

STAFF RECOMMENDATION

REPORT TO THE CITY OF SAND CITY

ON THE IMPLEMENTATION OF ITS LOCAL COASTAL PROGRAM

SEPTEMBER 21, 1990



Prepared for

California Coastal Commission Action at the Meeting of

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Cover photo: southern Monterey Bay 1965 courtesy of Joyce Stevens

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I. SUMMARY OF REPORT TO THE CITY OF SAND CITY ON THE IMPLEMENTATION OF ITS LOCAL COASTAL PROGRAM

A. SETTING

Sand City, one of the smallest incorporated communities in the Coastal Zone, is located at the southern end of Monterey Bay on the Monterey Peninsula. Although the resident population numbers only about 200 people, the portion of Sand City east of State Highway One (largely outside of the Coastal Zone) has a substantial daytime population due to an increasing number of commercial and industrial facilities. The first phase of a new, regional shopping center was recently completed, and additional development is planned. Highway One bisects the 347±-acre City; to the west the land is largely undeveloped, and north of Tioga Avenue, consists of larger parcels ranging from one to 39 acres in size. The City's coastline is 1.5± miles long and typified by rolling Flandrian sand dunes. Some of the dunes are relatively undisturbed, while in other areas the dune landform has been significantly altered by past sand mining and other industrial and public works operations. Much of Sand City's coastal frontage is visible from Highway One and from the Monterey Peninsula. Visitors travelling along the highway are offered highly scenic views of the Bay and the Peninsula as the road passes along the City's shoreline.

B. LOCAL COASTAL PROGRAM REVIEW

Preparation of the Sand City Local Coastal Program began in 1980. Most of the background information and draft policies were developed during 1980-81. Hearings on the plan began in 1982, and the LCP for most of the Sand City Coastal Zone was certified in 1984. It has thus been several years since the LCP and the basic planning assumptions that support it have been comprehensively analyzed. The Coastal Act mandates a periodic review of certified LCPs in order to determine the effectiveness of the plan in operation. The standard of review used to evaluate implementation of the LCP is the Coastal Act. This report is organized into Coastal Act issue areas paralleling the various components of the LCP. The discussion for each coastal resource topic includes a summary of the relevant Coastal Act policies and LCP provisions; a description of major development proposals and other activities, including the issues presented by them; an analysis of related city actions; conclusions regarding the adequacy of the LCP as implemented to respond to the issue; and recommendations to improve the ability of the LCP to meet the requirements of the Coastal Act.

Items considered in the analysis of the implementation of the LCP include official City actions, EIRs prepared for Coastal Zone projects, new information that has become available over the last seven years, and changed circumstances. LCP policy language is reviewed to identify the presence of ambiguities, conflicts, or omissions. The following paragraphs summarize the various events and activities of the past seven years that have affected the implementation of the Sand City LCP. A complete chronology of significant events since 1983 is found in the introduction section of this report.

C. CITY ACTIONS SINCE LCP CERTIFICATION

Since certification of the LCP, the City has issued 29 coastal development permits. Most of these permits have been for industrial and commercial projects east of Highway One. With few exceptions, these projects did not involve substantial impacts on coastal resources and the LCP was effectively implemented by the City's action on these permits. It is for projects on the west side of Highway One that the effectiveness of the City's action on coastal permits has been more controversial.

The only major project seaward of the highway that has been approved by the City has also been appealed each time it was approved (Sterling Center, a 229-unit resort, 1985, and revised Sterling Center, a 135-unit hotel, 1989). Based upon impacts on visual resources and shoreline erosion considerations, the Coastal Commission denied the 1985 project. The Commission determined that the smaller 1989 project also raised four substantial issues. However, the City has since passed a resolution vacating its 1989 coastal permit, pursuant to a Monterey County Superior Court ruling, rendering the appeal before the Commission moot. As noted in this report, City findings for the larger 1985 project tended to be overly conclusionary, failing to analyze the project's relevancy to all applicable LCP policies.

The City has only approved minor changes to its LCP since certification, but other City activities have had an effect on implementation of the LCP. In 1987 the Council declared the entire City to be a redevelopment area. An important component of the Redevelopment Plan is to use revenues from new development seaward of Highway One to finance City-wide improvements. Aided by funds from the Coastal Conservancy, the City has initiated the preparation of a Coastal Restoration Plan to meet concerns regarding the protection of the Smith's blue butterfly, an endangered species. Work on the plan has proceeded slowly.

City actions have also had an effect on public access to and along the shoreline. The City chained Tioga Avenue west of Highway One, thus reducing vertical access to the beach. In 1987 the entire length of Sand Dunes Drive was posted for "No Parking." In the past the shoulders of Sand Dunes Drive provided the only parking west of the highway available for beach users, although the City indicates that such parking was never legal. Meanwhile, the eroding rubble mounds at the Calabrese site and at the old landfill are depositing debris on the adjacent beach. The result of the City's actions and inactions since certification of the LCP has been a net reduction of public access opportunities to and along the shoreline.

D. NEW INFORMATION AND CHANGED CIRCUMSTANCES

Other events outside of official City actions have been considered in this report as well because they affect the implementation of the LCP. In the intervening years new information regarding coastal resources and constraints has been developed. New and revived programs for public acquisition of dunes and beaches have been gaining momentum. Lastly, severe natural occurrences --

the heavy storms of 1982-83, four successive years of drought, and a major earthquake -- have increased general understanding of the impacts of these cyclical occurrences on land use and development. A review of these events indicates three dominant patterns emerging in the last decade.

First, it is clear that local and state support for an open shoreline and dune protection is broad-based and growing. In 1983 (when the LCP was certified) most of the City of Monterey's shoreline was blocked from view by development. In Sand City, the State Department of Parks and Recreation (DPR) was considering selling its beachfront holdings. Since that time interest in pursuing public acquisition of the dunes has revived and intensified. A joint project undertaken by DPR, the City of Monterey, and the Coastal Conservancy has resulted in the purchase of substantial shorefront land in neighboring Monterey. Structures formerly existing on the sites are being demolished, thus opening up public views of the sea through the "Window on the Bay" program.

In Sand City, the DPR is actively pursuing acquisition of all the land south of Fell Street. Private (Big Sur Land Trust) and public (Monterey Peninsula Regional Park District, MPRPD) organizations worked together to purchase land south of Tioga Avenue. County voters in 1989 passed Measure B, providing an additional source of funding for dune acquisition. In order to facilitate future park development, MPRPD submitted to the City an LCP amendment request that proposes public recreation facilities as a "preferred" land use west of Highway One.

This recent acquisition activity is also an indication of the growing public perception that the entire southern Monterey Bay dune system stretching from the Salinas River to Monterey is a unique regional resource. The Bay itself is slated to receive protected status: Monterey Bay is about to become a National Marine Sanctuary. In contrast, Sand City is continuing its pursuit of intensive private development, opposing attempts to acquire land for public recreational use.

The second pattern apparent from a review of past activities is the increase in information relevant to the important issues of shoreline erosion and dune habitat. Studies undertaken since certification of the LCP have identified new factors to consider regarding these issues. A better understanding of the location, type, and requirements for the protection of dune flora and fauna, for example, should affect development proposals on the dunes. Seawalls and shoreline erosion rates directly affect the amount of land available for development.

Finally, a more sharply defined picture of regional planning constraints has developed over the past few years. Overly optimistic assumptions regarding water supplies have been replaced with the knowledge that new sources may not be developed in the near future and that existing supplies are being overtaxed, exacerbated by four years of drought. On a local level, assumptions made in Sand City's LCP regarding projected water consumption by various land uses have turned out to be extremely low compared with the

projections now used by the water management district. Traffic has also increased more than anticipated in the early 1980s. Recent studies indicate additional lanes will eventually have to be added to Highway One in order to maintain a reasonable level of service.

E. SUMMARY OF SELECTED CONCLUSIONS AND RECOMMENDATIONS

Following are some of the more significant of this report's 59 recommendations along with summary conclusions. Complete conclusions and recommendations are found at the end of each section of the report.

1. PUBLIC ACCESS

CONCLUSION

Public access opportunities to and along the Sand City shoreline have decreased since certification of the LCP in 1983. Since the LCP links all public access improvements and dedications to the construction of new hotel or residential projects, they may not occur for some time.

RECOMMENDATIONS (A-1, A-2)

The City should review the access component of its LCP to determine whether some of the listed measures slated for completion as part of new development proposals can be undertaken sooner, and if so should work to implement them quickly and independently, and should add to its access component other measures which can be implemented in the near future.

2. PUBLIC RECREATION

CONCLUSION

Land west of Highway One is suitable for public recreation; however, the City is opposing public acquisition initiatives because of a perceived conflict with City objectives and policies.

RECOMMENDATIONS (B-1, B-2)

The City should allow public recreation as a permitted land use and reconsider its opposition to public acquisitions.

3. VISITOR-SERVING FACILITIES

CONCLUSION

The LCP lacks policy standards that ensure that the priority for visitor-serving development west of Highway One will be realized.

RECOMMENDATION (B-3)

The City should allow visitor-serving facilities on the two shorefront residentially designated sites as permitted uses.

4. SAND SUPPLY AND SAND MINING

CONCLUSION

There is general consensus among experts that sand mining contributes to shoreline erosion, but not complete agreement on its magnitude.

RECOMMENDATION (C-1)

The City should not support renewal of the U.S. Army Corps of Engineers permit for sand mining, unless it can be shown that the mining will not adversely affect shoreline sand resources.

5. SHORELINE STRUCTURES

CONCLUSION

Construction of seawalls to protect new development can not be found consistent with LCP requirements.

RECOMMENDATION (C-4)

The City should only permit seawalls when necessary to protect existing structures.

6. ENVIRONMENTALLY SENSITIVE HABITATS

CONCLUSION

New information regarding habitats indicates that existing LCP provisions may not adequately protect resources consistent with Coastal Act requirements.

RECOMMENDATION (D-2)

The City, in its planning and permitting activities, should follow Coastal Act Section 30240's mandate to protect all environmentally sensitive habitats from any significant disruptions and allow within the sensitive habitat areas only those uses dependent upon them. Building and other impervious surface coverage should be limited to 15% of gross land areas seaward of Highway One and the existing Dunes Drive (i.e., approximately 17.3 acres) and be located outside of existing non-degraded sensitive habitats.

7. VISUAL RESOURCES

CONCLUSION

Specific design standards envisioned by the LCP have never been prepared. Development proposed seaward of Highway One has been massive, dominates rather than blends into the landform, and contains no design consistency from one project to another.

RECOMMENDATION (F-1)

The City should prepare additional specific design criteria as required by LCP Policies 5.3.4 and 5.4.2, including guidelines and supporting narrative relevant to the desired scale and design character for land west of Highway One.

CONCLUSION

Designated view corridors alone will not provide sufficient public views of Monterey Bay.

RECOMMENDATION (F-2)

The City should revise its view protection policies to minimize view blockage from Highway One.

CONCLUSION

Adequate implementation of the full range of visual resource protection policies is virtually impossible if the maximum density expectations outlined in the LCP are also implemented.

RECOMMENDATION (F-4)

The City should reduce maximum building envelopes by reducing maximum densities, height limits, and allowable site coverage.

8. WATER

CONCLUSION

Existing water allocations are not sufficient to accommodate the maximum amount of development permitted in the LCP and may be further reduced.

RECOMMENDATION (G-1)

The City should follow LCP Policies 6.4.11 and 6.4.13 by limiting the size of new development to that which can be adequately served by available water.

CONCLUSION

Likely reliance on desalination plants and/or on individual wells to supply water to projects requires additional policy direction.

RECOMMENDATIONS (G-2, G-6)

The City should clarify LCP Policy 4.3.31 to not allow any new development (component) that relies on wells unless and until the safe yield for the affected aquifer has been established and the water allocation has been revised to ensure that the safe yield will not be exceeded on a cumulative basis. The City should consider developing a citywide water supply and allocation plan that accounts for all possible sources including desalination. Criteria for permitting each source and its facilities could be established.

9. LAND USE AND DENSITIES

CONCLUSION

In order to implement the LCP in a manner consistent with the Coastal Act, approved development intensity must be less than the permitted maximum.

RECOMMENDATION (I-4)

The City should follow an implementation approach that reduces development intensity to fully carry out its resource protection policies. For example, use intensities should be commensurate with building envelopes that:

- do not interfere with required and/or provided access and open space recreational areas, including adequate facilities inland of the 50-year erosion setback line;
- do not encroach upon the erosion setback line;
- avoid dune habitats and their appropriate buffers;
- respect natural landforms and views to the Bay.

II. INTRODUCTION

A. PURPOSE AND AUTHORITY

1. COASTAL ACT AUTHORITY

Section 30519.5 of the Coastal Act requires the Commission to conduct a periodic review of a government's local coastal program at least once every five years. The basic purpose of the review is to determine whether the LCP is being effectively implemented in conformity with policies of the Coastal Act.

Section 30519.5 states in its entirety:

- (a) The commission shall, from time to time, but at least once every five years after certification, review every certified local coastal program to determine whether such program is being effectively implemented in conformity with the policies of this division. If the commission determines that a certified local coastal program is not being carried out in conformity with any policy of this division it shall submit to the affected local government recommendations of corrective actions that should be taken. Such recommendations may include recommended amendments to the affected local government's local coastal program.
- (b) Recommendations submitted pursuant to this section shall be reviewed by the affected local government and, if the recommended action is not taken, the local government shall, within one year of such submission, forward to the commission a report setting forth its reasons for not taking the recommended action. The commission shall review such report and, where appropriate, report to the Legislature and recommend legislative action necessary to assure effective implementation of the relevant policy or policies of this division.

Also, under Section 30501, the Commission may, from time to time, recommend specific uses of more than local importance for consideration by any local government for inclusion in its local coastal program. The periodic review provides an excellent vehicle to raise these considerations.

This report to the City of Sand City is the product of the second of the periodic, or "five-year," reviews that has been conducted by the Coastal Commission.

2. BENEFITS OF CONDUCTING PERIODIC REVIEW

Ensure On-going Protection of Coastal Resources

The purpose of a periodic LCP review is not to recertify an LCP. The intent is to learn from experience gained in the implementation of the LCP as well as to keep current in light of changed circumstances. Implementation includes issuance of coastal development permits, which is the primary route by which LCP policies are carried out. Implementation also includes other steps that a city or county can take, such as acquisition and operation of beach accessways, restoration of wetlands, resource management, and conducting educational programs, all of which bring to reality the programs and recommendations of the LCP. An LCP review, then, includes a look at all these types of implementing measures in relation to the policies of the LCP and ultimately to the policies of the Coastal Act itself. A review may also include suggested amendments or procedural changes to ensure that Coastal Act policies are indeed being carried out. The overriding goal is to ensure the ongoing protection and management of coastal resources. With over six years of experience in implementing its LCP, a periodic review of the Sand City LCP is timely under the provisions of Section 30519.5 of the Act.

Respond to New Information and Changed Circumstances

The provisions of the Coastal Act cited above provide an explicit basis for a periodic review, but such a review is, in any event, a natural step in an ongoing relationship between the Coastal Commission and local governments. The Coastal Act itself is based on a partnership between the Commission and local governments. That partnership does not end with the certification of an LCP. Rather, the challenging task of interpreting and enforcing a coastal plan only begins at that point. A periodic review of an LCP provides a chance for the Commission, as well as local residents and others, to assess the community's progress in carrying out its coastal plan and to identify changes that may make it work better, consistent with the requirements of the Coastal Act. When the Commission reviews the implementation component of an LCP (i.e., the zoning program), the standard of review is consistency with the certified land use plan. When the Commission reviews a project on appeal, the standard of review is consistency with the certified LCP (and Coastal Act access and recreation policies). Thus, periodic review is the only mechanism directly available to the Commission to comprehensively address any problems that develop with the LCP itself. A periodic review is also an opportunity to assess changing conditions in the coastal environment and new information on emerging issues that perhaps were not fully known or appreciated when the LCP was originally prepared.

Circumstances have changed significantly in the South Monterey Bay since the background studies upon which the LCP is based were undertaken in late 1981. New information regarding shoreline processes, habitats, and land use patterns has been developed. Assumptions made in the early 1980s regarding new water supplies have been found to be overly optimistic. These changes directly affect the ability of projects designed now to maintain consistency with the City's plan. Conversely, the LCP is silent on what are now important issues and cannot provide adequate guidance.

The following chronology provides a summary of significant activities that have occurred since the Land Use Plan was certified. Many of these activities have provided new information on relevant coastal issues, prompted revisions to basic assumptions regarding public services, and changed perceptions regarding land use in the dunes.

1983

- o Severe winter storms in central California cause increased erosion along southern Monterey Bay shoreline
- o "Window on the Bay" program begins by City of Monterey and California Department of Parks and Recreation to open up views to Monterey Bay

1984

- o "Smith's Blue Butterfly Recovery Plan" released by U.S. Fish and Wildlife Service includes recommendations for "securing" habitat in Sand City
- o First request made by County Health Department to remove former landfill in Sand City
- o AMBAG's Housing Needs Study targets 98 new residential units for Sand City from 1980-1990

1985

- o State Mining Board designates City's sand dunes as "Regionally Significant Construction Aggregate Resource Areas in the Monterey Bay Production-Consumption Region"
- o State Parks Department offered Mrs. Sturgeon's half-interest in property jointly owned by DeZonia; State Parks Foundations takes title; Lone Star Industries ceases sand mining on the site

1986

- o FEMA adopts "FIRM Flood Insurance Map" for Sand City

1987

- o "Sand City Biological Field Surveys for Rare Plants, Smith's Blue Butterfly, Black Legless Lizard" undertaken by Thomas Reid Associates
- o Wastewater allocation for Sand City established by Regional Pollution Control District provides for 68 housing units and 72,642 GPD for commercial/industrial uses for 1987-1989

1988

- o "Monterey Peninsula Recreation Trail: Seaside-Sand City Alignment Study," prepared for the Coastal Conservancy, shows alternative routes along railroad corridor and seaward side of Highway One

1989

- o Monterey Peninsula Regional Park District, with assistance of Big Sur Land Trust, purchases several small subdivided lots south of Tioga Avenue and obtains deeds of trust on 60 others
- o California Department of Parks and Recreation (DPR) states intention to continue acquiring land south of Fell Street for park purposes
- o Water Pollution Agency (MRWPCA) begins negotiations to sell Department of Parks and Recreation the wastewater plant site
- o Regional Park District submits an LCP amendment request to allow public parks as a preferred land use west of Highway One
- o A local tax initiative called Measure "B" passes, allocating \$2.5 million to acquire dunes in Sand City and Marina
- o Desalination ordinance adopted by Monterey County
- o Department of Defense lists Fort Ord as a possible base to be closed
- o EIR Addendum prepared for Regional Pollution Control Agency indicates Highway One through Sand City will need eventual widening
- o Monterey Sand Company applies to U.S. Army Corps of Engineers for a ten-year extension to continue sand mining west of Highway One; Corps revokes permit for surf zone mining and requires an EIS to be prepared
- o Draft EIR prepared for Monterey Peninsula Water Management District's water allocation program suggests reducing "safe yield"; third year of drought
- o Regional Air Quality Maintenance Plan adopted; accommodates 25% increase in hotel related traffic emissions
- o Monterey Regional Water Pollution Control Agency adopts residential allocation of 104 units for Sand City for 1990-91

1990

- o Regional Park District forecloses on the 60 lots south of Tioga Avenue, conducts appraisal of all property south of Tioga Avenue; considers draft Master Plan showing potential acquisitions of Sand City's beach

- o Water Management District conducts study of groundwater supply and desalination potential
- o Regional Water Quality Control Board schedules consideration of allowing discharges from desalination systems into Monterey Bay Discharge Prohibition Zone.

Input Into Ongoing Planning and Regulatory Exercises

Although little development has occurred in the City's coastal zone since 1984, potentially controversial projects are emerging (in particular the City's pending action on the Sands of Monterey project). The comprehensiveness offered by a five-year review may benefit the City, project developers, and the Commission.

This is also an opportune time to review Sand City's implementation of its LCP because of other ongoing planning efforts. The City itself began sponsoring a Coastal Restoration Planning process in late 1987, which is slowly proceeding and will be referred to further in this report. While the City's objective was to examine issues such as erosion, habitat, and recreation/access within the framework of the certified LCP (as opposed to redoing the LCP), the possibility of resulting LCP amendments was acknowledged. This report may help set some direction for completion of the Plan. Continuing regional planning efforts, involving water supply, transportation, housing, air pollution control, and wastewater treatment, may also benefit from having updated Coastal Commission findings on Sand City's ongoing implementation of its LCP and an updated LCP itself.

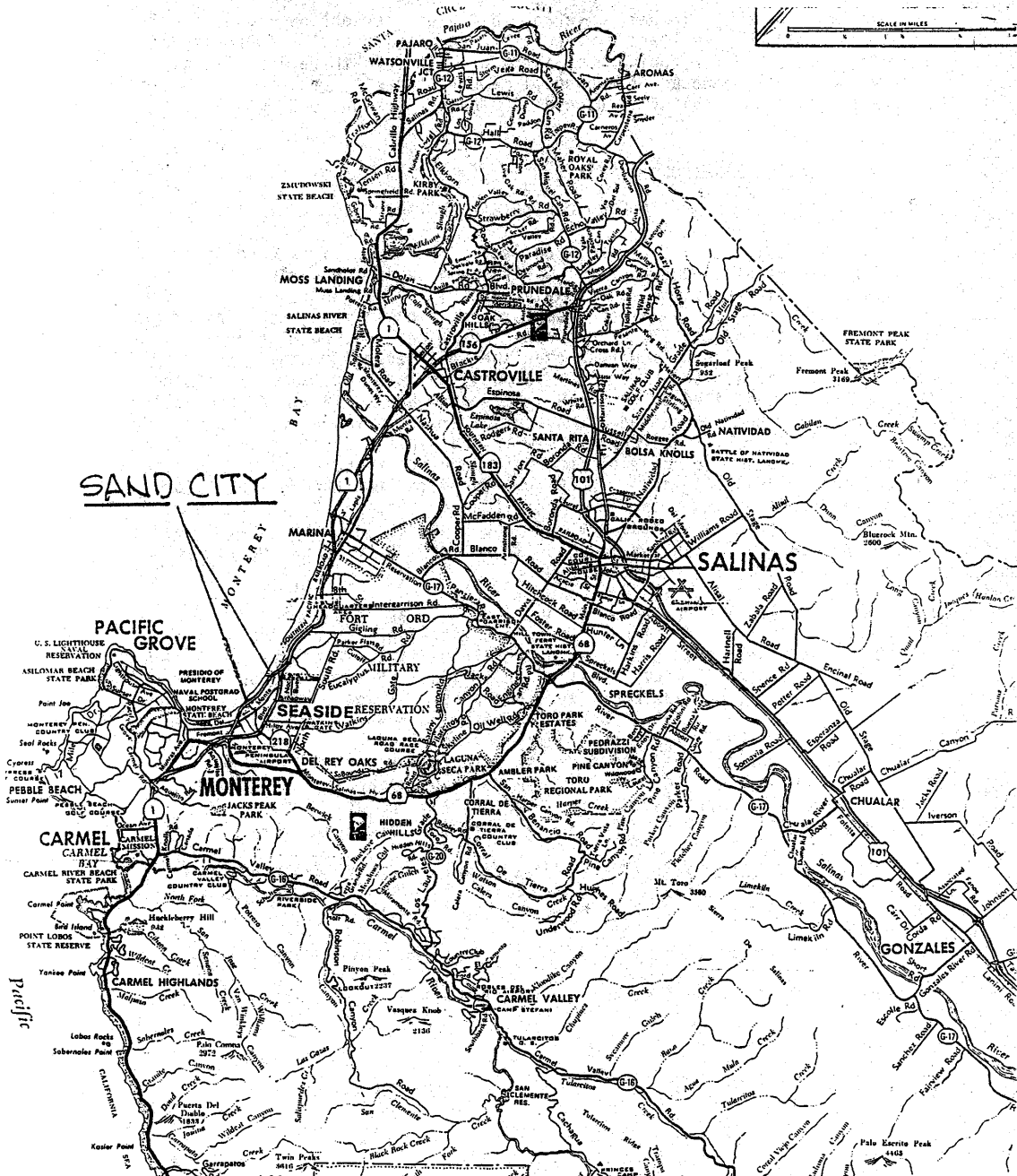
This report is presented to the City in the spirit of partnership between the Coastal Commission and local governments that is fundamental to the Coastal Act. The Commission seeks to assist the City of Sand City to identify ways in which the coastal planning process may be improved, to the benefit of the people of Sand City and the rest of the region and state.

B. ENVIRONMENTAL SETTING -- CITY OF SAND CITY

The City of Sand City is located on the Monterey Bay in Monterey County, adjacent to Fort Ord on the north and Seaside on the south (see Figure 1). The City was incorporated in 1960 to preserve its industrial base (Herald 7/23/89). With only about 347 acres of land area and a population of 200 residents in 97 homes, Sand City is also one of California's smallest cities. Some 3,000 employees work in the 140 businesses located there.

The small size of the City is reflected in the six-person City workforce, \$600,000 annual budget, and streamlined permit procedures. The building inspector and public works director are contracted positions. Health issues are the responsibility of the County Health Officer. During preparation of the LCP, the planning responsibilities were contracted to a consulting firm, which still does some work for the City. Since that time Sand City has

FIGURE 1: LOCATION MAP



employed its own city planner, with four different persons having held the position. All permit matters are heard by the City Council. There is no planning commission nor zoning administrator, although there is a design review committee, composed of a council member, two city residents, a building contractor, and an architect. (Zoning Ordinance Section 10.58.040.)

C. LOCAL COASTAL PROGRAM HISTORY

1. LAND USE PLAN PREPARATION AND CERTIFICATION (1982 -1985)

Sand City's Local Coastal Program, consisting of the required Land Use Plan (LUP) and Implementation Plan (IP), was formulated in the early 1980s. Coastal Commission staff worked closely with City staff and consultants during this period. The City's work program for preparing its local coastal program was approved in August 1981. Background investigations, culminating in published working papers, occurred over the next several months. The City's Land Use Plan was adopted by the City Council on March 23, 1982, submitted to the Commission and filed on April 19, 1982. On June 3, 1982, the Commission determined that the LUP raised a substantial issue. It denied the plan and then, on September 7, 1982, certified with modifications the portion of the LUP that applied to the areas of Sand City located inland of Highway One and seaward, north of Bay Avenue. The City resubmitted the Land Use Plan for these areas, and it was effectively certified on December 2, 1982. On July 19, 1983, the City resubmitted the Land Use Plan for the area south of Bay Avenue and seaward of Highway One, and it was denied for a second time on September 15, 1983.

A second resubmittal occurred on October 15, 1984 and was approved with modifications on April 11, 1985. This resubmittal proposed a 400-unit hotel on the northern half of the subject area (375 units were approved). A high building envelope of 75-foot elevation and a lower 45-foot envelope were proposed (28 to 58 foot maximum elevations were approved). The rest of the site was variously designated "Dune Stabilization," "Public Amenity," "Active Recreation," and "Habitat Restoration." The hotel complex, including park and other visitor-serving uses, could extend under a portion of the dunes to be recontoured and stabilized. A bicycle path, public parking, and other access amenities were to be provided at the time of development. The City accepted the modifications and final approval was given on March 14, 1986.

In conjunction with this resubmittal was an amendment (#1-84) request affecting properties just north of the subject area. The amendment, which applied to the areas immediately North of Bay Avenue:

1. Added access amenities along Vista del Mar Street including a vista point;
2. Added public parking landward of the sewage treatment plant;

3. Expanded view corridors and added visual development criteria to sewage treatment plant site;
4. Placed some parcels within specific plan requirements for "South-of-Bay";
5. Extended time for visitor-serving development option (#2) for areas north of Bay Avenue until August 1, 1985.

2. IMPLEMENTATION PLAN PREPARATION AND CERTIFICATION (1983-4)

Meanwhile, the City's implementation program (IP) was certified with 32 modifications on November 30, 1983. The IP consists of four documents: Implementation Plan (August 1983); Zoning Ordinance (October 1983); Subdivision Ordinance (August 1983); and Timesharing Ordinance (October 1983). The City subsequently adopted the suggested modifications. The Commission determined that the City's LCP was legally adequate on March 15, 1984. The City began issuing its own coastal development permits shortly thereafter, except for an "area of deferred certification." This is composed of all land seaward of Highway One south of Fell Street, except for the wastewater plant site. Although the Land Use Plan has since been certified for this area, implementation remains incomplete (see Section J of this report.) All of the water area of the Bay within the City limits also remains subject to the Coastal Commission's permit jurisdiction, pursuant to the Coastal Act.

The City developed procedures and forms regarding coastal permit processing (February 8, 1984), which were reviewed by the Coastal Commission staff. It also developed a Commission-approved process whereby the City reviews any required legal documents, such as access easement offers.

The Implementation Plan suggests a categorical exclusion; however, this was never formalized nor submitted.

3. ADDITIONAL AMENDMENTS (1986)

The City's LCP has been amended two additional times.

Major amendment # 1-86:

- #1: Redesignated from "Light Commercial" to "High Density Residential" the area east of Highway One that is generally bounded by the undeveloped streets of Fell to the south, Beach Way to the north, Park Avenue to the east, and Highway One to the west.
- #2: Reduced from 100% to 90% the requirement of Visitor-Serving units and eliminated the timeshare ownership option in the Visitor-Serving Residential Low Density designation (i.e., the Monterey Village project on the old landfill).

LCP Amendment #2-86 (minor) changed the parking requirements of automobile or machinery sales and service garages and added requirements for wheel stops and striping.

4. CITY ACTIONS SINCE LAND USE PLAN CERTIFICATION

Since the Land Use Plan was certified, the City has taken numerous actions that affect coastal access and resources. The following chronology lists some of the significant ones that will be further discussed throughout this report:

1984

- o Draft EIR prepared for "Monterey Views," a proposed 363-unit condominium project with a seawall on 12.5 acres south of Tioga Avenue

1985

- o "Sand City Coastal Zone Circulation Study," by Keith Higgins & Associates, concludes that development allowed under the LCP will not significantly degrade service levels
- o "Sterling Environmental Center," a 229-unit hotel with conference, health club, and restaurant facilities, plus a seawall, approved as first major project west of Highway 1; subsequently appealed to the Coastal Commission
- o EIR prepared for "Monterey Bay Village," a 198-unit timeshare condominium project with a seawall, on 15±-acre former landfill site.

1986

- o Reclamation plan for Monterey Sand Company mining operations approved
- o Coastal Commission sued by Sand City for denying Sterling Center permit on appeal; court upholds decision
- o East Dunes Specific Plan, involving habitat relocation, released; later dropped

1987

- o "No Parking" signs installed along the length of Sand Dunes Drive
- o Reclamation plan for Lone Star Industries mining operation approved; followed by coastal permit for reclamation activities, subsequently appealed to Coastal Commission

- o Redevelopment Plan and EIR adopted; entire city becomes a redevelopment district in order to alleviate blight and improve character of community
- o Preparation of Coastal Restoration Plan, partially funded by the Coastal Conservancy, begins; focus of the plan is a Habitat Conservation Plan, access provision, visual protection, and shoreline erosion prevention

1988

- o Obtrusive signs directed toward Highway One banned

1989

- o Monterey Sand Company's Regional Shopping Center approved with 7.6-acre habitat preserve
- o Revised "Sterling Center," a 135-unit hotel, with conference and restaurant facilities, approved by City and appealed to Coastal Commission, which found "Substantial Issue"
- o City acquisition of wastewater plant site pursued; purchase by State Parks Department opposed
- o "Shore Erosion Study," by Moffatt and Nichol, adopted; report estimates impacts of sand mining on coastal erosion and establishes a 50-year erosion setback line
- o Draft EIR released for "Sands of Monterey," a 375-unit hotel and 185-unit condominium project on DeZonia/State Parks Foundation site
- o EPA requested to place former landfill on Superfund Clean-up list

1990

- o Use of County Measure B dune acquisition funds in Sand City opposed except for acquiring wastewater plant and East Dunes sites
- o "Sterling Center" permit approvals rescinded after Monterey County Superior Court judgement against City; City releases response to Court action
- o Final EIR released for "Sands of Monterey" showing alternatives for reduced density

D. PUBLIC PARTICIPATION

At a December, 1989 public hearing the Coastal Commission embarked upon the LCP review process for Sand City. In January, 1990, Commission staff met with City staff members to discuss issues and timing. On February 1, 1990 Commission staff held a publicly advertised workshop that drew some 50 participants. The purpose of the workshop was to discuss the LCP review process and to solicit comments on any planning, development, access, or resource protection issues that may have arisen since certification of the City's Local Coastal Program. Speakers voiced two predominantly divergent themes: either that the LCP was fine as certified and needed no changes, or that the LCP should be revised to show little or no development on the west side of the freeway.

A draft of this report was released on April 23, 1990 and mailed to several interested parties. The Sand City City Council held a hearing on the draft on May 7, 1990, which again elicited a divergence of comments. City and Commission staff subsequently met to discuss possible revisions and procedures. Several persons sent the Commission comments on the draft (see accompanying memorandum).

E. ISSUE IDENTIFICATION AND SOURCES OF INFORMATION**1. SOURCES OF INFORMATION**

This LCP review is based on a review of many documents and conversations with and testimony from many people. A bibliography is included at the end of this report.

Since the effect of LCP certification is that authority over almost all coastal development permits is transferred from the Coastal Commission to the local government, these locally issued coastal permits are analyzed for this report. A complete list is provided in Table 2.

Three City permits were appealed to the Coastal Commission: Bell for Sterling Center (A-3-SNC-85-205); Lone Star (A3-SNC-87-131); and Bell for a revised Sterling Center (A-3-SNC-89-134). Information from these files was reviewed for this report. Additionally, there have been three major proposed projects in Sand City: Monterey Bay Village, Monterey Views, and Sands of Monterey, whose Environmental Impact Reports and other related public information have been used. There is no presumption made in this report that the City will approve these proposals. However, the substantial information that they have generated to date provides useful background data.

Other types of information used include:

- (1) the staff reports and adopted findings for certification of the City's LUP, implementation program, and LCP amendments;
- (2) public information regarding land acquisitions, annexations, and major infrastructure constraints and improvements;
- (3) correspondence between Coastal Commission staff and the City;
- (4) major City studies and plans including a Citywide Traffic Study, East Dunes Specific Plan, redevelopment plan and EIR, and sand mining reclamation plans;
- (5) proceedings of the Coastal Restoration Plan task force;
- (6) public notices of enforcement action by the City, the Commission, or other governmental agencies and relevant court decisions;
- (7) regional agency documents such as water restrictions, Air Pollution Control Plan, wastewater allocations;
- (8) newspaper and magazine articles.

2. ISSUE IDENTIFICATION

The issues that an LCP review might address are wide-ranging, potentially covering all the coastal resources that the Coastal Act is designed to protect. In the case of Sand City's LCP, the important issues are access and recreation, habitat protection, shoreline erosion, viewshed protection, and public service (especially water) availability. The focus of this report is on the scenic bay side of Highway One, which is almost entirely vacant, save for some uses that are being or are scheduled to be phased out. Most of the inland portion of the City was removed from the Coastal Zone in 1978 under AB 462 (Mello). What remains is a 200-foot strip adjacent to the freeway and the railroad corridor (right-of-way plus 100 feet). Generally, coastal issues have not been present in the permits approved to date in these inland areas, with some exceptions (habitat in # 89-1 for Monterey Sand Company's Regional Shopping Center; visual in #84-5 for Campos' dune removal). This report does not examine actions outside of Sand City's Coastal Zone, although the dune habitat extends beyond the coastal boundaries.

The LCP review also addresses procedural aspects of implementation from local noticing, to making proper findings, to noticing the Commission, and sending permit files for appeals. Other procedural aspects include LCP amendments and document update and availability. Procedural issues can affect how the LCP is

implemented in conformance with Coastal Act policies and mandates to ensure citizen participation. Agriculture and oil development are two additional areas that might be addressed in an LCP review. Policies concerning agriculture are not found within the City's LCP and hence are not evaluated.

There are other issues that might potentially arise and be appropriate for consideration in an LCP review of this type. For example, future offshore oil development could require onshore, industrial support facilities. Also, the ocean off California is traversed by oil tankers, including those carrying Alaskan crude to California refineries. Regardless of the outcome of plans for oil exploration and development in the sea off Northern California, the possibility exists for an oil spill along the shoreline. Planning for the possibility of such an oil spill may be included appropriately within local coastal programs, particularly those of counties or large jurisdictions.

Although emerging issues are potentially important, given the small size of Sand City, this LCP review focuses primarily on issue areas addressed in the existing LCP.

III. EVALUATION

Each LCP review issue below is introduced with a few prefatory notes. These notes are followed by applicable Coastal Act policies, City land use plan policies, and implementation (zoning) regulations. An analysis of the City's implementation action relative to carrying out the policies of the Coastal Act in these areas then follows, concluding with recommendations to the City.

A. PUBLIC ACCESS

Sand City has approximately 1.5 miles of shoreline frontage with no formalized public access.

1. COASTAL ACT ACCESS POLICIES

The primary Coastal Act access policies are summarized as follows:

Section 30210 requires that maximum public access shall be conspicuously posted and provided for all the people consistent with public safety, rights of private property owners, and the need to protect resource areas from overuse.

Section 30211 requires that development shall not interfere with the public's right of access to the sea where acquired through use [i.e., potential prescriptive rights] or legislative authorization.

Section 30212 requires that public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where the development:

- (1) is inconsistent with public safety, military security needs, or the protection of fragile coastal resources;
- (2) adequate access exists nearby, or;
- (3) agriculture would be adversely affected.

Section 30212 also specifically indicates what the term "new development" does not include (i.e., certain replacement, demolition, improvement, and repair activities to structures).

Lastly, Section 30214 requires that public access policies be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access. Considerations include, but are not limited to: site characteristics, the capacity of the site to sustain a certain level of intensity of use, the fragility of natural resources, privacy of adjacent property owners, collection of litter, and management.

2. LCP ACCESS POLICIES

The LUP contains fifteen primary access policies, six recommended implementation actions, and an access map. The LUP states that Vista Del Mar Street is worthy of protection as an accessway (page 34). Policy 2.3.1 requires that all future shorefront developments provide vertical and/or blufftop public access according to the access map or to other criteria listed in Policy 2.3.4, or pay an in-lieu fee. Policies 2.3.2 and 3.3.9 require dedication of lateral access easements along sandy beaches, which are defined to be at least 25 feet in the IP (e.g., pp.12, 44, 57). Policy 2.3.3 contains criteria for developing accessways, while Policies 2.3.15 and 3.3.12 spell out in more detail the access provisions for the area south of Bay Avenue. Policies 2.3.7, 2.3.11, 2.3.12, 2.3.13, and 5.3.7 address provision of public vista points, parking, and signs. Other policies address access through sand mining operations, dune areas, and private property in general. Policy 2.3.14 requires the implementation of a bicycle path, as the LUP on p. 12 indicates that there was no formal planning for a bike path to date. Policies 2.3.9 and 2.3.10 address the timing of opening and improving accessways. The thrust of all these policies is that new development will be responsible for the provision of public access.

Most LUP access policies are carried out primarily by the Coastal Zone Overlay District of the Implementation Plan. Other relevant provisions are found in the Design Control, Subdivision Ordinance, parking regulations, sign regulations, Administrative Procedures, and Other Actions sections of the IP.

3. PUBLIC ACCESS IMPLEMENTATION ANALYSIS

Of the coastal development permits issued by the City, only two permits involved public access dedication issues. Based on the types and location of other developments reviewed, there were no other permits where public access was a significant issue, although it was raised in conjunction with one other appeal. Many non-permit activities have significantly affected public access.

Site-Specific Analysis

From south to north, the following matters have occurred that have a bearing on public access:

South of Tioga Avenue: Access Opportunities Lessened

While proposals to advance public access in this area have emerged, existing opportunities have suffered. In September 1984 the City issued itself a coastal permit (# 84-5) to repair the protective structure along Vista Del Mar Street. The permit notice to the Commission was deficient, no access findings were made, and the project was never funded nor undertaken. Since this project never advanced beyond the conceptual stage, the LCP's access provisions for this area were not addressed. Portions of Vista Del Mar Street have continued to erode and are now beach or are under water.

In 1984 a draft EIR was released for "Monterey Views," a 363-unit condominium unit project south of Tioga Avenue. The site plan showed a curvilinear 12-foot-wide waterfront promenade for bicyclists and pedestrians along the project's entire ocean frontage generally in the vicinity of Vista del Mar. The promenade was to be constructed behind a seawall some ten feet above the beach level. This project is no longer active.

Both Tioga and Bay Streets, leading from Sand Dunes Drive toward Vista Del Mar and the beach, have had their vehicular accessibility restricted because of City concerns with liability (Goblirsch to Hyman 3/16/90). The LCP shows vista points at the ends of both streets, but indicates elsewhere (Policy 2.3.7) that they are to be established as part of new development. It does not directly address this issue of closures. A "Road Closed" sign and post with chain were placed on Tioga Avenue at Sand Dunes Drive, although the chain is not always fastened. Also, in 1987 the City placed "No Parking" signs along the length of Sand Dunes Drive, further reducing access. However, the City indicates that such parking was never legal.

Calabrese

This site has been the subject of three coastal permits:

Dooleage: No Access Finding: On August 21, 1984, the City Council issued a permit (#84-3) to temporarily use the site for a sawmill. It found that no site use intensification would occur, but did not make any access findings. Pursuant to the Nollan decision, the proposed project may not have resulted in significant adverse impacts that would trigger access requirements.

Bell for Sterling Environmental Center, first appeal (A-3-SNC-85-205): Inadequate Access Provisions: On January 9, 1986 the Commission denied this appeal of Coastal Permit #84-6, finding that:

In approving the coastal permit for the [229-room hotel] project the City found that, as conditioned, it was consistent with LCP public access policies. The City found that substantial access opportunities were being provided as part of the project, including:

- access promenade with both lateral and vertical access
- dedication of all land between the toe of the seawall and mean high water mark, including the sandy beach
- access improvement plan
- two vista points and restroom are provided
- 40 car public parking
- provision of bicycle path
- provision of a variety of visitor-needs (e.g., hotel, retail, restaurant, conference facilities)

Despite these features the Commission found that public access provisions were lacking:

However, some access aspects are not as extensive as implied by the City's findings. While a sandy beach is preserved, the proposed seawall does cut off the back part of it. Also, available evidence indicates that possibly over time the sand will disappear due to erosion. The LCP shows a road running along the shoreline. Instead the project shows a public promenade, with the road relocated inland, thus removing automobile and bicycle access from the immediate shoreline. While the promenade is shown to be public, no access easement is required, nor is it required to be built, and specific power is given to the Police Chief to close it for safety reasons. Taken together, these deficiencies demonstrate a potential for the LCP's access policies to not be implemented by the City's project approval. At worst case, the parking lot, restrooms, and beach stairs could be closed because of spurious "safety" reasons by the Police Chief; the public promenade could be closed off to public use at certain times or completely, or not even built; the sandy beach and any seasonal sand in front of the seawall could be eroded away. If these became the case, the amount of available public open space would actually decrease, supporting the appellants' contentions.

An oceanographic consultant reports that:

Looking ahead 50 years,...a beach should occupy the cove through the summer and fall;...in winter and spring the sand level should be seasonally lower at the rear wall, with there probably being no lengthy intervals of dry sand. Should the beach advance into the cove more rapidly over coming decades, consideration should be given to artificial placement of sand on the beach. (Thompson, November 25, 1985).

The consultant also suggests that beach nourishment in front of the seawall would also work, but when and how much would be experimental.

In conclusion, while the project is proposed to provide substantial public access amenities, true maximum public shoreline access and recreational opportunities, as required by Sections 30212 and 30220 of the Coastal Act are not guaranteed and thus the project is inconsistent with these provisions. Furthermore, the proposed access improvements are inconsistent with LCP Policy 2.3.4b which requires accessways to be sited where the least number of improvements would be required to make them usable by the public. A project which is setback further from the shoreline and/or does not include a seawall would more invitingly maximize opportunities for typical public oceanfront uses (eg., fishing, sunbathing, and beachcombing) over the long-term. (April 4, 1986 Commission findings)

Bell for Sterling Center, second appeal (A-3-SNC-89-134): Access Improvements Subject to Erosion: On December 12, 1989 the Commission found substantial issue with a revised 135-room hotel project based on four grounds. This project and the City approval answered many of the concerns of the earlier denial, but still came up short as far as public access was concerned:

The extensive access improvements and dedications on the Sterling site appear to be consistent with all relevant policies of the Sand City LCP Access Component...

However, the location of most of the access improvements and all of the areas proposed for dedication seaward of the 50 year shoreline erosion line presents an LCP policy interpretation issue regarding the longevity of access improvements. Siting of these improvements within the geologic setback area conflicts with LCP Policy 4.3.9 which requires that new development be set back a sufficient distance from the sea to ensure at least a fifty year life.

As proposed, all of the areas dedicated for public access and most of the improvements will be eroded into the sea within fifty years based on projected erosion rates. The vista points, for example, will need to be re-located, protected or abandoned within the next five years. The trail may remain in place for perhaps ten years.

The issue here is whether access improvements should be available for public use for the economic life of the private development with which they are associated. The access policies of the Sand City LCP do not provide any direct guidance on this issue nor does the City's finding relevant to public access on the site. The only definitive policy direction on this issue is found in LUP Hazard policies 4.3.8 and 4.3.9... [which calls for] setbacks based on at least a 50-year economic life for the project;...

According to the LCP definition, the proposed access improvements are considered to be development. Their location within the erosion setback area is, therefore, inconsistent with the LCP policies outlined in the preceding paragraph. (December 12, 1989 Commission findings in A-3-SNC-89-134 file)

As a result of a Monterey County Superior Court ruling on a lawsuit filed against the City by the Sierra Club, the City has rescinded its approval of the permit for the project, rendering the appeal moot (Landry to Morgan 7/2/90; Allen to Heisinger 4/26/90).

Old Landfill (Monterey Bay Village): Access on Seawall

The old landfill site was proposed to be developed into 198 residential units, of which at least 90% would be visitor-serving. A public promenade would be constructed along the top of a seawall along the length of the site, with the

beach below dedicated to the City. There would also be vertical access from a Highway One frontage road to the beach with public parking. These features are all required by the LCP. This application is no longer active. Meanwhile, debris continues to slough from the landfill encroaching on the public trust and impeding lateral beach access.

DeZonia/State Parks Foundation ("Sands of Monterey"): Proposed Access Facilities

Pending before the City is a permit for a hotel and condominium project on the land previously mined by Lone Star Industries. As part of its development proposal Fargo Industries is proposing a vertical pathway through the dune, blufftop accessway, lateral sandy beach dedication, 111 public parking spaces, vista point, and signing. These features are all required by the LCP.

A previously City-issued coastal permit for the site allowing Lone Star Industries to reclaim the parcel did not directly address public access (#87-4). The permit was appealed to the Coastal Commission. One appellant's contention was that the project may cause interference with access to the coast. This would be because of increased erosion due to not filling the pit high enough and the berm being subsequently breached. This contention, even if true, appears to mean simply that future siting of accessways would have to account for this possibility. Under the Nollan decision, the proposed reclamation work may not result in impacts significant enough to trigger access improvements. The appeal is still pending.

Citywide and Regional Access Issues

Comprehensiveness of Access Requirements Lacking

Since the LCP relies on individual developments to provide access, with exact locations to be determined on a case-by-case basis, it has become apparent that the various access facilities may not match or connect well. For example, some proposals (e.g., Monterey Views, first Sterling Center, Monterey Bay Village) showed elevated concrete promenades along the shoreline, with a sandy beach below. Generally later proposals (e.g., revised Sterling Center, Sands of Monterey) show beach level boardwalks, more respective of the natural settings. Since developments will occur at different times, lateral access will remain discontinuous for many years.

An objective of the current Coastal Restoration Plan being prepared by the City is an access component to include additional beach parking, bicycle lockers and rest stop, vista points, keep accessible facilities, restrooms, benches, drinking fountains, wind screens, and other new access facilities to and along the beach and along Sand Dunes Drive. (For discussion of a shoreline access road see Section H of this report.)

Regional Bike Path Alignment Not Yet Determined

This pathway link, called for in the LCP, has yet to be constructed. The City's Redevelopment Plan (1/87) indicates a preference for a route in the dunes roughly paralleling Highway One along Sand Dunes Drive and an extension of it. Then, on September 15, 1988, the City Council passed Resolution SC-23 determining that the bike path should be located within the present alignment of the Southern Pacific right-of-way inland from Highway One, with Sand Dunes Drive to continue to be studied as an alternate or secondary bike path.

In October 1988 "Monterey Peninsula Recreation Trail: Seaside-Sand City Alignment Study" was prepared for the Coastal Conservancy. This study found both of the mentioned routes feasible. On April 17, 1990 the City Council rescinded Resolution SC-23, instead instructing staff to continue studying the Sand Dunes Drive alignment and discussing purchase of the Southern Pacific right-of-way. It reaffirmed the City's commitment to provide a bike trail linking to the regional trail (Resolution SC-18).

The City has agreed that the railroad corridor from the Seaside City limit to the center of the tracks can be developed although the LCP designates it for circulation only. No LCP amendments have been processed in accordance with this agreement (Coastal Permit #89-1 for Monterey Sand Co.'s Regional Shopping Center file). This agreement does not necessarily preclude a bike path on the remaining portion of the right-of-way, but does not guarantee it either, in the face of competing demands. For example, passage of Proposition 108 and 116 may lead to establishment of passenger service on the rail line. The City Manager has indicated that the alignment issue remains open (Goblirsch to Hyman, 3/16/90). The railroad corridor bike route would be simpler to construct without posing environmental issues, but must await abandonment. The dunes route would be more scenic, but with more potential adverse environmental impacts.

Nollan Decision Requires More Detailed Access Findings

Since the LCP was certified, the U.S. Supreme Court has ruled in the Nollan case. Basically, the case requires that a clear nexus be established between any access condition required for a project by the Commission and the impacts that the development creates including cumulative impacts. In addition, the type of conditions must be related to the nature of the impacts. As a result the Commission staff has prepared a model access ordinance that incorporates the tenets of the Nollan decision, including guidance on adopting access-related findings (Local Assistance Notes, Number 6, September 1989). This decision should not have a major effect on the requirements in the LCP. It would appear that a nexus can still be found between these requirements and the impacts associated with permitted projects, which are large developments on relatively open shoreline. However, portions of the model ordinance might be helpful for cases of small, interim projects along the shoreline that might not justify the imposition of public access requirements, such as the Dooleage sawmill permit. Additionally, the model ordinance suggests that when access conditions are required, specific and detailed findings are necessary in order to demonstrate why such conditions are imposed, rather than merely indicating how the project is consistent with the LCP.

Conclusion

Experience to date indicates that the LCP is adequate in requiring public access dedications and improvements in connection with permitted new development in a manner generally consistent with the Coastal Act policies. However, some deficiencies have become apparent. The LCP does not fully address reducing existing access opportunities, provision of new or improved access prior to new developments occurring, siting of access facilities with relation to future erosion, integration of access facilities into a comprehensive system, or necessary access findings to be adopted. Access provisions in the LCP are tied to new development. The City required substantial access improvements in twice approving the Sterling Center coastal permit, although there were some problems that the Commission found on appeal. Since no shorefront projects have yet been constructed, there have been no concrete accomplishments with regard to providing public access, although planning efforts are underway.

Meanwhile, opportunities for public access along the beaches in the public trust areas have been reduced by debris sloughing on to the beach. Sand City discounted Coastal Act mandates to maximize access by prohibiting parking on Sand Dunes Drive and by closing Tioga Avenue at Sand Dunes Drive without benefit of coastal permits. The City also acted prematurely in agreeing with neighboring Seaside to allow the railroad corridor to be partially developed prior to resolution of the bike path issue and adoption of any proper LCP amendments. The City's current Coastal Restoration planning process, along with its implementing Redevelopment Plan and the Coastal Conservancy's bikeway study, are possible forums to address these issues.

4. RECOMMENDATIONS FOR CORRECTIVE ACTION

- A-1 The City should review the access component of its LCP to determine whether some of the listed measures slated for completion as part of new development proposals can be undertaken sooner, and if so should work to implement them quickly and independently. The City should work with the State Parks and Recreation Department, Coastal Conservancy, Regional Parks District, and landowners to formulate measures to achieve this objective, consistent with the direction of LCP Policy 2.3.4.
- A-2 The City should add to its access component other measures which can be implemented in the near future to maintain and enhance access opportunities under current conditions (e.g., current public ownership, road widths), consistent with habitat protection measures. Components should include permitting some on-street parking (pending development of new spaces) and continued facilitating of beach debris prevention and clean-up programs.

- A-3 The City should ensure that accessways and facilities will be compatible with and link with each other. The City should implement a coordinated system, elements of which could include a common signing and parking program, and illustrative designs of appropriate accessway construction (e.g., boardwalk constructions, minimum widths).
- A-4 The City should not implement Section 4.02 of its agreement with Seaside to allow Seaside's development of a portion of the railroad right-of-way until transportation plans are established for the railroad corridor (e.g., regional bicycle path route.), and then only if the planned access route(s) will not be impacted by Seaside's development and the necessary LCP amendments are certified. The City should continue to pursue a bicycle route seaward of the freeway if it can be located consistent with habitat concerns.
- A-5 The City should amend the LCP to specify under what conditions accessways may be closed, consistent with Coastal Act criteria. The duration of closure should be the minimum necessary to protect public safety. The City should require coastal permits for any activities that would reduce or interfere with access.
- A-6 The City should include standards for access findings in the Zoning Ordinance. Future city coastal permit findings should discuss the rationale for any required access or access in-lieu fees beyond indicating that the LCP requires them. Findings should also discuss whether a project interferes with public access.
- A-7 The City, to the extent that it is so empowered and working with the State Lands Commission and/or using its abatement powers if necessary, should require property owners to maintain their beaches free of debris sloughing from existing rubble structures or landfills.

B. RECREATION AND VISITOR-SERVING FACILITIES

Sand City is currently lacking in any visitor-serving or recreational facilities.

1. COASTAL ACT RECREATION AND VISITOR-SERVING USE POLICIES

Visitor-serving uses are given a high priority under the Coastal Act. The most applicable Coastal Act policies are summarized here:

Section 30212.5 requires that appropriate and feasible public facilities, including parking areas, be distributed throughout an area to prevent overcrowding or overuse by the public of any single area.

Section 30213 requires that lower cost visitor and recreational facilities be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.

Section 30220 requires that coastal areas suitable for water-oriented recreational activities that cannot be provided at inland water areas be protected for such uses.

Section 30221 requires that oceanfront land suitable for recreational use be protected for that use unless present and foreseeable future demand indicates that those uses are adequately provided for in the area.

Section 30222 requires that the use of private lands suitable for visitor-serving commercial recreational uses that are designed to enhance public opportunities for coastal recreation have priority over private residential, general industrial, or commercial development, but not over agriculture or coastal-dependent industry.

Section 30223 requires that upland areas necessary to support coastal recreation uses be reserved for such uses, where feasible.

Section 30224 requires that increased recreational boating use of coastal waters shall be encouraged.

2. LCP RECREATION AND VISITOR-SERVING FACILITIES POLICIES

Chapter 3.3 of the LUP contains twelve policies related to recreational and visitor-serving uses and three recommended implementation actions. Included are permitted uses in visitor-serving commercial facilities (Policy 3.3.3), timeshare restrictions (3.3.4), and parking requirements (3.3.8). Permitted in the visitor commercial districts are 1495 hotel or motel units and 303 visitor-serving residential units (see Table 1). Also permitted are campgrounds and RV parks, accessory shops, food service establishments, and

TABLE 1**SAND CITY LUP MAXIMUM SHORELINE UNIT BUILDOUT SUMMARY**

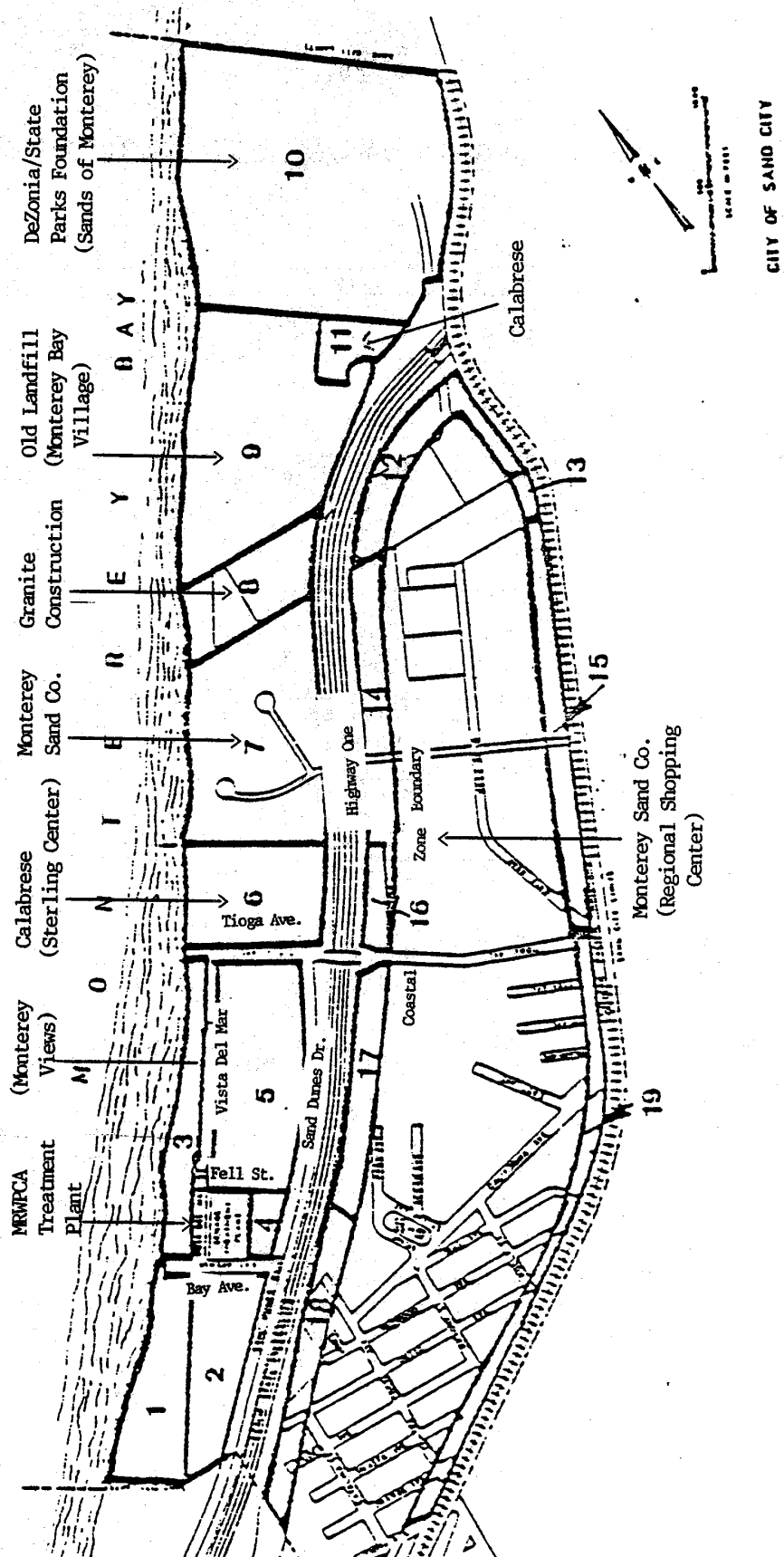
<u>Property</u>	<u>Acreage*</u>	<u>Uses</u>	<u>Units</u>
South of Bay Ave./ Inland & seaward of pump station: various owners (1-4)**	23.8	Hotel	375 rooms
South of Tioga Ave. Various public & private owners (Monterey Bay Village)*** (5)	12.5	Residential	242 -450± units****
Calabrese (Sterling Center)	7.5	Motel or Industrial	229 rooms
Monterey Sand Co. (7)	15	Hotel or Coastal industrial	375 rooms
Granite Construction (8)	4.6	Motel or Industrial	141 rooms
Old Landfill (Monterey Bay Village) (9)	15.6	Visitor residential	203 units
Dezonia/State Parks Foundation (Sands of Monterey) (10)	35.4	Hotel Visitor residential Residential	375 rooms 100 rooms 175 units
Calabrese (11)	1	Visitor commercial	---
TOTALS	115.6A.		2215- 2423± visitor & residential units

* approximate, some may be below mean high tide line

** planning area numbers from Appendix E of Land Use Plan

*** common names of proposed projects on these sites in parenthesis

**** estimated maximum under LCP bonus and transfer provisions



recreation retail shops. Policy 6.4.9 supports the pursuit and exchange of State Park lands for private lands to facilitate park consolidation, planned development, and provision of maximum recreation and view corridors; however, it also allows as an option establishment of a State Park in the area south of Bay Avenue.

The recreation and visitor-serving policies are implemented by the zoning map designations and the applicable district regulations for Coastal Zone Visitor-Serving Commercial, Coastal Zone Public Recreation, and Coastal Zone Visitor-Serving Residential. Other implementing provisions are the timeshare ordinance, coastal zone regulations, design control, parking, and park dedication ordinances.

3. PUBLIC RECREATION IMPLEMENTATION ANALYSIS

Site-Specific Issues

The following is a description from south to north of what has happened since LCP preparation that may affect public recreation opportunities:

South of Bay Avenue: Future State Park?

A large portion of the 6± acres of dunes south of Bay Avenue and inland of Vista del Mar (a paper street) is in public ownership. This is an area of deferred certification -- the Land Use Plan is approved, but the Implementation Plan has not been prepared. At the time of LUP preparation State Parks owned approximately 4 acres composed of some 85 scattered small holdings in the area south of Bay Avenue. It was not pursuing acquisition of additional parcels; in fact, Senate Bill 1708 signed into law September 21, 1982 authorized the Director of General Services to exchange or sell these existing holdings. However, the Department retained its holdings. On July 26, 1989 the Department conducted a public hearing regarding proposed additional land purchases. The Department now intends to proceed with the overall expansion program to buy the remaining privately owned lots in this area (letter from Director Agonia - October 1989). The Department has also offered to accept management responsibility for any of these lands that the Monterey Peninsula Regional Park District acquires (6/2/89 McCargo). The District has purchased approximately an acre of land in this area (26 lots). It has applied to Sand City to amend the Land Use Plan to indicate that a public park is the preferred option for South of Bay Avenue, not just one of the four options currently permitted under the LCP (October 25, 1989). The City of Sand City has opposed efforts of further State acquisitions, emphasizing preference for the option in its Land Use Plan of private development (hotel) with dune restoration and public recreation on the site and complaining that the Department has not properly managed the land that they already own (Mayor Pendergrass to Agonia 7/31/89). While the City may have legitimate reasons for preferring hotel development, its letter ignores its own Plan's option for a State Park on the site. Given the Department's plans, the City's hotel alternative appears to be no longer realistic.

Land between Tioga and Bay Avenues: Future Parkland?

The wastewater plant site at the corner of Vista Del Mar Street and Bay Avenue owned by Monterey Regional Water Pollution Control District is designated "Public Facilities." The plant is no longer operational and most components will be removed in the near future (Intent to Adopt Negative Declaration, 5/24/90). Some facilities in the southwest corner of the site including a pump station will remain. Sand City sought to purchase the site, foreseeing its use(s) to be decided by a specific plan to be prepared for all the land south of Tioga Avenue. However, the State Parks Department was given the right to negotiate and has negotiated with the landowner to purchase most of this four plus acre parcel. To discourage this sale, Sand City has stated that its LCP (the site is zoned "Public Facilities") does not allow the restrooms and parking lot that the State is contemplating for the site. Both the LCP and Coastal Permit 3-83-14-A2 (formerly A-80-80 as amended) issued by the Coastal Commission set the same development envelope. The Commission can concur with the City that structures outside of the envelope would not be permissible. However, the Commission would disagree that a public restroom or parking lot would not be considered a "public facility." Furthermore, the Department is an entirely acceptable agency to hold the land that must remain open space pursuant to the coastal permit and is an appropriate agency to implement the dune restoration required by the LCP.

The remainder of the property between Bay and Tioga Avenues is comprised of approximately 250 1,800-square-foot lots in various ownerships. Some land is designated for open space, but a major residential development is also permitted. A proposal termed "Monterey Views" for 363 condominium units was the subject of a draft EIR, but is no longer active. The Regional Park District has been purchasing lots in this area; it now owns 77. The Park District, therefore, proposed an amendment to the LCP to allow recreation as a priority use on these sites (October 25, 1989; reactivated February 27, 1990). The State Parks Department is also proposing to add a strip of this land along Fell Street to its holdings. The District is currently appraising all the land in Sand City south of Tioga Avenue in order to assess the feasibility of further acquisitions and to be able to take advantage of opportunities to purchase more lots (Tate to Hyman, March 28, 1990).

These recent and proposed public acquisitions suggest that the area has an increasing value for public recreational use. Existing uses within the current State Parks holdings (primarily in Monterey) that are also expected to occur on the proposed acquisitions in Sand City include

whale and dolphin watching, scuba [and] skin diving, board surfing, body surfing, wind surfing, beachcombing, surf fishing, beach ball, volleyball, sunbathing, picnicking, swimming, painting, photography, bird watching, and other nature study, aesthetic appreciation, kite flying and the like. (Agonia to Brown 10/4/89)

Calabrese (Bell for Sterling Center): Beach Use

As noted in the access section above, the City's first permit for this project (#84-6) included dedication of all land between the toe of the proposed seawall and mean high water mark, including the sandy beach. The second permit for a revised project (#89-3) showed an easement for public access and passive recreation seaward of the 50-year erosion line. As noted, this latter permit has now been rescinded.

Old Landfill (Monterey Bay Village): Seawall-Defined Beach

This inactive proposal also showed beach area seaward of a proposed seawall to be dedicated to the City.

DeZonia/State Parks Foundation (Sands of Monterey): Public Use

An approximately 7.5-acre portion of this parcel is designated in the LCP for public recreation (the remainder is for housing and visitor-serving facilities). Recent exercises superimposing the current shoreline position on the site map show that a large strip of the recreationally zoned land is under water (1986 Coastal Commission revision to post-certification map, 1988 Sand City Redevelopment Plan map).

In May 1985 the Department of Parks and Recreation was offered a one-half interest in the entire approximately 39-acre parcel by Mrs. Sturgeon, who wished to have it become a park. Because her gift was only a half-interest and had certain time constraints, because the LCP allowed commercial development, and because the Department did not own contiguous land, the agency suggested that the State Park Foundation take title instead (Henry to Hyman 4/4/90). The Foundation, in turn, optioned its interest to Fargo Industries and planned to use the proceeds to assist State Parks elsewhere (Herald 7/23/89). Fargo's pending "Sands of Monterey" proposal basically shows as open space recreation the area so designated in the LCP.

Citywide and Regional Public Recreation Issues**Accommodation of Recreational Demand**

The demand for recreational use of Sand City's beaches since LCP certification is evident. Monterey Regional Parks District has proposed allowing public park and open space as a preferred use on all parcels west of Highway 1, and requiring Sand City to cooperate with other public entities in exploring the establishment of a public park on all property west of Highway 1 (Tate to Goblirsch 10/25/89). While Sand City has not yet acted on this request, it is relying on more intensive development which would be permitted by its LCP to generate revenue to support redevelopment in the City (Goblirsch to Hyman 3/1/90).

Reportedly, the City estimated that more than 7,000 people visiting the beach to celebrate Fourth of July (Sunday Herald 7/9/89 p. 6A). The State Parks and Recreation Department states that:

"furthermore, since the coastal area of Monterey and Santa Cruz Counties attracts 5.76 million Californians (not including local residents, foreign visitors and out of state visitors) and since according to the Department's annual Statistical Report, 1.2 million people visit California State beaches on the Monterey Peninsula every year, clearly the coast is a tourist attracting resource that is well worth protecting. (Agonia to Brown, 10/4/89)

A 1985 study by Recht, Hausrath, and Associates estimated a continued 2.5 to 5% annual increase in visitors in the future based on a computed average annual increase of 3.7% (Future Hotel Rooms Demand Study for the City of Monterey, March 1985). They had earlier determined that 74 to 84% of all visitor parties staying overnight on the Monterey Peninsula visited the beach.

How such regional demand relates to the Sand City shoreline would require more specific analysis. Lack of easy access, lack of facilities and amenities, on-street parking prohibitions, private property, existing industrial uses, shoreline blockage from rubble walls and the landfill, and littering are current factors inhibiting or preventing beach use. Predictions of potential future use would thus have to assume these factors are altered as well as evaluate site characteristics. Generally, the beach configurations and climatic conditions would be similar to other Monterey Bay public beaches that receive extensive use. One possible predictor is the nearby Dune Drive portion of Monterey State Beach. Opened in the early 1980's, estimated visitor use has increased over the last three years (148,173 in 1986-87; 163,599 in 1987-88; 210,495 in 1988-89). Use has similarly increased at Marina State Beach, also located in the south Monterey Bay dunes. (Dickson to Hyman 4/13/90)

Maintenance Needs

The Herald newspaper article stated, "The visitors left behind more litter and more of the broken glass that have characterized the Sand City beach for years. Since there are no designated parks on the undeveloped land, there are also no trash cans." (7/9/89, p. 6A.) The City's opposition to public park ownership is in part derived from its concern that the beaches will not be adequately maintained, an activity they could require of developers. State Parks rangers do police their Sand City property to prevent off-road vehicle use, respond to incidents on the Sand City beach (which they do not own), and routinely direct Court referral work crews to pick up litter on the City beach (Dickson to Hyman 4/5/90). The City's opinion that private management of public beaches will result in better maintenance may or may not prove true, but there is no such guarantee in the LCP or elsewhere. For its part the City passed Resolution No. SC-20 on September 15, 1988 supporting Coastweeks and "Adopt-A-Beach" Coastal Clean-up Day, sponsored by the Coastal Commission.

Conclusion

Experience to date indicates that the LCP needs updating to recognize the suitability of the dunes and beach for public recreation. While the Coastal Act does not require the designation of privately owned land for exclusively public open space uses, it does emphasize provision of public recreation (Sections 30210, 30221, 30222). The oceanfront location, nearby public and visitor-serving uses on the Monterey shoreline, future demand projections, and existing and planned public acquisitions by state and regional recreational agencies all suggest the suitability of Sand City for increased public recreational opportunities. Contrary to the spirit of the Coastal Act and many provisions of the LCP, Sand City is selectively using some LCP provisions to justify opposition to acquisition for public recreation. An alternative approach would be to incorporate acquisition as a viable means of implementing access and resource protection policies. If certain lands were to become parks, the City could explore planning options for the remaining private lands to determine whether any could complement and capitalize on the parklands.

4. RECOMMENDATIONS FOR CORRECTIVE ACTION

- B-1 The City should allow public recreation as a permitted land use in all zoning districts seaward of Highway One. The Implementation Plan for the area South of Bay Avenue, when prepared, should allow for State Park ownership and public recreation uses. The City should consider redesignating land owned or acquired by public recreational agencies to "Public Recreation."

- B-2 The City should consider dropping its opposition to public acquisition of its shoreline and embracing it as an implementation mechanism. It should especially welcome and support State Parks Department's interest in the treatment plant site, provided the Department expresses its willingness to restore the site and comply with Coastal Commission permit #3-83-14 and City use permit (#181 and #325) conditions. The City could clarify its LCP provisions that refer to "the State Parks holdings" as those in existence in 1983, to avoid confusion with land which the Department might have acquired subsequently or might acquire in the future. The City could consider various scenarios of public acquisition of shorefront land occurring and what would then be the optimal use and design of the remaining privately owned properties to complement and support the park uses.

5. COMMERCIAL VISITOR-SERVING USES IMPLEMENTATION ANALYSIS

Site-Specific Issues

The following sites have been proposed for commercial visitor-serving uses:

Calabrese (Sterling Center)

Both the original and revised Sterling Center projects approved by the City are visitor-serving proposals consistent with the LCP use designation for the site.

Uses originally proposed included health and fitness facilities, a 200-seat restaurant, a 75-seat lounge, meeting rooms, retail shops, a pool, and tennis and racquetball courts. The revised project proposes conference and spa facilities, a 100-seat restaurant, and a 35-seat lounge. As noted, approval of this latter permit has been rescinded.

Old Landfill (Monterey Bay Village)

In conjunction with this inactive proposal for a 198-unit condominium development, the City amended its LCP to reduce the visitor-serving component from 100 to 90% of the units on this site, although the original proposal was for only 20% visitor-serving. The amendment also changed the type of visitor unit from timeshare ownership to short-term (maximum 31 day) rental.

DeZonia/State Parks Foundation (Sands of Monterey)

Proposed for the visitor-serving commercial portion of the site is a 375-room hotel. Proposed for the visitor-serving residential portion of the site is an 80-unit short-term rental project. The Draft EIR suggests an LCP amendment for the visitor-serving residential designation identical to one approved for the old landfill site: from 100% to 90% short-term visitor accommodations and elimination of the timeshare option. To date, the City has not determined whether to pursue such an amendment (Morgan to Hyman 3/16/90). Proposed uses included conference center, retail shops, restaurant, swimming pools, and tennis courts.

Citywide and Regional Commercial Visitor-Serving Issues

Timeshare/Short-term Occupancy Needs Limits

The LCP's visitor-serving residential designations were developed to promote timeshare units (p. 28 of IP, "Purpose"). The LCP's timeshare ordinance simply allows occupancy for 31-day maximum periods; thus an owner could leave for a day then return for another 31-day period, thwarting the visitor-serving intent. In contrast, a Santa Cruz County ordinance specifies both a maximum (29) consecutive day stay and (29 day) annual stay for an occupant or group of occupants (with a 45 day annual stay for the unit's owner(s)). Part of this ordinance, covering all types of visitor occupancy units (Santa Cruz County no

longer allows timeshare ownerships), would be an appropriate model for Sand City. As the amendments discussed above indicate, Sand City is no longer interested in timeshare because of its belief that timeshare does not generate City revenue through the transient occupancy tax, is not completely visitor-serving, and gives rise to "abuses and problems." (2/20/86 Pendergrass letter, 7/6/86 Herald article, 7/16/86 Chamberlin letter in LCP Amendment #1-86 file.)

Regional Demand for Accommodations is Apparent

Some commenters at the scoping meeting for this report have questioned whether the LCP's allowance of 1800 visitor-serving units on Sand City's shoreline remains appropriate (e.g., Broadwell to Loomis 2/1/90). In the City of Monterey voters favored continuing a moratorium on construction of new visitor accommodation projects in May 1985 by 77.1% to 22.8%. The moratorium has been in effect since 1984, and was made permanent on July 1, 1986. In 1985, in response to this concern, Recht, Hausrath, and Associates prepared Future Hotel Rooms Demand Study for the City of Monterey (March 11, Final Draft), the only known public study of Monterey Peninsula visitor demand in the last decade. The consultants found that:

under current market conditions and land use policies, Monterey and other Peninsula communities would experience a significant amount of hotel/motel development through 2000. Visitor demand would be strong enough to increase current occupancy levels, even with the projected additional hotel/motel development. (p. 6).

As of January 15, 1985 there were 7,334 rooms in 170 hotels and motels on the Peninsula from Marina to Carmel, with another potential 4,000 under construction, approved, applied for, or conceptually discussed. Additionally, the consultants calculated that out of the total available zoned land, a possible 2,148 units could be built in the foreseeable future on the Peninsula. For example, they noted that although Sand City has a total holding capacity (as permitted by Current Zoning) of about 1,500 rooms, only 750 (three out of five sites) were projected to be built soon. Average annual occupancy was 72%, ranging from 65% in Seaside and Pacific Grove, to 80% in Carmel, Marina, and Pebble Beach, with close to full occupancy in summer and reduced levels in winter. Since new hotels typically need 70% occupancy to return their investment and since the number of visitors was projected to increase, the consultants projected construction of 4,265 additional hotel rooms above the 7,334 existing ones by the year 2000. This projection indicates that there may be a demand for hotels in Sand City, but there would be competition from other jurisdictions. A 212 room hotel is slated for construction in adjacent Seaside, with another one of unspecified size being proposed nearby on Laguna Grande (Herald 3/6/90). These locations could capitalize on visitors' beach use in Sand City.

One regional cap on future hotel rooms is in place, but is not allocated by jurisdiction:

The AQMP (Air Quality Maintenance Plan) accommodates a 25 percent increase in hotel/motel traffic-related emissions between 1987 and the year 2000. Future hotel/motel facilities not exceeding a cumulative total of 3,700 rooms by the year 2000 will be consistent with the AQMP. Not including pending projects within Sand City, District records indicate a total of 1,371 units currently pending in the planning process within the air basin. (Quetin to Loomis 1/29/90.)

Neither of the current regional agencies' water and sewer allocations specifically separate out visitor-serving facilities (see Sections G and H of this report).

Conclusion

Experience to date indicates that the LCP is being and can be implemented in a manner that provides substantial visitor accommodations, which are a priority under the Coastal Act. The LCP does lack policy standards to assure that priority to visitor-serving uses will be realized. Although to date both visitor-serving and residential projects have been proposed and the only major shorefront project once approved by the City was visitor-serving, it is possible that the residentially designated sites will be the first, and possibly only ones, to develop in the foreseeable future, especially if water availability is further restricted. There are no distinguishing characteristics of these sites that make them less suitable for visitor-serving uses if they were to be developed. What is important is to maintain or exceed the ratio of 74% visitor units to 26% residential units seaward of Highway 1. Expanding options to achieve and ensure this provision may be desirable.

The LCP allows a variety of visitor uses, but also illustrates (in Appendix F) that there is room on the designated sites to accommodate some other visitor-serving commercial uses in addition to a hotel or motel. However, as will be shown in other sections of this report, this demonstration assumes a substantive site coverage and low water-use projections. Thus, if a range of visitor uses were to be encouraged, building fewer hotel or motel rooms would be appropriate.

The Recht, Hausrath & Associates study indicates that there is demand for additional hotels on the Monterey Peninsula. It does not examine Sand City's specific demand. It does suggest that there are alternatives to Sand City for hotel locations.

6. RECOMMENDATIONS FOR CORRECTIVE ACTION

- B-3 The City should allow visitor-serving facilities on the two shorefront residentially designated sites (South of Tioga Avenue, the portion of Dezonía/State Parks Foundation site adjacent to Fort Ord) as permitted uses, consistent with overall density constraints. If either of these sites were to be developed with visitor-serving facilities, then the City could, to compensate, redesignate another site, if available, for residential use, through an LCP amendment if necessary. Another option for City to consider is to allow residential components of visitor-serving projects, provided the LCP's overall percentage of visitor units remains (74% of total units seaward of Highway One).
- B-4 The City should revise its time share Land Use Plan provisions and ordinance to specify a maximum 30-day annual stay per owner or party and extend this requirement to all types of visitor facilities.
- B-5 The City should develop and employ strategies to implement LCP Policies 3.3.2 and 3.3.3 encouraging a variety of visitor-serving uses. Examples of strategies to consider would include: more specific land use designations, early consultations with potential applicants, facilitating public-private cooperation, and obtaining information on demand for various visitor-related uses.

C. SHORELINE SAND SUPPLY, SAND MINING, PROTECTIVE SHORELINE STRUCTURES, AND GEOLOGICAL HAZARDS

Sand City's eroding shoreline, with some non-engineered rubble walls, was the site of two sand mining operations.

1. COASTAL ACT SHORELINE HAZARD POLICIES

Relevant Coastal Act policies are summarized below:

Section 30235 requires that revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted where required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply.

Section 30253 requires that new development shall: (1) minimize risks to life and property in areas of high geologic, flood, and fire hazard; and (2) assure stability and structural integrity, neither create nor contribute significantly to erosion, geologic stability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

2. LCP SHORELINE SAND SUPPLY AND SAND MINING POLICIES

There are four Land Use Plan policies that address sand mining:

- Policy 4.3.1 supports the continuation of sand mining.
- Policy 4.3.2 establishes conditions for permitting and expansion of sand mining in the surf zone, so as not to adversely impact shoreline erosion.
- Policy 4.3.3 provides for enacting ordinances relating to surface mining and reclamation standards, pursuant to The California Surface Mining and Reclamation Act of 1975. (SMARA)
- Policy 4.3.4 specifies the limitations of dune mining operations to:
 - a. areas where previous mining activity has occurred.
 - b. areas where dunes are severely disturbed.
 - c. area where dunes have been severely disturbed by and in support of sand mining.

The Land Use Plan notes that an accurate sand budget had not been agreed upon; studies had not reliably quantified sand mining's contribution to erosion (p. 31).

These policies are implemented by the Coastal Dependent Industry, Visitor-Serving Commercial, and Industrial-Manufacturing zoning districts; the Coastal Zone regulations; and the Surface Mining and Reclamation Ordinance.

3. SAND MINING AND RECLAMATION IMPLEMENTATION ANALYSIS

Sand Mining May Be Over

The status of sand mining has changed since LCP preparation. At that time there were two active sand mining operations, Monterey Sand Company and Lone Star Industries. In August 1985 the State Mining Board designated the city's sand dunes as "Regionally Significant Construction Aggregate Resource Areas in the Monterey Bay Production-Consumption Region."

Under state law (SMARA) and the City's reclamation ordinance these operations were required to prepare reclamation plans. The plans themselves did not require coastal permits; however, any work associated with carrying them out would require a coastal permit (see Section J of this report).

Both final plans emerged after several earlier versions. Monterey Sand Company's was finalized in March 1986 and Lone Star Industries' on January 20, 1987. Coastal Commission staff commented on drafts of both. Monterey Sand Company proposed to recontour slopes to a ratio not to exceed 3:1 and to make the land available for other uses allowed by the Local Coastal Program. Lone Star Industries' plan included partially filling an existing pit and revegetating the site.

Near the end of 1986 Lone Star ceased sand mining. The City's coastal and grading permit (87-4) to reclaim the site was appealed to the Coastal Commission (A-3-SNC-81-131). The appeal remains pending (see Environmentally Sensitive Habitats Section G of this report).

Monterey Sand Company concluded successful litigation with the Coastal Commission, which resulted in a vested right to continue mining. However, the company's lease to mine from the State Lands Commission expired at the end of June 1988, as did its federal permit from the U.S. Army Corps of Engineers. The Company contended that the lease should automatically be renewed, while State Lands said that the Company needs to prepare a new environmental analysis. Monterey Sand Company was granted some lease and permit extensions while this controversy was ongoing. However, mining ceased, at least temporarily, in November 1989 and the Corps revoked its permit at the end of December 1989 (12/14/90 and 1/17/90 Herald articles). The company has applied to the U.S. Army Corps of Engineers for a ten-year extension to continue sand mining. That agency ruled that an EIS must be prepared (Yanagihara to Robinette III, 2/28/89).

Attempts to Quantify Shoreline Sand Supply Not In Complete Agreement

Sand City LCP Policy 4.3.2 establishes conditions for permitting and expansion of sand mining so as to avoid or minimize erosion. In order to determine the effect that sand mining has on shoreline erosion, various sediment budgets have been produced over the last 20 years (e.g., recently McGrath 1985, Oradiwe 1986). A sediment budget analysis attempts to quantify sediment sources and losses, with a deficit indicating that there will be erosion. Several studies indicate that there is a deficit in the vicinity of Sand City, although their estimated amounts varied significantly. Presently there is not complete agreement among all investigators as to how significant a factor, if any, is offshore loss of sand. Four studies attribute from 14% to 23% of the loss to sand mining, with the remainder due to wind or deposition offshore. (Dorman, 1969; Arnal, 1973; Welday, 1972; Oradiwe, 1986). Sand mining contributes to erosion by: (1) removing a large volume of the coarse-grained sand that would normally replenish the beach sand as the dune face eroded, and (2) removing vegetation that anchors sand to prevent wind transport.

Four EIRs and associated geotechnical reports have been prepared for the proposed projects along Sand City's shoreline. Two of the draft EIRs (for Monterey Views and Sands of Monterey) had no discussion on the sand transport or sand supply in the area. The Monterey Views EIR contains some minimal information on the littoral drift in the area, but it does not address the offshore currents. A 1985 geological report by Cleary Consultants for the first Sterling Center project states that there is a net deficit of sand in the southern portions of Monterey Bay. In 1989 a supplemental littoral drift study was prepared for the Monterey Bay Village project by Fox, Nielsen and Associates. It concludes that there is a weak littoral drift southward (p.23).

McGrath: Several other studies have been published since LCP preparation, in addition to the geotechnical reports on individual projects. "Developing A Sand Budget for Monterey Bay," by James McGrath (December 1985), is a thorough summary of research on the erosion and circulation of Monterey Bay up to that date. His conclusions are:

1. Monterey Bay has an eroding shoreline that has been eroding since the last glacial period.
2. Further research of offshore processes in the Southern Monterey Bay is required, as is a better understanding of the sources and movement of the coarsest materials. Loss of the coarse sand is probably directly responsible for beach retreat.
3. Longshore transport is a function of grain size and none of the present models adequately account for grain size in littoral transport.

4. Bluff retreat will occur during episodes of storm surf, which should replenish the beach with the coarsest materials. However, it is these coarsest materials that have been mined, thus removing the material that is necessary for beach replenishment.
5. Presently occurring erosion is episodic and usually occurs when there are episodes of storm surf.

Oradiwe: Emanuel Oradiwe's March 1986 thesis, "Sediment Budget for Monterey Bay," is an attempt to mathematically model the processes in the southern portions of the Bay to quantify a sediment budget. Oradiwe concludes that there is a budget deficit and that erosion is continuously occurring along the Monterey Bay, with the majority of that erosion in the southern portion.

Oradiwe himself admits that the reliability of the data and mathematical models is questionable: "The accuracy of these figures may either have been overestimated or underestimated, hence they are surely in error. These errors are due to the fact that there are no long-term observations backed by experiments." (p. 82.) To date, attempts to mathematically model and quantify coastal processes have shown little consistency in the results, due to the many variables involved (e.g., wind, current, grain size, grain density, grain shape, shape of the coastline, erosion rates, eroded material, drainage basins, rock types in the drainage basins, submarine canyons, bedload, suspended sediment load). Thus, this thesis can be used to show what future studies are needed, but not to determine exact beach replenishment, building setbacks, or other planning criteria.

McGee: Another thesis, "Coastal Erosion Along Monterey Bay" by Timothy McGee (1986), attempts to examine more thoroughly the forces driving longshore sediment transport and erosion. Modeling the effect of the massive long period waves that break in the surf zone and scour and transport massive quantities of sand annually within the Bay, McGee calculates a theoretical bluff recession rate of 2.47 feet per year. Comparing this to a rate of 4.12 feet measured from aerial photographs, he attributes the difference to the effect of sand mining.

Moffatt and Nichol: As part of the Coastal Restoration Plan, the City commissioned a "Shore Erosion Study" by Moffatt and Nichol (September 1989) to answer some of the unknowns about sand supply and erosion in the area. The consultants estimate sand mining's contribution to erosion as being .64 ft./yr. of shoreline recession for each 25,000 cu yds removed. Since they estimate up to 140,000 cy/yr of sand was previously mined, they attribute a large percentage of historic erosion to mining (i.e., up to 3.6 feet per year). Unfortunately, public records of exact amounts of sand historically mined are unavailable. The Moffatt and Nichol's model indicates that once mining operations ceased there could even be temporary accretion to bring the mined areas into balance with the neighboring shoreline. The Moffatt and

Nichol report assumed that "net offshore transport is limited to finer sediments, and the rate of offshore losses of shorefaced-sized sand is negligible." (page B-19) Their model considers only the effects of longshore transport (and sand mining, etc.). They did not model the offshore current in the circulation cell that carries sediments and water offshore in the vicinity of Sand City.

Conclusions

Although many studies on sand transport have been performed since the Land Use Plan was prepared, presumably improving on the previous ones, there is still not, and may never be, agreement among all experts. Reasons include the lack of data and the unreliability of models. The latest attempt at synthesis, the Moffatt and Nichol report, for example, relies on estimates of amount of sand mined. If the actual amounts differ from their estimates, then their predicted future erosion rate (without sand mining) could be incorrect. Their calculations also rely on a model that does not include deposition by the offshore current. If this phenomenon were factored in and proved significant, their predicted erosion rate could also be incorrect.

Despite these uncertainties, there has been growing consensus that sand mining, especially surf zone mining, significantly contributes to erosion. Mining also has adverse impacts on access and scenic resources and hence on recreational use of the shoreline. While Monterey Sand Company has a vested right to continue mining with regard to coastal permit authority, the upcoming EIS process for renewing the Corps' permit will offer an opportunity to fully air and address these issues.

4. RECOMMENDATIONS FOR CORRECTIVE ACTION

- C-1 The City should not support renewal of the U.S. Army Corps of Engineers permit for sand mining unless the approved method will involve pumping more sand from offshore than is mined from the shore, and will not result in adverse impacts on shoreline sand resources. The City should revise Policy 4.3.1 accordingly.
- C-2 The City should adopt a policy to bar export of sand not commercially mined and implement it to the extent that it has such authority. There should be a maximum salvage effort from maintenance and construction operations to retain and re-use sand in the beach sand cell (e.g., place in high, dry sandy beach) or in restoring dune landform (e.g., fill of blow-outs).

- C-3 The City should pursue development and implementation of a beach management and sand replenishment program to minimize shoreline erosion and establish equilibrium in the sand budget to the maximum extent feasible. Program components should be based on the dynamics of the South Monterey Bay littoral cell and should at a minimum:
- be developed by experts qualified and experienced in shoreline processes
 - be consistent and integrate with dune preservation and restoration initiatives
 - be consistent and integrate with dune preservation and restoration initiatives
 - identify suitable sand sources to reestablish the sand budget
 - identify alternative methods for obtaining and utilizing the source
 - include environmental review pursuant to the California Environmental Quality Act and ensure no significant adverse impacts
 - determine potential implementing agencies and funding mechanisms
 - conform to regulatory agencies' requirements (e.g., U.S. Army Corps of Engineers, State Lands Commission)
 - identify management, maintenance, and monitoring needs for long-term program implementation.

5. LCP PROTECTIVE SHORELINE STRUCTURES POLICIES

There are three Land Use Plan policies dealing with permitting, construction, and maintenance of shoreline protective devices where they are necessary, and requiring geologic and engineering studies to determine proper design:

Policy 4.3.5 permits construction and maintenance of all shoreline protection devices in situations where they are necessary to protect existing structures, coastal-dependent uses, public beaches and recreational areas, and public works. Shoreline structures, under certain circumstances, would be permitted along the entire shoreline from the Seaside Treatment Plant through the old landfill site.

Policy 4.3.6 requires complete geologic and engineering studies to determine the proper protective device design appropriate to site conditions.

Policy 4.3.7 allows periodic maintenance and replacement of existing shoreline protection devices.

LUP Policy 4.3.9 contains guidelines for setbacks:

- a. Setback measurements are determined from the most inland extent of wave erosion, i.e., blufftop or dune or beach scarp; if no such feature is identifiable, determine setback from the point of maximum expected design storm wave runup.
- b. Setbacks based on at least a 50-year economic life for the project.

These policies are implemented by the Coastal Zone regulations and the Natural Hazards and Protective Shoreline Structures narratives in the IP.

6. PROTECTIVE SHORELINE STRUCTURES IMPLEMENTATION ANALYSIS

Site-Specific Issues

From south to north three seawall projects have been proposed at various times since the LCP was certified:

South of Tioga Avenue

Vista Del Mar Protective Structure: The second coastal permit issued by the City was to itself to repair and maintain the rubble structure fronting Vista Del Mar Street, which runs from Tioga Avenue south to Bay Street (CP-84-5). The notice to the Commission was deficient in that the project description was unclear. No plans and no engineering/geological report were prepared. The project was not funded and hence was abandoned.

Monterey Views: Also in 1984, a residential development that included a seawall was proposed south of Tioga Avenue. The draft EIR for "Monterey Views" states that placement of a properly constructed and designed seawall will reduce the impact of wave runoff". A structure similar to the seawall at the nearby Monterey Beach Hotel was proposed. Neither the adequacy of the design nor the impacts of the seawall are addressed, nor are plans presented in the draft EIR.

Wastewater Treatment Plant: In approving the LCP, the Commission recognized the wastewater plant and the line leading to it as existing structures that could be protected. The plant at the corner of Bay Avenue and Vista del Mar Street will be demolished, but a new pump station there, approved by the Commission, will remain. This new facility was thought at the time to have been adequately set back for its 100-year expected lifetime, without the use of shoreline structures (see Coastal Permit No. A-80-80, MPWPCA, now MRWPCA). Applying the Moffat and Nichol study factors now suggests that the facility might be threatened by erosion in some 50 years. In negotiating to sell the site to the State Parks Department, the regional wastewater agency (MRWPCA) has sought to reserve a more inland location to relocate the pumping facilities in the future (Henry to Hyman 4/4/90).

Calabrese (Bell for Sterling Center)

First Sterling Center: The first Bell permit (#84-6) and appeal (A-3-SNC-85-205) included a seawall, as potentially allowed by LCP Policy 4.3.5. However, in finding substantial issue on appeal and then denying the project the Commission found:

While the LCP may permit a seawall on this property, the Commission nevertheless found substantial issue with the particular design (or more appropriately, the lack of a design) being proposed. At issue were the impacts on adjacent properties, the possibility of being forced to construct a seawall on the adjacent property, impacts on the sandy beach, and cumulative impacts up and down coast. Deferring final study and design, which was allowed by the City's conditional approval, was unacceptable to the Commission.

While Thompson's [applicant's consultant] Coastal Protection report is scholarly and professional, other expert testimony expressed concern over the proposed seawall's effect on downcoast erosion. The Commission is concerned about the potential long-term impacts from the seawall (beyond the 50 year life) and the potential cumulative impacts were the proposed wall to be part of a longer structure along the remainder of Sand City's northern coast. In conclusion the evidence is not convincing to find that shoreline processes will not be adversely affected and that increased erosion will not occur as LCP policy 4.3.5 requires. Therefore, the proposed project is not consistent with the geological policies of the Sand City LCP. (April 4, 1986)

The Superior Court upheld this decision in a case filed against the Commission by Sand City. (May 6, 1987)

One issue that emerged in considering this permit was that there were no clear siting criteria in the LCP for seawalls. Seawalls themselves are subject to wave and storm attack, will affect the beach seaward of them and adjacent properties, and need to be anchored to survive. Accounting for such factors, the project proponents redesigned and resited inland the proposed seawall during the course of the appeal.

Revised Sterling Center: The revised Sterling Center permit (#89-3) did not include a seawall. The applicant proposed to remove rubble and debris from the bluff area and, through grading and the placement of native sand and bluff materials, recontour the bluff on a 1:1 slope. On appeal, the Commission found substantial issue (A-3-SNC-89-134) in part due to "the lack of information regarding the final location of the bluff line, feasibility of the proposed bluff recontouring and sand replenishment program:"

The amount of debris and fill to be removed, the amount of fill to be placed and the finished location of the recontoured bluff is not known. However, the applicant's representative indicates that the new bluff will be approximately in the same location as the existing bluff... An optional program for periodic sand replenishment to aid in erosion control is also authorized by the City approval of this project. Information contained in the geological report prepared for the project indicates that it may be difficult to maintain a 1:1 slope because the new slope will erode and seek its angle of repose. ...

According to this [Moffatt and Nichols] study, which is based on historic erosion rates and factors in storm periods and sea level rise, a 3 foot per year shoreline retreat rate is predicted. Based on this study, development on the Sterling site must be located a minimum of 150 feet landward of the blufftop in order to meet LCP Policy 4.3.9 which requires a setback adequate to ensure at least a 50 year economic life for shorefront projects.

A review of the site plans for the project indicates that all portions of the hotel development (main building, meeting facilities, lobby) are located behind the ± 150 foot, 50 year erosion setback as measured from the existing blufftop and from the 10 foot contour in the north-west part of the site. The appropriate measuring point, however, is not the existing blufftop, but rather the new, recontoured line achieved as a result of the removal of construction debris. As no plans exist showing the new grading profiles for this aspect of the project, the finish location of the blufftop cannot be definitely placed at this time, although the applicant's representative indicates the "new" bluff will be located in approximately the same place as the existing bluff.

The uncertainty regarding the final location of the blufftop as well as information regarding the feasibility of compacting sand on a steep grade and the efficacy of the optional sand replenishment program, do not permit a finding of consistency with LUP Policy 4.3.9 to be made at this time. Staff has asked the applicant's representative for additional information regarding these currently ambiguous areas.

Site drainage and hypersaline discharge from the desalinization process also have the potential to exacerbate shoreline erosion if not properly designed. According to the site plans, drainage will be directed away from the bluff area and into a series of dry wells located on the easterly portion of the site. The locations of the saltwater discharge is not shown on the plans, but conversations with City staff indicate that the discharge will be routed into a dry well within the building envelope. Given these arrangements, it does not appear that drainage and seawater discharge from the site will contribute to shoreline erosion. (December 12, 1989)

The City has since passed a resolution vacating its coastal permit, pursuant to a Monterey County Superior Court ruling, rendering the appeal before the Commission moot.

Old Landfill Site

The Monterey Bay Village project, consisting of 198 units on approximately 15.6 acres once proposed on the old landfill site, included a shoreline protective structure. Its EIR suggests that protective structures will enable the applicant to provide public access to the beach and blufftops. The EIR states that access is not feasible without the structures, but does not explain why. Neither the negative effects of protective structures nor the amount of required maintenance are discussed. Thus subsequently the "Littoral Drift Study" mentioned earlier was prepared. It found that the seawall could trap up to 35,000 cubic yards of beach sand over a 50-year period and prevent about 7,000 to 8,000 cy of sand from annually entering the littoral system from on-site bluff erosion. Beach nourishment is mentioned as a possible mitigation.

Dezonia/State Parks Foundation

The proposed Sands of Monterey project on this site does not include the use of a protective structure; instead it is set back behind the 50-year erosion line based on a 5-foot annual rate measured from mean high water. However, most of the public park, picnic area, and public walkways were originally located in the setback area as were other improvements. The amended draft EIR includes an alternative plan that would have the 250 foot setback measured from the shore bluff instead of the mean high water line, resulting in a move 120 feet inland.

City-Wide and Regional Protective Structures Issues

Appropriateness of Protective Structures

There is continued debate about the impacts of seawalls and revetments. Some researchers argue that seawalls promote erosion. Others argue that seawalls merely stabilize the shoreline they are built to protect and that erosion at neighboring unprotected sites is not affected by the seawall. Some commenters on the periodic review process have suggested prohibiting seawalls in Sand City (e.g., Monterey Regional Parks, Ed Thornton, Ruth Vreeland). The Moffatt and Nichol study finds that seawalls can be used to protect the dunes and bluffs, but would not protect the beach area. The main issues that have arisen with regard to seawalls are off-site impacts and disappearance of the beach seaward of the wall. A succinct statement of the adverse effects of seawalls, and the viewpoint of coastal geologists that view beach processes from the perspective of geologic time, is contained in Saving the American Beach: A Position Paper by Concerned Coastal Geologists (March 1981, Skidaway Institute of Oceanography):

... Even more damaging is the fact that these shoreline defense structures frequently enhance erosion by reducing beach width, steepening offshore gradients, and increasing wave heights. As a result, they seriously degrade the environment and eventually help to destroy the areas they were designed to protect.

This finding was updated in National Strategy for Beach Preservation (June 1985, 2nd Skidaway Institute Conference):

...It is now clear that halting the receding shoreline with protective structures benefits only a few and seriously degrades or destroys the natural beach and the value it holds for the majority. Protective structures divert the ocean's energy temporarily from private properties, but usually refocus that energy on the adjacent natural beaches. Many interrupt the natural sand flow in coastal currents, thus robbing many beaches of vital sand replacement.

As stated in a publication by the State Department of Boating and Waterways, Shore Protection in California (1976):

While seawalls may protect the upland, they do not hold or protect the beach which is the greatest asset of shorefront property. In some cases, the seawall may be detrimental to the beach in that the downward forces of water, created by the waves striking the wall rapidly remove sand from the beach. (p. 30)

This impact is reiterated in the paper, "Economic Profiling of Beach Fills" by Herman Christiansen, which is contained in the proceedings of Coastal Sediments '77 (November 1977). It states:

Observations at some of the investigated beaches have shown that an optimal profile becomes instable, if structures, such as rocks, groins, revetments, piles, stairs etc., are placed within the wave action zone of a beach. Steady erosions, caused by complex high turbulent surf currents, lead to heavy sand losses. (p. 1047.)

Gary Griggs and James F. Tait monitored beach changes in the vicinity of several seawalls in Monterey Bay ("Observations on the End Effects of Seawalls," January 1989, in Shore and Beach). From this monitoring they found that:

Visual observations of the end sections, or return walls, of the seawalls under direct wave attack indicated that wave reflection was occurring. The downcoast extent of this impact depended primarily on wave height and wave period or the arrival time of the next wave uprush which tended to override and dissipate the reflected wave.

Additional factors which appeared to influence this end effect were the end geometry and permeability of the structure, the angle of wave approach, and tidal stage. The only significant end effects observed or surveyed in this study were at the downcoast or downdrift ends of each structure or seawall. Sand accretion counteracted the modest effects of increased scour from end reflection at the upcoast of each wall.

On an eroding shoreline fronted by a beach, a beach will be present as long as some sand is supplied to the shoreline. As erosion proceeds, from sea level rise or from other causes, the entire profile of the beach also retreats. However, this process stops when the retreating shoreline comes to a seawall. While the shoreline on either side of the seawall continues to retreat, shoreline retreat in front of the seawall stops. Eventually, the shoreline protected by the seawall protrudes into the water, with the winter mean high tide fixed at the base of the structure. The Commission is led inexorably to the conclusion that if the seawall works effectively on a retreating shoreline, it results in the loss of the beach, at least seasonally. If the shoreline continues to retreat, however slowly, the seawall will be where the beach was, and where the beach would now be located if the seawall had not been constructed. This represents the loss of a beach as a direct result of the seawall. The Commission has observed this phenomenon up and down California's coast, where a seawall has successfully halted the retreat of the shoreline, but only at the cost of usurping the beach. Although this may occur only slowly, the Commission concludes that it is the inevitable effect of constructing a seawall on an eroding shoreline. For such areas, even as erosion proceeds, a beach would be present in the absence of a seawall.

Another concern is the effectiveness of seawalls. Coastal barriers, such as seawalls or rip-rap erected to control erosion, reduce the sand supply contributed by cliffs and dunes to beaches. Sand from bluff erosion is a very significant source of beach material in the City. The Moffatt and Nichol study estimates that annual bluff erosion ranges from 99,000 cubic yards to 236,000 cubic yards, depending on the level of sand mining. It is estimated that 75% of this material is coarse enough for beach material; therefore bluff erosion could be supplying beaches with 74,250 to 177,000 cubic yards of beach quality material annually. This loss of material could lead to shoreline recession.

Not only do seawalls impair the breakdown and beachward movement of sandy material in the cliffs, they cause wave wash or reflection from a seawall that may also act to accelerate beach erosion. "Coastal Protection Structures and their Effectiveness" by Kim Fulton-Bennett & Gary Griggs (1986) analyzes successes and failures of area shoreline structures, as well as the maintenance required to keep these structures intact. At Fort Ord, adjacent to Sand City, the Department of Defense has decided not to further protect Stillwell Hall, which now hangs over the bluff, or the ammunition bunkers, which may be threatened by erosion. They have determined that it is more cost-effective to relocate facilities than to install protective structures (Kellogg to Otter, 4/10/90).

Typically, the Coastal Commission requires setbacks for new development, sufficient to last the life of the structure. Seawalls are allowed for new development if it is an in-fill situation (surrounded by existing seawalls). Normally, however, new sites are not approved with seawalls. If an existing building or development is in danger from erosion or wave attack, the Commission has approved emergency and regular permits for seawalls or revetments.

If the LCP were followed, there could be a seawall or walls the length of the City with the exception of the southernmost (south of Bay Avenue) and northernmost (Dezonia/State Parks Foundation) shorefront sites. Thus, there would be potential for off-site impacts to erode the properties between and adjacent, which could be exacerbated if these walls were built at different times based on different studies. In approving the LCP the Commission found:

Policy 4.3.6 sets the standards for construction of seawalls and allows such structures for purposes consistent with [Section] 30235 and only if no adverse impacts on access or shoreline structures will result. Policy 4.3.6 allows for construction of a seawall on one currently vacant lot, but the Commission finds this one exception to Section 30235's permissible circumstances for seawalls to be acceptable because the unusual circumstances of the site meet the balancing provisions (Section 30007.5) of the Coastal Act. This one site, the unmaintained former dump, constitutes a nuisance because wave action and surface erosion cause garbage and debris to continually fall off the site onto the beach. The physical and health hazards and adverse visual impacts caused by this situation can be remedied by a properly designed seawall with removal or stabilization of the landfill.

This finding did not directly justify the cases of infilling between existing seawalls. It also did not explain why a seawall would be needed on the old landfill site if the landfill were removed as opposed to being stabilized. According to the City Planner at the time, it was because of the possibility that the site would be subject to accelerated erosion when the landfill was removed (Groves to Hyman 3/28/90).

The Commission action on the LCP reinforced its position that the existing rubble structures are legal as they pre-date the Coastal Act (some expansion of the Calabrese seawall may have been done without benefit of required permits). Thus, were new seawalls to be prohibited, the property owners would have the right to at least maintain their existing structures.

The City-sponsored Moffatt and Nichols study briefly compares the following shore protection alternatives: no action, reduce sand mining, build a revetment, construct a seawall, or restore the beach (with either groins or offshore breakwaters). It recommends conducting an engineering feasibility study of these alternatives including preliminary designs, cost estimates, and potential impacts, to identify a preferred alternative.

A potential City Redevelopment Agency project is to undertake erosion control by establishing "a plan and financing program for the purpose of implementing a preventive soil erosion program along the shoreline." ("Redevelopment Plan" p. 12-7.)

Appropriate Erosion Rates and Point of Measurement to Determine Setbacks

If a protective device is not to be utilized, then a shoreline setback is necessary. A major factor in determining the appropriate setback is the erosion rate. A major factor in determining the erosion rate is the contribution of sand mining, as previously discussed.

Three proposed projects relied on seawalls and hence did not address erosion rates in detail. The draft EIR for the inactive Monterey Views project does not offer any specific erosion rates; however, it states that surf erosion poses a great threat to the project area. The geology report by Geoconsultants, Inc. for the inactive Monterey Bay Village project cites a 3 foot per year erosion rate (Final EIR, p. 73). Consultants for the first Sterling Center indicate that the on-site soils are highly erodible with rates of 1-1.5 feet per year.

As noted, two projects did not propose seawalls; they are to be located beyond the 50-year erosion setback. The revised Sterling Center project was set back based on a rate of 3 feet per year as described previously. The Sands of Monterey uses 5 feet per year for determining setbacks.

South Monterey Bay has been experiencing a high erosion rate. In an effort to arrive at a consensus erosion rate for Sand City, the Moffatt and Nichol Study, cited above, was prepared. The City Council has adopted this report as official City policy (8/15/89, 5/1/90). Table A3 of the report compares eight previous studies, which show a range of sand erosion rates of +1.5 to -8.9 feet per year over different time periods since 1939.

Accounting for this information, sea level rise, and a safety factor, the consultants derive a future erosion rate of 1.3-2.3 ft/yr. for Sand City, without sand mining. As noted above, they attribute .6 ft/year recession to each 25,000 cu yds of sand mining; thus, erosion rates with this amount of mining would be 1.9-2.9 ft/yr. Additionally, they recommend further setbacks of 65 feet to adjust for seasonal variations and extreme storms.

Moffatt and Nichol used the wetted bound (boundary between wet and dry sands) as the point from which to measure coastal retreat. This is not in compliance with Sand City LCP Policy 4.3.9a, which requires use of the blufftop, dune, or beach scarp, or absent these, the maximum expected storm wave runup, and raises two concerns. First, it is possible that the use of the wetted bound resulted in deriving a slower rate of recession due to the fact that material eroded from the dune face would replenish the beach, thus allowing for a slower retreat of the wetted bound. This could explain why the historic erosion rate they calculated is lower than that of some other investigators. Second, the problem with the use of the wetted bound as the line from which to determine future setbacks is that the proposed projects would be located in the dunes that could be eroding at a faster rate and not rebuilding. Moffatt and Nichol justify use of the wetted bound because it was the most easily identifiable mark (Battalio to Mariant, 3/12/90). They did not study dune and cliff retreat.

The Moffatt and Nichol report is most useful in establishing various quantifiable factors to determine erosion setbacks. Their quantification of the natural recession rate of .5 to 1.5 feet per year, based in large part upon subtracting out the estimated component due to sand mining, is dependent on their sediment budget modeling, which as previously noted involves many variables. Deriving different sediment budgets and/or using different measuring points other than the wetted bound could result in different rates. Site-specific differences, especially at the northern end of the city where erosion rates have been higher, may also translate into different setback requirements. Their addition of including a storm safety factor in determining setbacks may compensate for the use of the wetted bound and the different site conditions.

Accommodating Erosion Rates: Life-Cycle Setback

The LCP's 50-year setback figure has been challenged by some commenters on the periodic review (e.g., Monterey Peninsula Regional Parks). The LCP says to use "at least a 50-year economic life," suggesting that the project's economic life determines the setback calculation. The City has selected 50 years as

the economic life period for coastal development (8/15/89 Council meeting). The LUP for adjacent Seaside uses 75 years and the one for Monterey uses 100 years (these have not yet been certified due to other factors). Of concern is that buildings are built to last longer than 50 years. "Storm on the Horizon: The National Flood Insurance Program and America's Coasts" by Beth Milleman states:

FEMA should require that communities participating in the National Flood Insurance Program establish set back requirements for new buildings. Smaller buildings should be required to be located landward of the area likely to be eroded over 50 years. Larger buildings should be required to locate behind the area likely to be eroded in a 75-year period.

It is important now to address the problem of sea level rise, as well as erosion. Although major changes in sea levels, and the possible loss of coastal wetlands from inundation, may not be experienced in many places for another 50 years, the average life span of a building in more than 70 years, according to the National Association of Home Builders. Therefore, FEMA should delineate the sea level rise zones for areas likely to be affected in the next 100 years, and require participating communities to enforce construction within this zone. FEMA should also require the mandatory relocation of these structures as coastal wetlands migrate landward.

The National Flood Insurance Program; Erosion Benefits (Sec. 63.17(c) 44 CFR Parts 59 and 63) identifies conditions when FEMA will provide funds to move buildings that are "in imminent danger of collapse." Existing building can be moved, but they must be relocated "outside of the 30-year setback for 1-4 family residential structures, or outside the 60-year setback for all other structures." These 30 and 60-year setbacks apply to existing structures along the coast, regardless of age. FEMA will not provide funds to relocate buildings unless they can meet these setback requirements at their relocation site.

As time goes on improvements to or maintenance of permitted buildings will occur and/or there will be new owners who will start a new economic life period. The usable area of the beach will be diminishing. Theoretically, in approximately 50 years the Bay waves would be lapping at the building edge pursuant to the LCP criteria. Thus, there can be pressure to install seawalls in the future, with their attendant adverse impacts. Using a longer time period will likely postpone this day of reckoning, although longer time period predictions are more speculative. Determination of an appropriate time-frame to use is a policy decision, but it can be based on current information on anticipated building lives, which is what LCP Policy 4.3.9(b) can be read to require.

Sand Replenishment May Help Stabilize the Beach

As noted, one alternative protection measure suggested by Moffatt and Nichol is sand replenishment. City staff has attended a short course on principles and applications of beach nourishment in Florida. This concept has already been advanced for different circumstances in Sand City. For the first Sterling Center project and Monterey Bay Village it was proposed as a way to maintain a beach in front of a seawall. In the revised Sterling Center and Sands of Monterey projectscheck it was proposed as a way to maintain a beach and development buffer, given that there would be no seawall.

One of the concerns the Commission expressed in the Sterling Center appeals was that these programs lacked detail and a definite sand source was unknown. Replacement sand must be the same size and density of sand that is found naturally on the beach. If the sand grains are too small they will be lost to offshore currents and some will be blown landward by the prevailing winds. Frequently, a source for sands matching those of a specific beach are difficult and costly to obtain and transport. Beach replenishment is also temporary and hence requires a long-term commitment to work including monitoring.

Studies indicate that there has been mixed success with beach replenishment both on the East and West coasts of North America. T.D. Clayton in "Artificial Beach Replenishment On The U.S. Pacific Shore: A Brief Overview," published in Coastal Zone '89, states:

"In summary, processes or phenomena common among some of the Pacific artificial beaches include: (1) a general lack of success with the onshore migration of artificial bars placed offshore; (2) losses both downcoast and offshore from artificial beaches (relative magnitudes are generally undocumented), (3) occasional, but important, additional erosion relief provided by natural beach replenishment from river floods, (4) down coast migration of an erosion/accretion wave associated with the replenishment, (5) an initially high and eventually reduced erosion rate, and (6) correlation between high erosion rates and the passage of major storms."

In a study of beach nourishment projects on the East Coast, it was found that the "amount of sand required to maintain a beach close to its design dimensions is consistently underestimated." ("A 'Thumbnail Method' for Beach Communities: Estimation of Long-Term Beach Replenishment Requirements," by Orrin H. Pilkey, published in Shore and Beach, July, 1988). In a survey of 30 beaches, 14 of the beaches had nourishment projects that lasted 5 years or less. However, some sites have very successful nourishment programs and the beaches lasted for a number of years. At Pompano Beach, Florida there were sections of beach that showed no significant erosion even after 14 years.

California has had several successful beach nourishment programs. At Ocean Beach, San Francisco the present shoreline is up to 200 feet seaward of the 1852 shoreline, due to nourishment and a change in shoreline orientation ("Predicted Shorelines at Ocean Beach, San Francisco" by Cyril Galvin, April 1979). At present the shoreline is fairly stable. In Southern California a stable beach north of Newport Harbor has been established with a combination of beach nourishment and low profile groins. Oceanside, California has had serious problems with beach erosion due to Oceanside Harbor; however, nourishment prior to the 1982-1983 storms is thought to have protected many of the properties along Oceanside Beach. Much of the sand was lost during the storm, but most of the buildings were undamaged.

Beach nourishment can be successful in some areas. It must be a planned program, and would require monitoring and periodic replenishment. Even the best program cannot be viewed as a one-time solution. A poorly planned nourishment program or one where sand is simply dumped on the beach or in the nearshore, with no consideration of grain size, sorting action, or location, can have adverse impacts on coastal resources and provide none of the benefits expected of a nourishment project.

Conclusion

Experience to date indicates that in implementing its LCP, Sand City has not given full weight to all aspects of its shoreline policies. Allowance of shoreline structures has been emphasized over whether they are necessary and whether their impacts can be mitigated. Sand City argued in court that only Policy 4.3.7 applies to sites with existing seawalls, and that the criteria of Policy 4.3.5 were not relevant. The judge disagreed. While Policy 4.3.5 was an attempt at compromise, approved by the Commission in part under the balance test of the Coastal Act, its implementation has proven impossible. The LCP allows shoreline structures, yet under criteria that cannot be met; i.e., it is impossible to guarantee that there will be no adverse impacts on shoreline processes, restrictions on public access, or increased erosion on adjacent properties. Creating one long seawall will have adverse recreational, visual, and landform impacts, while permitting only disjunct walls may adversely affect adjoining properties. More recent studies prepared in conjunction with proposed projects have acknowledged these potential adverse impacts. Using sand replenishment to maintain a beach in front of a wall is not a sufficient mitigation measure. The basis of the Commission's approval of new seawalls in the LCP no longer appears present. The existing walls are not all engineered. They are not sufficient to protect new development and would be incompatible with the proposed recreational and visitor-serving uses. No proof has been offered that debris removal and new development on the old landfill site requires a seawall. From a Coastal Act perspective at this time, new seawalls to protect new developments should no longer be allowed.

If new development is to occur, the development must be set back an appropriate distance to be protected, it must not require a future seawall, and it must provide beach access as required by the LCP. It is obviously

impossible to predict the future -- the longer the time frame, the more speculative; the longer the time frame of historical records, the better the prediction. Given the relatively short time frame of the available aerial photographs, the uncertainty over the early USGS measurements, the changing nature of sand mining and the lack of data and agreement to determine its precise effect on erosion, and the relatively short 50-year time frame the City has chosen to employ, use of conservative erosion rates is warranted. Additionally, factoring in sea level rise, a safety factor, a seasonal adjustment, and a storm adjustment as Moffatt and Nichol recommends is appropriate. It is, however, premature to discount sand mining's contribution to erosion as long as future mining remains permitted and is being pursued.

It is unfortunate that the City-sponsored and approved study uses a different point to figure erosion setbacks from that required by the LCP. It would have been helpful for the consultants to have identified the LCP-required points from which to measure erosion along the City's shoreline and then calculated their rates based on those points. Instead, they recommend that blufftop erosion be considered in the development review process. If the City is to continue using its consultants' shoreline retreat figures in approving permits without this additional analysis, then an LCP amendment is required.

The South of Bay Avenue and DeZonia/State Parks Foundation (Sands of Monterey) sites are not permitted seawalls and the Calabrese site proposal (Sterling Center) has been designed without one. This leaves four major sites that could no longer depend on seawalls. An EIR for one (Monterey Bay Village) presented a no-seawall alternative of 134 units compared to the proposed 198 units. Obviously, the no-seawall alternatives would reduce the net buildable area from what may now be expected under the LCP; how this approach would translate into units would depend on their size, ancillary facilities, and viewshed and habitat constraints.

Even with such appropriate setbacks there may be a need or desire to implement beach replenishment, as proposed in the revised Sterling Center project. This approach deserves continued consideration in recognition of the 50-year building life standard and the recreational and aesthetic values of maintaining a wide beach. Since it would not be a substitute for the setback, permits would not have to be predicated on its success and it could be monitored over time.

7. RECOMMENDATIONS FOR CORRECTIVE ACTION

- C-4 The City should revise Policy 4.3.5 so that its later text is consistent with its first sentence, given information known about shoreline structures and their necessity. In determining whether a shoreline structure will be "necessary to protect existing structures" (e.g., the wastewater pump station) and public works (e.g., the wastewater transmission line), relocation of these facilities if threatened by future erosion should be given first consideration. The City should not resurrect its proposals to protect Vista del Mar structurally, as it is no longer a functioning street needing protection.

- C-5 Consistent with owners' rights to maintain pre-existing uses, the City should use fully its delegated coastal permit and enforcement authority to prevent any expansion of the pre-existing, non-engineered, shoreline rubble walls.
- C-6 The City should add a policy to the LCP requiring existing rubble walls to be removed as part of new development proposals in concert with its decision on the Sterling Center, possibly excepting those structures found to have no potential adverse impacts on access, scenic resources and shoreline stability if retained.
- C-7 The City should amend LCP Policy 4.3.9 to specify that all of the factors considered in the Moffatt and Nichol report be included in the shoreline setback determination: i.e., historic erosion rate, sea level rise, sand mining contribution, and safety factors.

The City should continue to require use of verified historical erosion rates in consideration of determining setbacks. The City should use the blufftop, dune or beach scarp, or maximum storm wave runoff for determining the setback point as required by Policy 4.3.9, unless an amendment is approved changing this requirement. The erosion rate used should be based on the point of measurement; e.g., the predicted erosion rate from the blufftop should be based on a geotechnic analysis of blufftop erosion, not shoreline retreat. In considering the adequacy of geologic reports under Policy 4.3.9, the City should allow sand mining's contribution to erosion to be discounted only to the extent that (a) future mining is guaranteed not to exceed the level used in the determination, (b) its past volume is verified, not estimated, and (c) there is reasonable agreement among experts as to what that contribution would be.

- C-8 The City should require submittal of an economic life analysis of shorefront projects, including improvements to previously permitted projects, to determine erosion setbacks pursuant to LCP Policy 4.3.9b. The City should consider establishing guidelines on appropriate economic lives possibly by project size and/or type.
- C-9 The City should include more specific direction in the LCP as to what is allowed within the erosion setback area: no permanent structures below the dune face, minimal temporary and/or portable access and drainage facilities within the erosion setback line, and permanent facilities including some usable access facilities behind the setback line. Any temporary facility permitted seaward of the line shall be conditioned to acknowledge its hazard zone location, be considered a temporary use, and not be automatically permitted to rebuild.

8. LCP NATURAL HAZARDS POLICIES

There are 11 policies dealing with natural hazards, requiring a report addressing impacts, groundshaking, offset, liquefaction, landslides, slope stability, erosion, and storm wave and tsunami runup based upon at least a 50-year economic life for the projects:

- 4.3.3 Requires all developments to be sited and designed to minimize risk from geologic, flood, or fire hazards.
- 4.3.9 Requires preparation of geologic and soils reports for all new developments in the Coastal Zone in accordance with guidelines established by the California Division of Mines and Geology, the Coastal Commission, and the City to address: 1. Groundshaking 2. fault offset 3. liquefaction 4. landslides 5. slope stability 6. coastal bluff and beach erosion 7. storm wave and tsunami inundation.
- 4.3.10 Encourages the clustering of developments away from potentially hazardous areas.
- 4.3.11 Prohibits development in the tsunami runup zone unless mitigated.
- 4.3.12 Denies a development if it is found that the hazards cannot be mitigated as recommended and approve developments if the density reflects consideration of on site hazards.
- 4.3.13 Implements building setbacks from active or potentially active fault traces, requiring at least 50-foot setbacks for all structures.
- 4.3.14 Requires all new development to be designed to withstand expected ground shaking during a major earthquake.
- 4.3.15 Requires a developer of a parcel in an area of known geologic hazards to record a deed restriction with the County Recorder indicating the hazards of the parcel.
- 4.3.16 Requires drainage plans for developments located on coastal bluffs that could affect unstable coastal bluffs or slopes.
- 4.3.17 Requires all new developments to conform to minimum road design standards for fire vehicle access.
- 4.3.18 Requires minimal water flow rates and fire response times for all developments in the Coastal Zone.

These policies are implemented by the Coastal-Dependent Industry, Visitor Serving, and Industrial-Manufacturing zoning districts as well as the Surface Mining and Reclamation Ordinance and general Coastal Zone overlay regulations of the IP.

9. NATURAL HAZARDS IMPLEMENTATION ANALYSIS

Geotechnical Evaluations Vary in Degree of Specificity and Usefulness

Geological reports are required for all new developments. Less significant projects on the shoreline did not receive geologic investigation including the Dooleage sawmill and Caltrans sand removal. Permitted repairs to the Vista Del Mar Street protective structure (# 84-05) were not subject to any geologic investigation, as the City never undertook the project.

Each of the four major projects proposed along the shoreline were the subject of geologic studies. In no case was there one definitive report covering all aspects of LCP Policy 4.3.9. Rather, as consideration of each project progressed, additional geotechnical investigation was recommended, and in some cases occurred. In addition to the shoreline erosion issues previously discussed, seismic and storm evaluations are necessary.

For the site immediately south of Tioga Avenue a soils report and a geotechnical report were prepared, then reviewed for adequacy by another consultant. The results are discussed in the draft EIR for the proposed Monterey Bay Views project, which is now inactive.

For the Calabrese site, a geotechnical investigation, fault study, coast recession and runup report, and hydrology analysis were prepared in conjunction with the first Sterling Center project. A geotechnical firm reviewed the adequacy of these reports in a summary report. For the revised Sterling Center project an updated geologic report was prepared.

For the old landfill site, a geotechnical report, soil investigation, fault investigation, and hydrology report were prepared. The results were all reviewed by a geologic consultant and discussed in the final EIR for the Monterey Bay Village project, which is now inactive.

For the Dezonía/State Parks Foundation site, three background reports were completed for the proposed Sands of Monterey project: a preliminary geotechnical study, soils feasibility report, and coastal conditions comments. These were reviewed, summarized, and amplified in the Sands of Monterey Draft EIR, which is now under consideration.

Previously, in conjunction with planning to reclaim the site from a mining operation, a geotechnical report was prepared and reviewed by City geologic consultants and the State Division of Mines and Geology. The City's permit to reclaim the site was appealed to the Coastal Commission, as discussed in the following Habitat section of this report.

Seismic Hazards Present Including Fault Traces

The Monterey Bay fault zone is mapped offshore in the southern Monterey Bay in the vicinity of Sand City. It consists of a wide belt of faults crossing the floor of Monterey Bay and the Monterey submarine canyon. Two traces of the Monterey Bay fault zone have been mapped onshore as the Ord Terrace Fault and

the Seaside Fault. It is possible that there are many unmapped traces that extend onshore in the area. Presently, the Monterey Bay fault zone is considered potentially active for planning purposes; however, the results of studies in progress may change this status.

Experience, observations, and studies from the recent earthquake (October 17, 1989) may result in new recommendations for building on sand. For example, lateral spreading and differential settling were observed in the coastal dunes as far south as the Salinas River after the earthquake. Large dry sand flows above Sunset State Beach resulted in the necessity to remove at least one residence (Griggs and Plant, California Geology, 1990).

Seismic issues have been addressed to date as follows from south to north:

South of Tioga Avenue (Monterey Views)

The draft EIR for the proposed Monterey Views project states that the site is subject to moderate levels of ground shaking. It raises the possibility of liquefaction (unlikely) and surface faulting and recommends more detailed analysis of these. It also contains some building recommendations relative to the soil characteristics. Lurching, landslides, and differential compaction were not addressed. A final EIR was never prepared and the project has since become inactive.

Calabrese (Bell for Sterling Center)

All the various elements of a required geology report are addressed in the materials on file for the Sterling Center projects (original and revised). The geotechnical report for the first Sterling Center project states that ground shaking would be strong, with a low potential for surface rupture. It is unlikely that liquefaction will occur even during a strong quake. Landslides, lateral spreading, and lurching are not likely to occur; however, differential compaction can occur in loose granular material such as the dune sands (Cleary Consultants, January 1985). Seismic sounding was performed in an attempt to locate fault traces. Although none were found, investigative techniques were not sensitive enough to conclude that there are none. In 1988 a supplemental geological report concentrating on shoreline erosion issues was prepared on the revised project. This revised project included a new element -- a desalination system. In finding substantial issue with the City's approval of the revised project in December 1989, the Coastal Commission expressed concern that injection of the hypersaline solution from desalination could raise the water table. However, the City has since passed a resolution vacating its coastal permit, pursuant to a Monterey County Superior Court ruling, rendering the appeal before the Commission moot.

Old Landfill (Monterey Bay Village)

The final EIR for the Monterey Bay Village project states that that site is subject to severe groundshaking with a high liquefaction potential at the beach decreasing inland to the dry sands. The one mapped trace of the Monterey Bay Fault system (the Ord Terrace Fault) was addressed with the

required 50-foot setback. No further investigation was performed to determine if there were additional fault traces. Lateral spreading, lurching, landslides, and differential compaction were not addressed. Further analysis of liquefaction potential of the beach sands was a recommended mitigation measure.

Dezonia/State Parks Foundation (Sands of Monterey)

The Sands of Monterey draft EIR covers all required geologic report elements. It addresses the location and potential of the Monterey Bay Fault Zone and the need to consider the fault potentially active for planning purposes. It provides the specific information on which to base engineering to meet safety standards (predicted maximum bedrock acceleration). The recommended mitigation measures include further liquefaction potential and slope stability analysis.

Storm Waves Considered in Projects

As also required by Policy 4.3.9, storm wave and tsunami inundation were considered in conjunction with the major project proposals.

Tsunamis

With regard to tsunamis, values varied according to the time period used. The geologic reports for the Sterling Center projects give a tsunami runup of 6.0-11.7 for the 100 and 500 year events. The Monterey Bay Village EIR has similar amounts of tsunami run up of 6.0 to 11.0 feet for the 100 and 500 year events. The Monterey Views draft EIR only discusses the 50-year event and gives no run up height. The Sands of Monterey draft EIR indicates that the 500-year event will produce a run up of 11.5 feet. This would increase up to 26 feet if it coincides with the "once-a-year storm waves." This calculation may also be subject to change as observations and records from the October 17, 1989 earthquake indicate that there was a 6-foot tsunami generated from that quake which may be considered the 50-year event.

Storm Waves

Storm wave or storm surf is defined as a sudden rise of sea level along an open coast during a storm caused by onshore wind stresses or by atmospheric pressure reduction resulting in water piled up against the coast. This is most severe when accompanied by a high tide. As background for the South of Bay Avenue LUP resubmittal, a consultant expected that storm wave runup having a 50-year recurrence would reach an average elevation of 22.6 across the site, with a minimum of 18 feet and a maximum of 27.8 feet. The draft EIR for the proposed, now inactive Monterey Views project briefly refers to the 50-year event. It indicates that the proposed promenade and a building corner would be affected by a 50-year event. The Sterling Center project's consultants use the 50-year storm wave runup elevations of 32-34 feet for the "Calabrese Fill" and 28-29 feet for the beach. A concern that emerged in conjunction with the

first Sterling Center project, which proposed a seawall, was overtopping by storm waves. Portions of the revised Sterling Center project, although set farther back without a seawall, were shown at current elevations below storm runup figures, but with the first floor at elevation 32. The Monterey Bay Village EIR addresses the problem of storm surf only with respect to the installation of a protective structure, and no independent runup calculation is given. It also has no reference to storm wave runup without a seawall or under present conditions. The Sands of Monterey EIR lists storm runup values in the vicinity as 20-30 feet with 35-48 feet under extreme conditions. The proposed fire access road, which is seaward of the 30-foot contour, could be affected during the life of the project. Thus, storm waves are a more significant factor than tsunamis and increase from south to north (Thompson to Carniato 7/27/84).

Flood Hazards at Treatment Plant Site

The Federal Emergency Management Agency has produced flood hazard maps for local jurisdictions that are based on a combination of hazards including stream overflows (there are none in Sand City, but there is an adjacent drainage in Seaside), tsunamis, and storm surf. The map for Sand City shows an inland bulge near Bay Avenue at the Seaside wastewater treatment plan site. In 1986 the Monterey Regional Water Pollution Control District (MRWPCD) authorized preparation of detailed architectural drawings and construction estimates for a district office to be built at this site (August 26, 1986 Herald). The architects produced sketches of buildings both within the building envelope allowed by the LCP for additional development and outside (which would have been inconsistent with the LCP). Both locations -- in fact, almost the entire MRWPCA site -- were within the 100-year flood zone according to FEMA's "Flood Insurance Rate Map," effective June 3, 1986. Base flood elevation was 24 feet, although MRWPCA's consultants claimed it should only be 19 feet. Sand City passed Ordinance 85-6 (not part of, nor necessary to be part of, the LCP) to comply with federal disaster standards, which require that structures be elevated above the base flood elevation. This requirement coupled with the LCP view protection policy (which requires maintaining a Bay view over development), reduced building opportunities and a new office location outside of Sand City was chosen instead. The building envelope remains designated in the LCP.

Other Safety Concerns Addressed in Sterling Center Project

Various other safety requirements of the LCP were applied to both City approvals of the Sterling Center regarding noise, air pollution, emergency vehicle access, and fire and police protection. No significant Coastal Act issues have been identified, other than the access closure previously discussed.

Conclusion

The City appears to be implementing its natural hazard policies in accordance with its LCP in a manner consistent with the Coastal Act. The procedure employed of reviewing initial consultant reports is beneficial. Hazard information to date has emerged at various stages in the review process, suggesting some more definitive threshold is necessary before a coastal permit is approved. Since the storm wave runup area has been found to be at a higher elevation than the tsunami runup zone, the former is more appropriate to use as a setback requirement than the latter. This is done in LCP Policy 4.3.9 a but not in Policy 4.3.11. Based on a review of the topographic maps, Flood Hazard maps, and geological reports to date, the storm inundation line appears to fall farther inland than the Moffatt and Nichol 50-year erosion line setback from the wetted bound (even accounting for storms with a distance measurement) at Calabrese (Sterling Center), the Treatment Plant site, and part of South of Bay Avenue. Since the 50 year erosion line has not been plotted from the blufftop, dune scarp, or beach scarp (which are the points to measure from pursuant to Policy 4.3.9) for the entire coast, it is unknown whether the storm wave runup line would fall further inland.

10. RECOMMENDATIONS FOR CORRECTIVE ACTION

- C-10 The City may wish to adopt a provision to waive geologic report requirements (or simplify them) in certain cases where there are no potential adverse impacts.
- C-11 The City should revise LCP Policy 4.3.11 and corresponding zoning provisions to apply to the storm wave inundation area, not just the tsunami runup zone.
- C-12 The City should clarify that the geologic and soils reports required before coastal permit approval pursuant to LCP Policy 4.3.9 should provide sufficient information to determine appropriateness of construction on the site and specific building location.
- C-13 The City should formalize its procedure of contracting for independent expert review of submitted geology reports.

D. ENVIRONMENTALLY SENSITIVE HABITATS.

While Sand City's shorefront dunes have been largely degraded, its inland dunes are habitat to the endangered Smith's blue butterfly and several rare plants.

1. COASTAL ACT HABITAT POLICIES

Section 30240 requires that environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values and that only uses dependent on such resources shall be allowed within such areas.

2. LCP HABITAT PROVISIONS

The LUP contains nine primary habitat policies (4.3.19 - 4.3.27). Basically the LUP establishes protection of certain dune habitat areas and the restoration of additional ones. These are designated on the Land Use Plan maps, but left to site-specific analysis to determine their exact boundaries. Detailed criteria are provided for preparation of habitat protection plans (4.3.22). Native landscaping is required (4.3.25), off-road vehicles are prohibited on the dunes (4.3.26), and boardwalks or other suitable substitutes are required when providing access through the dunes (4.3.27).

These LUP policies are primarily implemented by resource management overlays, habitat protection provisions, general Coastal Zone overlay provisions, Native Plant Guidelines, Specific Plan requirements, and design control provisions of the IP.

3. HABITAT IMPLEMENTATION ANALYSIS

Site-Specific Analysis

Treatment Plant Site: Required Dune Restoration

The LCP shows dune restoration at the Seaside treatment plant site. A 1980 coastal permit issued by the Commission to demolish the plant remains in effect and does not require restoration. Sand City thus does not have coastal permit authority over the pending demolition, although it does have Use Permit authority. Under MRWPA's Use Permits #181 and #325 as amended and extended, dune restoration may be required, in accordance with the LCP.

Calabrese (Bell for Sterling Center): Butterfly Habitat Plan Lacking

In approving the permit for the first Sterling project (#84-6), the City found:

- A "Dune Restoration and Landscaping Plan and Biological Study" was prepared ... in compliance with Policy 4.3.23 of the LCP. The portion of the site which is identified in the LCP as suitable for dune restoration will be included in the applicant's dune restoration and management program.

- In accordance with Policy 5.3.10 of the LCP, the proposed dune restoration and landscaping program will utilize existing and human-made dunes to enhance visual resources.
- An extensive landscaping and dune restoration plan has been proposed by the applicant. The dune restoration and dune landscaping plantings will promote blending of landscaping with adjacent dune areas and will promote the long term stabilization of the sand dunes.
- The dune restoration program will stabilize a large dune on the northeastern property boundary. This dune partially obscures views of the site from Highway One, thus its stabilization will further reduce the visual impact of the development on the highway viewshed per Policy 5.3.11 of the LCP.

In denying the project on appeal (A-3-SNC-85-205), "the Commission expressed concern over the massive grading of the project site and the alteration of the sand dune at the northern border of the site, but found no substantial issue with regard to LCP policy compliance." The Commission did find that:

Of remaining concern is the fact that the LCP was prepared prior to studies being completed on the endangered Smith's blue butterfly (SBB, U.S. Fish and Wildlife Service, Recovery Plan, November 9, 1984) and the proposed preparation of a Habitat Conservation Plan by the U.S. Fish and Wildlife Service with local government's participation (not yet commenced). The Recovery Plan lists unnamed sites in Sand City for permanent protection and restoration. The Habitat Conservation Plan Process as proposed by the Fish and Wildlife Service would be a vehicle for determining the extent of the habitat to preserve and means to accomplish protection and restoration. Although the subject site had no identified habitat when the LCP was prepared, a very small portion is shown for restoration in the LCPs in conjunction with the dunes on the adjacent northern parcel. Whether the habitat preservation and restoration areas shown in the LCP are of sufficient size and/or are sufficient proximate locations is undetermined at this time. In the absence of a Habitat Conservation Plan, the LCP's requirement for dune restoration, as embodied in the proposed project, as conditioned, appears adequate. If further conditioned to provide a buffer by moving the proposed tennis court, the project would be consistent with Sand City LCP habitat policies.

The Commission finds that it would be appropriate for a Habitat Conservation Plan to be prepared before all existing and potentially restored Smith's blue butterfly habitat sites are developed. Since such a plan might contain recommendations different than the current LCP directives, the Commission finds that this matter will warrant careful consideration during its mandated periodic review of the LCP in the future. Further work on the Habitat Plan would be desirable before this site is totally committed to development. Alternatively, a smaller

project with greater natural dune landscaping would provide more opportunities for habitat protection and restoration both on this site and potentially on the adjacent site when it is developed with dune restoration.

Revised Sterling Center: Sand Dunes Drive Located in Dune

Although the revised project (# 89-3) reduced the proposed development footprint in the vicinity of the large dune at the northeast corner of the site, the Commission again on appeal (A-3-SNC-89-134) found that:

The hotel development will directly require the alteration of the dune located on the southern boundary and will indirectly result in the removal of the dune in the north-eastern portion of the site. The dune formation along the southern boundary has already been altered to accommodate Tioga Avenue. Construction of the emergency road which runs between the north slope of the dune and the hotel will require substantial, additional alterations in the form of grading and placement of retaining walls...The Certified LCP does not, however, include any policies which prohibit or discourage alterations to natural landforms that are not specifically identified to be preserved. As this dune is not one of the six afforded protection, the substantial alterations proposed are consistent with the relevant LCP policies and ordinances.

The other remaining dune formation on the north-east corner of the site is identified as a dune stabilization and restoration area on Figure 7 of the Certified LUP. While the development footprint appears to avoid this dune, the lack of grading plans renders it difficult to ensure that this formation is protected under the City's approval. Furthermore, as proposed by this project, Sand Dunes Drive will be extended north along the Highway from Tioga Avenue in order to provide vehicular access to the hotel. The City has recently determined that an alignment parallel to Highway One is appropriate for Sand Dunes Drive north of Tioga in order to serve this site and parcels to the north. At the time the LCP was certified, Sand Dunes Drive north of Tioga was conceptually located on the western portion of the Sterling site then looping east behind the dune restoration area to run parallel to Highway One...It is now the City's intention to route Sand Dunes Drive directly through the dune restoration area. The extension of Sand Dunes Drive as proposed by this project will not likely directly alter the dune in the restoration area because the road will terminate at the dune. Approval of this alignment will, however, imply approval of the future extension of the road through the dune as there would be no other logical route, and as provided for by conditions #33 and 36. This future extension of Sand Dunes Drive would be inconsistent with LCP policy 4.3.24 which requires the protection of dune areas set aside for restoration and stabilization... (December 12, 1989)

The Commission also expressed concern that the injection of hypersaline solution desalination by-product could increase the salinity of the perched aquifer in the dune slacks, which could endanger wildlife. However, the City has since passed a resolution vacating its coastal permit, pursuant to a Monterey County Superior Court ruling, rendering the appeal before the Commission moot.

Dezonia/California State Parks Foundation: New Habitat Mapped

Pending on this site formerly mined by Lone Star Industries is a proposed project called the "Sands of Monterey." Although the City has yet to act on the project, the original proposal also contains an access road through a dune area slated for protection. No such road is illustrated in the LCP. The draft EIR also identifies areas of Smith's blue butterfly habitat outside of the generalized locations shown in the LCP. The originally proposed site plan shows areas to be restored as dune habitat, but also some units within the recently documented habitat area. An alternative plan is offered in the Final EIR to avoid disturbing this area.

As previously noted, Lone Star Industries prepared and implemented a reclamation plan for the site when they ceased sand mining at the end of 1986. A condition (#11) of approval of the coastal permit for grading was that the applicant shall revegetate the site as required in the conditions of the approved Reclamation Plan. The relevant part of the Reclamation Plan states:

Therefore, Lone Star will develop a grass cover on the seaward side of the bench that parallels the oceanfront,...means of applying grass seed is by hydro-mulching using a tactifier agent...the seed/mulch would be applied during the wet weather season to take advantage of the favorable growing conditions. ...The prominent dunes nearest the highway will be seeded in order to reduce the potential for sand to blow onto nearby roads. Other areas of the site that are not exposed to wind erosion will be seeded by broadcasting in order to create a lattice of non-contiguous grass that will stabilize sand and allow volunteer plants of other plant species to grow. The goal will be to create a random growth pattern rather than a uniform lawn-like appearance. (A-3-SNC-87-131 file)

The area to be revegetated was outlined on a map. The plant mix was outlined in a referenced January 14, 1987 letter from Lone Star:

LSA has recommended one native plant which is available; is fast growing and will succeed in the hydro-mulch mix which is *Lupinus arboreus* (bush lupine). Accordingly we have secured 35 pounds of this seed from LSA. LSA is looking into the feasibility of other species; for example, *Haplopappus ericoides* (mock heather) and *Eschscholzia California* (beach poppy), but cannot recommend them at this time. It should be noted that *Cakile maritima* (sea rocket) volunteers are rapidly colonizing the site and will, undoubtedly, be represented in the revegetated community.

Also, we understand that State Parks has an ongoing seed collection program for native dune plants. We are certainly willing to cooperate with their staff if they wish to attempt establishment of their desired species from their current seed collections. It should be clarified, however, that this would be an experiment on their behalf and the success or failure of the experiment would not be of consequence to Lone Star. (A-3-SNC-87-131 file)

A referenced September 22, 1986 contract stipulates the composition of the Hydromulch.

The reclamation work (Coastal Permit # 87-4) was appealed (A-3-SNC-87-131) to the Coastal Commission. The appellants had three concerns with the City's permit approval. First, they were concerned that the existing native plant cover be protected and that the revegetation be accomplished with native species. They believed that "the remaining natural dune forms would suffer loss of native vegetation and subsequent erosion" under the City's approval. The proposed revegetation included mainly annual grasses that would die out when irrigation ended. The dunes were expected to stay vegetated with the bush lupine that is planted and with iceplant and sea rocket that will establish themselves (per Malcolm Sproul, dune revegetation consultant for LSA, 8/12/87 in A-3-SNC-87-131 file).

The appellants also objected to the amount of area being graded and the grading being undertaken prior to the preparation of a Habitat Conservation Plan. The appellants contended that "the development will alter natural landforms that remain on the site by bulldozing those dunes to lessen the depth of the barrow [sic] pit." (A-3-SNC-87-131 file)

The final part of the appellants' concern addressed an area of native plants that was not authorized to be graded as part of this permit nor under the emergency permit that preceded it. However, the City's file indicates that some grading did occur in this likely Smith's blue butterfly habitat area directly adjacent to Fort Ord. City permit files indicate that Lone Star reported to Sand City:

This letter is to clarify for the record that following [sand] plant demolition, the stockpiles were spread out. The spreading was completed by about January 26, 1987 and filled in the plant settling pond and may have encroached into the habitat areas indicated in the biotic survey. (A-3-SNC-87-131 file)

Other than the City's after-the-fact permit condition prohibiting any grading in this area, there is no record of any City response to this letter's notice as to what may have occurred in the habitat area. U.S. Fish and Wildlife Service personnel also undertook an investigation, determined no corrective work was necessary, and closed the case. (Coastal Commission Enforcement staff memo 5/2/90.)

Based on an analysis of the appellant's contentions vis-a'-vis LCP provisions, Coastal Commission staff prepared a recommendation for "No Substantial Issue," the parties agreed to postpone Commission action, and the matter remains pending.

East Dunes: Habitat Transfer?

In November 1986 the City initiated and circulated a Negative Declaration for a specific plan for the East Dunes area. This area is within the Coastal Zone just inland of the freeway and consists of remnant dunes. The plan proposed to relocate the habitats, as opposed to the LUP's (Policy 4.3.20(a)) mandate for on-site habitat consolidation and preservation. Policy 4.3.20(a) allows off-site mitigation, but in addition to, not in lieu of, on-site consolidation. The Department of Fish and Game commented, "The Department will not accept the responsibility for operation and maintenance of the habitat mitigation areas...Actual enhancement and management of these areas, in perpetuity, should be the responsibility of the city, funded through an assessment district." (Parnell to Resources Agency, December 2, 1986). The U.S. Fish and Wildlife Service commented that the plan could be considered a "taking" under the Endangered Species Act of 1973 and would require a conservation plan. Thus, this proposal was terminated (October 23, 1987 City Planner memo).

Monterey Sand Company's Regional Shopping Center: Preserve Set Aside

One of the major achievements of LCP implementation is the establishment of a 7.14-acre habitat preserve on the inland Monterey Sand property. The Coastal Zone extends only 200 feet inland from the Highway One right-of-way, covering a portion of this site. Areas on the property are to be protected as sensitive habitat and for habitat restoration, exact boundaries subject to site-specific review, pursuant to the LCP. Several biological surveys were conducted. The mapping and other results of this review are contained in the EIR for this project (Sand City Regional Shopping Center, Draft: August 1988 and Final: January 1989). This shopping center project was approved, with the western Coastal Zone portion of the property placed in scenic easement (#89-1). A Biological Resources Management Plan was required, consistent with the LCP, and reviewed by the U.S. Fish and Wildlife Service. Its "goal is to provide 7.6 acres of an enhanced, unified, and permanently maintained and protected block of central dune scrub habitat on the project site that will support microclimates suitable for expansion of the resident population of Smith's Blue Butterfly." The plan includes control of exotics, revegetation, permanent fencing, and monitoring.

Regarding buffering and adjacent development, massive landform alteration was confined to areas outside of the Coastal Zone. The dune was graded at a slope of between 2 and 2 1/2 to 1 to allow construction of the adjacent road, then the shopping center (outside of the Coastal Zone). Slope stabilization was specified and slope failures were not expected to occur. According to the final EIR,

[the] 50 foot buffer would be adequate because the Smith's Blue Butterfly is usually oblivious to humans unless they approach with 10 feet, black legless lizards are not affected by human presence adjacent to their habitat because of their secretive nature and propensity to remain unseen while buried beneath the sand, and the special interest plant species...would not be affected... (p. 52).

Hopefully, the required monitoring will be able to ensure that the protected habitat remains viable.

An alleged violation that some host buckwheat plants were destroyed during grading for fence installation has been reported. The City has indicated that this destruction was accidental, the result of previous dumping on the site that obscured any view of the subject plants (Goblirsch to Talkin 12/21/89). The City did not find out which previous dumping activity led to the accidental vegetation removal or how.

Citywide and Regional Habitat Issues

Habitat Identification Has Occurred

The Land Use Plan identifies Sand City's dunes as home to the black legless lizard and host buckwheat plants for the endangered Smith's blue butterfly (Eriogonum latifolium and E. parvifolium). It also mentions three other sensitive plant colonies found in Sand City: Sandmat manzanita (Arctostaphylos pumila), coast wallflower (Erysimum ammodendrum), and Monterey ceanothus (Ceanothus rigidus). During Plan preparation, only generalized locations were identified (p. 40); more detailed mapping has since been completed. In 1987 Thomas Reid prepared "Sand City Biological Field Surveys for Rare Plants, Smith's Blue Butterfly, Black Legless Lizard." Follow-up specific habitat mapping by Reid & LSA occurred in 1988 and 1989. These show fairly close coordination with the generalized maps in the LCP, with the exception of the additional site at the northern portion of the DeZonia/State Parks Foundation property. These surveys resulted in the identification of another rare plant -- Monterey dune gilia (Gilia tenuiflora ssp. arenario) - not mentioned in the LCP. According to the U.S Fish and Wildlife Service,

"one of the largest populations of the Monterey dune gilia... is found within the city limits of Sand City. This plant is endangered by urban development and other factors that cause destruction of its habitat. The Service may soon publish a proposed rule in the Federal Register to list it as an endangered species." (2/13/90 letter from Wayne White)

It is possible that additional species will be discovered over time which "are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments." (from Coastal Act/LCP definition of environmentally sensitive habitat areas). For example, the Sands of Monterey

EIR notes that its beach is a nesting site for the Snowy Plover, which is a candidate species for federal listing as a threatened or endangered species (Amended Draft, July 1990, p. 4.10-4). Also, recent correspondence from the Sierra Club indicates that another species that may be eligible for federal listing (*Paruroctnus maritimus* Williams) is present in Sand City (Broadwell to Coastal Commission, 9/3/90).

Protection of Endangered Smith's Blue Butterfly Habitat Still Being Considered

Since LCP preparation, efforts to protect the Smith's blue have progressed and knowledge about its habitat has increased. A "Smith's Blue Butterfly Recovery Plan," prepared for the U.S. Fish & Wildlife Service in November 1984, treats all of Sand City as one habitat site. It recommends, among other items, controlling off-road vehicles, revegetation, controlling foot traffic, and removing exotics. If ten sites (not including the City) are permanently secured, then the butterfly's status can be changed to threatened. If an additional eight sites (including Sand City) are secured, then the butterfly can be "delisted."

The butterfly's habitat requirements have been further studied in conjunction with the Gullwing project in Marina (A-3-MAR-84-4) and that City's preparation of a Habitat Conservation Plan. The consultants indicate in background studies for that plan that larger areas with dense host plant vegetation are most desirable for long-term species survival. They furthermore suggest that the habitat should include warmer areas of sheltered dunes. Planted corridors, at least 50 feet in width, connecting host plant locations are desirable to allow adequate dispersal of the butterfly. (Thomas Reid Associates, March 1990). According to Arnold, a butterfly expert,

The inter-colony exchange of even a few individuals per generation is extremely important for maintenance of gene flow and recolonization of sites where localized extinctions or new buckwheat patches occur. Animal and plant populations that become isolated and restricted to islands..., often suffer reduced viability and other genetic problems due to inbreeding, genetic drift, etc... (Arnold to Swanson 9/24/84).

As a result of the East Dunes and other proposed projects that could potentially be considered a "taking" of an endangered species under Federal law, Sand City has embarked upon preparation of a Habitat Conservation Plan. One component includes dune restoration techniques, outlining what has and has not worked elsewhere. By providing detailed planting instructions, this could eliminate the controversy associated with the Lone Star revegetation scheme.

Of greater difficulty is the possible need to identify a corridor or corridors for Smith's blue butterfly dispersal in contrast to the current LCP's designations of unconnected areas for preservation or restoration. Also at

issue is the appropriate width of such a corridor and of any acceptable road crossings. Almost all the City's existing habitat is inland of the freeway. Even if it could all be connected, corridors to the north and/or south would be problematic. Thus, there may be value in a replacement or additional corridor created seaward of the freeway that remains substantially undeveloped. Sand City indicated that another possibility is to examine sites beyond the City limits (Goblirsch to Hyman 3/19/90).

Under Federal law, a Habitat Conservation Plan must be prepared only if there is a "take" (loss) of habitat. A "take" is broadly defined to include even "indirect impacts (increased automobile and human foot traffic, changes in runoff patterns, fragmentation of habitat, etc.) that are reasonably certain to occur as a result of the proposed land use." (Harlow to Robinette 11/4/88.) Nevertheless, it is possible to avoid host plant areas and hence eliminate the need to prepare a plan. This approach could be detrimental to those small parcels that would not have a remaining building site and to the butterfly, whose habitats would be surrounded by development. It is also possible for individual landowners to prepare habitat conservation plans, but again comprehensiveness and an opportunity for a City-wide solution are lost under such a scenario.

Dunes Habitat Protection Extends Beyond Needs of Butterfly

Sand City's dunes are part of a system that extends from the Salinas River, 12 miles south into Monterey City (see Cooper, 1967 for a physical description). The dune complex stretches through six separate political jurisdictions -- Monterey County, City of Marina, Fort Ord, Sand City, City of Seaside, and City of Monterey. The dunes over the years have variously been used as industrial sand sources, a staging ground for military activities, and as a dump. The South Monterey Bay Dunes are also a natural asset of tremendous ecological and aesthetic value. They comprise the largest and best preserved of any of the historic dune systems in central California, except for the Oso Flaco Dunes in San Luis Obispo County. According to Gordon's Monterey Bay Area: Natural History and Cultural Imprints,

Dune life is an complex and interesting assemblage of species, with the natural vegetation supporting a characteristic fauna...In addition to the ecological considerations, the protection of dune vegetation is important simply from an engineering standpoint...In place the dunes are essential protection against marine flooding...Dunes in South Monterey Bay area appear to be richer in species than those in the north.

Two recent articles, one in Pacific Discovery, a magazine published by the California Academy of Science (Summer 1989), and one in the Best From Monterey Life 1990, offer well-composed discussions of the value and problems of the Monterey Dunes.

These articles suggest renewed interest in preserving the dunes as an entire ecosystem. Resolutions to this effect have been adopted by the Cities of Carmel (#89-143 -11/7/89) and Pacific Grove (#6029 -10/4/89). California Department of Parks and Recreation's 1971 California Coastline Preservation and Recreation Plan identified the dunes as one of "38 natural areas which, if properly managed, would assure that adequate examples of California's coastal landscape heritage are protected." (p.98) The 1975 California Coastal Plan called for a special study of the dunes. (p.233)

The fate of the dunes is at a turning point. In addition to the development permitted by the Sand City LCP, the City of Marina, which is north of Sand City, is considering a draft Habitat Conservation Plan that would allow another 1720 visitor-serving units within the dunes. The proposed Marina plan would permit new development in degraded areas, such as those being mined or previously mined and having little or no existing habitat value. The dunes in Marina encompass some 467 privately-owned and 237 publicly-owned acres; even with the majority slated for preservation, substantial development is proposed.

Dune habitat preservation in Sand City is complicated by the fact that the best remaining habitat is inland of the freeway, largely outside of the Coastal Zone and interspersed with the developed portion of the City. The freeway geographically and biologically isolates those dunes and interferes with the natural processes that shape them. The Sand City LCP generally follows the approach of the draft Marina Habitat Conservation Plan, finding the seafront dunes suitable for development because they are degraded. Sand City's shoreline is almost entirely in private ownership. As noted above, it is not yet known what direction Sand City's Habitat Conservation Plan, currently under preparation, will take.

The Sand City LCP text recognizes the sensitive nature of the dunes (LUP Ch. 4.2.4). In terms of policies, dunes shown to be Stabilization and Restoration areas amount to roughly one-fifth the land seaward of the freeway, mostly concentrated south of Fell Street (a paper street). The approximately 12.5 acres south of Tioga Avenue and north of Fell Street (site of the once-proposed, now inactive Monterey Views project) show a generalized area of some 3 acres for Habitat Restoration. The site's CZ-R3 zoning sets a maximum 65% site coverage. For the rest of the shoreline (i.e., north of Tioga Avenue), there are no site coverage limitations in the applicable zoning districts (CZ-VSC, CZ-VS-R1, CZ-VS-R2, and CZ-R2). Implementing visual and erosion policies will result in some additional open space.

Implementation of the LCP to date has led to a concern that its provisions may be insufficient to fully protect the dune habitat in a manner consistent with the Coastal Act. It is possible that permitted development will interfere with natural dune processes and affect the continued viability of the habitat preserves that are to be established. It is also probable that despite fencing and boardwalks, the amount of activities associated with the developments (including noise, lights, drainage, utility maintenance, foot and vehicular traffic) will further degrade the overall habitat and compromise the proposed restoration.

Unfortunately, since LCP preparation, there have been no definitive studies analyzing the cumulative impacts of the permitted development on the dune complex, nor apparently is there useful, available general literature on this subject. In order to make scientifically-based recommendations on the extent of development that might be appropriate for the dunes, preparation of a background study encompassing elements such as the following, would be helpful:

- description of the extent and importance of coastal dunes in California;
- discussion of Monterey Bay dunes in statewide context (eg., type, percentage);
- functional description of Monterey Bay dunes;
- description of Monterey Bay dunes ecosystem(s);
- historical account of changing characteristics of Monterey Bay dunes;
- comparison of today's dunes to historic extent (what remains?);
- requirements of native dune species to survive;
- future of Monterey Bay dunes if developed; left alone; or restored.

In the absence of deriving and applying conclusions from such a study, limiting coverage is a means of ensuring that the integrity of the dune complex is maintained. The Commission has had relevant experience with two other Monterey Bay area local governments in habitat protection. Santa Cruz County protects areas adjacent to the essential Santa Cruz long toed salamander habitat (endangered species) by limiting initial site disturbance to 25% and final disturbance after revegetation to 15%.

The Pacific Grove Land Use Plan provides for 15% residential coverage on vacant lots within the Asilomar Dunes area. The Coastal Commission considered nearly all of the neighborhood to be existing or potential environmentally sensitive habitat pursuant to Section 30240 of the Coastal Act. In allowing continued development but limiting site coverage, the Commission found that the net impact would not constitute a significant habitat disruption. Overall preserved habitat would total less than 85%, due to pre-existing development, use of some outdoor areas for immediate living space, and roads (Commission findings on Pacific Grove Land Use Plan, 12/15/88).

The Sand City Land Use Plan provisions for the seaward area from Fell Street (a paper street) to the southern City boundary already embody this approach to some extent as they would result in approximately 9% site coverage. On the 4.5±-acre MRWPCA site (which is publicly owned), approximately 11% site coverage is allowed, and about 50% of the site is to be restored dunes. For

the remainder of the area, (estimated at 23.8 acres, some of which is under water and some of which is publicly owned), an approximately 2-acre building envelope is provided, with dune stabilization and restoration required over a substantial portion of the open space area.

To illustrate, applying a maximum 15% coverage requirement to the entire City shoreline and maintaining the LCP's ratios of visitor-serving to residential uses would yield the following buildout at the low density range: 99 residential units on 7.6 acres, 46 visitor-residential units on 3.3 acres, and 237 motel units on 6.4 acres, for a total of 382 units. At the high end of the allowed density, 219 residential units (on 6.3 acres), 101 visitor-residential units (on 4 acres), and 524 hotel rooms (on 7 acres) could be built, for a total of 844 units.

Applying a 15% coverage rule to each property seaward of Highway One is a simple and apparently equitable means of achieving this objective. However, because of different site characteristics and other factors, the resulting permitted development from a individual or citywide perspective might not be the most desirable. Thus, it would be appropriate to explore various ways of implementing this type of provision.

Utilizing this concept throughout the City's shorefront would result in preserving the majority of dunes in an open, more natural state, allowing native vegetation to reestablish itself. Therefore, consistency with the Coastal Act could be achieved.

Conclusion

Experience to date indicates mixed results in Sand City's implementation of the LCP's Habitat provisions to ensure consistency with the Coastal Act. These actions ranged from: initially ignoring the policies in investigating a proposed relocation of the East Dunes habitat; to applying them in an incomplete manner on the Calabrese site; to fully applying them in a manner that resulted in even more initial protection than envisioned at the time of LCP preparation on the Monterey Sand Company site east of Highway One. This accomplishment was then, unfortunately, undermined by an alleged habitat destructions at that site and on the Dezonias/State Parks Foundation site, and suggests a need for protective measures in addition to these regulatory efforts.

Experience indicates that while the LCP provides a framework for habitat protection, its options for habitat relocation and mitigation may no longer be consistent with Coastal Act and federal mandates. The LCP's emphasis on preserving discreet, unconnected areas, doing so on the basis of site-by-site reports, and allowing intensive adjacent development will not result in a level of habitat protection required by the Coastal Act in light of information now known about species requirements. The current initiative to prepare a City-wide habitat conservation plan is welcomed as being in concert

with the Commission's findings on the initial Sterling Center project. However, the estimated date of completion is unknown, since progress toward meeting study objectives has slowed. If the Plan results in recommendations for off-site mitigation in lieu of protecting all of Sand City's environmentally sensitive habitat areas from significant disruption, it could be in conflict with Section 30240 of the Coastal Act. Additionally, under the Coastal Act and the LCP, all the rare and threatened species need consideration, not just the endangered butterfly. Long-term protection of the dune complex as an environmentally sensitive habitat itself appears to be the best approach to accomplish this and other Coastal Act objectives.

4. RECOMMENDATIONS FOR CORRECTIVE ACTION

- D-1 The City should enact and implement interim measures to ensure that the results of the Habitat Conservation Plan will not be precluded. Until the Plan is adopted and approved by the relevant agencies the City should ensure that no new developments will interfere with the establishment of an interim 50-foot-wide continuous Smith's blue butterfly corridor on each side of the freeway. If there are no feasible alternatives, an exception could be granted for a narrow road to cross a potential corridor based on submitted scientific evidence that the road will not be a barrier to the dispersal of the butterflies along the corridor.
- D-2 The City, in its planning and permitting activities, should follow Coastal Act Section 30240's mandate to protect all environmentally sensitive habitats from any significant disruptions and allow within the sensitive habitat areas only those uses dependent upon them.

The sensitive habitat area should be remapped, based on available information, consistent with the Coastal Act/LUP (p.38) definition, and buffer areas added, to encompass not only areas of existing native vegetation, but additional areas (which currently may be altered or degraded) sufficient to ensure continued functioning of a healthy dune habitat.

In the absence of or until completion of a study which examines the historic extent of the dunes and recommends a sufficient area to remain in native dune vegetation, building and other impervious surface coverage should be limited to no more than 15% of gross land area seaward of Highway One and the existing Dunes Drive (ie., approximately 17.3 acres) and be located outside of existing, non-degraded sensitive habitats. In order to ensure that this recommendation does not constitute an unlawful taking of individual property rights, recognizes the public benefits in restoring degraded dunes to functioning habitat, and fosters an acceptable development pattern, the City should explore various options for accomplishing it (see Section I of this report).

- D-3 The City should continue to take a lead in securing immediate protection of existing habitat to prevent any unauthorized disturbances. Elements of such a management program could include rendering the destruction of a rare or endangered plant or host plant to an endangered species illegal, encouraging landowners to voluntarily protect their habitats even prior to development proposals, establishing interagency programs with State Parks, Fish and Game, and/or U.S. Fish and Wildlife Service personnel to provide monitoring, enhancement, and enforcement assistance, seeking funding to protect critical habitats, and sponsoring an educational program to enhance citizen and landowner awareness of the significance of the habitat. The City may wish to adopt the Coastal Act penalty reference (Section 30820) to bolster the enforcement section of its zoning ordinance.
- D-4 The City should revise LCP Policy 4.3.20(a) by eliminating the second sentence allowing off-site mitigation for the East Dunes or changing the policy's parenthetical phrase to read, "(destruction of isolated non-host individual plants, elimination of non-habitat natural dune area)."
- D-5 The City should revise Figure 7 of the LCP and corresponding text to include the endangered Smith's blue butterfly habitat in the northern corner of the city.
- D-6 The City should apply the LCP's habitat protection policies to the habitats of the rare Monterey dune gilia's and other species that fall under the definition of environmentally sensitive.

E. ARCHAEOLOGICAL RESOURCES.

1. COASTAL ACT ARCHAEOLOGY POLICY

Section 30244 requires that reasonable mitigation measures shall be required where new development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer.

2. LCP ARCHAEOLOGY POLICIES AND IMPLEMENTATION EVALUATION

The Land Use Plan has two archaeological resources policies: 4.3.33 and 4.3.34, which require surveys and protection, evaluation, and/or removal if resources are found. Since the only identified potential archaeology site is within the area of deferred certification, the certified Implementation Plan lacks archaeologic provisions. Archaeology has not been an identified issue in any coastal permits processed by the City to date.

3. RECOMMENDATIONS FOR CORRECTIVE ACTION

- E-1 The City should include an archaeological resources protection section in its ordinances when the IP is amended to incorporate the area south of Bay Avenue, unless further investigation reveals that this area does not contain archaeological resources.
- E-2 The City should consider adopting an archaeological discovery ordinance, including provisions for stopping work if resources are discovered, and for evaluating and protecting the resources.

F. VISUAL RESOURCES

The mostly undeveloped, varying sand dunes are in the foreground of a view of Monterey Bay from Highway One through Sand City.

1. COASTAL ACT VISUAL RESOURCE POLICIES

The principal Coastal Act policies relevant to the protection of coastal scenic resources are summarized as follows:

Section 30251 identifies the scenic and visual qualities of coastal areas as a resource of public importance. It requires that new development be designed and sited in a manner that protects views of the sea and other scenic coastal areas, minimizes the need to alter natural landforms, is compatible with the character of the surrounding area, and, where feasible, enhances and restores the visual quality of degraded areas. This section further requires that new development located in highly scenic areas such as those designated by the Department of Parks and Recreation or a local government to be subordinate to the character of its setting.

Section 30253(5) also offers policy direction regarding the protection of visual resources. This policy requires that new development in communities that are popular visitor destinations and are distinguished by unique characteristics shall be designed to preserve that special character.

2. LCP VISUAL RESOURCE POLICIES

Chapter 5 of the Sand City LUP includes twelve visual resource policies and three recommended implementation actions. The LUP policies include provisions for protecting some coastal views (5.3.1), the designation of protected view corridors (5.3.2 and Figure 9), design standards for new development (5.3.4), and a requirement that all new development submit to a design review process. LUP Policy 5.3.6 encourages the restoration and enhancement of visually degraded areas. Policies 5.3.7 and 5.3.8 require the inclusion of vista points in project designs and encourage developments that include additional view corridors beyond those mandated for protection by Policy 5.3.2. Policy 5.3.10 indicates that dune forms should be used to enhance the appearance of new development, while 5.3.11 requires that dune stabilization be done where feasible, where stabilization would reduce views of the project, and/ or where dunes are unstable. Finally, Policy 5.3.12 encourages the consolidation of small lots in order to improve design options. In Chapter 6, Policy 6.4.5 gives the height limits measured from existing grade.

Recommended implementation actions include the institution of a Design Review process and the development of design standards to provide direction regarding the siting, design, and landscaping of new development (5.4(1)(2)(3)).

The following components of the Implementation Plan carry out various visual policies: Coastal Zone Regulations, Design Control, Native Plant Guidelines, Parking, Public Utility Lines, Habitat Restoration Overlay, and Special Treatment Overlay. The City Zoning Ordinance provides for a design review process including a Design Review panel to ensure that new development is consistent with the visual resource policies of the LUP. No new additional design criteria or standards beyond those found in the LUP are included in the design review ordinance.

Height regulations are found in each zoning district section of the IP. For the shoreline north of Fell Street, the height limit is generally 36 feet, except within the first 100 feet from Highway One, where it is only 25 feet. It is also 25 feet on the old landfill site, but 45 feet for permitted hotels (on Calabrese, Monterey Sand Company, Granite Construction, and DeZonia/State Parks Foundation). The zoning ordinance includes a formula for measuring the allowable heights of proposed structures: "the vertical distance from the average contact ground level at the front wall of the building to the highest point of the building."

3. VISUAL RESOURCES IMPLEMENTATION ANALYSIS

Site-Specific Analysis

Each of the major development proposals seaward of Highway 1 has raised significant design issues:

South of Tioga Avenue (Monterey Views): Highly Visible

In 1984, an EIR was prepared for a 363-unit condominium project on a 12.5-acre site west of Highway One and immediately south of Tioga Avenue. The EIR did not discuss the design or scale of the project, but did indicate that this large project would be highly visible from Monterey and Pacific Grove. No final City action was ever taken on this proposal, and it remains inactive.

South of Fell Street: Scenic Easement Required

The majority of the Regional Treatment Plant site at the corner of Bay Avenue and Vista Del Mar is shown as a view corridor. The portion of the site containing the pump station is mapped as a "view over development." In approving the new pump station's intrusion into the viewshed, the Coastal Commission required the remainder of the site to be free of new structural development (A-80-80). In late 1983 the Commission amended the coastal permit to make the scenic easement area be coterminous with the open space area shown on the City's Land Use Map provisions. The Commission retains authority over this condition, which has yet to be fulfilled (as the old facilities have not yet been demolished), but Sand City is interested in its completion (Goblirsch to Israel 3/27/90).

Calabrese (Bell for first Sterling Center): Massive Development

In 1985, the City approved a coastal permit for a 229-room resort hotel on a 7.9±-acre shoreline site immediately north of Tioga Avenue. The project was appealed to the Coastal Commission and ultimately denied in January of 1986. One of the bases for denial was the adverse impact on views from the Monterey Peninsula, the Bay, and the beach due to the massiveness of the development. The Commission made the following finding relevant to this issue:

Since the Substantial Issue determination by the Commission, the applicant proposed a modified project design. Basically, one story would be removed from most of the Highway side of the building, which is further lowered into the site. The resulting height would be at elevation 54 feet (compared to 73 feet originally proposed) resulting in a view over the building to the Bay from all of Highway One. Nevertheless, a fairly massive structure would remain visible. Although it would be within the maximum numerical design parameters permitted by the LCP, it does not fully comply with other policies addressing softening the visual appearance (5.3.9), utilizing man-made dunes within project design to enhance visual resources (5.3.10), and encouraging mass and height variation (5.3.4b).

The building and shoreline structure are proposed to be set back somewhat from the mean high tide line, but will still appear quite massive to people on the pedestrian path, beach, Bay, or opposite shore on the Monterey Peninsula. For example, the shoreline structure will be a solid wall some 20-25 feet high and over 300 feet long. The face of the immediate building will be approximately 19 feet high (two stories) by 432 feet long with a higher element looming in the background. Depending on how the LCP is ultimately applied to other parcels, this proposal may be the most seaward located one.

In summary, the proposed massive project, even as offered to be further modified by the applicant, is not fully consistent with the Sand City LCP visual policies. (A-3-SNC-85-205 file)

The City sued the Coastal Commission because of the denial of the project. In upholding the Commission's action, the Court agreed that application of the more subjective LCP decision policies (5.3.4b, 5.3.9, and 5.3.10) "is arguably as important as the preservation of 'view corridors' " and that approval requires consistency with all these policies. (Superior Ct. of Monterey Case #M16952)

Calabrese (Bell for revised Sterling Center): Retaining View Over Development

In 1989, the City approved a scaled-down visitor-serving project on the Calabrese site. The revised project included a 135-room hotel, restaurant, and conference facilities.

This project was also appealed to the Coastal Commission. At the December 12, 1989 meeting, the Commission determined that the City's action on the project presented a substantial issue regarding consistency with the certified LCP. A potential impact to coastal views was again cited as an area of possible inconsistency, as indicated in the adopted findings for Substantial Issue:

The correct elevation for the portion of Highway One within the view corridor is critical to the successful application of LCP Policy 5.3.3 and the goal of preserving views to the sea over approved development. In this case, due to the height of structures proposed in the view corridor, accuracy is particularly essential as a few feet will make the difference between preserving or obstructing views. As an example, the roof elevation on the meeting and restaurant building is at elevation 54 feet. If the highway elevation is at 50 feet and the viewpoint is therefore at 54 feet, it is probable that views will be obstructed. Likewise, it is important to know the maximum elevation (top of guardrails) of the portion of the Sand Dunes Drive elevated roadway within the view corridor in order to determine the effect, if any, on views from the Highway.

In an effort to more precisely determine the impacts of the project on view corridors identified in the LCP, staff has requested the applicant to stake critical building and road heights. The applicant has indicated that staking the site is of no utility and offered to provide the Commission with photos depicting the effects of the project on Highway 1 views. ...

RECOMMENDATION: The City's approval was based on viewpoint information that was at variance with other information included in the file. Since the project height would have to be lowered if the 54 foot elevation were used and since the City's findings did not address this data inconsistency, a substantial issue is raised regarding project compliance with LCP Policy 5.3.3, which requires that views over development within the identified view corridor shall be retained on this site. (A-3-SNC-89-134 file)

The following excerpts from the project's Supplemental EIR "Aesthetic Resources" section further explain the visual issues:

There is not a more demanding site in Sand City on which to build a large hotel. The site's relation to the surrounding ocean front environment in its virtually undeveloped state, its visibility from Highway 1, and the views across the bay from Monterey and Pacific Grove all make for difficult constraints within which to design.

Design criteria provided by the LCP and Design Review Committee are primarily concerned with the visual compatibility with the character of the surrounding area, enhancement of the visual quality in degraded areas, maintaining view corridors to and across Monterey Bay, and building form and color. Review of these guidelines reveals that the best possible design solution is one that is an integral part of the landscape.

The present design as proposed has changed considerably since the project's inception ... The applicant in this most recent solution has effectively addressed the LCP concerns for maintaining the designated view corridors and is using colors and exterior finish materials that are compatible with the surrounding environment. However, other design criteria have not been considered. These include scale, mass, and the height of the proposed buildings. The LCP is specific about using mass and height variation to avoid bulky buildings. The building design in its present form does not address this concern.

The building should be unobtrusive for its size. Its relation to the land should somehow reflect the form of the dunes. To become an integral part of the landscape, the building should appear to hug the dunes and not grow out of them. The proposed project design does not meet these criteria.

A comparison of scale should be made between a building and its backdrop. For this particular project, it would dictate a much smaller scale modulation of the building form. An example of where this relation does not work can be seen by looking toward Monterey from Highway 1 (southbound). The Sheraton Hotel looms in the midst of the buildings around it and is obviously out of scale. Attention must be given to this project in order to avoid this mistake.

Architecturally the building design would be more successful if it evoked a sense of place and regional character. This area is rich with architectural heritage that design images could be drawn from to create a more appropriate building design.

The proposed design for the proposed project is not compatible with its surroundings. The scale, height, and mass of the structures are not varied and the design is inappropriate for the surrounding terrain. The project design should reflect the regional and local character of the Monterey Peninsula and the City of Sand City.

The following mitigation measure was suggested in the Sterling Center Supplemental EIR (#42):

The proposed project shall be reviewed and approved by the Design Review Committee prior to approval of the coastal permit. The Design Review Committee should focus on the following:

- a. The compatibility of the proposed project with the character surrounding the project site.
- b. The adequacy of the height variations incorporated into the proposed project. Modulation in height and mass should be evaluated.

- c. The incorporation of regional and local character into the project design.
- d. The use of existing or new natural and manmade sand dunes as berms for visual and physical barriers instead of concrete walls as proposed.

Pursuant to court action, the City rescinded approval of the Sterling Center rendering the appeal before the Coastal Commission moot.

Old Landfill (Monterey Bay Village): Inappropriate Design

In 1985, a 198-± unit timeshare condominium project was proposed on the 15±-acre old landfill site adjoining the DeZonia/State Parks Foundation.

As with the Sands of Monterey project discussed below, the EIR prepared for this development identified potential impacts on visual resources -- effects on views from the Monterey Peninsula and Highway One and inappropriate design for the coastal setting:

The project's architectural style does not appear consistent with prevailing styles of other coastal developments in the Monterey Bay area. The spires on many of the rooftops make the development appear ornamental and the brass caps on the spires add to this appearance. Again, this is a subjective assessment; no development or design standards of the LCP define "acceptable" architectural design. The policies do intend for coastal developments to be architecturally compatible with the surrounding dune environment.

City action on this project was never completed and it is considered inactive at this point.

DeZonia/State Parks Foundation (Sands of Monterey): Inappropriate Scale and Design?

An application for a mixed-use project consisting of a 375-unit hotel, 20,000 square-foot conference center, restaurant, and 185 condominium units is currently awaiting final City action. The 32±-acre site is located west of Highway One, immediately adjacent to Fort Ord.

The EIR prepared for the project identified several potential visual impacts (view blockage, visibility, cumulative effects, and inappropriate scale and design) and offered a variety of mitigation measures to bring the proposed development into consistency with the LCP. An alternative design is also offered which is mostly hidden from Highway One views, and involves landform alteration. No final design has been approved by the City to date.

East Of Highway One: Dune Landform Alteration Not Addressed

The City has approved some projects in the dunes immediately inland of Highway One. For example, coastal permit #85-4 (Campos) allowed removal of sand dune (16,700± cubic yards) from a 36,000± sq. ft. site to accommodate open storage and fuel tanks between Shasta and Elder Avenues. The City's visual resources analysis downplayed any significance of the proposal:

The removal of the large sand dune on the site will open up a new view corridor from Highway One to Sand City. The project site and lands east of it will be visible to northbound travelers on the highway. The use of the site for open storage of vehicles and equipment may be considered aesthetically offensive. Since the highway is at a higher elevation than the final graded elevation of the site, screening the site is not feasible. Future uses of the site may incorporate landscaping to mitigate the visual impact of development on these parcels of land.

Citywide and Regional Visual Resource Issues

Scale of Projects is Very Large

The Certified LCP provides little direction regarding an appropriate scale for new development. Policy 5.3.4(a) simply indicates that the scale of new development should be consistent with that of the community as determined by new development. This rather circular policy thus allows the first new project to set the scale for those that follow. Policy 5.3.4 also, however, clearly contemplates the preparation of more detailed design standards, as does recommended implementation action 5.4.2. The need for the standards is discussed in the Land Use Plan text as follows:

Development of "Design Criteria" that would outline standards for building and site design and landscaping for future development would serve to enhance and maintain the visual resources in Sand City. The fact that many lands within the coastal zone are undeveloped presents a rare opportunity to establish a design image for future development. Design criteria are especially needed in areas of Sand City that were previously subdivided into numerous small lots. Future development of these areas could result in piecemeal development, ultimately affecting the City's visual resources. (Section 5.2.2)

Presumably, these guidelines would included more specific direction regarding community scale. To date, such guidelines have not been prepared. The adopted design review ordinance indicates a reliance on the policies of the LUP for guidance in matters of design and scale.

The EIRs prepared for the various proposed projects west of Highway One have all provided cursory discussions of the proposed scale of the particular development. Because EIRs are project-specific, they have not offered comments on what an appropriate scale for this area might be, nor analyzed the cumulative impacts of the scale proposed by the subject development.

Likewise, City findings authorizing new development west of Highway One have not included in-depth discussions of appropriate scale for the particular site or, by extension, for all the largely undeveloped area west of the highway. Findings relevant to the issue of scale tend to be conclusionary in nature and rely more on compliance with the height regulations than on other indicators of scale, i.e., mass, ratio of building and paving coverage to open areas, and relationship of the size of the proposed structure to that of the existing dominant landforms. To date, the City has concluded that the scale proposed by the developer is the appropriate scale.

Due to the lack of more specific direction regarding scale, all of the projects submitted for consideration have been quite large in scale. The City, because it has not defined the scale desired, has been placed in a reactive rather than a proactive position on this critical issue.

Inadequate Design Standards

Although the City has prepared guidelines for use by the Design Review Committee, these standards do not adequately address the visual issues posed by new development west of Highway One. The City guidelines, which are not yet amended into the LCP, focus on sign restrictions, lighting, and landscaping rather than on the major issues of design character, scale, and alteration of landforms (Design Review Standards and Guidelines, H. Coastal Zone, 1-11).

The Certified LCP encourages, but does not require, project designs that are compatible with the surroundings and that will enhance the overall City image (Policy 5.3.4(a)2)). The policy also provides that the design of new development should be consistent with the character of the community as established by new development. As discussed in detail in the preceding section on scale, due to the lack of more specific direction, the design of the community will apparently be determined by the first project built.

All of the EIRs prepared for projects west of Highway One have discussed the design of the proposed development. One draft concluded that the design was appropriate (Monterey Views, South of Tioga Avenue). The others, however, found flaws in the appearance. These design problems fall into roughly two categories: not harmoniously integrated with dune landforms, and not related to the distinctive architectural styles of the Monterey Peninsula (e.g., Spanish, Victorian, or small-scale rustic). The previous excerpts from the Monterey Bay Village and Sterling Center EIRs illustrate these concerns. City coastal permit findings regarding the design of approved projects are perfunctory and do not include a discussion of what the City sees as an appropriate design character for its community.

A clear vision of what is desired is especially important for the land west of Highway One. Not only is this land highly visible from the highway and the Monterey Peninsula, but most of the parcels are visually connected to each other. Even if developments are largely hidden from the Highway, they will be visible to beach, trail and facility users. It is, therefore, of particular relevance that the individual projects share some design relationship to one another. An eclectic architectural array is offered by once-proposed designs for four of the parcels. Monterey Views, south of Tioga, was conceived of as a "Mediterranean village" -- thus Italianate in style. Immediately to the north, the Sterling Center project was of a standardized, modern style similar to many of the more recent visitor-serving developments found along major interstate highways. Farther to the north, Monterey Bay Village proposed a combination rustic (shingle, cupolas, brass roof ornaments) and post-modern design. Lastly, the original Sands of Monterey proposal was reminiscent of large-scale contemporary design often seen in Southern California. None of these project designs bore any relationship to each other nor to the shape of the landform, nor were they particularly evocative of the distinctive architectural characteristics of the Monterey Peninsula.

As with the issue of scale, the City has been placed in a reactive position on community design because a City-generated vision of the appropriate design character for land west of the highway has not been articulated. The City has the opportunity to improve upon poor design choices made elsewhere by setting design standards appropriate for the dunes before any major projects are built.

View Corridors Do Not Ensure Viewshed Protection

The protection of views of the Sand City coastline and views across the dunes to scenic vistas (Monterey Bay, Monterey Peninsula, Santa Cruz Mountains) is an important goal of the visual resources component of the Certified LCP. Five of the twelve policies that comprise the visual resource component are specifically directed to enhancing, providing, or protecting views. Some of these policies are general in their intent (5.3.1, 5.3.7, 5.3.8) and require all new development to enhance views of the City's coastal zone, provide formal vista points, and encourage the provision of additional view corridors, over and above those required by other policies, in new development west of Highway One. Other LCP view protection policies are site-specific and are some of the most detailed policies in the LCP (5.3.2 and 5.3.3). These specific policies define the view to be retained and the method by which to calculate the angles and heights of viewing points. These policies were based on an analysis of existing views, modified to allow new development. They establish a three-tiered approach: total view preservation (view corridors), partial view preservation (views over development), and no explicit preservation (height limits alone apply).

An analysis of the impact on views is required for all projects located west of Highway One. All of the EIRs prepared for projects west of the highway have included such an analysis. These discussions identify available views

and tend to focus on how each project complies with the LCP requirements to preserve views within designated view corridors. Little or no discussion is given to the provision of additional view corridors as suggested by LUP Policies 5.3.8 and 5.3.1, except in the Sands of Monterey EIR.

City coastal permit findings have also focused exclusively on the provision of required view corridors as shown on the visual resources map of the LCP. City analysis does not include implementation of the requirements of LUP Policy 5.3.1 to protect views nor a discussion of the feasibility of complying with the discretionary Policy 5.3.8, which concerns provision of additional view corridors beyond the designated minimum.

Continuation of the emphasis on the two specific view corridor policies to the exclusion of other, more general, view protection policies presents two problems. The first problem is that only the barest minimum of views from the highway will be preserved. At build-out under the LCP, views will be limited to glimpses through the gaps of a developed coastline. Even at the points of the highway from where the view corridors begin, passersby will see structures. The second problem is that the visual resources policies are not implemented as an integrated policy body. This policy body, considered as a unit, should provide the level of visual resource protection envisioned in the underlying Coastal Act policy. The mechanical application of the formula for preserving identified corridors avoids the comprehensive analysis required if the totality of the visual resource policy component is to be adequately addressed in conformity with Coastal Act policies.

An objective of the current Coastal Restoration Plan being prepared by the City is to "protect existing visual resources as identified in the City's LCP." As background the consultants prepared a map showing building envelopes that could not be seen from Highway One or the beach. The result was: two-story envelopes south of Tioga Avenue and north of the wastewater plant, a mostly one and two-story envelope on the Monterey Sand property, and a mostly one-to-four-story envelope on the DeZonia/State Parks Foundation (proposed Sands of Monterey) property. One commenter on the periodic review has suggested a LCP policy permitting development only where it is invisible (Big Sur Land Trust 2/1/90).

Further analysis by the City's consultant has been in the direction of adding or enlarging dunes to render additional areas invisible. Another instructive approach would be to first determine building envelopes that would be visible but not block Bay water views, and then determine envelopes that would only partially block such views. Applying this type of hierarchy would be a shift from the LCP's emphasis on preserving only certain views and would follow the intent of Section 30251 of the Coastal Act.

Views From the Beach and Across the Bay Not Adequately Considered

At the end of 1982 (the time of Commission certification of the Sand City Land Use Plan) a consultant for the City of Monterey was developing a contrasting plan. Basically, the Monterey Bay Park Waterfront Restoration Plan calls for the removal of existing development seaward of Del Monte Avenue between Sloat Avenue and Figueroa Street in Monterey, opening up views of the Bay, and providing public parkland. This project is being implemented in stages; some parcels have already been publicly acquired and cleared. The project symbolizes a growing public desire to have unobstructed views of Monterey Bay and the shoreline.

Reciprocal views to Sand City have likewise not received much attention. As noted in the Access section of this report, early proposals included seawalls that would double as public promenades. The result would have been a developed shoreline. People on the walk would have had clear views of the Bay, but views inland would have revealed massive buildings. People on the beach (assuming one remained) would have had a tall, unbroken seawall at their backs. These massive walls would have been clearly visible from the City of Monterey beaches and planned parklands across the Bay, with the buildings as an imposing backdrop. If the early design schemes were built, the existing rolling dune landforms would have been largely replaced with the geometric, hard-edged shapes of a "built" environment.

Landform Alteration Not Addressed

Although dunes, albeit degraded dunes, are the dominant landform west of Highway One, the certified LCP's visual resources component does not include any explicit mandatory policies relevant to their preservation for aesthetic purposes. Limited consideration can, however, be inferred from LUP Policy 5.3.4(a), which encourages project designs compatible with the surroundings, and Policy 5.3.4(f), which encourages the use of existing natural and man-made dunes in projects. As noted, some, but not all dunes are to be stabilized and restored for habitat purposes with grading prohibited, except in conjunction with an approved habitat restoration activity (Policies 4.3.23 and 4.3.24). Again landform preservation for these dunes can be inferred from these policies, but is not an absolute requirement.

In permit actions involving development east of Highway One, the dunes were allowed to be graded away, as previously discussed. Visual resource issues presented by policies 5.3.4(a)(f) were not analyzed. The projects proposed to date west of Highway One have been of such intensity that substantial alterations to the existing landform would be required to accommodate the developments. In the case of the now inactive Monterey Views project, for example, virtually the entire site required grading in order to accommodate the structures. Only a narrow remnant of the dune landform would be retained along Highway One in order to shield the project from sight. This virtual

elimination of dune forms on this site would be particularly unfortunate because the area contains some of the least degraded dunes within the City's shorefront. The draft EIR prepared for the project concluded that the proposed development was fully consistent with the visual resources component of the LUP but offered no analysis regarding policies 5.3.4(a)(f). The City never acted on the Monterey Views project and it may well be that more attention to the preservation of the dune landform will occur should the project be re-activated.

The City's findings for the first Sterling Center project in 1985 were brief, but indicated that existing and man-made dunes would be used in the design:

6. In accordance with Policy 5.3.10 of the LCP, the proposed dune restoration and landscaping program will utilize existing and man-made dunes to enhance visual resources.
7. The dune restoration program will stabilize a large dune on the northeastern property boundary. This dune partially obscures views of the site from Highway One, thus its stabilization will further reduce the visual impact of the development on the highway per Policy 5.3.11 of the LCP. (A-3-SNC-85-205 file)

Similar findings were made for the revised 1989 Sterling Center project, which was reduced in scope. Nevertheless, construction of either of the projects would have resulted in substantial alterations to the remaining existing dune landforms. "Dune Restoration Areas" were proposed to mitigate the impacts of these projects; however, the new dunes would be smaller in scale than those removed. The protection accorded the large dune partially located on the northeastern portion of the site (City Finding 7 quoted above) would be short-lived, if the Sand Dune Drive alignment approved by the City were extended north to serve the adjacent parcel. (A-3-SNC-89-134 file)

Implementation of the LCP to date has not guaranteed that existing landforms will be protected as an aesthetic resource consistent with Coastal Act objectives, rather it has suggested that they can be replaced with development and much smaller areas of "ornamental" dune landscaping. To avoid this situation, the relevant LCP policies should either be strengthened or more aggressively implemented. Examples of more active implementation might include preparation of standards that limit grading, require development to not project above dune ridgelines, and encourage designs that are built with and into the topography rather than imposed on it. Preserving dune landforms for habitat reasons would, of course, have beneficial impacts on protecting the aesthetic values of the landform as well. (See Section D of this Report.)

Obtrusive Signs Banned

The City has acted firmly with regard to obtrusive signs. In February and March 1987, the City Council passed urgency ordinances establishing moratoria on off-site signs and signs that directed automobiles toward State Route 1. On April 20, 1988, these restrictions were made permanent through amendments to the Sign Ordinance under City Council Resolution # 88-4. This amendment has not yet been submitted to the Coastal Commission.

Conclusions

Based on experience with implementation of the LCP, to date, its technical height, site coverage, and view corridor provisions cannot be found sufficient to achieve conformance with the Coastal Act. Experience further indicates that the remaining visual policies have not been implemented in a manner that achieves this objective. Specifically, the following conclusions can be drawn.

1. The City has emphasized the implementation of LCP Policies 5.3.2 and 5.3.3, which are designed to retain designated view corridors. However, it is unclear whether the City-approved design will, in fact, avoid encroachment into the designated viewshed (Sterling Center, December 1989, "Substantial Issue" findings). It is apparent that the designated corridors alone are insufficient to respond to Coastal Act policy requirements to protect public views to and along the shoreline.
2. Specific design guidelines contemplated by LUP Policies 5.3.4 and 5.4.2 have not yet been developed. The lack of these guidelines has kept the City from assuming a proactive, leadership role in determining the appropriate scale and design character for the community, thus complying with Coastal Act policy requirements to protect the scenic qualities of coastal areas as outlined in Section 30251.
3. City findings on visual resource issues are often overly conclusionary and do not include an analysis of all relevant policies. Lack of in-depth analysis and failure to apply all relevant policies limits the ability of the LCP to fully address visual resource issues described in Section 30251 of the Coastal Act. In some cases, the wording of the policy lacks mandatory direction.
4. Certified policies are not written tightly enough to prevent significant alteration of dune landforms. The potential resulting grading would be inconsistent with Coastal Act policy to minimize landform alterations and to protect the scenic quality of the coast.

These conclusions suggest utilizing either or both of two approaches. One approach would involve analyzing and revising height limits, site coverages and/or view corridors to define appropriate building envelopes that protect visual resources consistent with Coastal Act objectives. This approach was taken in developing the Land Use Plan as it applies to the area South of Bay Avenue. The other approach involves fully implementing all the design policies, including the preparation and utilization of design guidelines.

How effectively the visual resource policies are carried out is also closely related to the implementation of Chapter 6 Land Use Plan policies. As noted previously, there are three visual resource issues that continually arise, particularly for projects west of Highway One. The issues involve the design and mass of new development, the visibility of the projects from public viewing points, and the substantial alteration of the dune landform. Every one of these issues is either caused or exacerbated by the intense level of development permitted by the LUP.

Adequate implementation of the full range of the visual resource policies is virtually impossible if the maximum density expectations outlined in the LCP are also implemented. The original 1985 Sterling Center project provides an example of the inherent conflict. The City approval was for a 229-unit hotel/resort with substantial square footage of auxiliary uses (restaurant, conference rooms, health spa, etc.). Although the gross site area totalled almost eight acres, only approximately five acres were actually available for development, even with a proposed seawall that maximized the buildable area. The net density for the project was thus 45 units to the acre, which was above the LCP's maximum of 37 per acre (Policy 6.4.4e), plus all the auxiliary uses. At this density, it becomes extremely difficult, if not impossible, to design structures that are integrated with open space areas and are compatible with their natural surroundings. Massive projects that must, of necessity, cover much of the site and that will be highly visible are practically unavoidable. If actual net buildable site area is further reduced by applying erosion setbacks, the conflict between adequate implementation of the visual resource policies and the achievement of the maximum densities allowed by the plan can only become accentuated. As long as density provisions maintain priority over other planning considerations, it is likely that the visual resources component will continue to be incompletely implemented.

4. RECOMMENDATIONS FOR CORRECTIVE ACTION

- F-1 The City should prepare additional specific design criteria as required by LUP Policies 5.3.4 and 5.4.2. The criteria should include guidelines and supporting narrative relevant to the desired scale and design character for land west of Highway One. The guidelines should provide that, generally, the maximum height of new structures west of the Freeway should be no greater than the height of the tallest dune onsite or in the immediate area.

- F-2 The City should revise its view protection policies to more closely reflect current view opportunities and minimize structural visibility from Highway One. A suggested hierarchy would encompass the following priorities:

First, hide new structural development behind existing landforms;

Second, if the above is not possible, allow visible new structural development that does not interfere with Bay water views;

Third, if both of the above are not possible, minimize view blockage by applying the LCP's view over development criteria (i.e., maximum one-third view blockage) for new structural development throughout the City seaward of Highway One.

- F-3 The City should fully implement its dune stabilization/restoration and visual policies (5.3.4(a), 5.3.4(f)) to minimize alterations of existing landforms. The City should consider revising these policies to explicitly recognize the integrity of the existing landforms.

If the City finds it necessary to permit dune grading for habitat, visual and/or landfill removal purposes, then it should establish as part of its design guidelines parameters for permitted grading, such as:

- dunes providing sensitive habitat or already restored to provide sensitive habitat should not be altered as a visual mitigation;
- new dunes should not block existing bluewater views from Highway One;
- resulting alteration should not adversely affect other landforms and should promote landform stability and vegetation restoration;
- grading should be the minimum necessary to achieve the stated objective.

As an alternative or supplement to establishing criteria applicable on an individual project basis and consistent with habitat preservation efforts, the City may elect to prepare a comprehensive dunescape plan, which would allow greater landform alterations but maintain similar views as currently afforded on a Citywide basis.

- F-4 The City should correspondingly reduce the maximum building envelopes currently permitted for the area west of Highway One by reducing the maximum densities, height limits, and allowable site coverages.

- F-5 In adopting future coastal permit findings, the City shall include an analysis of the relationship of the project to all mandatory and discretionary applicable LCP visual policies and ordinance sections.

G. WATER SERVICE AND RESOURCES

Sand City is served by the Cal-Am Water Company, which currently has inadequate supplies to serve all projected new development.

1. COASTAL ACT WATER SUPPLY POLICIES

Coastal Act Sections 30230, 30231, and 30250 are summarized below:

Section 30230 requires that marine resources shall be maintained, enhanced, and, where feasible, restored, and that special protection shall be given to areas of special biological or economic significance.

Section 30231 requires that the biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes shall be maintained and, where feasible, restored through minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Sections 30250 requires that new residential, commercial, or industrial development be located within areas able to accommodate it and where it will not have significant adverse impacts, either individually or cumulatively, on coastal resources.

Section 30254 requires that new or expanded public works facilities shall be designed and limited to accommodate needs generated by development or uses permitted consistent with the Act. Special districts shall not be formed or expanded except where assessment for, and provision of, the service would not induce new development inconsistent with the Act. Where existing or planned public works facilities can accommodate only a limited amount of new development, service to coastal-dependent land uses, essential public services, basic vital industries, public and commercial recreation, and visitor-serving uses shall not be precluded by other development.

2. LCP WATER SERVICE AND RESOURCE PROVISIONS

The Land Use Plan contains seven policies that pertain to the provision of water service -- Sections 6.4.13 through 6.4.19 -- and five policies that pertain to marine and water resource protection -- Sections 4.3.28 through 4.3.32. These policies allocate water among all the sites and require water conservation and various facility improvements. Appendix F contains the water allocation. Private wells are to be used in a manner that does not adversely impact Cal-Am wells in the aquifer. One recommended implementation action is

to collect information on existing private wells (6.5.3). These policies are implemented by Coastal Zone regulations, Water Allocation Resolution, Water Conservation Ordinance, and "Industrial" and "Industrial Park" zoning district provisions.

3. WATER IMPLEMENTATION ANALYSIS

Site-Specific Analysis

From south to north, the following water issues have arisen:

South of Tioga Avenue

The once-proposed Monterey Views project on this site was anticipated to use 56.6 acre-feet per year (AF/yr) of water. This is equal to its base LCP allocation before the mandatory 25% reduction.

Calabrese: First Sterling Center (A-3-SNC-85-205)

In denying this project the Commission acknowledged that the City appropriately conditioned its approval on preparation of a water-use analysis consistent with the site's allocation. However, the Commission found that:

Of remaining concern with the latter condition is that information to date (see EIR) indicates that supplementary water sources (e.g. off-site well, recycled water, bottled water, borrowing from others' allocation) will be necessary. This problem is further exacerbated by the necessity to achieve a 25% reduction of the site's base water allocation to fall within the City's total allocation (LCP policy 6.4.13 and Appendix F), a requirement overlooked in the City's approval. (The City's allocation is based on a regional formula that could change in the future). Thus, for the site, maximum water use should be 11.53 AF/yr or 10,291 gallons per day. The EIR estimates that interior use alone (landscaping excluded) would be 32,722.5 gpd at full occupancy of 1.5 persons per room. One method proposed to address this concern is to borrow water from another site's allocation, but such is not permitted by the LUP. The County Environmental Health Officer (who serves as Sand City's Health Officer) has already expressed opposition to two other proposed measures: trucking in water and recycling wastewater on-site (letter of Tom Updike to Paul Davis of May 15, 1985). The Commission believes that if the project must rely on a low occupancy rate (e.g., 60 percent is mentioned in the EIR), that in order to also protect visual resources, it would be appropriate to build a smaller development. Given the large discrepancy between the estimated water use and the LUP's allocation and the unlikelihood that the various measures proposed to close the gap are feasible, approval of a project of the proposed magnitude is inconsistent with Sand City LCP policies regarding public services. (April 4, 1986 in A-3-SNC-85-205 file)

Calabrese: Revised Sterling Center Project (A-3-SNC-89-134)

The revised project was projected to use 19.91 acre-feet per year "under a 'worst case' scenario (100 percent average annual occupancy)" compared with the LCP's net allocation after water conservation of 11.53 acre feet. Thus, the applicant proposed a reverse osmosis desalination plant to supply at least the differential. The plant is to be capable of producing approximately 19 AF/yr. Desalination is not mentioned in the LCP. Issues addressed in the Sterling Center Supplemental EIR included public safety from the facility on the beach and the higher salinity discharge back into the ocean (p. 27). The City has passed a resolution vacating its coastal permit for this project, pursuant to a Monterey County Superior Court ruling.(check final project consideration packet

The revised project also includes extending a 15-inch water main along Sand Dunes Drive from Seaside to the project site "sized to accommodate future development in the area." (Supplemental EIR p. 27) The EIR acknowledged the growth-inducing aspects of this component.

Old Landfill

The Monterey Bay Village project once proposed for this site was projected to use 29.33 AF/yr or 5.97 above project site allocation (including the 25% reduction). Additionally, the project's proposed pool and hot tubs were to utilize filtered seawater.

DeZonia/State Parks Foundation

"Preliminary water use calculations indicate a total consumption of water by the [proposed Sands of Monterey] project of 68 to 105 AF/yr (the lower figure based on 70% occupancy), which is 9.5 to 46.49 AF/yr in excess of the site's allocation." The draft EIR lists a connection to CAL-AM, use of filtered seawater, use of the existing well, use of bottled water, and desalination, along with water conservation, as possible ways to meet needs. The growth-inducing impacts of utility extensions were acknowledged, but a definite size and location of the water line are not described in the draft EIR.

Citywide and Regional Water Issues

Regional Water Allocation Limited

In the last decade, the water supply situation on the Monterey Peninsula has become more tenuous. Parts of Sand City are served by CAL-AM Water Company. CAL-AM and the entire City are under the regulation of the Monterey Peninsula Water Management District (MPWMD). The District has many charges, including water supply planning, water demand management, and water resource management (Laredo to Heuer 10/17/89). To date, no significant new supplies have been brought on-line, while population growth, resource needs, and drought

conditions have placed further stress on the regional supply. The District's safe annual yield is 20,000 AF/yr; 18,600 of which is available for allocation after factoring in system losses. Sand City has been allocated 334.6 AF/yr of this total, the figure given in the LUP. However, a draft EIR on the regional allocation indicates that even regional use of 16,700 AF/yr will result in unavoidable, unmitigated adverse impacts to the riparian corridor and to wildlife. This figure is below existing demand, resulting in a challenge to the District in reconsidering its allocation. The draft EIR was on an allocation of 17,600 AF/yr, of which Sand City would be allotted 307.32 AF/yr. What actual allotment the City will end up with after EIR certification may not be known for several months. In the interim, CAL-AM is limited to providing 110 AF/yr of water for new development on a first-come, first-serve basis.

It should be noted that Section 30254 of the Coastal Act requires that limited water capacity must not be precluded by other non-essential, non-priority development. MPWMD could adopt an allocation system that favors non-priority uses, and therefore, for example, allow residential use on the Peninsula while not allowing visitor-serving development (such as in Sand City). Such an allocation would not fall under Commission review.

City Allocation Needs Revision

The City's internal water allocation does not match maximum development potential. The City allocated its 334.6 AF/yr share of CAL-AM water on a parcel-by-parcel basis. The maximum site densities were said to be derived from these allocations. Appendix F of the Land Use Plan attempts to demonstrate that the density can be accommodated by the allocation, but, as noted, each of the proposed projects to date would require more water. This discrepancy can be traced to three factors: the need to demonstrate 25% reduction for water conservation to meet allocation; lack of allocation for ancillary uses including landscaping and pools; and initial unrealistically low per-room allocations. The LCP Table is based upon 50 gallons per day (gpd) per hotel or motel room. In contrast, MPWMD currently uses the figure of 134 gpd per room, based on studies of actual use in the area.

The LCP's allocation assumes an 80% occupancy rate. This translates into 62.5 gpd at full occupancy. Thus, if a different occupancy rate is to be used (such as the Sands of Monterey at 70% or Sterling at 75%), it must be derived from the 62.5 gpd base figure, not the 50 gpd figure. However, the MPWMD's figure of 134 gpd already accounts for occupancy (Ricker to Hyman 9/18/90). Therefore, there should be no reduction for occupancy in calculating estimated uses.

Desalination: Use of Supplemental Sources Needs Examination

Given the regional water supply deficit, use of potential supplemental sources, such as desalination, has emerged as a key issue since certification of the LCP. MPWMD is studying desalination's feasibility utilizing the U.S. Navy site in Monterey. Meanwhile, individual initiatives in Sand City have been put forward.

The Sterling Center (A-3-SNC-89-134) has proposed such a system and the Sands of Monterey project is exploring the use of one (Draft EIR, p. 4.3-7). Monterey County, which regulates water quality in Sand City, recently passed an ordinance addressing desalination. Since the County Health Officer is also the City's, Sand City is bound by the County ordinance. A permit from the Health Officer is required for any desalination treatment facility. Information required in the application includes chemical analysis of the sea water, analysis of impacts from groundwater extraction, plans for brine and other by-product disposal, and a contingency plan for alternative water supply. Operators must be public entities and must demonstrate financial capability to run and maintain the plant. For the Sterling Center project, the Health Department required, among other items: initial operation of a pilot plant; consultation with a biologist to determine marine life impacts; and that there be no connection with the fresh water aquifers. MPWMD also may have permit authority over new desalination plants (Nottenkamper to Hyman, May 25, 1990). The Regional Water Quality Control Board is considering allowing discharges from desalination systems into the Monterey Bay Discharge Prohibition Zone in response to the proposed project in Sand City. Finally, a National Pollution Discharge Elimination System permit may be required (RWQCB Staff Report 8/6/90).

The use of on-site desalination plants presents a major public policy issue regarding the impacts and mitigations associated with providing an essential utility on a project-by-project basis. Other issues associated with this approach include effects on freshwater aquifers, natural systems from hypersaline discharges, energy consumption, recreational beach use, and on companion public infrastructure, sewage systems in particular. Desalination plants may very well be a reasonable option for water-short areas; however, the public policy issues are important and should be addressed before these individual systems are permitted. The LCP contains no policy standards that address new water treatment and delivery technologies.

CAL-AM Service Area Not Citywide

A portion of the City, including the old landfill (Monterey Bay Village) and Dezonio/California State Parks Foundation (Sands of Monterey) sites, remain outside of the Cal-Am service area. Annexation was rejected by the Monterey Peninsula Water Management District in 1985 as premature. Annexation would not be necessary if a site could provide its own water.

Wells May Provide Water

Given the water shortage and location of sites outside of the CAL-AM service area, another source under investigation is water wells. There are industrial wells that produce or have produced substantial quantities of water in Sand City (a well on the Dezonía/State Parks Foundation site produced an estimated 200 af/yr but is no longer in use according to Sands of Monterey EIR, p.4.3-1). The wells draw from the Seaside Aquifer. The water management district is now determining the quantity that may be available for a regional water supply project. As noted, at least one individual development is contemplating using wells to serve proposed developments. The Water Management District's permitting and rationing authority extends to private well owners. Policy 4.3.31 of the LCP says that the City should incorporate MPWMD's requirements into its development review. The District could not prohibit continued use of an existing well as long as it continues to serve the same use, only one use, and one connection (Nottenkamper to Hyman, May 25, 1990). The District could regulate existing wells if it was determined that they had adverse impacts on the aquifer. MPWMD has permit authority over new wells and new connections to existing wells. The County Health Department also regulates wells in Sand City. MPWMD also has condemnation powers should it choose to develop a public project. Thus, it is not known at this time whether additional underground water in Sand City will be available directly to the properties with wells, or if it will be developed and then allocated on a regional basis, or if a combination of approaches will emerge.

Conclusion

Experience to date indicates that the City is not fully implementing its water policies due to a combination of factors. The result is a potential inconsistency with Coastal Act marine resource protection and development accommodation policies. Each of the major proposed shoreline projects' water demand, when realistically calculated, has been above its allocation, suggesting a greater overall demand than contemplated in the LCP. Even under the current regional allocation, the City's total internal allocation to visitor-serving designations of 181 AF would allow only 1209 units, with no ancillary facilities, compared to 1798 units with ancillary facilities allowed by the LCP. This deficit could increase if MPWMD reduces Sand City's allocation. Under LCP Policies 6.4.11 and 6.4.13 developments would have to be approved at less than the maximum density that the LCP allows. The City is thus faced with a decision as to whether to proportionately reduce the allocations, somehow adjust them, or resort to another approach, such as "first come, first serve." If the City wishes to adjust its internal allocation in response, it must retain the priority afforded to visitor units to remain consistent with the Coastal Act.

The City's response to date has been to permit supplemental or alternative sources proposed by the applicant, even those not mentioned in the LCP. Adequate regulation of these sources by other agencies is available. However, by approving permits prior to these sources being assured, the City creates a

situation where a development could be built without adequate water. This could lead to adverse environmental impacts in trying to find a suitable source. The City also loses the ability to plan water supply comprehensively. The changed water situation and new available technologies are reasons that the City may wish to update its LCP with regard to water.

4. RECOMMENDATIONS FOR CORRECTIVE ACTION

- G-1 The City should follow LCP Policies 6.4.11 and 6.4.13 pertaining to limiting development to available water in considering coastal permit applications.
- G-2 The City should clarify LCP Policy 4.3.31 to not allow any new development (component) that relies on wells unless and until the safe yield for the affected aquifer has been established and the water allocation has been revised to ensure that the safe yield will not be exceeded on a cumulative basis. Implementation of this policy, as clarified, should be included in the Zoning Ordinance.
- G-3 The City may wish to revise its internal allocation of CAL-AM water allocated to it by MPWMD, but any such allocation must preserve the Coastal Act mandate for priority to visitor-serving facilities.
- G-4 The City should revise Appendix F of the LCP based on calculations derived from MPWMD's use generation figures. The City should continue to ensure that complete and accurate water demand projections are calculated for permit applications under consideration.
- G-5 The City should develop a policy direction for adjusting its water allocation if the overall amount that it is allotted by MPWMD is changed.
- G-6 The City should consider developing a City-wide water supply and allocation plan that accounts for all possible sources. Criteria for permitting each source and its facilities could be established. What happens to a site's CAL-AM allocation that is unneeded should be governed by policy.

H. WASTEWATER DISPOSAL, CIRCULATION, AND OTHER PUBLIC SERVICES

The City is served by the Seaside Sanitation District, which in turn is a member of the Monterey Regional Water Pollution Control Agency (MRWPCA). MRWPCA has just opened a new regional treatment plant. Highway One runs the length of the City, splitting off the mostly undeveloped shorefront dunes from the inland portion of the City.

1. COASTAL ACT CIRCULATION AND SERVICES POLICIES

In addition to Section 30254 cited above, Section 30252 is relevant to circulation:

The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing non-automobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit for high intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of onsite recreational facilities to serve the new development.

Additionally, Sections 30253(3,4) state that new development shall be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development and shall minimize energy consumption and vehicle miles traveled.

2. LCP CIRCULATION AND SERVICES POLICIES

In addition to those cited above regarding water, Land Use Plan Policies 6.4.11 - 6.4.12 and 6.4.20 -6.4.23 address the provision of services. Adequate sewage treatment capacity must be available, and safety features must be built into projects. Page 73 of the LUP discusses interim alternatives for increasing wastewater treatment capacity.

Policies 6.4.24 - 6.4.32 address circulation. A new frontage road and extension of Vista Del Mar Street are permitted. Page 82 indicates that the exact location of the planned frontage road has not been determined.

The parking ordinance, general improvements section of the subdivision ordinance, on-site circulation section of the zoning ordinance, and the Coastal Zone regulations help implement the mandatory LUP policies.

3. CIRCULATION AND SERVICES IMPLEMENTATION ANALYSIS

Available Wastewater Capacity Limited

The Regional District did not pursue any of the options mentioned in the LUP for interim wastewater capacity increases at the Seaside Treatment Plant. Work did continue on a regional treatment plant which is now in operation. For 1987-1989 the District established a wastewater allocation for Sand City of 68 new housing units and 72,642 GPD commercial/industrial flow. For 1990-91 it imposed a 213 dwelling unit allocation, 104 more than currently served (Regional Water Pollution Control Board ordinance, November 1989). Commercial restrictions are no longer in effect.

The regional wastewater collection line passes through sand dunes in Sand City within an existing easement, pursuant to a coastal permit (A-80-80). Since the dunes may constitute sensitive habitats in the future, the City may wish to explicitly allow maintenance of the line, to avoid conflicts with habitat policies.

Infrastructure Improvement Necessary

On November 23, 1983 remaining portions of Sand City (including the Calabrese, old landfill, and Dezonias/State Parks Foundation sites) were annexed into the Seaside Sanitation District. Thus, the entire City is now eligible for sewer connections. The Seaside County Sanitation District's Sewer System Master Plan calls for an 8-to-12-inch main trunk line along Highway One from near the northern City boundary to the treatment plant (off Bay Avenue).

No wastewater collection facilities are in place west of Highway One, and large portions of the City inland from Highway One also lack sewers. Thus, the first project to be constructed on the shoreline will induce the remainder of the development, since it will be responsible for installing a sewer line.

Air Pollution Must Be Considered

The Air Pollution Control District states:

While the North Central Coast Air Basin is an attainment area for carbon monoxide standards, air quality modeling undertaken for projects in Sand City and Monterey indicate a potential for CO [Carbon Monoxide] violations in the future. These violations are directly related to increasing traffic congestion in urban areas throughout the basin. The District recommends that CO modeling be undertaken for all major projects which would impact highway segments with LOS D or below and that mitigation measures be addressed if modeling indicates potential violations of CO standards. (Quetin to Loomis, 1/29/90)

Such modelling has been undertaken for the COSTCO (Regional Shopping Center) and proposed Sands of Monterey projects (see their EIRs), but is not required by the LCP.

The district also recommends that the City adopt a policy requiring all projects to be found consistent with the Air Quality Management Plan prior to project approval. "Such a policy would further the goals of attainment of ozone standards within the North Central Coast Air Basin." (Quetin to Loomis, 5/3/90)

Road Capacity Constrained

"Sand City Coastal Zone Circulation Study" was prepared by Keith Higgins & Associates in December 1985. It concludes that traffic generated by development allowed under the LCP will not significantly degrade the level of service on the regional road network: "Every intersection will continue to operate at an acceptable level of service." (p E-8)

When regional growth is factored in, Sand Dunes Drive and Tioga Avenue are projected to experience periods of congestion. Nine intersections in locations near Sand City would require improvement (Higgins p. E-10). Updated regional traffic projections have been made by Higgins in conjunction with the Regional Shopping Center and proposed Sands of Monterey projects. These show increases over his 1985 projections for most of the intersection traffic volumes. This is in large part the result of five-fold greater estimates of traffic from Monterey Sand Company's Regional Shopping Center site, which was developed commercially instead of industrially. The 1989 Sands of Monterey draft EIR indicates that two intersections, even with improvements, would be at Level of Service D instead of C. In response to the draft EIR, the City of Seaside has suggested that Sand City require developers to pay traffic impact fees that can be used to fund future regional improvements.

In a larger context, all major highways and arterials on the Monterey Peninsula are or are projected to be at Level of Service E or F by 2004. Funding measures still fall short of being able to support new projects necessary to bring level of service up to Level "C" of the County's standard (League of Women Voters, 1/26/90). Although not currently within the Regional Transportation Plan, there is an identified need to eventually widen Highway One through Sand City from four to six lanes (p. v-19 Addendum EIR - MRWPCA, March, 1989; CALTRANS, Route Concept Report, 1986).

Appropriate Alignment of Crosstown Road Needs Resolution

Sand City has chosen an alignment of Sand Dunes Drive extension (shown as a floating plan line in the LCP) paralleling Highway One in the vicinity of the Calabrese property (proposed Sterling Center site), but has not yet made a final decision on the full location of the road. The Higgins report mentioned above includes the Sand Dunes Drive extension and illustrates a northern Sand

Dunes Drive connection, which is followed in the proposed Sands of Monterey site plan. The report also recommends that Playa Avenue be extended westward under Highway One to connect with Sand Dunes Drive to aid in circulation. The City is interested in establishing such a north-south connection since there currently is not one in the City (except for Highway One; Del Monte Avenue is located in Seaside) for safety access. CALTRANS recommends such a connection to alleviate traffic on Del Monte Boulevard (Carlton to Towner, 9/30/88). The EIR on the Sand City Regional Shopping Center also recommends one as a regional mitigation for cumulative traffic impacts (p.135). The Higgins report does not calculate future levels of service without such an extension. As part of the Shopping Center project both Tioga and Playa Avenues were improved, as were their intersections with Del Monte Boulevard in Seaside.

Redevelopment Can Provide Infrastructure

"In order to alleviate blight and improve the physical, social, and economic character of the community," the City Council in July 1987 designated the entire city as a Redevelopment Project Area. All the exact projects were unknown; however, an "Anticipated Initial Projects List" was included in an appendix to the EIR. Some of the projects listed included reconstruction, intersection improvements, extension and signalization of Sand Dunes Drive, drainage improvements, expansion and improvement of sewer and water lines, a preventive soil erosion program along the shoreline, reuse of the railway right-of-way, and scenic lookouts. According to the final EIR, these would be subject to additional Environmental Review when the projects are actually planned. According to the Project's EIR, "The activities undertaken will be in strict conformance with the ... Local Coastal Program Land Use Plan." (EIR, July 1987, p. 1-6.)

Conclusions

Experience to date indicates that Sand City is adequately implementing its LCP with respect to requiring traffic studies and necessary improvements as a result of those study recommendations. The City is following the requirements of the air pollution authorities, although such provisions have not yet been added to the LCP. The redevelopment agency can act to provide the necessary improvements not required of individual developments. However, implementation of the policies allowing new or improved roads seaward of Highway One may no longer remain in conformity with policies of the Coastal Act, given new information about erosion and habitat needs. Although the LCP's floating plan line concept allows the City to determine the alignment of Sand Dunes Drive, that determination, when made, should be incorporated into the LCP to resolve the issue. Additionally, implementation that allows or requires wastewater lines to be sized to accommodate the maximum development indicated in the LCP is not consistent with Section 30254 of the Coastal Act because this level of development has been shown to be inconsistent with the Coastal Act.

4. RECOMMENDATIONS FOR CORRECTIVE ACTION

- H-1 The City should not prematurely commit to nor construct part of its circulation system and/or utility system (e.g., Sand Dunes Drive) without first ensuring that the entire route will be consistent with all LCP policies. The City may wish to explicitly provide for the necessary maintenance of the regional wastewater line within the dunes. The City should request an amendment to the LCP to show the specific location of Sand Dunes Drive when such a determination is made. Given the required erosion setback, Policy 6.4.30 allowing extension of Vista Del Mar Street should be deleted.
- H-2 The City should adopt policies to reflect air pollution considerations, (e.g., carbon monoxide monitoring; finding of consistency with Air Quality Management Plan), pursuant to the recommendations of the Air Pollution Control District quoted above.
- H-3 The City should adopt a policy that does not obligate landowners west of Highway One to pay for any wastewater collection line extension until his/her development is permitted.

I. LAND USE: DENSITY, TYPES, AND LOCATION

The Sand City shoreline contains a regional wastewater pump station, a storage yard, sand plant, and abandoned landfill.

1. COASTAL ACT LAND USE PLAN REQUIREMENTS

The Coastal Act requires the preparation of a land use plan indicating specific kinds, densities, and intensities of land uses based on all the previously cited sections of the Coastal Act (Sections 30500, 30108). Additional relevant policies are:

Section 30255, which states that coastal-dependent developments shall have priority over other developments on or near the shoreline.

Recommended uses that are of more than local importance should be considered in local coastal programs (Coastal Act 30501 and Regulation 13513). An implementation plan, including zoning map, is to be consistent with and adequate to carry out the land use plan (Section 30513).

2. LCP LAND USE PROVISIONS

Chapter 6 of the LUP lists the types of development allowed and includes a land use plan map (Figure 11). One site of two or more acres must be set aside for coastal dependent development (6.4.1(a)). Details of the various building envelopes for South of Bay Avenue are provided in Figures 12 and 13 and Policy 6.4.1(b). What uses and maximum densities the various LUP provisions translate into are illustrated in Appendix F, the water use calculations.

Types and densities of uses are repeated in the individual zoning district regulations of the IP. The IP also contains a Zoning Map that is derived from the Land Use Plan map.

The current LCP allows up to approximately 417 residences and 1,798 visitor-serving units along the shoreline as shown in Table 1.

3. LAND USE IMPLEMENTATION ANALYSIS

Site-Specific Issues

In some cases the LCP has been applied in a manner that takes liberties with the permitted uses and densities specified. In the case of the old landfill, inaction has been detrimental to shoreline access as previously described.

South of Tioga Avenue and East Dunes (Special Treatment Areas)

The site South of Tioga Avenue (inland of Vista del Mar Street and north of Fell Street, a paper street), comprised of small parcels in multiple ownerships, is designated High Density Residential with a Special Treatment Overlay in the LCP. The density under Special Treatment is one dwelling unit per existing lot of record (as of 1981) between 1,875 and 2,250 square feet and two dwelling units per existing lot of record over that size. A bonus is available if two 2,250 square foot lots are combined; the credit would be four units. These credits appear to be available even to parcels seaward of the erosion setback line (in contrast to LCP provisions for other lots on the shoreline). There appear to be about 200 lots in the area between 1,875 and 2,250 square feet and 21 over 2,250 square feet (yielding a base density of approximately 242 units). However, since most of the lots are exactly 2,250 square feet, consolidation could result in as many as some 410 units. (The Land Use Plan's Water Allocation, Appendix F, estimates 370.) However, the LCP is not clear as to whether lots that had been previously consolidated under the same assessor's parcel number remain eligible for the bonus. Additionally, it is possible that credits for any buildable lots seaward of Vista del Mar Street and any inland of the wastewater treatment plant could also be transferred to the South of Tioga site, further increasing the density, although there are other options for these lots also under the LCP. The LCP specifies a maximum of 80 credits from these areas. However, given where the erosion setback line might fall, 40 is a more realistic maximum estimate (for a total theoretic maximum of approximately 450 units on this site).

While the LCP specifies that credits can only be given for buildable parcels inland of the erosion setback line which are located seaward of Vista del Mar Street, this provision is not in effect for those parcels inland of the street. It is likely that the 50 year setback now falls inland, thus rendering some of the small parcels unbuildable. The City has the apparent ability to no longer give density credits to such parcels under the specific plan that must be prepared for this area. However, it would also be possible for the City to independently evaluate the issue of credits for these properties.

The Monterey Bay Views project, for 363 units (or approximately 29 dwelling units per gross acre) and a seawall, was once proposed for this site south of Tioga Avenue. The draft EIR found consistency with the General Plan's permitted density (9-45 units per acre) and the LCP's base High Density Residential density of 25 to 35 units per acre. It did not mention the LCP's Special Treatment overlay's requirements.

Inland of the freeway is another small lot area also governed by the Special Treatment provisions. The City-prepared, now abandoned, East Dunes Specific Plan indicates that permitted density is 25- 35 units per acre, except within Special Treatment Areas where a PUD is applied for. However, the certified LCP's PUD zoning regulations do not contain such an exception, as the Special Treatment density standards still apply. The East Dunes contain Smith's blue butterfly and Monterey dune gilia habitat.

Calabrese

Sawmill Appropriate Use? The City approved a coastal permit (# 84-03) for Dooleage to store and process building materials (i.e., install a sawmill) on the Calabrese site. This site is designated for manufacturing. The development was approved as a permitted use, although the LCP zoning ordinance does not list specifically list the proposed use as permitted. The City Attorney at the time stated that "manufacturing" was broad enough to cover the proposed use and the ordinance was not required to be any more specific. (Coastal Commission's file on # 84-03)

Industrial Use Necessary? The Calabrese site has a dual designation of manufacturing and visitor-serving. Before the secondary visitor-serving use can be allowed, the LCP requires a finding that the industrial use is no longer important or feasible in the regional context. This was first made under Resolution No. 25 (1985) taking into consideration the amount of other land designated "Industrial-Manufacturing" in the City's General Plan and market demand for sand mining and the batching of cement (Commission permit file A-3-SNC-85-205). The finding was made again in Resolution No. SC-39 (July 18, 1989) based on a letter from the property owner, as part of the Sterling Center (#89-03) approval. She stated that the concrete batch plant was closed down ten years ago because it was more economic to purchase the finished product than make it, and no use has been presented since then to "make it economically viable to reopen the plant." (Calabrese letter of 5/1/89 in A-3-SNC-89-134 file.)

Old Landfill

Density Determination: This parcel is only one of two whose density is to be determined by acreage pursuant to the Local Coastal Program. According to the Water Allocation Appendix F, there are 15.64 acres, which, at the maximum of 13 units per acre, yields 203 units. The EIR for the once-proposed Monterey Bay Village notes that if the project did not have a seawall and was therefore set back the necessary 170 feet, approximately 134 units could be built at the maximum density. This assumes that the allowed number of units would be based on a net site area, although the LCP allows use of gross acreage (Land Use Plan p. 80). Even if gross acreage is used, at issue is whether that portion now under water, and hence now part of the public trust, should count.

The proposed project also encompassed some of the adjacent Granite Construction property, which is allowed up to 141 visitor rooms. The LCP designations and densities (which generally shows use corresponding to property lines) is silent as to how to allocate density if property lines are changed in the future.

Landfill Removal Needed: The proposed Monterey Bay Village project is on the site of a former landfill used by the City of Monterey and other nearby jurisdictions. Its planned removal has been the subject of extensive study. A 1986 study concluded that the waste was not toxic; only some high, but

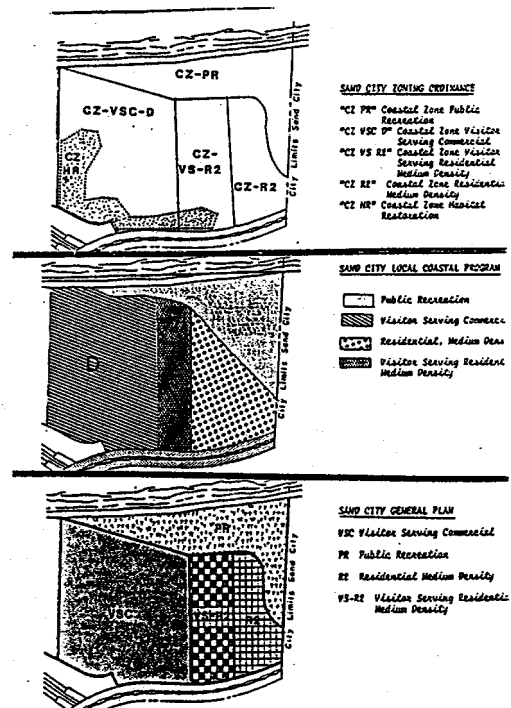
acceptable, amounts of lead and copper were found. The debris is sloughing onto the beach, creating adverse impacts for public access and proposed adjacent visitor-serving development. The landfill is in violation of County and State laws. Since 1984 the Monterey County Health Department, which acts as Sand City's Health official, has requested that the landfill be removed (3/12/84 Jennings to Novelli, 7/6/88 Dennis to Brumfield, 7/16/89 Herald) or "stabilized and capped with no development allowed over it" (Finney to Brown 5/8/90).

Removal remains stalled. There are no direct landfill removal requirements in the LCP. Landfill removal was not discussed in the Redevelopment Plan EIR because it was to be undertaken as part of the now-inactive Monterey Bay Village project. State regulations governing landfill closures were adopted in 1984 (Title 23, Section 2581). While they mainly address leachate, they do require that areas subject to erosion by water and wind shall be protected or designed and constructed to prevent such erosion. A state solid waste facility permit and an authority to construct permit from the regional air pollution district are also required. On August 31, 1989 an assessment was performed by Ecology and Environment, Inc. asking EPA to use superfunds to remove the dump. This latest report cited the lead and copper hazards, contamination of groundwater, material on the beach, and potential adjacent recreational development (i.e., Sands of Monterey) among the justifications for the federal assistance. To date the City has not chosen to use its police power to require abatement of the nuisance of garbage falling on the beach.

DeZonia/State Parks Foundation

This parcel is split into four major designations. There is a difference in the boundary lines drawn between the General Plan maps and the Coastal Land Use Plan maps. The latter appears to show less visitor-serving (and more residential) development. However, the zoning map (which is in the certified IP) corresponds with the General Plan map and allows a greater amount of visitor-serving units (see maps).

The Visitor-Serving Residential and Residential designations' densities are to be determined on an acreage basis. The maximum density for both categories is 25 units per acre. The LCP's Water Allocation Appendix F estimates a total of 11 acres so designated (4, visitor; 7, residential), which could result in a maximum of 275 units. Net developable acreage would be somewhat less, depending upon where the



erosion setback line is drawn. The current Sands of Monterey proposal for the site is for 185 residential and visitor-residential units, or 16.14 units per gross acre, according to the draft EIR, but an alternative lower density project (at 12.45 du/ac) is also evaluated.

Railroad Corridor and Highway Frontage

Within the City's Coastal Zone extending 200 feet inland from the freeway right-of-way and 100 feet from the railroad right-of way, several permits have been issued (see Table 2). The permitted uses have been consistent with the LCP requirements. No major Coastal Act issues have been associated with these developments.

Citywide and Regional Land Use Issues

Accommodation of Population Growth

Although Sand City was incorporated to protect its industrial and commercial base, its General Plan and Redevelopment Plan recognize the need to provide housing. The General Plan initially identified six potential sites, five seaward of Highway One (Figure 3). The current LCP provides for both the City's desire for housing and the Coastal Act's priority to visitor-serving uses, by designating some sites for exclusive visitor uses, two for pure residential use, and most of the remainder for "visitor-serving" residential (such as timeshare units or short-term rentals). In addition to the two shoreline sites (South of Tioga Avenue and part of Dezonía/State Parks Foundation, see Table 1), the City designated the East Dunes, inland of the freeway and extending outside of the Coastal Zone, for housing. However, now, according to the U.S. Fish and Wildlife Service, allowing housing in this latter area would be resisted because of its habitat value (Coastal Restoration Plan Task Force minutes 4/20/89, see Habitat section). The alternative of redeveloping the City's older commercial areas east of the Highway (also mostly out of the Coastal Zone) for residential use is limited because some of the businesses provide necessary products and services for the Monterey Peninsula. Some under-utilized sites and uses that are planned to be phased out may, however, offer opportunities for reuse for residential development. This may still leave the shorefront as the area most desirable for housing from the City's perspective. The City has indicated that it has pursued locating housing inland of the freeway and found it infeasible (Goblirsch to Hyman 8/27/90).

Various regional planning agencies use different population projections for different purposes. As noted, the City currently houses some 200 people in 97 units, all inland of Highway One (mostly outside of the Coastal Zone). The Association of Monterey Bay Area Government's (AMBAG) estimate for Sand City for year 2000 is 836 people (which is used by the Monterey Bay Unified Air Pollution Control District in the 1989 Air Quality Management Plan) and for 1995 is 623 people, over three times the existing population. The 836

population translates into about 385 housing units, almost 300 more than are existing today. AMBAG periodically prepares a "Regional Housing Needs Study" that sets targets for overall new construction and for income distribution. The 1984 report sets a goal of 98 new units for the City from 1980 to 1990. It also sets targets for housing very low and low income families. The City's 1984 General Plan is based on the previous 1981 AMBAG study and demonstrates that the City is virtually already meeting its affordability target. The City did not meet AMBAG's 1984 goal of total new units, as there has been almost no new construction. But, unless income level categories in the City have changed since 1980, its population distribution by income would remain favorable from a regional perspective. AMBAG's draft Needs Plan, covering 1989 through 1996, indicates that the City needs 214 additional units.

The Monterey Peninsula Water Management District estimates 2,617 potential new residential units in all of Sand City at buildout. This seemingly high estimate is based on permitted upper floor residential development in commercial and industrial areas. The District is grappling with re-allocating a safe yield that might not even serve existing levels of development (see Section G of this report). Its current allocation is not broken down by sector; that disaggregation is the responsibility of the local government. The Monterey Regional Wastewater Pollution Control Agency's 1987-89 allocation allows 68 more residences in the City by 1990. Its new allocation would accommodate 104 new residences for 1990-1991 (see Section G of this report).

Intensity Permitted by Plan Too High to Achieve Resources Protection

The maximum buildout that could result from LCP implementation has generated concern from some members of the public commenting on the periodic review process and would be at variance with achieving Coastal Act objectives. Two aspects of buildout are worthy of consideration -- density and intensity.

As noted, total potential buildout of units in the coastal zone seaward of Highway One is 2215 to approximately 2423; 417 to 625 residential and 1798 visitor-serving units. Approximate permitted maximum visitor-serving densities per site range from 13 units per acre on the old landfill site, to between 25 and 37 units per acre on all other sites. However, the LCP allows up to 75 units to be built per acre, leaving the remainders of the sites available for non-hotel/motel visitor uses. For example, the Calabrese site is allowed 229 rooms maximum, with 37 to the acre. Thus, the hotel could be built on 6.17 acres (229 divided by 37). This leaves an estimated 1.31 acres available for other uses according to Appendix F of the Land Use Plan, provided it is buildable.

There are only two exclusively residentially designated sites. Permitted residential densities are about 25 units per acre on the portion of Dezonja/California State Parks Foundation site adjacent to Fort Ord and up to 36 units per acre on the south of Tioga Avenue site.

Average combined density along the City's entire shoreline would be 18.5 to 21 units per gross acre. The LCP indicates that the density was based on the City's water allocation (Land Use Plan p. 77). Average density per net developable acre would be considerably more based on erosion setbacks, view corridors, road right of ways, and dune habitat preservation.

Density figures are useful for calculating certain impacts, such as water use, wastewater generation, and traffic volumes. However, the number of units does not represent the entire maximum buildout. Visitor-serving sites can accommodate other uses in addition to rooms. Two sites totalling three acres are designated for uses that do not involve units. Thus, to perform some analyses, such as with regard to visual and habitat protection, knowledge of maximum intensity is more relevant.

There is not sufficient experience with implementing the LCP to date to predict what intensity will be approved. To roughly estimate the intensity that the LCP would allow, using a standard of 2500 square feet per each residential and visitor residential unit (1700 for unit and 800 for parking) and 1000 square feet per hotel/motel unit (400 for room, 400 for parking, 200 for ancillary), there is a structural buildout potential of almost 3,850,000 square feet. To this would be added non-hotel/motel development in addition to the rooms, estimated in the LCP at 1,000,000 square feet (this appears to be coverage, which would have to be multiplied by number of stories to arrive at total floor area).

The LCP admits that maximum densities may not be attained due to various constraints (Land Use Plan p. 80). Sand City representatives have further argued that these maximums will never be achieved. Indeed, this report has shown that rigorously applying every relevant LCP policy to each proposal would result in less than maximum permitted intensity. On the other hand, the LCP is written in a manner that appears to accommodate the maximum if at all feasible, evidenced by the limited permit activity to date. To date, the City approved only one shoreline project. The first Sterling Center was approved at the requested maximum -- 229 units. After the Commission denied this proposal and the Court upheld the decision, the developer applied for a scaled-down project -- 135 units. The City approved it without any further reductions (That approval has now been rescinded). In a recent Sunday Herald "Commentary," the Mayor stated,

Like all cities, we plan for long-term maximum build-out and like all cities, we adjust to reality.

To illustrate, both the Sterling and [not yet permitted] Sands of Monterey [projects] will be constructed at considerable less density than what our adopted plans allow. (11/5/89 p. 3B)

At issue is whether the LCP's permitted densities and intensities are too high. Given the approach of adjusting densities to fit constraints, an argument can be made that they are somewhat unimportant. On the other hand, they can create unrealistic expectations, especially since they are so prominent in the LCP. The LCP, taken in its entirety, appears oriented toward achieving the maximums, as the discussion about constraints is relegated to one chapter's introductory text. Only because of the intervention of third parties -- the Coastal Commission and the court -- was the maximum density permitted by the LCP not allowed on the Calabrese (Sterling Center) site. This report's analysis of habitat and visual resource protection and to some extent shoreline processes and water availability suggest an ultimate buildout considerably lower than the LCP maximums.

Are Designated Development Locations Appropriate?

The Sand City LCP designates a structural use for each shoreline parcel (or grouping of paper lots), which some commenters on periodic review have opposed, preferring open space uses to physical development. As noted, most sites are designated for visitor-serving uses, a Coastal Act priority. Two shoreline sites are permitted "Industrial Manufacturing" in recognition of existing use, but can convert to visitor-serving uses. Two sites are designated for residential uses, their locations not being critical (see Section B of this report). The two acres reserved for coastal-dependent industries may no longer prove critical because of sand mining's adverse impacts. But, the reserve is still worthy of being retained in the LCP in case mining impacts can be mitigated or another coastal-dependent use materializes. The Commission is not aware of such uses having been recently, publicly suggested for Sand City. Given the earthquake's destruction of coastal research facilities in Moss Landing, interest in aquaculture in the Monterey Bay area, and the forthcoming Monterey Bay National Marine Sanctuary, they may emerge.

Following is a discussion of two alternative development scenarios, which may deserve consideration as ways to reduce development intensity. They are not being recommended as necessary within this context of evaluating the existing certified LCP.

Open Space Alternative to Shoreline Development: Achieving a shoreline free of structural development would further Coastal Act objectives, but require a different planning perspective than that offered in Sand City's LCP. This approach would constitute a potential solution to many of the issues identified in this report, such as need for erosion setbacks, parkland, viewshed protection, and habitat preservation. How to manage such open space to achieve habitat protection and/or public access and recreation would be an issue to resolve. Some limited development may be desirable to support and enhance public use such as roads, trails, or restrooms and/or habitat preservation. For example, a model prepared by the Dunes Coalition and

presented at the Coastal Commission's December 1989 meeting shows trails, interpretive center, rest room, picnic sites, model plane launch area, and a bicyclist camp. A variation of this approach would allow one or possibly two small visitor facilities within these dunes.

There are two major obstacles to achieving this objective that were voiced at the public workshop on periodic review: property ownership and public finance. Most of the land is in private ownership and would have to be publicly acquired if no economic uses of the land are permitted. As mentioned in Section B of this report, the City could list public recreation and open space as permitted uses and not oppose public acquisition. But the LCP could not simply be amended to show all open space until public funding was assured (Coastal Act Sections 30010 and 30604(e)).

Interest in public acquisition has become apparent since the LCP was certified, although a comprehensive program has not been articulated to date. Costs could run in the tens of millions of dollars, based on known sale and asking prices. As noted, the Regional Parks District has begun conducting an appraisal, but only for south of Tioga Avenue with the results not yet available. In terms of the entire dune complex, the State Department of Parks and Recreation and the Wildlife Conservation Board have been pursuing acquisitions in the City of Monterey (Window of the Bay and Phillips Petroleum site), Seaside (Arco-Bostland site), the Martin Dunes area north of Marina in Monterey County, as well as in southern Sand City (South Monterey Bay Dunes project). The Department of Parks and Recreation already owns a significant portion of the Marina Dunes in the Marina State Beach unit. Monterey County voters narrowly approved a 1/2% sales tax increase which would make \$2.5 million available to spend acquiring dune habitat in Sand City and Marina (Measure B, 11/89). The private non-profit Big Sur Land Trust acquired land that the Regional Park District is now purchasing in the Marina dunes. The 4 1/2 mile largely undeveloped Fort Ord Shoreline, between Sand City and Marina, is in public ownership. In recognizing the destructive nature of coastal erosion, the Department of Defense is proposing to relocate some large ammunition depots inland and is not planning to protect or rebuild its other major shoreline structure -- the undermined Stillwell Hall (Kellogg to Otter 4/10/90). Except for continued use of firing ranges, Fort Ord's Master Plan shows no major development seaward of Highway One. Habitat preserves have been set aside at the north and south (adjacent to Sand City) ends of the Fort. In fact, the Department of Defense has announced that the entire base may be closed in the future.

While Sand City's development objectives contradict those of neighboring Fort Ord's and Monterey (which is also removing structures along part of its shoreline), they are based on a desire to generate property, sales, and especially transient occupancy tax revenues. As noted, the City is counting on this money to finance improvements pursuant to its Redevelopment Plan. Pursuit of the open shoreline alternative would thus have to overcome the City's objections and possibly require restructuring the City's redevelopment focus.

Clustered Shoreline Development Alternative: A related alternative approach to planning for west of the freeway would be clustering development to achieve substantial contiguous open space, for example, along one-half the City's coastline. Areas of open space could be the southern half of the City, the northern half, the middle, or possibly two areas, such as the northern and southern quarters. If located at an end of the City, the open space reserve could be connected to parks or preserves in an adjacent jurisdiction. Such large tracts of open space would result in non-fragmented view protection, significant habitat enhancement, and substantial recreational opportunities. The remaining sites would still have to provide for shoreline setbacks, habitat reserves, and visual protection, but could develop at urban densities, albeit reduced from the LCP's maximums.

Fulfilling this objective, once an appropriate open space area was identified, would likely involve public acquisitions and possibly transfers of development credits. The amount of public funding available and the potential for transfers of development credits would determine the amount of open space possible to preserve. For example, if the goal was for the southern half of the City's shoreline to remain in open space, Monterey Sand Company could cluster development on the northern half of its site (located in the center of the City's shoreline), or be compensated for part of its land, or possibly be allowed additional development potential on property it owns inland of the freeway, through a transfer program. Calabrese (Sterling Center site) and the individual private lot owners south of Tioga Avenue with developable parcels would have to be compensated. Possible sources could be State Park or Regional Park funds, Monterey County Measure B funds, and/or proceeds from the sale of the State Parks Foundation half interest in their site (co-owned by DeZonia; proposed Sands of Monterey site).

Utilizing a transfer of development credit program, by increasing permitted densities on some sites in return for leaving other sites open, could be used to achieve the objective of contiguous open space. This is a more complicated method, which would likely entail involving a third party, such as the Coastal Conservancy, with the authority to purchase, hold, and sell property for specific public and planning purposes. Special authorization may be needed if transfers were to involve land outside of the coastal zone, which may be the only locations capable of supporting the increased density (e.g., into Sand City inland of the freeway).

Conclusions

Sand City is generally implementing its LCP's stated permitted land use and density provisions as intended. The uses and locations reflect Coastal Act priorities; the stated intensities appear too great to allow Coastal Act objectives to be fulfilled. Density bonus provisions are subject to interpretation and may be obsolete.

Since development, and hence, associated removal of the old landfill site has yet to occur, it is appropriate to continue aggressively seeking other means of implementing the required clean-up.

Even without the East Dunes, Sand City's LCP designates substantial residential development, above regional goals and allocations. Not all could be built immediately under current wastewater and possibly water supply constraints. Developing the two oceanfront sites, assuming that the constraints are relaxed in the future, will enable the City to meet its fair share housing requirements. On the other hand, options may exist for providing housing inland of the freeway which are worthy of further study.

In order to implement the LCP in a manner consistent with the Coastal Act, project approvals must be for less intensity than the permitted maximums, and in some cases, possibly much less. Deriving the exact figures is beyond the scope of this report; they should be set by the development review process. Enunciating such an approach in the LCP would be helpful, given the current emphasis of its text on accommodating development. Other LCPs contain formulas and criteria for calculating allowed density based on site constraints and opportunities which might prove useful models.

Other approaches discussed are also available to address Coastal Act concerns, such as preserving open space through public acquisition, or clustering development with contiguous open space. While such approaches are worthy of Sand City's consideration, they are likely beyond the small City's ability to fully implement, even if it became favorably inclined toward them. Other agencies taking an interest in the entire dune complex may be able to derive a comprehensive approach that satisfies the private landowners and City, while accomplishing much more preservation than the current LCP envisions. Were substantial public acquisitions to occur seaward of Highway One, Sand City might consider revisions to its LCP and General Plan to allow and encourage support facilities inland, if the highway barrier can be overcome.

4. RECOMMENDATIONS FOR CORRECTIVE ACTION

- I-1 The City should continue efforts with all potential parties to abate the landfill. It should be explicit City policy that landfill clean-up should be implemented as soon as possible.
- I-2 The City should revise the Land Use Plan map to conform to the General Plan and zoning maps with respect to the various land use designations on the Dezonía/California State Parks Foundation site.
- I-3 The City should clarify what the buildout of the Specific Plan areas could be, reevaluate the appropriateness of the density bonus and of the density credits for parcels seaward of the erosion setback line and landward of Vista Del Mar Street, and consider revising the density formula to be less complicated.

- I-4 The City should follow an implementation approach that reduces development intensity to fully carry out its resource protection policies. For example, the following type of policy objective should be added to the LCP:

The permitted density represents a maximum. Use intensities should be commensurate with building envelopes that:

- do not interfere with required and/or provided access and open space recreational areas, including adequate facilities inland of the 50-year erosion setback line;
- do not encroach upon the erosion setback line;
- avoid dune habitats and their appropriate buffers;
- respect natural landforms and views to the Bay.

Another example would be to analyze, then revise, densities on a parcel-by-parcel or City-wide basis.

- I-5 The City should add a provision to its LCP that addresses how permitted density will be calculated if future parcel boundaries are different than those in the LCP.

J. POST-CERTIFICATION IMPLEMENTATION PROCEDURES

After certification of its LCP in 1984, Sand City assumed responsibility for the day-to-day implementation of the Coastal Act within the Coastal Zone. The LCP contains provisions required by the Coastal Commission's Administrative Regulations to ensure public participation.

1. ANALYSIS

Most Activities Properly Permitted

Generally all activities in the coastal zone defined as development under the Coastal Act and City's LCP have received city coastal permits. In the case of Lone Star's Reclamation activities, the City initially contended that no permit was required, but issued one upon our legal staff's advice that one was needed. In late March 1990, the Commission received a complaint that monitoring wells were being drilled on the DeZonia/State Parks Foundation site without a coastal permit (Figen to Morgan 3/29/90). Although City staff had determined that the development was exempt (Morgan to Feeney 2/20/90), the City subsequently issued coastal permits (CP-90-01 and 90-02) upon advice of Coastal staff (Brown to Morgan 4/2/90). Closing Tioga Avenue, as discussed in the access section, also should have been subject to the coastal permit process.

Two projects permitted by the City include portions in the Coastal Commission's jurisdiction and thus require coastal permits from the Commission. Some road improvements in conjunction with Monterey Sand Company's Regional Shopping Center occur in neighboring Seaside (Strnad to Robinette 6/19/89), and the City is submitting an after-the-fact application for these. Utility extensions to the Sterling Center are proposed along Sand Dunes Drive in the area of deferred certification.

Local Noticing and Hearings Appear Adequate

Pursuant to Coastal Act Section 30006, the Legislature intended that the widest opportunity for public participation be given in decisions affecting coastal planning, conservation, and development. Coastal Commission regulations and the Sand City Implementation Plan require the local government to provide notice of and hold hearings on all coastal permit applications. The Commission staff did not maintain complete records of being noticed and did not observe or participate in local hearings. However, no significant problems were voiced by commenters on periodic review. In conjunction with the Sterling Center application, City staff said it was not common procedure to release staff recommendations prior to the hearing, but did send them to the Commission office upon request.

Final Action Noticing Generally Timely

Coastal Commission regulations and the Sand City Implementation Plan require the local government to provide notice of all final actions on coastal permits taken within seven calendar days (p.41). Notice must include findings and conditions and procedures for appeal (if appealable). Notices from Sand City have generally been timely, complete, and clear. Only one early permit notice (#84-05 for City of Sand City) was deficient. It involved a seawall repair that included an unclear project description and no appeal procedures. The City responded that it would send the procedures, but never did, as the project was never funded nor executed. Another early final action notice for a sawmill (# 84-03 for Dooleage) did not indicate that it was appealable (it clearly was). It also did not provide the applicant's address to enable the Commission staff to inform him of the appeal period. The Commission also received a notice of one coastal permit hearing (# 87-06 for Federal Express) but never received an action notice, although the project was approved. The applicant then requested a coastal permit amendment, for which a final action notice was again not sent to the Coastal Commission. Upon requesting these, the Commission staff was informed by the City planner that they were "null and void because of the applicant's failure to execute." (February 16, 1988.) The Commission also received a hearing notice, but not a final action notice, on an amendment to Coastal Permit 86-04, which too was never executed. Since the Zoning Ordinance requires amendment requests to constitute new coastal permit applications, it is adequately written to ensure that amendment actions are sent to the Commission office.

One requirement of Section 13565 of the Commission's administrative regulations (adopted January 17, 1983) is that a local permit number be assigned to each permit application to facilitate public tracking of local actions. Only one permit was sent to the Commission office without any identifying number (for the regional shopping center), although City files indicate it was properly numbered.

Files for Appealed Permits Need Prompt Delivery to Commission

If an appeal is made to the Coastal Commission of a locally issued permit, the City has only five days upon request to produce its file under the Commission's regulations. Pursuant to these regulations, the Commission staff requested the file on coastal permit #-84-06 when it was appealed. The City staff at that time said that the Commission could not have the file; they offered to make it available to be copied by a professional firm if the Commission paid for it. Commission staff told the City that the appeal could not be processed without the file. The City Planner finally brought it to the Commission office, where staff copied the needed material. The City has since become more cooperative. For the third appeal, on #-89-03, the Commission received a totally organized, page-numbered file, although it took 2 1/2 months.

Legal Document Review Procedures Need to be Codified

Sand City is one jurisdiction to have the authority to process its own legal documents without Coastal Commission staff approval (although staff is afforded a seven-day comment period). This authority was granted by the Commission pursuant to Section 13574 of its regulations, because the City agreed to accept or find another body to accept offers of dedication. Approved were procedures to process the documents and standard forms to be used (i.e., Offers to Dedicate, Certificates of Acceptance, Deed Restrictions, and Subordination Agreements). The procedures to process legal documents are not incorporated into or directly referenced into the LCP, although they were adopted by a City Resolution 41 (1983). Since City staff has already and will continue to change, staff may lose track of these provisions unless codified.

One permit (#89-01 Monterey Sand Co.) involved a scenic easement for habitat conservation purposes. A copy was sent to the Commission's legal staff, whose comments were then incorporated into the final version. This exercise revealed that the City did not use the model forms that the Commission had approved.

Land Use Policy 2.3.10 dictates that an access offer shall revert to the owner in five years if not accepted, while the approved procedures provide for a ten-year period, compared to the Coastal Commission's standard twenty-one years. This lesser period was authorized because Sand City agreed to be the recipient of all offers if no other agency accepted them. The Monterey Sand Company offer is for twenty-one years.

LCP Documents Need Errata Pages to Show Revisions Until Updates

Land Use Plan

Sand City printed its Land Use Plan in March 1984, one year after final certification. It reprinted it in May 1986 to incorporate the approved South of Bay Avenue resubmittal. However, Appendix F, the water land and use projections, has not yet been amended to reflect the new South of Bay provisions. The cover page clearly states the approval and printing date and the revised printing accurately incorporates the resubmittal. The current printing does not incorporate the final amendment # 1-86, which is simply a change to the LUP map. The document sells to the public for cost of reproduction (\$18).

Implementation Plan

The Implementation Plan submittal consisted of four documents: the Implementation Plan, Subdivision Ordinance, Zoning Ordinance, and Timeshare Ordinance. Additional components of the Implementation Plan, listed below, were adopted pursuant to the Commission's approval with modifications. The

first document, entitled "Implementation Plan," is a blueprint for the entire IP. This title can be somewhat confusing in that it alone does not constitute the complete Implementation Plan. To minimize this confusion, a provision in the Zoning Ordinance clearly states that all of these documents constitute the IP and any amendments to them are subject to Coastal Commission approval. However, a reciprocal provision is lacking for those components that are not part of the Zoning Ordinance. The document labelled "Implementation Plan" is distributed separately by the City (sale for cost of reproduction); the other component documents are not bound together with it.

In early 1988 Sand City adopted a municipal code. The Zoning Ordinance became Title 18 and the Subdivision Ordinance became Title 17. Other components of the Implementation Plan were incorporated as follows: Timeshare Ordinance (Chapter 18.86), Local Coastal Program amendment ordinance (Chapter 18.84), Surface Mining and Reclamation Ordinance (Chapter 18.90), Water Conservation Ordinance (Chapter 15.12), Access In-Lieu Fee Ordinance (18.84), Park Dedication Ordinance (Chapter 17.68), and Specific Plan Ordinance (Chapter 18.14). Resolution 1 (1984) regarding City-Wide Water Allotments, some procedural sections of the Implementation Plan document (Ch. 2.0 Administrative Procedures, Appendix A coastal permit procedures, Appendix B Guidelines for Geological Reports, and Appendix C Native Plant Landscaping Guidelines,) and the subsequently adopted forms and procedures for coastal permits and legal document review were not codified.

General Plan

The City originally adopted its General Plan in 1980 and revised it in 1984. The revision included the land use map and other information from the adopted Coastal Land Use Plan. However, the policies of the Coastal Plan were not integrated into the General Plan document, nor are the General Plan and Coastal land use plan maps made identical (see previous discussion on Dezonía/State Parks Foundation site). However, the General Plan text indicates that the Sand City LCP is incorporated by reference into the General Plan. The certified South of Bay provisions and the East Dunes amendment (#1-86) are not reflected in the printed copy of the General Plan.

LCP Amendment Submittals Due

In addition to the revised sign ordinance discussed in the Visual Resources section, the City has also passed but not yet sent for certification amendments to the zoning ordinance in early 1987 (allowing adult entertainment in the C-2 zone district) and in April 1988 regarding auto repair. On January 21, 1986 the Subdivision Ordinance was amended regarding vesting. These were not noticed on LCP amendments. These revisions cannot be in effect in the coastal zone until Commission certification.

Additionally, the recodification of the zoning and other ordinances into the Municipal Code was not brought to the Commission's attention at the time, although technically it could be considered a minor amendment under the

Commission's regulations (Section 13554(d)(2)). City staff discussed another ordinance with Coastal Commission staff regarding an in-lieu parking fee program and agreed that it did not have to constitute an amendment to the LCP (April 23, 1986 letter from Chamberlin).

Implementation Plan for Area of Deferred Certification Awaits Completion

Sand City is not able to fully implement its certified Land Use Plan because the IP was approved with an area of deferred certification. Several options are listed in the land use plan for this area of small undeveloped dune and beachfront lots on paper streets. One option calls for a TDC (Transfer of Development Credits) program. The submitted IP did not contain a TDC program, thus it could not be certified. Sand City attempted to obtain funding from the Coastal Conservancy to prepare a TDC ordinance (October 1985 for \$25,000), but the request was never acted on. The City then asked the Commission for \$28,000 in July 1986, but no funding was available (Van Beckum to Chamberlin, 9/29/86).

The TDC program is not a high priority because of the other options available, such as consolidation of all the property by one ownership. Consolidation has become a more feasible option because the City now has redevelopment authority (Resolution (RA)3(1989) offering Exclusive Right to Negotiate for all the properties located south of Tioga Avenue to the City Limits) and the State Parks Department has renewed its acquisition interest. Thus, at this point there seems to be no urgency in spending public funds to complete a TDC ordinance. On the other hand, given that total lot consolidation has yet to occur, it may be premature for Sand City to amend its Land Use Plan to delete the TDC option. This periodic report recommends other amendments to the LCP as it affects this area of deferred certification. Thus, it might prove expeditious for the City to submit at one time any LUP revisions for this area along with implementation.

2. RECOMMENDATIONS FOR CORRECTIVE ACTION

- J-1 Until the City's Land Use Plan is reprinted, all copies in use and for sale should contain an errata sheet showing certified amendment # 1-86. This procedure should be followed for any future LCP amendment.
- J-2 The City should submit its reorganized zoning ordinance to the Commission for review as an amendment. Those ordinances that are components of the IP should be clearly identified as such, in order to ensure future amendments are properly reviewed by the Coastal Commission. Implementation plan procedures (i.e., administrative procedures, legal document review, Native Plant guidelines) should be codified or referenced.

J-3 The City should promptly submit all zoning and subdivision ordinance amendments that it has approved to the Coastal Commission for review and approval.

J-4 The City should ensure consistency among its legal document review provisions by revising LUP Policy 2.3.10 and corresponding zoning provision second sentence to read,

"Agencies shall have ten years to accept offers; otherwise, the City will accept them within this time period."

If a unified management agency is selected for the dunes in the future, the City should transfer its conservation easements to that agency.

J-5 The City may wish to pursue a categorical exclusion for certain minor categories of development and/or authorize the City Planner to act as zoning administrator to hold coastal permits hearing in lieu of the City Council.

J-6 The City may wish to clarify that Section 18.84.120 limitations on amendment submittals apply only to major amendments.

J-7 The City may wish to enumerate in its zoning ordinance the cases for which it is not responsible for issuing coastal development permits (all other requirements of the zoning and subdivision ordinances would remain applicable):

- areas that permanently remain under Coastal Commission original jurisdiction pursuant to Coastal Act Section 30519(b) and Section 30603(a)(1,2) as illustrated on the Commission's post-certification map
- projects that are proceeding under and in conformance with Coastal Permits issued by the California Coastal Commission
- projects on sites subject to coastal permits issued by the California Coastal Commission authorized by amendments to these permits
- appeals to the Coastal Commission pursuant to pp. 9 and 11 of the Implementation Plan
- projects undertaken by the federal government, subject to the federal consistency requirements of the Coastal Zone Management Act

IV. CONCLUSION

Implementation of the LCP has produced mixed results when considered in the context of achieving consistency with Coastal Act policies. The LCP is basically supportive of extensive new development along the shoreline. Access provision and resource protection are to occur in the context of this new development. While the LCP has some policy guidance to suggest that development must be limited to protect resources, this concept has not consistently been given priority by the City. To date, the City has approved few coastal permits, but has also taken other actions that affect coastal access and resources. Public access opportunities have been reduced through parking restrictions, and no new public access improvements have been made. The City has opposed public recreational agencies' initiatives to acquire land, preferring instead that public recreation be a component of private development. The City would have allowed shoreline structures and argued in court that the criteria for mitigating their impacts were inapplicable. The City investigated relocating an endangered Smith's blue butterfly habitat, rather than preserving it onsite. The City has generally followed technical view protection standards (e.g., height limits, view corridors), but given only cursory attention to the more subjective visual policies.

Implementation of the LCP has also produced accomplishments, most notably the creation of a 7.14-acre butterfly habitat preserve as part of a regional shopping center approval. For the one major City-approved project to date on the shoreline, the Coastal Commission noted that substantial benefits did accrue with regard to access, despite some problems found on appeal. City approval of a revised project (now rescinded) eliminated or reduced many of the Commission's concerns with the first approval, most notably by eliminating a seawall, although it still fell short of meeting all LCP policies.

Recently, the City has indicated interest in moving from the development-driven approach to giving resource protection priority. It is sponsoring a Coastal Restoration Plan to address shoreline erosion, access, viewshed, and habitat protection.

There have been some changed circumstances and new information generated since the LCP was prepared in the early 1980s that affect coastal resources and access. In some cases this information can be factored in through the LCP policy framework. But in other cases, this information calls for a revision of the policies, especially with regard to habitat protection, shoreline structures, and water supply.

This report has attempted to show Sand City's importance in the regional perspective. To boosters, the City represents an opportunity to provide for some housing and visitor-serving hotels. To others, its undeveloped shoreline represents an opportunity to provide open space for recreation and habitat protection, especially in context with the dune complex to the north and the south. A regional planning approach which would require new legal and institutional authorities, might view Sand City in an entirely different context than a locally produced local coastal program.

The Commission recommends that the City follow more closely some of the resource protection policies in the LCP and consider certain changes to its LCP in order to address deficiencies noted throughout this report. Consistency with the LCP must be taken to mean consistency with all provisions, not just those quantitative ones. The thrust of these recommendations is toward less massive developments surrounded by more restored dune habitat and open beach. These recommendations will not result in an undeveloped shoreline -- an objective voiced by some commenters -- but will hopefully implement the LCP in a manner that results in a level of resource protection that can be found consistent with the Coastal Act. In offering these recommendations, the Commission recognizes that they are not binding on the City nor the only way to address the noted deficiencies. However, the Commission believes that these changes to the City's LCP are necessary to assure implementation in complete conformity with Coastal Act policies. Should the City wish to follow through on these recommendations, Coastal Commission staff is available to assist in the implementation of these measures. Some that will require LCP amendments are written in a directive, but not specific manner. For example, the amount of density reduction is not specified. This gives the City flexibility to determine their exact content and language and opportunity to provide supporting information if and when they are submitted to the Commission.

The Commission is concerned with the financial ability of local governments to implement the recommendations such as those contained in this report. The Commission will investigate the availability of possible grant funding or reimbursement of mandated costs to cover the cost of implementing these recommendations. The Commission generally supports the reimbursement of mandated costs.

V. TABLE 2**SAND CITY COASTAL PERMIT LOG: 1984 - JUNE 1990**

PROJECT	LOCAL DATE OF NAME/ADDRESS	PERMIT NO.	ACTION
APPEALABLE (WEST OF RT. 1)			
groundwater monitoring wells	MPWMD, DeZonia/SPF and Monterey Sand, Highway 1	CP-90-01 and CP-90-02	5/15/90
136 room hotel, restaurant	David Bell, 500 Tioga Ave.	CP-89-03	7/18/89*
grading/reclamation	Lone Star Industries, Hwy. 1	CP-87-04; CP-87-02 (emergency)	5/19/87* 3/20/87
4 ac of sand removal	Caltrans, Highway 1	CP-85-01 emergency	4/16/85 2/14/85
229 room hotel/resort	David Bell, Tioga Avenue	CP-84-06	7/11/85*
seawall repair	City of Sand City, Vista Del Mar	CP-84-05	9/18/84
storage and processing of building materials (sawmill)	David Dooleage, 501 Tioga Ave.	CP-84-03	9/7/84
NON-APPEALABLE (INLAND OF RT. 1)			
[Note only portions of most of these fall within the coastal zone]			
2nd floor residential	B & R Investment 718 Redwood Ave.	CP-86-02 Amendment	12/19/89
industrial building	Monterey Iron Works, 431 Ortiz Ave.	CP-89-02	4/18/89
regional shopping center	Monterey Sand Co., n. of Tioga Ave.	CP-89-01	4/18/89
4000 sf truck repair, 47' silo, 2000 sf drainage pond	Granite Rock Co., California Ave.	CP-88-01	11/10/88
parking/mail distribution	Federal Express, 235 Elder Ave.	CP-87-06	8/18/87
change 1500 sq. ft. from storage to commercial	McCord for M & C Williams, 400 Ortiz Ave.	CP-87-03 amendment	9/15/88

* = appealed to Coastal Commission: first Bell denied (A-3-SNC-85-205); second Bell substantial issue found (A-3-SNC-89-134) but appeal rendered moot by subsequent City permit recision; Lone Star pending (A3-SNC-87-131)

SAND CITY COASTAL PERMIT LOG: 1984 to June 1990

(continued)

PROJECT	NAME/ADDRESS LOCATION	LOCAL PERMIT NO.	DATE OF ACTION
commercial bldgs (28,407sf)	M & C Williams, 400 Ortiz Ave.	CP-87-03	4/21/87
storage silo	Granite Rock Company, California Avenue	CP-87-01	1/20/87
900 sf flower shop	Tutto Bella, 1805C Contra Costa Street	CP-86-06	10/16/86
2 lot subdivision	B & R Investments, 718 Redwood Avenue	CP-86-05	10/21/86
1909 sf auto shop	Josh Hageman, 541B Orange Ave.	CP-86-04 Amendment	9/6/86 11/18/86
950 sf office building addition	Granite Construction, Route 1 and Fremont Blvd.	CP-86-03	8/14/86
7,390 sf industrial bldg.	B & R Investments, 718 Redwood Avenue	CP-86-02	6/17/86
13,890 sf commercial bldg.	Bay Laurel Corp., Catalina St.	CP-86-01	5/15/86
14,500 sf open storage	Lubin Cons., 501 Contra Costa St.	CP-85-08	11/19/85
7500 sf auto repair addition	M & C Williams, 449 Ortiz Ave.	CP-85-07	9/17/85
mobile home	M & C Williams, 400 Ortiz Ave.	CP-85-06	8/20/85
remodel 1536 sf commercial building	Rimm Investment, California St.	CP-85-05	7/16/85
excavate 16,700 cy of sand	H & J Campos, Shasta/Elder	CP-85-04	6/18/85
excavate 2000 cy of sand	G & Y Wilson, Shasta/Orange Aves.	CP-85-02	4/16/85
open storage for vehicle parking	H & J Campos, Elder/Shasta	CP-84-02	7/17/84
remove 1000 cy of sand	F & D Engles, Elder/Shasta	CP-84-01	7/17/84
PERMITS DENIED			
open storage/parking	L. Marotta, 872 & 884 Afton Ave.	CP-86-07	1/15/87

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