protection of coastal waters and the assurance of adequate support facilities to accommodate new development are both objectives of the Coastal Act and require clear specific procedures for the review of septic systems. Except for a relatively small area of Bolinas, new development in Unit I depends on septic systems for sewage disposal. Therefore, standards for the review of septic system construction must assure that the installation and use of systems will not have, either individually or cumulatively, an adverse impact on coastal waters. Such standards should be rigorously applied; however, provisions for addressing individual, unique situations must also be provided.

Transportation

When Congress authorized the creation of the GGNRA, they also requested that a study be prepared to plan methods of carrying visitors to and within the park areas. This study was titled, "The Golden Gate Recreational Travel Study" (GGRTS) and the final report was issued in 1977. The report is available for review from many agencies, including the Regional Coastal Commission and Marin County Planning Department and only the Plan's recommended additions, or modifications to transit routes in Marin County are included here, although. it should be pointed out that the road network in the coastal zone, particularly access ways, consists of narrow, windy, two-lane roads.

The GGRTS Plan for early implementation recommends two basic additions to the existing transportation system - Transit/Information Junctures and Park Shuttles.

Transit/Information Junctures are locations where many-existing public transit routes already converge and where a transfer may be made to a shuttle service direct to park locations. information about both transit service and the parks would be available for passengers. The following junctures, Marin City or Manzanita and Larkspur Ferry Terminal, are recommended for Marin County. Both are located outside the Coastal Zone.

Park Shuttles are short bus routes connecting popular destinations with the GGRTS study area. The system would operate on 33 peak weekend and holiday days during the summer, including Memorial and Labor Days. The National Park Service would be the agency responsible for this program.

Additional information on the traffic situation in the GGNRA and Point Reyes National Seashore is available in the "Assessment of Alternatives, for the General Management Plan, 1977". In it, they present current traffic conditions largely derived from the GGRTS Study and two possible alternatives to manage traffic, continue existing access and improve transit service. The latter alternative includes most of the recommendations made in the GGRTS Study.

Previously, the National Park Service was unable to provide or participate in funding transit service from urban areas to park properties due to an interpretation of enabling legislation by the Office of Management and Budget. The passage of S.B. 975 by the Congress, allows the Park Service to provide funding for public transit service to and within National Parks. This bill now enables the Park Service to participate in outside transit programs but did not provide any funding to implement the proposals discussed here.

LCP POLICIES ON PUBLIC SERVICES

General

- Roads, flood control projects and utility service expansions shall be limited to the minimum necessary to serve development as identified by LCP land use policies. All such public works projects shall be reviewed under resource and visual policies of the LCP.
- Because of the unique, natural resources and recreational opportunities of the Unit I coastal zone, industrial and energy facilities are not appropriate and shall not be permitted.

Water Supply

- 3. Within the service area of a community or mutual system the use of individual domestic water wells to serve new construction shall be permitted provided: a) the community or mutual system is unable or unwilling to provide service, or, b) the distribution system improvements are physically and/or economically unfeasible to construct to the site. Additionally, wells or water sources shall be at least 100 fee from property lines or, a finding shall be made that no development constraints are placed on neighboring properties.
 - [Amended pursuant to <u>BOS Resolution No. 83-253</u> [6/14/83], approved by CCC as submitted 8/11/83]
- 4. New community and mutual water wells serving five or more parcels shall demonstrate by professional engineering studies, including, as necessary, long-term monitoring programs, that such groundwater withdrawal will not adversely affect coastal resources, including groundwater aquifers. Such engineering studies shall provide the basis of establishing safe sustained yields from these wells.
- 5. Prior to the authorization of subdivision or construction of projects utilizing individual water wells, the applicant shall demonstrate that a sustained water yield of at least 1.5 gallons per minute per residential unit. Additional requirements for fire protection, including increased yield rates, water storage facilities and fire hydrants shall be installed as recommended by the applicable fire protection agency.
- 6. In acting on any coastal project permit for expansion of the water facilities of the Bolinas Public Utility District, the County shall determine that adequate water is guaranteed from the expanded facilities to serve VCR-zoned property in the village core.

Septic System Standards

- 7. All septic systems within the Coastal Zone shall conform with the Minimum Guidelines, for the Control of Individual Wastewater Treatment and Disposal Systems adopted by the Regional Water Quality Control Board on April 17, 1979. No waivers shall be permitted except where a public entity has formally assumed responsibility for inspecting, monitoring and enforcing the maintenance of the system in accordance with criteria adopted by the Regional Water
 - Quality Control Board, or where such waivers have otherwise been reviewed and approved under standards established by the Regional Water Quality Control Board.
- 8. Alternate waste disposal systems shall be approved only where a public entity has formally assumed responsibility for inspecting, monitoring and enforcing the maintenance of the system in accordance with criteria adopted by the Regional

Water Quality Control Board.

- 9. Where a Coastal Development permit is necessary for any enlargement or change in type or intensity in use of an existing structure, a septic system that is adequate to conform to current Regional Water Quality Control Board Guidelines or such other program and standards approved by the Board shall be installed.
- 10. In order to minimize the generation of wastewater and to encourage the conservation of Coastal water resources, the use of water saving devices shall be required in all new developments.
- 11. The existing water quality monitoring agreement between the North Central Coast Regional Commission, the Stinson Beach County Water District, and the Regional Water Quality Control Board, and conducted by the Water District, shall be continued.

Bolinas Sewage Disposal System

12. In acting on any coastal project permit for the extension or enlargement of the sewer treatment facilities of the Bolinas Public Utility District, the County shall determine that adequate treatment capacity is available in the system to serve VCR-zoned property in the village core.

Transportation

- 13. Highway 1 provides an important and limited access route to the coastal zone. The narrow, twisting two-lane roadway successfully complements the rugged, open character of this coastal area. Highway 1 shall remain a scenic, two-lane roadway. Roadway improvement projects shall not, either individually or cumulatively distract from the rural scenic characteristics of the present roadway. Improvements (beyond repair and maintenance) shall be limited to minor roadway improvements as identified below:
 - Slope stabilization, drainage control and minor safety improvements such as guardrail placement, signing, etc.
 - Expansion of roadway shoulder paving to accommodate bicycle/ pedestrian traffic along the highway shoulder.
 - Creation of slow traffic and vista turnouts, as a safety and convenience improvement.
 - Other minor selected roadway improvements necessary to adequately accommodate public transit consistent with the goals of the following policy: no filling of streams or wetlands shall be permitted.

14. Public transit service to and through Unit I is presently limited to commuter services and selected recreational service routes. The expansion of public and recreational areas and facilities in Unit I will accelerate the need to increase opportunities in providing public access to the coastal areas of Marin. The development of such programs shall rely extensively on public transit as the most appropriate and consistent method of increasing public access and recreational opportunities in Unit I. The development of new transit service routes and associated loading and turn areas, is consistent with the policy to utilize public transit in meeting the increased use of coastal access and recreational areas.

NEW DEVELOPMENT AND LAND USE

Historical Resources

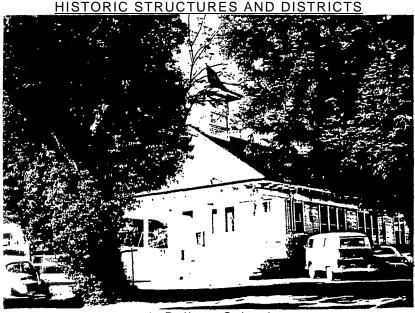
Section 30253 of the California Coastal Act of 1976 mandates the protection of communities and neighborhoods "which, because of their unique characteristics, are popular visitor destination points for recreational uses." The intent of this policy is to protect the unique character of existing coastal communities.

The Unit I coastal communities are historically important and aesthetically unique. The LCP proposes that structures in the coastal zone built prior to 1930 should be reviewed through the coastal permit procedure before being altered or demolished. Additionally the LCP designates specific areas with the Unit I coastal zone as "historic areas." New construction and additions to or demolition of existing structures will require a Coastal Permit.

Boundaries for historic areas were selected to include groups of unique and architecturally significant structures that are visually accessible to both local residents and visitors. Community input and additional historic surveys are encouraged as part of the Coastal Plan. After survey, historic area boundaries could be revised through the public review process.

All pre-1930s structures in the coastal zone are eligible for utilization of the State Historic Building Code, and alternative to the Uniform Building Code. This alternative code can aid property owners in the retention of historic character of buildings that undergo restoration and rehabilitation, and can result in cost savings.

This section illustrates some of the other historic structures in Unit 1. These are by no means all of the historic structures in Unit I. The descriptions that follow are based on <u>Discovering Marin</u> (1974). [Amended pursuant to <u>BOS Resolution No. 82-256</u> [6/22/82], approved as submitted by CCC 9/7/82]



1. Bolinas School

This school, on the Olema-Bolinas Road, was built in 1907. The school is identical to the original school built in 1867 which was located on the same site.



2. Calvary Presbyterian Church

This Bolinas church was built in 1878, and moved to its present site on Brighton Avenue in 1898.



3. Waterhouse Subdivision

The first major subdivision in Bolinas occurred in 1832. Mr. & Mrs. Frank Waterhouse divided 6k lots along Brighton, Park and Spring Avenues. Summer homes, such as the one shown above, were constructed beginning in the 1880's.



4. Sharon Building

The Sharon Building was constructed in 1878 and used originally as a Methodist Church. The building was moved in 1909 from its original site on the Bolinas-Olema Road to its present site on Wharf Road.



5. Smiley's Bar

Smiley's Bar on Main Street was formerly the Schooner Saloon. The original part of the building dates from 1852.



6. College of Marin Marine Station

The Marine Station on Wharf Road was constructed originally as a U.S. Coast Guard Station (1917-1946).



7. Captain Easkoot's House

This house on Highway I in Stinson Beach was built in 1875 by Captain Alfred D. Easkoot, first County surveyor and an eccentric recluse. The beach was originally known as Easkoot's.



8. Airey's

Airey's, now the Superette, was the first grocery store in Stinson Beach.

Archaeological Resources

Section 30244 of the Coastal Act provides that where development would adversely affect archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required. The Unit I LCP does include explicit policies on the protection of Archaeological resources to ensure that the intent of the above Coastal Policy is incorporated into the LCP. The proposed LCP policy is needed to clarify the protection of archaeological resources in the area by requiring professional field survey work in the areas of known or probable archaeological significance prior to development in such areas and by requiring the implementation of reasonable mitigation measures consistent with Section 30244 of the Coastal Act and previous actions of the Commission.

Visual Resources

Coastal Act policies on visual quality, found in Section 30251, require the protection of scenic and visual resources of coastal areas. Visual resources, including beaches, wetlands, and other natural as well as manmade features, are vulnerable to degradation through improper location of development, blockage of coastal views, alteration of natural land forms by poor cutting, grading, and filling practices, and by poor design or placement of roadside signs and utility lines. The primary concern• of the Coastal Act is to protect views to scenic resources from public roads, beaches, trails, and vista points.

<u>Housing</u>

The Coastal Act requires that "housing opportunities for persons of low and moderate income shall be protected, encouraged, and where feasible, provided ... New housing in the coastal zone shall be developed in conformity with the standards, policies, and goals of local housing elements ..." (Section 30213),

The moderate-income housing question is not limited to coastal Marin, however. It is a countywide and regional issue. The coastal zone in Marin is physically removed from the rest of the County and region by a limited road network. This network limits the coast both as an employment center and as a residential area to commuters. Because of this, residents of the coastal zone live there as a conscious lifestyle decision, not because of the inequities of the regional housing market.

The Marin Countywide Plan recognizes housing cost and availability as one of the three major problems to be solved in the County. The Plan's policy is to encourage moderate income housing in the eastern, city-centered corridor where employment, transportation and public services are most available. The Plan does not view coastal Marin as a feasible location for additional moderate income housing. The Plan recommends that:

... higher density housing be located where adequate services and transportation are available, within ... areas specified in the plan where there are opportunities for achieving housing goals ... high-density housing supports public transit efficiently, provides a market for nearby shopping areas, and offers an accessible labor supply for local employers ... higher densities can reduce costs to the developer and thus make low and moderate income housing more feasible. (Pages 3-4 and 3-5).

For the rural villages, the Plan states the development policy:

LARGE DEVELOPMENT THAT WOULD RAPIDLY OR DRASTICALLY CHANGE THE CHARACTER OF THE VILLAGE SHOULD BE DISCOURAGED, BUT SOCIAL AND ECONOMIC DIVERSITY SHOULD BE ENCOURAGED.

Large scale development occurring over a short period of time that would drastically change the appearance of a village, or would create a need for expensive new urban services should be avoided.

Most low and moderate income housing stock will have to come from existing supply, and therefore methods to prevent units from rising in price should be employed. (Pages 3-22)

Given the constraints on development in the Unit I area, including a limited water supply, dependence on septic systems, and the limited capacity of Highway 1, the LCP policies restrict community residential development to single-family homes and duplexes. As such, provisions of low and moderate income housing opportunities by density bonuses and other mechanisms is severely restricted.

Additionally, the desirability of the provision of such units in this area is reduced because of their remoteness from employment centers and the lack of available public transportation and other necessary support services. Therefore, consistent with previous permit decisions, the Coastal Commission has found that construction of low and moderate income housing is not feasible in connection with the construction of single-family and small multi-unit developments, except as otherwise provided for in State Coastal commission policy on the demolition of existing low and moderate income housing units.

<u>Housing Supply</u>. The 1970 census was the last comprehensive survey of income and housing costs in the coastal zone. These data are no longer a valid measure of the extent of the housing problem, because of recent shifts in the housing market and mortgage lending patterns.

To determine the extent and location of existing moderate income housing, County Planning staff inventoried single-family dwelling values in 1977 against the estimated income of permanent coastal zone residents. The methodology of this study and a description of its limitations is contained in Appendix C. The results of the study are shown graphically

in Figure 3 and in Table 1. The raw number of moderate income units as defined by HUD for Section 8 programs estimated by the study should not be considered accurate. However, the concentrations shown on Figure 3 and the proportions shown in Table 1 are close approximations of the current situation.

TABLE 1: LOCATIONS OF MODERATE-COST UNITS IN COASTAL ZONE					
	Percent of Total Single-Family Units	Number of Moderate-Cost Units			
Dillon Beach	62%	126			
Tomales	91	52			
Non-Village, east of Tomales Bay	52	47			
Inverness Ridge Communities	32	206			
Point Reyes Station	52	73			
Olema	25	10			
Bolinas	55	301			
Stinson Beach	23	95			
Muir Beach	10	12			
Total:	41%	922			

Source: Marin County Planning Department

The most recent survey of housing conditions was conducted by the County Planning Department in 1971. A total of 14,035 parcels countywide were surveyed in areas selected by City and County officials as those likely to contain substantial proportions of deficient housing. Most units in the coastal villages were inspected during the survey. Table 2 shows the results of the survey.

TABLE 2: COASTAL HOUSING CONDITIONS						
			Condition, % of Total Surveyed			
Village	Total Housing Units, 1970	% Covered by Survey	Sound	Deteriorating	Dilapidated	
Dillon Beach	153	97%	87%	10%	0%	
Tomales	66	88	72	26	2	
Marshall	49	94	80	20	0	
Inverness	56	88	85	15	0	
Inverness Park	70	100	85	15	0	
Point Reyes Station	113	83	7.7	23	0	
Bolinas	632	80	89	11	0	
Stinson Beach	380	57	88	12	0	
Muir Beach	65	100	97	3	0	
Total:	1584	79	87	13	2	

Source: Marin County Housing Conditions Survey, 1971.
Marin County Planning Department.

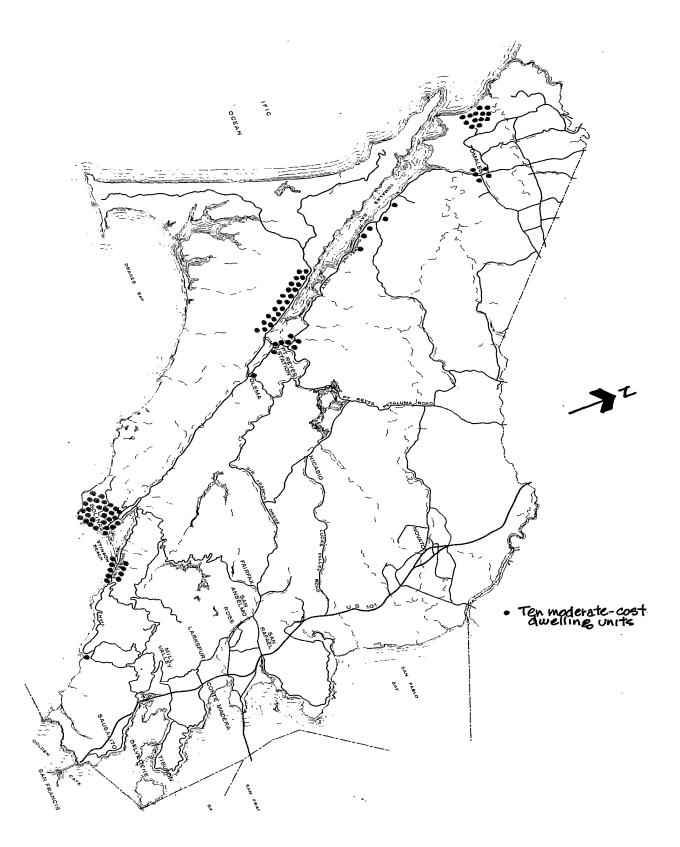


Figure 3: Concentrations of Low and Moderate Income Housing Units

It can be assumed that restoration of many of the deteriorating units has taken place as a result of the increased demand for housing in the coastal zone after this survey was completed. Nevertheless, Table 2 is probably a good indicator of relative concentrations of deteriorated housing in the coastal zone.

<u>Future Demand.</u> Future housing demand in the coastal zone generated by employment increases in the area will be minimal, if any. The only employment sectors which could grow in the next few years are the GGNRA, visitor-serving enterprises, and aquaculture.

The GGNRA planning staff has not estimated employment increases resulting from the General Management Plan. Few of the Plan's proposals would seem to require large numbers of employees. It is impossible to project what employment increases may occur from visitor-serving enterprises or aquaculture. However, any employment increases from these three sectors must be balanced against an overall loss in jobs forecasted by the Association of Bay Area Governments. ABAG's 1995 forecast for the coastal area is shown in Table 3.

TABLE 3 EMPLOYMENT, HOUSING, POPULATION FORECAST								
	1975 BASE			1990 FORECAST				
Zone ⁽¹⁾	Basic Employment	Total Employment	DUs	Pop.	Basic Employment	Total Employment	DUs	Pop.
23	107	210	1075	3853	94	207	1075	3533
24	158	259	1813	4807	131	233	1813	4212
Total	265	469	2888	8660	225	440	2888	7745

⁽¹⁾ Zone 23 is Census Tract 1330, which includes both northwest Marin and Nicasio outside the coastal zone. Zone 24 is Tracts 1321 and 1322, which includes the Point Reyes Peninsula and Stinson Beach.

Source: ABAG Series III - Base Case 1 Forecasts, Revised March, 1978.

Marin County Planning staff does not believe housing demand from future employment increases will be great enough to justify altering the current County emphasis on preservation of the existing stock.

<u>Local Programs.</u> The County of Marin and the County Housing Authority currently operate four housing programs on a Countywide basis: Section 8 rental assistance, City-County rental assistance, Housing and Community Development Block Grants, and rehabilitation loans.

Under Section 8 of the 1974 Housing Act, the County Housing Authority provides rental subsidies to low and moderate income families. These families are responsible for finding their own dwellings, which must meet basic structural standards and rent levels established by HUD. As of September 15, 1978, there were eight units in the coastal zone in the Section 8 program.

The City-County Rental Assistance Program is an innovative attempt by the County's local governments to provide a solution to the moderate income housing problem. The program was begun in 1977, funded by the County and the Cities of Mill Valley, San Anselmo, Corte Madera and Larkspur. In 1978, only the County, Mill Valley and San Anselmo have contributed funds. The City-County program is structured similarly to the Section 8 program, except that structural standards and rent levels are more flexible. Currently, no units in the coastal zone are in this program. The City-County program could be of great value in the coastal zone because of its flexibility. Because of their age, condition, and utility status, many coastal dwellings cannot meet Section 8 standards, but could qualify for the City-County program.

The County of Marin administers a Countywide Housing and Community Development Block Grant program under the Housing Act of 1974. Under this program, 2.1 million dollars are allocated for housing and capital improvement projects throughout the County. One-half of the total budget is allocated Countywide for housing projects. The remaining one-half is split between the County's six planning areas for individual projects nominated by sponsor groups. To date, no projects for new moderate income housing have been proposed or funded in the coastal zone.

The Rehabilitation Loan program is administered by the County Housing Authority on a Countywide basis, and funded from the Countywide housing portion of the Block Grant program. Since the program began in 1976, four loans have been processed in coastal communities.

<u>Farmer's Home Administration Programs.</u> The Farmer's Home Administration is an agency of the U.S. Department of Agriculture. The Administration currently administers three housing programs of use in the coastal zone: Sections 502, 504 and 515 of the Housing and Community Development Act of 1974. In all of these programs, the applicant deals directly with a Farmer's Home Administration Field Office. For Marin's coast, the nearest field office is in Santa Rosa.

The Section 502 program provides direct loans to buy, build, repair, renovate, or relocate a home. Families with incomes up to \$15,500 can qualify, and those with incomes under \$11,200 may receive interest subsidies down to as low as 1 percent.

The Section 504 program provides loans up to \$5,000 to very low income families. The loans are limited to health and safety corrections of owner-occupied homes.

Section 515 provides loans to public and private sponsors for the construction or rehabilitation of rental and cooperative housing for low and moderate income families and elderly people. Interest rates vary depending on the kind of sponsor and projected income of the tenants. Tenants in Section 515 projects may pay no more than 25 percent of adjusted income for rent and utilities.

None of these programs is currently being used in the coastal zone. All of them have their limitations, but all of them are potentially useful in the coastal zone. Section 502 is limited by its payment standards. An application must be able to meet monthly housing payments within 20 percent of household adjusted income. For example, an applicant with a \$15,000 income and 2 children would be limited to a payment of \$228 per month. However, the monthly payment necessary for an 8-1/2 percent, \$33,000 loan is \$250, which exceeds the payment limit. Since there are relatively few homes available in the coastal zone in that price range, Section 502 has limited application for ownership loans. For rehabilitation purposes, however, this program may be a good source of loans.

Section 504 is limited by its maximum loan amount (\$5,000), and its availability to only very low income families for health and safety corrections. Given the few dilapidated units in the coastal zone (Table 2), there are few units which could qualify for. this program.

Section 515 is limited by the few parcels of land large enough and zoned for multiple-family units. Projects of 6 to 10 units have been found feasible elsewhere under this program, however,, and could be tried in Marin's Coastal Zone.

<u>Demolitions.</u> in order to preserve the existing stock of moderate cost housing units, it is important that older, deteriorated homes not be demolished merely to allow-construction of new, expensive homes.

Since January, 1973, six dwellings have been demolished in the coastal zone. A much larger number could occur in the future should the value of land continue to increase rapidly relative to the value of the structures sitting on it.

In the village areas contained in the Unit I., LCP, low and moderate income housing is now generally provided through rental of the existing housing stock which consists primarily of single-family, duplex, and several multiple-family structures in Stinson Beach (which were constructed before zoning of the area was reduced from R-3 to R-2). In accordance with Coastal Commission guidelines on demolition of existing structures that provide such opportunities for low and moderate income housing, the LCP requires that such opportunities be preserved and protected, when feasible.

<u>Future Programs</u>. It is the intent of Marin County to continue operating the four current local programs, described above, as long as funding continues. In addition, two new programs could address housing issues.

Mann County has recently adopted an Inclusionary Housing ordinance, requiring low or moderate income units in projects of 15 units or more. Because of this minimum size, it is unlikely that this program will have much application in the coastal zone.

A possible second program could consist of an ordinance permitting second units (or in-law units) in single-family zones. This could be an important program for maintaining the availability of moderate income, housing in the coastal zone.

<u>Grading</u>

Section 30253(2) of the Coastal Act requires that new development shall neither create nor contribute to erosion. Section 30231 further stipulates that the biological productivity of-coastal waters shall be maintained, in part, by controlling runoff, and Section 30240(b) states that development adjacent to environmentally sensitive habitat areas shall be sited and designed to prevent impacts which could significantly degrade such areas.

Development has three different but related effects which are of concern to the productivity of coastal waters. First, the development process increases the production of sediment from land, at least during the construction phase. Second, development increases the rate of runoff by increasing the amount of impermeable surfaces. (This increase in the mean runoff, in turn increases the rate of sediment deposition into the lagoon and creeks and decreases the purifying effects of overland flow.) The third major effect of development is an increase in the concentration of pollutants contained in runoff. The increased production of sediments and other, pollutants can clog the respiratory structures of many marine organisms, adversely affect egg development, deprive algae and eel grass of necessary sunlight and adversely affect other marine habitats.

In order to minimize the adverse impacts from development consistent with the Coastal Act, additional grading standards are proposed. Standards of the policy ensure runoff rates that will not increase, prompt revegetation of graded areas, and limitations on grading during the winter months by careful project design, special attention to drainage and erosion control measures.

LCP POLICIES ON NEW DEVELOPMENT AND LAND USE

<u>Historical Resources</u>

- 15. In order to protect the unique qualities and character of coastal communities in the Unit I coastal zone, historic structures shall be preserved and restored. The following means shall be used to protect and preserve historic structures:
 - a. "Historic areas" shall be established in Stinson Beach and Bolinas. The boundaries of these areas are described and mapped in Appendix F of the Unit I LCP. Within these historic area boundaries, all new construction shall conform in scale, design, materials and texture with the surrounding community character.
 - b. Alterations and Additions. Alterations or additions to any structure built prior to 1930 shall require a coastal project permit; except that, maintenance or repair to restore any pre-1930 structure to its original architectural character shall be exempt from the requirement of a coastal permit. Alterations or additions to any pre-1930 structure shall retain the scale and original architectural features of the structure, especially for the front facade.
 - c. Demolitions. Demolition of any structure built prior to 1930 shall require a Coastal Project Permit; except that, demolition of any secondary or agricultural building built prior to 1930, may be exempted from the requirement for a coastal permit upon a finding by the Planning Director or appropriate hearing body that such structure is not a significant historic resource. Issuance of a Coastal Project Permit for the demolition of any pre-1930 structure may be delayed for a period not to exceed six months. During this period, the property owner or local historic group or society may attempt to find a purchaser or alternate location for the structure. This six month period may be waived by the Planning Director or appropriate hearing body upon a finding that the structure is not historically significant or cannot be rehabilitated.

[Amended pursuant to <u>BOS Resolution No. 82-256</u> [6/22/82], approved as submitted by CCC 9/7/82]

- 16. All Coastal Project Permits for projects located within the boundaries of an historic area, and for projects involving pre-1930 buildings, shall be reviewed in accordance with:
 - a. The "design Guidelines For Construction in Historic Areas and For Pre-1930 Structures" and,
 - b. The "Historic Review Checklist," both located in Appendix F of the Unit I LCP.

[Amended pursuant to <u>BOS Resolution No. 82-256</u> [6/22/82], approved as submitted by CCC 9/7/82]

17. All Coastal Project Permits for historic structures shall be revised by established local planning or design review groups, where these groups exist.

[Amended pursuant to <u>BOS Resolution No. 82-256</u> [6/22/82], approved as submitted by CCC 9/7/82]

Archaeological Resources

- 18. The County shall maintain a file, including maps of currently known and probable archaeological sites within the coastal zone of Unit I, in cooperation with the State Office of Historic Preservation. Additional information regarding areas of archaeological significance that becomes available through the Environmental Impact Report process or by other means shall be added to the file. The file shall be kept confidential in order to prevent vandalism of any known or probable archaeological sites that have been recorded.
- 19. Prior to the approval of any proposed development within an area of known or probable archaeological significance, a limited field survey by a qualified professional at the applicant's expense shall be required to determine the extent of the archaeological resources on the site. Results of such field survey shall be transmitted to the State Historical Preservation Officer or his/her designee for comment.
- 20. Where development would adversely impact archaeological resources or paleontological resources which have been identified, reasonable mitigation measures shall be required as may be recommended by the field survey or by the State Historic Preservation officer his/her designee. Such mitigation measures shall include acquisition of unique sites for long-term preservation where feasible, or preservation of the sites by incorporating them into open space areas protected by easement, or a requirement that the site be opened to an approved qualified professional and educational groups for scientific exploration for a specified period of time before development begins. Where construction is permitted, special construction techniques shall be employed to protect the resources intact and reasonably accessible underground.

Visual Resources

- 21. Existing development standards and the design review ordinance (Chapter 22.52) shall continue to be enforced. The following explicit standards shall apply to selected areas and projects:
 - All new construction in Bolinas, Stinson Beach and Muir Beach shall be limited to a maximum height of twenty-five (25) feet; except that in the Highlands neighborhood of Stinson Beach, the maximum height shall be seventeen (17) feet, and in the Seadrift section of Stinson Beach, the maximum height shall not exceed fifteen (15) feet.
 - To the maximum extent feasible, new development shall not impair or obstruct an existing view of the ocean, Bolinas Lagoon, or the national or State parklands from Highway 1 or Panoramic Highway.

<u>Housing</u>

- 22. In order to protect housing opportunities for persons of low and moderate income (as defined by "HUD" Guidelines), as well as preserve the existing character of coastal villages, existing structures providing such housing opportunities shall be demolished only when:
 - The structure poses an immediate and established health or safety hazard; or
 - The Planning Commission finds, based upon established procedures, that the rehabilitation of the existing structure is not feasible. (Feasible is defined in Section 30108 of the Coastal Act.); and
 - Such demolition coupled with subsequent reconstruction would provide replacement housing of comparable rental value either on site or within the immediate coastal zone area.
- 23. Housing assistance programs that provide moderate-cost housing opportunities in existing units shall continue to be administered in the coastal zone.

Grading

The following standards shall apply to projects involving 150 cubic yards or more of grading and excavation.

- 24. Development shall be designed to fit a site's topography and existing soil, geological, and hydrological conditions so that grading, cut and fill operations, and other site preparation are kept to an absolute minimum and natural landforms are preserved. Areas of a site which are not suited to development because of known soil, geologic, flood, erosion or other hazards that exist to a degree that no amount of corrective work consistent with these policies, including but not limited to the protection of natural landforms, can eliminate or substantially reduce the hazards to the property endangered thereby shall remain in open space.
- 25. For necessary grading operations, the smallest practicable area of land shall be exposed at any one time during development and the length of exposure shall be kept to the shortest practicable time. The clearing of land shall be discouraged during the winter rainy season and stabilizing slopes shall be in place before the beginning of the rainy season.
- 26. Development plans shall include sediment, erosion, runoff controls, and revegetation measures. The following measures shall be included in all cases; additional conditions as required pursuant to Section 23.08.090 of Marin County Code shall also be included where appropriate.
 - Sediment basins (including debris basins, desilting basins, or silt traps), shall be installed at the beginning of grading operations and maintained throughout the development process to remove sediment from runoff waters. All sediment shall be retained on site.

- The extent of impervious surfaces shall be minimized to the greatest degree possible. Water runoff beyond natural levels shall be retained on-site whenever possible to facilitate maximum groundwater recharge. In order to prevent on-site gullying and downstream erosion of-existing stream channels, the velocity of runoff on and off the site shall be dissipated through the application of appropriate drainage controls so that the runoff rate does not exceed the storm water runoff from the area in its natural or undeveloped state for all intensities and durations of rainfall. Grassed waterways are preferred to concrete storm drains for runoff conveyance.
- Pollutants such as chemicals, fuels, and other harmful materials shall be collected and disposed of in an approved manner in accordance with the best engineering technology available.
- Temporary vegetation, seeding, mulching, or other suitable stabilization methods shall be used to protect soils which have been exposed during grading or development. Cut and fill slopes shall be permanently stabilized as soon as possible with native plants or other suitable landscaping techniques.
- Where topsoil is removed by grading operations, it shall be stockpiled for reuse and shall be protected from compaction and wind or erosion during stockpiling.
- All debris shall be removed from the site upon the completion of the project.
- Permit applications for grading which involve cut slopes in excess of 8 feet or fill in excess of 5 feet shall include a report from a registered soils or civil engineer.

LOCATION AND DENSITY OF NEW DEVELOPMENT

Priority Uses

Section 30254 of the Coastal Act states, in part:

"Where existing or planned public works' facilities can accommodate only a limited amount of new development, services to coastal-dependent land use, essential public services and basic industries vital to the economic health of the region, state, or nation, public recreation, commercial recreation, and visitor serving land uses shall not be precluded by other development."

In analyzing this policy and how it applies to Unit I, two questions must be answered: first, whether water and sewer facilities can accommodate only a limited amount of new development; and second, which of the priority uses listed may occur in the Unit I coastal zone. A preceding section discussed public service constraints. The present status of the priority land uses listed in Section 30254 of the Coastal Act is as follows:

<u>Coastal-dependent Land Use</u>. No such uses exist in Unit I. The bulk of the coastline is made up of sharp bluffs which preclude such development, and the remainder is environmentally sensitive, making it unlikely that such uses will ever be located in the coastal zone.

<u>Essential Public Services</u>. The only public service which requires significant water or sewer services is fire protection. All three villages have adequate water storage and transmission facilities for fire protection. Some improvement in these facilities will occur as the systems are improved in the future.

Basic industries vital to the economic health of the region, state, or nation. No such industries exist in Unit I and it is unlikely any will ever develop because of the constraints noted above for coastal-dependent land use. (The Region is identified as the nine County area included within the Association of Bay Area Governments (ABAG).)

<u>Public Recreation.</u> Existing federal, state, and local parkland and watershed areas provide a substantial amount of public parkland.

<u>Commercial Recreation</u>. No commercial recreation exists in Unit I, and no new commercial recreation facilities are anticipated due to the land constraints noted above.

<u>Visitor-serving land uses</u>. These uses are described above, under public recreation. The priority uses which must be provided for, then, are visitor-serving facilities and some increment of public recreation.

The extensive public lands surrounding the three villages of Unit I significantly diminish the issue of the location of new residential development. These parklands effectively establish community expansion areas for the Unit. However, the proposed density of residential development, particularly in Stinson Beach, does require modification to meet Coastal Act objectives.

Muir Beach

The proposed Muir Beach Land Use Plan follows the adopted Community Plan. The single-family residential area recognizes the existing residential community; the open areas recognize recreation and habitat area which are, or will be, a part of the GGNRA. The agriculture areas recognize lands in that use. According to the Community Plan, 44 single-family building sites remain in the residential area.

Stinson Beach

Stinson Beach, particularly those areas west of Highway 1, was historically subdivided into small lots. The community relies on on-site sewage disposal systems for waste disposal. For a variety of reasons, including age, density and lack of proper maintenance, Stinson Beach has

experienced acute problems with septic systems. A program for correcting existing septic problems and avoiding additional problems is underway, and initial indicators demonstrate the program will be helpful in correcting many of the historic problems. However, land use policies that reflect the historic problems and the reality of present on-site sewage disposal technology can also contribute to a successful water quality program. The present multi-family zoning of selected areas in Stinson Beach does not adequately reflect the limitations of on-site waste disposal systems, and the potential impact of such intense development on coastal waters.

The proposed Stinson Beach Land Use Plan, with the exceptions noted below, follows the adopted Community Plan. Single-family residential areas, multi-family residential areas, and commercial areas are based on existing development patterns. With the exception of Seadrift, these areas have little room for additional development: the estimated 540 dwellings at the time of Community Plan adoption would be increased to a maximum of 900 dwellings.

Table 4 summarizes the potential buildout that would be allowed under this LCP.

TABLE 4 BUILDOUT POTENTIAL IN STINSON BEACH									
Sub Area	Use	Additional Dwellings Possible							
Seadrift	Single-family residential	243							
Highlands	Single-family residential	24							
Patios	Single-family residential	39							
Calles	Multiple-family residential	30							
Panoramic	Single-family residential	28							
Total		364							

The R-3 zoning, which permits densities of 10 to 30 units per acre, and the R-2 zoning, which permits duplex development on 4,000 square foot lots, have no realistic relationship to Stinson Beach's capability of supporting development given the above identified constraints. Changes in present land-use policies, therefore, are necessary to conform to Coastal Act requirements that new development be adequately supported by public services.

Chapter II, Natural Resource Protection, discusses the need to rezone properties along Calle del Arroyo that front on Bolinas Lagoon from R-1 to a Resource Management Area. Such rezonings are necessary to reflect the Coastal Act's specific requirements for protection of wetlands. This rezoning would reduce, by approximately 10 dwellings, the build-out potential of Stinson Beach.

In addition, there is a need to rezone the ocean front lots of Mira Vista. A rezoning to 15,000 square foot parcel size of the lots immediately adjacent to either side of this paper street would effectively combine those parcels under common ownership so as to preclude new development seaward of the existing line of development. While those lots seaward of Mira Vista do not now have much development potential, this rezoning clarifies and establishes by ordinance the development potential of this area.

The one remaining area of change in existing County zoning for Stinson Beach is at the Seadrift Subdivision. Extensive modification of existing development potential were found necessary to bring this subdivision into conformance with Coastal Act objectives. The following Subsection addresses Seadrift.

Seadrift

Existing Pattern of Ownership and Development at Seadrift.²

Development of homes at the Seadrift Subdivision proceeded in the early 1950's and continued at a rather slow rate through the early 1970's. During this period, home construction was concentrated on the larger ocean and Bolinas Lagoon fronting lots with much slower development of the smaller Seadrift Lagoon lots. In 1973, the San Francisco Bay Regional Water Quality Control Board (RWQCB) placed a septic system moratorium at Stinson Beach. That restriction was lifted in January, 1978. Since January, development of selected Seadrift lots has proceeded under policies and regulations of Marin County, the Stinson Beach Water District, the San Francisco Bay RWQCB and the Coastal Commission.

There are 346 subdivided lots at Seadrift. These lots fall into two general size categories: the lots adjoining the ocean or the Bolinas Lagoon are between 15,000 and 20,000 square feet in area, whereas those surrounding the interior Seadrift Lagoon contain 7,500 square feet. All lots are zoned R-I, which carries a 7,500 square-foot minimum size requirement.

Of the 346 lots, 164 are either developed with homes or have permits authorizing such development. (There is also one additional home which is located on an unsubdivided parcel of land directly adjacent to the Bolinas Lagoon.) The 182 vacant lots at Seadrift are scattered along the ocean, the Bolinas Lagoon and the two sides of the Seadrift Lagoon.

Ownership of the 182 vacant lots is divided among a number of individuals, (who own from one to six lots each) and two major owners. These two are Mr. Steve Wisenbaker, who owns 61 lots on the northern and eastern sides of the Seadrift Lagoon, and the William Kent Estate Company which

¹ The State Coastal Commission, in conditionally certifying the LCP Land Use Plan, made extensive findings on the Seadrift subdivision. These findings are contained in Appendix D.

² The statistics on ownership and build-out are current as of June 10, 1979.

owns 22 subdivided lots as well as both roads inside the Seadrift entrance gate and two large unsubdivided parcels adjoining the Bolinas Lagoon. One of these two parcels is a strip of land stretching along the margin of the lagoon (an existing home is located on this parcel) and the other is a triangular piece which lies adjacent to the entrance gate.

<u>Development Issues under the Coastal Act.</u> The California Coastal Act of 1976 establishes policies under which the LCP planning and regulations must be based. Several of these policy standards apply at the Seadrift Subdivision. These general coastal issues include:

- Protection and enhancement of the wildlife resources and habitats of the Bolinas Lagoon;
- The reduction of geologic hazards associated with new development;
- The protection of water quality necessary for biological productivity;
- The maintenance of public views to and along the coast; and
- The provision of adequate public access to beach and tideland areas, including recognition of the doctrine of "public trust".

Extensive testimony and background support material has been developed on most of these issues. The substance of this information and its relationship to development at Seadrift is summarized below.

<u>Wildlife Resources of Bolinas Lagoon:</u> Bolinas Lagoon is a shallow estuary of approximately 1400 acres of sheltered water, mudflats, marshes and sandbars. The relatively abundant fauna of benthic invertebrates and fish supports a great diversity and abundance of wintering and migratory shorebirds, waterfowl, gulls and other water-associated birds. Extensive scientific research has been conducted on the resources of the Lagoon, including the California Department of Fish and Game's report on the natural resources of Bolinas Lagoon (Giguere, 1970).

The composition of the bottom of the lagoon varies considerably from one place to another. This composition is influenced by proximity to creek mouths, which contribute organic material and sediment, and to the inlet connecting the lagoon to the ocean, which contributes coarse sand particles.

A census conducted over a number of years has shown that the tidal flat extending along portions of the Seadrift Spit supports both more birds and a greater variety of species of shorebirds than the other areas of the lagoon. At the east end of Seadrift, near the old causeway leading to Highway 1, is a salt marsh which is used by some species of shorebirds. When high water forces the birds from the tidal flats, some of them retreat to this and other marshy areas in the lagoon to feed or roost. Although not the area most preferred for feeding or roosting, this marsh is nevertheless used by many shorebirds.

Bolinas Lagoon is also important to types of wildlife other than birds, and development on the margin of the lagoon could have adverse impacts on these species as well. For instance, the lagoon is home to a variety of types of invertebrates that are food for the shorebirds discussed above. These invertebrates could be adversely affected by runoff of pesticides and other chemicals which might accompany urbanization of the Seadrift spit. Furthermore, Kent Island, within the lagoon, is a haulout and pupping site for harbor seals. Harbor seals are very sensitive to humans or dogs, and they require a fairly isolated resting place. Kent Island provides such a site because it remains separated from the mainland even at low tide. However, the channel separating the island from the mainland (the Bolinas side) is a narrow one and can be easily crossed by those determined to reach the island.

To most observers, the significant coastal issue at Seadrift is the potential impact of development on the wildlife resources of the area. Residential development at Seadrift introduces increased human and pet population which can be disturbing to wildlife, particularly the shorebirds which feed in the Lagoon. Studies and testimony have identified those areas of wildlife habitat that are concentrated along most parts of the Seadrift Spit, with special areas located along the northerly portions of the Spit's Lagoon shore. New development along all portions of the shoreline threatens to introduce new levels of human activity and increase urban storm run-offs. These potentials for human and animal access to the lagoon are especially acute along those portions of Lagoon shoreline that are characterized by a sloping, sandy beach. This area, (the northerly area) of the spit also provides the more significant tidal flat habitat for wildlife.

In summary, the Bolinas Lagoon is a unique and important coastal wetland with well documented wildlife habitat value. Urban-scale development on or near the Lagoon's shores presents the likelihood of increased intrusions into these habitat areas, especially those areas easily accessible to human and domestic pets. For the most part, the potential of such impacts is only indirectly related to the specific location of new development at Seadrift. However, the location and density of future development can do much to either intensify or mitigate such impacts. This is particularly so in decisions involving development adjacent to the Lagoon's more significant habitat areas.

Geologic Hazards. Publications of the U.S. Geological Survey, U.S. Army Corps of Engineers and California Division of Mines and Geology substantiate a variety of geologic hazards on the Seadrift Spit. The San Andreas fault and its mapped cone include portions of the Seadrift Subdivision. Coupled with the future probability of earth shaking is the generally poor foundation base afforded by the sandy material of the Seadrift Spit. The sandy soils of the natural spit as well as the Lagoon muds comprising area of artificial fill are both foundation materials which are highly intolerant to earthquake intensities. Additionally, sandy soil materials in combination with high groundwater in the areas are subject to the geologic phenomenon of liquefaction during earthquake shaking. This phenomenon can be extremely hazardous to buildings so situated.

The Seadrift Subdivision is at a relatively low elevation with a gently sloping beach profile. These characteristics subject the Seadrift Spit to the dangers of seismic seawaves, particularly waves generated from a southerly direction. Wave run-up estimates are such that total overtopping of the Spit may be possible during such seismic wave occurrences. A less drastic geologic occurrence, wind and wave erosion of the Spit, is a continuing process. Along the Bolinas Lagoon side of the spit, for example, gross estimates of shore erosion range from 3 to 10 inches a year.

Wave erosion hazard along the ocean front is even more pronounced and, as recently demonstrated, can, with sudden efficiency, extensively erode the protective sand dunes fronting the Seadrift houses. The result of this phenomenon is twofold: the physical endangerment to the structures and the pressure to develop shoreline protective works that often distract from the public's visual and physical use and enjoyment of the coast.

In summary, the range of possible physical hazards at Seadrift is extensive. The predictability of experiencing some or all of these hazards is relatively high. Build-out of the Subdivision's existing residential lots will expose a significant number of houses and people to these geologic hazards.

<u>Water Quality.</u> Development within the Seadrift Subdivision is dependent upon septic systems for sewage disposal. The use of septic disposal systems can provide an effective means of waste disposal when placed, constructed and operated properly. However, the use of such systems is not generally regarded as an appropriate method of serving urban, dense, residential developments. (There is little doubt that, by present-day standards, residential developments of the size, density and location characterized by Seadrift would require alternate, more extensive waste disposal technology.)

The San Francisco Bay Regional Water Quality Control Board and the Stinson Beach County Water District have performed testing and monitoring programs to determine the range of water quality problems resulting from the existing level of development at the Seadrift Subdivision. These studies show no evidence of adverse water quality problems either in surface or ground waters. The fact remains, however, that the Seadrift Subdivision is made up of relatively small lots located on a peninsula almost entirely surrounded by coastal waters. The sandy material of the spit allows very rapid percolation of wastewater. Furthermore, many of the homes at Seadrift had originally been built for vacation use. As occupancy of more and more existing homes becomes full time, consistent with the trend observed in other beach communities, and as more homes are built, the potential for adverse impacts on water quality due to use of septic tanks will increase.

Another less obvious concern is the impact of urban run-off on the water quality of Bolinas Lagoon. High levels of ground coverage (buildings, driveways, decks, etc.) can significantly increase peak storm water flows and velocities. This increased storm run-off over

suburban density developments adds increased levels of heavy metals, hydrocarbons and nitrates into the Lagoon.

In summary, the full development of the Seadrift Subdivision would double the number of septic system discharges on the spit, increasing the potential of both individual and cumulative adverse impacts on coastal waters. Additionally, development at present lot densities will significantly reduce the physical area available for repair and replacement of septic systems. Finally, these higher densities will increase the probability of storm water run-off contributing urban contaminates to the Lagoon. While certain areas of Seadrift, along both the Bolinas and Seadrift Lagoons, share a more direct responsibility for potential water quality impacts, the issue is not specifically locational and should be recognized as subdivision-wide.

<u>Coastal Views.</u> The issue of adverse impacts of continued Seadrift development on public views is more subjective than the issues previously discussed. There is little disagreement that the natural features of the area add significantly to the travelers' and residents' enjoyment. To travelers on the highway bordering the Bolinas Lagoon, the outstanding visual elements are the mountains rising on one side and the expanse of the lagoon itself on the other. The Seadrift spit is indeed visible here, but it is a low-lying peninsula which is not the most commanding visual feature of the area. The development of the heretofore vacant lots along Dipsea Road will modify the present views from the Highway. These changes, however, should not significantly distract from the principal visual features of the area. Limitations on height (now at 1-story) and reduction of density along Dipsea Road, would, however, reduce the travelers' potential perception of a "wall" of houses backdropping the Lagoon.

Views from the Bolinas Ridge can offer a spectacular panorama of the sea, the Seadrift Spit, the Bolinas Lagoon, and the communities of Stinson Beach and Bolinas. However, since the Seadrift Sandspit is located between these two developed villages, the appearance of houses on the Spit is neither overly distracting or incongruous to the casual observer of this scene.

In conclusion, the likelihood of significant visual impacts from continued development at Seadrift is not high. Existing development along the Sandspit has diminished its "natural" appearance. Continued development will not significantly change this perception. To the extent visual impact supports-reduction of development, density, it does so along the Dipsea Road, particularly that section nearest Highway 1.

<u>Coastal Access and Public Trust</u>. The Coastal Act provides that the LCP's "maximize" public access to the coast where appropriate. At the Seadrift Subdivision, the issue of public access is presented in three distinct areas: 1) Public pedestrian access and use of extensive ocean beaches fronting the Seadrift Subdivision; 2) Public pedestrian access to the Bolinas Lagoon's shoreline (along the spit); and 3) Automobile access to the Seadrift Spit's coastal beaches.

To provide for firm, legally enforceable access to and along the ocean beach, a negotiated access easement will be pursued with the owners of individually developed properties fronting the ocean. The agreement would identify the area and types of use available to the public. This agreement is in lieu of court actions to establish historic prescriptive rights across the beach.

Access along the Bolinas Lagoon shore would reflect the sensitive nature of the Lagoon's shore by restricting use to selected scientific, educational and native study uses. This access easement would be acquired as part of development proposals of those unsubdivided parcels.

Finally, the only vehicle access to the Seadrift Subdivision is by way of Calle del Arroyo, a county road leading from State Highway 1. Calle del Arroyo also serves the neighborhoods located on the Calles and Patios. Although most of these short streets are marked as private, they do provide pedestrian access to the beach. A so-called paper street, Walla Vista, which is adjacent to the entrance to Seadrift, is also a public accessway to the beach. (The Seadrift developers donated a right-of-way at the end of Walla Vista.)

Limited parking is now available along sections of the public road right-of-way. Increased traffic from Seadrift conflicts with the provision of such roadside parking, thereby limiting beach access and use. The LCP provides the option to reconstruct the "causeway" from Highway 1 to Seadrift, thereby providing alternative vehicle access.

The doctrine of public trust is indirectly related to public access and use of coastal areas. In an overly simplistic definition, public trust lands are those lands which are now or have been historically below the mean high tide line. Such lands are assumed to have an easement which forbids undue restrictions to certain public use. These public uses include access for navigation, fisheries and related uses. Portions of the Seadrift development, particularly along the easterly area on Dipsea Road are reportedly subject to the public trust, while the contention that portions of the Seadrift Subdivision are subject to the public trust is disputed. The doctrine of Public Trust should be considered at Seadrift. The location, density and type of development should be compatible with the public uses established under the trust easement.

<u>Conclusion.</u> Based upon the above findings, significant reductions in development density are necessary to assure adequate protection of coastal resources and conformity with the intent of Coastal Act policies. The LCP policies are adapted to govern the density and location of future development at Seadrift in response to the relative impact on coastal resources. These policies represent a balanced consideration of the technical and legal methods available for lot reduction, the benefits of the regulatory program, and the needs and desires of local government and citizens.

The Marin County Board of Supervisors has determined that lot consolidation is consistent with its requirements to develop LCP policies which successfully implement Coastal Act policies. Such consolidation should provide for maximum consolidation in Area 4, the area representing the largest potential for development in close proximity to Bolinas Lagoon. Contiguously owned lots in other areas of the Seadrift Subdivision should also be consolidated. Such consolidation should be based on the requirements of the Coastal Act, the appropriate techniques available for such density reduction and the need to provide for an equitable development opportunity for property owners. Based upon the November 27, 1979 Board of Supervisors' letter to the Regional Coastal Commission, it is the Board of Supervisors' understanding and intent that the Coastal Commission has full latitude and discretion with respect to the issue of lot consolidation in Areas 1 through 3.

At its December 13, 1979 meeting, the North Central Coast Regional Commission, responding to the -County's request for Commission assistance in development of Seadrift lot consolidation policies, concluded that increasing minimum lot sizes in Areas 1 through 3 was necessary to implement the intent of the Coastal Act. Such rezoning would require contiguously owned lots be consolidated in attempts to meet the new zoning classifications. These lot consolidations would occur where lots were located side-by-side; lots located across Seadrift Road from others of same ownership would not be subject to such consolidation technique. These policies for Areas 1 through 3 of Seadrift are based upon the Regional Commission's extensive hearings and review of the Seadrift issue and reflect the background facts in this LCP. The Commission considered the County of Marin's preliminary determinations as well as received extensive public testimony prior to development of policies for Areas 1 through 3. These policies incorporated much of the work and requirements developed in the County's deliberations on the question of lot reduction.

The Regional Commission explicitly reviewed the concept of "across-the-road" consolidation and extensively examined its legal and technical basis as a density reduction technique. The Commission determined that this technique presented technical problems of implementation and created substantial concerns of equity in the application of lot consolidation policies at Seadrift. These concerns, weighted against the marginal benefits attributed to the decreased number and location of lots otherwise achieved through this consolidation approach, did not warrant such a policy for Seadrift. The Commission found coastal resources were adequately protected without across-the-road consolidation.

Bolinas

The Bolinas gridded Mesa was subdivided in 1927 into more than 5,400 twenty thousand square foot lots, which were sold for \$69.50 each to persons who subscribed to the San Francisco Bulletin. Since the original subdivision, some parcels have been consolidated into larger lots, while many remain their original size. Some 384 dwellings have been built on parcels of varying size. In 1976, the Mesa was rezoned to R-A:B-2 (10,000 square foot minimum lot size) to conform with the policies of the Community Plan. However, all parcels are considered to have development potential due to the fact that they have been subdivided since 1927 and are considered exceptions to Title 22 of the Marin County Code. In 1984, the Bolinas Gridded Mesa Plan was adopted by the County as an amendment to the Bolinas Community Plan. This Plan identified a residential development potential of approximately 75 units. The Gridded Mesa Plan includes three zoning designations; C-R-A-B2, C-R-A-B3 and C-R-A-B4. The three zones require minimum parcel sizes of 10,000 square feet, 20,000 square feet and 40,000 square feet respectively.

The Mesa is provided water service by the Bolinas Community Public Utility District. That District has had a moratorium on new water meter connections since 1971; since then a few homes have been built with wells. Waste disposal on the Mesa is by septic system. Existing older systems on lots of less than 6,000 square feet (larger in certain geologic and topographic circumstances) do not meet current County requirements for septic systems and may, therefore, be a hazard to the Mesa's ground water. The street network on the Mesa (the "grid") is unpaved, except for Elm Avenue Overlook and parts of Ocean Parkway, and suffers from poor drainage.

The problems of the Mesa are hidden by the limited development resulting from the water moratorium. Many existing vacant lots of less than 10,000 square feet may be effectively unbuildable because they cannot meet County septic tank requirements. Still other lots may be too lose to the bluffs which are experiencing erosion at a fairly rapid rate or are in or adjacent to the major drainage ways. The problems of bluff erosion are described in Chapter II. The conditions of the existing good network makes access to most of the undeveloped parcels difficult. The 1984 Gridded Mesa Plan includes a program to prepare a circulation plan for the Mesa which will address the problems caused by limited access.

The current County zoning of the Gridded Mesa was determined during preparation of the Bolinas Gridded Mesa Plan and is based on the 1983 report "Bolinas Mesa On-site wastewater Disposal Investigation" prepared by Questa Engineering Corporation. Buildout under this zoning does not seem to threaten the ability of Mesa Road to serve the Palomarin Trailhead. Table 5 summarizes potential buildout that would be allowed under this LCP.

Zoning is not a total answer to the problems of the Gridded Mesa, which includes lots lying within the bluff erosion area; potentially inadequate septic systems on legal, substandard lots; and the inadequate street system. It may also prove to be inadequate to deal with future cumulative septic tank impacts on small lots and the relation of the Mesa to the new park lands. For these reasons, the County identifies the Gridded Mesa as an area requiring public action to resolve existing development problems. This identification is necessary to make the Mesa eligible for restoration funding by the State Coastal Conservancy (Section 31201 of the Public Resources Code), or a similar public or private body. Any restoration proposal for the Mesa should include the study of bluff erosion, the cumulative impacts of septic systems on the Mesa, the possibility of including low income housing, coastal access, and the ability of public facilities to support the new development.

TABLE 5 BUILDOUT POTENTIAL IN BOLINAS												
Use	Sub Area	Acres	Existing Dwellings July 1974	Additional Dwellings Possible	Total Dwellings Possible							
	Rural Area	2,675	17	64	81							
Agriculture	Dogtown	69	7	11	18							
and Open Space	Horseshoe Flat	280	9	29	58							
	Gospel Flat	168	9	15	24							
Single- family Residential	Downtown: Wharf & Brighton Roads	30	68	15	83							
	Terrace Ave	54	53	33	86							
and Commercial	Little Mesa	32	35	48	83							
Commercial	Gridded Mesa	326	384	75*	459							
TOTAL:		3,634	602	290	892							

^{*} Estimate based on remaining undeveloped lot pattern, 10,000 - 40,000 square feet minimum site size, legal non-conforming lots, remaining and probable effects of slope, cliff erosion, drainage pattern and other environmental policies - without redevelopment. [The "Bolinas" section above was amended pursuant to BOS Resolution No. 84-564 [11/27/84], approved as submitted by CCC 3/27/85]

Non-Community Plan Areas

Lands outside the three villages are all in public ownership, with the exception of Audubon Canyon Ranch. All of these lands, including the Ranch, are designated Open Area for LCP land use purposes.

LCP POLICIES ON LOCATION AND DENSITY OF NEW DEVELOPMENT

This Section contains the land use/zoning proposals for Unit I and represents the basic element of the LCP. These proposals are based upon the County-wide Plan (1973), as supplemented by the three Community Plans adopted since 1975. Many of the LCP policies have been referenced to the appropriate sections of the Countywide and Community Plans to provide policy background material. The proposals contained herein use, for the most part, the land use policies of these Community Plans; therefore, the Community Plans are used as descriptive base references in describing the LCP policies. It should be clear, however, that based upon Coastal Act requirements, selected modifications to the land use policies and designations in the Community Plans are being proposed by the LCP. Where plans and policies of the local coastal program conflict with policies of local plans, the policies of the LCP shall govern. Maps showing the LCP land use designations are on file with the Marin County Planning Department.

<u>Muir Beach</u>

The Muir Beach LCP land use designations shall follow the Community Plan land use designations with the following modifications:

- 27. Redesignate residential lot size of parcels along Redwood Creek from 10,000 square feet to 1 acre minimum lot size. (See also Policy 11-8).
- 28. Make no LCP recommendation for agricultural lands of over 60 acres. (See also Policy II 29).

Stinson Beach (excluding Seadrift)

The Stinson Beach LCP land use designations are those identified in the adopted Community Plan except as modified below:

- 29. The existing R-2 zoning designation in Stinson Beach shall be retained in order to protect and maintain the existing character of the community, provided, however, that no development other than single-family residences shall be permitted on any parcel of less than 7,500 square feet in area in order to minimize septic tank problems and the cumulative impacts of such development on public access along Calle del Arroyo. All development within these zones shall conform with LCP policies on septic systems and housing. Repair or replacement of existing duplex residential use on a parcel of less than 7,500 square feet damaged or destroyed by natural disaster shall be permitted.
- 30. The properties presently Zoned R-3 along Shoreline Highway shall be rezoned to R-2 in order to minimize flood hazards and the adverse impacts on Easkoot Creek which would result from such development (Easkoot Creek runs across the subject properties). Redesignation of the R-3 properties to R-2 will also assure development consistent

with the existing character of the community. Development shall not be permitted within the 100-year floodplain of Easkoot Creek and shall otherwise conform with LCP Policies on septic systems and stream protection.

- 31. The properties presently zoned R-1 on 'the east side of Calle del Arroyo should be redesignated to a "Resource Management Area" in order to assure protection of the adjacent marsh areas of Bolinas Lagoon. (See also Chapter II.)
- 32. The properties presently zoned R-1 on the seaward side of the paper street Mira Vista should be redesignated to RSP-2.0 in order to assure preservation of the natural sand dunes and sandy beach areas located seaward of Mira Vista.

Seadrift

The coastal issues presented by future development at the Seadrift Subdivision have been extensively reviewed to determine the appropriate LCP policies to apply to this geographical area. The most significant LCP policies address the location and density of development. However, other policies relating to access, visual compatibility and water quality at Seadrift are also included in this section for clarity of presentation. Policy IV-36 establishes the major requirements for density and location of future development.

33. Access Program. The access program for the land and water surrounding the Seadrift subdivision consists of two separate sub-elements.

Ocean Beach Access. The LCP establishes continued moderate access and use of selected areas of the Seadrift Beach. Guaranteed public use of this beach and ocean area would be accomplished in one of three ways: (1) an easement agreement with the property owners, 2) public purchase or (3) litigation to establish the public's prescriptive rights gained via historic use. Option #1 presents the preferred approach for achieving this access element.

Lagoon Access. The LCP identifies this section of shoreline as an important wildlife habitat area requiring controlled public access to protect that resource. Therefore, only limited public access across those unsubdivided Seadrift subdivision lands fronting Bolinas Lagoon is proposed. Such access easement(2) shall be required as a condition of development of lands owned by the William Kent Estate Co.

As a condition of future development approval, an open space and limited pedestrian access easement over the strip of Lagoon-front land (20 acres) shall be offered to the County of Marin or other approved agency/organization. This easement shall provide educational and scientific access and use of these lands as subsequently approved by the County of Marin or its designee.

The developer shall deed to the County of Marin a recorded irrevocable offer of a roadway dedication over the general area of the old causeway. Said roadway offer shall have a common boundary with a public street. The developer shall also agree to financially participate in subsequent construction of the causeway, should it be built. Costs of any causeway reconstruction shall be primarily borne by new development in the area.

To provide emergency pedestrian egress from the beach and the Seadrift subdivisions, landowners possessing an interest in the roads, including the right to preclude the public from using the roads, in Seadrift shall record an agreement allowing the public emergency egress during periods of highwater or high tides when the beach is impassable. The County shall cause signing of such emergency access opportunity along the Seadrift Spit. Sign should be placed near the public use area along the Seadrift Spit. Signs should be placed near the public use area at Walla Vista adjacent to Seadrift beach and the northwest end of the Seadrift Spit. The County shall request input from the Seadrift Property Owners Association and the Village Association regarding the exact wording of the signs. The County will through applications for new development ensure emergency vertical egress form the beach to Seadrift Road at the northwest end of the beach and other locations found appropriate.

[Amended pursuant to <u>BOS Resolution No. 84-005</u> [1/3/84], approved conditionally with added amendment by CCC 3/14/84, 2^{nd} <u>BOS Resolution No. 84-146</u> [3/26/84], CCC ED checkoff 4/26/84]

- 34. Water Quality. The LCP policies encourage continued Seadrift Lagoon water monitoring via adoption of the following policy:
 - The existing water quality monitoring agreement between the North Central Coast Regional Commission, the Stinson Beach County Water District, and the Regional Water Quality Control Board, and conducted by the Water District, shall be continued. Should such water quality monitoring data warrant, the County would support a moratorium on additional development pending satisfactory improvement in water quality. New septic systems at Seadrift shall be designed in accordance with Marin County Code, Section 18.06, and waivers to that Section shall comply with the technical report accepted by the Regional Water Quality Control Board, adopted January 2, 1979.
- 35. <u>Visual Resources.</u> Height of new construction at Seadrift shall be restricted to one story. (See Also Policy IV-21.)
- 36. <u>Density and Location of Seadrift Development</u>. For purposes of this policy, the Subdivision is divided into sub-areas as follows: (Refer to Figure 4.)
 - Area 1: Those lots fronting on the Pacific Ocean and generally south of Seadrift Road (total lots: 123);
 - Area 2: Those lots generally between Seadrift Lagoon and Seadrift Road (total lots: 94, Separation of Areas 2 and 4 occurs at lot lines between AP #195-320-19 and 195-320-57 and AP #195-051-24 and 195-051-23).
 - Area 3: Those lots fronting on Bolinas Lagoon and generally west of Dipsea Road (total lots: 19);
 - Area 4: Those lots fronting on Dipsea Road (total lots: 109). Area 4 is further divided into Areas 4A and 4B with the division occurring between parcels AP #195-070-07 and 195-070-08.
 - Area 5: That unsubdivided land consisting of 26 acres adjacent to the Bolinas Lagoon and the entrance gate of Seadrift.

Based upon the present available information and after extensive public hearings and investigation, the following program policies for density reduction and/or location of development at Seadrift are enacted.

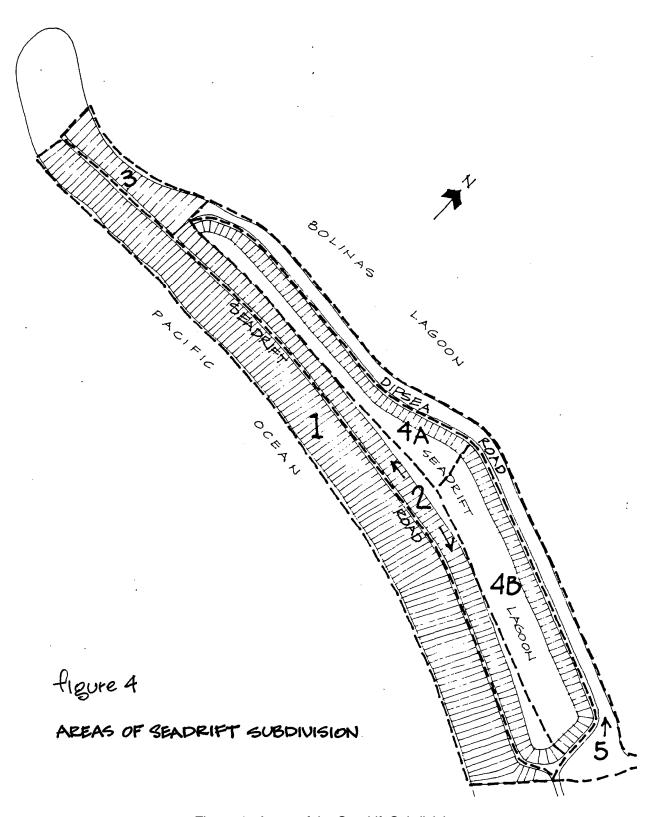


Figure 4: Areas of the Seadrift Subdivision

- a. Area 1. Those properties in Area 1 present the least potential for adverse impacts by new development activities because of their size, their location relative to lagoon waters, and their build-out potential. Development on existing lots in Area 1 may proceed (consistent with other LCP policies) based upon a new zoning classification of 15,000 square foot minimum lot size. Lot consolidation (of adjacent lots under like ownership) shall occur only by side-by-side lot consolidation, if necessary to achieve the minimum lot size.
- b. Area 2. Those properties in Area 2 are smaller lots with a large amount of build-out potential adjacent to the interior Seadrift Lagoon. Lots in Area 2 shall be rezoned to a 30,000 square foot minimum parcel size. Contiguous (side-by-side) lots under like ownership shall be consolidated to achieve the minimum parcel size requirement.
- c. Area 3. These properties of varying size are located immediately adjacent to Bolinas Lagoon. Development in Area 3 may proceed (consistent with other LCP policies) based upon a new zoning classification establishing 30,000 square foot minimum lot size. Contiguous (side-by-side) lots under like ownership shall be consolidated to achieve minimum building site size established by the rezoning.
- d. Area 4. Except as noted herein, properties in Area 4 shall be rezoned from the existing 75,000 square foot minimum parcel size to a 112,500 square foot (2.5 acre) minimum parcel size. Contiguous properties under the same ownership shall be merged to create building sites totaling up to this lot size, where possible. This Policy shall be implemented by means of a master plan zoning district. Based upon a Memorandum of Understanding for the settlement of litigation between the County and, Steven Wisenbaker and the William Kent Estate Company, dated July 12, 1983, the portions of area four (4) listed below shall be subject to the following policies:
 - 1. All of the lots listed herein shall be subject to master plan approval pursuant to Chapter 22.45. Any master plan approval shall include all of the lots listed herein and, be subject to all of the policies contained herein:
 - 2. Lot 201 of Seadrift Lagoon Subdivision No. 2 shall be designated as a non-building site in the master plan. This lot may be combined with an adjacent developed lot or developable lot; however, the resultant combined lot shall be used as a single lot. A lot line adjustment application pursuant to Title 20 of Marin Count Code shall be required to accomplish the combining of a non-buildable lot with a developable lot.
 - 3. Lots 167 through 175 of Seadrift Lagoon Subdivision No. 2 shall be consolidated into seven (7) building sites in the master plan. These lots shall be rezoned to C-RSPS-4.5;
 - 4. Lots 95 through 97 of Seadrift Lagoon Subdivision No. 1 and lots 98 through 102 of Seadrift Lagoon No. 2 shall be consolidated into a maximum of five (5) lots in the master plan. These lots shall be rezoned to C-RSPS-3.5;
 - 5. Lots 104 through 145 of Seadrift Lagoon Subdivision No. 2 shall be consolidated into 32 building sites in the master plan. These lots shall be rezoned to C-RSPS-4.39:
 - 6. Lots 186 and 187 shall be consolidated into one (1) building site in the master plan:
 - 7. The consolidation of all lots shall be accomplished via a tentative and final subdivision map pursuant to Title 20 of Marin County Code;
 - 8. The master plan and tentative map approvals shall provide for a mechanism whereby all of the lots included in the master plan shall be assessed an appropriate share of the cost of developing the proposed access over the old causeway. The appropriate share shall be based upon a consideration of all of the lots that will benefit from the proposed access;

- 9. The master plan and tentative map approvals shall provide that the front property line for lots abutting Dipsea Road shall not be considered property lines for the purposes of establishing setbacks for leach field areas, so that the private road right-of-way or portions thereof may be used for leach field areas for lots abutting that private roadway. Additionally, the owners of such lots shall retain the right to cross the private right-of-way to the unsubdivided parcel for the installation of leach field areas. This may only be done in a manner consistent with Marin County Code 18.06 and "Septic Tank and Leach Field Waivers" dated November 27, 1978, Marin County Department of Public Works. The use of the private road right-of-way and/or the unsubdivided parcel for the installation of leach fields shall only occur if: a) each lot or user has a discrete sewage disposal system; b) each lot or user has a recorded easement over the necessary portion of the unsubdivided parcel; c) no leach fields are located within 100 feet of the mean high tide line of the Bolinas Lagoon; and d) after an opportunity for review and comment has been provided to the Stinson Beach County Water Board.
- e. <u>Area 5</u>. This area includes approximately 26 acres consisting of 2 parcels of approximately 6 and 20 acres respectively. This land is unsubdivided; however, portions of the property are improved with underground utility services. Although Area 5 is not an explicit part of the Seadrift Subdivision, it is included in this policy because of the physical relationship and ownership of the land. Because of its location and general configuration, development of Area 5 presents potentially significant conflicts with several findings and policy objectives identified in this Seadrift Section. Therefore, proposals for development of Area 5 shall be controlled by a Master Plan development providing the following development standards:
 - 1. Additional development in Area 5 shall be limited to no more than 7 additional single-family, detached dwellings and shall be limited to the 6 acre parcel of Area 5:
 - 2. All improvements shall be located a minimum of 100 feet from the waters of Bolinas Lagoon;
 - 3. Development shall be limited to one-story in height, not to exceed 18 feet from average finished grade;
 - 4. Development shall be designed to provide future vehicle and pedestrian access over the site as follows:
 - (a) Roadway dedications to provide possible future connections of the causeway;
 - (b) Pedestrian easements to provide limited public access to and along the Bolinas Lagoon edge.

[Amended pursuant to <u>BOS Resolution No. 84-005</u> [1/3/84], approved conditionally with added amendment by CCC 3/14/84, 2nd <u>BOS Resolution No. 84-146</u> [3/26/84], CCC ED checkoff 4/26/84]

37. Public Acquisition of Seadrift Subdivision Lands. The Seadrift Subdivision is an existing, subdivided development with approximately one-third of the lots presently developed with single-family houses. Coastal policy issues connected with continued development of this subdivision center upon minimizing of geologic hazards, reducing the possible adverse impacts on water quality, public access to beach and tideland areas, protection of wildlife and habitat resources and maintenance of views along the coast.

In review of the Seadrift Subdivision, the County examined these issues and has proposed a regulatory program which successfully acknowledges and addresses the significant aspects of these issues. The County recognizes that public purchase of the lands at the Seadrift Subdivision presents a definitive vehicle for

public management of the resource. However, in light of other methods available, the cost of such acquisition would be extremely high in relationship to the needs, principles and goals that have been identified at Seadrift. The proposed program for lot reduction at Seadrift successfully mitigates the coastal issues identified. Only if portions of the program cannot be achieved as envisioned, should public acquisition be considered a program option.

38. Public Trust. Portions of the Seadrift Subdivision may be subject to the doctrine of public trust, whereby easements benefiting selected public uses run with the property. The LCP adequately identifies and provides a balanced level of public use on and adjacent to the land of Seadrift. However, to assure thorough consideration of the public trust issues, the following policy is proposed:

The County of Marin will notify the State Lands Commission when an application for a coastal development permit is filed with the County on property identified as potentially subject to the public trust. Such notification shall be on lands shown on maps, supplied by the State Lands Commission, as being potentially subject to the trust easement. The State Lands Commission shall be requested to make a statement as to whether the lands are subject to the public trust, and whether a permit or lease will be required for such proposed development, prior to the issuance of the coastal permit by the County.

Bolinas

The LCP land use designations for Bolinas shall be as established by the Community Plan densities except as modified below:

- 39. Those lands designated A-5 and A-10 within the Bolinas Planning Area shall be redesignated to an ARP-5 and ARP-10 zone classification to encourage flexible lot patterns. (See Policy 11-30.)
- 40. Redevelopment/rehabilitation of existing structures and new construction on the Bolinas Gridded Mesa shall be permitted in accordance with the adopted policies of the Bolinas Gridded Mesa Plan (adopted by the Board of Supervisors on November 27, 1984).

[Amended pursuant to <u>BOS Resolution No. 84-564</u> [11/27/84], approved as submitted by CCC 3/27/85]

APPENDICES

		<u>Page</u>
Α.	INVENTORY OF RECREATION AND VISITOR SERVING FACILITIES	A-1
В.	SEISMICITY	B-1
	Alquist-Priolo Special Studies Zones Act	B-1
	Marin County Implementing Resolutions	B-4
C.	HOUSING STUDY METHODOLOGY	C-1
D.	STATE COASTAL COMMISSION FINDINGS ON SEADRIFT	D-1
E.	REFERENCES	E-1

APPENDIX A: INVENTORY OF RECREATION AND VISITOR SERVING FACILITIES

	Existing						Existing Visito <u>r Services</u>									
Subarea		Recreat	ion Faci	lities		Da	s tau- ,		-	Visit	tor Serv	ices		Other		
	Trail heads	Stables	Beaches	Picnic Areas		l ra	ants/	Liquor (On/ Off Site	Gro- cery	Gas	Auto Repair	Hote! Mote!	Camp Sites	Retail	Notes	
Marin Headlands Area							,						} }			
G.G.N.R.A.	30.6 miles hiking 16.8 miles equestrian				Historic Military Forts Barry & Cronkhite		,			•						
-Kirby Cove -Rodeo Lagoon			X X		w/public swimming, fishing.								χl		¹ Group campsites	
-Rodeo Beach -Old military stabl -Tennessee Valley stables	2 S	x x	Х	х			ļ									
Sausalito Area *				1			х	X	Х	х	Х	x			Variety in all categorie	
Tam Junction Area *							х	х	х	х	X	х¹			Variety in all categorie lincludes 100-room Howard Johnson motel	
Mt. Tamaipais Area				,	,							,			•	
Mt. Tamalpals State Park *	Hikings, 17.5 M				Mountain Theater											
-Boot Jack -East Peak -Pan Toll	Equest. X X			X	Scenic overlook	1	x1						1 8s t e		lFood sales	
-Alice Eastwood -West Point Inn -Mountain Home Inn							X ²					X ²	40grou	P	2 _{sem1} -private	
GGNRA Area						1										
-Franks Valley Stab -Muir Woods*	les* 6 M. hiking	x		l			x							x	Snack bar & gift shop	
	* These fac coastal e	ilities xperienc	and serv e and ar	ices ar e used	e not located with by significant numb	ers	he co	astal zone, b bast visitors	ut are	dir	ectly re	lated	to the			

Existing Existing Visitor Services Recreation Facilities Subarea Other Restau-Auto | Hotel Camp rants/ Liquor (On/ Gro-Retall Trall Picnic ood Svd Off Site cery Gas Repair Motel Sites Services Notes Stables Beaches Areas Notes heads Mulr Beach Area Weekend snack bar -Muir Beach Park Х w/public swimming Х -Mulr Beach overlook Open spring 1979 X 5 rooms -Pelican inn Institutional Х -Zen Center Stinson Beach Area Snack Bar Restaurant Х w/public swimming -Stinson Beach Park -Parkside -Jatural Food store Х -Sea Witch Deli Χ. -Post office 10 units -Sandpiper Hotel 14 units -Fern Court Х -Standard Station Х X X -Bungalow ٠., --Stinson Beach Book -A gallary Х -Peach Bottom flats Х -Ed's Superette -Shore store Х -Al's Alleyed Antiques X -Sand Dollar -The Barn 4 untik -Stinson Beach Mote Х -Willow Camp Antiques Х -Quilts, Etc. -Surf Shop -Pacific Midway Opening winter 1979 Х Rest. 6 WWII bar Observation-bird '-Audubon Canyon Ranch X sanctuary . __Elwoods_ Seakeeper Motel Priscilla's Antiques

Oceanic Realty

Seadrift Realty

Χ

Weekend, Vacation

Rentals

Subarea	Existing Recreation Facilities		Restau-			Existing Visitor Services					Other					
	Trail heads	Stables	Beaches	Picnic Areas	Notes		I rants	s/l	Liquor (On/ Off Site	Gro- cery	Gas	Auto Repair	Hote Mote	Camp Sites	Retail Services	Notes
Bolinas Area						:			•							
-Blue Lagoon -Bolinas Bay Bakery	,						X X		x							
-Smiley's Saloon -Pizzaria Fetto de (l '	.	11				X		Χ.				6 uni	:5		
-Bolinas Garage -Gibson House Rest. and Saloon							X		x			X	X			
-dook'N'Things -Bolinas Store] ·				•	11	1	. X	х					Х	
-The Shop -Scowley's						4	X X X		. X X						x	
-Post Office -Bolinas Marine Service					ľ										x .	Boat repai
-Bed and Breakfast							 .						8 room	is		Dispersed dwelli
•		}	}] -	•			•							
									•	·	ľ	}				
•										<u> </u>			ĺ (
									•						•	
	•	,						ļ	•							
									: .							
`						•		l	•							
•											.					
		'								'						
	••		• •	•	•	•	• •	•		•	•.	•	•	•		•

APPENDIX B: SEISMICITY

ALQUIST-PRIOLO SPECIAL STUDIES ZONES ACT

Excerpts from California Public Resources Code (Signed into law December, 1972, amended September 26, 1974, May 4, 1975 and September 28, 1975)

DIVISION 1. ADMINISTRATION CHAPTER 2. DEPARTMENT OF CONSERVATION

Article 3. State Mining and Geology Board and the Division of Mines and Geology

660. There is in the department a State Mining and Geology Board consisting of nine members appointed by the Governor.

673. The board shall also serve as a policy and appeals board for the purposes of Chapter 7.5 (commencing with Section 2621) of Division 2.

DIVISION 2. GEOLOGY, MINES AND MINING CHAPTER 7.5. SPECIAL STUDIES ZONES

2621. This chapter shall be known and may be cited as the Alquist-Priolo Special Studies Zones Act.

2621.5. It is the purpose of this chapter to provide for the adoption and administration of zoning laws, ordinances, rules, and regulations by cities and counties in implementation of the general plan that is in effect in any city or county. The Legislature declares that the provisions of this chapter are intended to provide policies and criteria to assist cities, counties, and state agencies in the exercise of their responsibility to provide for the public safety in hazardous fault zones.

This chapter is applicable to any project, as defined in Section 2621.6, upon issuance of the official special studies zones maps to affected local jurisdictions, but does not apply to any development or structure in existence prior to the effective date of the amendment of this section at the 1975-76 Regular Session of the Legislature.

- 2621.6. (a) As used in this chapter, "project" means
- (1) Any new real estate development which contemplates the eventual construction of structures for human occupancy, subject to the Subdivision Map Act (commencing with Section 66410 of the Government Code).
- (2) Any new real estate development for which a tentative tract map has not yet been approved.
- (3) Any structure for human occupancy, other than a single-family wood frame dwelling not exceeding two stories.
- (4) Any single-family wood frame dwelling which is built or located as part of a development of four or more such dwellings constructed by a single person, individual, partnership, corporation, or other organization. No geologic report shall be required with respect to such single-family wood frame dwelling if the dwelling is located within a new real estate development, as described in paragraph (1) or (2) of this subdivision, for which development a geologic report has been either approved or waived pursuant to Section 2623.
- (b) For the purposes of this chapter, a mobile home whose body width exceeds eight feet shall be considered to be a single-family wood frame dwelling not exceeding two stories.
- 2621.7. This chapter, except Section 2621.9, shall not apply to the conversion of an existing apartment complex into a condominium. This chapter shall apply to projects which are located within a delineated special studies zone.
- 2621.8. This chapter shall not apply to alterations or additions to any structure within a special studies zone the value of which does not exceed 50 percent of the value of the structure.
- 2621.9. A person who is acting as an agent for a seller of real property which is located within a delineated special studies zone, or the seller if he is acting without an agent, shall disclose to any prospective purchaser the fact that the property is located within a delineated special studies zone.
- 2622. In order to assist cities and counties in their planning, zoning, and building-regulation functions, the State Geologist shall delineate, by December 31, 1973, appropriately wide special studies zones to encompass all potentially and recently active traces of the San Andreas, Calaveras, Hayward, and San Jacinto Faults, and such other faults, or segments thereof, as he deems sufficiently active and well-defined as to constitute a potential hazard to structures from surface faulting or fault creep. Such special studies zones shall ordinarily be one-quarter mile or less in width, except in circumstances which may require the State Geologist to designate a wider zone.

Pursuant to this section, the State Geologist shall compile maps delineating the special studies zones and shall submit such maps to all affected cities, counties, and state agencies, not later than December 31, 1973, for review and comment. Concerned jurisdictions and agencies shall submit all such comments to the State Mining and Geology Board for review and consideration within 90 days. Within 90 days of such review, the State Geologist shall provide copies of the official maps to concerned state agencies and to each city or county having jurisdiction over lands lying within any such zone.

The State Geologist shall continually review new geologic and seismic data and shall revise the special studies zones or delineate additional special studies zones when warranted by new information. The State Geologist shall submit all revised maps and additional maps to all affected cities, counties, and state agencies for their review and comment. Concerned jurisdictions and agencies shall submit all such comments to the State Mining and Geology Board for review and consideration within 90 days. Within 90 days of such review, the State Geologist shall provide copies of the revised and additional official maps to concerned state agencies and to each city or county having jurisdiction over lands lying within any such zone.

2623. The approval of a project by a city or county shall be in accordance with policies and criteria established by the State Mining and Geology Board and the findings of the State Geologist. In the development of such policies and criteria, the State Mining and Geology Board shall seek the comment and advice of affected cities, counties, and state agencies. Cities and counties shall require, prior to the approval of a project, a geologic report defining and delineating any hazard of surface fault rupture. If the city or county finds that no undue hazard of this kind exists, the geologic report on such hazard may be waived, with approval of the State Geologist.

After a report has been approved or a waiver granted, subsequent geologic reports shall not be required, provided that new geologic data warranting further investigations is not recorded.

2624. Nothing in this chapter is intended to prevent cities and counties from establishing policies and criteria which are stricter than those established by this chapter or by the State Mining and Geology Board, nor from imposing and collecting fees in addition to those required under this chapter.

- 2625. (a) Each applicant for approval of a project may be charged a reasonable fee by the city or county having jurisdiction over the project.
- (b) Such fees shall be set in an amount sufficient to meet, but not to exceed, the costs to the city or county of administering and complying with the provisions of this chapter.
- (c) The geologic report required by Section 2623 shall be in sufficient detail to meet the criteria and policies established by the State Mining and Geology Board for individual parcels of land.

2630. In carrying out the provisions of this chapter, the State Geologist and the board shall be advised by the Geologic Hazards Technical Advisory Committee consisting of nine members nominated by the State Geologist and appointed by the board. Members of the committee shall be selected and appointed on the basis of their professional qualifications and training in seismology, structural geology, engineering geology, or related disciplines in science and engineering, and shall possess general knowledge of the problems relating to geologic seismic hazards and building safety. The members of the committee shall receive no compensation for their services, but shall be entitled to their actual and necessary expenses incurred in the performance of their duties.

BOARD OF SUPERVISORS OF THE COUNTY OF MARIN RESOLUTION NO. 74-426

A RESOLUTION AUTHORIZING IMPLEMENTATION OF THE ALQUIST-PRIOLO GEOLOGIC HAZARD ZONES ACT

WHEREAS, the Alquist-Priolo Geologic Hazard Zones Act (Ch. 1354, Stats. 1972) directs the State Mining and Geology Board to establish certain seismic safety policies and criteria for proposed new real estate developments or structures for human habitation near earthquake faults, the State Geologist to prepare maps delineating earthquake faults and their associated fracture belts, and mandates cities and counties to require proposed new real estate developments or structures for human habitation near faults and within delineated special studies zones to submit geologic reports and observe the State-adopted criteria; and

WHEREAS, the State Mining and Geology Board has adopted Policies and Criteria (copies of which are available for inspection at the County Planning Department) for the administration of the Alquist-Priolo Geologic Hazard Zones Act Thai are applicable to Marin County and provide for geologic studies, their possible waiver by the County with concurrence of the State Geologist, and establish required setbacks from identified active and potentially active faults; and

WHEREAS, pursuant to the State Mining and Geology Board's adopted Policies and Criteria, the State Geologist has prepared preliminary special studies zones maps for Marin County which have been published and posted as a public notice and within which all known property owners of record have received notice of their property's inclusion; and

WHEREAS, the State Geologist has issued final versions of the special studies zones maps, incorporating minor changes, for local administrative use, and these final versions have been received by the County; and

WHEREAS, to defray the State and local costs of administering the program, the Alquist-Priolo Geologic Hazard Zones Act provides for fees to be collected by the County; and

WHEREAS, a method of appeal by applicants is desirable and equitable;

NOW, THEREFORE, BE IT RESOLVED:

- 1. That all County agencies and departments are to observe and carry out the requirements of the Act and adopted Policies and Criteria.
- 2. The Planning Department is to review all applications for new real estate developments, including subdivisions, land divisions, master plans, development plans, and design reviews, and building permits for structures for human habitation to determine if such projects are located within the special studies zones. The Planning Department shall notify such applicant and the Department of Public Works if the project is located within the special studies zones and also notify the applicant that a geologic report is required unless waived by the Department of Public Works and the State Geologist.

 I Public Works if the project is located within the special studies zones and also notify the applicant that a geologic report is required unless waived by the Department of Public Works and the State Geologist.
- 3. The Department of Public Works is to review all applications for new real estate developments and structures for human habitation within the special studies zones for compliance with the Act and develop procedures for its implementation.
- 4. The applicant shall reimburse the County for actual costs incurred in reviewing the geologic report and also pay an additional building inspection fee in the amount of one-tenth of one percent of the total valuation of the proposed building construction to cover administrative costs, as provided in the Act (Pub. Res. C § 2624 and 2625).
- 5. Provisions to implement this Act are to be included in a comprehensive seismic safety and geologic hazards protective ordinance to be developed by the County Planning Department with the cooperation of the County Counsel and the Department of Public Works for consideration by this Board at a later date.
- 6. Any time limits specified within Titles 19, 21 and 22 are hereby waived until any required geologic report has been approved or the need for a report waived by the Department of Public Works and the State Geologist.
- 7. The Marin County Board of Supervisors shall hear any appeals arising from implementation of this Act in order to determine whether an undue hazard exists with respect to the application. The appeals shall be submitted in writing to the Clerk of the Board of Supervisors. All decisions and findings shall be given in writing to the appellant.

PASSED AND ADOPTED at a regular meeting of the Board of Supervisors held on the <u>23rd</u> day of December <u>, 1974</u>, by the following vote:

AYES:

SUPERVISORS

Peter R. Arrigoni, Gary Giacomini, Thomas S. Price,

Arnold M. Baptiste, Bob Roumiguiere

WOES:

SUPERVISORS

ABSENT:

SUPERVISORS

Chairman of the Board of Supervisors

ATTEST:

Clerk

POLICIES AND CRITERIA FOP IMPLEMENTATION OF THE ALQUIST-PRIOLO GEOLOGIC HAZARD ZONES ACT

PURSUANT TO MARIN COUNTY BOARD OF SUPERVISORS RESOLUTION NO. 74-42b

- 1. Applicants for new real estate developments, including subdivisions, land divisions, master plans, development plans, and design reviews, and building permits for structures for human habitation in the studies areas shall have a geologic report prepared by a geologist registered in the State of California unless waived pursuant to Section 2623 of the Act (Pub. Res. C. 2623). The contents of the geologic report shall generally comply with the "Desired Content of Geological Reports Submitted to the Department of Public Works, County of Marin," as applicable to the Act.
- 2. Three (3) copies of the geologic report shall be submitted to the Department of Public Works, along with a one hundred fifty dollar deposit to cover the cost to the County of having the report reviewed by a geologist registered in the Sate of California. Prior to approval of the report by the Department of Public Works, any additional costs in excess of the one hundred fifty dollar deposit shall be paid by the applicant. If the cost to the County is less than one hundred fifty dollars, the excess will be returned to the applicant.
- 3. In addition, prior to issuance of a building permit for a structure for human habitation, a fee in the amount of one-tenth of one percent of the total valuation of the proposed building construction shall be paid when a geologic report has been required for this property.
- 4. Upon submission of the geologic report to the Department of Public Works, the Department of Public Works will transmit one copy to a geologist registered in the State of California, hired by the Department of Public Works to review such

reports. The second copy will be transmitted to the State Geologist, when approved, and the third copy filed with the Department of Public Works.

- 5. Where the application is for a building permit, reference to the Department of Public Works shall mean the Building Inspection Division of the Department of Public Works, and for other applications, shall mean the Land Development Section of the Department of Public Works.
- 6. If a geologic report is required, no permit will be granted or application approved until the geologic report has been approved and any recommendations or conditions implemented or made conditions of such permit or approval.
- 7. If an applicant is dissatisfied with the decision of the Department of Public Works or its consultant, he may appeal to the Marin County Geologic Hazard Advisory and Appeals Board within five working days of the date-of formal action by the Department of Public Works. Any such appeal shall be submitted to the Director of Public Works.

APPENDIX C: HOUSING STUDY METHODOLOGY

To estimate 1977 income, the ratio of median family coastal income to SMSA income from the 1970 census was applied to the median family SMSA income for 1977 as estimated by the U.S. Department of Housing and Urban Development:

	1970 Coastal Median Income	(\$8,474)	
	1970 SMSA Median Income	(\$10,038)	
Χ	1977 SMSA Median Income	(\$19,200)	
	1977 Coastal Median Income	(\$16,208)	

HUD uses a cut-off of 80 percent of median income to define moderate income households. This cut-off was used to define the upper limit of 1977 coastal zone family income as \$13,000.

Under current mortgage lending practices, dwelling costs generally cannot exceed three times income. The cost limit for moderate price units was therefore set at \$39,000. The 1977 Assessor's rolls for the coastal zone were examined to find single-family units on single-family parcels (not including farms) with values less than \$39,000.

LIMITATIONS OF THE STUDY

Four limitations of this study must be fully understood to avoid reading too much into it.

- (1) The study is based on single-family assessed valuation, not on rents. In the coastal zone, this is not a serious limitation since less than 10 percent of coastal dwellings are multiple-family. Moderate-cost rent or ownership in the coastal zone is a direct function of single-family housing prices.
- (2) Housing value is based on assessed value; however, the assessed value of older houses frequently lags behind actual market value. This is a serious limitation, the magnitude of which can only be guessed at. There does not appear to be any strong relationship between the assessed value of units and their last date of sale, which suggests that any understatement in values may not be great.
- (3) Related to this second point is the age of the Assessor's printout. The printout gives values as of April 1, 1977. Rapidly increasing real estate values since then have probably decreased the number of moderate-cost units available. To the extent that housing values are understated, the number of moderate-cost units is overstated. Any resulting overstatement of moderate-cost units may be compensated for 1y the exclusion of multiple family and hidden mother-in-law units from the study. Many of these units are of moderate cost.

(4) The study is based on a derived estimate of coastal zone income, and not on a direct statistical sample of coastal zone residents. By its nature, however, personal income is difficult to accurately estimate. This is not a major limitation in relation to the others noted above.

Because of the limitations of the study, staff does not believe that the number of moderate-cost units estimated in Table 1 should be considered accurate. The study does acceptably portray the concentrations and proportions of moderate-cost units shown on Figure 3 and in Table 1.

APPENDIX D. STATE COASTAL COMMISSION FINDINGS ON SEADRIFT

This appendix consists of the findings of the Seadrift Subdivision that were adopted by the State Coastal Commission when they conditionally certified Unit I of Marin County's Local Coastal Program.

FINDINGS AND DECLARATIONS

The Commission finds and declares as follows:

1. History

The Seadrift area is made up of five separate subdivisions plus certain unsubdivided lands known as Sub-area 5 and so identified on the maps accompanying the LCP as forwarded to the Commission. Seadrift Subdivision Number One was recorded in 1949; Seadrift Subdivision Number Two in 1956; Seadrift Subdivision Number Three in 1964; Seadrift Lagoon Subdivision Number One in 1961; and Seadrift Lagoon Subdivision Number Two in 1963.

Under Proposition 20, the predecessor Regional Commission held public hearings on the subdivisions and identified overall conditions for the review and approval of development at Seadrift. These were adopted as a formal policy statement on March 21, 1974, and amended on April 25, 1974. They covered public access, septic tanks, open space, and hazard liability. Access provisions on the seaward edge of the spit called for removal of a fence, dedication for public use of a lot at the southwesterly end of Walla Vista Avenue, just south of the Seadrift area, removal of the iron rail "fence" across the beach, placement of signs identifying private property and a pathway to the public beach, and specific instructions to the Seadrift security guard that he is "to continue to permit any normal, non-nuisance public use of such portion of the beach area as is public land or is sand wetted by recent tides adjacent to the water's edge." On the lagoon edge, the conditions provided for a pedestrian easement as far as the location of the former causeway, (near the southern boundary of the area, and linking it with Highway One) with further access procedures or easements to be evaluated as part of preparation of the Coastal Plan.

The conditions specified that permits would not be granted for septic tank permits issued by the County after October 31, 1973, based upon an action of the San Francisco Bay Regional Water Quality Control Board after public hearings on the high probability of septic tank pollution. The overall conditions further identify two areas (unsubdivided lots northerly of Dipsea Road from the Seadrift entrance gate to the boathouse and lots 103-149 along Dipsea Road) where the Commission could not make the findings necessary to issue coastal permits, based upon visual proximity to Highway 1, location

adjacent to the most narrow section of the Bolinas Lagoon wildlife habitat, the undeveloped nature of these areas, and their location in an area to be considered for limited public access in the coastal plan. The hazard provisions included assumption of full liability for damage due to natural geologic and hydrologic hazards to be assumed by those who built and a requirement that the developer provide notice to all current and future owners of property at Seadrift of the relatively high degree of hazard from earthquake and tsunami. Regional staff reports indicate that by 1973, approximately 20 single-family houses had been developed, the majority along the ocean front lots. (A large exhibit to be available at the meeting will indicate the time of development of each of the parcels where development or active permits exist up to the present.)

Several of the overall conditions were met during the period from mid-1973 to mid-1974 while the Region was reviewing development permits. Several items, the most significant of which was the easement dedication for public access along the lagoon edge of the spit, were not completed at that time, however.

The entire Stinson Beach area was placed under a building ban by the SFBRWQCB, and further construction at Seadrift was not considered again by the Regional Commission until early 1978. In the interim, a proposed sewage treatment plant was turned down by area voters, and new state legislation authorizing septic system maintenance districts was utilized to set up a program by which the Stinson Beach Water District could exercise the authority to monitor and where necessary, to remedy, problems caused by failing septic systems. Their program was formally reviewed by the SFBRWQCB, and the prohibition of individual systems was modified by Resolution 78-1 on January 17, 1978, to allow the consideration of homes with such systems.

After the passage of the Coastal Act of 1976, the Regional Commission began reexamination of its policies in regard to all possible development, including the Seadrift area. In anticipation of renewed development requests at Seadrift, the Regional Commission adopted an Interpretative Guideline in October, 1977 that focused upon the contiguously owned lots. This guideline provided as follows:

"Development on the existing contiguous subdivided lots adjacent to the interior Bolinas Lagoon (Seadrift Lagoon) at Seadrift raises a number of planning issues involving density, siting, sewage disposal and lagoon protection. Pending Commission approval of an overall development plan which offers resolution of these planning issues, further development will not be permitted."

Regional Commission staff reports of January 18, 1978, April 17, 1978, and May 16, 1978, set forth additional information and analysis on a number of coastal issues, including wildlife resources, water supply conditions. After public hearings, the Regional Commission adopted an interim policy on July 20, 1978 (this was amended September 28, 1978 and October 19, 1978). One section of this overall policy stated

that "... no development of any contiguous lots under common ownership shall take place until the Commission has approved a plan for the consolidation of some of those lots." Attention since that time has focused upon the specific provisions of such a consolidation program, with a number of different proposals being suggested in a series of regional staff reports and public hearings. The Regional Commission held additional hearings in late 1978 and early 1979, and adopted a revised policy May 10, 1979.

Related Planning Efforts

While the Seadrift question was being considered by the North Central Regional Commission, several related planning projects in the area were being carried out. A harbor district that had planned substantial alteration of Bolinas Lagoon for harbor and marina construction was abolished by legislation in 1969, and custody of the tidelands was transferred to Marin County, with a requirement that a plan for the Lagoon be prepared. The County arranged for substantial background work to be done by the Conservation and Resources Development Planning" in February 1971; and based the 1972 Bolinas Lagoon Plan largely upon that work and upon a study by the Department of Fish and Game published in December, 1970, "The Natural Resources of Bolinas Lagoon, their Status and Future."

The resulting Bolinas Lagoon Plan was approved in 1972 and submitted to the State Lands Commission in fulfillment of one of the conditions of the tidelands grant. It provided for ecological reserve status for all tidal areas, called for bicycle and pedestrian paths and observation points (to include small viewing decks, interpretive exhibits and minimum parking and sanitary facilities), and set forth locations for active and passive recreational uses. In a modified form, these policies were incorporated by reference as the LCP policies governing uses and development in and around the Lagoon. The modifications provided that the construction of physical improvements would not be considered an allowable use under the diking, filling and dredging policies, limited dredging to maintenance of existing channels pending completion of current studies by the Corps of Engineers, prohibited the commercial extraction of marine species pending completion of base studies for the development of a comprehensive management program, limited the discharge of toxic substances, and called for continuation of the existing monitoring of the lagoon.

The Corps of Engineers' study is a five-year review of flow hydrodynamics, sedimentology, water quality, and marine and wildlife resources. It is to produce a model which incorporates these physical processes, and by varying those conditions which affect the Lagoon, to predict the consequences of proposed actions. The study is anticipated to be completed in 1983, subject to continued availability of funding. Another planning project completed during this time was the Stinson Beach Community Plan, adopted by the Board of Supervisors in 1975 after extensive public hearings. It redesignated from commercial to residential uses a portion of the undivided

Seadrift area now called sub-area 5, but made no proposals for change in the area that had been subdivided at the time of the plan's adoption. Those portions of this plan not superseded by specific LCP policies have also been incorporated into the Local Coastal Program.

Marin LCP Program. The work program for the Marin LCP was approved on April 5, 1978, and the land use plan was submitted for Unit z, the southern portion of the County, on September 20, 1979. Five drafts of the LCP were reviewed by the Planning Commission and the public in a series of public hearings and workshops. Substantial changes were made in the Seadrift policies by the Board of Supervisors, leading to extensive discussion and reexamination of these provisions. The Planning Commission proposals would have allowed a higher level of buildout than the Board action, but would have placed most future structures away from Subarea 4A, (which the Planning Commission considered as being of special value to shorebirds) by means of a voluntary transfer program by which major lot owners could obtain bonus units by shifting the location of development. Policies adopted by the Board of Supervisors would have eliminated this bonus provision and would have resulted in the distribution of allowable development throughout Sub-areas 4A and 4B,** although at a lesser overall density.

<u>State Commission Planning and Permit Activity</u>. The Coastal Commission and the predecessor Commission have considered 19 appeals from the Seadrift area, eight of which are now pending. Under Proposition 20, development on five lots in Subarea 4B was denied, with findings that indicated that public acquisition should be seriously considered as to whether it might be the most appropriate means to protect the habitat value of the Lagoon.

The Coastal Plan of 1975 urged the acquisition of land for construction of small-scale parking and visitor facilities near the Seadrift gate, while the Commissions' 1976 acquisition recommendations to the Governor and the Legislature recommended acquisition of 57.4 acres for beach recreation and day use activities as a II-A priority (and noted that negotiations on dedication of the beach were underway). No action has been taken on this recommendation.

Subsequent to the adoption of the 1976 Coastal Act, the State Commission reviewed a number of the issues presented in the Seadrift segment of the Marin County-LCP during its consideration of appeals from permit decisions regarding development within Seadrift. In Appeal No. 395-78 (Terplan), the Commission granted a permit for construction of a single family residence on an oceanfront parcel in

^{**} The Sub-areas are shown on Figure 4 They are not coterminous with the boundaries of original subdivisions. Several early Regional staff reports refer to slightly different Sub-areas, so care should be taken to ensure that confusion is avoided.

Sub-area 1 subject to conditions of requiring dedication of public access for passive recreation use, finding that, as conditioned, the project was consistent with the public access policies of the Coastal Act. The terms of the conditions of the permit are substantially the same as those set forth in the plan as the proposed settlement agreement (Page 14). In Appeal No. 175-79 (Alstrom), the Commission granted a permit for construction of a single family residence on a parcel in Sub-area 4A, finding that since the applicant owned no contiguous parcels, planning options then being considered by the County and the Regional Commission to mitigate impacts of development on the adjacent lagoons (i.e., lot consolidation) would not be applicable. The Commission concluded, therefore, that approval of the project was consistent with the Coastal Act and would not prejudice the LCP planning process. In appeals of permit discussions dealing with similar development proposals, ("isolated" parcels) the commission found no substantial issue had been raised (Appeal Nos. 364-79 (Safrit - Sub-area 3) and 363-79 (yolk-Sub-area 4A).) The Commission has recently found a substantial issue raised in Appeal Nos. 311-79, and 312-79 (Wisenbaker). Action on such appeals which deal with single family residential developments where the applicant owns contiguous parcels has been postponed pending final action by the Commission on Unit I of the Marin County LCP. Based upon the above information and upon the recommended findings of the Regional Commission, the Commission finds that substantial consideration has been given to the coastal issues and resources in the Seadrift area and that the Local Coastal Program provisions have been developed in conformity with these previous decisions and with the policies of Chapter 3 of the Coastal Act.

2. Habitat Values of Bolinas Lagoon.

Testimony before the Regional and State Commissions has dwelled at length upon the habitat values of the Lagoon and on the presumed effect of further buildout upon these values. The available scientific studies were cited in the background section of the LCP as revised by the Regional Commission. Relevant pages 57-61 are attached as Exhibit 3. The studies include shorebird studies carried out under the auspices of the Point Reyes Bird Observatory as well as more general investigations in the ecology of the Lagoon.

The Bolinas Lagoon Technical Advisory Committee, a group appointed by the County to oversee the Bolinas Lagoon Plan, considered the lot consolidation proposals as they were being reviewed by the County in light of the scientific investigations available to the Committee. Their resulting action, as documented in the minutes of their March 14, 1979 meeting, called for no buildout in the unsubdivided portion of Seadrift (Sub-area 5), minimum buildout within Sub-area 4A (at that time called 3A) and (as a second priority), within 4B (then called 3B). The committee also encouraged measures that would prevent free access to the Lagoon by dogs and urged that solutions for the tidal flow problems in the southern end of the Lagoon be explored by the Army Corps of Engineers before the nineacre entrance parcel and adjacent lands (Sub-area 5) were committed to development.

Since that time, there has been substantial discussion as to whether there really is a difference in value to wildlife between Sub-areas 4A and 4B. An associated question is whether the bonus units included in several lot consolidation schemes, including the one presently recommended by the Regional Commission, are appropriate as an inducement to encourage transfers of development from 4A to 4B. This has been described to the staff as a difference between those concerned primarily with shorebirds and those whose chief concern is with the entire ecological system of the Lagoon. The Regional Commission discussed on several occasions whether the bonuses were an appropriate technique, and at least once whether the transfer should be made mandatory rather than voluntary, but concluded that the added protection within Sub-area 4A outweighed the increase in overall density that would result from the transfer program.

Another point of controversy has been whether Seadrift residents and visitors should be considered a chief source of possible interference with the Lagoon's wildlife, especially the population of harbor seals, or whether harassment from other sources, such as visitors along the inland margin of the Lagoon or people and dogs from Bolinas may be a part, or an important part of this problem. The Regional Commission investigation focused primarily on the presumed effects associated with development rather than investigating behavioral questions.

Based upon the above information and upon the recommended findings of the Regional Commission, the Commission finds that the Local Coastal Program provisions are consistent with Sections 30231 and 30240 of the Coastal Act dealing with protection of valuable habitat areas.

3. Water Quality and Watershed Management

The history of water quality problems within Bolinas Lagoon is summarized in Finding 1 as it relates to the town of Stinson Beach. Two other sources of pollution within the Lagoon, untreated sewage from the town of Bolinas and pollution from livestock and other sources within the watershed, have largely been abated through the installation of a sewage treatment system under the management of the Bolinas Public Utility District and the placing of more of the watershed within public ownership. Facilities in the park area are currently very limited and consequent use is not anticipated to add substantially to current levels of pollution. Comprehensive management plans for both Mt. Tamalpais State Park and the Golden Gate National Recreation Area have been completed and adopted. They have also focused upon minimizing or eliminating adverse impacts, and have provided for only low intensity recreational uses for the areas.

The LCP, after investigation, recommended that the 1970 quarantine on shellfish remain in effect, and the background portion of the LCP notes that "lifting of the existing quarantine would likely be followed by a new quarantine in the southeast corner of the Lagoon

where sampling has consistently recorded high pollutant levels." The LCP calls for renewed attempts to deal with the remaining sources of pollution, and tighter development standards to be provided.

Proponents of further building at Seadrift have emphasized that testing of all the septic systems in the area during implementation of the Water District's monitoring program revealed only two systems with problems, both attributed at the time to faulty installation, and that the current monitoring program carried out by the Stinson Beach Water District and subject to SFBRWQCB review has shown no indication of a present problem. Opponents have countered that the Seadrift area is inherently unsuitable for continued reliance upon this method of waste disposal, especially at the density envisaged for ultimate buildout, and that current investigations do not reflect the magnitude of the potential problems because a large number of the present structures are occupied only part of the time.

There is no conclusive evidence upon which to base projections of ultimate occupancy other than the number of homes that would be allowed under the policy provisions, and the rate at which full time occupancy of existing structures might occur. Testimony before the Regional and State Commissions has indicated that a number of lot owners are contemplating eventual retirement, but no comprehensive survey has been done. Stinson Beach is within an easy drive of San Francisco, and has been a traditional destination of both weekend and day users of the beach, which is often sunny when San Francisco is experiencing summer fog. Other subdivisions in Sonoma and Marin which appear to be largely or substantially second homes are not as accessible, and even if good data were available as to the rate at which second home areas have become more oriented toward primary residences, it would not furnish a useful indication of the probability of such changes in the Seadrift area in the short term. The present monitoring program is designed to take the factor of part-time occupancy into account, and Policy IV 7b does provide that if the monitoring indicates a problem is occurring, development can be halted at that time.

The Regional Commission concluded that the danger of further pollution of Bolinas Lagoon is a substantial one, and this concern constituted one of the bases of their imposition of a lot consolidation program on an interim basis and their recommendation of such a program within the Local Coastal Program. The Commission finds, on the basis of the information above and the recommended findings of the Regional Commission, that this concern is a valid one and that the lot consolidation program based upon existing information as considered by the Regional Commission is a valid approach and consistent with the Coastal Act.

4. Review of Access Provisions

The LCP access component separates the access policies dealing with the Seadrift Subdivision into two portions - access to and use of the Seadrift Beach and access to that edge of the Bolinas Lagoon along the Seadrift sandspit. The recommended LCP access provisions for the ocean area focus on assuring 'a right for the public to use the sandy beach area adjacent to the Seadrift subdivision. Although the LCP identifies public purchase and litigation of prescriptive rights as alternatives available for the establishment of continual public access at the Seadrift Beach, the recommended priority approach is to obtain an agreement between the County, the Coastal Commission and the Oceanfront landowners for the dedication of easements along the beach for low intensity recreational use. Such an agreement, proposed as a settlement to any prescriptive rights litigation now or in the future, would provide for public use over the beach area between the ocean and a line 25 feet seaward of the toe of the dunes (but not closer than 100 feet to the rear building setback line). In addition to these overall solutions for obtaining access along the beach, the LCP, as conditioned, requires that dedications similar to those proposed in the settlement agreement be obtained from oceanfront property owners through the coastal permit process. The LCP does not provide for requirements of vertical access through the Seadrift subdivision. The access easement would, therefore, be reached by walking from presently available access and parking areas lying down coast.

On the lagoon side of the sandspit, recommended policies call for offer of an easement for limited scientific and educational access in conjunction with any development requests in Sub-area 5. This limitation of access is consistent with the type of monitored and supervised use available at the Audubon Canyon Ranch on the inland side of the Lagoon, and the Regional Commission findings were emphatic that similar limitations were appropriate given the sensitive nature of the resources.

The issue of public access within the Seadrift subdivision, particularly to the Seadrift Beach, has been the subject of numerous discussions before the predecessor and current North Central Coast Regional Commissions and the State Commission. In 1978, the Regional Commission formed a special subcommittee to draft an access agreement as an alternative to pursuing a prescriptive rights lawsuit against the individual oceanfront property owners. Enactment of such an agreement would effectively settle any prescriptive rights litigation by the state concerning the oceanfront parcels at Seadrift whose owners are party to the agreement. Although numerous hearings have been held, the Regional Commission has not formally adopted an agreement package. Questions of the area of public use and the types of uses to be allowed were among the major issues considered by the Regional Commission.

The Property Owners Association, SPOA, has strongly opposed any general public access, or any attempt to make the road system available to the public citing such factors as the need to maintain security for many vacant vacation homes, the absence of parking or restrooms for visitors, and an alleged increased chance of habitat damage. Representatives of SPOA informed the Regional Commission that their continuing participation in attempting to work out the voluntary agreement for ocean front access if dependent upon no requirements of access within the other portions of the subdivision (and upon no imposition of across-the-road consolidation). The Regional Commission concluded that it was most appropriate to seek the voluntary agreement as a first priority approach since a large number of the oceanfront lots were already developed, and since the alternatives of pursuing litigation on prescriptive rights or seeking acquisition would involve substantial public expenditures. The LCP policies recommend this approach and set minimum standards for the provisions of an agreement which would meet the Coastal Act policies. These provisions are similar to the terms of public access conditions which the Commission has required in granting permits for development on oceanfront parcels. The LCP policies, as conditioned, would also provide that similar public access conditions would be imposed in new development projects on oceanfront parcels.

Concern has been expressed over the availability of adequate support facilities for public use of Seadrift Beach. A parcel located just outside of the subdivision boundaries has been deeded to the County by the original owner and developer of Seadrift, the William Kent Estate Company. It may be possible that, after the opening of Seadrift Beach to the public, use may justify siting facilities such as public restrooms and trash collectors on that parcel.

Another question remaining regarding access to and use of the Seadrift Beaches is whether vertical access through the subdivision to the lagoon and to the beaches is necessary to meet the mandates of Section 30212 of the Coastal Act. Opponents of the plan as submitted argue that the public should be allowed to use the private roads to reach the lagoon and the beaches within the Seadrift area. To establish such access, offers of dedication of easements over private roads could be required in connection with any request for a development permit from the original development company, which still holds fee title to the roads as well as certain other facilities and a number of lots. Access along such easements could be restricted to pedestrian, bicycle, and similar non-motorized access, or could be expanded to include automobile access and parking, and perhaps facilities such as chemical toilets. Representatives of SPOA have strongly opposed any suggestions of allowing access through the subdivision itself.

The protection of the resource values of the lagoons within and adjacent to the Seadrift subdivision has been of major concern during the planning process. The submitted LCP includes a lot consolidation program to lessen the impacts development at Seadrift could have on the lagoon resources. By allowing unlimited public

use of the roads to the lagoon, human interference with existing resources could significantly increase; this would be inconsistent with the protection of fragile coastal resources. Since the plan does provide for obtaining access for scientific purposes through the permitting process for development within Sub-area 5, the Commission finds that the plan does provide for adequate access to the lagoon consistent with the protection of the resources.

The Commission, in granting permits for development on oceanfront parcels, has found that vertical access through the subdivision was not necessary to find development on such parcels consistent with the Coastal Act. In making this determination, the Commission noted that access to the entire area of shoreline is available by walking upcoast from existing accessways to the southerly part of the subdivision. Because the walk from these accessways along the 2-1/2 miles of Seadrift ocean shoreline is virtually unobstructed except at the most extreme high tides and storm conditions, the public would have full access to the oceanfront Seadrift Beach.

The question of the appropriateness of vertical access through the subdivision to the oceanfront was also considered by the County and the Regional Commission during the hearings on the Marin LCP. Again, it was concluded that adequate vertical access will be available nearby, and vertical access was not required in this situation. The Commission finds, based on the Regional Commission public hearings, consideration and findings, that the proposed easement area will be accessible from existing and permitted accessways adjacent to and southerly of the Seadrift subdivision and that the LCP policies therefore, represent a valid approach to obtaining public access.

The Commission has considered whether the Seadrift area would be an appropriate location in which to utilize an additional tool provided in the 1979 amendments to the Coastal Act to achieve access through subdivided areas not otherwise accessible to the public. Section 30610.3 of the Public Resources Code now provides as follows:

SEC. 30610.3

(a) Whenever the commission determines (1) that public access opportunities through an existing subdivided area, which has less than 75-percent -of the subdivided lots built upon, or an area proposed to be subdivided are not adequate to meet the public access requirements of this division and (2) that individual owners of vacant lots in such an area do not have the legal authority to comply with such public access requirements as a condition of securing a coastal development permit for the reason that some other person or persons has such legal authority, the commission shall implement such public access requirements as provided in this section.

After reviewing this potential approach, the Commission has concluded that it would not be appropriate for use within the Seadrift area. The second condition of this subsection is met because individual owners of vacant oceanfront parcels do not have the legal authority to allow access through the locked gate or along the subdivision roads. The gate is controlled by the Seadrift Property Owners Association, membership in which is voluntary on the part of home and lot owners. (Membership in a second association, the Seadrift Lagoon Property Owners Association, is mandatory, but only for lot owners within the subdivisions fronting upon the interior Seadrift Lagoon, and this association does not control the access roads.) Fee title to the roads is retained by the William Kent Estate Company, which holds a number of vacant parcels in Seadrift and certain recreational facilities. However, the first prerequisite of Section 30610.3 (a) is not met because more than 75 percent of the oceanfront lots in Seadrift Subdivision No. One were built upon as of the effective date of Commission consideration of the Local Coastal Program (and of the adoption of these amendments to the California Coastal Act of 1976). Accordingly, this program would not be applicable within the Seadrift area.

Owners of existing vacant parcels can provide lateral access along the oceanfront of their parcels, and will be required to do so by Policy 1-13 of the LCP. As noted elsewhere in these findings, the Commission has concluded that (1) unlimited use of the private roads could have detrimental effects upon Bolinas Lagoon resource values; (2) adequate access to the oceanfront easement area can be obtained by walking along the beach from existing and permitted accessways; and (3) that this approach represents a valid approach to obtaining public access. Thus in any event, Public Resources Code Section 30610.3 (a), which depends upon a Commission finding that "public access opportunities through an existing subdivided area ... are not adequate to meet the public access requirements of this division" would not be applicable to the Seadrift oceanfront area.

Based on the above findings and the recommended findings of the Regional Commission, the commission finds that the recommended LCP access provisions are consistent with the provisions of Chapter 3 of the Coastal Act.

5. Possibility of Public Action or Acquisition

LCP Policy IV 7-F acknowledges that public purchase of the lands at Seadrift presents a definitive vehicle for public management of the resource. It concludes that in light of other methods available the cost would be extremely high, and that the proposed program for lot reduction successfully mitigates the coastal issues involved, and states that "only if portions of the program cannot be achieved as envisioned, shall public acquisition be considered a program option".

Recent Federal purchases within the Marin coastal areas have focused upon the watershed of Tomales Bay, to the north, as a means of protecting that valuable area. Very recently, additional authorizations have included a number of tidelands parcels, at least one of which (Kunst, 21-80) has a pending appeal from a Regional Commission denial of a request to place additional fill (pilings) in the Bay to allow construction of a garage. Investigation during LCP preparation indicated that no Federal purchases are planned within the Bolinas Lagoon area or elsewhere within Unit I, and this still appears to be the case.

A number of potential Conservancy projects within Marin County have been discussed informally with Conservancy staff and board members, but it does not appear that there is substantial interest in the Seadrift area at this time. Conservancy restoration projects to date have focused upon areas where a majority of the parcels are vacant, so that opportunities for redesign or shifting the location of development are less limited. A facilitating role within a larger approach may be a more appropriate role for the Conservancy than a major project.

There has been no interest on the part of the State Department of Parks and Recreation on purchasing any land in the Seadrift area, either in their original review of the Commissions' 1976 acquisition recommendations or subsequent to that time. The Department has recently turned its holdings at Stinson Beach State Park over to the Federal Government, and that popular area is now being administered as part of the Golden Gate National Recreation Area. Commission staff has recently reviewed a number of projects on the Commissions' 1976 list for which acquisition has not been authorized or completed, and recommended to the Commission that the Parks and Recreation Commission be urged to include a number of those projects in funding from the June, 1980 bond act, if it should pass. However, most of the projects so recommended were on the highest priority list, Group I, and the Seadrift area was not included. While it is an important resource area, given the extreme limitations on funding from State sources, use of the regulatory authority appears to be a more appropriate approach. The Commission finds that based upon the information above and upon the findings of the Regional Commission, that this approach has been sufficiently considered and that it does not appear to be the most appropriate approach at this time.

6. Review of Development Alternatives

Alternative approaches to further development at Seadrift can be considered as four basic alternatives, as follows:

- A. No further development
- B. Moderate consolidation utilizing existing land use designations and lot patterns
- C. Consolidation with redesignation of allowable land uses

D. Redesignation of allowable land uses, elimination of existing parcel patterns, and redesign and resiting of any allowable structures.

Discussions by the Regional Commission and Marin County have focused primarily upon variations of Alternative B during the preparation and review of the Local Coastal Program, although the other alternatives were reviewed to some extent. Commission comments during the public hearing indicated their desire to examine further the benefits and disadvantages of other approaches, however.

6A. No further development. Based upon an evaluation of the potential coastal resource problems discussed above, and upon such additional factors as the hazards presented by the site, it has been advocated by some that no further development. should be allowed at Seadrift. The Regional Commission's 2-7-79 staff report noted this as an alternative but concluded that it would be too expensive. The Regional Commission discussed this approach, but did not select it for further investigation, concluding that it was not justified by Coastal Act requirements. A policy of potential acquisition was considered by the Board of Supervisors but was rejected in favor of a regulatory program approach.

The Commission considered the hazard aspect during its July, 1979 discussion of the Alstrom appeal, and found that Section 30253 of the Coastal Act, requiring development to be located to "minimize risks to life and property in areas of high geologic, flood, and fire hazard" could be dealt with through conditions requiring individual applicants to waive any claim to liability or public disaster insurance. Although concern has periodically been expressed about this approach, particularly since emergency permits have been requested for riprap or other barriers to protect existing homes from wave action during periods of storm and high tide, the Regional Commission has noted that the oceanfront lots are essentially built out, and that there may be no significant alternative to protective works for the protection of existing structures.

On the basis of the information discussed in this report and in the Regional Commission findings on the anticipated effect of additional development upon coastal resources, the Commission finds that the Regional Commission conclusion that halting all further development at Seadrift was not required in terms of the Coastal Act was an appropriate one.

6B. Moderate Consolidation Utilizing Existing Land Use Designations and Lot Patterns. Very considerable attention has been given to this alternative, and a number of variations in regard to appropriate minimum lot sizes, appropriate provisions for lot combination, (and particularly whether across-the-road consolidation should be required) and whether attempts should be made to shift a portion of the allowable development out of Sub-area 4A have been considered by the County and by the Regional Commission. In almost all of the discussions, however, owners holding only one lot have been proposed to be allowed to develop that parcel, thus leading to a certain level of development

throughout the Seadrift area. The Commission acquiesced in this approach in July, 1979, noting that the Alstrom application was one of ten individually owned lots that would be allowed in Sub-area 4A, and approving it at that time.

6C. Consolidation, Redesignation, and Elimination of Some Existing Parcels. More substantial reduction of the eventual density could be obtained by considering development proposals that do not treat existing parcel patterns as an absolute constraint. This could be accomplished by redesignating and rezoning Sub-areas 3, 4A, 4B and a portion of 5 to the Resources Management Area designation that was developed for marsh areas in Stinson Beach proper. Development credits based upon an approach such as a .25 credit for each parcel without an outstanding permit could be assigned in each of these areas, with a base density of one credit per owner of record as of the effective date of the Regional Commission consolidation policy adoption. This base density would provide a minimal level of participation for each owner who held a single parcel anywhere within Seadrift. By assigning a somewhat larger credit, perhaps .5 per parcel, to vacant parcels in Area 1 and Area 2, more remote from Bolinas Lagoon, and forming a more concentrated development again with a base density of one per single owner, densities in these areas could also be reduced, thus allowing, in effect, an on-site receiver area for the potential development transferred out of Subarea 3, 4A, 4B, and 5. Existing structures in those Sub-areas could be made non-conforming but with the right to rebuild in place, similar to the RMA provision recommended by the North Central Regional Commission in the implementation provisions for the Marin County LCP, but no new single-family homes would be allowed under the provisions of the RMA designation.

This alternative would result in additional buildout of approximately 97 homes. Non-conforming structures within the RMA designated portions of the spit would total 38 homes. Because of the possibility of fractional development credits or difficulty in arranging private transfers of the development credits, a restoration project, carried out either by the County or by the Coastal Conservancy, would be helpful in implementing this alternative.

Under such an alternative, owners who had applied to the Regional Commission for a development permit prior to a given date could be included in the non-conforming use category if the Commission determined that this was an appropriate approach. Alternatively, such owners could be assigned a second full development credit but would have to obtain a site within the designated receiver area upon which to exercise that right. Such an approach was discussed briefly by the County during preparation of the LCP. The Regional Commission noted the extreme difficulty of implementing such an approach, especially as weighed against the resulting benefits in terms of Coastal Act policies. The Commission finds that although this alternative would be consistent with the remainder of the LCP in redesignating the margin of Bolinas Lagoon to a Resource Management Area, it would be more difficult to implement than

Alternative B and might require participation by the Coastal Conservancy or other entity to facilitate the ready transfer of development credits, and that on the basis of the information above and findings of the Regional Commission, that the alternative as recommended is consistent with Chapter 3 of the Coastal Act.

6D. Redesignation of Allowable Land Uses, Elimination of Existing Parcel Patterns, and Redesignation and Resiting of Any Allowable Structures. The Commission also inquired about the possibility of revising the type of development to be allowed at the remainder of the Seadrift area, perhaps allowing only vacation oriented condominiums of a modest size and clustering them in locations as far as possible from the wildlife resources of the Lagoon. Such a program could be carried out by redesignating Sub-areas 4A, 4B, 3 and 5 to a Resource Management Area, as in Alternative C, and redesignating the balance of the spit to allow attached residential structures. Existing structures could be made non-conforming and development credits assigned much as in Alternative C, and appropriate provisions made to restrict the size of units and allow common areas to be used as wildlife refuge areas. Leach lines for the attached structures might also be placed within the commonly held areas, as is now done in certain portions of the Sea Ranch.

As a variant of this approach, it might be provided that the condominium structures would be managed on a time-sharing basis, with a requirement that each unit be made available for public rental during a given portion of the year. This would be similar to conditions placed on permits at Pajaro Dunes and in the Playa del Rey area where the predecessor Commission found that such a specialized management program would increase public access to a limited beach resource. The present Commission has also utilized a variation of this approach in commercial development at Marina del Rey to increase the range of persons to whom the facilities would be available at least on a part-time basis, in accordance with Public Resources Code Section 30213, which calls for encouragement of recreational facilities for persons of low and moderate income. Although the price of homes at Seadrift is well out of the reach of such persons, a rental of limited length might well be manageable by a number of families. Available information indicates that a substantial number of homes are presently participating in voluntary rental arrangements. A guaranteed continuation of such a use could supplement seasonal rentals now available at the Sea Ranch, Irish Beaches, Pajaro Dunes, and a number of other locations. Because Seadrift is within easy reach of the entire Bay Area, present uncertainties over transportation costs and availabilities might make this alternative particularly attractive, especially since Stinson Beach is presently served by public transit from San Francisco and eastern Marin County.

The Regional Commission discussed the subject of condominium development while they were reviewing the question of possible clustered development. Final Regional commission consideration focused more upon questions of overall density, however, rather than

locational aspects. The Regional Commission also noted that there might be adverse visual impacts upon the character of the Stinson Beach community. The Commission finds, therefore, that this alternative would be consistent with the Coastal Act, but that it would also be more complicated to implement than the recommended approach of the Regional Commission, and that on the basis of the information above and the findings of the Regional Commission, the decision not to adopt this alternative is consistent with Chapter 3 of the Coastal Act.

APPENDIX E: REFERENCES

Introduction (Basic References for all Sections)

- California Coastal Commission. 1977. Local Coastal Program Manual. San Francisco, California.
- Marin County Planning Department. 1977. Work Program for Preparing the Local Coastal Program. Marin County, California.
- State of California. 1976. Public Resources Code, Division 20, California Coastal Act. Sacramento, California.

Land Use Plans and Policies

- Marin County Planning Department. 1978. Bolinas Peninsula Community Plan. Marin County, California.
- Marin County Planning Department. 1973. The Marin Countywide Plan, Marin County, California.
- Marin County Planning Department. 1976. The Stinson Beach Community Plan. Marin County, California.
- Muir Beach Community Plan Committee. 1978. Muir Beach Community Plan. Muir Beach, California.
- U.S. Department of the Interior, 1977. Assessment of Alternatives. San Francisco, California.

Implementing Ordinances and the Coastal Project Review Process

- California Coastal Commission. 1978. Issuance of Coastal Development Permits by the City of Los Angeles. San Francisco, California.
- County of Marin. 1977. County Code. Marin County, California.

Public Access Component

- Summary Report, Golden Gate Recreational Travel Study. 1977. Berkeley.
- U.S. Department of the Interior. 1977. Golden Gate National Recreation Area, Point Reyes National Seashore: Assessment of Alternatives for the General Management Plan. Washington, D. C.

Land and Water Allocation Program for Visitor-Serving Facilities

- Marin County Planning Department. 1978. Bolinas Peninsula Community Plan. Marin County, California.
- Marin County Planning Department. 1976. Coastal Pilot Program. Marin County, California.
- Marin County Planning Department. 1976. The Stinson Beach Community Plan, Mann County, California.
- Marin County Planning Department. 1971. The Visitor in Marin. Marin County, California.
- Montgomery, James M., Consulting Engineers, Inc. 1977. Preliminary Design Report for Water System Improvements, Stinson Beach, County Water District. Walnut Creek, California.
- Muir Beach Community Plan Committee. 1978. Muir Beach Community Plan. Muir Beach, California.
- U.S. Department of the Interior. 1977. Assessment of Alternatives. San Francisco, California.

Bolinas Lagoon

- Burghy, Robert H. 1971. Bolinas Lagoon, The Watershed, Runoff and Sedimentation. Prepared for The Conservation Foundation., Washington, D.C.
- Bergquist, Joel R. 1978. Depositional History and Fault-Related Studies, Studies, Bolinas Lagoon, California. United States Geologic Survey Open File Report 78-802.
- Chan, Gordon L. 1967. Population studies of Marine Animals in Bolinas Lagoon. College of Marin, Bolinas Marine Station.
- Galloway, Alan J. 1977. Geology of the Point Reyes Peninsula, Marin County, California. Sacramento: California Division of Mines and Geology Bulletin 202.
- Giguere, Paul E., et.al. 1970. The Natural Resources of Bolinas Lagoon, their status and future. State of California, Department of Fish and Game.
- Gluskoter, H. J. 1962. Geology of a Portion of Western Mann County, California. University of California, Berkeley. Unpub. PL.D. thesis.
- Gluskoter, H. J. 1969. Geology of a Portion of Western Mann County, California, Map Sheet II. California Division of Mines and Geology.
- Gustafson, Joel F. 1969. Ecological Studies of Bolinas Lagoon. Resources and Ecology Projects, Mi11 Valley, California.
- Isselhardt, C., L. Osuch, and P. Wilde. 1968. Recent Marine Sediments of Bolinas Bay, California. University of California, Berkeley, Hydraulic Engineering Laboratory. Technical Report HEL-2-22, 155 p.
- Lewis, T. J. and F. C. Sibley. Undated. Preliminary Survey of the Avifauna of Bolinas Lagoon. Point Reyes Bird Observatory, Bolinas, California.

Bolinas Lagoon (Cont'd)

- Marin County Parks and Recreation Department. 1972. Bolinas Lagoon Plan. Marin County, California.
- Marin County Planning Department. 1966. Report on Bolinas Lagoon Master Plan. The Marin County Planning Dept., San Rafael, California.
- Molina, A1 and A. Rathburn. 1968. The zonation of the conspicuous phanerogams on Kent Island, Bolinas Lagoon, Marin County, California. College of Marin, Bolinas Marine Station.
- Page, Gary and L. Stenzel. 1975. Aspects of the Ecology of Shorebirds on Bolinas Lagoon. Point Reyes Bird Observatory, Bolinas, California.
- Ritter, John R. 1969. Preliminary Studies of Sedimentation and Hydrology in Bolinas Lagoon, Marin County, California, May 1967 June 1968. U.S. Geological Survey open-file report, 68 p.
- Ritter, John R. 1973. Summary of. Sedimentation and Hydrology, 1967-1969. Bolinas Lagoon, Marin County, California. U.S. Geological Survey, Water Resources Investigations 19-73.
- Rowntree, Rowan A. 1971. Biological Considerations in Bolinas Lagoon Planning. The Conservation Foundation, Washington, D. C.
- Sedway, Paul H. 1971. Bolinas Lagoon Environs: Environmental Management Implications. The Conservation Foundation, Washington, D.C.
- Small, John. 1978. Bolinas Lagoon Five Year Report: April 1973 to April 1978. Marin-County Parks and Recreation Dept., Marin County, California.
- Wahrhaftig, Clyde.. 1971. The Geologic Setting of Bolinas Lagoon. Prepared for The Conservation Foundation, Washington, D. C.
- California, State of, Department of Fish & Game. 1968. Pine Gulch Creek Stream Survey.
- Zeigler, Karl. 1978. Personal Communication regarding condition of biotic resources.

Duxbury Reef

- Chan, Gordon L. 1970. Analysis of the Effects of Public and Educational School Field Trips on a Marine Environment, Duxbury Reef. College of Marin, Kentfield, California.
- Chan, Gordon L. 1971. Duxbury Reef An Outdoor Classroom. College of Marin, Kentfield, California.
- Chan, Gordon L. 1974. The Marine Resources and Environmental Alternatives for the Natural Resources Management Plan of the GGNRA. Prepared for the National Parks Service, Western Region, Department of the Interior. 92 pp.
- Chan, Gordon L. and A. Molina. 1969. The Conservation of Marine Animals on Duxbury Reef. College of Marin, Kentfield, California 56 pp.
- Gosliner, T. M. and G.C. Williams. 1970. The Opisthobranch Mollusks of Marin County, California. 'Veliger. Vol. 13, No. 2.

Pine Gulch Creek

- Thomson, Bruce and J. Michaels. 1968. Pine Gulch Creek Stream Survey Report. California Department of Fish and Game
- Anderson, Keith R. 1976. Letter to Bolinas Community Public Utility District regarding Anadromous fish resources of Pine Gulch Creek. California Department of Fish and Game.
- U.S. Geological Survey. Records of Streamflow, Pine Gulch Creek, 1967, 1967-1968, 1968-1969, 1969-1970.

Redwood Creek

- Curtis, Ron and G. Scopettone. 1976. Redwood Creek Stream Survey Report. California Department of Fish and Game.
- Hershey, Marvin C. 1973. The Silver Salmon of Muir Woods. Muir Woods-Point Reyes Natural History Association.

Seadrift

North Central Coast Regional Commission. 1978. Interim Policy for the Review of Coastal Development Permits at the Seadrift Subdivision, Stinson Beach, Marin County. San Rafael, California

Bolinas Gridded Mesa

- 1. California State Coastal Conservancy, 1978. Guidelines and-Criteria for Grants to Local Public Agencies for Coastal Restoration Projects., Oakland, California
- 2. Marin County Planning Department. 1978. Bolinas Peninsula Community Plan. Marin County, California.
- 3. State of California. 1976. Public Resources Code, Division 21, State Coastal Conservancy. Sacramento, California.
- 4. Warshall, Peter and P.T. Farnswerth. I\$73. _Septic Tank Practices in Bolinas, California. Warshall/Farnsworth Watershed Consultants.

Shoreline Development

- Galloway, A. J. 1977. Geology of Point Reyes Peninsula, Marin County, California. California Division of Mines and Geology Bulletin 202.
- Howe, Steve. In Press. Wave Damage Along the California Coast, 12/77 to 3/78. California Coastal Commission.
- Wagner, David L. 1977. Geology for Planning in Western Marin County, California. California Division of Mines and Geology.
- Wahrhaftig, Clyde. 1970. The Geologic Setting of Bolinas Lagoon. Unpublished report for the Conservation Foundation.

Housing Policies, Programs and Ordinances

- Association of Bay Area Governments. 1978. Series ill Forecasts Berkeley, California.
- California Department of Housing and Community Development. 1978. The Housing Directory. Sacramento, California.
- County of Marin. 1978. Community Development Block Grant Application, Fourth Year. Marin County, California.
- Marin County Planning Department. 1971. Marin County Housing Condition Survey. Marin County, California.
- Marin County Planning Department. 1973. The Marin Countywide Plan. Marin County, California.

Historic Protection

- California State Office of Planning and Research. 1976. Historic Preservation Element Guidelines. Sacramento, California..
- Teather, Louise. 1974. Discovering Marin. Fairfax, California.
- California State Office of Historic Preservation. Date Unknown. Model Cultural Resources Management Ordinance for California Cities and Counties. Sacramento, California.

L.C.P. Unit I Amendments: approved by B.O.S. Resolution #82-256 (6-22-82) [*Note: all adopted changes reflected in this document]

Page 51: Amend the first three paragraphs to read as follows:

Historic Resources

Section 30253 of the California Coastal Act of 1976 mandates the protection of communities and neighborhoods "which, because of their unique characteristics', are popular visitor destination points for recreational uses." The intent of this policy is to protect the. unique character of existing coastal communities.

The Unit I coastal communities are historically important and aesthetically unique. The LCP proposed that structures in the coastal zone built prior to 1930 should be. reviewed through the coastal permit procedure before being altered or demolished. Additionally the LCP designates specific areas with the Unit I coastal zone as "historic areas". New construction and additions to or demolition of existing structures will require a Coastal Permit.

Boundaries for historic areas were selected to include groups of unique and architecturally significant' structures that are visually accessible to both local residents and visitors. Community input and additional historic surveys are encouraged as part of the Coastal Plan. After survey, historic area boundaries could be revised through the public review process.

All pre-1930's structures in the coastal zone are eligible for utilization of the State Historic Building Code, an alternative to the Uniform Building Code. This alternative code can aid property owners in the retention of historic character of buildings that undergo restoration and rehabilitation, and can result in cost savings.

This section illustrates some of the other historic structures in Unit I. These are by no means all of the historic structures in Unit I. The descriptions that follow are based on <u>Discovering Marin</u> (1974).

Page 64: Amend policies 15, 16, and 17 to read as follows:

<u>Historical Resources</u>

15. In order to protect the unique qualities and character of coastal communities in the Unit I coastal zone, historic structures shall be preserved and restored. The following means shall be used to protect and preserve historic structures:

- a. "Historic areas" shall be established in Stinson Beach and Bolinas. The boundaries of these areas are described and mapped in Appendix F of the Unit I LCP. Within these historic area boundaries, all new construction shall conform in scale, design, materials and texture with the surrounding community character.
- b. Alterations and Additions. Alterations or additions to any structure vult prior to 1930 shall require a coastal project permit; except that, maintenance or repair to restore any pre-1930's structure to its original architectural character shall be exempt from the requirement of a coastal permit. Alterations or additions to any pre-1930 structure shall retain the scale and original architectural features of the structure, especially for the front facade.
- c. Demolitions. Demolition of any structure built prior to 1930 shall require a Coastal Project Permit; except that, demolition of any secondary or agricultural building built prior to 1930, may be exempted from the requirement for a coastal permit upon a finding by the Planning Director or appropriate hearing body that such structure is not a significant historic resource. Issuance of a Coastal Project Permit for the demolition of any pre-1930 structure may be delayed for a period, not to exceed six months. During this period, the property owner or local historic group or society may attempt to find a purchaser or alternate location for the structure. This six month period may be waived by the Planning Director or appropriate hearing body upon a finding that the structure is not historically significant or cannot be rehabilitated.
- 16. All Coastal Project Permits for projects located within the boundaries of an historic area, and for projects involving pre-1930 buildings, shall be reviewed in accordance with:
 - a. The "Design Guidelines For Construction in Historic Areas and For Pre-1930 Structures" and,
 - b. The "Historic Review Checklist", both located in Appendix F of the Unit I LCP.
- 17. All Coastal Project Permits for historic structures shall be reviewed by established local planning or design review groups, where these groups exist.

APPENDIX F - HISTORIC PRESERVATION

RECOMMENDED HISTORIC AREA BOUNDARIES

Historic area boundaries were selected for groups of historic structures in areas within coastal communities. Criteria used in defining historic areas were visual access and coherent grouping as well as architectural and historic composition. Groups of non-conforming structures that disrupt the historic quality of an area were excluded... Area boundaries are described in this section, followed by maps of the recommended boundaries.

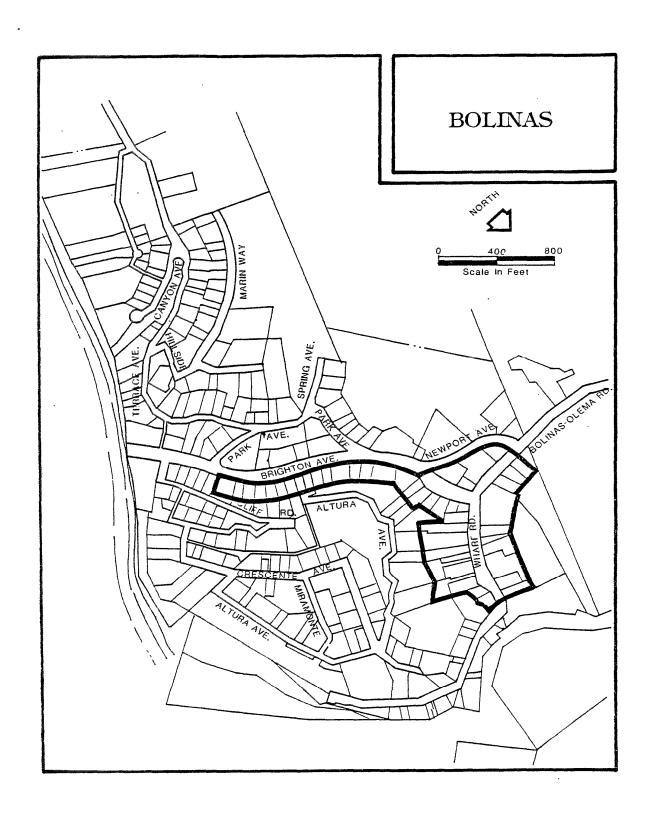
Bolinas

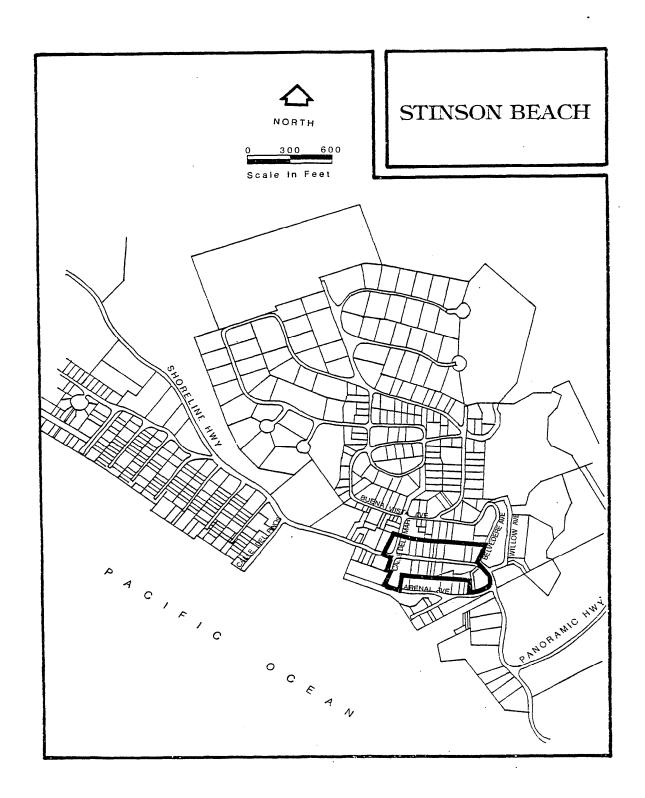
The historic area in Bolinas includes parcels bordering Wharf Road in downtown Bolinas and some parcels on Brighton Avenue in the 1882 Waterhouse subdivision from Smiley's Bar at, (AP 1193 061-04), 41 Wharf Road, and three parcels to the west on the Olema to Bolinas Road. Parcels south of Wharf Road from 48 Wharf Road (AP 4193-081-09) to Brighton Avenue and parcels up to 11 Olema to Bolinas Road are included. The area also encompasses parcels bordering Brighton Avenue on the east from 1 Brighton Road (AP 193-075-13) to 87 Brighton Avenue (AP 193-102-14).

Stinson Beach

The Stinson Beach historic area encompasses parcels bordering both sides of State Route 1 between Belvedere Avenue and Calle del Mar. Two parcels adjacent to and north of Calle del Mar bordering State Route 1 (AP 's 195-191-16 and 195-192-05), which includes Airey's, now called the Superette, are also within the historic area.

[Appendix F added as shown (pp. F-1 through F-16), pursuant to \underline{BOS} Resolution No. $\underline{82-256}$ [6/22/82], approved as submitted by CCC 9/7/82]





DESIGN GUIDELINES FOR CONSTRUCTION IN HISTORIC AREAS AND FOR PRE-1930'S STRUCTURES

Technology has quickened the pace of change and introduced a great variety of building materials and construction methods. Since personal tastes and social attitudes often govern today's choice of materials and methods, design review has been introduced to guarantee carefully executed design solutions.

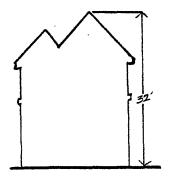
The landscape and buildings of a healthy community exhibit continuity of a community's past and present. In recognition of this concept, a properly instituted design review program aims to insure guided freedom for future growth in historic areas. Design review will vary according to conditions in particular communities, but should insure that new buildings conform in scale, proportions and texture to existing community form.

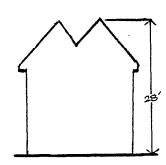
The design principles and standards below are intended to insure maximum compatibility of remodeling and new construction with older buildings in historic districts.



REPETITION OF ROOF SHAPE

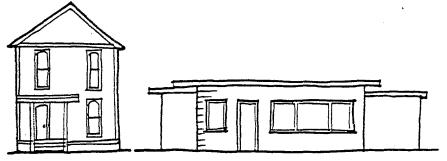
Similarity of roof shapes is of ten the most important Means for achieving continuity in design between new and old buildings in historic areas. Roofs are a71 important factor in the overall design of a building to help relate items such as height and scale to those adjacent structures.





CONSISTENT BUILDING HEIGHT

New buildings should be constructed to a height within a reasonable average height of existing adjacent buildings.



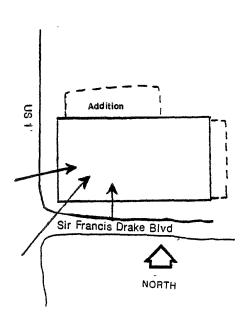
DIRECTIONAL EXPRESSION OF FRONT ELEVATIONS

Structural shape, placement of openings, and architectural details may give a predominantly vertical, horizontal, or a non-directional character to a building's facade. If buildings in a historic district are predominantly vertical expressions, then new buildings should be vertical expressions also.

19th century buildings tend to be vertical while 20th century buildings often have a horizontal emphasis.

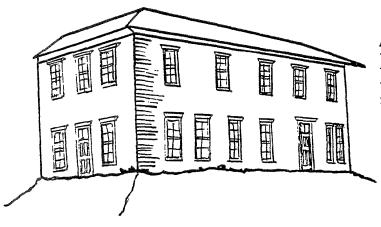
PLACEMENT OF NEW ADDITIONS TO HISTORIC BUILDINGS

The most important facade of any building is generally the frontal facade; this is particularly true when viewing a streetscape. The front elevation, and side elevation on a corner building, should not have additions added that destroy a building's historic character.



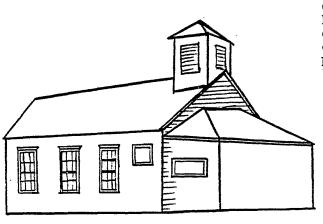
GOOD_EXAMPLE

Focal Points of Olema Inn.



Additions were made to the Olema Inn, but these additions left the focal point facades intact.

BAD EXAMPLE



Greek Revival school house with addition on front facade, destroys the focal point view.

BAD EXAMPLE

Italianate commercial structure with front facade addition.

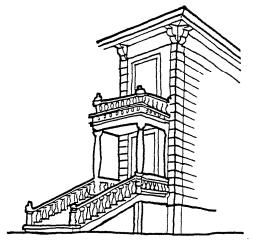


BUILDING SETBACK

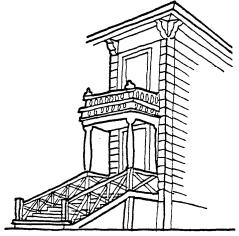
Setback is an important consideration in harmonizing new with old in rural historic areas.



PRESERVE OR REPLICATE HISTORIC DETAILS



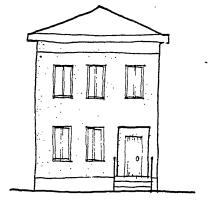
Original: Sympathetic treatment of stairway railing.



Remodeled: Unsympathetic treatment of stairway railing.



Original: Precise wooden details around windows, doors, cornice line, at building edges, horizontal lap siding.



Remodeled: Stucco facade destroys integrity of historic structure.



The front facade of the Greek Revival commercial building (in foreground to left) has been "modernized" with the addition of wood shingles and brick. These exterior coverings are not appropriate for Greek Revival. Its next-door neighbor (smaller building to left) retains the Greek Revival feeling.

RELATIONSHIP OF TEXTURES

The texture of a building is an important factor in the overall appearance of a neighborhood. The predominant texture may be smooth (stucco), or rough (brick with tooled joints), or horizontal wood siding, or other textures. Whatever texture is used, its appearance must be considered in relation to. the neighborhood to insure a compatible blending with other styles.

The front facade on the Greek Revival commercial building (in foreground to left) has been "marinated" with the addition of wood shingles and brick. These exterior coverings are not appropriate for Greek Revival. Its next-door neighbor (smaller building to right) retains the Greek Revival feeling, with the original horizontal siding.

REPETITION OF DETAILS

Repetition of details, such as choice of exterior building materials, proportions of windows and doors, gingerbread porch posts and trim, window and door moldings, cornices, lintels, and arches, is extremely important in insuring compatible appearance in new construction in historic areas.

There has been a general misunderstanding about 19th century styles because of the weather-beaten appearance of many vintage buildings. Greek Revival, Queen Anne, Italianate, and Stick architectural styles are precise in their detailing and consistency of proportions. There is a great difference between these precise, albeit weathered, architectural statements, and contemporary efforts to create vintage-style buildings by constructing badly proportioned, indistinctive, rough-shod buildings of rough-sawn plywood or board and batten.

¹ "Marinated" - the fad in Marin County currently is to add wood shingles whether appropriate or not.

RELATIONSHIP OF COLORS

The proper application of a color scheme to a building or a series of buildings can highlight important features and increase their overall appearance. Accent or blending colors on building details is also desirable in creating compatibility of neighboring structures.

Use of exterior color is of particular importance in the case of a wood frame house where the combination of wall and trim colors usually decides its basic character.

A good color scheme should be neighborly as well as effective in itself, so that both the house and the environment benefit.

RELATIONSHIP OF LANDSCAPING AND PHYSICAL FEATURES

Landscaping should be placed to emphasize design and should enhance a structure rather than detracting from it or obscuring it. Physical features such as picket fences, building facades, beaches, lamp posts, and signs or combinations of these features provide continuity and cohesiveness to a neighborhood.

Efforts to achieve continuity should not be so restrictive that they force mere imitation. However, the design of new buildings in and adjacent to historic areas, and new additions to old buildings must be carefully executed to achieve harmony between old and new. The challenge, particularly in special design districts, is to create contemporary buildings whose flavor and scale compliments, rather than imitates, the predetermined images of the historic setting.

SIGNS AND STREET FURNITURE

Commercial signs are an effective tool for enhancing the historic quality and can be designed to harmonize with the structure. All too often, oversized or modernistic signs are used and detract from the overall charm. For this reason, strict design review for signs is recommended.

Similarly, street furniture (benches, light fixtures and litter containers) should be designed to embellish the historic grace and conform to existing architectural styles. Ingenuity may be required, but these details can provide cohesion and grace.

HISTORIC REVIEW CHECKLIST

The attached Historic Review Checklist has been established to provide an initial determination of compatibility of new construction, alterations and additions in historic areas or for individual pre-1930 structures outside the boundaries of historic districts. Additional background information is available in the Historic Study and in Planning Department files.

This checklist should apply to all types of structures, including outbuildings. Signs and street furniture should be compatible with the historic character of the community.

HISTORIC REVIEW CHECKLIST

Please check the appropriate box in applicable categories.

YES	NO	
		A. NEW CONSTRUCTION, ALTERATIONS AND ADDITIONS
		Does the Project:
		1. Preserve distinguishing original qualities or character of the structure or site and its environment?
		2. Retain or preserve any previous modifications that evidence the history and development of the structure or site?
		3. Retain or preserve distinctive stylistic features or examples of skilled craftsmanship which characterize the building's structure or site?
		4. Has every reasonable effort been made to provide a compatible use for the property in this community?
		5. Give consideration to harmonizing street furniture and signs?
		B. NEW CONSTRUCTION
		1. Is the roof shape similar to adjacent structures?
		2. Is the building height consistent with surrounding structures?
		3. Do the front facades give similar directional expressions (vertical or horizontal)?
		4. Are building setbacks similar to adjacent structures?
		5. Will new landscape features (including parks, gardens, fencing, benches, walkways and signs), be compatible with the character of the neighborhood?
		6. Is the design compatible in scale, design, materials and texture with surrounding structures?

YES	NO	
		7. Will a contemporary design that is compatible with the mood and character of the surrounding neighborhood be used?
		8. Will mechanical equipment such as air conditioners and television antennae be placed in inconspicuous locations?
		C. ALTERATIONS, RESTORATION
		 Has the applicant applied for designation of a historic structure?
		2. Does the State Historic Building Code apply?
		Will the proposed project:
		3. Retain the front of the building to preserve the architectural and historic character of the building?
		4. Retain distinctive features such as the size, scale, mass and building materials, including roofs, porches and stairways that give the community its character?
		5. Retain landscape features (including parks, gardens, fencing, benches, signs, walkways), that reflect the structure's development and history?
		6. Place new additions without destroying focal point views?
		 Preserve or duplicate original details (such as cornices, brackets, windows, doors, shutters, siding, railing) of architectural significance?
		8. Repair or stabilize weakened structural members and systems?
		9. Retain original materials where possible?
		10. Preserve the original roof shape and material?

YES	NO	
		11. Retain or replace, where necessary, architectural features in the roof such as dormer windows, chimneys, cornices and brackets?
		12. Improve the thermal performance of the building through weather-stripping without damaging window and door frames?
		13. Improve or repair drainage to prevent damage to the structure or foundation where necessary?
		14. Retain any previous modifications that evidence the history and development of the structure?
		15. Make alterations and new additions in such a manner that they can be removed in the future without impairing the essential form and integrity of the structure?
		D. RESTORATION
		 Are any deteriorated architectural features being repaired rather than replaced, where possible?
		Where replacement of deteriorated architectural features is necessary, do new materials match the material being replaced in color, texture, composition and design?
		3. Will cleaning methods undertaken damage the historic building materials?
		E. DEMOLITION
		 Is the building or structure of such architectural or historic interest that its removal would be to the detriment of public interests?
		 Is the building or structure of such interest or significance that it could be designated as a National, State or local historic landmark?

YES	NO		
		3.	Is the building of such old and unusual or uncommon design, texture and/or material that it could not be reproduced or be reproduced only with great difficulty and/or expense?
		4.	Would retention of the building or structure help preserve and protect an historic place or area of historic interest in the County?
		5.	Would retention of the building or structure promote the general welfare of the community by encouraging study of local history, architecture and design or by developing an understanding of the importance and value of the local culture and heritage?
		6.	Can the structure be converted to another use?
		7.	Is the structure in a state of major disrepair?
		8.	Has the local historical group or society been contacted?
		9.	Has the State Historic Preservation Office been contacted?
		10.	Has an attempt been made to locate a purchaser for the property?
		11.	Has an alternative site for the structure been researched?