



INTRODUCTION

Scenic Way is a residential street which lies in an interdunal depression at the northeastern boundary of Baywood Park. During prior investigation of treated wastewater disposal sites, Scenic Way was identified as an area of potential concern for rising water attributable to treated wastewater disposal (Wastewater Disposal Sites Evaluation, Cleath & Associates, October 2001). A Harvest well was tentatively proposed for the area, as noted in the October 2001 report (page 23):

The Harvest well on Scenic Way would be beneficial if shallow perching clay beds are not present and would be recommended if a more detailed understanding of the ground water conditions in that area verifies its effectiveness...otherwise, a shallow subsurface cut-off drain may be required.

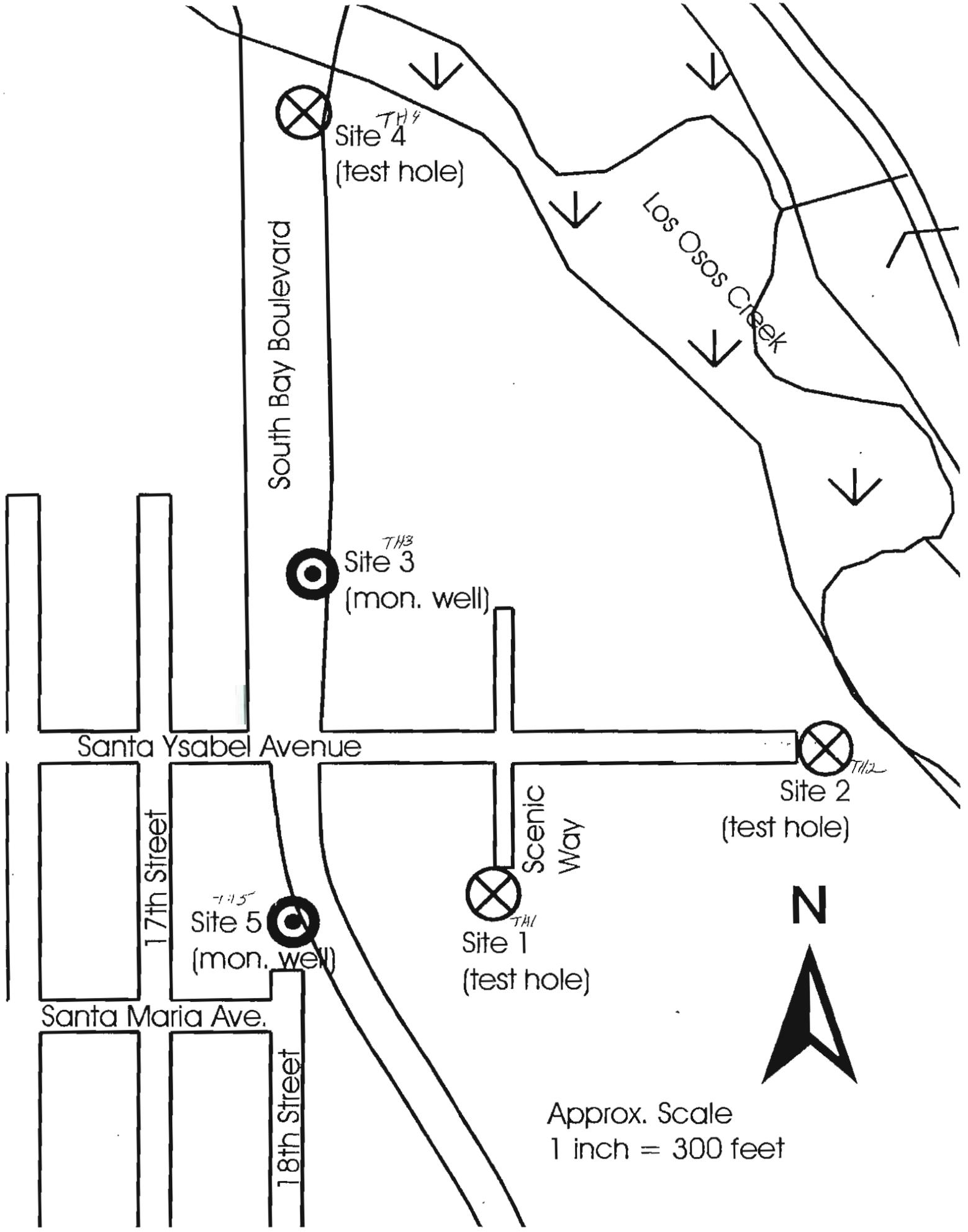
The concern for rising water was based on two drilling logs from private wells that reported sandy brown clay at 10-65 feet and 10-53 feet depth at the south end of Scenic Way. Other nearby logs, however, indicate that the dune sands along Scenic Way should extend significantly deeper. The current investigation was designed to characterize the subsurface lithology, provide data for evaluating ground water mounding under wastewater project conditions, and to include construction of monitoring wells for use in treated wastewater disposal operations.

DRILLING AND WELL CONSTRUCTION

Five test holes, TH1 through TH5, were drilled by S/G Drilling under Cleath & Associates' supervision between March 25 and April 2, 2003 (Figure 1). The test holes were advanced with 8-inch diameter hollow-stem auger, and sampled using standard geotechnical methods at five-foot intervals. Lithologic logs of the test holes are in Appendix A. Selected samples were analyzed for grain size and permeability by Fugro West, Inc (Appendix B).

TH1 was drilled on the southern cul-de-sac of Scenic Way, where private residences in a local topographic depression are the primary concern for rising water impacts. TH2 and TH4 were drilled at the perimeter of the ground water basin along Santa Ysabel Avenue and South Bay Boulevard, respectively. These test holes intercept Franciscan Formation metavolcanics at depth. Test holes TH3 and TH5 were drilled adjacent to future treated wastewater disposal areas, and were converted to monitoring wells for future use during disposal operations. TH3 (Well 30S/11E-8Ma) is located at the south end of a future disposal site on South Bay Boulevard, while TH5 (Well 30S/11E-8Mb) is located near the northeast end of a future disposal site on Santa Maria Avenue/18th Street.

The monitoring wells are completed with 2-inch diameter PVC with 10 feet of well screen (0.020-inch slots) set at the water table. The wells are constructed for the purpose of monitoring the development of ground water mounding associated with future treated wastewater disposal. The wells are permitted



^{TH4}
Site 4
(test hole)

^{TH3}
Site 3
(mon. well)

^{TH2}
Site 2
(test hole)

^{TH1}
Site 1
(test hole)

^{TH5}
Site 5
(mon. well)

Los Osos Creek

South Bay Boulevard

Santa Ysabel Avenue

17th Street

Santa Maria Ave.

18th Street

Scenic Way



Approx. Scale
1 inch = 300 feet

- ▶ Programs aimed at facilitating coordination among agencies and organizations involved in management and conservation/preservation of sensitive resources, including USF&WS, CDFG, California Coastal Commission, San Luis Obispo County, the LOCSD, MEGA, NEP, Land Conservancy of San Luis Obispo County, and others;
- ▶ The creation of a landbank program to facilitate the purchase of properties with high quality habitat within the Greenbelt, to be repaid over time from fees on new building permits;
- ▶ Programs for the acquisition of properties within the Greenbelt with significant habitat resources;

Population and Estimated Wastewater Flows

Population

The design capacity of the proposed wastewater treatment system is based on population projections and calculated flows for the service area in the year 2020. Population projections for the community have been calculated by various entities over the years, including the SWRCB (1982-2007), the County of San Luis Obispo (Draft Estero Area Plan, 2000), and members of the LOCSD Wastewater Committee. The population served by the proposed system is summarized on Tables 3-5 and 3-6.

Table 3-5: Buildout Estimate and Adjustments Within The Urban Reserve Line

Source: LOCSD and Montgomery Watson Americas, 2000

Buildout Population of Collected Area:	19,306
Buildout Population of Uncollected Areas:	2,628
Sub-Total:	21,934
Adjustments:	
Morro Palisades (204 acres)	-1,325
Broderson (north 40 acres)	-18
Total:	20,590

Table 3-6: Summary of Population Served By the Wastewater Facilities Project

Source: LOCSD, 2000

Area	Population At Buildout	Percent of Urban Reserve Line
Urban Reserve Line	20,590 ¹	100%
Adjustment for Uncollected Areas:	-2,628	13%
RWQCB Prohibition Zone/Collection Area	17,963	87%

1. See Table 3-5.

3. Project Description

The collection area is approximately 78% of the total area within the RWQCB Prohibition Zone (see Figure 3-2) and about 47% of the area within the Urban Reserve Line for Los Osos. Areas within the Prohibition Zone with lot sizes of one acre or more are excluded from the collection system. These areas include the Martin Tract, which surrounds Monarch Grove Elementary School, and Bayview Heights, which lies south of Los Osos Valley Road. In addition, the Monarch Grove subdivision has been excluded from the collection system because it has its own package treatment plant.

Wastewater Flows

Based on the population described above in Table 3-5, wastewater flows were estimated as follows:

Dry Weather Flow:	1.365 million gallons per day
Estimated Savings from Water Conservation Program:	0.150 mgd
Adjusted Average Dry Weather Flow:	1.200 mgd
Peak Wet Weather Flow:	1.700 mgd

Supporting Public Services

Public services necessary to construct, operate and maintain the facility include water and electric power; fire and police protection services may be also required in the event of an emergency. Water used by the facility will be minimal. Electric power is currently provided to the community by a number of companies. Reliance on police services is expected to be minimal. Fire service is located nearby, but due to the nature of the facility, would rarely be summoned.

Reasonably Foreseeable Future Phases

This project is designed to serve the 2020 buildout population of the Los Osos area as envisioned by the Estero Area Plan. Although future phases may be necessary, the project incorporates reasonable estimates of long-term growth and is considered cumulative. In the future it may be necessary (or desirable) to collect septic tank effluent from areas outside the Prohibition Zone adopted by the RWQCB, such as Cabrillo Estates. For this reason, the collection system is being designed so that it can be readily extended to these areas if necessary in the future.

Another option being considered for future phases of the Wastewater Facilities project is the recycling of bio-solids for re-use as a soil amendment as an alternative to hauling. Under this alternative, treated sludge would be removed from the Wastewater Treatment facility about three times per week and hauled to bio-solids recycling center where it would be combined with green-waste (organic mulch) and allowed to decompose. The bio-solids recycling facility would consist of about four acres and would contain a two-acre covered concrete pad and support facilities as illustrated by Figure 5-11.

LEGEND

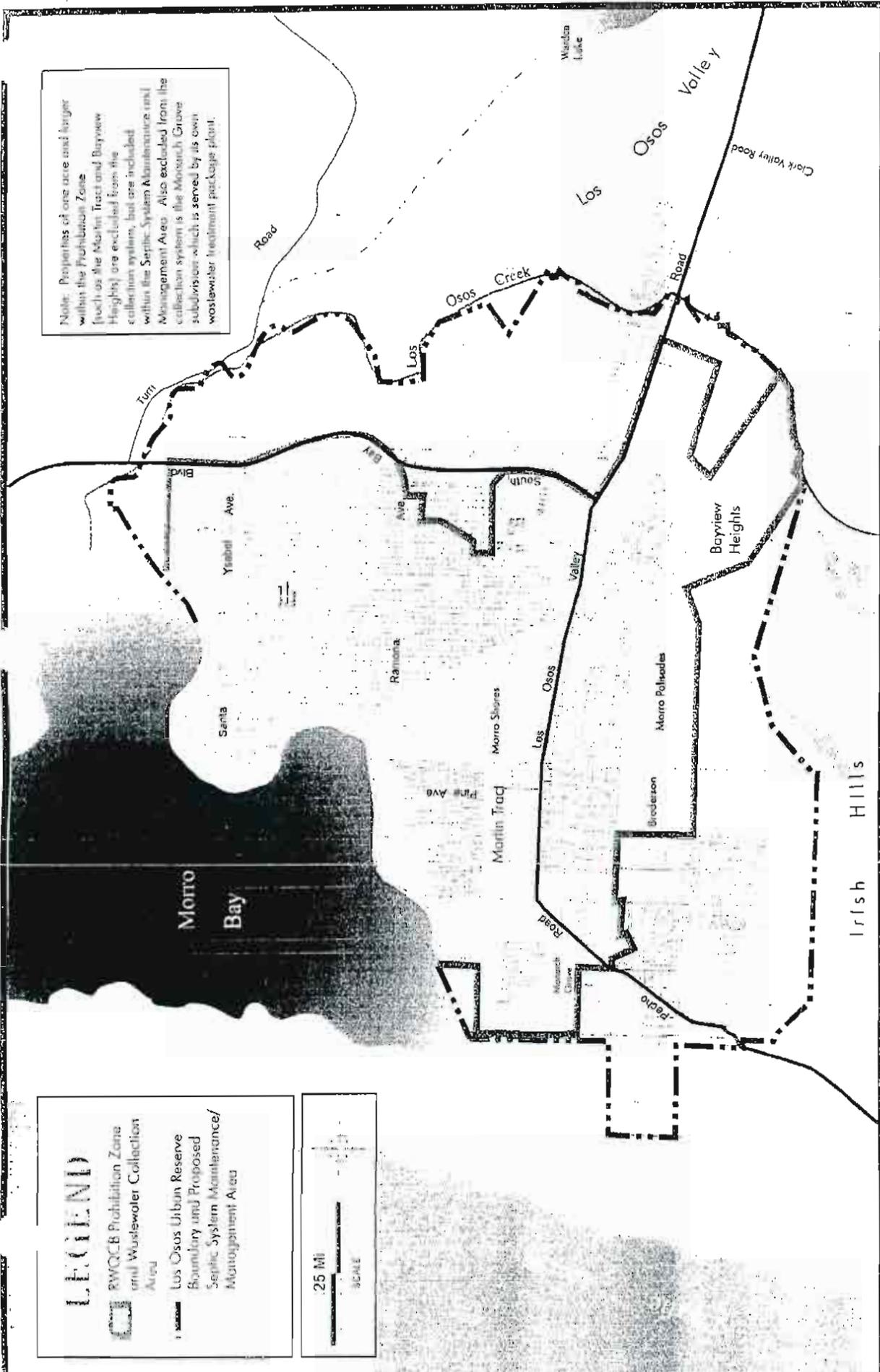
 RWQCB Prohibition Zone and Wastewater Collection Area

 Los Osos Urban Reserve Boundary and Proposed Septic System Maintenance/Management Area

0.25 Mi
SCALE



Note: Properties of one acre and larger within the Prohibition Zone (such as the Martin Tract and Bayview Heights) are excluded from the collection system, but are included within the Septic System Maintenance (SM) Management Area. Also excluded from the collection system is the Monarch Grove subdivision which is served by its own wastewater treatment package plant.



LOS OSOS COMMUNITY SERVICES DISTRICT WASTEWATER FACILITIES PROJECT

Figure 3-2
Wastewater Collection Area &
Proposed Septic System Maintenance
and Management District

Attachment 3

LOS OSOS URBAN AREA: COMMUNITYWIDE

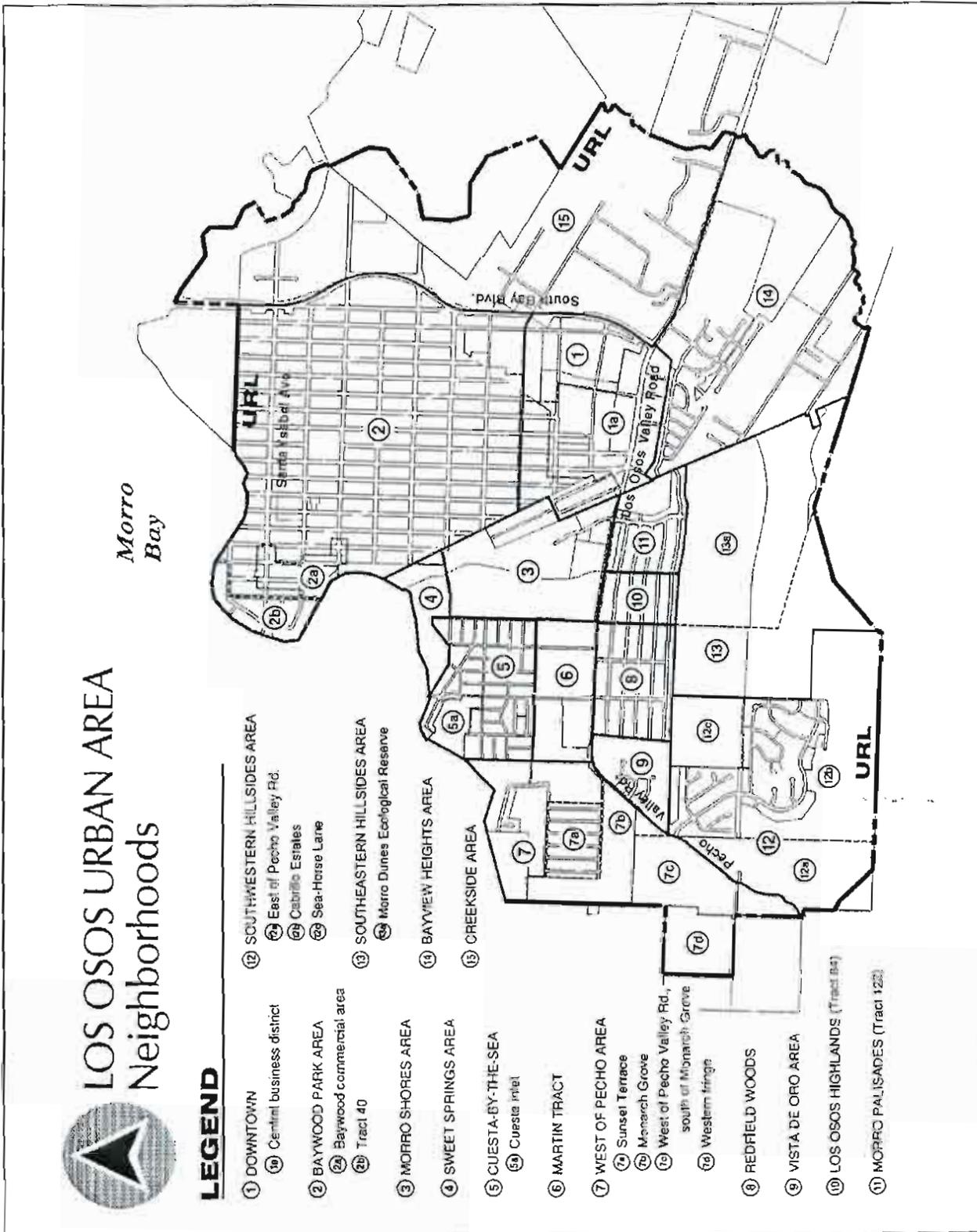
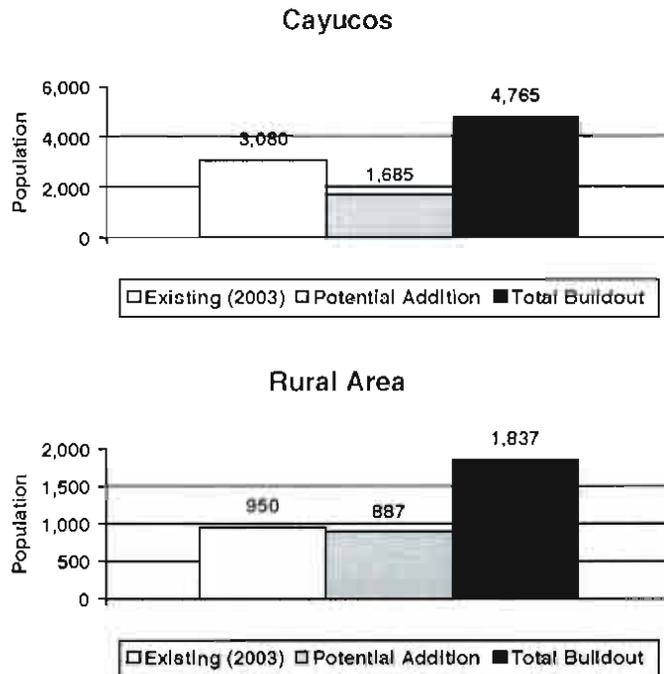


Figure 7-37: Los Osos Location Map

TABLE B- ABSORPTION CAPACITY ¹ ESTERO PLANNING AREA				
Land Use Categories	Rural Area	South Bay Los Osos	Cayucos	Total
Agricultural	1,900			1,900
Rural Lands	94			94
Residential Rural	104			104
Residential Suburban	280	1,956		2,236
Residential Single Family		19,416	2,791	22,207
Residential Multi-Family		5,796	2,678	8,474
Office and Professional		1,512	171	1,685
ABSORPTION CAPACITY	2,378	28,688	5,642	36,708
Existing Population	852	20,381	2,292	13,525
POTENTIAL ADDED POPULATION	1,526	18,307	3,350	23,183

1 Potential population at building by land use category.
2 Does not include population of city of Morro Bay (8,876 in 1980).

Figure 2-7: Existing Population and Theoretical Potential at Buildout



**Table A – Population Projections
Estero Planning Area**

Year	Rural Area	South Bay	Morro Bay	Cayucos	Planning Area	% of County
1979	832	9,593	8,685	2,223	21,333	14.74
1980	852	10,381	8,876	2,292	22,401	14.96
1985	960	12,630	9,896	2,531	26,017	15.38
1990	1,080	14,220	10,926	2,775	29,001	15.63
1995	1,216	15,700	11,940	3,001	31,857	15.74
2000	1,369	17,334	13,047	3,246	34,996	15.88

Table 2-5: Estimated Growth and Buildout¹

AREA	2003	2005	2010	2015	2020	2022
Cayucos	3,080	3,220	3,610	4,050	4,530	4,765 buildout in 2022 ²
Rural	950	990	1,110	1,250	1,400	1,460
						1,837 buildout in 2031 ⁴

1 Population estimates assume 2.3% annual growth rate.
 2 Buildout estimate for Cayucos assumes 9.3% vacancy for existing development, 5% vacancy for future development, 2.09 persons per occupied dwelling unit
 4 Buildout estimate for the Rural area assumes 100% occupancy and 2.67 persons per occupied dwelling unit

Attachment 6

POPULATION AND ECONOMY: POPULATION PROJECTIONS

Table 2-5: Estimated Growth and Buildout

AREA	2003	2005	2010	2015	2020	2022
Cayucos	3,080	3,220	3,610	4,050	4,530	4,765 buildout in 2022 ²
Los Osos	14,440	14,520	16,260	18,220	19,713 buildout in 2018 ³	19,713
Rural	950	990	1,110	1,250	1,400	1,460 1,837 buildout in 2031 ⁴
Planning Area	18,470	18,730	20,980	23,520	25,530	25,800 26,315 buildout in 2031
1	Population estimates assume 2.3% annual growth rate, except in Los Osos: assume 0.20% total population growth between 2002 and 2005 (the same rate as between 1997 and 2002); 2.3% per year thereafter					
2	Buildout estimate for Cayucos assumes 9.3% vacancy for existing development, 5% vacancy for future development, 2.09 persons per occupied dwelling unit					
3	Buildout estimate for Los Osos assumes 100% occupancy and 2.44 persons per occupied dwelling unit					
4	Buildout estimate for the rural area assumes 100% occupancy and 2.67 persons per occupied dwelling unit					