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June 14, 2022

Via U.S. Mail and E-Mail

rbartoli@smcgov.org

Mr. Rob Bartoli Executive Officer San Mateo LAFCo 455 County Center, 2nd Floor Redwood City, CA 94603

Re: Exhibits for Presentation: Municipal Service Review for East Palo Alto Sanitary District

Dear Mr. Bartoli:

We are pleased to be given the opportunity to present to the Local Agency Formation Commission ("LAFCo" or "Commission") on the subject of the Municipal Service Review ("MSR Report") prepared regarding the East Palo Alto Sanitary District ("EPASD"). As part of our presentation, we will refer to the following documents, which can all be found on the LAFCo website under the archive of documents. We ask that the Commission take Notice of their own documents:

1. Exhibit 1: MSR Draft Report of EPASD, dated February 12, 2009

This document serves as a contrast to the MSR Report now under consideration by the Commission. The Commission is directed to page 10 of the 2009 Report, where it states the purpose of the report is as follows: "This analysis is not a proposal to reorganize service providers, rather it identifies alternatives that may be further examined by the District, rate payers and affected agencies."

The 2009 Report carefully balances the pros and cons of EPASD reorganization, including the thorny issue of the disenfranchisement of hundreds of Menlo Park ratepayers if EPASD came under the control of the City of East Palo Alto ("City"). The 2009 Report also noted concerns of a "general service" local agency (i.e., City of East Palo Alto) undertaking the specialized functions of a specialized district. In contrast, the MSR Report now before the Commission reads like a thinly veiled trial brief, with little or no consideration of the pros and cons of each potential action, including the maintenance of the status quo.

2. <u>Exhibit 2: Memorandum from Martha Poyatos, Executive Officer to Members of Formation Committee, dated October 8, 2008</u>

Although addressing another section of the County, the Commission should note Ms. Poyatos' analysis of the need for regional cooperation and governance in a County where service districts are often disorganized and uncoordinated. This specifically states, "[t]he Service Review Determinations identified the need for regional governance to best provide water and sanitary sewer service, including water recycling."

As Ms. Poyatos' comments note, the path to better water and sanitary services is regionally based services. The current MSR Report does not even address the concern of continued fragmentation, especially when this fragmented approach would be undertaken by a City with continued fiscal and administrative issues.

3. Exhibit 3: Current List of Joint Power Authorities ("JPAs") taken from LAFCO Website.

The LAFCO website has a long list of JPAs providing direct services to the public, including the Sewer Authority Mid-Coastside and Silicon Valley Clean Water. Both agencies include wastewater and sewage disposal. One of the paths to a systemic, non-adversarial approach to sanitary services is through a county-wide sanitary JPA. EPASD is willing to undertake this approach.

4. Exhibit 4: "Second Restated and Amended Agreement Between The City of Palo Alto and the East Palo Alto Sanitary District For Wastewater and District Outfall"

Although not an Exhibit found on the LAFCO website, the Agreement supports the notion that multiple agencies can agree to approaches that support efficiencies in service and cooperation. The Agreement, involving the City, EPASD, Mountain View and Los Altos was originally entered into in 1940 and continued to this day. It is in reality a Joint Powers Agreement and centers around the construction and maintenance of a waste treatment plant. It also includes agreements to comply with federal state laws and regulations regarding wastewater collection, transmission, treatment, and disposal.

5. Exhibit 5: Sea-Level Rise: a Slow-Moving Emergency, Select Committee Report of 2014

The MSR Report implies that EPASD has singularly failed to address the long-range impacts of sea-level rise. This implication is absurd, as shown by the Select Committee Report, the impact of sea-level rises is a global and enduring problem and affects water and sanitary districts throughout the State.

Rob Bartoli June 14, 2022 Page 3

EPASD reserves its rights to amend this exhibit list, as necessary. Should you have any questions or concerns, please do not hesitate to contact me at mwilliams@f3law.com.

Sincerely,

FAGEN FRIEDMAN & FULFROST, LLP

Mark S. Williams

MSW

Encl.

cc: Timothy Fox, Esq. (via e-mail)

Akin Okupe, General Manager of East Palo Alto Sanitary District (via e-mail) Sergio Ramirez, District Manager of West Bay Sanitary District (via e-mail)

Patrick Heisinger, Interim City Manager (via e-mail)

James Cook, Esq. (via e-mail)

EXHIBIT 1

February 17, 2009

TO: Members, Local Agency Formation Commission

FROM: Martha Poyatos, Executive Officer

SUBJECT: Municipal Service Review and Sphere of Influence Update for

the East Palo Alto Sanitary District

Attached please find the municipal service and sphere of influence update and recommended determinations for the East Palo Alto Sanitary District. LAFCo is required by State law to complete municipal service and sphere of influence reviews for all cities and special districts in the County by taking three actions: adopt Municipal Service Review Determinations pursuant to Government Code Section 56430 (Attachment B to this memo); adopt Sphere Influence Determinations pursuant to Government Code Section 56425 (Attachment C); and reaffirm or amend the sphere of influence.

The attached determinations and recommendation to reaffirm the sphere of influence for the East Palo Alto Sanitary District have been prepared for consideration based on information provided and limited comments received on the report. However, it should be noted that since continuance at your January 21, 2009 hearing, the service review was not placed on the East Palo Alto Sanitary District agenda for consideration of formal comment. LAFCo did request and receive additional information from the District based on questions at the January meeting and today received the attached comments from the District's General Manager. In addition, LAFCo received the February 18, 2009 agenda of the District's Public Information and Governmental Affairs Committee that includes discussion of LAFCo related issues. If the Commission desires to have additional comments beyond comments received today, the Commission may wish to continue consideration again in the event the District will place the report on the District's agenda for formal comment.

MSR/SOI East Palo Alto Sanitary District February 17, 2009 Page 2 of 3

Comments from East Palo Alto Sanitary District

The District General Manager comments received today are summarized as follows: a request that the report acknowledge 70 years of continuous operations; states that the report should include financial condition of City of East Palo Alto and West Bay Sanitary District including debt and pending lawsuits; the report lacks historical information regarding community representation resulting from reorganization; that after twenty years of a sphere of influence other options should be considered; consideration of local control of ratepayers of board membership and board sensitivity to the customers that would be adversely affected by the LAFCo recommendations; (fiscal) impact to rate payers that support feasibility of reorganization; and in general, the information in the report is limited and inadequate to support conclusions. (Attachment A)

First Municipal Service Review for East Palo Alto Sanitary District

It merits emphasis that while LAFCo has been required to adopt and review spheres of influence since 1985, municipal service reviews are a newer requirement. This is the first municipal service review being completed on East Palo Alto Sanitary District (EPASD). While the service review contains fiscal information on district operations and provides discussion of governance alternatives, it is not intended to be a comprehensive analysis of detailed fiscal impacts that would result from reorganization. It affords the opportunity to identify potential areas of savings and shared resources, in some cases through consolidation and in some cases by comparison of best practices of similar agencies. While study from an outside agency in the context of broader state policies may not be welcome, the LAFCo municipal service review expands the discussion of maximizing resources beyond agency boundaries.

Discussion in the LAFCo report is in the context of State policies that favor multipurpose agencies or regional agencies over several layers of limited purpose agencies, particularly in urban areas. In the context of sewer service provided wholly within cities, the report offers alternatives for achieving efficiencies in service through consolidation of service providers. And equally important, when considered at the special district board meeting, affords the opportunity for dialogue regarding rates in the long term, potential areas of savings, best practices and allocation of resources.

MSR/SOI East Palo Alto Sanitary District February 17, 2009 Page 3 of 3

Changes to the Municipal Service Review and Sphere of Influence Update

In response to questions at the January meeting and based on additional information provided, the municipal service review and sphere of influence report has been updated, including actual budget data for 2006-07 and 2007-08 and discussion of a variation on governance alternatives that would provide for reorganization of East Palo Alto And West Bay Sanitary Districts to result in sewer authority conforming with city boundaries. Recommended determinations have also been drafted for Commission consideration.

Municipal Service Review Determinations:

Staff believes that the attached municipal service review, sphere of influence update, and recommended determinations are consistent with Government Code Sections 56430 and 56425 and with LAFCo's mission to promote logical boundaries and efficient service delivery.

Attachments: Municipal Service Review & Sphere of Influence Update

Municipal Service Review Determinations

Sphere of Influence Determinations



EAST PALO ALTO SANITARY DISTRICT

BOARD OF DIRECTORS
Glenda Savage, President
Edrick Haggans, Vice President
Joan Sykes-Miessi, Secretary
Bethzabe Yañez, Director
Goro Mitchell, Director

901 Weeks Street P. O. Box 51686 East Palo Alto, CA 94303 Phone: (650) 325-9021 Fax: (650) 325-5173 www.epasd.com

Leroy Hawkins, General Manager

February 12, 2009

Martha Poyatos, Executive Officer San Mateo LAFCo 455 County Centers, 2nd Floor Redwood City, CA 94063

Dear Ms Poyatos:

This year, the East Palo Alto Sanitary District will be celebrating over 70 years of continuous operations providing sanitary sewer services to the East Palo Alto and East Menlo Park communities. Our financial statements consistently report a cost efficient operation with adequate reserves and a plan toward the future. It was unfortunate you had to discuss your draft municipal review report while I was unavailable. It was my understanding, that you were delaying comment to your February 18, 2009 meeting.

It's certainly appropriate and timely that LAFCo perform municipal service reviews, however, I have to question the limited amount of data and analysis utilized to reach the conclusions presented in your report.

Please note the following comments:

- Your list of advantages and disadvantages should include more information on current cost and efficiencies of District operations. After all, 70 years of continuous operations should at least be mentioned in a final report.
- The scope of review not clearly defined so we can never be sure if the conclusion reached are credible- it would help to know the financial condition of the Westbay Sanitary District and the City of East Palo Alto, how much debt do they have are there current or pending lawsuits which could adversely effect a merger, etc., what is the short term (five year (5)) financial outlook for these agencies when compared to the District?

- Lack of important historical data which could influence the final recommendation.
 Some communities have typically been underrepresented; will a dissolution/merger result in disenfranchisement of our customers in the political process?
- Each sphere of influence issued for the past 20 years or more say the same thing
 with little or no deviation. After such a long period reaching the same conclusions, it
 maybe time to expand the scope of the municipal review process and consider
 other options.
- We all want what is best for our customers and community. A report that values local control and participation would benefit all citizens. Currently the district is controlled locally and ratepayers can decide who sits on the board of directors. Local control is important to the future growth of our community and currently, we enjoy a sensitivity of our customers that could be adversely affected by your recommendations.
- Finally, any proposal for dissolution and/or merger must have at its core, the impact on District ratepayers as a primary measure for the feasibility for such a decision. The economy of scale argument is not sufficient when some customers or asked to shoulder debts not of their making.

Again, your report appears to be based on a cursory review of financial data submitted while the information is good, it is limited and inadequate to support the conclusions you have reached.

If you have any questions please call me at (650)325-9021.

Sincerely,

Lee Hawkins General Manager

C: Naomi Patridge, City Member, Vice Chair Iris Gallagher, Special District Member Rich Gordon, Board of Supervisors, Chair Adrienne Tissier, Board of Supervisors Howard Jones, Public Member Robert Craig, Special District Member Sepi Richardson, City Member David Altscher, Alternate Special District Member Rose Jacobs Gibson, Alternate for Supervisors Barbara Pierce, Alternate for City Member Linda Craig, Alternate for Public Member

Draft February 12, 2009

Municipal Service Review Determinations
East Palo Alto Sanitary District

Determinations pursuant to Government Code Section 56430:

1. Regarding infrastructure needs and deficiencies:

- a) The East Palo Alto Sanitary District contracts for sewage treatment at the Palo Alto Water Quality Control Plant by agreement with City of Palo Alto.
- b) Sewer infrastructure identified in the Municipal Service Review includes approximately 30 miles of sewer pipelines and 560 manholes. The District also owns District offices and maintenance facilities.
- c) The District has an adopted capital improvement plan and is responsible for a proportionate share of capital improvements at the City of Palo Alto Water Quality Control Plant.

2. Regarding growth and population projections for the affected area, the Commission determines:

a) Population growth estimates by the year 2030 for the area served by East Palo Alto Sanitary District range from 27% to 49%

3. Regarding financing constraints and opportunities and opportunities for rate restructuring, the Commission determines:

- a) The District board is the rate-setting body for sewer service.
- b) The Bartle Wells 10-Year Financial Plan and Rate Projections indicate the need to adjust the current residential rate of \$415 per year annually to \$520 per year by July 2011.
- c) Sewer districts that offset sewer rates with property tax have the opportunity to adjust rates to provide for eventual allocation of property tax for nonenterprise activities or the event that property tax revenues are no longer available to enterprise districts.

4. Regarding cost avoidance opportunities and shared facilities, the Commission determines:

a) The Sewer District practices cost avoidance and shared facilities through participation in the City of Palo Alto Water Quality Control Plant.

- b) Other opportunities for cost avoidance and shared facilities exist through reorganization of the district as a subsidiary district, consolidated with West Bay Sanitary District to achieve efficiencies and economies of scale and eliminate redundant costs associated with dual administration and governance in overlapping areas.
- c) Under current governance, cost avoidance opportunities appear to exist when board compensation and travel expenditures are compared to neighboring agencies. In this regard, the District board is encouraged to consider and adopt best practices in compensation for similarly sized districts.

5. Regarding evaluation of management efficiencies, the Commission determines:

- a) See Number 6 below.
- 6. In regard to government structure options, including the advantages and disadvantages of consolidation or reorganization of service providers, the Commission determines:
- a) Given the relatively small size of the EPASD service territory located wholly in cities and adjacent to a regional sewer district, options for consolidation with either the City of East Palo Alto or West Bay Sanitary District offer potential for efficiencies and economies of scale for operations and rates, streamlined planning for infrastructure, efficient and timely decision making by a fewer number of elected boards. In general disadvantages of reorganization include the short-term cost and effort of implementing organizational change and a less focused governance approach and representation for a single municipal service.
- b) Governance Alternatives include:
 - 1. Establishment as a subsidiary district of the City of East Palo Alto
 - 2. Dissolution of the District and annexation of the service area to West Bay Sanitary District
 - 3. Reorganization of the EPASD & WBSD, dissolving EPASD and reorganizing sewer service through annexations and detachments that would place territory in the City of East Palo Alto under sewer service authority of the City and placing all territory in City of Menlo Park under service authority of West Bay Sanitary District
 - 4. Continued existence of the district

7. Regarding local accountability and governance, the Commission determines:

- a) The District adopts a budget that includes proposed expenditures and revenues.
- b) The District is encouraged to include on the District Website, prior year budget, audited financial statements and the LAFCo Municipal Service Review.
- c) District public meetings are televised on local cable television.

<u>Draft Recommended Sphere of Influence Determinations</u> <u>East Palo Alto Sanitary District</u>

(1) The present and planned land uses in the area, including agricultural and open-space lands.

Consisting primarily of residential, commercial, and institutional land use designations, land use in district boundaries is varied and the under the jurisdiction of the Cities of East Palo Alto and Menlo Park.

(2) The present and probable need for public facilities and services in the area.

The area within District boundaries consists primarily of residential, commercial, institutional land use requiring basic municipal services and there is a demonstrated need for continued delivery of sanitary sewer services.

(3) The present capacity of public facilities and adequacy of public services that the agency provides or is authorized to provide.

Services provided by EPASD include sanitary sewer service through District boundaries. The Board of Directors approved a Capital Plan for replacement of sewer mains identified in the September 2002 Master Plan Update. The report identifies deficiencies and makes recommendations for improvements. Since adoption, the District reviews the plan each year to incorporate capital improvements with City of East Palo Alto redevelopment.

(4) The existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency.

The District serves most of City of East Palo Alto and portions of City of Menlo Park. While the service area includes customers served by a single wastewater collection system that flows to a separate sewage treatment plant in the City of Palo the neighborhoods served share a community of interest with their respective cities and an economic interest in a long-term plan for efficient and affordable Municipal services.

Municipal Service Review and Sphere of Influence Update East Palo Alto Sanitary District February 16, 2009

Introduction

This municipal service review and sphere of influence update for the East Palo Alto Sanitary District is being completed as required by Government Code Sections 56425 and 56430 which require the Local Agency Formation Commission (LAFCo) to prepare and update spheres of influence in conjunction with, or after, preparing a municipal service review. This updated report includes information and comments provided in response to circulation of a draft document. Since the draft was circulated, LAFCo received the District's Bartle Wells Associates 10-Year Financial Plan and Rate Projections and the District's June 2008 Audited Financial Statements. Budget data has been updated to reflect 2006-07 and 2007-08 actual budgets based on San Mateo County Controller's Schedule 16.

A municipal service review is an analysis of public services in which determinations are made regarding adequacies or deficiencies in service, cost effectiveness and efficiency, government structure options and local accountability. Once adopted by LAFCo the spheres of influence serve as the plan for governance and boundaries of special districts. This is the first municipal service review completed on EPASD.

Local Agency Formation Commission (LAFCo)

Created by the State legislature in 1963, the Local Agency Formation Commission (LAFCo) is a State-mandated, independent commission with countywide jurisdiction over the boundaries and organization of cities and special districts including annexations, detachments, incorporations, formations, consolidations and dissolutions. LAFCo adopts sphere of influence as plans for probable boundaries of cities and special districts. LAFCo operates pursuant to the Cortese Knox Hertzberg Local Government Reorganization Act of 2000(Government Code Section 56000 and 57000 et seq.) LAFCo has two members of the Board of Supervisors, two city council members of the cities in the county, two directors of independent special districts in the county, a public member, and four alternate members (county, city, special district and public). As an independent

commission, LAFCo adopts its own budget and contracts with the County of San Mateo for staff, facilities and legal counsel. The Executive Officer serves in the administrative capacity, which includes staff review of each proposal, municipal service reviews and sphere of influence studies and assistance to local agencies and the public. LAFCo's net operating budget is apportioned in thirds to the County of San Mateo, the 20 cities and the 23 independent special districts. For additional information on LAFCo please visit www.sanmateolafco.org.

East Palo Alto Sanitary District

East Palo Alto Sanitary District (EPASD) was formed in 1939 pursuant to the Sanitary District Act of 1923 (Health & Safety Code 6420) in order to provide sewer services to increased development in what is now City of East Palo Alto and portions of City of Menlo Park. (Please see Map #1) As noted on the District's website, the initial sewer lines were installed as a Federal Works Progress Administration (WPA) project and construction began after the treatment contract with the City of Palo Alto was signed in 1940. District facilities were put into operation on September 8, 1942. Services authorized under Section 6420 et seq. include collection, treatment and disposal of garbage, storm water and sewage. EPASD provides sewage collection and contracts for treatment with the City of Palo Alto. 1 Under the contract EPASD owns 7.64% of capacity rights at the City's treatment plant, is responsible for a proportional share of construction costs amortized at \$85,421 per year² and annual operating costs based on proportional flow to the plant, budgeted at \$1.5 million for 2007-2008.

EPASD has approximately 3,300 single residential connections, 3,500 multi-family connections and 300 commercial, industrial and institutional connections including hotels, school/churches, retail, office and medical. The District charges sewer service fees and connection fees and receives approximately \$180,000 annually in property tax. The District is governed by a five-member board of directors, serving four-year terms. A General Manager, appointed by the Board, manages District operations. The following table provides an overview of East Palo Alto Sanitary District.

2

¹ Stormwater and garbage collection are under the jurisdiction of respective cities.

² City of Palo Alto cites amortization at approximately \$75,311

EAST PALO ALTO SANITARY DISTRICT

901 Weeks Street Contact Person: Leroy Hawkins

East Palo Alto, 94303

650/325-9021 FAX 650/325-5173

Website: www.epasd.com

Date of Formation: August 28, 1939

Enabling Legislation: Section 6400 State Health & Safety Code

Governing Board: Five-member board of directors elected to four-year terms

a. Membership and Term Expiration: Joan Sykes-Miessi, President (11/09), Edrick Haggans (11/09),

Goro Mitchell (11/11), Glenda Savage-Johnson (11/11),

Bethzabe Yañez(11/11)

b. Compensation: \$264.00 per regular meeting

\$100.00 per other meeting,

c. Public Meetings: First Thursday of the month at 7:00 p.m.

901 Weeks Street, East Palo Alto

Services Provided: Sanitary Sewer Collection

District The majority of East Palo Alto and a Estimated Population: 28,000 persons

boundaries: small portion of Menlo Park (census 2000)

Contractual Arrangements: Sewage Treatment with the City of Palo Alto

Number of Personnel: 9 full-time: Management 1, Supervisory 2, Administrative 2.5, Maintenance 3.5

Sphere of Influence: Zero, indicating services could be assumed by another agency

Service review criteria as set forth in Government Code Section 56430 are examined below.

Infrastructure needs or deficiencies

<u>District offices:</u> District facilities include the District's office at 901 Weeks Street, East Palo Alto, which the District lists in very good condition. The District is in the process of remodeling 2,680 square feet of the second floor at an estimated cost of \$210,000. The District is in the process of negotiating a lease with tenants that will occupy this space.

Capital Plan: The District maintains approximately 30 miles of sewer mains and about 560 manholes. Sewage is transported via gravity mains to the City of Palo Alto Water Quality Control Plant. The Board of Directors approved a Capital Plan for replacement of sewer mains identified in the September 2002 Master Plan Update. The report identifies deficiencies and makes appropriate recommendation for improvements. Since adoption, the District reviews the plan each year to incorporate capital improvements with City of East Palo Alto redevelopment. In the 2007-2008 Fiscal Year, the District repaired and replaced sewer mains located on Woodland, Runnymede and Poplar. Anticipated annual expenditures for repairs and replacement of sewer mains in the next five years is \$1,500,000.

The District's agreement with City of Palo Alto and associated and sewage treatment fees include non-major capital improvement costs. The City of Palo Alto is in planning stage of the Ultraviolet Disinfectant Facility projected to cost \$12 million. EPASD's share is estimated at \$69,000 per year, with first loan payments projected to begin in Fiscal Year 2012.

Sewage Treatment Capacity: The District comments that the City of East Palo Alto Redevelopment Agency has indicated a need for an additional sewage treatment capacity of approximately 1.4 million gallons per day (mgd), in effect increasing by 33% the District's average 2.9 mgd dry weather flow capacity. Along with Town of Los Altos Hills and Stanford University, EPASD purchases sewage treatment capacity from the City of Palo Alto, which is a joint owner, along with Mountain View and City of Los Altos, of the Palo Alto Water Quality Control Plant. EPASD estimated flow to the Palo Alto Water Quality Control Plan is 1.8 mgd, of the 2.9 mgd capacity included in the District's agreement with Palo Alto. Any additional capacity would need to be purchased from

the City of Palo Alto, City of Mountain View or City of Los Altos.

<u>Water Conservation Program</u>: The District is working with the City of East Palo Alto (California American Water Company) to help homeowners replace inefficient toilets with new low flow, high-efficient toilets.

<u>Lateral Replacement Program</u>: The District is planning a Lateral Replacement Program to assist homeowners in replacing broken sewer laterals in order to decrease infiltration/inflow³ into sewer mains.

Growth and population projections for the affected area.

The EPASD territory includes the majority of the City of East Palo Alto and a portion of the City of Menlo Park as shown in Map #1. The estimated Census 2000 population of the District is In regard to growth projections, the City of East Palo Alto 2006 Urban Water Management Plan states that East Palo Alto's population grew by 26 percent through the 1990s, and estimated that with population growth trends of approximately 2.5% per year, by 2030 East Palo Alto's population was expected to grow by 27% reaching 32,712 persons. 4 Growth by the year 2030 within EPASD boundaries is anticipated to range from 27% to 49% in City of East Palo Alto and up to 15% for areas in City of Menlo Park boundaries. As noted above, EPASD estimated flow to the Palo Alto Water Quality Control Plant is 1.8 mgd, of the 2.9 mgd average dry weather capacity included in the District's agreement with Palo Alto. Any additional capacity would need to be purchased from the City of Palo Alto, City of Mountain View or City of Los Altos.

Financing constraints and opportunities and Opportunities for Rate Restructuring

The District's budget for the current and previous two fiscal years is summarized in the table below:

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³ Infiltration/inflow refers to intrusion of clean water into sanitary sewer mains from the ground through defective laterals, mains or manholes.

⁴ In contrast, Association of Bay Area Governments (ABAG) policy based forecasts, project that the City of East Palo Alto will grow by 49% by 2030 reaching 44,000 persons. Projections for City of Menlo Park indicate that by 2030, the City's population will grow by 15% from the Census 2000 population of 35,254 to 40,400 persons.

Ea	st Palo Alto Sanitary I	District 5	
	General Fund Revenu 2006-2007 Actual	2007-2008 <u>Actual</u>	2008-2009
Beginning Fund Balance	724,331	1,939,755	2,099,107
Cancellation of Prior Year Reserves	1,144,676	1,565,766	2,000,107
Property Taxes	285,482	334,497	180,000
Homeowner Property Tax Relief	4,372	4,481	100,000
Interest Earnings	68,105	93,386	62,800 ⁶
Sewer Service Charges	2,920,967	2,962,768	3,244,000
Connection Charges	0	32,625	5,2 : :,666
Miscellaneous Revenue	65,902	201,496	-
All Other Misc. Revenue	0	10,978	
Plan/Inspection Fee	2,050	3,800	
Stale-dated Checks	(1,219)	321	
ERAF Rebate	122,577	105,536	
Total Available Funds	\$4,232,488	\$5,159,267	\$5,585,907
Based on annual residential rate of:	\$380	\$380	\$415
Dated of annual recidential rate of	Actual 2006-07	Actual 2007-08	Adopted 2008-09
Salaries & Benefits	7101441 2000 07	7101441 2007 00	71400104 2000 00
Salaries & Wages ⁷	418,814	532,714	680,000
Directors' Fees	50,126	56,594	76,800
Benefits	170,530	286,622	290,000
Sub-Total	639,470	875,930	\$1,046,800
Operation & Maintenance		515,000	V 1/0 10/000
Supplies	834	3,469	4,700
Office Expense	22,121	31,703	21,500
Election Expense	-	-	-
Memberships	9,394	16,129	17,500
Publications & Legal Notice	7,532	9,270	9,500
Gas, Oil & Fuel	5,060	7,061	9,504
Repairs & Maintenance	30,922	38,232	30,000
Rents & Leases	-	-	500
Utilities	28,106	28,527	26,000
Travel & Meetings	43,865	80,871	72,000
Training & Education	12,231	17,250	20,000
Contract Sewage Service	1,359,005	1,190,961	1,310,000
Contractual Services	97,520	72,275	88,200
Engineering & Management Services	33,432	27,322	35,000
Professional & Accounting	74,500	78,600	82,000
Professional Services	6,610	19,533	20,000
Research & Monitoring	-	-	400
Operating Expenses	1,205	2,549	3,396
District Special Expense ⁸	5,037	6,002	45,500
Total Services and Supplies	1,737,015	1,629,753	1,795,700
Continues next page			

 ⁵Actuals for 06-07 and 07-08 from San Mateo County Controller's Schedule 16.
 ⁶ Under projection of property tax revenue according to actual property tax reported in Schedule 16
 ⁷ Increases in the salaries and benefits reflects the District changing from 32 hour to 40 hour week and addition of health club benefits

⁸ For 2008-09 includes funds for celebration of 70 Years of District operation and to cover educational materials.

Other Charges			
Retirement of Long Term Debt	75,412	75,220	85,000
All Other Insurance	9,077	42,647	43,500
Legal Services	40,514	41,900	35,000
Sub-Total Other Charges	119,950	159,766	163,500
Capital Expenditures			
General Facilities	282,589	282,303	283,000
Equipment	136,124	75,892	192,000
Sub-total	418,714	358,195	475,000
Transfers Out	50,000	0	0
Sub-total	2,915,149	3,023,644	3,481,000
General Reserves			3,103,082
Total Expenditures	\$2,915,149	\$3,023,644	\$6,584,082

The District's General Fund provides unrestricted funds and supports operating cash flow. The table above reflects actuals for 2006-07 and 2007-08 as reported in the San Mateo County Controller's Schedule 16 and 2008-09 as shown in the District's adopted budget.

The District makes quarterly payments to the City of Palo Alto for sewage treatment and receives revenues via tax apportionment twice a year in December and April. The District maintains a general fund balance to address cash flow given sewer fees are distributed twice a year when expenditures are bi-weekly, monthly and quarterly.

The General Fund fund balance as of June 2008 is \$2,099,107. Restricted funds and fund balances include: Connection Fee Fund \$1,348,000; Construction Replacement Fund \$981,900; Rate Stabilization Fund \$25,803; Lateral Replacement Fund \$15,231; Treatment Plant Fund \$596,998.

Long Term Debt:

Long Term Debt as of

Long Term Debt as of June 30, 2008, as summarized in the District's Audited Financial Statement (June 2008), totals \$2,424,225 and includes:

• 2000 Installment Sale of Bonds, Maturing in 2014, \$1,619,400

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⁹ This fund is restricted for unanticipated maintenance costs for the City of Palo Alto Treatment Plant in proportion to each agency's actual use.

¹⁰ As a participant in the County of San Mateo Investment Pool, EPASD experienced one-time net losses related to the Lehman Bros. Bankruptcy that are not reflected in the adopted budget. The losses for each of the accounts are as follows: General Fund (\$133,260), Construction and Replacement (\$23,251), Lateral Replacement (\$735), Reserve (\$28,812), Rate Stabilization (\$1,245).

(discharge of 1990 Installment Sale Agreement used to finance acquisition and construction sewer system improvement

- Palo Alto 1990 Utility Revenue Bonds, Maturing in 2024, \$356,680 (represents EPASD portion of City of Palo Alto debt related to City of Palo Alto treatment plant.)
- City of Palo Alto 1999 Utility Revenue Bonds, Maturing in 2024, \$435,098

Opportunities for Rate Restructuring

As an enterprise district, the District's primary revenue sources are sewer service charges and connection fees. The District has the ability to adjust rates to cover the cost of providing service, subject to ratepayer approval according to the provisions of Proposition 218. The following illustrates historic residential sewer service charges.

Annual Fee History-Residential

2008-09	\$415
2007-08	\$380
2006-07	\$380
2005-06	\$350
2004-05	\$320

The East Palo Alto Sanitary District's sewer rates are reviewed and adjusted annually and calculated to recover the District's projected costs related to share of maintenance, operation and minor improvements of the City of Palo Alto Water Quality Control Plant, the District's share of debt service for major capital improvements at the Treatment Plant, maintenance and operation of the District's sewage collection system and general administration of the District. The current residential rate is set at a flat rate of \$415.00 per year and commercial rates are charged based on annual use of water with a minimum commercial rate of \$415.00 per year. Based on adopted rates, projected sewer service revenues for 08/09 are \$3,244,000 compared to \$3,481,000 in projected expenditures including debt service and capital improvements for the City of Palo Alto Treatment Plant. 11 The difference is funded by other revenues including fund balance carry over, interest and property tax revenues.

¹¹ Future rate adjustments will also include the District's anticipated share of the Palo Alto Water Quality Control Plant Ultraviolet Disinfectant Facility costs estimated at \$69,000 per year for 20 years with payments projected to being in Fiscal Year 2012.

A 10-Year Financial Plan and Rate Projection prepared for the District in June 2008 provides the District a ten-year financial projection and recommendation for phase in of future sewer rates as follows:

2009-10	\$450
2010-11	\$485
2011-12	\$520

In regard to property tax revenues, since implementation of Proposition 13, the District has received a share of the 1% property tax, which is projected by the District in the current year at \$180,000. The District underestimates property tax revenue in preparing current year budget, with actuals for 2006-07 and 2007-08 reported as \$248,597 and \$297,077 respectively. In implementing Proposition 13, the State legislature recognized that many special districts had the ability to raise revenue through user charges and fees and that their ability to recognize revenue directly from the property tax for district operations was eliminated by Proposition 13. Government Code Section 16270 states the intent of the Legislature that enterprise districts rely on user fees and charges and that such districts were encouraged to begin the transition to user fees and charges in the 1978-79 fiscal year with implementation of Proposition 13. Adjustment of rates or reduction of operating costs to eliminate reliance on property tax would provide for use of property tax for other non-enterprise municipal services.

Cost avoidance opportunities

The District comments that as a small entity with a small budget, has limited opportunities for cost avoidance. The board of directors reviews the District budget and makes adjustments annually.

Opportunities for shared facilities.

As noted above, EPASD effluent flows to the Palo Alto Sewage Treatment Plant allowing the District to participate in regional sewage treatment. The District cites no other practice for shared facilities, but noted District consideration of a memorandum of understanding with the City of East Palo Alto to provide capital planning, code enforcement and public education in shared service areas.

Government structure options, including advantages and disadvantages of consolidation or reorganization of service providers.

Section 56430 requires discussion of government structure options including advantages and disadvantages of consolidation or reorganization of service providers in a municipal service review. This analysis is not a proposal to reorganize service providers, rather it identifies alternatives that may be further examined by the District, rate payers and affected agencies. For the purposes of this report, government structure options include:

- a) status quo (continued existence of the District),
- b) b) establishing the district as a subsidiary district of the City of East Palo Alto with sewer service becoming a public works function of the City, or
- c) dissolution of the district and annexation of the service area to West Bay Sanitary District
- d) a variation of Alternative C that would reorganize both EPASD and WBSD to align boundaries of the districts with city boundaries.

These options are discussed below. As noted above, the purpose of the discussion is to allow affected agencies and communities to consider and comment on governance alternatives. This section of the report does not represent a proposal by LAFCo or any affected agency for the organizational changes discussed.

A. Status Quo-Continued Existence of the District

Continued existence of the District would require no action to initiate a change and provide for focused governance and management over service to a relatively small area. As an independent special district with approximately 6,300 residential customers and 300 commercial/industrial customers, the District's ability to achieve economy of scale and share resources will continue to be limited, underscoring the need for the District to seek efficiencies and reduce operation costs wherever possible.

B. Establishment of the District as a subsidiary district of the City of East Palo Alto

Because East Palo Alto Sanitary District boundaries include territory outside the City of East Palo Alto, dissolution and transfer of service responsibility to the City of East Palo Alto

would require that the district be established as a subsidiary district¹² of the City, with the City Council acting as ex officio board of directors of the District.

Transfer of sanitary sewer services to the City of East Palo Alto would be consistent with recent activities in consolidating utility services under the City Public Works Department. In recent years the City has assumed operation of municipal water operations (via contract a private utility company), the drainage maintenance District and the street lighting district, previously operated by the County of San Mateo. City of East Palo Alto Public Works services include: various city engineering functions, traffic signalization management and street signage, park and City facility maintenance, street maintenance and repair, and storm drain management. The Public Works Department also maintains the Senior Center, Joel Davis Park, O'Connor Street Pump Station, Shuttle Services, and street trees.

In subsidiary district scenario, sewer service responsibility would be transferred to the City as a public works function. The City of East Palo Alto would be party to the agreement for sewage treatment with the City of Palo Alto. The City Public Works Director would oversee sewer operations and positions that do not exist as public works positions at the City such as Sanitary Sewer Maintenance positions, would be transferred to the City to perform these functions. The City Council as governing body would adopt the budget and set rates.

Potential advantages to establishment as a subsidiary district include savings in the cost of providing service through economy of scale and elimination of redundant administration and governance in overlapping areas and in the case of service provided in City of East Palo Alto boundaries, comprehensive oversight by a single city for both water and sewer utilities in particular as it relates to growth and development in the City. Salary and benefit savings by including sewer service under the governance, management and administration of the City savings would depend upon the level to which existing city positions could absorb additional duties or would be augmented to handle

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¹²A subsidiary district may be established when both 70% of the territory of a district and 70% of the population of the district are located with the City. An example of such a subsidiary district in San Mateo County is North San Mateo County Sanitation District, which is a subsidiary district of the City of Daly City that provides sewer service to Daly City, Unincorporated Broadmoor and Colma and the Town of Colma.

administration, billing, etc. Other areas of potential savings include but are not limited to elimination of Board of Directors fees budgeted at \$76,800 in the adopted 2008/09 Budget, potential savings in travel & meeting expenditures (currently budgeted at \$72,000), and costs associated with separate audit reporting and general contractual services. Under subsidiary district status offices currently used exclusively for sanitary sewer administration and operations, could under City governance, potentially be used for additional city functions.

Also, because EPASD collects property tax as an enterprise district, an alternative to the subsidiary district subsidizing sewer rates with property tax would be to transfer property tax to respective cities for the purpose of non-enterprise municipal services such as police, parks and administration, with sewer rates being adjusted to reflect the cost of sewer service and treatment.

The effect of establishing a subsidiary district would be to transfer all assets and liabilities to the City. Establishing the District as a subsidiary district of the City would also give the City authority over the majority of the sewer service in the City, enhancing the City's ability to coordinate sewer capital improvements related to redevelopment.

Potential disadvantages include costs of the transition from an independent special district to subsidiary of the City. A subsidiary district would also result in the territory located in the City of Menlo Park being part of the service territory of the subsidiary district but registered voters outside the City of East Palo Alto would not have the ability to vote for the East Palo Alto City council members who would serve as the governing body of the city governed sewer district.

The process for establishment as a subsidiary district would involve application by either 10% of the EPASD registered voters, or by resolution the City or the District. If an application is submitted by resolution of either the District or the City and both the City and the District consent to establishment of a subsidiary district, LAFCo may approve the proposal without an election if less than 25% of the registered voters submit protest at conducting authority proceedings. However, if the City or the District adopt resolutions of opposition, the LAFCo approved application must be submitted to the voters of the agency that has submitted a resolution of

opposition, and would require simple voter majority approval at the election.

C. Dissolution of EPASD and annexation to WBSD

Because the East Palo Alto Sanitary District and West Bay Sanitary District share common boundaries and are formed under the same enabling legislation, dissolution of the smaller district and annexation of the service area to West Bay Sanitary District is an alternative that would offer potential for savings in governance and management. This alternative would require an interest on the part of West Bay Sanitary District and would require that WBSD become party to the sewage treatment contract with the City of Palo Alto.

Similar to a subsidiary district, potential advantages of dissolution of EPASD and annexation of the EPASD service area to WBSD include savings in the cost of providing service through economy of scale and in the case of service provided in City of East Palo Alto boundaries simplification of sewer service providers. Potential savings by consolidating service for approximately 6,700 residential customers and a variety of commercial/industrial customers with WBSD include payroll costs associated with management and administration depending upon the level to which positions could be reduced while absorbing administration, billing, etc. of an expanded district. Areas of potential savings include, but are not limited to, reduction of costs in administration and governance of two board of Directors, general managers and administrative offices. Examples of areas in which savings would be achieved by reduced and shared expenditures for the combined service area include but are not limited to the following (based on 08/09 budgets):

	EPASD	WBSD
Salaries & Wages Benefits	\$680,000 \$290,000	\$2,376,016 \$ 862,879
Board Compensation	\$ 76,800	\$ 28,365
Travel & Meetings	\$ 72,000	\$ 39,500

Unlike the subsidiary district scenario in which customers of the subsidiary district outside City of East Palo Alto boundaries would not be able to vote for city council members governing the subsidiary district, all registered voters in the

area annexed to WBSD would be eligible to vote for District board members that would govern sewer service and set rates.

Also, as noted above, because EPASD collects property tax as an enterprise district, an alternative in dissolution and annexation to WBSD would be to transfer property tax to respective cities for the purpose of non-enterprise municipal services such as police, parks and administration, with sewer rates being adjusted to reflect the cost of sewer service and treatment.

Effect of annexation would be transfer all EPASD assets and liabilities to the West Bay Sanitary District. Like establishment of a subsidiary district, potential disadvantages include costs of the transition in consolidation/annexation.

The process for dissolution of EPASD and annexation of the service area to WBSD would involve application by 25% registered voters of EPASD, or resolution of the District. If an application is submitted by resolution of the District and both the EPASD and WBSD consent to dissolution and annexation, LAFCo may approve the proposal without an election if less than 25% of the registered voters submit protest at conducting authority proceedings. However, if either District adopts a resolution of opposition, the LAFCo approved application must be submitted to the voters of the agency that has submitted a resolution of opposition, requiring simple majority voter approval.

D. Reorganization of East Palo Alto Sanitary District and West Bay Sanitary District involving dissolution of the East Palo Alto Sanitary District, annexation and detachment of territory from/to West Bay Sanitary District and establishing the City of East Palo Alto as successor for sewer service in City of East Palo Alto boundaries and the West Bay Sanitary District as successor to sewer service in City of Menlo Park boundaries

This alternative would align jurisdictional authority for sewer service with the city boundaries in the areas served by East Palo Alto Sanitary District and West Bay Sanitary District. As shown on the attached map, East Palo Alto Sanitary District serves the majority but not all of City of East Palo Alto and also includes territory in south eastern Menlo Park bounded by Menalto, San Francisquito Creek and the East Palo Alto boundary. West Bay Sanitary District includes the northern portions of City of East Palo Alto and the majority of City of Menlo Park.

As noted elsewhere, the boundaries of the sanitary districts were based on flow to sewage treatment plants and were established prior to establishing city boundaries. East Palo Alto Sanitary District flows to the City of Palo Alto Water Quality Control Plant and West Bay Sanitary District flows to a West Bay pump station and is pumped to the South Bayside Treatment Plant.

As two separate sewer systems with separate agreements for sewage treatment, a reorganization to align sewer jurisdiction with city boundaries would simplify service are boundaries but involve complex agreements for sewage treatment and a comprehensive assessment of condition of infrastructure to be assumed by the two entities. Reorganization could only be cost effective if systems could remain intact and agreements for sewage treatment could be amended to account for the reorganized sewer service in East Palo Alto City boundaries and West Bay Sanitary District boundaries. Simply put, if all territory outside of East Palo Alto is annexed to WBSD and all territory in City of East Palo Alto would be detached from WBSD and/or transferred to City of East Palo by dissolution of EPASD, either the City of East Palo Alto and WBSD would need to enter into agreements for allocation of sewage treatment for areas transferred or City of Palo Alto and SBSA would need to amend agreements to include City of East Palo Alto and WBSD for their proportional shares of flow the respective plants.

Given the separate systems, gravity flow and separate sewage treatment agreements, informal comment from District engineers and city staff indicate that it is unlikely that this alternative simplify service or improvement administration. Implementation of this scenario would require, at a minimum:

- Support on the part of City of East Palo Alto, West Bay Sanitary District, City of Palo Alto and the South Bayside System Authority and amendment of agreements to include agencies and proportional shares of sewage treatment that would be transferred.
- Assessment of sewer mains and infrastructure that would be transferred to successor agencies which would include assessing sewers mains using Closed Circuit Television
- Potential transfer of EPASD & WBSD fund balances proportionally to address capital improvements and debt service at respective sewage treatment plants.

In regard to advantages and disadvantages, while reorganizing sewer service according to city boundaries would on face value simplify sewer service delivery in the cities of Menlo Park and East Palo Alto because each city would be served by one sewer agency and not two, because sewer infrastructure was established prior to city boundaries and based on topography and proximity to sewage treatment plants, reorganization to focus on city boundaries and not systems would not necessarily make service delivery by successor agencies more efficient because each agency would then operate and maintain portions of two separate systems and be party to two separate sewage treatment agreements.

Evaluation of management efficiencies

This section examines the ability of an agency to provide efficient and effective service by meeting service demands and maintaining adequate staffing levels given the resources available.

The District is governed by a five-member board and has nine employees including General Manager, Director of Administration, Accountant Assistant, receptionist, Maintenance Supervisor, Senior Maintenance Worker and three maintenance workers. District board members attend monthly board and committee meetings. The District retains legal counsel, an accountant, auditing firm, district engineer and personnel consultant.

As a separate entity serving territory wholly within the Cities of East Palo Alto and Menlo Park, the District's board duplicates governance and management that exists in the cities. As a relatively small, single-purpose special district, EPASD has limited opportunities for economies of scale offered by a larger organization.

Local accountability and governance.

This section examines the degree to which an agency keeps affected residents and property owners informed about district services, budget, programs, anticipated changes in service; effectiveness of the district in responding to requests for information and the degree to which the district encourages public participation in decision making. As a special district, the District is subject to the Ralph M. Brown Act governing public meetings. As noted above, the District has a five-member board elected by district voters. District meetings are held the

first Thursday of the month at 7:00 p.m. at the District office, 901 Weeks Street, East Palo Alto, with an agenda prepared and circulated prior. The District maintains a website (www.epasd.com). The District adopts a budget annually and the budget is posted on the website. District Board meetings are aired on Public Access Cable. District office hours are 8:00 a.m. to noon and 1:00 p.m. to 5:00 p.m., Monday to Thursday. The District contracts with an answering service when staff is not available.

Sphere of Influence Review and Update

Government Code Section 56425 specifies that in determining the sphere of influence of each local agency, the Commission shall consider and prepare a written statement of its determinations with respect to each of the following:

- 1. The present and planned land uses in the area, including agricultural and open-space lands
- 2. The present and probable need for public facilities and services in the area.
- 3. The present capacity of public facilities and adequacy of public services that the agency provides or is authorized to provide.
- 4. The existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency.

This sphere of influence update incorporates information and determinations in the municipal service review as well as changes that have taken place since the sphere of influence was originally adopted, and provides for public input. Comments to LAFCo by affected agencies, organizations individuals are requested in order to be included in the Executive Officer's report to the Commission.

EPASD Sphere and Service Area:

The LAFCo adopted sphere of influence designation for the EPASD is for dissolution and annexation of the territory to WBSD. The Municipal Service Review, Governance Alternatives Section examines the alternatives of transferring service responsibility to City of East Palo Alto as a subsidiary district, as well as to West Bay Sanitary District by annexation upon dissolution of EPASD. Changes since the sphere was adopted include significant growth and economic development in the City of East Palo Alto,

which is served primarily by EPASD. Also, as noted in the Municipal Service Review, in recent years the City has assumed responsibility for municipal water operations (via contract a private utility company), the drainage maintenance District and the street lighting district, all previously operated by the County of San Mateo.

Sphere of Influence Determinations:

Section 56425 requires the Commission to make determinations concerning land use, present and probable need for public facilities and services in the area, capacity of public facilities and adequacy of public services that the agency provides or is authorized to provide and existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency. The following section discusses these areas of determination.

The present and planned land uses in the area, including agricultural and open-space lands

Consisting primarily of residential, commercial, and institutional land use designations, land use in district boundaries is varied and the under the jurisdiction of the Cities of East Palo Alto and Menlo Park.

The present and probable need for public facilities and services in the area

The area within District boundaries consists primarily of residential, commercial, institutional land use requiring basic municipal services and there is a demonstrated need for continued service and in some areas expanded sanitary sewer services. Services provided by other agencies include: water service by City of Menlo Park, City of East Palo Alto via contract with a private utility, and two mutual water companies; fire and emergency response by Menlo Park Fire Protection District and police service by Cities of East Palo Alto and Menlo Park in their respective jurisdictions. Services are more specifically described below.

Service	City of	City of Menlo Park
Responsibility	East Palo Alto	
Police		
Fire	Menlo Park Fire Dist.	Menlo Park Fire
		District
Sewer	East Palo Alto	West Bay Sanitary
	Sanitary District	District (majority)
	(majority)	East Palo Alto
	West Bay Sanitary	Sanitary District
	District (portion)	(portion)
Water	City of East Palo Alto	City of Menlo Park
	Palo Alto Park Mutual	California Water
	(Partial)	Service Co.
	O'Connor Tract Mutual	O'Connor Tract Mutual
	(partial	(Partial)
Streets	City of East Palo Alto	City of Menlo Park
Animal Control	Peninsula Humane	Peninsula Humane
	Society via contract	Society via contract
	with Animal Control	with Animal Control
	Joint Powers Agreement	Joint Powers Agreement
Park & Recreation	City of East Palo Alto	City of Menlo Park
Library	County Library System	County Library System
Garbage Collection	Allied Waste via	Allied Waste via Joint
	Joint Powers Agreement	Powers Agreement

The present capacity of public facilities and adequacy of public services that the agency provides or is authorized to provide

Services provided by EPASD include sanitary sewer service through District boundaries. The Board of Directors approved a Capital Plan for replacement of sewer mains identified in the September 2002 Master Plan Update. The report identifies deficiencies and makes recommendations for improvements. Since adoption, the District reviews the plan each year to incorporate capital improvements with City of East Palo Alto redevelopment.

The existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency

The District serves most of City of East Palo Alto and portions of City of Menlo Park Communities served by the District are defined by their respective city jurisdictions and are not their sanitary sewer provider. However, they share an economic interest in a long-term plan for efficient and affordable sewer service, similar to surrounding areas.

Discussion:

The East Palo Alto Sanitary District was formed to provide reliable sewer service to developing areas. In 1983 the City of East Palo Alto incorporated and the Commission subsequently adopted a 'zero' sphere of influence for EPASD indicating at the time that EPASD could be dissolved and West Bay Sanitary District could assume sanitary service via annexation. Changes that have occurred since the sphere was adopted include increased service demand with significant development in the City of East Palo Alto and as noted above, the City of East Palo Alto has assumed responsibility for several utility services previously provided by the County.

While there now appear to be two (instead of one) potential successor agencies, there have been no significant changes that merit amendment of the sphere of influence of EPASD. Advantages to consolidation of sanitary sewer service with either the City of East Palo Alto or West Bay Sanitary District and limited opportunities for cost savings and shared resources as a small single purpose special district as discussed in the municipal service review indicate that reaffirming the sphere of influence of dissolution would serve to further state policies promoting efficient service delivery, economies of scale and orderly boundaries based on local conditions.

Draft Recommended Sphere of Influence Determinations

Based on the foregoing, the following section includes sphere determinations that could be adopted by the Commission.

(1) The present and planned land uses in the area, including agricultural and open-space lands.

Consisting primarily of residential, commercial, and institutional land use designations, land use in district boundaries is varied and the under the jurisdiction of the Cities of East Palo Alto and Menlo Park.

(2) The present and probable need for public facilities and services in the area.

The area within District boundaries consists primarily of residential, commercial, institutional land use requiring basic municipal services and there is a demonstrated need for continued delivery of sanitary sewer services.

(3) The present capacity of public facilities and adequacy of public services that the agency provides or is authorized to provide.

Services provided by EPASD include sanitary sewer service through District boundaries. The Board of Directors approved a Capital Plan for replacement of sewer mains identified in the September 2002 Master Plan Update. The report identifies deficiencies and makes recommendations for improvements. Since adoption, the District reviews the plan each year to incorporate capital improvements with City of East Palo Alto redevelopment.

(4) The existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency.

The District serves most of City of East Palo Alto and portions of City of Menlo Park. While the service area includes customers served by a single wastewater collection system that flows to a separate sewage treatment plant in the City of Palo the neighborhoods served share a community of interest with their respective cities and an economic interest in a long-term plan for efficient and affordable Municipal services.

East Palo Alto Sanitary District

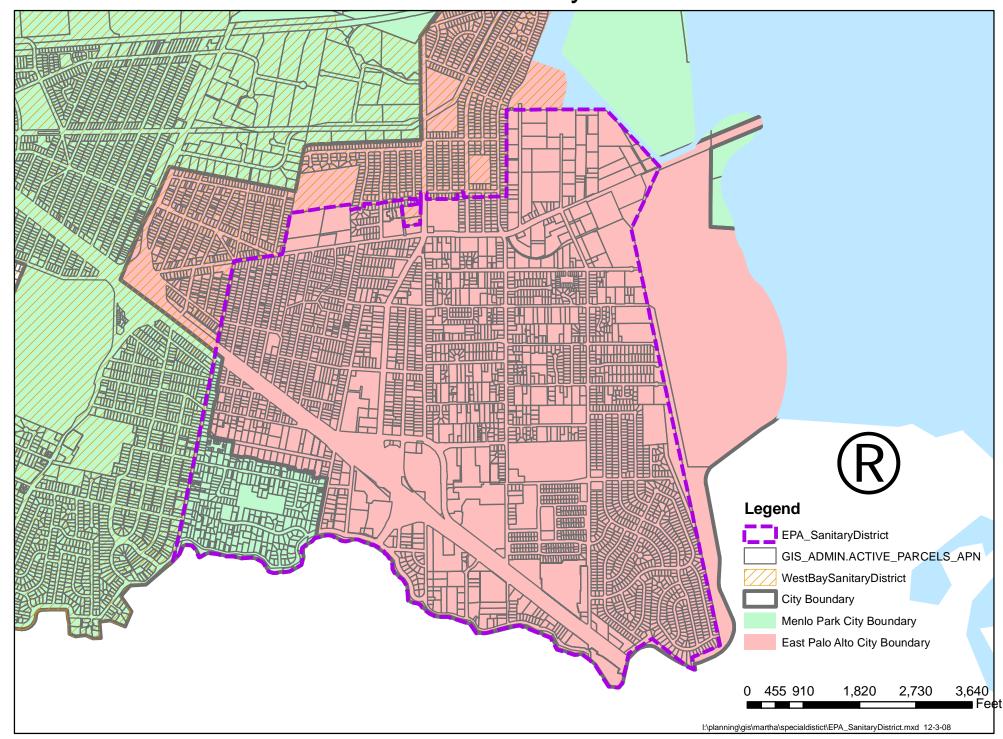


EXHIBIT 2

October 7, 2008

To: Members, Formation Commission

From: Martha Poyatos

Executive Officer

Subject: Recommended Coastside Spheres of Influence

Recommended Action:

Staff recommends that the Commission consider the sphere of influence report with amendments, comment letters received regarding the August 18 draft, additional public comment at the October 15 public hearing and adopt the report and amended spheres of influence for coastside agencies and inventory of special district services as recommended.

Summary:

The attached sphere of influence report has been prepared according to Government Code Section 56425, following preparation of a Municipal Service Review and adoption of Municipal Service Review determinations. Discussion includes the four areas of determination for spheres of influence set forth in Government Code Section 56425 in regard to the City of Half Moon Bay and districts serving Half Moon Bay and the urbanized unincorporated Midcoast of San Mateo County. The report incorporates the service review determinations and examines spheres of influence for the affected agencies.

The draft sphere influence report was circulated on August 18, 2008. In response to extensive comments, the August 18 report has been revised where appropriate and a summary of comments and responses are included in this staff report. Comment letters are attached to the sphere of influence report.

Background

LAFCo is required to periodically update spheres of influence in conjunction with or after completing a municipal service review. Municipal Service Reviews are studies of city and special district governance and operations and spheres of influence updates are studies of service providers in the context of plans for probable boundaries and governance.

In June of 2008, LAFCo completed the municipal service review for the Coastside and unincorporated Midcoast. 1 The Municipal Service Review identified several constraints related to municipal services with key issues including significant lack of park and recreation facilities, programs and funding in the unincorporated area; lack of storm drain infrastructure and funding in the unincorporated Midcoast, a long-standing moratorium in Montara Water and Sanitary District, and limits on CCWD's SFPUC water supply assurance. The adopted determinations identified the study area's geographic isolation from other urbanized areas in the County and fragmented governance resulting in a failure to plan regionally for essential municipal services including regional water supplies. The Service Review Determinations identified the need for regional governance to best provide water and sanitary sewer service, including water recycling. The Commission's adopted determinations are attached to the sphere of influence report.

As required by Government Code Section 56425 the sphere of influence report includes discussion related to determinations the Commission must adopt in updating or amending a sphere of influence, inventory of special district active and inactive powers, existing spheres, the urban/rural boundary as it relates to service boundaries, and possible steps for implementation of the recommended spheres.

Since the August 18 draft was circulated, LAFCo received comments from the following agencies, committees and individuals. Comment letters are attached.

Montara Water and Sanitary District (MWSD):

MWSD submitted extensive comments regarding the sphere of influence recommendations and recommended text changes to the report. Key points raised by MWSD include MWSD support for activation of park and recreation powers by MWSD as permitted by water district enabling legislation and a request for inclusion of excluded lands not currently in the jurisdiction of a water agency in the MWSD sphere rather than the CCWD sphere as

¹ The Coastside Municipal Service Review is available at www.sanmateolafco.org

Coastside Sphere of Influence Update October 7, 2008

recommended in the report. Specifically, the District requests establishing the MWSD boundary for water service to be the former boundaries (versus system/infrastructure) of the former Citizen's Utility Company/CalAm that was acquired by MWSD and requests a sphere designation be adopted that would indicate that the inactive County Service Area 12, formed but never activated, be consolidated with MWSD to allow MWSD provision of water service to areas south of current MWSD boundaries.

MWSD notes inconsistent language when referencing special district services in the inventory of special district powers. MWSD also opposes CCWD's request to amend the CCWD inventory of authorized powers for CCWD to include water recycling and recycled water distribution as an authorized power.

<u>LAFCo Staff response</u>: Where possible, MWSD comments are addressed with additions to the sphere report that are indicated with 'underline' and 'strikeout'.

In regard to the former service area of Citizen's/Cal Am and the boundaries of inactive County Service Area 12, MWSD comments (page 7) indicate that the District is not subject to CKH Act with regard to establishment of water powers as set forth in Health and Safety Code Section 6512.7 which authorized the District the powers of a water district for the purpose of providing water service within the Montara Sanitary District. This legislation states in paragraph (d) of 6512.7: If the Montara Sanitary District assumes authority to exercise the powers of a county water district pursuant to this section, thereafter the district shall be subject to the Cortese-Knox Local Government Reorganization Act of 1985 (Division 3 (commencing with Section 56000) of Title 5 of the Government Code).

In this regard, following enactment of Section 6512.7, the District Board submitted to the voters in the District, the question of whether the Montara Sanitary District should exercise the powers of a county water district for the purpose of furnishing water in the district. Following voter approval, the District assumed authority for water service in 1994 and LAFCo, in order to add special district members in 1996, considered inventories of special district powers. At that time, LAFCo considered establishing water as an inactive power for Montara Sanitary District. MSD's legal counsel urged the Commission to adopt an inventory that recognized water as an active power, which the Commission adopted. (Attachment C to MWSD comments)

Subsequent approval of the District voters of a bond measure to acquire the water system resulted in all privately owned parcels within MWSD boundaries being assessed for the District's bond to acquire the water system. MWSD states that water code precludes

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another water district from providing water service to properties subject to a lien of MWSD's general obligation bond. This would preclude service by CCWD to unless MWSD Board permits service by resolution. There are no properties outside MWSD's jurisdictional boundaries subject to the bond.

In regard to expanding the sphere of influence of MWSD, the Municipal Service Review and MWSD written comments acknowledge a long-standing water moratorium. Amendment of geographic spheres, placing additional territory in the boundaries of MWSD, a district that has insufficient water supply and infrastructure to serve existing boundaries, is not supported and LAFCo can not make a determination that the receiving entity has capacity and infrastructure to serve the territory in question.

In regard to MWSD comments on inventory of special district powers, changes have been made to the to the inventory table to harmonize language used for different types of services and acknowledges that inventories are based on information originally provided by the districts individually. In regard to MWSD's opposition to inclusion of recycling as an authorized but inactive power of CCWD, CCWD is a county water district created under California Water Code Sections 30000 et seq. and pursuant to Water Code Section 31047, a district may control, distribute, store, spread, sink, treat, purify, recapture and salvage any water, including sewage and storm waters, for the beneficial use or uses of the district or its inhabitants or the owners of rights to water therein.

The purpose of the inventory is to identify services authorized in district enabling legislation and identify which services are actively provided. Inclusion of an authorized power according enabling legislation is not expansion of service. Activation of an unauthorized but inactive power would require application by the District to LAFCo.

Granada Sanitary District (GSD):

GSD supports planning for consolidation in phases and requests an additional implementation option of allowing both GSD and Montara Water and Sanitary District to provide park and recreation though GSD reorganizing as a community services district and MWSD being authorized to provide park and recreation as permitted by State Water Code. GSD expresses concern regarding tying provision of park and recreation service to consolidation.

<u>LAFCo staff response</u>: The alternative proposed by GSD is inconsistent with the purpose of community services district enabling legislation which includes the following intent: To encourage LAFCos to use their municipal service reviews, spheres of influence and boundary powers where feasible and appropriate

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to combine special districts that serve overlapping or adjacent territory into multifunction community services districts².

City of Half Moon Bay

City of Half Moon Bay comments indicate council opposition to an amended sphere of influence for the City of Half Moon Bay.

Coastside County Water District (CCWD)

CCWD supports the recommended spheres calling for consolidation of the water and sanitary districts and supports allocation of areas not currently in the boundaries of a water agency to the CCWD sphere consistent with the past sphere of influence designation. As noted above, CCWD requests that the inventory of District services be amended to include water recycling and recycled water distribution as an authorized power.

MidCoast Community Council (MCC)

The Midcoast Community Council is an elected, seven-member municipal advisory council formed by the County Board of Supervisors to serve as an advisory body to the Board of Supervisors on matters concerning the Midcoast. The MCC comments support the recommended sphere designations providing for a City of Half Moon Bay sphere coterminous with City of Half Moon Bay corporate boundaries, a sphere of consolidation for CCWD, MWSD and GSD and a community services district designation for the incorporated midcoast in order to provide park and recreation services. However, the MCC requests that LAFCo spheres provide for the reorganization of GSD as a community services district to provide park and recreation service in tandem with MWSD activating park and recreation powers permitted by water district enabling legislation, in lieu of a reorganization that would consolidate GSD and MWSD to form a community services district.

Midcoast Park Lands (MPL)

As stated in their letter, MPL is a non-profit organization that has supported Midcoast parks for fourteen years and the goals of GSD to provide park and recreation for eight years. MPL also supports provision of park and recreation individually by GSD and MWSD.

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² Government Code Section 61000 [c] 2

Comments from Individuals:

G.A. Laster

Support for a community services district and parks and recreation on the midcoast and agreement with recommendation by \mbox{MCC} .

Neil Merrilees

Support for the recommendation of consolidated districts that would result in a community services district for the unincorporated midcoast for provision of park and recreation.

Sandy Emerson

Support for City of Half Moon Bay sphere of influence coterminous with city boundaries; spheres that support consolidation; opposition to provision of park and recreation by MWSD and GSD separately, and support for an interim plan that would provide for park and recreation planning and service delivery with property revenues received by the districts without requiring consolidation first.

Sabrina Brennan:

Support for separate spheres of influence and an alternative that would allow for provision of park and recreation individually by GSD and MWSD.

Victor H. Abadie III

Opposition to combining MWSD with CCWD and support for inclusion of area south of MWSD boundaries, formerly in Citizen's/CalAm in MWSD boundaries.

California Environmental Quality Act (CEQA)

In considering and approving the sphere of influence update, LAFCo is the lead agency under CEQA. Consideration of the sphere report by the Commission concerns governance of existing agencies already providing service within the areas eligible to receive urban services. There is no proposal to expand urban services to rural areas or addition of area not previously included in a sphere of influence of public agencies that provide municipal services. For these reasons, the sphere of influence update is exempt from CEQA because it can be seen with certainty that there will be no adverse impact on the environment (CEQA Guidelines, Section 15061b (3)).

Discussion and Recommendation:

Having prepared and adopted a municipal service review specific to fire agencies on the Coastside, the Commission's service review and sphere of influence review for the City of Half Moon Bay and unincorporated Midcoast offers a second and more in depth review of urban coastside communities, governance and service provision. Both processes have resulted in consensus on the part of commenting agencies and individuals on challenges and opportunities for service provision in a region of San Mateo County that is geographically remote but urbanized and in need of a municipal level of services. In the case of fire district consolidation, there was broad support for consolidation to achieve efficiencies in management, service delivery and governance.

In the case of this municipal service review and sphere update, there is demonstrated consensus that active park and recreation services, facilities and a reliable funding source are a high priority need for the unincorporated area and there is also consensus that a safe, affordable and reliable water supply is in the best interest of all communities under study. The recommended community services district for the unincorporated Midcoast does not present creation of yet another special district, rather a vehicle for consolidation of districts to promote efficiencies and capacity for provision of park and recreation. The recommended spheres of influence are consistent with the urban rural boundary in the County's Local Coastal Program and policies designating areas eligible for municipal level of services.

Staff believes that the recommended spheres of influence provide the means and plan to accomplish governance that will meet the vital, long-term municipal service needs of the region and it is recommended that the Commission adopt the spheres as proposed by taking the following actions:

- 1) By motion, certify that the sphere of influence update is exempt from CEQA because it can be seen with certainty that there will be no adverse impact on the environment (CEQA Guidelines, Section 15061b (3)).
- 2) By Resolution, adopt the inventory contained on pages 4 and 5, sphere determinations contained on page 13 and 14 and sphere designations contained on page 12 in the sphere report dated October 7, 2008
- C: Carol Woodward, Dep. County Counsel
 City of Half Moon Bay and Affected Districts
 Cabrillo Community College District
 Coastside Fire Protection District
 Lisa Grote, San Mateo County Community Development Director
 James Porter, Director, San Mateo Co. Public Works Dept.
 David Holland, Director, San Mateo Co. Parks Dept.

Sphere of Influence Update City of Half Moon Bay and Unincorporated Midcoast Draft

October 7, 2008

The Cortese Knox Hertzberg Act of 2000 requires that San Mateo Local Agency Formation Commission (LAFCo) prepare municipal service reviews and sphere of influence updates¹ for each city and special district in the County. San Mateo LAFCo's service review and sphere of influence review program groups agencies regionally, studying the City of Half Moon Bay and urban Midcoast as a subregion of San Mateo County. The Act requires that a municipal service review be conducted prior to or in conjunction with a sphere of influence update. In June 2008, the Commission completed the municipal service review for the City of Half Moon Bay and urban midcoast and adopted the attached determinations as required by Government Code Section 56430.

Government Code Section 56425 specifies that in determining the sphere of influence of each local agency, the commission shall consider and prepare a written statement of its determinations with respect to each of the following:

- (1) The present and planned land uses in the area, including agricultural and open-space lands.
- (2) The present and probable need for public facilities and services in the area.
- (3) The present capacity of public facilities and adequacy of public services that the agency provides or is authorized to provide.
- (4) The existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency.

This sphere of influence update incorporates information and determinations in the municipal service review as well as changes that have taken place since the sphere of influence was originally adopted, and provides for public

¹ Spheres of influence are plans for the probable physical boundary and service area of an agency and municipal service reviews are evaluations of service provision by an agency or agencies.

input on the four areas of determination listed above. Comments to LAFCo by affected agencies, organizations individuals have been included in the Executive Officer's report to the Commission.

The study area includes the City of Half Moon Bay and the unincorporated communities of El Granada, Miramar, Princeton by the Sea, Moss Beach and Montara with an estimated 2007 population of 23,460. The study area receives services from: the City of Half Moon Bay; four independent special districts including Coastside County Water District, Granada Sanitary District, Montara Water and Sanitary District and Coastside Fire Protection District; and the County of San Mateo including three active County-governed districts. Please See Map #1 - City of Half Moon Bay and sphere of influence area and Attachment 2 - Aerial Photo). The County itself is not subject to a sphere of influence designation because it is not a city or a district. The County-governed districts are listed below and depicted on attached maps:

- County Service Area 6³ was formed in 1965 and while it encompasses predominantly undeveloped and agricultural lands outside the urban rural boundary, the District maintains street lights in developed areas in the portion of Princeton adjacent to El Granada and Pillar Point Harbor
- Granada Highway Lighting District was formed in 1910 and the District maintains street lights in areas of El Granada
- Montara Highway Lighting District was formed in 1913 and maintains streetlights in Montara and Moss Beach.
- County Service Area 10 was formed in 1975 to establish assessments for park maintenance in Montara, but the levy was not passed and the CSA remained inactive.
- County Service Area 12 was formed in 1988 to facilitate public acquisition of Citizen's Utility Company water system to provide for transfer to Coastside County Water District and remained inactive following special legislation that gave Montara

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² Coastside Fire Protection District's sphere of influence is coterminous with District boundaries and was adopted in 2007 when the Commission approved consolidation of Pt. Montara and Half Moon Bay Fire Protection Districts and therefore is not studied in this report.

³ County Services Areas (CSA) are county-governed districts empowered to provide the broad set of services provided by counties. CSA legislation was enacted in response to rapid growth in unincorporated areas in order to provide an alternative method to provide urban services to these areas.

Sanitary District water authority in anticipation of acquiring the system.

County-governed Granada Highway Lighting District and Montara Highway Lighting District are exempted from a sphere of influence designation by their enabling legislation. However, annexation and dissolution of these districts by the Board of Supervisors can be conditions of approval adopted by LAFCo in approving organizational change proposals.

Enabling Legislation and Active Powers:

Section 56425 also requires that in reviewing a sphere of influence, the Commission shall establish the nature, location and extent of services provided by existing Districts. In 1994, government code provisions were added to require inventories of independent special district services if a LAFCo added special district members. In 1996 San Mateo LAFCo adopted inventories of special district services as part of the seating of special district members on LAFCo. The purpose of inventories is to distinguish powers a district is actively providing and those powers which are subject to LAFCo approval to activate. Inventories adopted by LAFCo for the special districts subject to sphere of influence designation are summarized below. Activation of any other services would require LAFCo approval pursuant to Government Code Section 56824.10.

District ⁴	
Coastside County Water District	Inventory of Active Services*
	*Water Supply Development
	*Water Conservation & Distribution for
	Residential, Commercial, Industrial &
	Firefighting purposes
	Inactive services permitted by enabling
	legislation:
	*Fire Protection
	*Sanitary Sewer & Stormwater
	*Draining and reclaiming lands
	*Park & Recreation on lands under District
	control ⁵
	*Water recycling & recycled water
	distribution ⁶
	*Generate & sell electric power in
Constant District	conjunction with water conservation project
Granada Sanitary District	Inventory of Active Services*
	*Wastewater collection, transport,
	treatment, and disposal of sewage (Member of SAM), *Septic Tank Maint.
	*Solid Waste collection, recycling &
	disposal (Franchise Agreement)
	disposar (Franchise Agreement)
	*Sewage Collection
	*Sewage Treatment (Member of Sewer Authority
	Mid-Coastside(SAM)
	*Solid Waste Collection & Disposal
	(Franchise Agreement)
	Inactive services permitted by enabling
	legislation: water recycling & distribution
	systems

Revisions in the table respond to MWSD request to use identical language when referencing district powers and services.

^{*}Location and extent of active services of water and sewer are limited by LCP

5 Water Code Section 31130. A district may use any water or land under its control for recreational purposes and in connection therewith may construct, maintain, and operate any works or facilities appropriate or ancillary to such recreational use; provided, that recreational use of water shall be subject to the approval of the public health authority having jurisdiction.

⁶ 31047. A district may <u>control</u>, distribute, store, spread, sink, treat, purify, recapture and salvage any water, including sewage and storm waters, for the beneficial use or uses of the district or its inhabitants or the owners of rights to water therein.

Montara Water and Sanitary Dist.	Inventory of Active Services*	
	*Wastewater collection, transport,	
	treatment, and disposal of sewage (Member of	
	SAM), *Septic Tank Maint.	
	*Solid Waste collection, recycling &	
	disposal (Franchise Agreement)	
	*Water Supply Development	
	*Water Conservation & Distribution	
	for Residential, Commercial, Industrial &	
	Firefighting purposes	
	Inactive services permitted by enabling	
	legislation:	
	*water recycling & distribution systems	
	*Fire Protection	
	*Draining and reclaiming lands	
	*Park & Recreation on lands under District	
	control (See footnote #4)	
	*Generate & sell electric power in	
	conjunction with water conservation project	
County Service Area No. 6	Street Lighting (all other powers inactive)	

As noted above, initiating inactive services authorized by district enabling legislation would require application to and approval by LAFCo. Cities and counties are not subject to LAFCo approval for addition of new services.

Current Adopted Spheres of Influence

While LAFCo is required to assign spheres of influence to individual districts and cities, the spheres of influence address community service needs, communities eligible for service and governance models for service delivery. The sphere of influence for City of Half Moon and the urban midcoast adopted by LAFCo in 1985 and reaffirmed at subsequent sphere reviews is a single coastside city, with establishment of water service as a subsidiary district of the City. As such, the Commission assigned all of the unincorporated urban area to the sphere of influence of the City of Half Moon Bay and Coastside County Water District (CCWD) with the provision that CCWD would be established as a dependent, subsidiary district of the City, governed by the City council. LAFCo assigned zero spheres of influence to Granada Sanitary District and the Montara Sanitary District indicating that the sanitary districts would be dissolved upon annexation and sewer and garbage collection would become city functions.

⁷ The "zero" sphere designation indicates a district should be dissolved.

At the time the sphere was established, water service in Montara was provided by Citizen's Utility Company (CUC), a private water utility company regulated by the California Public Utility Commission (CPUC)⁸. CUC had failed to improve system infrastructure and supply which led to a CPUC moratorium on water connections in Montara. Following special legislation in 1991 that gave Montara Sanitary District the powers of a water district as provided in State Water Code 30000, Montara Sanitary District voters approved a \$19 million bond measure to acquire the water system through eminent domain. The District acquired the system in 2003 and the District name was changed to Montara Water and Sanitary District.

CSA 6 and 10 have a zero sphere of influence indicating they would be dissolved upon annexation to the City, with street lighting becoming a City function. CSA 12 has sphere designation coterminous with the original boundaries of Citizen's Utility Company but has remained inactive.

Service Areas & Urban/Rural Boundary:

District service areas are defined as their agency boundaries upon formation pursuant to attached maps. However, service is limited by the County's Local Coastal Program (LCP). Specifically, Policy 2.14: directs that urban level services shall be confined to urban areas, rural service centers and rural residential areas established by the LCP; directs that boundaries of special districts providing urban level services should be redrafted to correspond to urban areas, rural service centers and rural residential areas established by LCP; allows exceptions to the above to maintain some rural lands in boundaries to continue a service consistent with LCP and directs that special districts maintain rural lands in their boundaries, they designate rural zones and restrict service consistent with rural nature of the area and the LCP. The urban/rural boundary and LCP prohibit extension of municipal sewer and water to rural areas and LCP Policy 1.21 requests that LAFCo spheres of influence be coterminous with the urban/rural boundary. (Please see map

⁸ As a private utility company Citizens Utility Company and successor companies were not subject to LAFCo review. In 1996, when San Mateo LAFCo added special district members and adopted inventories of special district services, the Commission adopted an inventory for then Montara Sanitary District including sewer, garbage collection and water as active powers, in anticipation of acquisition of the water system.

7 - LCP land use which includes urban/rural boundary and rural residential area.) $\frac{9}{}$

Overlapping Territory and Excluded Territory

Two areas of overlap exist between jurisdictions with like powers. Granada Sanitary District territory and sewer system includes the northern portion of City of Half Moon Bay. And overlap exists between Montara Water and Sanitary District and Coastside County Water District in that a portion of the northern CCWD territory is within the boundaries of Montara Water and Sanitary District. This overlap does not reflect location of actual infrastructure or service delivery, rather jurisdictional boundaries of agencies with like powers. The territory includes primarily rural lands not eligible for municipal water and results from special legislation (Health & Safety Code 6512.7) granting water power to MWSD and LAFCo granting water as an active power within all of the then Montara Sanitary District's boundaries without requiring that boundaries be redrawn to reflect actual eligible service area. (See Map #3). It should be noted that all lands within the boundaries of Montara Water and Sanitary District are assessed for the District's bond to acquire the water system, which precludes another water agency from providing service with consent by resolution of the MWSD board.

Urban designated lands excluded from the boundaries of any water district include the territory including the southern portion of Half Moon Bay Airport and lands adjacent to the Half Moon Bay Airport, contiguous to current CCWD boundaries. (See Map #3) This territory is in the current adopted sphere of influence of CCWD. However, a Coastal Commission condition on the CCWD El Granada pipeline expansion limits provision of water by CCWD to areas in district boundaries at the time of the Coastal Commission approval of the project. Annexation of this territory to CCWD would therefore require Coastal Commission approval.

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⁹ MWSD comments received October 4, 2008 (Page 6) indicate that amendments would be necessary to the water demand and consumption tables in the County's LCP update pending Coastal Commission approval because LAFCo spheres recognize formation boundaries of MWSD and GSD as regulated by the urban rural boundary and not the commonly understood, former boundaries of CalAm/Citizens acquired by eminent domain by MWSD, and that tables in the LCP would need revision. Water consumption, demand and build out reference in the LCP apply to the study area and are estimates of growth and water needs, regardless of water provider. LAFCo notes this comment and has referred it to the County Planning Division. LAFCo spheres of influence recommendations are consistent with the urban rural boundary in the document submitted to the Coastal Commission.

MWSD indicates it proposes consolidation of MWSD with CSA 12 in order to complete acquisition of assets the District acquired from former CalAm, which include a improvements to a well located on the Half Moon Bay Airport south of the current MWSD boundaries. As stated elsewhere, County Service Area 12 is an inactive active and has no authorized services. In contrast, MWSD comments that CSA 12 boundaries reflect the County's definition of the eligible water service area for Citizen's Utility Company that was acquired by MWSD. It should be clarified that at the time CSA 12 was formed, the County's proposal was to acquire the Citizen's system, transfer it to CCWD by annexation of the entire territory to CCWD and then dissolve CSA 12. This plan was abandoned when Montara Sanitary was given the powers of a water district via special legislation (Health and Safety Code 6512.7). MWSD subsequently, through eminent domain and bond financing within the District jurisdictional boundaries acquired the water system, infrastructure and assets.

In adopting spheres of influence and considering boundary change proposals, LAFCo is required to consider the present capacity of public facilities and adequacy of public services the agencies provide and the ability of the receiving entity to provide service. In that regard, in spite of the District's stated intent to provide essential service for public and private hydrants in the excluded area, expanding the sphere of influence territory of MWSD is not supported by the longstanding water moratorium in MWSD boundaries, lack of MWSD water infrastructure in the area and proximity of the area to CCWD infrastructure.

Sphere of Influence Determinations:

As noted above, Section 56425 requires the Commission to make determinations concerning: land use; present and probable need for public facilities and services in the area; capacity of public facilities and adequacy of public services that the agency provides or is authorized to provide; and existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency. The following section discusses these in the context of the study area.

The present and planned land uses in the area, including agricultural and open-space lands

Land uses within the study area for the Unincorporated Midcoast include: Residential, Airport, Agriculture, Industrial, Institutional, Neighborhood Commercial, Open Space, Public Recreation and Commercial Recreation under the land use jurisdiction of the County of San Mateo. Land uses within the City of Half Moon Bay include: residential, commercial, open space, and agricultural.

The present and probable need for public facilities and services in the area

The area within the City and unincorporated midcoast consists of land uses listed above, requiring urban level of municipal services and anticipated demand to accommodate growth. With the exception of rural residential designations, areas in on the rural side of the urban/rural boundary are prohibited from receiving municipal sewer and water.

Service delivery jurisdiction within the study area is summarized below:

Service	Incorporated	Unincorporated
Responsibility		
Police	City of Half Moon Bay	County Sheriff
Fire	Coastside Fire Protection	Coastside Fire Protection
	District	District
Sewer	City of Half Moon Bay	Granada Sanitary Dist
	(portion GSD)	Montara Water & San.
Water	Coastside County Water Dist	Coastside Co. Water Dist.
		Montara Water & San. Dist.
		Private Wells
Streets	City of Half Moon Bay	County of San Mateo
Animal Control	City of Half Moon Bay as	County of San Mateo as
	member of Joint Powers	member of Joint Powers
	Agreement that contracts	Agreement that contracts
	with Peninsula Humane	with Peninsula Humane
	Society	Society
Park & Recreation	City of Half Moon Bay	County of San Mateo
Library	City of Half Moon Bay as	County of San Mateo as
	member of County Library	member of County Library
	System	System ¹⁰
Garbage	City of Half Moon Bay under	MWSD & GSD under franchise
Collection	franchise agreement with	agreement with Seacoast
	Allied Waste	Disposal

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¹⁰ There is no library located in unincorporated area.

As noted in the service review determinations, based on Association of Bay Area Governments (ABAG) Projections 2007, the study area population is estimated to grow by at least 4,640 persons to 28,100 by 2035 and the San Mateo County Local Coastal Program estimates indicate that the unincorporated midcoast population growth associated with build-out ranges from 18,340 to 19,440, or 5,940 to 7,040 persons greater than ABAG 2035 projections for the unincorporated area. These figures represent a range of anticipated growth and increased service demand.

The present capacity of public facilities and adequacy of public services that the agency(ies) provides or is (are) authorized to provide

Service authorized by the enabling legislation of the Districts is outlined above. Sewer and water provision for a population of 23,460 comprised of approximately 8,600 sewer connections and 7,370 water connections are carried out by one city, one joint powers authority, one sanitary district, one water and sanitary district and one water district.

Based on information in the Municipal Service Review, capacity of public facilities and adequacy of public services in the unincorporated area are characterized by an ongoing water moratorium in Montara Water and Sanitary District, limits on CCWD water supply assurance with SFPUC, lack of park and recreation facilities and programs in the unincorporated area, lack of storm water facilities and lack of funding for non-enterprise activities that include park and recreation, stormwater and road improvements. In the context of water agency boundaries and infrastructure, the urban designated area adjacent to Half Moon Bay Airport is omitted from water service jurisdiction.

In the City of Half Moon Bay, facilities and services are provided by the City of Half Moon Bay and Coastside County Water District, and Granada Sanitary District in the northern section of the City. Service delivery and capacity challenges include limits on Coastside County Water District water supply noted above and budgetary constraints on city services.

The existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency

The study area includes the City of Half Moon Bay and the unincorporated communities of El Granada, Princeton, Miramar, Moss beach and Montara, delineated by the urban/rural boundary certified by the Coastal Commission and constitutes a geographic sub-region of the County separated from other urbanized areas, illustrated by attached aerial and Map #1. The area is accessed via Highways 1 and 92. Both the City of Half Moon Bay and the unincorporated Midcoast consist of individual communities and neighborhoods that share economic and social interest in benefiting from reliable and efficient municipal services including sewer and water service, parks and recreation, streets, street lighting and storm drain. 11 Recognizing this economic and social community of interest of the sub-region is relevant to potential models for delivery and governance for municipal services and is not intended to replace land use policies and plans designed to retain the unique character of neighborhoods and unincorporated communities.

Recommended Spheres of Influence:

Spheres of influence provide a plan for governance for a community or region. When several governmental entities provide service in a sphere study area, it is necessary to adopt a sphere that includes each agency providing service. In conducting the municipal service review the Commission examined existing boundaries, infrastructure deficiencies and opportunities in the context of the urban coastside as a sub-region. The Commission adopted determinations based on information in the Municipal Service Review that support a regional sewer and water agency that could better promote regional planning for sewer and water including water supply augmentation and water recycling. In addition to facilitating regional planning and service provision for water and sewer, the Commission acknowledged the need to provide for a single governance entity to focus on provision and funding of park and recreation in the unincorporated area.

¹¹ LAFCo proceedings on the consolidation of the Pt. Montara and Half Moon Fire Protection Districts included significant public comment recognizing the area as a subregion that could benefit from regional service delivery for fire protection and emergency response.

The recommended sphere of influence for the City of Half Moon Bay and Unincorporated Midcoast based on the discussion of determinations in Section 56425 and the Municipal Service Review Determinations adopted by the Commission are as follows:

- A single regional water and sewer district to serve the unincorporated and incorporated study area delineated by the urban/rural boundary
- A community services district to serve the unincorporated midcoast to provide park and recreation, street lighting and other services as determined
- Associated with this sphere designation for service delivery and governance, the following sets the sphere of influence designations for existing agencies:
 - o City of Half Moon Bay coterminous with existing corporate boundaries
 - o Coastside County Water District "Consolidation" with sphere of influence territory to include current boundaries eligible for service under LCP and eligible urban areas previously included in CCWD sphere and not currently in the jurisdictional boundaries of receiving water from Montara Water and Sanitary District¹²
 - o Montara Water and Sanitary District "Consolidation" and coterminous with current service area as determined by LCP
 - o Granada Sanitary District "Consolidation" with sphere of influence to include service area as determined by LCP
 - o County Service Area 6 "Consolidation" with service responsibility transferred to Midcoast community services district and the district dissolved
 - o County Service Area 10 "Dissolution"
 - o County Service Area 12 "Dissolution"

¹² A Coastal Commission condition on the CCWD El Granada pipeline expansion limits water provision to territory in the boundaries of CCWD at the time of approval of the Coastal Development Permit. Annexation to the District would therefore require Coastal Commission approval.

Recommended Sphere of Influence Considerations

The following includes sphere considerations and designations that could be adopted by the Commission in amending the sphere of influence of the agencies under study.

(1) The present and planned land uses in the area, including agricultural and open-space lands.

Land uses within the study area including various residential land use designations under the jurisdiction of the County of San Mateo and the City of Half Moon Bay and include residential, Airport, Agriculture, Industrial, Institutional, Neighborhood Commercial, Open Space, Public Recreation and Commercial Recreation under the land use jurisdiction of the County of San Mateo.

(2) The present and probable need for public facilities and services in the area.

Land use designations, current populations and projected growth indicate a current need and an increased demand for facilities, services and supply in the study area, in particular the need to augment water supply.

(3) The present capacity of public facilities and adequacy of public services that the agency provides or is authorized to provide.

Capacity of public facilities and adequacy of public services in the unincorporated area are characterized by an ongoing water moratorium in Montara Water and Sanitary District, limits on Coastside County Water District water supply assurance with SFPUC, lack of park and recreation facilities and programs in the unincorporated area, urban designated areas omitted from the jurisdictional boundaries of a water provider water service areas, and lack of storm water facilities.

(4) The existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency.

The study area consists of urbanized communities bounded by the urban/rural boundary certified by the California

Coastal Commission. Sewer and water provision for a population of 23,460 comprised of approximately 8,600 sewer connections and 7,370 water connections is carried out by one city, one joint powers authority, one sanitary district, one water and sanitary district and one water district. The area can benefit from regional cost avoidance and shared resource practices to ensure a reliable, safe, sustainable water supply for the current and future health, safety and economic well-being of all coastside residents, landowners and businesses.

Implementation:

Spheres of influence adopted by LAFCo are plans for the governance and boundaries of cities and special districts. Once a sphere is adopted, organizational changes including annexations must be consistent with the LAFCo adopted sphere of influence. Implementation of the sphere requires one of the following actions:

- Adoption of resolution of application by affected districts
- Adoption of resolution of application by the Board of Supervisors, City or school district containing the territory
- Application by petition of 5% of the registered voters or landowners within each of the districts proposed for consolidation $\frac{13}{2}$
- Adoption of Resolution by LAFCo initiating consolidation proceedings¹⁴

Commission determinations recognized organization around historic boundaries and disagreement with consolidation on the part of affected agencies and acknowledged that the goal of regional service delivery and a community services district might best be achieved in phases. With concurrence that park and recreation is a vital service that must be met in the unincorporated area, the recommended spheres of influence address regional service delivery for sewer and water and provides a plan for establishing an agency dedicated to park and recreation for the unincorporated area. Recognizing that water and sanitary services are

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¹³ Petition signature requirements for a consolidation that would result in the formation of a new successor district would be subject to signature requirements of the new districts enabling act.

¹⁴ San Mateo LAFCo's adopted policies include a stated preference for application by affected agencies, voters or landowners.

enterprise functions, opportunities exist to establish rates to recover the cost of providing water and sewer service, to facilitate transfer of property tax to a community services district focusing on park and recreation programs and provide for a direct governance model for Midcoast voters.

In regard to implementation of transfer of property tax, the opportunity exists to adjust water and sewer rates over time to allow allocation of property tax to the community services district for park and recreation purposes. ¹⁵ To mitigate the effects of increasing rates in a single year, formation of the community services district could be implemented in a manner that would allow Districts to increase rates annually while phasing out property tax over a four or five year period, until such time that all property tax would be transferred to the community services district and rates have been adjusted accordingly.

Examples of steps that could lead to a regional water and sewer district and a community services district (reducing from eight to two the number of special districts with associated overhead costs) could include the following:

Alternative A:

- 1. Formation of a regional sewer district to include SAM members and service area
- 2. Consolidation of Montara Water with Coastside County Water district and formation of Midcoast Community services District for Park and Recreation, and dissolution of CSA 6, Montara Lighting District and Granada Lighting District
- 3. Consolidation of regional water and regional sewer into the Coastside Water and Sanitary District

Alternative B:

1. Consolidation of Montara Water and Sanitary District with Granada Sanitary District, and formation of the Midcoast Community Services District for Park and Recreation, and dissolution of CSA 6, Montara Lighting District and Granada Lighting District

¹⁵ Montara Water and Sanitary District is apportioned approximately 6.5% of the 1% property tax, Granada Sanitary district is apportioned approximately 5.5% of the 1% property tax and CCWD is apportioned approximately 3.15%.

- 2. Consolidation of the consolidated Montara/Granada District with Coastside County Water District
- 3. Transfer of City of HMB sewer operations to the consolidated MWSD/GSD/CCWD

These potential steps or phases are not intended to be the only methodology for achieving regional governance and provision of park and recreation service delivery for the unincorporated. In the case of the San Mateo County Urban Midcoast and City of Half Moon Bay, the recommended sphere of influence takes into account service delivery and fiscal challenges, Local Coastal Program mandates and needs identified in regard to park and recreation, water and sewer service. Once adopted by the Commission, implementation requires application to LAFCo by affected agencies or the community. Clearly, collaboration and genuine commitment by affected agencies in examining the possibilities for service delivery is essential to implement service delivery and governance to provide long term, sustainable local governance and service delivery to the coastal communities.

Attachments: Adopted Municipal Service Review Determinations

Summary of Coastside elected bodies and committees

Maps

Comment Letters

Exhibit A

Municipal Service Review Determinations
City of Half Moon Bay and Unincorporated MidCoast
Adopted June 18, 2008

Determinations pursuant to Government Code Section 56430:

1. Regarding infrastructure needs and deficiencies, the Commission determines:

1.1 Sewer Infrastructure:

- a) The Montara Water and Sanitary District, Granada Sanitary District and City of Half Moon Bay are member agencies of Sewer Authority Mid-Coastside (SAM) for Sewage Treatment and contract separately with SAM for sewer system maintenance.
- b) Sewer infrastructure identified in the Municipal Service Review includes approximately 104.5 miles of sewer pipelines and 17 lift stations owned by member agencies and the SAM wastewater treatment plant, three pumping stations, eight-mile transmission line and ocean outfall.
- c) Member agencies budget for capital improvements to respective sewer systems and member agencies fund SAM capital improvements related to sewage treatment infrastructure pursuant to the Joint Powers Agreement creating Sewer Authority Mid-Coastside.
- d) SAM Member agencies are jointly preparing a Sewer System Master Plan.
- e) Member agencies and SAM have adopted capital improvement plans and infrastructure needs are identified in these plans.

1.2 Water Infrastructure

- a) Water providers include Coastside County Water District (CCWD) and Montara Water and Sanitary District (MWSD).
- b) CCWD water infrastructure includes 10 water storage tanks (8.1 million gallon capacity), five pump stations, two water treatment plants, 100 miles of transmission and distribution line, and Denniston Wells and surface water.
- c) CCWD has an adopted capital improvement plan and Urban Water Management Plan that indicate capital assets are upgraded appropriately and there are not significant infrastructure deficiencies.
- d) MWSD water infrastructure, acquired by MWSD through eminent domain, includes one water treatment plant,

- three miles of distribution line, 28.6 miles of water mains, three storage tanks and ten producing wells.
- e) The MWSD system was acquired from CalAm with significant deficiencies in the areas of distribution, supply, storage and water quality, including a long-standing moratorium on new connections, which the District identifies in the Water System Master Plan. The Master Plan identified over \$10.4 million in improvements. The District began addressing deficiencies upon acquisition and a summary of District efforts since acquisition is attached to the Municipal Service Review Report.
- f) While there is no projected date for completion of improvements and additional water supply, the Implementation Plan indicates implementation to supply the build-out population may be expected in twenty years.

1.3 Parks & Recreation

- a) In the Unincorporated Area, while the Municipal Service Review identifies existence of regional park facilities, it identifies a lack of active playfields for organized sports, pocket parks or community parks (except for four acres at Quarry Park) and the lack of a community center.
- b) The County has developed and adopted the Midcoast Action Plan for Parks and Recreation that includes identification of priorities for facilities.
- c) In the City of Half Moon Bay, the Municipal Service Review identifies 24 acres of developed park facilities, which falls below both a standardized national average and the City General Plan Standard of 8 acres per 1,000 of population or 98 acres.
- d) In both the City of Half Moon Bay and the Unincorporated Area, the Cabrillo Unified School District facilities provide virtually all playing fields for organized sports and merit inclusion in the broader discussion of park and recreation facilities.

1.4 Streets, Street lighting and Stormwater Drainage

- a) The County of San Mateo and the City of Half Moon Bay are the responsible agencies for street and street lighting within their respective boundaries.
- b) Agencies with enabling legislation or general powers that authorize stormwater activities include the County of San Mateo, City of Half Moon Bay, Granada Sanitary District and Montara Water and Sanitary District.

- c) The County of San Mateo maintains roads in all unincorporated areas including 47 centerline road miles in the study area. The County has an adopted Pavement Management Program and faces a significant backlog of deferred maintenance due to inadequate funding.
- d) The City of Half Moon Bay maintains 28 centerline miles of roads, has an adopted Pavement Management Program and faces a significant backlog of deferred maintenance due to inadequate funding.
- e) The majority of the City of Half Moon Bay has stormwater infrastructure that was constructed as new subdivisions were constructed.
- f) There is a significant lack of stormwater drainage infrastructure on the unincorporated Midcoast resulting in flooding in some areas. The County of San Mateo's Midcoast Stormwater Drainage Committee is identifying priorities for projects to address the most apparent problem areas and is also considering the need for a stormwater master plan for the Midcoast area. There are no existing funding sources for improvements or maintenance.

1.5 Law Enforcement

- a) The City of Half Moon Bay's public facilities fund includes annual appropriations for improvements to the existing Police Station located at 537 Kelly Avenue and the station will be included in upcoming capital improvement planning.
- b) The County of San Mateo provides law enforcement services from the Moss Beach substation and there are no significant infrastructure needs or deficiencies identified.

2. Regarding growth and population projections for the affected area, the Commission determines:

- a) Population estimates for 2007 include 12,308 persons for City of Half Moon Bay and 11,152 persons for the unincorporated Midcoast for a total of 23,460 for the study area.
- b) Based on Association of Bay Area Governments (ABAG) Projections 2007, the study area population is estimated to grow by at least 4,640 person to 28,100 by 2035.
- c) San Mateo County Local Coastal Program estimates indicate that the *unincorporated* midcoast population growth associated with build-out ranges from 18,340 to

19,440, or 5,940 to 7,040 persons greater than ABAG 2035 projections for the unincorporated area.

3. Regarding financing constraints and opportunities and opportunities for rate restructuring, the Commission determines:

3.1 Sewer

- a) The City Council and District boards are rate-setting bodies for their respective enterprise services and opportunities exist for cost recovery through revision of existing fees.
- b) The City of Half Moon Bay current year sewer revenues are less than current year operating and capital expenditures and the City indicates the Finance Committee has begun analysis of appropriate sewer rate revision.
- c) Sewer districts offset sewer rates with property tax and would need to increase rates in the event that property tax revenues are redistributed for other purposes.
- d) Financing of needed improvements and of infrastructure replacement for each agency is constrained by the relatively small size of their customer bases and by very low or no growth rates.

3.2 Water

- a) Principal revenue sources for both CCWD and MWSD include water fees with augmentation by property tax.
- b) Financing of needed improvements and of infrastructure replacement for MWSD and CCWD is constrained by the relatively small size of their customer bases and by very low or no growth rates.
- c) MWSD voters approved \$19 million in general obligation bonds for acquisition and rehabilitation of the water system and the District has successfully obtained grants and loans for individual District projects.
- d) As the rate setting bodies for water service, the Districts have the ability to set rates to reflect the cost of providing service and capital improvements.
- e) Water districts would need to increase rates in the event that property tax revenues are redistributed for other purposes.
- f) There may be opportunities for additional financing, including grant funding for regional projects such as regional water recycling or integrated regional water management planning.

3.3 Park & Recreation

- a) Revenue sources for park and recreation in the City of Half Moon Bay include program fees, development impact fees and City general fund contribution.
- b) The City's program fees include a fee for nonresidents and the City has the ability to adjust both resident and non-resident fees for better cost recovery.
- c) The County of San Mateo Parks Department Budget includes approximately \$300,000 annually for services on the Midcoast, including approximately \$30,000 for maintenance at Quarry Park. The County also collects development impact fees on the Midcoast for parks.
- d) While the County has developed and adopted the Midcoast Action Plan for Parks and Recreation that includes identification of priorities for facilities, implementation requires new funding sources.

3.4 Streets, Street lighting and Stormwater Drainage

- a) Revenue sources for streets include primarily intergovernmental (state and federal) revenues distributed to jurisdictions for the purpose of street maintenance.
- b) The City of Half Moon Bay has a development impact fee for traffic mitigation and the County of San Mateo has a development impact fee for road maintenance.
- c) In the unincorporated area, there are no existing funding sources for stormwater improvements or maintenance.

3.5 Law Enforcement

- a) Primary funding sources for law enforcement include County and City General fund revenues such as property tax, sales tax, transient occupancy tax.
- b) The City of Half Moon Bay recently successfully increased the transient occupancy tax to augment general fund revenues to fund programs such as police.

4. Regarding cost avoidance opportunities and shared facilities, the Commission determines:

- 4.1 Sewer Agencies practice cost avoidance and shared facilities through regional participation in the Sewer Authority Mid-Coastside (SAM) for joint operation of the sewage treatment plant and through separate contracts with SAM for system maintenance.
- 4.2 Water:
 - a) The area that includes City of Half Moon Bay and the unincorporated midcoast constitutes a

separate subregion of the County with combined water supplies that are limited.

- b) The area can benefit from regional cost avoidance and shared resource practices to ensure a reliable, safe, sustainable, and fiscally viable water supply for domestic, commercial, agricultural and fire protection for the current and future health, safety and economic well-being of all coastside residents, landowners and businesses.
- c) Such practices include, but are not limited to, an inclusive integrated regional water management plan for the study area, a joint effort that includes Sewer Authority Mid-Coastside Member Agencies and the Coastside County Water District by formal agreement in a regional recycling program, system interties to provide for emergency water exchange between agencies, and mutual assistance agreements.

4.3 Parks & Recreation

- a) Existing cost avoidance and shared facilities practice includes participation of unincorporated residents in existing City of Half Moon Bay Park and Recreation programs and use of school facilities for park and recreation purposes.
- b) Potential opportunities for cost avoidance and shared facilities include coordinated efforts by the City of Half Moon Bay, County of San Mateo and Cabrillo Unified School District to fund and provide for facility improvements on Cabrillo Unified School District facilities for recreation purposes.
- c) Opportunities for partnership between the City of Half Moon Bay, County of San Mateo and other agencies in pooling resources to jointly provide park and recreation that could be explored by the agencies include but are not limited to a contract or agreement with the City of Half Moon Bay in which the City of Half Moon Bay provides expanded active recreation programs within the unincorporated area, with the County focusing on resource management of passive recreational lands.

4.4 Streets, Street lighting and Stormwater Drainage

a) There are no apparent cost avoidance or shared facility opportunities in these areas.

4.5 Law Enforcement

a) The County of San Mateo and City of Half Moon Bay are encouraged to examine potential savings and economies of scale for both agencies if the City contracts with the County sheriff for law enforcement.

5. Regarding evaluation of management efficiencies, the Commission determines:

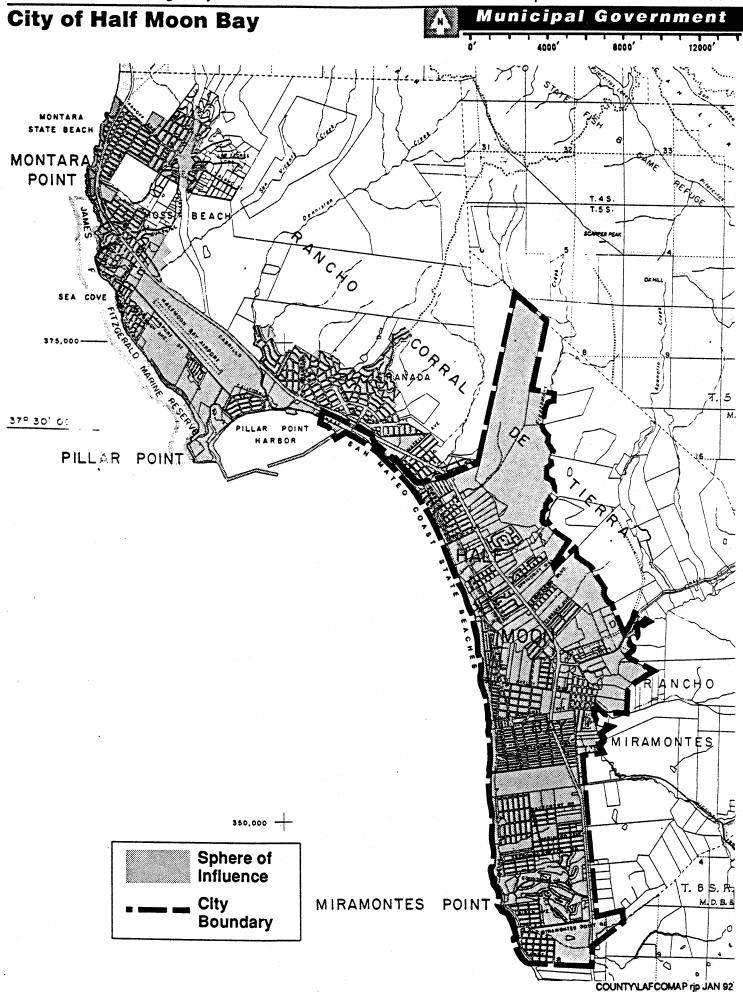
- a) Sewer and water provision for a population of 23,460 comprised of approximately 8,600 sewer connections and 7,370 water connections is carried out by one city, one joint powers authority, one sanitary district, one water and sanitary district and one water district, each with separate office space, attorneys, engineers, management and administrative personnel dedicated to the activities of five separate agency operations, meeting agenda preparation, and board meeting attendance by management, clerical and legal counsel.
- b) In addition to potential economies of scale that are indicated by the summary in (a) above, the number of agencies reduces effectiveness of decision making for regional or subregional projects, whether they involve, water, sewer, park and recreation or storm drain improvements.
- c) Specifically, while Sewer Authority Mid-Coastside and the separate contracts for system maintenance minimize costs for member agencies while meeting the service needs of respective ratepayers, the composition and voting structure of SAM requires decision-making by four separate entities which impedes and delays funding and implementation of essential projects.
- 6. In regard to government structure options, including the advantages and disadvantages of consolidation or reorganization of service providers, the Commission determines:
- a) Fragmentation of local government organized around historic agency boundaries and the quantity of agencies has limited ability to plan regionally for the benefit of municipal services essential to the health and economic well-being of the communities in the region and a failure to augment water supplies in a timely manner.
- b) Given the geographic separation of the study area from other areas in the County, the limitations on water resources and the need to provide for regional planning, the area is best governed by a limited number of regional agencies specifically, a regional water and sewer agency, or a regional water district and a regional sewer district, as opposed to the current government structure of multiple individual water and sewer entities.
- c) Governance alternatives that include the provision of regional sewer and water service delivery, could also include a community services district for the unincorporated midcoast to better provide for local

- governance and a more focused approach to recreation and community services.
- d) Based on the number of existing agencies and inherent challenges to government reorganization including individual agency rate setting policies, infrastructure condition, fiscal resources and lack of broad consensus or support by elected boards for consolidation, the Commission recognizes that reorganization may best be achieved in phases that would include a combination of the alternatives enumerated in f) below.
- e) In general, advantages of consolidation include efficiencies and economies of scale for operations and rates, streamlined planning for regional infrastructure, maximizing resources including water supply and personnel and efficient and timely decision making by a fewer number of elected boards. In general disadvantages of consolidation identified by the Districts include loss of local control, inadequate evidence of significant savings that would result from economies of scale, and obstacles to achieving consolidation disparate rate structures, infrastructure conditions, reserve and debt levels of individual districts.
- f) Governance Alternatives for the study area include:
 - 1) Independent regional sewer district
 - 2) Independent regional water district
 - 3) Consolidation of Granada Sanitary District and Montara Water and Sanitary District
 - 4) Community Services District for Unincorporated Midcoast
 - 5) Reorganization of Granada Sanitary
 District as a community services
 district and status quo for Montara
 Water and Sanitary District
 - 6) Incorporation of the Midcoast
 - 7) Implementation of current sphere of influence involving annexation to City of Half Moon Bay and consolidation of water and sewer operations
 - 8) A consolidated, regional water and sanitary district

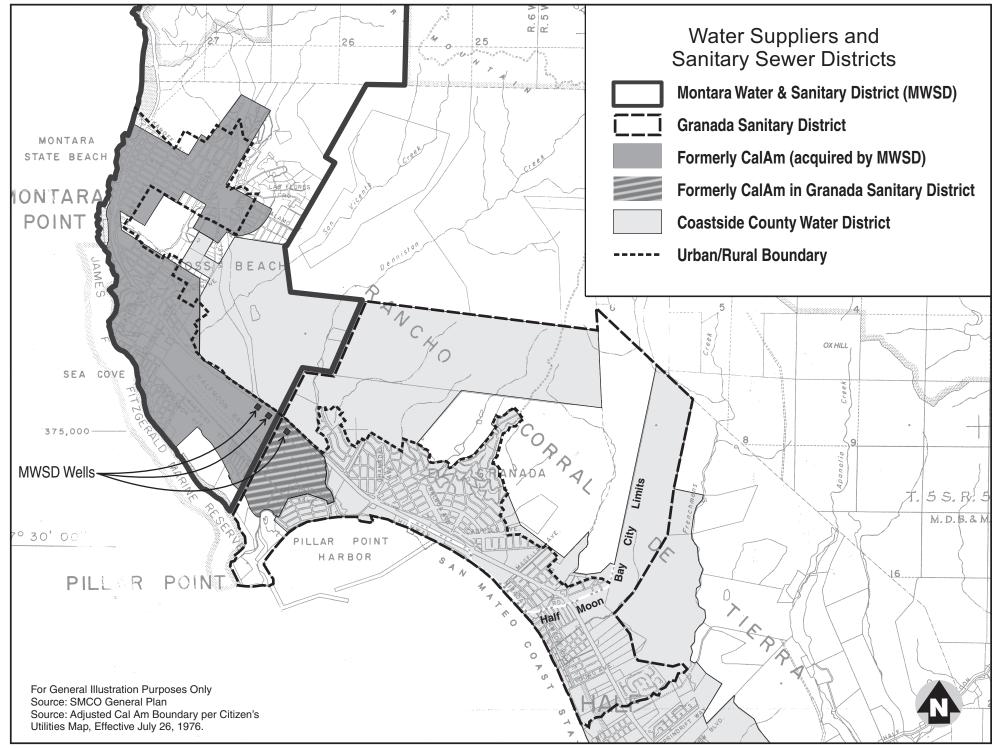
7. Regarding local accountability and governance, the Commission determines:

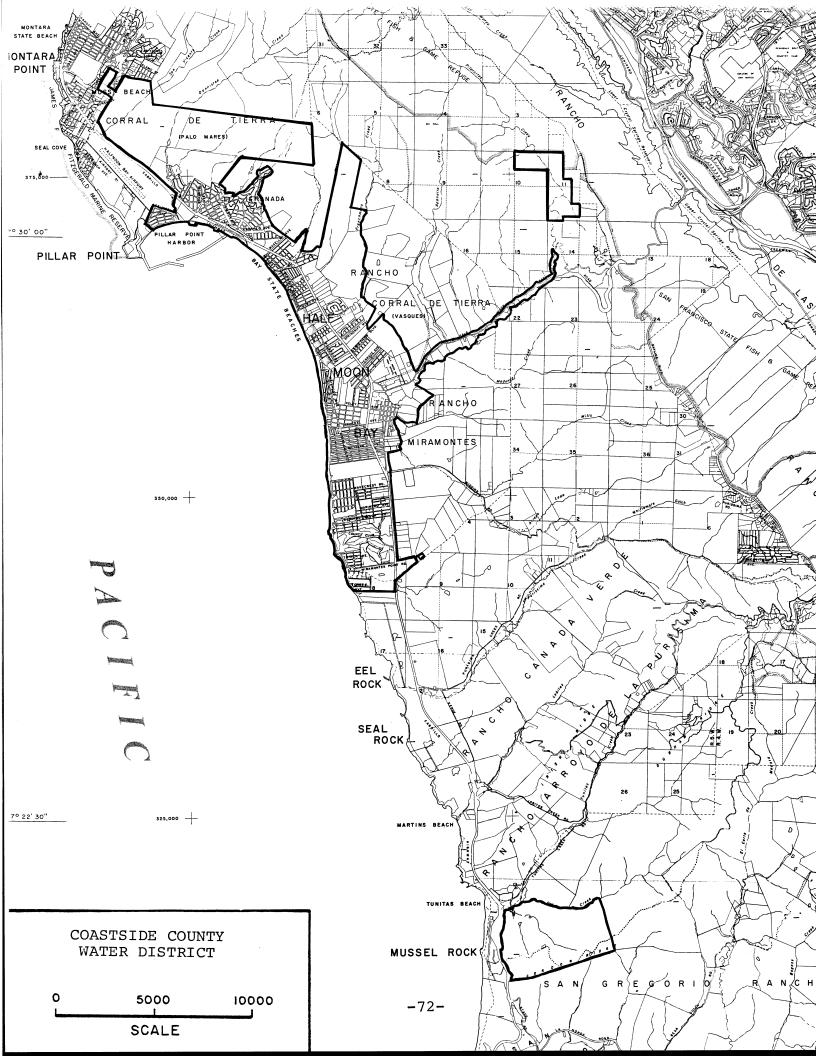
- a) Agencies adopt budgets that account for expenditures and revenues and these budgets are accessible to the public.
- b) Agencies publish meeting agenda, financial and other information as required by the Brown Act, and post this information on agency websites.

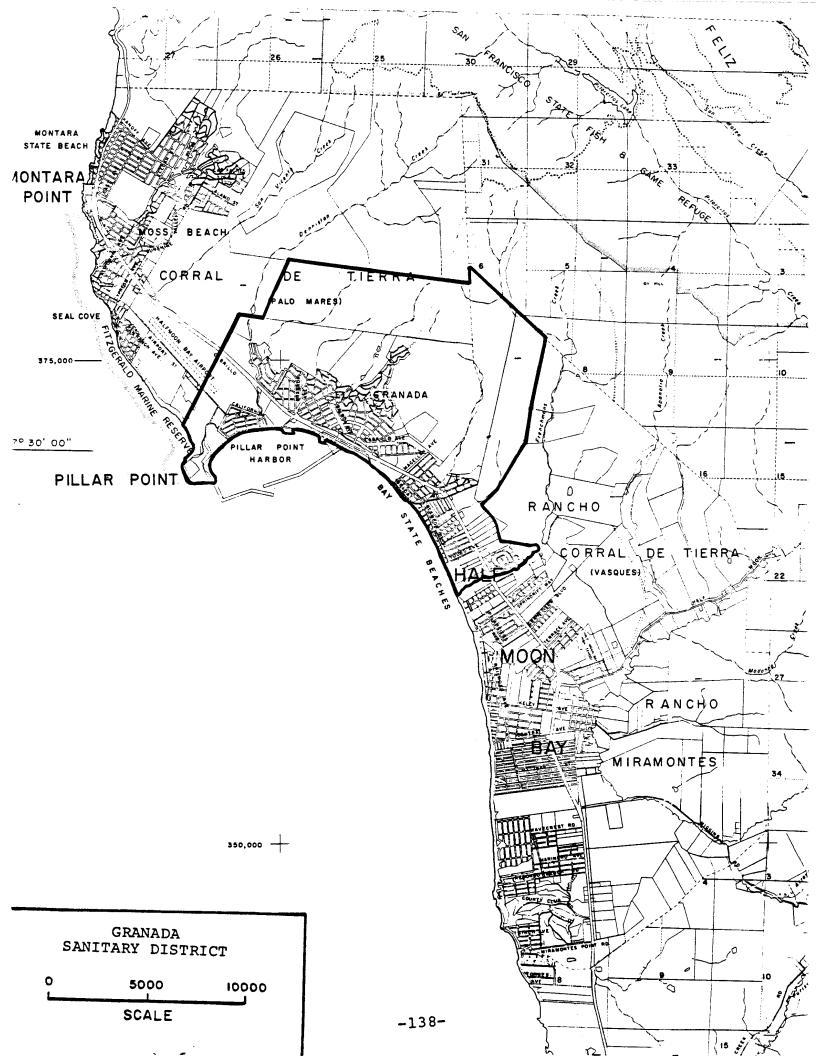
- c) While district public meetings are not broadly attended, meetings are televised on local cable television.
- d) While agencies fulfill mandated responsibilities related to public meetings and information, the number and diversity of limited purpose agencies providing service in the study area inhibit regional planning, in particular for water supply and infrastructure in including efforts such as recycling which can best be achieved with efforts by both sewer and water agencies, and require that the public stay informed of a multiple agency agenda, budgets, etc. in order to influence and participate decision making.

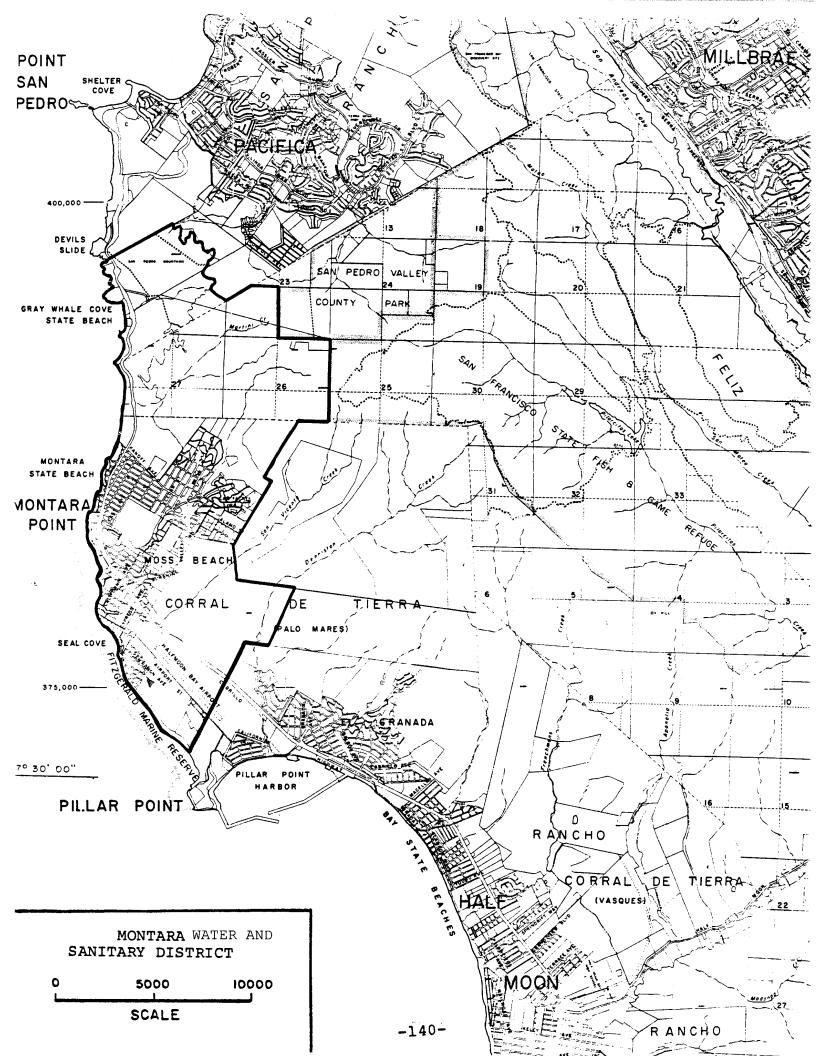


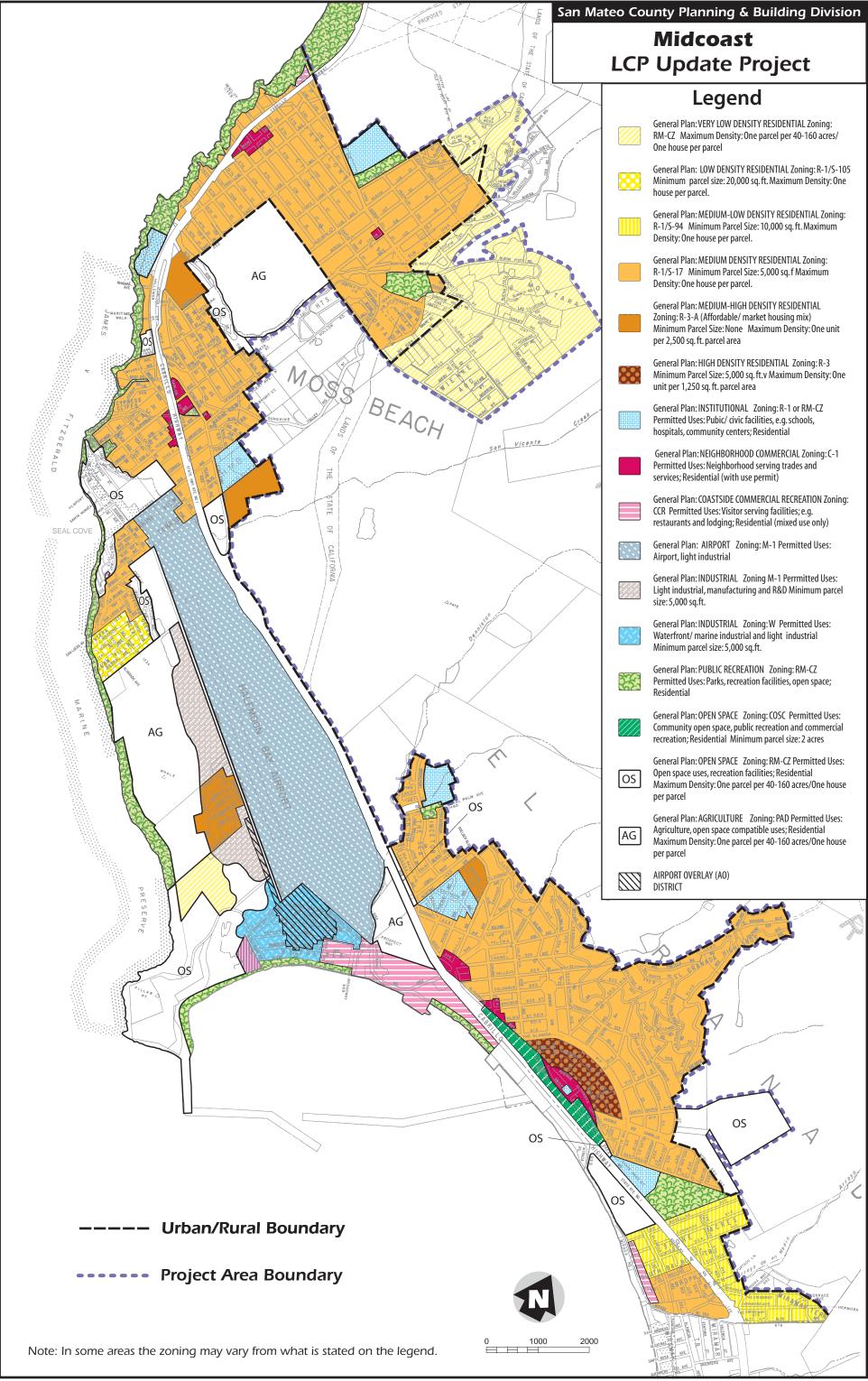


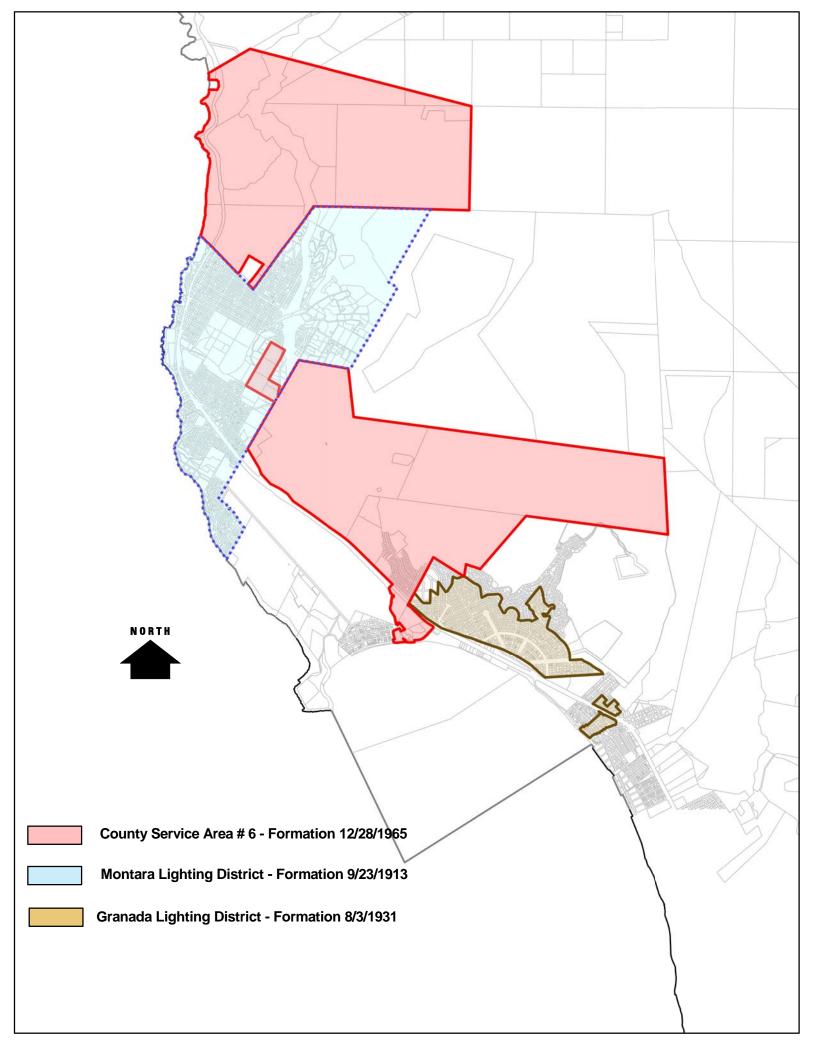


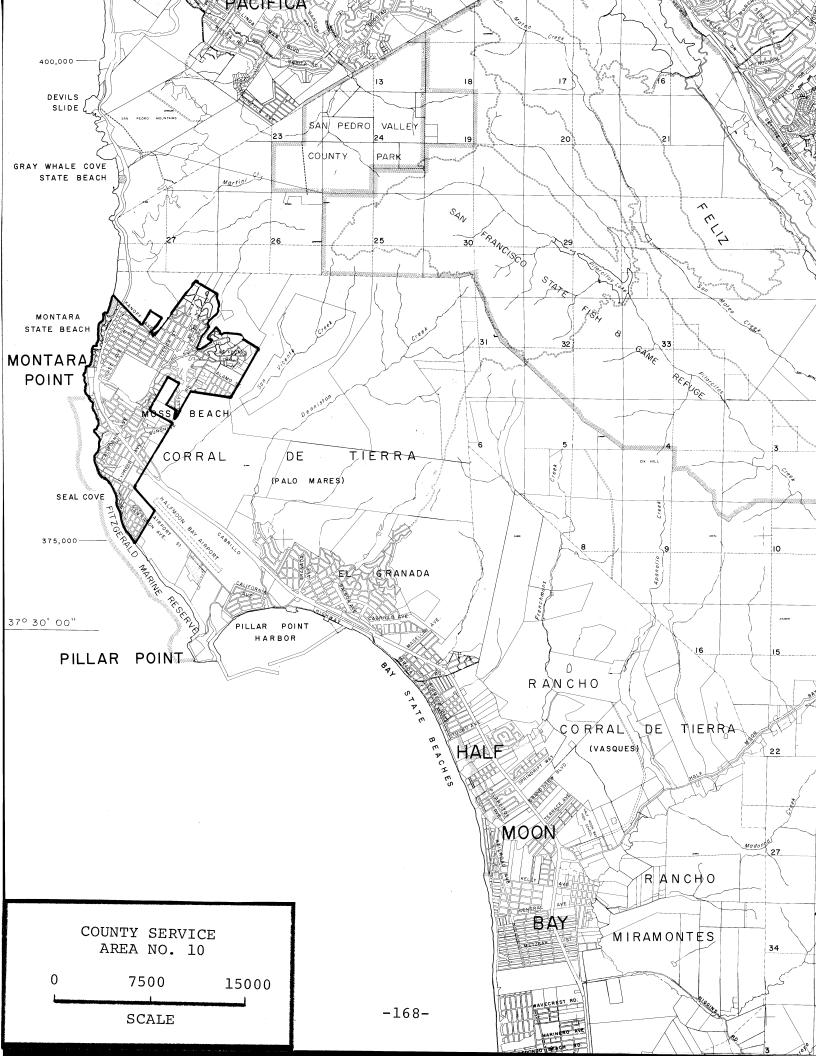


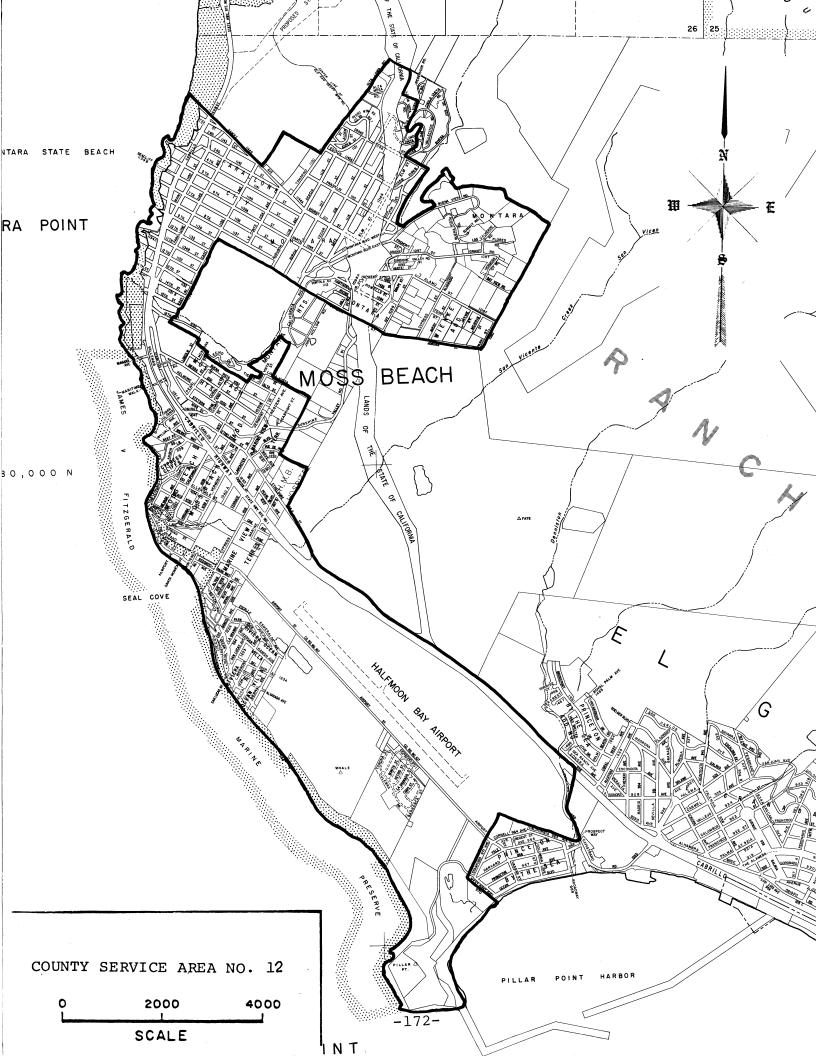












Coastside Council/Board/Committees & Membership

City of HMB	CCWD	GSD	MWSD	SAM	MCC	MPL	CFPD
B. McClung	E. Everett	L. Woren	P. Perkovic	M. Fraser/HMB	L. Woren	J. Blanchard	Gary Burke
J. Muller	C. Mickelson	R. Fenech	K. Slater Carter	R. Lohman/GSD	K. Slater Carter	R. Fenech	Chris Cilia
N Patridge	K. Coverdell	M. Clark	S. Boyd	L. Woren/GSD	N. Merrillees	S. Emerson	J. Cockrell
M. Fraser	B. Feldman	G. Erickson	P. Ptacek	J. Muller/HMB	G. Erickson	G. Erickson	J. Draper
J. Grady	J. Larimer	R. Lohman	J. Harvey	J. Harvey/MWSD	R. Lohman	F. Pollard	G. Hosfeldt
				S. Boyd/MWSD	D. Lardie	L. Erickson	L. Lees
					S. Brennan	S. Brennan	B. McKimmie
						C. Vogel	D. MacKintosh
						D. Holland	G. McShane
						M. Kingshill	

Acronym Legend:

CCWD Coastside County Water District

GSD Granada Sanitary District

MWSD Montara Water and Sanitary District SAM Sewer Authority Mid-Coastside MCC Midcoast Community Council

MPL Midcoast Parks Lands

CFPD Coastside County Water District



MONTARA WATER & SANITARY DISTRICT

Serving the Communities of Montara and Moss Beach

P.O. Box 370131 8888 Cabrillo Highway Montara, CA 94037-0131

Tel: (650) 728-3358 Fax: (650) 728-8556

E-mail: msd@montara.com

Visit Our Web Site: http://www.msd.montara.com

October 3, 2008

Martha Poyatos, Executive Officer San Mateo County Local Agency Formation Commission 455 County Center Redwood City, CA 94063

Re: Comments on Preliminary Sphere of Influence Report (draft of August 18, 2008) and Request for Sphere of Influence Determination for Montara Water and Sanitary District

Dear Ms. Poyatos:

Our Board has previously commented extensively on the Municipal Service Review of the City of Half Moon Bay and Unincorporated Midcoast ("MSR"), although much of the historical background offered in our comments was not included in the final report prepared for the San Mateo County Local Agency Formation Commission ("LAFCo" or "Commission") by Matrix Consulting Group and adopted by LAFCo at its June 18, 2008 meeting. The MSR and related findings provide the first step in a two-stage process for Sphere of Influence determinations for the agencies under review. This letter conveys Montara Water and Sanitary District ("MWSD" or "District") comments on the draft Sphere of Influence Update dated August 18, 2008 ("Sphere Update") for the City of Half Moon Bay and Unincorporated Midcoast, with detailed comments on the draft and specific recommended text changes in Attachment A.

We request and recommend that the proposed sphere of influence designations on page 11 of the Sphere Update be modified to read as follows:

- Coastside County Water District "Consolidation" with sphere of influence territory to include current boundaries eligible for service under LCP excluding territory included in County Service Area 12
- Montara Water and Sanitary District "Consolidation" with sphere of influence territory
 to include current boundaries eligible for service under LCP (including solid waste
 collection and recycling) and urban areas eligible for water service included in County
 Service Area 12
- •
- County Service Area 10 "Consolidation" into Montara Water and Sanitary District
- County Service Area 12 "Consolidation" into Montara Water and Sanitary District

Our Board of Directors ("Board") finds that research into prior background and LAFCo actions reveals significant relevant history and inconsistencies between past and present LAFCo actions and recommendations. The most critical changes regard the so-called "excluded territory" described on page 7 of the Sphere Update, an asset purchased by MWSD on behalf of the Montara / Moss Beach community that appropriately belongs within MWSD's boundary and within MWSD's Sphere of Influence ("Sphere") in order to conform to our acquired water service area.

This territory is the subject of a pending annexation application before LAFCo and, among other negative effects, excluding it from our Sphere would presume to prejudge that application without the full examination of facts justifying its annexation. In addition to having an operating municipal water system supply well in the subject territory, MWSD also has transmission lines and hydrants and continues to serve County-owned property in that area that has been served by MWSD and its predecessors since the 1940s. However, as discussed below, your recommendations regarding County Service Area ("CSA") 12 provide a vehicle for rectifying the omission.

County Service Area 12 - "Consolidation" into Montara Water and Sanitary District

County Service Area 12 was formed in 1988 "to acquire and operate a water system to serve the community of Montara-Moss Beach". The boundary of CSA 12 delineates the authorized service area of Citizens Utilities Company of California ("CUCC") established by the California Public Utilities Commission ("CPUC") eligible for urban-level water services under the San Mateo County Local Coastal Program. The County never completed the proposed acquisition. Instead, MWSD acquired all Montara District assets of CUCC (then owned by California American Water, "Cal-Am"), including the rights to the former CUCC service area, through an eminent domain proceeding concluded in 2003. MWSD began operation of the former CUCC water system on August 1, 2003.

Aside from having acquired the service area as an asset from Cal-Am, MWSD has also compensated the County pursuant to Health and Safety Code §6512.7, for the County's preliminary efforts toward acquiring the water system, including the formation of CSA 12. Prior to acquisition of the water system, the District made a significant investment in water studies, appraisals, and other preparatory work, as documented more fully in Attachment D. Since completion of the acquisition in August 2003, MWSD has made extensive investments in the Montara / Moss Beach water system designed to meet the needs of the entire service area. Thus, MWSD has heavily invested in acquisition of the *entire* CUCC / Cal-Am / CSA 12 territory. Consolidation of CSA 12 into MWSD merely completes the public acquisition and operation of the former CUCC water system contemplated and intended by San Mateo County when the boundary of CSA 12 was approved by LAFCo, by adjusting the District boundary of MWSD to conform to our newly-acquired water service area boundary.

Our Board therefore formally requests, pursuant to California Government Code ("GC") §56428(a), that LAFCo designate a Sphere of Influence for Montara Water and Sanitary District consistent with our long-standing multi-function services (sanitary sewer service, septic system service, and solid waste collection and recycling) within our existing District boundary together with the recent domestic and fire protection water supply services within the water service area established by the CPUC for CUCC described by the boundary of CSA 12 for which MWSD already owns the right to serve.

This request is consistent with the Recommended Spheres of Influence given on pages 10 and 11 of the Sphere Update, except for the so-called "excluded territory" outside Montara Water and Sanitary District's existing boundary but included within the water service area established by the CPUC for CUCC and its successors, to which MWSD already acquired rights as noted above. In particular, the appropriate Sphere of Influence for MWSD includes all of the territory within the boundary of CSA 12, which, as noted earlier, also includes the area in MWSD's pending annexation application to LAFCo.

¹ This territory is at the southern end of the Half Moon Bay Airport and in the Pillar Point area outside of Princeton. We have held in abeyance proceeding with the annexation application in deference to comments received after the closure of the California Environmental Quality Act ("CEQA") public comment period and in light of our own staff workload. Nevertheless, we fully intend to pursue formal inclusion of the area in question into our District boundary via annexation in the event the consolidation with CSA 12 discussed in this letter does not occur.

² Board of Supervisers Resolution No. 50271 adopted April 26, 1988, initiating formation proceedings.

County Service Area 10 - "Consolidation" into Montara Water and Sanitary District

Another important opportunity exists with regard to future watershed acquisition and water supply development. In light of the inactive power for recreation available to county water districts listed in the inventory on page 4 of the Sphere Update (as authorized by Water Code §31130) and the fact that MWSD holds title to an historic military base on its oceanfront District headquarters and owns 11 acres of watershed land with several community-created informal trails running across it, it is logical that County Service Area 10 should also be consolidated into MWSD to give the District the ability to seek financing to improve these existing public resources. Further, it has been suggested that MWSD acquire the surplus California Department of Transportation ("CalTrans") right-of-way within the urban and rural districts of Montara and Moss Beach as additional protected watershed to expand MWSD's assured water supply and to continue the existing, extensive, improvised use of those lands for public open space and recreation.

County Service Area 10 was established by the Board of Supervisors on January 14, 1975, prior to the certification of the Local Coastal Program ("LCP") in 1980, "for the purpose of providing local park and recreation services" to an area generally consisting of the portions of the Montara / Moss Beach community later designated as urban or rural residential by the LCP, as amended.³ A proposed tax levy to provide funding for CSA 10 was not adopted and CSA 10 has remained inactive. The territory of CSA 10 is wholly contained within the existing boundary of MWSD and the proposed Sphere of Influence for MWSD requested above, and therefore does not directly affect the Sphere Update except for our proposal to recommend consolidation into MWSD, rather than dissolution, for CSA 10.

MWSD is prepared to assist LAFCo in the consolidation of special districts and service areas on the Midcoast by formally requesting consolidation of CSA 10 and CSA 12 into MWSD.

Supplementary Information

Attachment A, as noted earlier, contains MWSD's specific recommended revised language for the Sphere of Influence Update prior to submitting it for approval by the Commission, together with our extensive analysis supporting each of the recommended text revisions.

Attachment B is MWSD's analysis in support of our request for a sphere of influence determination. It contains the background, history, and factual basis sufficient for LAFCo to make the required determinations and findings supporting the Sphere of Influence designation requested for MWSD.

Attachment C is a map of the requested Sphere of Influence for MWSD and expected eventual boundary of the District following consolidation of CSA 10 and CSA 12 into MWSD, together with copies of maps from the LAFCo Handbook showing the boundaries of CSA 10 and CSA 12 which were not included in the Sphere Update report. We recommend that these maps be included in the revised Sphere Update.

Attachment D is a letter from District Counsel David E. Schricker dated August 8, 1996, submitted to LAFCo in conjunction with the Inventory of Special District Services compiled by LAFCo during the expansion of San Mateo LAFCo to include representation of special districts. This letter clearly spells out the intention of the District to serve the entire CUCC service area, either through public development of additional water supplies or storage facilities to be leased to CUCC, or through outright acquisition of all of CUCC's Montara District assets.

³ Board of Supervisors Resolution No. 34528 adopted January 14, 1975.

Attachment E is a set of commendations from Senators Barbara Boxer and Dianne Feinstein, Congresswomen Anna Eshoo and Jackie Speier, State Senator Leland Yee, Assemblyman Gene Mullin, the San Mateo County Board of Supervisors, Coastside County Water District, Granada Sanitary District, North Coast County Water District, Sewer Authority Mid-Coastside, and the Midcoast Community Council honoring the Montara / Moss Beach community and MWSD on the occasion of the District's 50th Plus 5th Anniversary Celebration on August 24, 2008.

Our request does nothing to hinder future reorganizations recommended in the Municipal Service Review. It does request a Sphere of Influence that will allow LAFCo to conform MWSD's boundary to include all of MWSD's water service area through future consolidation of CSA 12 into MWSD (or through our pending annexation application), and it does provide an opportunity for a near-term solution to Montara / Moss Beach recreation needs, which have no funding mechanism in any other proposal we have seen presented, including that of the Sphere Update.

Indeed, consolidation of CSA 10 and CSA 12 into MWSD is consistent with the recommendations contained in the MSR and the Sphere Update to reduce the number of districts and to provide a method for park and recreation services in the Midcoast. It is most efficient and economical for the mutual interests of LAFCo and the Montara / Moss Beach community for the Commission to take advantage of the Municipal Service Review process to adjust the District's Sphere of Influence as requested herein pursuant to GC §56428.

Unfortunately the spheres of influence as proposed for MWSD and CCWD in the Preliminary Sphere Update would amount to a taking of a portion of MWSD's existing service area that was initially established for CUCC, thereafter acquired by MWSD, and within which MWSD currently has operating facilities and provides service. Accordingly, MWSD urges the Executive Officer to revise the LAFCo staff recommendations to conform to those contained in Attachment A so that the final Sphere of Influence Update presented to the Commission for approval avoids interfering with MWSD's vested interests and properly recognizes the long-established history of district service areas, the clear legislative intent in the formation of CSA 12 to define the service area of the water system to be acquired from CUCC, pertinent decisions of the California Coastal Commission, pertinent policies in the Local Coastal Program, and the overwhelming mandates of the voters in the Montara / Moss Beach area. We firmly believe that following our recommendations will best serve the public health, welfare and safety and avoid unnecessary conflicts.

Montara Water and Sanitary District is finally fulfilling the objectives for which County Service Area 12 was originally formed. Thank you for your attention to this matter.

Respectfully submitted,

Paul Perkovic, President,

Montara Water and Sanitary District

cc: Cabrillo Unified School District

California Coastal Commission

City of Half Moon Bay

Coastside County Water District

Granada Sanitary District

Midcoast Community Council

San Mateo County Board of Supervisors

Sewer Authority Mid-Coastside

Attachment A

Specific Proposed Text Changes on Preliminary Sphere of Influence Update

This attachment lists specific recommended changes or clarifications proposed by the Montara Water and Sanitary District to the text of the Preliminary Sphere of Influence Update for the City of Half Moon Bay and Unincorporated Midcoast (draft dated August 18, 2008) ("Sphere Update") prepared by the San Mateo County ("County") Local Agency Formation Commission ("LAFCo").

Active Services and Inactive Services

The table on page 4 of the Sphere Update showing an inventory of active services and inactive services permitted by enabling legislation gives inconsistent lists and phrasings for the three major districts.

Granada Sanitary District ("GSD") and Montara Water and Sanitary District ("MWSD"), both formed in 1958 pursuant to Health and Safety Code ("HSC") §§ 5400 et seq. should have identical service descriptions for solid waste, wastewater, and water recycling and distribution. MWSD was granted all of the powers of a county water district under HSC §6512.7, and therefore should have identical service descriptions with Coastside County Water District ("CCWD") for water and related functions.

The differences in phrasing suggest that there is some substantive difference in services, e.g., "Sewage Collection", "Sewage Treatment" under GSD versus "Wastewater collection, transport, treatment, and disposal of sewage" under MWSD. We also note that "Septic Tank Maint." is listed as an active service of MWSD, but it is not listed for GSD under either active or inactive services. Are there no septic systems within GSD's boundary, which includes rural-designated land for which urban-level sanitary sewer services are prohibited under Local Coastal Program ("LCP") policies?

Furthermore, CCWD has a latent service listed as "Sanitary Sewer & Stormwater", which is not included (with regard to stormwater) as a latent service for MWSD. MWSD's authority regarding stormwater services derives both under its powers as a sanitary district and under its county water district powers.

In order to avoid confusion the exact same phrases should be used when describing the same services for each agency. In fact, LAFCo already has a formally adopted set of rules and regulations that list specific functions and services that may be provided by any of the local special districts within the County. The terminology used in the table on page 4 of the Sphere Update seems to be drawn from the Inventory of Special District Services returned to LAFCo by the various districts in May, 1996, when special district representation was added to LAFCo. Those documents contain discrepancies between the services listed by the various districts and the information presented in the table on page 4. We recommend that the Sphere Update utilize the function and service terminology adopted by LAFCo for uniformity in describing existing and allowable services for the relevant districts.

Finally, the comment letter to the Executive Officer dated October 1, 2008, from CCWD General Manager David R. Dickson states: "We would also like to request a correction to the service inventory table on Page 4 of the report. Water recycling and recycled water distribution should be included in CCWD's permitted services." Notably, CCWD's powers under the Water Code do not expressly include recycling, while MWSD's powers under the Health and Safety Code do. We therefore find that request of

⁴ See Exhibit B of Rules and Regulations of the Local Agency Formation Commission of San Mateo County Affecting Functions and Services of Special Districts ("Rules and Regulations"), dated February 21, 1996.

doubtful validity, unsubstantiated and an improper attempt to expand services without following proper procedures (Government Code §56824.10, et seq.). Moreover, LAFCo's Rules and Regulations place limitations on the exercise of functions and services, specifically noting that, "At such time as the Commission has identified the nature, location and extent of functions and services being provided by any district, the district shall not provide nor engage in any new or different function or class of service, except as authorized by these Rules and Regulations." A service cannot simply be added to a purported inventory by a simple letter request.

Service Areas & Urban/Rural Boundary

Page 6 of the Sphere Update categorically states: "District service areas are defined as their agency boundaries upon formation pursuant to attached maps." The rest of the paragraph proceeds to contradict this blanket statement, by introducing limitations based on the Local Coastal Program ("LCP"), and ignores the fact that MWSD has operating facilities and serves County-owned property in our service area that is proposed to be excluded from our Sphere, viz., the southerly portion of County Service Area 12 and the service area acquired by MWSD from Citizens Utilities Company of California ("CUCC"). Furthermore, the discussion of the LCP completely ignores LCP Table 2.9 ("Estimate of Water Consumption Demand from Buildout of Land Use Plan / Citizens Utility Company"), Table 2.10 ("Estimate of Water Consumption Demand from Buildout of Land Use Plan / Coastside County Water District within County Jurisdiction"), LCP Table 2.11 ("Summary of Water Demand at Buildout / Mid-Coast Areas Under County Jurisdiction"), and Table 2.17 ("Amount of Water Capacity to be Reserved for Priority Land Uses / Citizens Utility District (Montara/Moss Beach) and Coastside County Water District (County Jurisdiction)".

These tables define and constrain the water service areas of CUCC and Coastside County Water District based on the territory in their respective service areas as of 1980. Detachment of territory from CUCC's service area (acquired by MWSD in August 2003) and transfer of that territory to CCWD would require amendments to all of these tables in the LCP. San Mateo County has spent much of the past eight years preparing the Midcoast Local Coastal Program Update amendments, with extensive public meetings, Planning Commission hearings, and Board of Supervisors hearings. At no time did anyone question the basis of the water demand and priority reservation tables using the well-known and commonly understood boundaries of CUCC and CCWD, or propose amendments to these LCP tables to accommodate transfer of service responsibilities from CUCC's service area (now owned by MWSD) to CCWD.

The Midcoast LCP Update amendments are still not certified by the Coastal Commission more than two years after they were approved by the Board of Supervisors. Adopting spheres of influence for CCWD and MWSD that would require Coastal Commission approval of LCP amendments caused by adopting spheres in conflict with the historic service areas adds unnecessary cost, delay, and complication to delivery of necessary services to the area.

If the revised version of the Sphere Update adopts MWSD's proposals, no additional text is necessary in this section. However, if LAFCo continues with the direction of the Preliminary Sphere Update, then it requires an acknowledgement of the LCP amendment requirements to conform the LCP to revised service areas. MWSD strongly opposes this approach and cannot suggest language that would be appropriate, because the entire concept of removing territory from MWSD's acquired water service area is unacceptable.

Overlapping Territory and Excluded Territory

The bottom paragraph on page 6 of the Sphere Update reads: "Two areas of overlap exist between jurisdictions with like powers. . . . [O]verlap exists between Montara Water and Sanitary District and Coastside County Water District in that a portion of the northern CCWD territory is within the boundaries of Montara Water and Sanitary District. This overlap does not reflect location of actual infrastructure or service delivery, rather jurisdictional boundaries of agencies with like powers. The territory includes primarily rural lands not eligible for municipal water and results from special legislation (Health & Safety Code 6512.7) granting water power to MWSD and LAFCo granting water as an active power within all of the then Montara Sanitary District's boundaries without requiring that boundaries be redrawn to reflect actual eligible service area."

We believe that as a matter of law, Health and Safety Code §6512.7 explicitly exempts the Montara Sanitary District (now MWSD) from the provisions of the Cortese-Knox Local Government Reorganization Act of 1985 with regard to the establishment of its water powers, as clearly stated in the legislation. Therefore, there was no LAFCo grant of water power to MWSD. Moreover, both the County, by establishing County Service Area ("CSA") 12, and the Legislature, in directly granting water power to MWSD, expressly and impliedly included the portion of CUCC's southern service territory in the area to be served by CUCC's successor, i.e., MWSD. Therefore, the last sentence of this paragraph should read:

"The territory includes primarily rural lands not eligible for municipal water under the LCP and results from special legislation (Health & Safety Code 6512.7) granting water power to MWSD."

We note that CSA 12 reflects the County's own definition of the eligible water service area of CUCC that was acquired by MWSD.⁵ The overlapping territory noted in the Sphere Update (i.e., territory currently within the boundaries of both CCWD and MWSD) should be resolved by adjusting the boundary of Coastside County Water District to eliminate this overlap. At the present time, the appropriate action for LAFCo to take is to designate a sphere of influence for CCWD that indicates LAFCo's intention to eliminate this overlap in the future. That is accomplished by eliminating from CCWD's sphere of influence all territory within MWSD's water service area, defined by the boundary of CSA 12. MWSD requests and recommends that the sphere of influence designations for CCWD and MWSD be modified to read as follows to resolve the conflicts created by the existing district boundaries:

- Coastside County Water District "Consolidation" with sphere of influence territory to include current boundaries eligible for service under LCP excluding territory included in County Service Area 12
- Montara Water and Sanitary District "Consolidation" with sphere of influence territory
 to include current boundaries eligible for service under LCP (including solid waste
 collection and recycling) and urban areas eligible for water service previously included in
 County Service Area 12

⁵ Board of Supervisors Resolution No. 50271, adopted April 26, 1988, states in relevant part that "the County of San Mateo proposes to acquire and operate a water system to serve the community of Montara-Moss Beach", and explains that "the reasons for initiating this proposal include: (1) Residents in the Service Area have expressed dissatisfaction with the quality of service provided by the present operators of the water system; and (2) a public opinion survey showed widespread support for the proposal; and (3) a technical evaluation has shown the proposal to be economically feasible." The proposed County Service Area was to be subject to the following terms and conditions: "(1) that it be empowered to provide water service including the acquisition, construction, operation, replacement, maintenance and repair of water supply and distribution systems, including land, easements and rights-of-way and water rights; and (2) that it be empowered to serve only those properties included within the boundaries of its territory as described in Exhibit 'A'", which describes the service area of CUCC eligible for urban-level water services under the LCP and corresponds to the LAFCo map showing the boundary of CSA 12.

At the October 2, 2008, Board of Directors meeting, MWSD approved a notice of intention to initiate consolidation proceedings for the consolidation of County Service Area 12 into the Montara Water and Sanitary District. As noted in Attachment B, this consolidation will complete the acquisition by MWSD of Citizens Utilities Company of California's former Montara District assets and service area by aligning the District's boundary with the District's water service area.

MWSD requests and recommends that the sphere of influence designation for CSA 12 be modified to read as follows, to allow the most cost-effective completion of MWSD's acquisition of CUCC's assets:

• County Service Area 12 - "Consolidation" into Montara Water and Sanitary District

On page 7 of the Sphere Update, the first sentence reads: "Urban designated lands excluded from the boundaries of any water district include the territory adjacent to Half Moon Bay Airport, contiguous to current CCWD boundaries." This statement is incomplete and possibly prejudicial, in that it fails to note that this territory is also "contiguous to current MWSD boundaries" as well. Furthermore, the implication that this territory is currently excluded from MWSD's water service area is inaccurate and misleading in light of the above historical discussion, including legislative intent. Moreover, MWSD has operating facilities and serves County-owned property in the area.

This section of the Sphere Update should note that this so-called "excluded territory" is in fact within County Service Area 12's boundary, which was drawn to reflect the existing authorized service area of Citizens Utilities Company of California when San Mateo County contemplated acquisition of that private water system and transfer to a public agency for operation. In fact, MWSD acquired all rights to CUCC's former service area through an eminent domain action completed in 2003. MWSD proposes a formal consolidation of CSA 12 into MWSD, with an appropriate boundary realignment, to complete the transfer of assets owned by CSA 12 and already paid for by MWSD.

This section should also note that all of CCWD's non-priority water connections created by the Crystal Springs Water Supply Project ("CSWSP") were pre-sold through assessment district financing. No parcel in the so-called "excluded territory" was assessed for the CSWSP, and therefore no parcel in that territory has any entitlement to or expectation of water service from CCWD.

MWSD has *existing* water supply, treatment, and distribution infrastructure in this area, serves County-owned property, and stands ready to provide additional essential public services when needed, in particular, water for fire protection through either street hydrants or private fire protection connections. These connections are available today to any property needing such services (although, to the best of our knowledge, there is no pending application for a Coastal Development Permit for any property within this territory because the territory is uninhabited and largely used for agricultural or airport functions).

This section of the Sphere Update concludes with the statement: "Annexation of this territory to CCWD would therefore require Coastal Commission approval." It would be appropriate to note that: "Annexation of this territory to MWSD would *not* require Coastal Commission approval." As noted above, annexation of this territory to CCWD would require LCP amendments and Coastal Commission approval, whereas consolidation of CSA 12 into MWSD, or other adjustment of MWSD's boundary to include the acquired CUCC service area, is consistent with the certified LCP water demand and water priority tables.

MWSD requests and recommends that this section be revised to read more accurately as follows:

"Urban designated lands excluded from the boundaries of any water district include the territory adjacent to Half Moon Bay Airport, contiguous to current CCWD and MWSD boundaries and within the boundary of County Service Area 12. This territory is in the current adopted sphere of influence of CCWD (which includes the entire urban coastside as well as some rural land) but is also within the service area granted to Citizens Utilities Company of California by the California Public Utilities Commission prior to acquisition of that service area by MWSD in August, 2003.

"A Coastal Commission condition on the CCWD El Granada pipeline expansion limits provision of water by CCWD to areas within district boundaries at the time of the Coastal Commission approval of the project. Annexation of this territory to CCWD would therefore require Coastal Commission approval, together with a set of Local Coastal Program amendments to tables 2.9, 2.10, 2.11, and 2.17. MWSD is already authorized to serve this area, does not require Coastal Commission approval, requires no LCP amendments, has existing water supply, treatment, and distribution infrastructure within the territory, and has filed an application for annexation of this excluded territory with LAFCo that is currently pending. Furthermore, MWSD has notified LAFCo of its intention to formally request consolidation of CSA 12 into MWSD to complete the acquisition and public ownership of the former CUCC water system contemplated when CSA 12 was formed in 1988."

Present Capacity of Public Facilities

On page 9 of the Sphere Update, under the discussion of present capacity of public facilities, the last sentence of the second paragraph currently reads: "In the context of water agency boundaries and infrastructure, the urban designated area adjacent to Half Moon Bay Airport is omitted from water service jurisdiction." We respectfully disagree with the Staff analysis. The area under discussion, referred to as the "excluded territory" earlier, may be outside the district boundaries of both CCWD and MWSD. However, as explained in the previous section of our comments, this area falls within the service area of CUCC's water system and that defined by CSA 12's boundary. The right to serve water in this area, as well as the existing water supply, treatment, distribution and service infrastructure located within this area, were acquired by MWSD through the eminent domain action completed in August 2003.

MWSD requests and recommends that this sentence be revised to read more accurately as follows:

"In the context of water agency boundaries and infrastructure, the urban designated area adjacent to Half Moon Bay Airport is included within the water service area acquired by MWSD from CUCC (and was also designated as County Service Area 12's service area prior to the special legislation granting MWSD water powers) and contains existing water supply, treatment, and distribution infrastructure owned by MWSD. This area is currently the subject of an application pending before LAFCo to conform MWSD's district boundaries to its authorized service area."

Service Delivery Jurisdiction

The table on page 8 of the Sphere Update, under Water for the Unincorporated area, lists "Private Wells" as one method of furnishing water service. The first paragraph on page 9 of the Sphere Update notes that there are approximately 8,600 sewer connections and 7,370 water connections; every sewer connection requires a source of water for the property being serviced, therefore there must be approximately 1,230 private wells. From MWSD's Sewer Service Charge report, we know that there are approximately 260

properties within MWSD that receive sewer service but not water service, i.e., that are developed on private wells. That leaves approximately 970 private wells within CCWD's territory which are not being served by public utility water. San Mateo County Environmental Health should be able to provide exact counts of existing private water wells within each district.

MWSD requests and recommends that a footnote be added to "Private Wells", or a paragraph following the table clarifying the factual situation, that reads as follows (with possible update of the count of wells in each district from County sources):

"San Mateo County has allowed development on private water wells for domestic water within the urban/rural boundary due to inadequacies in the public water supply from CCWD and MWSD. San Mateo County Resolution No. 53059, 'Policy Regarding the Use of Water Wells in the Urban Mid-Coastside', states: 'Now, therefore, be it resolved, that the Board of Supervisors of San Mateo County hereby reaffirms its existing policy of allowing the use of water wells in urban areas only when no other water is available from existing public water systems and directs the Planning Director and Environmental Health Director to implement this policy in the Coastal Zone by conditioning all appropriate permits in the urban Mid-Coastside area to require connection to a public water system when such water supplies are available.' As documented in the Municipal Service Review and Sphere Update, there are approximately 970 private wells within CCWD's service area and 260 private wells within MWSD's service area. It is evident that CCWD does not have adequate water supplies to meet the requirements of San Mateo County policies."

Recommended Spheres of Influence

As noted earlier, MWSD asserts its existing right to serve the so-called "excluded territory" contiguous to the District's southerly boundary. We request and recommend that the proposed sphere of influence designations on page 11 of the Sphere Update be modified to read as follows:

- Coastside County Water District "Consolidation" with sphere of influence territory to include current boundaries eligible for service under LCP excluding territory included in County Service Area 12
- Montara Water and Sanitary District "Consolidation" with sphere of influence territory
 to include current boundaries eligible for service under LCP (including solid waste
 collection and recycling) and urban areas eligible for water service previously included in
 County Service Area 12
-
- County Service Area 10 "Consolidation" into Montara Water and Sanitary District
- County Service Area 12 "Consolidation" into Montara Water and Sanitary District

Recommended Sphere of Influence Considerations

On page 12 of the Sphere Update, the first sentence currently reads: "The following includes sphere considerations and designations that could be adopted by the Commission in amending the sphere of influence of the two districts." We are confused by this reference to "two districts", since the Sphere Update recommends amending the sphere of influence designations for the City of Half Moon Bay, Coastside County Water District, Granada Sanitary District, Montara Water and Sanitary District, and County Service Areas 6, 10, and 12 – a total of one city, three special districts, and three county service areas. Please clarify or revise this sentence.

Later on page 12 of the Sphere Update, under the paragraph numbered "(3)", reference is again made to "urban designated areas omitted from water service areas". As we have stated earlier, there is no urban designated area omitted from water service areas, because the so-called "excluded territory" is within the water service area acquired by MWSD from the former CUCC and described by CSA 12's boundary.

MWSD requests and recommends that this paragraph be revised to read more accurately as follows:

"Capacity of public facilities and adequacy of public services in the unincorporated area are characterized by an ongoing moratorium on new domestic water connections in Montara Water and Sanitary District (except as to fire protection connections), severe limits on Coastside County Water District water supply assurance with SFPUC, no new water supply sources for CCWD since the Crystal Springs Water Supply Project (begun in 1987, with all non-priority connection rights already assigned through assessments), lack of park and recreation facilities and programs in the unincorporated area, and lack of storm water facilities."

Implementation

On page 13, the last paragraph contains a sentence that reads: "With concurrence that park and recreation is a vital service that must be met in the unincorporated area, the recommended sphere of influences addresses regional service delivery for sewer and water and provides a plan for establishing an agency dedicated to park and recreation for the unincorporated area."

Our problem with this formulation is the use of the phrase "establishing an agency dedicated to park and recreation", which suggests a new special district limited to park and recreation powers. Recommending, or even suggesting, a new special-purpose district with extremely limited powers in the Midcoast contradicts all of the objectives of LAFCo's Municipal Service Review and the adopted determinations, which all point towards future reduction, not increase, in the number of special districts.

The last special district limited to park and recreation powers that was created in the Midcoast was County Service Area 10, which was dependent on voter approval of a tax levy to fund its operations. The unfortunate fate of this CSA is well known and documented in the Sphere Update. A plan for establishing an agency dedicated to park and recreation for the unincorporated area requires a funding source, and history has shown that it is difficult to achieve a two-thirds voter approval for a new tax levy.

We are aware that Granada Sanitary District is considering an application to reorganize as a Community Services District, allowing the reorganized district to deliver park and recreation services in addition to GSD's current services. Such a reorganization should not be precluded by the Sphere Update, because it allows delivery of important services to a portion of the Midcoast by an existing special district.

MWSD is also considering an application to consolidate County Service Area 10 into MWSD or, alternatively, to activate its latent recreation powers granted by Water Code §31130. Together with GSD, these two existing special districts cover all territory in the Midcoast that would benefit from park and recreation services, including both urban and rural parcels, and already derive a small portion of property tax money, as noted in the Sphere Update, that could be redirected (with voter and ratepayer approval).

Without creating a new Midcoast special district exclusively for park and recreation, the combination of a GSD reorganization and consolidation of CSA 10 into MWSD produces a desirable near-term solution

⁶ County Service Area 10 was created January 14, 1975, by Board of Supervisors Resolution No. 34528, "for the purpose of providing local park and recreation services" to territory comprising "a part of what is commonly known and referred to as Montara-Moss Beach area".

with no increase in the number of special districts. As noted in the Sphere Update on pages 13 and 14, GSD and MWSD could potentially allocate some or all of their existing property tax revenue to the non-enterprise park and recreation services. Each district could manage these services directly, or contract with the other district or some other agency to manage service delivery, or enter into a Joint Powers Agreement with one or more other agencies (including possibly Cabrillo Unified School District, the City of Half Moon Bay, or San Mateo County) to deliver park and recreation services in the Midcoast.

Such a model for park and recreation services is not without complications. Each district might desire or require voter approval of a plan to take on park and recreation services. Ratepayer consent would also be required, under Proposition 218, for any increases in sewer or water rates that might be occasioned by use of tax allocation to park and recreation uses.

We do not intend to pre-judge how park and recreation services should or will be delivered in the Midcoast, nor should LAFCo's sphere of influence determinations force any specific solution. However, MWSD requests and recommends that this sentence be revised to read more broadly as follows:

"With concurrence that park and recreation is a vital service that must be met in the unincorporated area, the recommended spheres of influence address regional service delivery for sewer and water and provide a plan for consolidating or reorganizing one or more districts to provide park and recreation services for the unincorporated area in addition to their other existing services."

MWSD proposes that one way to implement park and recreation services for the Montara / Moss Beach area would be to consolidate the existing inactive County Service Area 10, created in 1975 to establish assessments for park maintenance in Montara, into MWSD and fund park and recreation services with existing property tax revenue. CSA 10 is wholly contained within the boundary of MWSD. There is no other appropriate successor district to take over CSA 10's purposes.

Consequently, MWSD requests and recommends that the sphere of influence for CSA 10 be modified to read as follows:

• County Service Area 10 - "Consolidation" into Montara Water and Sanitary District

On page 14 of the Sphere Update, the Report discusses the possibility of transfer of property tax from enterprise to non-enterprise functions by increasing water or sewer rates. It is important to emphasize the difficulty of implementing this solution for readers of the Sphere Update report who may not be familiar with constraints on rate adjustments resulting from voter approval of Proposition 218.

MWSD suggests that a sentence be added to this discussion, essentially as follows:

"Under an interpretation of Proposition 218 by the California Supreme Court, increases in water or sewer service rates require notice to ratepayers and are subject to protest provisions that may prevent needed revenue increases for existing services or preclude redirection of existing property tax revenue that currently offsets water or sewer costs to be used instead for non-enterprise services."

Attachment B

Request for Sphere of Influence Determination for Montara Water and Sanitary District

Executive Summary

The Spheres of Influence for Coastside County Water District ("CCWD") and Montara Water and Sanitary District ("MWSD"; formerly Montara Sanitary District or "MSD") were first established in 1969 and updated in 1985. Conditions have drastically changed since that initial determination and update. Notwithstanding periodic reviews, there has been no serious consideration of the changed circumstances and reasons for modifying existing Spheres of Influence until the issuance of the draft Preliminary Sphere of Influence Update ("Sphere Update") for the City of Half Moon Bay and Unincorporated Midcoast (draft dated August 18, 2008) based on the first comprehensive Municipal Service Review for this region.

Changes in the authorized powers of MWSD – specifically granting all powers of county water districts to MSD – and changes in the ownership structure of the water system serving the Montara / Moss Beach community – specifically, authorization by voters of a general obligation bond measure in 2001 and acquisition of the water system in August 2003 by Montara Water and Sanitary District, a public agency, from a private corporation – establish the need to re-evaluate the existing spheres of influence and modify them to correspond to changed conditions.

A result of careful examination shows that Montara Water and Sanitary District serves a distinct community, successfully fulfilling its responsibility to that community in the areas of service that it provides – historically, wastewater collection and treatment, septic system services, and solid waste collection and recycling, for 50 years, plus the more-recent five year history operating and improving the water system serving the Montara / Moss Beach community.

MWSD requests a Sphere of Influence that comprises the entire existing area of the District, together with the water service area acquired from Citizens Utilities Company of California ("CUCC")⁷ more particularly defined by the boundary of County Service Area ("CSA") 12. The map in Attachment C shows the requested Sphere of Influence boundary for MWSD. This will also become the eventual boundary of the District following the proposed consolidation with CSA 12. We acknowledge that our proposed Sphere of Influence will result in a small overlap with the recommended Sphere of Influence for Granada Sanitary District ("GSD"), and therefore address the issues of service areas in detail in each section below where we discuss each existing or anticipated service. We are unaware of any provision of the Cortese-Knox-Hertzberg act that prohibits overlap of spheres of influence; indeed, the existing spheres of influence already include overlapping spheres.

⁷ For convenience, we generally refer to CUCC as the owner of the water system serving the Montara / Moss Beach community prior to August 1, 2003. We intend by this reference to include predecessors (e.g., Public Utilities Company of California, which aggregated several small water systems into the Montara District beginning in 1928) and successors (e.g., California-American Water, a subsidiary of American Water Works, which acquired all of the California assets of CUCC in 2002 and was then, in turn, acquired by Thames Water Holding, a subsidiary of RWE Aktiengesellschaft, a Germany-based multinational utility holding company). CUCC was the owner/operator of the Montara District under that name for nearly the entire time period relevant to this analysis and Citizens Utilities is generally known as the private water company serving the Montara/Moss Beach area prior to MWSD's acquisition of those assets and service area in August 2003.

The Municipal Service Review process provides an opportunity for San Mateo County Local Agency Formation Commission ("LAFCo") to review and adjust Spheres of Influence for the agencies under review. Although LAFCo may impose fees to consider changes to a Sphere of Influence, California Government Code ("GC") §56428(f) provides: "The commission may waive the fee if it finds that the request can be considered and studied as part of the periodic review of spheres of influence required by Section 56425. In addition, the commission may waive the fee if it finds that payment would be detrimental to the public interest."

In support of our Sphere of Interest request and anticipated consolidation of CSA 12 into MWSD, the District has prepared a Water System Master Plan and a Public Works Plan, Phase I, showing how water services will be provided within the territory described by CSA 12, which the District will submit as part of its formal application for consolidation as our Service Plan for the consolidated District. No changes to our existing sanitary sewer, septic system, or solid waste and recycling services are contemplated by designation of our requested Sphere of Influence or consolidation of CSA 12 into the District (or other boundary change to accommodate the water service area acquired from CUCC).

Financing for acquisition and essential water system improvements has already occurred through the general obligation bond measure approved by 80.66% of the Montara / Moss Beach voters in November. 2001, and through the regular Capital Improvement Program funded by water service charges.

County Service Area 10 falls wholly within the existing boundaries of MWSD and therefore would be included in the proposed Sphere of Influence and adjusted District boundary, so no further action by LAFCo is required at this time. If MWSD initiates a consolidation of CSA 10 into MWSD, or otherwise applies to LAFCo to activate its latent recreation powers under Water Code §31130, the District will prepare all necessary maps, service plans, financing options, and environmental studies at that time.

Introduction

There is a long-standing community of interest within the unincorporated Montara / Moss Beach community served by the Montara Water and Sanitary District ("MWSD" or "District"), distinct from the communities to the north and south. Nearby communities are separated from the Montara / Moss Beach community by open space, rural agricultural and prime agricultural land, and the Half Moon Bay Airport. This community is geographically, historically, physically, and governmentally independent.

At the time of the 1984 Sphere of Influence Study by the San Mateo County Local Agency Formation Commission, Coastside County Water District was developing a proposal for a pipeline from Crystal Springs Reservoir to reduce the amount of water taken from Pilarcitos Lake (and degrading downstream flows in Pilarcitos Creek). Sewer Authority Mid-Coastside ("SAM") was planning the expansion of its wastewater treatment plant, doubling capacity sufficient to serve eventual buildout population estimates. And California Department of Transportation ("CalTrans") was planning a four-lane freeway bypass of Devil's Slide, for which it had acquired property in the hills surrounding Montara. Meanwhile, Montara and Moss Beach received their water from the poorly managed Citizens Utilities Company of California ("CUCC"). As noted in the Sphere Update, LAFCo originally adopted spheres of influence for the City of Half Moon Bay ("HMB") and CCWD covering the entire coastside, with a zero sphere for MWSD.

Since that time many of those regional planning and infrastructure factors have been altered and others not anticipated have occurred, which require designation of revised spheres of influence for MWSD, as well as CCWD and HMB, including:

- CCWD's Crystal Springs Water Supply Project and Infrastructure Pipelines were completed in 2008, more than 20 years after the start of the project, with capacity limited to that needed to serve only the communities of Half Moon Bay, Miramar, El Granada, and Princeton.
- SAM's wastewater treatment plant expansion in 1999 was completed with less than anticipated capacity for the Montara / Moss Beach community.
- CalTrans's four-lane freeway bypass of Devil's Slide was defeated in favor of a two-lane tunnel project now under construction.
- Peninsula Open Space Trust ("POST") acquired 4262 acres of Rancho Corral de Tierra, the land surrounding the Montara / Moss Beach community and separating it from El Granada. POST is in the process of transferring these lands to the Golden Gate National Recreation Area, a unit of the National Park Service, Department of the Interior.

Obviously the growth potential that was projected in the early 1960s and that influenced the original sphere of influence designations has been greatly reduced. The soon-to-be federal acquisition of property between the Montara / Moss Beach community and El Granada creates a clear boundary to the appropriate Spheres of Influence for MWSD and CCWD. Accordingly, current circumstances compel adjusting MWSD's and CCWD's Spheres of Influence to conform to their existing service areas.

Critical Factors Supporting MWSD's Sphere of Influence Designation

We request approval of a revised Sphere of Influence for Montara Water and Sanitary District by the San Mateo County Local Agency Formation Commission based on the following factors:

- Montara / Moss Beach is a community distinct from both incorporated and other Midcoast unincorporated communities.
- Montara Sanitary District established decades long leadership in wastewater treatment and has a demonstrated track record in meeting the needs of its constituents.
- The Montara / Moss Beach water system has always been distinct, separate, and apart from Coastside County Water District.
- CUCC had a long-standing history of neglect and deferred maintenance that resulted in the Board of Supervisors creating County Service Area 12 in 1988, defining the boundary of the area served by CUCC eligible for water service under the LCP, anticipating acquisition of the assets and service area of CUCC by a public agency.⁸
- Legislation sponsored by State Senator Quentin L. Kopp in 1991 granted the powers of a county water district to MSD, subject to confirmation by a vote of the community which was achieved in 1992 by an overwhelming 91% favorable vote.
- CCWD's Inventory of Special District Services furnished to LAFCo on July 18, 1996, by Bob Rathborne, CCWD's General Manager, described the geographic coverage of CCWD's water system as "City of Half Moon Bay, El Granada, Princeton, Skylawn Cemetery, Highway 92 Corridor to Pilarcitos Road, Highway One immediately South of Half Moon Bay" there is no mention of any service or proposed service in Montara or Moss Beach.
- MSD's Inventory of Special District Services furnished to LAFCo on April 30, 1996, by George Irving, MSD's District Administrator, described the geographic coverage of MSD's authorized active water powers as "Area of Service: Intended area of service, as retailer,

⁸ County Service Area 12 was created by Board of Supervisors Resolution No. 50749, adopted August 30, 1988, following approval by LAFCo via Resolution No. 779, which states in relevant part that "services to be provided by the proposed County Service Area shall be limited to water service, including the acquisition, construction, operation, replacement, maintenance and repair of water supply and distribution systems, including land, easements and rights-of-way and water rights", and defines the service area of the water system to be acquired.

- wholesaler, or other supply function, as the District shall determine, includes the area currently served by CUCC (see, map marked Exhibit 'B', attached and incorporated herein by reference)."9
- LAFCo previously adopted Resolution No. 870, "Resolution of the San Mateo Local Agency Formation Commission Approving the Inventory of Functions and Services of the Montara Sanitary District," on September 18, 1996, confirming the intended area of service including all of CUCC's service area. 10
- In support of LAFCo's consideration of Resolution No. 870, MSD's District Counsel, David Schricker, provided extensive legal analysis supporting MWSD's intent to develop water supplies and other infrastructure to serve all of CUCC's service area, or acquire the CUCC system outright (see Attachment D).
- Voters in the Montara / Moss Beach community authorized up to \$19,000,000 in general obligation bonds for the acquisition and improvement of the CUCC water system, with Measure V receiving an overwhelming 80.66% favorable vote of the community in 2001, enabling the sale of bonds for MWSD's purchase of the former CUCC / California-American ("Cal-Am") water system and service area.
- MWSD acquired CUCC's entire service area, established by the California Public Utilities Commission ("CPUC"), when it purchased the CUCC / Cal-Am system, which includes existing infrastructure and service connections within the territory outside the current boundary of MWSD.
- CCWD's supply assurance from the San Francisco Public Utilities Commission ("SFPUC") through the Bay Area Water Supply and Conservation Agency ("BAWSCA") is insufficient to meet existing obligations, much less serve additional customers in the MWSD service area.
- MWSD is developing additional local, independent water supplies, including the new Alta Vista Well, which allow MWSD to meet customer needs while water districts dependent on the SFPUC supply are currently requiring voluntary or mandatory rationing.
- MWSD operates existing water supply, treatment, and delivery infrastructure outside MWSD's current boundary in the service area acquired from CUCC and defined by CSA 12; there are currently no customers in this area (described as "excluded territory" in the Sphere Update), which is uninhabited and largely used for agriculture and airport purposes.
- MWSD is investigating potential for desalination and recycling as additional sources of water
 to address the scarce supply available to the community, in addition to further development of
 ground water sources in appropriate watersheds.
- The Final Program Environmental Impact Report for the Water System Improvement Program and the Phased Water System Improvement Program for the SFPUC Hetch Hetchy Reservoir System, released on September 30, 2008, strictly limit water supplies available to existing SFPUC customers, including wholesale customers with supply assurances from BAWSCA, thus limiting CCWD's potential for increased water supply.

MWSD, with considerable investment in both time and money by the entire Montara / Moss Beach community, has finally turned around the situation left by CUCC and is now serving the Montara / Moss Beach community with a safe, reliable supply of water to meet existing needs.

⁹ See Attachment C to this letter, which shows County Service Area 12's boundary (i.e., CUCC's authorized service area) together with MWSD's existing boundary, to show the proposed boundary of MWSD's Sphere of Influence and anticipated consolidated District boundary following inclusion of CSA 12 into MWSD.

¹⁰ See also letter from David E. Schricker, District Counsel, to San Mateo County Local Agency Formation Commission dated August 8, 1996, re: Montara Sanitary District-Provision of Water Service, which was a part of the LAFCo Staff Report dated September 5, 1996, attached to the current letter as Attachment D.

The property owners and voters of the Montara / Moss Beach area have shown complete self-sufficiency in addressing water, wastewater, and solid waste needs. MWSD has served that community faithfully for 50 years, is poised to continue that service into the future, and requests designation of a Sphere of Influence as shown in Attachment C that reflects the reality of the existing community of interest.

Background and History of Districts

The Montara Sanitary District was formed on August 5, 1958, and held its 50th Plus 5th Anniversary Celebration on August 24, 2008. The community is justifiably proud of the accomplishments of its own District over 50 years, as well as 5 years of improved water service. The community's achievements were recognized by letters, proclamations, and resolutions from Senators Barbara Boxer and Dianne Feinstein, Congresswomen Anna Eshoo and Jackie Speier, State Senator Leland Yee, Assemblyman Gene Mullin, the San Mateo County Board of Supervisors, and boards of neighboring agencies (see Attachment E).

The formation of MSD followed that of Coastside County Water District, which was formed in 1947, and predates that of the City of Half Moon Bay, incorporated in 1959. Granada Sanitary District ("GSD") was also formed in 1958, reflecting the needs of its own distinct community of interest.

Independent Community Leadership with 1963 Montara Wastewater Treatment Plant

The residents of the Montara / Moss Beach community built the most advanced wastewater treatment plant on the coastside, providing secondary treatment with a capacity of 500,000 gallons per day average daily dry weather flow, sufficient to meet the projected needs of the community at buildout. Our neighboring agency to the south, GSD, provided only primary treatment for its customers. While the City of Half Moon Bay was having operational problems with its treatment plant, federal and State funds were available to assist in correcting those problems, but would only be made available if they were used to eliminate the proliferation of individual treatment plant outfalls on the Coastside.

These issues led to the formation of Sewer Authority Mid-Coastside ("SAM") as a joint exercise of powers agency ("JPA") in 1976 to fix the existing inadequate GSD and HMB wastewater treatment plants. MSD was forced to join SAM and abandon its successfully operating treatment plant as a result of San Mateo County's creation of the James V. Fitzgerald Marine Reserve ("Reserve") and then expansion of the Reserve so that it incorporated MSD's outfall, thereby preventing its continued use. [1]

SAM received funding under the Clean Water Act that enabled construction of an Intertie Pipeline System, upgraded Wastewater Treatment Plant, and Ocean Outfall to serve the wastewater needs of the combined GSD, HMB, and MSD sanitary districts. By participating in this joint solution to regional needs, the residents of the Montara / Moss Beach community gave up a significant investment in MSD's local treatment plant, which still had approximately ten years of bond payments outstanding. Only with the further expansion of the SAM treatment plant in 1999, at significant cost to the Montara / Moss Beach community, has the Montara / Moss Beach area had its original 500,000 gallons per day of wastewater treatment capacity restored.

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¹¹ The collection system serving the Montara / Moss Beach area flows into the former MSD treatment plant, which was converted to the Montara Pump Station as part of the SAM Intertie Pipeline System. A portion of the community's investment in this plant was recovered by recent conversion of the Walker Tank to a surge tank as part of SAM's Wet Weather Flow Management Program. The original outfall is still in existence and may serve future needs as part of a possible desalination plant located on the District's property. A portion of the parcel may be suitable for recreational use or as part of the California Coastal Trail, subject to MWSD exercising recreation authority.

Another condition of the federal funding, memorialized by an amendment to the JPA agreement dated June 21, 1976, limited the service area boundaries to all lands within the districts not zoned RM (Resource Management). Certification of the San Mateo County Local Coastal Program ("LCP") in 1980 further restricted sanitary sewer service to parcels inside the Urban / Rural Boundary.

Although there are some pre-existing sewer customers outside the limits of our current sewer service area, under existing District policy in conformance with the SAM agreement and certified LCP policies, MWSD's sewer service area comprises parcels within the Urban / Rural Boundary, excluding those zoned RM (Resource Management) in 1976. MWSD has rights to sufficient treatment capacity in SAM for anticipated buildout population, including the revised (higher) estimates in the San Mateo County Midcoast Local Coastal Program Update amendments currently pending before the California Coastal Commission.

MWSD also regulates and requires permits for septic systems within the entire territory of the District, particularly in the areas designated as "Rural" by the LCP, although responsibility for percolation tests and other approvals has been delegated to San Mateo County (MWSD Code §3-4.100, et seq.).

MWSD has established a long-term history of acting responsibly and effectively to serve the needs of the Montara / Moss Beach community regarding wastewater and stormwater issues, while protecting the environmentally sensitive habitats of the coastal region and adjacent marine sanctuaries.

Within the requested Sphere of Influence comprising the entirety of MWSD's proposed territory, MWSD proposes to continue sanitary sewer service within the existing urban service area; MWSD has no intent to extend sanitary sewer service into the area served by GSD or included in the sphere of influence recommended for GSD by the Sphere Update.

Within the requested Sphere of Influence comprising the entirety of MWSD's proposed territory, MWSD proposes to continue septic system service, except those areas currently within GSD's jurisdiction or included in the sphere of influence recommended for GSD by the Sphere Update.

Solid Waste and Recycling Leadership in the Montara / Moss Beach Community

MSD was organized under the Sanitary District Act of 1923 (California Health and Safety Code ["HSC"] §§6400 et seq.). An important public health and safety responsibility undertaken by the District is garbage collection throughout the entire District territory, in accordance with HSC §6512 and §6521. When the San Mateo County Local Coastal Program ("LCP") was certified in 1980, it prohibited extending urban level services (defined as sewer and water) into the rural area, to avoid burdening those agricultural and open space parcels with the high costs of urban infrastructure. The LCP contains no provision limiting solid waste or recycling services to the urban area; indeed, public health and safety requires management of solid water throughout both urban and rural areas.

Every inhabited property in the District has road access. The District, through our franchised solid waste contractor, Seacoast Disposal, serves all developed properties within the entire boundary of the District, including those on the rural side of the Urban / Rural Boundary defined in the LCP. Chapter II of the District Ordinance Code ("Garbage, Rubbish, Waste Matter and Refuse, and the Collection, Removal and Disposal Thereof") requires that every occupied premise within the District shall subscribe to the waste collection and recycling services provided by MWSD's franchised contractor.

Recycling programs were instituted by the District in 1988 and were strengthened by introduction of a lower-fee, small container rate, to encourage recycling. Because solid waste collection is essential to the public health and safety, the District's existing boundary, including rural agricultural and resource management lands, must remain within the District. The solid waste service area includes the entire area within existing District boundaries and should be within the District's designated Sphere of Influence.

MWSD has been the lead agency in negotiating the franchise agreement with Seacoast Disposal. GSD used our agreement as the model for its contract, and both MWSD and GSD have cooperated on revisions to the contract.

MWSD has established a long-term history of acting responsibly and effectively to serve the needs of the Montara / Moss Beach community regarding solid waste and recycling issues.

Within the requested Sphere of Influence comprising the entirety of MWSD's proposed territory, MWSD proposes to continue solid waste and recycling service, except as to those areas currently within GSD's jurisdiction or included in the sphere of influence recommended for GSD by the Sphere Update.

History of Water Service Providers for the Montara / Moss Beach Area

In 1928, Citizens Utilities Company of California (then known as Public Utilities Company of California) acquired various scattered small water systems constructed by original land subdividers as far back as 1907. CCWD purchased those systems located south of the Half Moon Bay Airport from CUCC in 1950. CCWD expanded its district boundary across the boundary of MSD towards Montara and Moss Beach in 1966, annexing large areas of prime agricultural land. At the time the property owners involved had hopes of turning their holdings into major coastal residential housing developments. Those plans evaporated in 1972 with the statewide approval of Proposition 20 (enacting the California Coastal Zone Conservation Act, now the California Coastal Act of 1976) and certification of the San Mateo County Local Coastal Program in 1980.

CCWD's boundaries and existing sphere of influence now include large rural areas within the authorized boundaries of the Golden Gate National Recreation Area which will never require urban level water services. Eventually this area should be detached from CCWD at the urban edge of Clipper Ridge and Princeton, as the land is not used for agricultural crops or floriculture requiring urban water supplies. CCWD's sphere of influence should be adjusted appropriately.

CUCC had provided water services in the Montara / Moss Beach area since 1928. After selling a portion of its system to CCWD in 1950, as noted above, CUCC continued to operate the water system serving the Montara / Moss Beach area as part of its Montara District. Lack of investment, deferred maintenance, and inadequate water supply and storage capacity to meet community needs during droughts constantly plagued its customers. Meanwhile, CUCC mis-managed its system to the detriment of the Montara / Moss Beach community.

As LAFCo's 1984 Sphere of Influence Study notes:

"Service provided by Citizen's Utility has been a subject of local debate since the 1960s. Citizens in the Montara area have considered alternatives for transferring CUC's system to a public agency and have recently requested Board of Supervisors assistance in pursuing annexation to the Coastside County Water District. It is possible that acquisition of CUC's existing facilities could eventually be carried out by the district, a city or the county government."

In response to this request, the Board of Supervisors formed County Service Area 12 with boundaries conforming to CUCC's authorized service area eligible for urban water services under the LCP. ¹² The County expended funds for appraisals and other studies that were to be reimbursed by CSA 12 through the eventual financing mechanism adopted for the acquisition. Acquisition of the CUCC facilities by County Service Area 12, by CCWD, or by San Mateo County was never accomplished, as described in more detail below.

As noted above, recognizing that the Montara / Moss Beach community must proceed independently of other coastside communities and government agencies, the citizens and voters in our community overwhelming approved Measure V on November 6, 2001 by 80.66% – an unheard-of margin for a general obligation bond measure. (School funding measures, costing property owners much less, routinely fail to achieve even the requisite 55% margin.) The Montara / Moss Beach community committed to borrowing up to \$19,000,000 to acquire and improve the local water system.

In July 2003, MSD completed a settlement of its eminent domain action to acquire the Montara District water system and issued \$17,500,000 in general obligation bonds to finance that purchase and subsequent improvements. On August 1, 2003, MWSD finally completed acquisition of CUCC's assets and service area as contemplated by CSA 12 and has reimbursed the County \$118,000 for its efforts, including establishment of the service area defined by CSA 12. Consolidation of CSA 12 into MWSD completes the last step in public ownership of the Montara / Moss Beach water system. That territory rightfully belongs within the Sphere of Influence of MWSD. The District became Montara Water and Sanitary District in August 2003. Finally, a solution to long-standing water problems has been accomplished by our local community, showing remarkable cohesion and commitment to local control and necessary water system improvements.

As noted, property owners within MWSD's territory are repaying a general obligation bond that financed acquisition and improvement of the water system. MWSD anticipates using revenues from new service connections to offset some of the costs of acquiring and improving the system, and consequently the property owners within MWSD's territory will be financially harmed if a portion of the service area they have purchased is not available for connection fee revenues.

CCWD has never served, nor planned to serve, nor does it have the infrastructure to serve, property within the service area acquired by MWSD from CUCC / Cal-Am. Moreover, CCWD is precluded from providing water service to properties within MWSD's boundaries, all of which are subject to the lien of MWSD's general obligation bond (California Water Code §31053). Therefore, CCWD's boundaries and Sphere of Influence, to the extent they overlap MWSD's or include rural agricultural land prohibited by the LCP from receiving urban-level water services, should be redrawn to conform to CCWD's authorized and legal water service area.

In establishing MWSD's Sphere of Influence, consideration should be given to CCWD's and MWSD's potential for future water sources. CCWD is currently consuming nearly its maximum allowance of water from SFPUC's Pilarcitos Lake and Crystal Springs Reservoir, called its "supply assurance". In 2007, CCWD used 96% of the 800 million gallons per year allocation from the SFPUC system and is confronting possible supply reductions as SFPUC's Hetch Hetchy sources are affected by a statewide drought. Surface water diversion from Pilarcitos Lake has resulted in significant habitat destruction downstream, leading to study groups attempting to restore environmental quality.

Meanwhile, MWSD has located and developed its Alta Vista Well and is working to develop additional local water sources in an environmentally sensitive manner. MWSD's efforts in that regard are leading

¹² As noted earlier, CSA 12 was formed to delineate the service area of CUCC and provide for public acquisition.

toward the eventual provision of a safe, healthful, and sufficient water service within MWSD's existing boundary plus the newly-acquired service area formerly held by CUCC / Cal-Am and represented by the boundary of CSA 12.

MWSD is also working to remedy a long-standing deficiency in water storage capacity needed to meet emergency needs. Our Public Works Plan, Phase I ("PWP"), includes 1,100,000 gallons of additional storage capacity, with a new treated water storage tank at the Alta Vista site and an enlarged replacement storage tank at the Schoolhouse site. The PWP also includes additional water treatment facilities for the Airport Wells to improve water quality for the community. These projects are awaiting approval of the PWP by the California Coastal Commission.

Now that CUCC's Montara District assets and service area have been acquired by a public agency, as contemplated by CSA 12, and major system improvements are either completed or well under way, MWSD proposes to merge CSA 12 into MWSD and include the entire CSA 12 territory within MWSD's Sphere of Influence and District boundary.

In just five years, MWSD has established a history of acting responsibly and effectively to serve the needs of the Montara / Moss Beach community regarding domestic water and community fire water supply, treatment, and storage issues. Within the requested Sphere of Influence comprising the entirety of MWSD's proposed territory, MWSD expects to continue water service within the existing service area acquired from CUCC and described by the boundary of CSA 12.

Conclusion

The Montara Water and Sanitary District has the proven community backing (shown by overwhelming votes of 91% in favor of exercising water powers and 81% in support of the bond measure to finance acquisition and improvement of the Montara / Moss Beach water system), financial resources and management capability to serve the wastewater, septic system, solid waste / recycling, domestic water, and fire protection water needs of the Montara / Moss Beach community. Designating a Sphere of Influence for MWSD as requested would have no effect on the existing provision of services, financing, property taxes, rates, or environmental impacts.

County Service Area 10 should eventually be consolidated into MWSD to give the District the tools needed to work toward a solution for the grossly inadequate and much needed parks and associated services needed in the growing Montara / Moss Beach community. Active recreation powers also would allow MWSD greater flexibility in acquiring and managing watershed land essential to providing the community with safe, reliable, and adequate water resources.

The only reasonable decision for the near future is to recognize the long-standing community of interest in the Montara / Moss Beach area, designate a Sphere of Influence for MWSD that includes the areas within and outside its current boundary that are authorized for service by MWSD (including the area purchased from Cal-Am on August 1, 2003, conforming, likewise, to CSA 12's boundary), and to adjust the Sphere of Influence for CCWD accordingly.

The citizens of Montara and Moss Beach have worked hard and successfully to acquire their own water system from an absentee investor corporation that neglected it, to make substantial investments in repairs to its infrastructure in both water and sewer, and to find new sources of water, independent of any other agencies or community. For these reasons, MWSD's Sphere of Influence should be established as described above and as shown on the map in Attachment C.

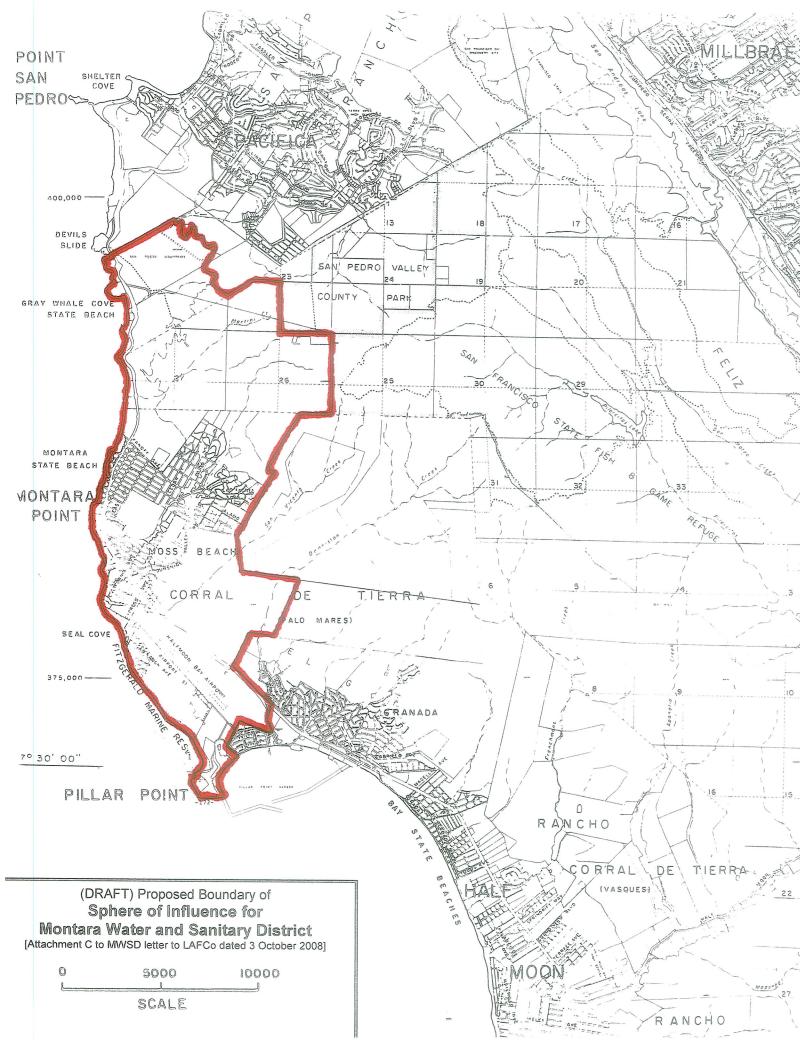
Attachment C

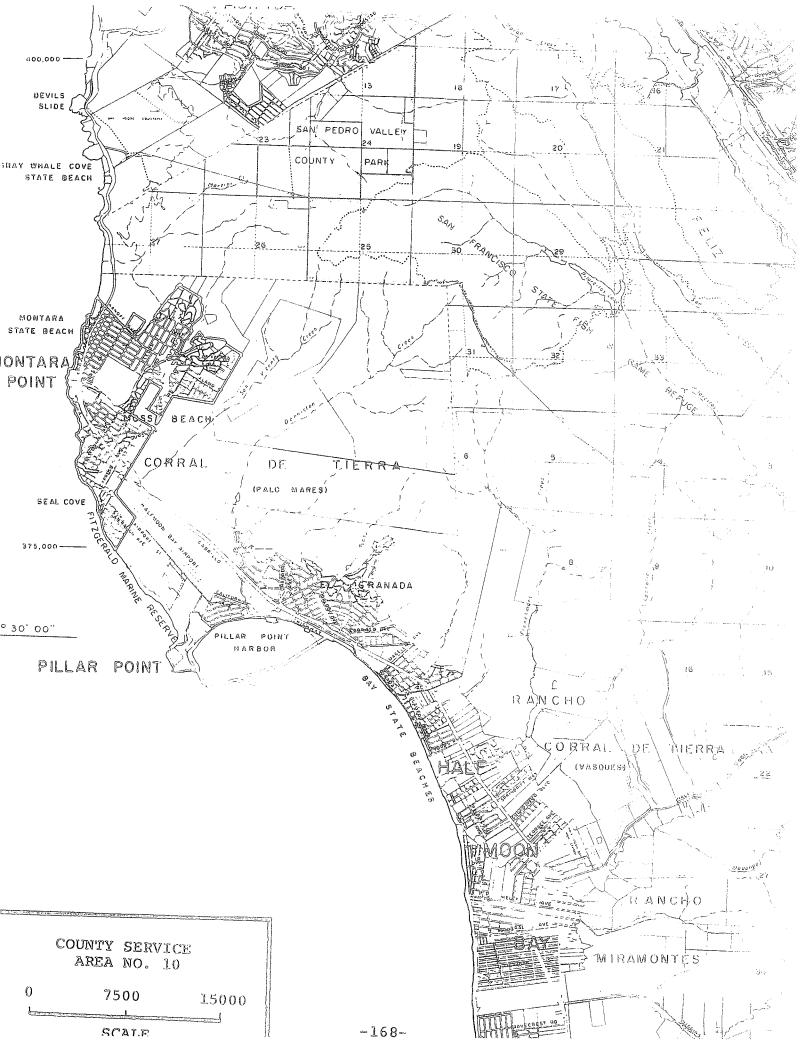
Map of Proposed Sphere of Influence for Montara Water and Sanitary District

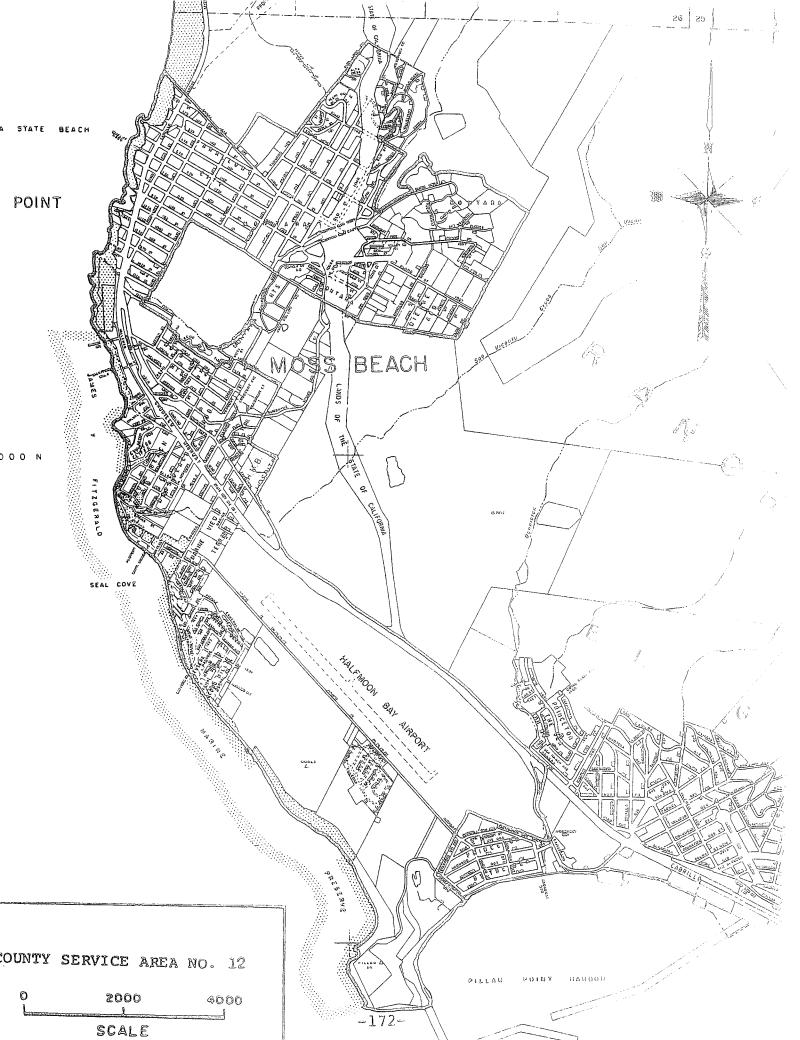
(Overlay map of County Service Area 12 and existing Montara Water and Sanitary District boundaries.)

An official map suitable for recording as the consolidated MWSD boundaries will be included with MWSD's formal consolidation application.

Maps of County Service Area 10 and County Service Area 12 from the LAFCo Handbook are included for completeness, and we suggest including them with the final Sphere of Influence Update report.









GRANADA SANITARY DISTRICT

OF SAN MATEO COUNTY

Board of Directors

Leonard Woren, President

Ron Fenech, Vice-President

Ric Lohman, Secretary

Gael Erickson, Treasurer

Matthew Clark, Board member

September 12, 2008

Ms. Martha Poyatos, Executive Director Local Agency Formation Commission County of San Mateo 455 County Center Redwood City, CA 94063

Re: Comments on the August 18, 2008 Draft Sphere of Influence Update for the City of Half Moon Bay and the Unincorporated Midcoast

Dear Martha,

Thank you for the opportunity to provide comments on behalf of the Granada Sanitary District Board of Directors concerning the draft LAFCo Sphere of Influence Report referenced above.

The District supports the report's approach of planning for any potential consolidation in steps or phases, rather than attempting to accomplish the task all at once. We would request that Alternative B be modified (or an Alternative C be added) to allow for the reorganization of the Granada Sanitary District into a community services district with parks and recreation powers, and activation of the Montara Water and Sanitary District's parks and recreation powers, as an initial first step towards any future consolidations. The addition of this step would allow parks and recreation services to be provided to the residents of the Midcoast in a much more timely fashion. Inextricably tying the provision of parks and recreation services to consolidation, which may never occur, raises the possibility that parks and recreation services will never be provided to local residents. The history and experience of the past 20 years reinforces this concern.

We would also like to thank LAFCo staff for working with the District and encouraging our input into this report.

Sincerely,

GRANADA SANITARY DISTRICT

Chuck Duffy, General Manager

October 1, 2008

Ms. Martha Poyatos Executive Officer San Mateo County LAFCo 455 County Center Redwood City, CA 94063



Re: Coastside County Water District Comments on Sphere of Influence Update/Review for City of Half Moon Bay and Unincorporated Midcoast

Dear Ms. Poyatos:

Coastside County Water District (CCWD) appreciates the opportunity to comment on the LAFCo Sphere of Influence Update/Review. The District's Board of Directors discussed the review at their September 9, 2008 meeting. CCWD supports the sphere of influence recommendations on Page 11 of the report.

In particular, the District supports the determination that CCWD's sphere includes urban area adjacent to CCWD's northern boundary in Princeton which has always been in CCWD's sphere but is not currently served by any district. In previous discussions of a project in this area, CCWD has taken the position that CCWD is ready to provide water service, either permanently or on an interim basis until another water district is able to serve the area. With water supply capacity available, and infrastructure in close proximity, CCWD is the only agency likely to have the ability to provide service to this area in the near term.

We would also like to request a correction to the service inventory table on Page 4 of the report. Water recycling and recycled water distribution should be included in CCWD's permitted services.

The District would like to thank you and the Commission for your work on the municipal service review and sphere of influence determinations.

Sincerely yours,

David R. Dickson General Manager

Midcoast Community Council

An elected Municipal Advisory Council to the San Mateo County Board of Supervisors
Serving 12,000 coastal residents
Post Office Box 248, Moss Beach, CA 94038-0248
http://mcc.sanmateo.org

September 24, 2008

Council Members

Chair Leonard Woren 726-9647

Vice-Chair Kathryn Slater-Carter 728-5449

Secretary Neil Merrilees 728-3813

Treasurer **Deborah Lardie**415-864-0770

Gael Erickson 726-4416

(vacancy)

(vacancy)

Supervisor R. Gordon 400 County Center Redwood City, CA 94063

Re: Comments on August 18, 2008 draft Preliminary Sphere of Influence Report for the City of Half Moon Bay and Unincorporated Midcoast

Dear Supervisor Gordon:

The Midcoast Community Council supports the Preliminary Sphere of Influence Report recommendation on page 11 that designates a sphere of influence for the City of Half Moon Bay "coterminous with existing boundaries" and that designates spheres of influence for each of the local agencies providing services in the Midcoast, consistent with their existing service boundaries.

The Midcoast Community Council (MCC or Council) is an elected Municipal Advisory Council created in 1991 pursuant to Government Code section 31010, representing approximately 12,000 residents of the unincorporated Midcoast. San Mateo County Board of Supervisors Resolution 55042 creating the Council states:

WHEREAS, the unincorporated areas of Montara, Moss Beach, El Granada, Miramar and Princeton (hereinafter referred to as the Midcoast):

- Are neighboring communities with a strong sense of identity and common problems,
- Desire a vehicle for exploring the feasibility and merits of governmental organization alternatives, such as incorporation and annexation; and WHEREAS, the Board of Supervisors finds that it is in the best interests of this County to establish a Municipal Advisory Council for the Midcoast;

NOW, THEREFORE, IT IS HEREBY RESOLVED as follows:

3. The Midcoast Community Council is established to advise the San Mateo County Board of Supervisors on matters including, but not limited to, public health, safety, welfare, public works and planning which affect the Midcoast.

Given the mission of the MCC, it is appropriate for the Council to comment on the draft recommendations for updates to the spheres of influence of the local special districts that serve residents in our communities, and for the City of Half Moon Bay. The MCC has a "Forms of Government" committee that has investigated alternative government structures for the Midcoast, including annexation to Half Moon Bay, incorporation as a separate city, or continuation of existing and new services through local special districts. This community dialog should be encouraged, consistent with the Board of Supervisors resolution quoted above.

"A Sphere of Influence designates an agency's probable future physical boundary and service area. It is territory that a city or special district will annex in the future. It's also the area where the local government will build facilities and deliver services sometime in the future. A sphere of influence is often bigger than a local government's current jurisdiction." – It's Time to Draw the Line, A Citizen's Guide to LAFCOs, published by the California State Legislature

The existing spheres of influence for the City of Half Moon Bay (HMB), Coastside County Water District (CCWD), Granada Sanitary District (GSD), and Montara Water and Sanitary District (MWSD) were first established by LAFCo in 1969. Conditions have drastically changed since that initial determination, including the addition of water service by MWSD as a result of special enabling legislation passed in 1991 and ratified by over 91% favorable vote of the Montara / Moss Beach community in 1992. Notwithstanding periodic reviews, there has been no serious consideration of those changed circumstances and reasons for modifying existing spheres of influence until the current Preliminary Sphere of Influence Report.

San Mateo County LAFCo should be congratulated on finally taking a serious look at changed conditions and recommending new spheres of influence that are appropriate for the current situation. Half Moon Bay's obsolete 1969 sphere of influence, which includes the entire coastside, does not seem appropriate under the constraints of today's political and fiscal realities.

The Midcoast Community Council is particularly concerned that the recommended spheres of influence allow existing special districts to propose reorganizations or activation of latent service powers so that they may fulfill critical park and recreation needs for the Midcoast, as well as allowing the creation of a new special district to fulfill these functions. The LAFCo goal of reducing the number of special districts is not achieved by establishing spheres of influence that force formation of a new park and recreation district, rather than using existing local agencies.

The remainder of this letter provides some background and history that may not be as well known to you or the LAFCo Commissioners as it is to local residents while you consider the Preliminary Sphere of Influence Update Report (Report).

Background and Overview

"An important consideration in the Commission's decisions on spheres of influence is the determination that a community of interest exists within an area to be placed within a single sphere." – December 1984 Sphere of Influence Study for Mid-Coastside San Mateo County

Following World War II, the San Francisco Bay Area grew rapidly, with development filling in San Francisco's Sunset District, moving into Daly City, expanding communities along the Southern Pacific rail / El Camino Real corridor, and forming new cities such as Foster City. The Coastside was the last large undeveloped area in San Mateo County. Buildout population estimates in the mid-1950s varied from 140,000 to more than 238,000, according to newspaper articles from the time. As one example of anticipated growth here, the April 19, 1958, issue of the *Half Moon Bay Review and Pescadero Pebble*, in an article headlined "Coast Progress Is Forecast At Conference," wrote: "Keynote was sounded by County Planning Director Frank S. Skillman who said that by the turn of the century agriculture will have disappeared from this county and that the Coastside had better prepare for an avalanche of people on 'sleepy San Gregorio, peaceful Pescadero and happy Half Moon Bay.' Population of the area, now 7,000 will be 120,000 by 1970, Skillman predicted, and the capacity is up to three times even that."

The San Mateo County Planning Commission approved a Preliminary General Plan for the Mid-Coastside District in 1962, showing anticipated levels of growth and the nearly total elimination of agriculture in the County, much as Mr. Skillman had suggested four years earlier.

The State Legislature created Local Agency Formation Commissions in 1963 to deal with and attempt to control the proliferation of cities and special districts throughout the state resulting from California's rapid population growth. San Mateo County LAFCo was among the first to adopt the concept of a "sphere of influence" to define the territory in which each agency was expected to eventually provide services. The current coastside spheres of influence were designated in 1969 and have been continued with little careful study and review.

Extensive legislative and tax policy changes since 1969 have made it unlikely that the City of Half Moon Bay will have the financial resources to annex the territory north of the current city limits in the foreseeable future. Half Moon Bay has no plan to service the municipal needs of the Midcoast under an annexation scenario. The City most recently consistently voted not to be a part of a regional solution to wet weather flow problems affecting the Sewer Authority Mid-Coastside, a joint powers authority of which the City is a member. The City has taken the position that it has no responsibility or obligation for essential infrastructure improvements in its own existing sphere of influence, which further underscores the City's separation from the Midcoast. We urge the Commission to support the staff recommendation for Half Moon Bay's sphere of influence, specifically, to designate Half Moon Bay's sphere of influence as coterminous with the existing city limits.

As structured, existing Midcoast special districts cannot provide all of the services of a city. San Mateo County, as the provider of last resort, has failed to meet community needs. As noted on page 12 of the Report, "Capacity of public facilities and adequacy of public services in the unincorporated area are characterized by . . . lack of park and recreation facilities and programs in the unincorporated area . . . ," among other problems.

The need for park and recreation facilities in the Midcoast has been extensively studied, including efforts by the MCC's Park and Recreation Committee, San Mateo County Park and Recreation Department, and the Midcoast Recreation Planning Team, among others. The Midcoast Community Plan adopted by the Board of Supervisors in 1978 outlined proposed park and recreation needs. More recently, the County conducted a Midcoast Recreational Needs Assessment in 2002, followed by a Midcoast Parks Action Plan. The goals of all these studies and plans are consistent with the Shared Vision 2010 The Promise of the Peninsula prepared by the Board of Supervisors.

The path to effective implemention of the LAFCo recommendation for parks and recreation has complexity and involves many players. During the past year and a half the need assessment and action plan for parks and recreation services have been undertaken by the Midcoast Action Plan Committee (MAPC). That committee has been chaired by the County (Dave Holland, Director of San Mateo County Parks and Recreation) and MCC's current chairs of its Park and Recreation Committee has been a member of MAPC. The report of that committee, Midcoast Actional Plan for Parks and Recreation – Planning Team Report, has been vetted extensively in all relevant parts of the coastside. It is supported by the MCC and was adopted by the Board of Supervisors with supportive community comment in May of this year.

The thrust of LAFCo's recommendation is the creation of a parks and recreation body that represents Midcoast residents' interests and is organizationally and financially efficient. The two bodies that have organizational effectiveness and manage the existing property tax base are GSD and MWSD. Both of these agencies have expressed an interest in fulfilling parks and recreation needs in terms of service, revenue, and governance.

As it relates to parks and recreation in the Midcoast in the near term, the Council desires to see:

- Adoption of revised spheres of influence for Half Moon Bay, GSD, and MWSD
- Continuity and coordination of the action elements of the Midcoast Action Plan Report
- An efficient process to create a coordinated and possibly graduated plan for Midcoast Parks and Recreation that is acceptable to LAFCo, the affected agencies, and the local community, and that also reflects current local government organizational structures

The Council believes that this will require the cooperative work of several groups including the MCC and the Council desires to play a role in such a process.

The recommended spheres of influence in the Report recognize and respond appropriately to this problem. "With concurrence that park and recreation is a vital service that must be met in the unincorporated area, the recommended sphere of influences . . . provides a plan for establishing an agency dedicated to park and recreation for the unincorporated area," the Report states on page 13, and then continues: "Recognizing that water and sanitary services are enterprise functions, opportunities exist to establish rates to recover the cost of providing water and sewer service, to facilitate transfer of property tax to a community services district focusing on park and recreation programs and provide for a direct governance model for Midcoast voters."

The recent Municipal Service Review for the City of Half Moon Bay and Unincorporated Midcoast, adopted by LAFCo in June of this year, called particular attention to Government Code section 16270, and the intent of the State Legislature that enterprise services should be financed exclusively through user fees and charges. A recommendation from the Legislative Analyst Office to eliminate tax revenue to enterprise districts alarmed both the GSD and MWSD boards. Sacramento has already diverted 40% of the local property tax revenue to meet State obligations. Both GSD and MWSD are interested in performing non-enterprise services to their communities so that local property tax revenues can be allocated to those non-enterprise services and remain available to meet local needs.

It is the Council's understanding that GSD is planning to submit an application to LAFCo for reorganization as a Community Services District, to carry out this approach. GSD needs its own non-zero sphere of influence to facilitate this community-oriented solution. Failure of Measure O in the recent November 2007 election eliminates the anticipated tax revenue that San Mateo County Parks and Recreation Department had hoped would support Midcoast parks and recreation. GSD appears to be willing to step in to fulfill this need. We urge the Commission to support the staff recommendation for Granada Sanitary District's sphere of influence.

MWSD has also begun consideration of providing recreation services, as allowed under its enabling legislation, so that local property taxes can support local services, rather than being diverted to fund Sacramento's responsibilities. MWSD also needs its own non-zero sphere of influence for this potential solution to park and recreation needs to be viable. We urge the Commission to support a modified staff recommendation that recognizes the historic service area of Citizens Utilities Company of California as part of MWSD's sphere of influence.

The final enterprise service provider serving the Midcoast is Coastside County Water District. It is the Council's understanding that CCWD is not considering any changes to its organization or services that would allow it to provide park and recreation services. However, CCWD's participation is not necessary to meet Midcoast park and recreation needs, because GSD's recommended sphere of influence, together with MWSD's, cover the entire unincorporated portion of the Coastside where park and recreation services are needed. We urge the Commission to support a sphere of influence for CCWD coterminous with its existing service area, including only the Midcoast communities of Miramar, El Granada, and Princeton.

Brief History of Agencies, Spheres of Influence, and Significant Changed Circumstances

Local government on the Coastside began in 1947 with the formation of Coastside County Water District. Beginning in the mid-1950s, discussion of forming a Coastside city resulted in an incorporation committee, largely based around the Spanishtown area. Attempts to solicit interest and participation in forming a larger Coastside city among residents of El Granada and areas further north were unsuccessful. During this time, both the Pillar Point Improvement Association and the Montara / Moss Beach Improvement Association held many public meetings to discuss alternatives for local government and provision of necessary services.

To solve discharges of untreated wastewater into the Pacific Ocean and provide for the growth anticipated in the mid 1950s, San Mateo County proposed a coastside sanitation district extending from Devil's Slide to Purissima. This plan was opposed nearly unanimously by the property owners and voters on the coastside, who were unwilling to be assessed for a sewage treatment plant designed to serve the massive development envisioned at the time.

Meanwhile, at the same time as the discussions proposing the formation of the City of Half Moon Bay were occurring, the separate local communities of El Granada / Princeton (through the Pillar Point Improvement Association) and Montara / Moss Beach (through the Montara / Moss Beach Improvement Association) were proceeding to form independent local districts to meet their own sanitary sewer and wastewater treatment needs. These districts – Granada Sanitary District and Montara Sanitary District – were formed in 1958. The City of Half Moon Bay was finally incorporated in 1959.

Looking at the aerial photographs from this period clearly indicates why these three separate communities were interested in local solutions. Large agricultural areas separated the developed area around Spanishtown, the developed area around Princeton and El Granada, and the developed area in the Montara / Moss Beach community. The breakwater at Pillar Point Harbor had not yet been built.

Despite the independent spirit of these separate Midcoast communities, a sphere of influence study in 1969 and the 1984 Sphere of Influence Study for Mid-Coastside San Mateo County concluded that in the long term (using a 20-year planning horizon), the entire coastside between Pacifica and Pescadero should be encompassed by a single coastal city. Accordingly, it gave the City of Half Moon Bay a sphere of influence that included the entire coastside. There has been no comprehensive evaluation and update of coastside spheres of influence until the current LAFCo Report, which responds to recent legislative mandates.

When LAFCo first established its now-obsolete spheres of influence for the Midcoast in 1969, Half Moon Bay was the only incorporated coastal city in San Mateo County south of Pacifica. The general view at that time was for an urban / suburban community stretching from south of Half Moon Bay to the southern base of Montara Mountain. California Department of Transportation (CalTrans) was planning a four-lane freeway bypass of Devil's Slide, together with a 19th Avenue freeway from the San Mateo / Hayward bridge in San Mateo out to a proposed Coast Freeway (even including a tunnel through the Coastal Range), as well as other freeway connections from I-380 into what is now Pacifica and along the current Route 84 corridor. Interstate 280 along the Crystal Springs reservoirs had already been built, including an interchange for the 19th Avenue Freeway (now Route 92).

Developers, supervisors, and commercial interests were planning for the urban growth that would follow the anticipated infrastructure construction. In its original 1969 determination and later 1984 reaffirmation of coastside spheres of influence, it may have been appropriate for LAFCo to have determined that a "single-city" coastside governmental model seemed to be most consistent with

anticipated circumstances.

However, many factors negating that determination have changed since Half Moon Bay's Sphere of Influence was adopted in 1969, including:

- Statewide voter approval of Proposition 20, the California Coastal Zone Conservation Act, in 1972, which limited and regulated development in the Coastal Zone
- Legislative enactment of the California Coastal Act in 1976 and creation of the California Coastal Commission
- The fiscal effects of Proposition 13, enacted by initiative in 1978, that have drastically limited the City's taxing powers that could support any notion of annexation
- Certification of San Mateo County's Local Coastal Program in 1980 and subsequent certification of the City of Half Moon Bay's Land Use Plan and later its Coastal Plan
- Passage of Measure T in 1996 by over 74% of San Mateo County voters approving a twolane tunnel rather than the Devil's Slide Bypass freeway
- Approval of Midpeninsula Regional Open Space District's annexation of the Midcoast area in 2004, resulting in protection of some coastal open space lands
- A 2008 court decision in the Beachwood case severely affecting the City's economic capability for annexation of territory that would increase its fiscal responsibilities

Half Moon Bay – incorporated in 1959 – has had 49 years to pursue annexation of some or all of the Midcoast and has not pursued any action towards annexation. Half Moon Bay's repeated refusal to participate in the Sewer Authority Mid-Coastside Wet Weather Flow Program improvements within its current sphere of influence – including upgrades to serve the portion of GSD within HMB's city limits – reinforces the perception that HMB cannot see and plan beyond its own city limits. LAFCo should recognize the political reality and redraw HMB's sphere of influence to be coterminus with the existing city limits, as recommended in the Report. This will allow the Midcoast to continue to pursue its own solutions independently, as it has done for over 50 years.

Existing Half Moon Bay Sphere of Influence No Longer Viable

The 1984 Sphere of Influence study concluded that the long-range goal for the Coastside was a single city, encompassing all municipal services. At that time, the distorting effects of Proposition 13's limits on property tax revenue were not fully understood. Half Moon Bay today receives only 22% of its revenue from property taxes; other revenue sources include sales taxes and transient occupancy taxes. For Half Moon Bay to annex any portion of the Midcoast, the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 requires preparation of a plan of service showing sources of financing, as well as environmental studies required under the California Environmental Quality Act. Half Moon Bay would be under severe financial contraints to implement the needed services for the Midcoast to support annexation.

Following the 1984 Sphere of Influence study, LAFCo prepared a Mid-Coast Incorporation / Annexation Fiscal Study, released in June 1998. That thorough and excellent study prepared by LAFCo staff found that annexation of the Midcoast to the City of Half Moon Bay would increase the City's deficit by \$1,440,000 (in 1998 dollars). Clearly, annexation and a single coastal city are not financially viable given the constraints on government financing imposed by Proposition 13, subsequent initiatives, legislative action, the recent Beachwood court decision, and the extensive urban infrastructure deficiencies noted in the Report on pages 11 and 12. Simply stated, a Midcoast single-city model would not be viable anytime in the foreseeable future.

Conclusion

Half Moon Bay has not acted to plan, promote, or protect its alleged future interests in the unincorporated area. The City has not lobbied San Mateo County to improve roads or implement storm water controls or storm water management infrastructure. It has allowed the infrastructure to become increasingly overloaded by urban level growth. The City has no plan to service the unincorporated area in its existing obsolete 1969 sphere of influence.

Based on extensive interviews with individual homeowners in the Midcoast, it is quite evident that the Montara / Moss Beach, El Granada, Miramar, and Princeton communities have no interest in joining Half Moon Bay as part of a single Coastside city.

The Midcoast Community Council strongly supports the recommendation in the Preliminary Sphere of Influence Update report to designate Half Moon Bay's sphere of influence along existing city limits, allowing for the Midcoast community to continue solving its own problems.

LAFCo's long-range goal of a single coastside city, reflected by the existing Half Moon Bay sphere of influence, should not prevent intermediate steps that can meet immediate local community needs with existing agencies.

Respectfully submitted,

Leonard Woren, Chair

Cc Martha Poyatos



October 1, 2008

Midcoast Park Lands PO Box 1754 El Granada CA 94018

Board of Directors

Jim Blanchard

President

Treasurer

Secretary

Chris Vogel

Vice President

Len Erickson

Fran Pollard MCC Appointee

Sabrina Brennan

MCC Appointee

Dave Holland

Gael Erickson

Ron Fenech Director

Marty Kingshill

Park Projects

Director

Director

SMCo Appointee

Sandy Emerson

Ms. Martha Poyatos, Executive Director Local Agency Formation Commission County of San Mateo 455 County Center Redwood City, CA 94063

Re: Comments on the August 18, 2008 Draft Sphere of Influence Update for the City of Half Moon Bay and the Unincorporated Midcoast

Dear Ms. Poyatos:

Midcoast Park Lands is a non-profit organization that has supported Midcoast parks for 14 years and the Granada Sanitary District (GSD) and its goals for the past 8 years, since GSD directly furthers our mission.

Consistent with our mission statement (see below), we have worked with the County's efforts to promote parks programs on the Coast through the Midcoast Action Plan.

We would like to reaffirm our support for GSD and their comments as submitted in their September 12, 2008 letter. MPL supports GSD's efforts to bring local parks and recreation responsibility to the Midcoast as expressed in this letter.

MPL also supports the efforts of the Montara Water and Sanitary District to bring local parks and recreation responsibility to the Midcoast.

MPL also supports the LAFCo staff recommendation that recognizes the necessity and rationale for designating each district's Sphere of Influence. This will allow the communities to identify their mutual parks and recreation interests while working with Midcoast Community Council, SMC Parks, LAFCo, and other community stakeholders.

MPL recognizes that the August 18, 2008 LAFCo recommendation brings the opportunity for local responsibility for parks and recreation along with the existing district responsibilities to the Midcoast. This supports MPL's goals for parks and recreation.

Too many years have passed without progress. We feel the time for action is now.

Thank you for your consideration.

Bouch

Kind regards,

Jim Blanchard President

CC: GSD, MWSD, SMC Parks

e-mail midcoastparks@sanmateo.org

www.MPL.sanmateo.org

Midcoast Park Lands seeks to promote land stewardship, conservation and recreation by creating and supporting parks on the unincorporated San Mateo County coast

LAW OFFICE

G. A. LASTER

RECEIVED SEP 3 0 2008

LAFCO

TELEPHONE: (650) 342-3523630 North San Mateo Drive
San Mateo, California 94401-2328

September 30, 2008

FAX:(650) 342-6392 e-mail: <u>galaster@aol.com</u>

P.O. Box 786 Half Moon Bay, Ca. 94019

Martha Poyatos, Executive Director San Mateo LAFCO 455 County Center Redwood City, CA 94063

Re: Sphere of Influence Update – City of Half Moon Bay and Unincorporated Midcoast – August 18, 2008 Draft

Dear Ms. Poyatos:

I am a 23 year resident of El Granada, prior to that an 8 year resident of Moss Beach, and prior to that a 4 year resident of Montara. I have been active for many years in Midcoast activities, including the organization of the Midcoast Community Council, the acquisition and lease of Quarry Park, and the failed effort about 14 years ago to organize a community services district for parks and recreation in the El Granada - Moss Beach – Montara area.

Properties most suitable for parks and recreation in the area have long needed an organization with the ability to make those arrangements. There is continuing and current concern that such properties will be diverted to other more profitable uses. I helped organize Midcoast Park Lands, a California nonprofit public benefit corporation qualified to receive tax-deductible contributions, on the failure of the community services district in an effort to provide such an organization, and while it has operated Quarry Park under a lease from San Mateo County, it has not been able to arrange for additional properties – including key properties such as the Burnham Strip – despite many tireless efforts by highly dedicated volunteers.

So as I read through the Draft Update I was very pleased to find the recommendation for a community services district with park and recreation powers. The above brief history, supports this recommendation for it makes it very clear that citizen efforts, alone, are not sufficient. There is no question, now, as to the need for government.

I also note that the Draft Update discusses other public services such as water

and sewer, and recommends reorganization of the provision of those services. No doubt the present admittedly complex organization for those services can be simplified. But the existing organization has existed for years and projects have been undertaken and arrangements have been made that will not be easy to unwind. Time will be required in order to accomplish any reorganization, certainly one as comprehensive as that recommended. Fortunately, time is not a critical factor since the services are already being provided by each of the local governments in the area.

However, the provision of park and recreation services is unique: there is no local government presently providing such services. To the extent that properties need to be acquired and put to park and recreation uses there is simply the blank that has existed for the last 14 years. Arguably, that blank suggests lack of local interest. But that is hardly the case. The vote 14 or so years ago was strongly in favor of the community services district. The problem which defeated the vote was the failure to authorize a special tax sufficient to provide funding. Even the vote on the tax was strongly in favor, but not enough to equal two-thirds. Suffice it to say that while there was a mathematical failure, there was a dramatic success, in that the Board of Supervisors recognized the strength of the vote and decide to advance county funds to acquire Quarry Park.

As the area has continued to build out, the interest in protecting the environmental ambiance by acquiring additional properties for parks and recreation has, if anything, increased. And so, of course, has the interest of the owners of suitable properties in developing them for profitable uses.

In short, there is a need, now, for the community services district.

The need may differ somewhat from one area to another, that is hard to say. But what can be said is that by treating the existing districts separately, it will become obvious where the need is most immediate. And it is the ability of the individual districts, without a two-thirds vote, to provide the existing tax revenues to satisfy the immediate need.

All that is required is for a district to obtain the necessary powers by being reorganized into a community services district with such powers.

The procedure is straightforward, simple, requires no time-consuming changes in organization of any other government, can be accomplished by a majority vote, and is by far the most efficient method of enabling the needed services.

I request that the Draft Update be modified, if necessary, to accommodate the need. This appears to be consistent with comments of the MCC.

G. A. Laster

From: "Neil & Jennifer Merrilees" <mermade4@yahoo.com>

To: <rgordon@co.sanmateo.ca.us>

Date: 10/1/2008 3:18 PM

CC: <mpoyatos@co.sanmateo.ca.us>

Supervisor Gordon

I would like to voice my support for the recent Sphere of Influence Update/Review (dated August 18, 2008).

I agree that fewer Sewer and Water districts on the coastside could be more efficient, economical, and simplify interaction with regulatory agencies. I am especially supportive of the goal of a Parks and Rec district that is independent from sewer and water providers.

For the last 4 years, there has been a conflict between the Moss Beach Park, and the MSWD, over the use of an existing water connection for a park bathroom. I feel that the goals of providing Sewer and Water, and the Goals of providing Parks and Rec, are too dissimilar, and finding board members adept at both issues would be problematic. I worry that the adoption of Parks responsibilities by Sewer and Water agencies could slow, rather than promote much needed recreational opportunities. I feel that the best long term solution, is one single separate Parks and Rec district on the San Mateo County unincorporated midcoast, as is noted in the recent Lafco report.

Thank you

Neil Merrilees (650)728-3813

I believe that parks and recreation planning and service delivery should be done for the whole unincorporated Midcoast, from one high-level entity. Given the realities that exist with the agencies' dedication to seeking local control at the appropriate level, I wonder whether there could be a "collaboration" alternative to consolidation that might permit high-level planning for parks and recreation, funded in a phased approach by the property tax revenues that the Districts now enjoy, without requiring consolidation first.

I look forward to further developments and discussions. Thank you for the opportunity to comment.

Yours,

Sandy Emerson

Resident of El Granada

Sabrina Brennan 165 La Grande Ave. Moss Beach, CA 94038

Wednesday, October 1, 2008

Ms. Martha Poyatos, Executive Director Local Agency Formation Commission County of San Mateo 455 County Center Redwood City, CA 94063



Re:

Comments on the August 18, 2008 Draft Sphere of Influence Update for the Unincorporated Midcoast and the City of Half Moon Bay

Dear Martha,

Thank you for the opportunity to provide comments regarding the draft LAFCo Sphere of Influence Report referenced above.

I enjoy living and working in Moss Beach. I purchased my home on the unincorporated Midcoast in 1999 when I was 29 years old. This Saturday I will celebrate my 39th birthday with a bike ride on the Coastal Trail.

The Midcoast is a wonderful community of families and business that would benefit from improved parks and recreation funding.

The Midcoast community is in urgent need of a Multi-Use Commuter Bike Trail (parallel trail) on the east side of Highway One and the Coastal Trail connection on the west side of Highway One.

Additional immediate needs include:

Safe Highway One Crossing for pedestrians and bicyclists
Community parks with water and bathroom facilities
Community Center that includes active recreation programs and a
community garden
Ball Courts (tennis & basketball)
Play Fields (soccer & baseball)
Playgrounds

I support the LAFCo staff recommendation that designates three Spheres of Influence on the Coastside. This will allow the three communities to identify their mutual parks and recreation interests while working with Midcoast Community Council, SMC Parks, LAFCo, Coastside Land Trust and other community stakeholders.

I support the report's approach for potential consolidation in steps or phases, rather than attempting to accomplish the task all at once.

I support the reorganization of the Granada Sanitary District into a community services district with parks and recreation powers.

I support activation of the Montara Water and Sanitary District's parks and recreation powers, as an initial first step towards any future consolidations.

Funding Midcoast parks and recreation projects should be on a fast track.

Midcoast residents should not have to wait for another level of bureaucracy before funding and implementing the Board of Supervisors approved Midcoast Action Plan for Parks and Recreation. Further delays are a waste of time.

Midcoast	Parks and	Recreation	funding	is ı	needed	now
wiiucuast	rains allu	Neci eation	IUIIUIIIU	131	leeueu	IIOVV.

Sincerely,

Sabrina Brennan

Victor H. Abadie III Post Office Box 81 Montara CA 94037-0081

650.728.3373

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OCT 0 2 2008

30 September 2008

LAFCO

Ms. Martha Poyatos, Executive Officer
San Mateo County Local Agency Formation Commission
455 County Center
Redwood City CA 94063

Re: Preliminary Sphere of Influence Report and Montara Water and Sanitary District

Dear Ms. Poyatos:

This letter has two purposes. The first is to oppose combining Montara Water and Sanitary District with Coastside County Water District. The second is to request that LAFCo support enlarging MWSD's service area to include that part of the former Citizen's Utility Company area outside of MWSD's current boundary.

MWSD should remain separate from CCWD. Any effort to combine the two districts appears opportunistic on the part of CCWD and possibly others, now that MWSD's customers and taxpayers purchased the water utility, invested heavily to repair dilapidated water infrastructure, and found significant new groundwater supply. MWSD should not have to relinquish to CCWD the benefit of what we MWSD customers and taxpayers bought. This reminds me of the story of the Little Red Hen, who asked the other barnyard animals to help process wheat and make bread. They declined to help and became interested in the project only upon noticing the aroma of fresh-baked bread.

LAFCo should approve expanding MWSD's service area southeastward, near Pillar Point, to include that part of the former Citizen's Utility Company service area that now extends beyond MWSD's boundary and is contiguous with the boundary. MWSD purchased all of the Citizen's Utility Company service area here on the Midcoast. MWSD should have full rights to operate the entire area it purchased. This requires extending MWSD's boundary to incorporate all of the former Citizen's Utility Company area.

Yours truly,

Victor H. Abadie III

From: "Sandy Emerson" <semerson@igc.org>
To: <mpoyatos@co.sanmateo.ca.us>

Date: 10/1/2008 8:47 PM

Subject: Comments on August 18, 2008 Draft Sphere of Influence Update for the City of Half

Moon Bay and the Unincorporated Midcoast

October 1, 2008

Ms. Martha Poyatos

San Mateo LAFCo

455 County Center

Redwood City, CA 94063

Dear Martha Poyatos:

As a long-time participant in efforts to bring improved parks and recreation services to the unincorporated area of the Midcoast, I read with interest your Draft SOI Report of August 18. I served two years on the Midcoast Community Council, as Chair of the Parks and Recreation committee and as Chair of the Council, and I participated in Rich Gordon's initial Parks and Rec Task Force. I am currently on the Board of Midcoast Park Lands and of the Committee for Green Foothills.

The comments that follow come solely from me as an individual and do not represent the views of anyone else.

First, I support making the SOI for Half Moon Bay coterminous with the current City limits. Our neighbor to the south is functioning as a separate entity.

Second, I support creating non-zero spheres of influence for Granada Sanitary District and Montara Water and Sanitary District. The path to consolidation could be very long indeed, and these Districts have the means and the motivation to improve parks and recreation services in the near term. However, the mechanisms available to the Districts are problematic: I have concerns about creating a CSD limited to GSD's service area; and about MWSD's parks and recreation powers being limited to lands under its direct control.

EXHIBIT 3

Joint Powers Agencies Providing Municipal Services in San Mateo nt San Mateo LAFCO VOCAL AGENCY FORMATION COMMISSION

Senate Bill 1266

Approved on August 22, 2016, **SB 1266** amended an existing section and added a new section to the Joint Exercise of Powers Act. This change to the Act required *JPAs that were formed for the purpose of providing municipal services and that include a local agency member* to provide LAFCos with their joint powers agreements and amendments by July 1, 2017 and to provide any subsequent amendments as they occur.

Joint Powers Agency Definition

A joint powers agency (JPA) consists of two or more public agencies that jointly exercise any power common to both through a joint powers agreement or contract. The agreement may set up a governing board composed of representatives of the contracting agencies and defines the JPA's governance and functions.

► Click on a JPA name in the left column to view or download its joint powers agreement:

JPA NAME	PURPOSE / MEMBERS	INITIAL AGREEMENT DATE	MOST RECENT AMENDMENT DATE
Central County Fire Department	Fire suppression and prevention, emergency medical services, training, administration, and disaster preparedness serving Burlingame, Millbrae, and Hillsborough	4-20-2004	7-20-2010

JPA NAME

PURPOSE / MEMBERS

INITIAL AGREEMENT DATE MOST RECENT AMENDMENT DATE

City/County Association of Governments (C/CAG)	Planning and programming in the areas of transportation, air ACENIX FORMATION, and climate protection. Allocation of State and and federal transportation funds to the County of San Mateo, its 20 cities, and other agencies. Serves as Airport Land Use Commission, Congestion Management Agency, Integrated Solid Waste Management Local Task Force, Program Manager for AB 434 40% Funds and for National Pollutant Discharge Elimination System, and Service Authority for Abatement of Abandoned Vehicles. (See the C/CAG 2014-15 Annual Report.)	1990	7-1-2011
Community Development Commission of the County of San Mateo (San Mateo County Joint Powers Financing Authority)	Financing of public capital improvements for the County of San Mateo	5-15-1993	7-1-1997
Net Six Joint Powers Authority	Fire and emergency dispatch service for the Belmont Fire Protection District, Coastside Fire Protection District, Menlo Park Fire Protection District, City of Redwood City, City of San Carlos, Woodside Fire Protection District, and the County of San Mateo under a contract operated by the County	4-28-1994	8-13-2013
North County Fire Authority	Administration and supervision of operations, emergency response, training, fire prevention, public education, and wildland fire trainings for Daly City, Brisbane, and Pacifica. The three cities employ firefighters, maintain fire stations and apparatus, and coordinate each city's Community Emergency Response Team (CERT).	6-11-2001	4-24-2012
Peninsula Clean Energy Authority	Provision of electricity generation from renewable resources such as solar and wind for the County of San Mateo and its 20 incorporated cities	5-16-2016	2-9-2016

JPA	NΑ	ME

PURPOSE / MEMBERS

INITIAL AGREEMENT DATE MOST RECENT AMENDMENT DATE

Powers Board ■ ▼	ATEO PARCO ATEO PARCO AGENCE AND COMMISSION SAN Francisco, the San Mateo County Transit District, and the Santa Clara Valley Transportation Authority	10-3-1996	6-1-2000
Peninsula Traffic Congestion Relief Alliance	Reducing traffic congestion and air pollution through Transportation Demand Management (TDM) programs, services, and subsidies and other related consultation services that are designed to reduce the number of single-occupant vehicles traveling on streets and highways in the County of San Mateo's 20 incorporated cities.	5-9-2000	6-2-2005
San Francisquito Creek Joint Powers Authority	Addressing flooding, environmental, and recreational concerns through planning, designing, and implementing projects from the upper watershed to the tidal marshes of San Francisquito Creek. Serves Palo Alto, Menlo Park, and East Palo Alto; the County of San Mateo; and the Santa Clara Valley Water District	5-18-1999	N/A
San Mateo Consolidated Fire Department	Fire suppression and prevention, investigation, rescue, and emergency medical services serving San Mateo, Foster City, and Belmont	11-22-2017	N/A
San Mateo County Express Lanes Joint Powers Authority	Own, manage, operate, and maintain Express Lanes along the Highway 101 corridor in San Mateo County. The agreement is between the San Mateo County Transportation Authority and the City/County Association of Governments of San Mateo County.	5-24-2019	6-13-2019
San Mateo County Library Joint Powers Authority	Operation of each member agency, including physical and digital collections, free internet access, access to public computers, hosting of cultural events, outreach services, bookmobile, and special programs. (Each member agency maintains its own library facilities.)	12-15-1998	5-30-2004

JPA NAME	J	PA	NA	ME
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PURPOSE / MEMBERS

INITIAL AGREEMENT DATE MOST RECENT AMENDMENT DATE

Mateo SAN N ty Fre-CAL Hospital Emergency Medical Services Group	AGENISO PARKAGE SUPPORT SERVICES per an operating agreement with American Medical Response West (AMR) and provided for in the agreement between the County of San Mateo and AMR for Countywide emergency ambulance service	7-1-2009	N/A
Sewer Authority Mid- Coastside	Sewage collection, treatment, and disposal serving Half Moon Bay, El Granada, Princeton, Moss Beach, and Montara	2-3-1976	5-22-1989
Silicon Valley Clean Water	Industrial waste monitoring, wastewater treatment and disposal, and recycled water serving Belmont, San Carlos, Redwood City, West Bay Sanitary District (encompasses Menlo Park, Atherton, and portions of East Palo Alto and Portola Valley); unincorporated communities of North Fair Oaks, Emerald Lake Hills, and Devonshire	11-13-1975	12-12-2013
South Bayside Waste Management Authority (RethinkWaste)	Waste collection, disposal, and reduction, and recycling serving Atherton, Belmont, Burlingame, East Palo Alto, Foster City, Hillsborough, Menlo Park, Redwood City, San Carlos, San Mateo, and unincorporated San Mateo County	12-9-1999	6-19-2013

First Amended and Restated JPA for the San Mateo County Express Lanes.pdf

14.61 MB

No results

PDF

EXHIBIT 4

SECOND RESTATED AND AMENDED AGREEMENT BETWEEN THE CITY OF PALO ALTO AND THE EAST PALO SANITARY DISTRICT FOR WASTEWATER TREATMENT AND DISTRICT OUTFALL

This Second Amended and Restated Agreement ("Agreement") is made and entered into on May 17, 2021 , by and between the CITY OF PALO ALTO, a chartered municipal corporation of the State of California (the "City") and the East Palo Alto Sanitary District, a public corporation under the laws of the State of California (the "District") (individually, a "Party", collectively, the "Parties"), restates and amends that certain agreement, Contract No. C237, first entered into March 11, 1940 and first restated as amended on March 16, 1989, including subsequent amendments thereto.

RECITALS

- A. On March 11, 1940, the Parties entered into a contract, "Contract Restatement and Amendment No. C237," whereby the City agreed to provide treatment of the District's wastewater, which contract was subsequently amended by amendments dated September 10, 1963, June 25, 1964, and May 1971 (the "Original Agreement").
- B. On October 10, 1968, the City joined with the cities of Mountain View and Los Altos to fund the construction, operation, and maintenance of the regional sewage treatment plant (the "Treatment Plant") that is part of a sewerage system ("System") owned and operated by the City.
- C. In May 1971, the City and District agreed that the District's share of the primary/secondary design capacity of the Treatment Plant would be 2.25 million gallons per day (mgd) average dry weather flow (ADWF). The Treatment Plant was subsequently modified to include tertiary treatment, and the District's share of tertiary capacity was established at 1.9 mgd (ADWF).
- D. On March 16, 1989, the Parties restated and amended the Original Agreement (the "1989 Agreement") to provide for the District's participation in financing and expansion of the Treatment Plant's capacity from 35.0 primary/secondary capacity to 38.0 mgd (ADWF) (and 40.0 mgd average annual flow (AAF)) and from a tertiary capacity of 30.6 mgd to 38.0 mgd ADWF (and 40.0 mgd AAF).
- E. On May 30, 1989, the Parties amended the 1989 Agreement to revise the billing and payment provisions in Paragraph 6.b of the 1989 Agreement ("<u>Amendment No. 1</u>").
- F. On December 18, 1989, the Parties amended the 1989 Agreement to provide specific measures and procedures for complying with federal and state laws and regulations regarding wastewater collection, transmission, treatment and disposal in Paragraph 9 of the 1989 Agreement ("Amendment No. 2").
- G. On December 7, 1998, the Parties amended the 1989 Agreement to add Paragraph 26 to permit the rehabilitation of the City's incinerators ("Amendment No. 3").

- H. On November 19, 2003, the Parties executed an agreement entitled "Settlement and Release Agreement" and amended Paragraphs 6.a and 8 of the 1989 Agreement on June 2, 2005 to be consistent with the Settlement and Release Agreement ("Amendment No. 4").
- I. On March 19, 2009, the Parties amended the 1989 Agreement to add Paragraph 28, which provided for the funding, design, and construction of an ultraviolet disinfection treatment system at the Treatment Plant ("Amendment No. 5").
- J. On October 17, 2016, the Parties amended the 1989 Agreement to provide for the cost sharing for certain Treatment Plant renovations (collectively, the "<u>Projects</u>"), and to clarify the indemnity provision ("<u>Amendment No. 6</u>"). The Projects include, but are not limited to, up to \$6.75 million for planning and design of the rehabilitation of:
 - the primary sedimentation tanks;
 - secondary treatment upgrades; and
 - a new lab/environmental services building.

The Projects included up to \$28 million for design and construction of the Sludge Dewatering and Truck Loadout Facility. The State Revolving Fund ("SRF") loans from the State Water Resources Control Board ("SWRCB") were the anticipated and authorized funding instruments in Amendment No. 6. The SRF loan has been granted for up to \$28 million for the costs of the Sludge Dewatering and Truck Load-out Facility design and construction. An SRF loan has not yet been authorized for the \$6.75 million planning and design expenses. However, SRF funding is anticipated to cover a portion of this amount.

The 1989 Agreement and Amendment Nos. 1-6 are referred to collectively, hereinafter as the "1989 Agreement."

- K. City has developed and continues to implement an industrial pretreatment program ("Pretreatment Program"), pursuant to conditions contained in its National Pollutant Discharge Elimination System ("NPDES") Permit number CA0037834 issued by the San Francisco Bay Regional Water Quality Control Board ("Water Board"), implementing the requirements and policies of State law and the Federal Clean Water Act.
- L. The District, who is a partner to the Treatment Plant (also referred to as the "Palo Alto Regional Water Quality Control Plant" or "RWQCP"), desires to continue to utilize the System and recognizes its industrial waste control obligations under the Federal Pretreatment Regulations at Title 40 of the Code of Federal Regulations, Part 403, ("40 CFR 403") as the same may be amended from time to time.
- M. The Parties desire to restate and amend the Agreement to consolidate the terms added through multiple amendments into one document, to clarify certain provisions, to expand project financing instruments for the Projects described in Recital J beyond the SWRCB's SRF loan program, and to approve the construction of and cost-sharing for two additional RWQCP projects: (1) a new outfall and improvements to existing discharge infrastructure, and (2) rehabilitation of the primary sedimentation tanks including electrical upgrades.

N. District Staff raised the issue of whether a Joint Powers Authority should be formed to manage the Treatment Plant. City staff are not taking steps to implement this idea at this time, as it has not been suggested by any of the other Partners to the Treatment Plant. City Staff have reported that neighboring Joint Power Authority treatment plants have higher sewer rates than the Partners of the Palo Alto Treatment Plant.

AGREEMENT

- 1. <u>DEFINITIONS</u>. As used in this Agreement, the following terms shall have the meanings herein set forth:
 - a. "Capacity" means a stated amount of wastewater flow through the Treatment Plant (whether total, or a portion assigned to any contributor to the Treatment Plant), variously expressed in terms of Average Annual Flow (AAF) or Average Dry Weather Flow (ADWF).
 - b. "Average Annual Flow (AAF)" means the daily average discharge of wastewater during a calendar year period, expressed as a rate of flow in million gallons per day, and shall be computed by dividing the total gallons discharged during such year by the number of days within such year.
 - c. "Average Dry Weather Flow (ADWF)" means the daily average discharge of wastewater from May 1 to October 31, expressed as a rate of flow in millions gallons per day, and shall be computed by dividing the total gallons discharged during such period by the number of days within such period.
 - d. "Recycled Water" means wastewater which has been treated beyond that required for San Francisco Bay discharge and which meets any water recycling criteria set forth in Title 22, Division 4, Chapter 3 of the California Code of Regulations.
 - e. "Wastewater" means the water-carried wastes of the community derived from public, residential, commercial, or industrial sources.

2. TREATMENT PLANT CAPACITY AND ALLOCATION.

- a. Treatment Plant Capacity and Allocation. The Treatment Plant's primary, secondary, and tertiary capacity is 38.0 mgd (ADWF). The City shall have the right to utilize a total of 20.0 mgd of both the primary, secondary, and tertiary capacities, and shall make available a total of 2.9 mgd (ADWF) of such capacities to the District for the District's utilization. The District's capacity is 3.06 mgd (AAF) and is detailed in Exhibit "H" attached hereto and incorporated herein.
- b. <u>Use of Capacity</u>. Neither the District nor the City shall use the Treatment Plant or any part thereof to a greater percentage of its capacity, specified above, except with the approval and agreement of the other Party, as hereinafter provided. If either the City or the District hereafter desires to use additional capacity in the Treatment Plant or any unit thereof in

excess of such amounts, and the Treatment Plant or any unit thereof is not then being used by the other Party to the full extent to which the other Party is entitled, the Party desiring such additional capacity may rent such additional capacity rights, at a rate of \$400.00 per million gallons of primary and secondary capacity and \$200.00 per million gallons of advanced waste treatment facility capacity. The District may audit the City's use of any capacity rented from the District, and the City may not sell the rented capacity to others. Likewise, the City may audit the District's use of rented capacity and the District may not sell rented capacity.

- 3. <u>PAYMENT FOR COST OF TREATMENT</u>. The District shall bear a proportionate share of the costs, determined in accordance with the City's standard accounting practices, of operating and maintaining the Treatment Plant, as follows:
 - a. <u>Use of Allocation Formula</u>. Attached to this Agreement and incorporated herein as Exhibit "C" is a description of the cost-allocation formula to be used to allocate operating and maintenance costs among the participants in the Treatment Plant. The District shall bear its share (as determined according to such formula) of all costs of operating and maintaining the Treatment Plant.
 - b. <u>Industrial User Charges</u>. Notwithstanding the foregoing and except as provided in Paragraph 11.n, the City shall charge the District an added amount to cover the cost of the Industrial Waste Pretreatment Program (IWPP). The IWPP charge shall be calculated as follows: 67% of the Palo Alto Utility Quantity Rate (Utility Rate Schedule S-2, Section C.2, excluding special notes) as of July 1 each year, multiplied by the volume of process wastewater discharged to the sewer system from any and all District "Significant Industrial Users," as defined by the U.S. Environmental Protection Agency. The Palo Alto Utility Rate S-2 will change from time to time as the City changes its rates.
 - c. Billing and Payment. The City shall bill the District as follows:

Prior to the commencement of its fiscal year on July 1, the City shall prepare an estimate of the annual cost of operating and maintaining the Treatment Plant for the forthcoming fiscal year and allocate such costs by user consistent with this Agreement. The City will provide a copy of said proposed budget to the District at least 30 days before it is scheduled for adoption. The District may comment on the proposed budget and review the City's records supporting its final budget, including the City's actual costs. Not later than thirty (30) days after July 1, October 1, January 1, and April 1, of each year, the City will bill the District an amount, payable not later than forty-five (45) days after July 1, October 1, January 1, and April 1, of each fiscal year, or twenty-five (25) days after the District receives said bill, whichever date is later, equal to one-fourth the amount of the adopted budget for the Treatment Plant allocated to the District. Such amount will be subject to the following adjustments:

i. All October 1 billings will be adjusted, subject to the City's annual audit, by the amount necessary to reflect the actual costs and expenses for operation and maintenance of the Treatment Plant during the immediately prior fiscal year. The City

- will review any audit performed by the District and may adjust the billings upon such review.
- ii. With the April 1 billing, the City will make an adjustment for the then estimated remaining operation and maintenance expenses to be incurred between the period of April 1 and July 1, adjusted by the City's actual expenditures, if known, for the first three quarters of the fiscal year prior to April 1.
- In the event that the amount billed to and collected from the District for operation and maintenance associated with the District are less than or greater than the actual amounts expended when determined in conformity with subparagraph (a) by an amount more than ten percent (10%) greater or more than ten percent (10%) less than the amount billed and collected, the District's bill for the October 1 payment will be adjusted by an amount necessary to compensate for interest earned by or interest lost to the City on the amount of the overage or underage based on an imputed interest rate equal to the City's latest average rate of return on investments published by the Director of Finance of the City and applied to the average amount over ten percent (10%) or under ten percent (10%) from the date of payment.
- iv. The District hereby agrees to set and collect fees and rates within its service area sufficient to pay its share of operating, maintenance, and capital expenses.
- d. <u>Supporting Information to be Made Available</u>. The City shall supply the District with all existing information requested by the District which supports the City's determinations regarding the cost of operating and maintaining the Treatment Plant, including information relating to the computation of the relative shares of the individual participants in such costs. The City shall make available all such information relative to the costs of operating and maintaining the Treatment Plant (historical as well as current) to the District's auditors, upon request.
- e. <u>Delinquent Payments</u>. In the event any amounts to be paid under this Agreement are not paid in full to the City within thirty (30) days of the due date, interest shall accrue on the unpaid balance at a rate and in an amount equal to seventy-five one hundredths percent (0.75%) per month of the unpaid balance.
- 4. RIGHTS OF PARTIES TO USE OF WASTEWATER PRODUCTS. Notwithstanding Water Code section 1210, either party to this Agreement shall have the right to have and to convey, at its own expense, all available wastewater by-products, including treated wastewater and Recycled Water, for reuse that the party requires. In the event the total of the Partner requests exceeds the available supply, each party shall be entitled to have wastewater by-products, including treated wastewater and Recycled Water, in proportion to the party's percentage of actual wastewater input flow to the total plant flow over the relevant period of time. In the future, should the District receive Recycled Water, City may bill the District for the incremental operation and maintenance (O&M) cost of producing Recycled Water (at a rate adopted by the City after review with the District), over and above the O&M cost of producing treated the same amount of wastewater that would otherwise be discharged to the Bay.

5. PAYMENT FOR PAST PROJECTS WITH ONGOING OBLIGATIONS. As part of the 1989 Agreement, the Parties agreed on financing through bonds and/or loans and cost-sharing for certain projects including the Capacity Expansion Project, the Incincrator Rehabilitation Project, the Ultraviolet (UV) Disinfection Facility Project, and the Sludge Dewatering and Truck Loadout Facility Project. Debt schedules with remaining principal and interest payments are detailed in Exhibits "D," "E," "F," and "G" all attached hereto and incorporated herein. The District and City shall continue to pay their share of principal and interest on the following past projects listed below, and consistent with the Exhibits D, E, F, and G:

Project	Loan Principal Palo Alto/District	District Share	Debt Schedule Exhibit
1999 Refunding of 1990 Bonds for 1989 Capacity Expansion Project	\$3,946,176 \$986,544/\$469,595	11.9% share	"D"*
1999 Bonds for Incinerator Rehabilitation Project	\$7,500,000 \$2,862,000/\$573,000	7.64% share, Exhibit H	"E"**
SRF Loan for Ultraviolet Disinfection Facility Project	\$8,595,665 \$3,280,106/\$656,709	7.64% share, Exhibit H	"F"
SRF Loan for Sludge Dewatering and Truck Load Facility Project	\$25,197.407.73 \$9,615,330.79/\$1,925,081.95	7.64% share, Exhibit H	"G"

^{*} The bill shall include an annual amortization of issuance costs and bond discount of \$490.34 due in Q4 of each fiscal year (2020, 2021, 2022, and 2023) and \$449.48 (2024).

a. 1989 Capacity Expansion Project: 1999 Refunding of 1990 Bonds.

i. Payment for the District's Additional Capacity. The District hereby agrees to pay its proportionate share (11.9%) of the annual debt service and bond issuance requirements for the 1999 refunding of the 1990 bonds according to the schedule set forth in Exhibit "D" attached to this Agreement. The 1990 bonds are for the 1989 Capacity Expansion Project, which was refunded in 1999. The City shall bill the District one-quarter of such annual payment with each quarterly billing, as set forth in Paragraph 3.c of this Agreement. The bill shall include an annual amortization of issuance costs and bond discount.

b. 1999 Incinerator Rehabilitation Project: 1999 Bonds.

i. <u>Payment for Incinerator Rehabilitation</u>. The District hereby agrees to pay its proportionate share (7.64%) of the annual debt service and bond issuance requirements for the 1999 bonds according to the schedule set forth in Exhibit "E" attached to this

^{**} The bill shall include an annual amortization of issuance costs and bond discount of \$664.06 due in Q4 of each fiscal year (2020, 2021, 2022, and 2023) and \$\$608.72 (2024).

Agreement. The 1999 bonds are for the Incinerator Rehabilitation project. The City shall bill the District one-quarter of such annual payment with each quarterly billing, as set forth in Paragraph 3.c of this Agreement. The bill shall include an annual amortization of issuance costs and bond discount.

c. Ultraviolet Disinfection Facility Project and SRF Loan

- i. For purposes of this subparagraph, "Project Costs" means all costs incurred in connection with the planning, design, construction and implementation of the project. Without limiting the generality of the foregoing, Project Costs shall include, but not to be limited to, design, engineering, and other consultants' fees and costs, including fees incurred pursuant to agreements with engineers, contractors and other consulting, design and construction professionals; environmental analysis and approval, including compliance with the California Environmental Quality Act; deposits; ordinarily applicable permit fees, plan check fees, and inspection fees; initial maintenance; attorney's fees and costs; insurance; and interest from the date of payment on any contracts.
- ii. The Parties authorized the City to pursue State Revolving Fund (SRF) loan from the State Water Resources Control Board (SWRCB) to fund the costs of the Ultraviolet Disinfection Project. The loan was authorized. The SRF loan shall be repaid in the same proportionate share as shown on Exhibit "H." The Parties further agree that if necessary, each Party shall raise their sewer use rates for the repayment of past SRF loans, operations, and/or maintenance of the Project, following any appropriate process under California Constitution article XIII C and D (Proposition 218).
- iii. If the SWRCB terminates its loan commitment unexpectedly following execution of the construction contract for the Project, the City shall notify the District promptly. Following notification of the termination of the SRF, the Parties shall meet in a timely manner to discuss alternative funding sources and strategies.
- iv. The Parties shall remain responsible for the Ultraviolet Disinfection Facility Project costs, bonds, and loans incurred, whether before or after termination of the Project, in connection with the termination of the Project construction contract, in the same proportion to each organization's share as shown in Exhibits "F" and "H". Unless earlier terminated, the obligations and responsibilities of the Parties shall commence with the execution of this Agreement and be in force for the life of the SRF loan.
- v. The District shall pay its share of any Project Costs within ten (10) business days of receipt of the quarterly billing statement sent by the City. If District disputes the correctness of an invoice, it shall pay the invoice in full and the dispute shall be resolved after payment in accordance with the Agreement, and shall not offset against any payment due.
- 6. <u>DESIGN OF PRIMARY SEDIMENTATION TANK REHABILITATION, SECONDARY TREATMENT UPGRADE, LABORATORY SERVICES BUILDING; DESIGN AND CONSTRUCTION OF SLUDGE DEWATERING AND TRUCK LOADOUT FACILITY; AND CONSTRUCTION OF OUTFALL AND PRIMARY SEDIMENTATION TANK REHABILITATION.</u>

a. Implementation of the "Projects"

- City and District hereby approve the planning and design of the Primary Sedimentation Tanks, Secondary Treatment Upgrades, Laboratory/Environmental Services Building, and design and construction of a Sludge Dewatering and Truck Loadout Facility. Each Party shall pay its share of Project Costs for the Projects in proportion as it owns capacity in the Treatment Plant or portion thereof, as shown in Exhibit "H." For purposes of this subparagraph, "Project Costs" means all costs incurred in connection with the planning, design, construction and implementation of the Projects. Without limiting the generality of the foregoing, Project Costs shall include, but not be limited to: design, engineering, and other consultants' fees and costs, including fees incurred pursuant to agreements with engineers, contractors and other consulting, design and construction professionals; environmental analysis and approval costs, including cost of compliance with the California Environmental Quality Act; deposits, applicable permit fees; all costs to apply for and secure necessary permits from all required regional, state, and federal agencies, plan check fees, and inspection fees; construction costs; initial maintenance; attorneys' fees and costs; insurance; interest from the date of payment on any contracts.
- ii. City and District hereby approve the construction of a new outfall and related improvements to existing discharge infrastructure (the "Outfall Project") and the rehabilitation of the primary sedimentation tanks including electrical upgrades (the "Primary Sedimentation Tank Rehabilitation Project"). Each Party shall pay its share of Project Costs for the Projects in proportion as it owns capacity in the Treatment Plant or portion thereof, as shown in Exhibit "H." For purposes of this subparagraph, "Project Costs" means all costs incurred in connection with the construction and implementation of these two projects. Without limiting the generality of the foregoing, Project Costs shall include, but not be limited to: engineering and other consultants' fees and costs, including fees incurred pursuant to agreements with engineers, contractors and other consulting, design and construction professionals; deposits, applicable permit fees; all costs to apply for and secure necessary permits from all required regional, state, and federal agencies; plan check fees, and inspection fees; construction costs; initial maintenance; attorneys' fees and costs; insurance; interest from the date of payment on any contracts.
- iii. The projects described in subparagraphs (i) and (ii) immediately above are referred to individually as a "Project" and collectively as the "Projects".
- b. <u>Financing for the Projects</u>. The District authorizes the City to pursue and receive State Revolving Fund ("<u>SRF</u>") loans from the State Water Resources Control Board ("<u>SWRCB</u>") or pursue other project financing (i.e. utility revenue bonds) to fund the costs of the Projects. The maximum amount of the financing sought for each Project is:

- Planning/design of the primary sedimentation tanks, secondary treatment upgrades, and a new Laboratory/Environmental Services Building - \$6.75 million
- Design and construction of a sludge dewatering and truck load-out facility -\$28 million
- Construction of Outfall Project \$12 million
- Construction of Primary Sedimentation Tank Rehabilitation \$17 million
- c. The SRF loans will have a thirty year repayment term. The SRF loans shall be repaid in the same proportionate share, as shown on Exhibit "H." The Parties further agree that, if necessary each Party shall raise their sewer use rates for the repayment of the SRF loan or other financing, operations, and/or maintenance of the Project, following any appropriate process under California Constitution article XIII C and D (Proposition 218).
- d. If the SWRCB terminates its loan commitment unexpectedly following execution of the planning and/or construction contract(s) for a Project or the Projects, the City shall notify the District promptly. Following notification of the termination of the SRF loan commitment, the Parties shall meet in a timely manner to discuss alternative funding sources and strategies for completion of the Projects. If the Parties are unable to agree on new funding sources in a timely manner, then the City shall have the right to terminate the Project or the Projects immediately.
- e. The Parties shall remain responsible for Project Costs and loans incurred, whether before or after termination of the Project, in connection with the termination of the Project construction contract, in the same proportion to each organization's share, as shown on Exhibit "H." Unless earlier terminated, the obligations and responsibilities of the Parties shall commence with the execution of this Agreement and be in force for the life of the SRF loan or other financing.
- f. Pursuant to Paragraph 3.c of the Agreement, the City will supply the District with all information supporting the City's determinations regarding the Project Costs, including but not limited to, information relating to the computation of the relative shares of each organization. The City will make available all such information (historical and current) to the District's auditors, on request.
- g. District shall pay its share of any Project Costs within thirty (30) business days of receipt of the quarterly billing statement sent by the City. If District disputes the correctness of an invoice, it shall pay the invoice in full and the dispute shall be resolved after payment in accordance with the Agreement, and shall not offset against any payment due. The Parties shall undertake any dispute resolution in accordance with Paragraph 15 of the Agreement.

7. FUNDING FOR MINOR CAPITAL IMPROVEMENT PROJECTS (CIPs).

a. Relatively small capital projects for the replacement of obsolete, broken or worn-out equipment, shall be referred to as "Minor Capital Projects". The total annual expenditure

on Minor Capital Projects shall not exceed the amount specified for the base year (1982-1984), as set forth below, adjusted annually, in accordance with the Consumer Price Index [Urban Wage Earners and Clerical Workers] (base year 1982-1984 = 100) for the San Francisco-Oakland-San Jose CSMA ("CPI"), published by the United States Department of Labor, Bureau of Labor Statistics ("Index"), most immediately preceding the twelve-month period beginning the July of each following fiscal year ("Extension Index"), and which shall be compared with the Index published most immediately preceding the twelve-month period beginning the July of each preceding fiscal year ("Beginning Index"). The Minor Capital Projects total maximum amount for the base year is set at 1.9 million dollars (\$1,900,000.00).

- b. Minor Capital Project expenses are included as part of operating expenses. Therefore, the District's share is calculated using Exhibit C, as it is for all operating expenses. Major CIPs are those which are too large to be implemented with the annual funds available in 7.a above. The District's share for Major CIPs is contained in Exhibit H.
- 8. PAYMENTS FOR MAJOR CAPITAL IMPROVEMENT PROJECTS (CIPS). Each Party shall pay for the cost of major CIPs in an amount equal to its proportional share of capacity in the Treatment Plant or portion thereof, as more fully described in Exhibit "H," attached hereto and incorporated herein by reference. If the District will pay for its share of the costs of CIPs through its voluntary participation in the City's issuance of debt securities, if any, to finance the work, then the District shall pay to the City for its share of the City's debt service in an amount equal to its proportional share of capacity in the Treatment Plant, unless the Parties agree in a separate writing to a different share. Major CIPs means those projects, which are not covered by Paragraph 7.
- 9. ALTERNATE FUNDING MECHANISM FOR THE PLANNING AND DESIGN OF THE PRIMARY SEDIMENTATION TANK REHABILITATON, SECONDARY TREATMENT UPGRADE, AND LAB/ENVIRONMENTAL SERVICES BUILDING PROJECTS. The City utilized the annual minor capital budget funded by the Parties (detailed in Paragraph 6) to fund the Sludge Dewatering and Load-out Facility project planning and design, with the intent to reimburse the annual minor capital budget once the SRF loan for that project phase was received. The Parties agree that the City will use the SRF loan reimbursement funds from the Sludge Dewatering and Loadout Facility project design (soft costs only of approximately \$3.4 million, referred to as the "Reimbursement Funds") to finance the initial planning and design costs of the following three projects: (1) primary sedimentation tanks, (2) secondary treatment upgrades, and (3) a new Laboratory/Environmental Services Building. After the Reimbursement Funds are exhausted, any additional planning and design expenses for the three projects shall be paid by the Parties in quarterly payments in the same proportionate shares as shown on Exhibit "H". Once construction financing for these three projects is secured, the City may roll any remaining, yet unbilled, planning and design expenses into the debt financing instrument.
- 10. <u>THE DISTRICT'S OUTFALL</u>. The City hereby confirms that by an Amendment to the Original Agreement dated September 10, 1963 ("September 1963 Amendment"), it granted to the District the right to construct and maintain a sanitary sewer outfall line (subsequently sized at

twenty-four (24) inches) over a route across City property as shown on a map attached to this Agreement as Exhibit "A" and "B."

- a. The District shall have an irrevocable license coextensive in term with the existence of said outfall or until the license is replaced with an easement as set forth in subparagraph f, for ingress and egress across City property necessary to maintain or repair said outfall, in the event that the Parties do not agree on another method of such repair and maintenance.
- b. District shall operate such facilities without trespassing on any fairways or greens of City's golf course and shall exercise due diligence in the protection of all natural plant material, wetlands (if any), environmental habitat, and piping, to the greatest extent feasible.
- c. In addition, for the portion of the District's facilities within the City's airport, the District shall exercise due diligence and coordinate any maintenance work with the City's airport and the Federal Aviation Administration (FAA) as required.
- d. If any regulatory permits are required, the District shall be responsible for obtaining them and following the requirements of any applicable regulatory permit.
- e. District's operation of its facilities shall not interfere with City's use or development of any City property.
- f. In 2017, as part of the San Francisquito Creek Flood Reduction, Ecosystem, Restoration, and Recreation Project San Francisco Bay to Highway 101, District relocated a portion of the sanitary sewer outfall line pursuant to a Right of Entry Agreement by and between City and District dated October 5, 2017 ("ROE"). The Parties agree to enter into an easement agreement to govern the rights and obligations of the Parties with respect to both the new portion of the line and the preexisting portion first contemplated by the September 1963 Amendment, which easement agreement upon recording shall supersede and replace the preceding provisions regarding the license. The Parties shall cooperate in the preparation and recording of the easement. At City's request, District shall cause the preparation of the following documents necessary for the easement, and submit them to City:
 - A set of as-built plans and profiles (hard copy and AutoCAD) for District's entire sanitary sewer outfall line on City property, including the preexisting portion and that portion installed under the ROE. The plan shall be prepared based on the surveyed information obtained by the District's consultant.
 - The set of as-built plans and profiles shall include the segment of pipe that was sliplined and left in place for future use.
 - Where feasible, surveyed markers, steel pipe, monuments or equivalent shall be set in the field by a licensed surveyor to identify the location of the existing facilities.

- g. In accordance with the September 1963 Amendment, and without creating any precedent for any future connections, the District shall provide and reserve capacity for sanitary facilities at the City's golf course in order to accommodate the sewage from the two (2) existing restroom facilities at the golf course ("Fixture Units") in operation as of the date of this Agreement. The flow value of each of the two (2) Fixture Units is approximately 5,000 gallons per year. The In preparing fourth quarter bills for each fiscal year, the City shall deduct 5,000 gallons per fiscal year from the total flow of the District beginning in Fiscal Year 2020-2021.
- h. The two connections to the District's trunk line from the Palo Alto Airport which predate November 19, 2003 may also continue to be utilized by the City without compensation to the District. One connection is from the airport tower and wash pad, and the other connection is from Building 1903B.
- i. The flow from the four connections described in subsections (g) and (h) above shall not count toward the District's capacity allocation contained in Exhibit "H."
- j. The Parties agree that the value of the license and easement to the District offsets any incremental cost to the District from Fixture Units and the City Airport trunk line connections.
- k. Regarding future connections or flow increases to the District outfall from Palo Alto, fees and expenses for both use and connection to the District outfall shall be negotiated and approved in a future amendment to this agreement.

11. PRETREATMENT PROGRAM

- a. District will adopt the City's Sewer Use Ordinance (currently codified in Chapter 16.09 of Title 16 of the Palo Alto Municipal Code), as it may be amended from time to time. Alternatively, the District may adopt its own Pretreatment Ordinance which is at least as stringent as federal, state, and City requirements, and is rapidly updated when new requirements are issued by any of these entities.
- b. Whenever City makes revisions or additions to its Sewer Use Ordinance, City will forward to District a copy of such revisions or additions within ninety (90) days of enactment thereof. District will take all necessary steps to ensure that the ordinance as applicable in the District's jurisdiction is consistent with and reflects the most current version of the City's Sewer Use Ordinance in effect.
- c. District designates City as an agent of District for the purposes of implementation and enforcement of District's ordinances against industrial users located in District. City may, but shall not be obligated to, take any action under District's ordinances which could have been taken by District, including the enforcement of the ordinance in courts of law.
- d. City, on behalf of and as agent for District, will perform technical and administrative duties to implement and enforce District ordinances and regulations. City will: (1) Prepare

industrial waste discharge permits for District to issue to industrial users located within its boundary; (2) Conduct inspections, sampling, surveillance, and analysis; (3) Take all appropriate enforcement action, save litigation (except as specified in 11.i below), required to enforce District's ordinances, regulations, and industrial waste discharge permit provisions, as outlined in City's enforcement response plan and provided for in District's ordinances and regulations; (4) Notify industrial users of new requirements; (5) Prepare documentation necessary to support enforcement actions to be taken by District; (6) Process from industrial users all reports, including compliance reports, self-monitoring reports, base-line reports, records of violations and actions taken, and any other monitoring or reporting requirements imposed by federal, state, or local regulations. These records and other relevant information shall be maintained for at least three (3) years by City. City shall forward copies of any inspection reports, sampling results, and informal administrative enforcement actions which it generates to District upon request; and (7) Perform any other technical or administrative duties the Parties deem appropriate. In addition, City may, as an agent of District, take emergency action to stop or prevent any discharge which presents or may present an imminent danger to the health or welfare of humans, which reasonably appears to threaten the environment, or which threatens to cause interference, pass through, or sludge contamination.

e. Any authorized officer or employee of City may enter and inspect at any reasonable time any part of District's wastewater system; provided, however, at or before the time this right of inspection is exercised, City shall notify District by at least telephonic means of the date, time, place and nature of the intended inspection, and upon conclusion of the inspection shall upon request provide District with a written report of the inspection activities undertaken by City and the information obtained. The right of entry and inspection shall extend to public streets, easements, and property within which the system is located. Additionally, District hereby grants authorized officers or employees of City to enter onto private property, in compliance with the law, to inspect industrial users within the jurisdiction of District. Authorized officers or employees of City shall have the same legal authority afforded District staff. The right of inspection shall include on-site inspection of entire facilities including pretreatment and sewer facilities and includes observation, measurement, sampling, testing, and access to (with the right to copy) all pertinent compliance reports and documents required to be maintained by federal, state, or local regulations and applicable discharge permits.

f. District will be responsible for:

- i. Updating the industrial waste survey and providing such update annually to City;
- ii. Issuing industrial waste discharge permits;
- iii. Initiating litigation required to enforce District's ordinances, regulations, and industrial waste discharge permit provisions. The District and the City may each or both seek injunctive relief when an imminent danger exists, as described in 11.i below and

- iv. Controlling by written contract, with terms and conditions equivalent to the requirements of District's ordinances and regulations, any discharger outside District's territorial limits which is connected to District's wastewater system.
- g. District shall file with City certified copies of its ordinances and regulations and any amendments thereto, any discharge permits which District issues, including any contracts entered into by District for the purpose of controlling industrial waste.
- h. If City determines that District has failed or has refused to fulfill any Pretreatment Program obligations, City will allow District thirty (30) days to identify the cause of the violation(s) and remedy them. If the District is unable to remedy the violation within thirty (30) days, City shall develop, in consultation with District if possible, and issue a remedial plan containing a description of the nature of the Pretreatment Program deficiencies, and an enumeration of the steps to be taken by District, and a time schedule for attaining compliance with all Pretreatment Program obligations. Where District fails or declines to satisfy the conditions of the remedial plan on schedule, City may seek review of the remedial plan and enforcement thereof, via seeking injunctive relief or any other legally available remedy, in a court of competent jurisdiction. Where District fails to satisfy any such conditions on schedule, other than those imposed or required by formal administrative or judicial enforcement actions, City may conduct those tasks. District shall reimburse City for any and all costs associated with performing these tasks. In the event District has failed to satisfy the terms of any remedial plan, City may, upon thirty (30) days' written notice, refuse to accept industrial waste emanating from industrial users within District's jurisdiction and enforce such prohibition in any court of competent jurisdiction.
- i. Where a discharge to the wastewater system reasonably appears to present an imminent danger to the public health, safety, and welfare, or presents or may present, an imminent danger to the environment, or threatens to interfere with either Party's wastewater system, either Party may immediately initiate steps to identify the source of the discharge, and to halt or prevent said discharge. Either Party may seek injunctive relief against any industrial user or other person contributing to the emergency conditions and may pursue self-help remedies if available.
- j. District will prohibit the discharge of surface and storm water into its sanitary sewers if such discharge is or would be excessive under any federal, state, or local regulation, and shall otherwise comply with such regulations in permitting any such discharge therein.
- k. District shall defend, indemnify and hold harmless the City, its agents, officers and employees, of, from and for all damages, fines and costs incurred as a result of industrial waste discharge from District (including industrial dischargers connected to District's system) or incurred as a result of the failure of District to comply with Paragraph 11 (Pretreatment Program) of this Agreement. District shall reimburse City for fines or costs stemming from damages to City facilities or the System, disruption of treatment processes or operations, degradation of sludge quality, NPDES permit violations arising in the jurisdiction of District, and other air, water and sludge quality violations attributable to District, or its industrial dischargers, and any enforcement actions of regulatory agencies including the state

and regional water boards and federal and state environmental protection agencies. In the event that any suit based on such a claim, demand, suit, action, fine, penalty or liability is brought against either Party, each Party retains the right to participate in said suit.

- 1. If the authority of City to act as an agent for District under this Agreement is questioned by an industrial user, court of law, or otherwise, District will take whatever action is necessary to ensure the implementation and enforcement of District ordinances and regulations against its industrial users, including, but not limited to, implementing and enforcing District ordinances and regulations on its own behalf and/or amending this Agreement to clarify City authority. Any such actions shall be at no cost to City.
- m. The Parties will review and revise this Agreement to ensure compliance with the Federal Clean Water Act (33 U.S.C. 1251 et seq.) and rules and regulations (see 40 CFR Part 403) issued thereunder, as necessary.
- n. District shall reimburse City for administrative costs of permitting, implementing and enforcing the Pretreatment Program. District agrees that City may seek such reimbursement by directly charging facilities regulated under the Pretreatment Program within the jurisdiction of District for said costs and/or recovering said costs through permit or annual fees.
- 12. <u>INDEMNIFICATION</u>. Each of the Parties shall defend, indemnify and hold the other party harmless of and from all claims, liabilities, actions, causes of action, proceedings, damages, fines, penalties, costs, expenses, attorneys' fees or any other forms of pecuniary or non-pecuniary relief which result from:
 - a. That party's violation of laws and regulations governing the collection, transmission, treatment and disposal of wastewater or wastewater byproducts, including, without limitation, laws and regulations governing disruption of treatment processes or operations, degradation of sludge quality, and NPDES permit violations attributable to the conduct of that party or other persons, including industrial waste dischargers for whom that party exercises regulatory responsibility.
 - b. That party's failure to exercise reasonable care in the operation and maintenance of its wastewater facilities.

13. TERMINATION.

a. <u>Termination Rights.</u> Except as otherwise provided herein, this Agreement shall continue indefinitely; provided the District may withdraw herefrom if it decides to construct and operate a treatment plant of its own, join in the use of some plant, or execute another alternative; in which case the District shall give the City at least six months written notice in advance of its intention to withdraw. Upon the consummation of such withdrawal, this Agreement shall be deemed to have terminated, except as to obligations already incurred and not yet satisfied.

- b. <u>Disposition of Property and Funds Upon Termination</u>. Upon termination of this Agreement, all property of either Party then in the custody of the other or a third party shall be distributed pursuant to an agreement reached by the City and the District at that time.
- 14. <u>BREACH OF AGREEMENT</u>. In the case of a breach by either Party of any of its respective obligations to be performed hereunder, notice in writing of such breach may be given by the aggrieved one to the other, who shall have a reasonable time not exceeding sixty (60) days, in which to cure such breach.
- 15. <u>DISPUTE RESOLUTION</u>. The Parties acknowledge that there are a number of informal dispute resolution procedures (such as arbitration, mediation, informal conferences, etc.) which could be used to resolve any controversy or claim arising out of or relating to this Agreement, or the alleged breach thereof. The Parties agree in principle that one or more such mechanisms should be utilized prior to proceeding in a judicial forum. Should any such controversy or claim arise, any Party wishing to utilize an informal dispute resolution procedure may request in writing that such procedure should be utilized, stating in general terms the nature of the proposed procedure. The other Party shall then have a period of two (2) weeks in which to either accept or reject such request. If such request is denied, or if no answer to such request is given within such period, then the requesting Party shall be free to pursue any legal remedy which may be available to it. If such request is accepted, then the procedures outlined in such request shall first be followed prior to either Party resorting to a judicial procedure.
- 16. <u>NOTICES AND OTHER COMMUNICATIONS</u>. Every notice or other communication required or contemplated by this Agreement by either Party shall be delivered either by (a) personal delivery or (b) postage prepaid return receipt requested certified mail addressed to the Party for whom intended at the following address:
 - a. If to District, to:

General Manager East Palo Alto Sanitary District 901 Weeks Street East Palo Alto, CA 94303

Separate copies to:

President of Board of Directors Secretary of Board of Directors East Palo Alto Sanitary District 901 Weeks Street East Palo Alto, CA 94303

b. If to City, to:

City of Palo Alto City Manager's Office Post Office Box 10250 Palo Alto, CA 94301 Attn: Director of Public Works

Copy to:

Palo Alto Regional Water Quality Control Plant Attn: Manager, Water Quality Control Plant 2501 Embarcadero Way Palo Alto, CA 94303

or at such other address as the intended recipient previously shall have designated by written notice to the other party. Notice by certified mail shall be effective on the date it is officially recorded as delivered to the intended party by return receipt or the equivalent. Notice not given in writing shall be effective only if acknowledged in writing by a duly authorized representative of the party to whom it was given.

- 17. <u>CONSENT TO JURISDICTION</u>, <u>SERVICE</u>, <u>AND VENUE</u>. Should either party submit matters of dispute to a court for the purpose of enforcing obligations hereunder or otherwise in connection herewith, both parties hereby consent to the jurisdiction and venue of the state or federal courts in the County of San Mateo or the County of Santa Clara, California.
- 18. <u>NO WAIVER OF RIGHTS</u>. All waivers hereunder must be in writing, and failure at any time to require the other party's performance of any obligation under this Agreement shall not affect the right subsequently to require performance of that obligation. Any waiver of any breach of any provision of this Agreement shall not be construed as a waiver of any continuing or succeeding breach of such provision or a waiver or modification of the provision.
- 19. <u>COUNTERPARTS</u>. This Agreement may be executed in any number of counterparts, and each counterpart shall constitute an original instrument, but all such separate counterparts shall constitute only one and the same instrument.
- 20. WRITTEN AGREEMENT TO GOVERN. This Agreement sets forth the entire understanding and prospectively supersedes all prior and contemporaneous agreements between the parties relating to the subject matter contained herein and merges all prior and contemporaneous discussions between them, and neither party shall be bound by any definition, condition, representation, warranty, covenant, or provision other than as expressly stated in or contemplated by this Agreement or as subsequently shall be set forth in writing and executed by a duly authorized representative of the party to be bound. Except as expressly set forth in the Agreement, all rights, claims, and obligations of the parties shall be preserved.
- 21. <u>SEVERABILITY</u>. If any provision of this Agreement shall be held invalid under any applicable law, such invalidity shall not affect any other provision of this Agreement that can be given an effect without the invalid provision, and, to this end, the provisions hereof are severable. If any provision of this Agreement shall be held invalid because of its scope or

duration, the court making such determination shall have the power to limit the scope and/or duration of such provision and, in its limited form; such provision shall then be enforceable.

- 22. <u>SUCCESSORS</u>. This Agreement shall be binding upon and shall inure to the benefit of the successors of the parties.
- 23. <u>REVISION OF AGREEMENT</u>. This Agreement may, from time to time, be amended, revised, or supplemented by and with the consent of the parties hereto and subject to the approval and ratification of their respective governing bodies.

IN WITNESS WHEREOF, the Parties have by their duly authorized representatives executed this Agreement which restates and amends that certain Agreement (Palo Alto No. 237) dated March 16, 1989, as amended, between the City of Palo Alto and East Palo Alto Sanitary District as of the date first written above.

ATTEST:	CITY OF PALO ALTO
DocuSigned by:	DocuSigned by:
Beth Minor	Ву:
City Clerk	Mayor
APPROVED AS TO FORM:	
DocuSigned by:	
Aylin Bilir	
City Attorney or Designee	
APPROVED AS TO CONTENT:	
DocuSigned by:	
Ed Shikada	
City Manager or Designee	9
EAST PALO ALTO SANITARY DISTRICT	
EAST TALO ALTO SANTIART DISTRICT	2
ATTEST:	
	(KM)
Betsy Yañez, Secretary	Joan Sykes-Miessi Vice President
Delay Tanez, Secretary	Joan Sykes-Miessi, Vice President Reting President
	ibiaig menter
APPROVED AS TO FORM:	
MAR	
101	
Mala Subramanian, General Counsel	

IN WITNESS WHEREOF, the Parties have by their duly authorized representatives executed this Agreement which restates and amends that certain Agreement (Palo Alto No. 237) dated March 16, 1989, as amended, between the City of Palo Alto and East Palo Alto Sanitary District as of the date first written above.

ATTEST:	CITY OF PALO ALTO
Both Minor City Clerk	By: DocuSigned by: DocuSigned by: DD53585CASCH4E9
APPROVED AS TO FORM: Outling Biling Docusioned by: Outling Biling Docusioned by: City Attorney or Designee	Mayor
APPROVED AS TO CONTENT: Docusigned by: EA Shikada F2DCA19CCC8D4F9 City Manager or Designee	
EAST PALO ALTO SANITARY DISTRICT	
ATTEST:	
Betsy Yañez Secretary	Joan Sykes-Miessi, Vice President
APPROVED AS TO FORM: Mala Subramanian, General Counsel	

EXHIBIT "A"

LEGAL DESCRIPTION

EASEMENT "A"

All that real property situated in the City of East Palo Alto, County of San Mateo, State of California, described as follows:

Being a portion of that parcel as described in that certain Grant Deed recorded March 27, 1946 as Book 1244 Page 439 of Official Records of said county and also being a strip of land 20.00 feet in width, lying 10.00 feet on each side of the following described line:

commencing at an iron pipe monument at the intersection of the centerlines of Daisy Lane and Hibiscus Court, as shown on that map entitled "Tract No. 805 Palo Alto Gardens No.7" filed August 16, 1962 in Book 56 of Maps at Page 38 at said office of said recorder; thence along said centerline North 01°24′00" West 258.73 feet to an iron pipe monument, thence continuing along said centerline northwesterly North 01°24′00" West 34.43 feet to the southerly line of that parcel of East Palo Alto Sanitary District as described in that certain Grant Deed recorded December 18, 1984 as Instrument No. 85031440 of Official Records in said office of said recorder; thence along said southerly line North 83°45′00" East 266.28 feet to the southeasterly corner of said parcel of East Palo Alto Sanitary District, said point also being the northeasterly corner of the PG&E Right-of-Way (60 feet wide) as described in that certain Tax Deed recorded September 4, 2015 as Instrument No. 2015-095214 of Official Records in said office of said recorder; thence along the easterly line of said PG&E Right-of-Way for the following two course: South 06°08'45" East 214.02 feet and South 24°43'43" East 372.92 feet; thence leaving said easterly line North 87°05'56"East 127.45 feet to the TRUE POINT OF BEGINNING; thence North 87°05'56"East 56.00 feet to its point of termination, said point hereinafter referred to as POINT "A".

The sidelines of said strip shall be prolonged or shortened so as to begin at said easterly line of said PG&E Right-of-Way and shall terminate at the westerly line of Easement "B" described herein.

Containing 1,120 square feet (0.03 acres) more or less.

EASEMENT "B"

All that real property situated in the City of East Palo Alto, County of San Mateo, State of California, described as follows:

Being a portion of that parcel as described in that certain Grant Deed recorded March 27, 1946 as Book 1244 Page 439 of Official Records of said county, described as follows:

BEGINNING at said **POINT** "A" hereinbefore described; thence for the following courses and distances: North 00°00'00" East 60.00 feet, thence North 90°00'00" East 10.00 feet to a point hereinafter referred to as **POINT** "B"; thence North 90°00'00" East 34.00 feet; South 00°00'00" West 35.00 feet to a point hereinafter referred to as **POINT** "C"; thence South 00°00'00" West 35.00 feet; thence South 90°00'00" West 44.00 feet, thence North 00°00'00" East 10.00 feet to the **POINT OF BEGINNING**.

Containing 3,080 square feet (0.07 acres) more or less.

EASEMENT "C"

All that real property situated in the City of East Palo Alto, County of San Mateo, State of California, described as follows:

Being a portion of that parcel as described in that certain Grant Deed recorded March 27, 1946 as Book 1244 Page 439 of Official Records of said county and also being a strip of land 20.00 feet in width, lying 10.00 feet on each side of the following described line:

BEGINNING at said **POINT** "B" hereinbefore described; thence North 14°58'25" West 460.75 feet to its point of termination.

The sidelines of said strip shall be prolonged or shortened so as to begin at the northerly line of Easement "B" described herein.

Containing 9,215 square feet (0.21 acres) more or less.

EASEMENT "D"

All those real properties situated in the City of East Palo Alto, County of San Mateo and the City of Palo Alto, County of Santa Clara, State of California, described as follows:

Being a portion of that parcel in said City of East Palo Also as described in that certain Grant Deed recorded March 27, 1946 as Book 1244 Page 439 of Official Records of said County of San Mateo and a portion of that parcel in said City of Palo Alto as described in that certain Quitclaim Deed recorded January 23, 1974 as Instrument No. 4690974 of Official Records of said County of Santa Clara and also being a strip of land 65.00 feet in width, lying 32.50 feet on each side of the following described line:

BEGINNING at said **POINT** "C" hereinbefore described; thence South 81°53'09" East 524.27 feet to its point of termination, said point hereinafter referred to as **POINT** "D".

The sidelines of said strip shall be prolonged or shortened so as to begin at the easterly line of Easement "B" described herein and shall terminate at the southwesterly line of Easement "E" described herein.

Containing 34,075 square feet (0.78 acres) more or less.

EASEMENT "E"

All that real property situated in the City of Palo Alto, County of Santa Clara, State of California, described as follows:

Being a portion of that parcel as described in that certain Quitclaim Deed January 23, 1974 as Instrument No. 4690974 of Official Records of said county and also being a strip of land 20.00 feet in width, lying 10.00 feet on each side of the following described line:

BEGINNING at said **POINT** "**D**" hereinbefore described; thence the following courses and distances: North 21°40'53" East 160.73 feet, thence North 36°30'37" East 302.34 feet, thence North 50°27'24" East 365.63 feet, thence North 51°14'34" East 481.56 feet, thence North 76°57'29" East 327.01 feet, thence South 37°54'43" East 2,660.98 feet, thence South 05°42'51" West 1,490.68 feet to its point of termination.

The sidelines of said strip shall be prolonged or shortened so as to begin at the southeasterly line of Easement "D" described herein.

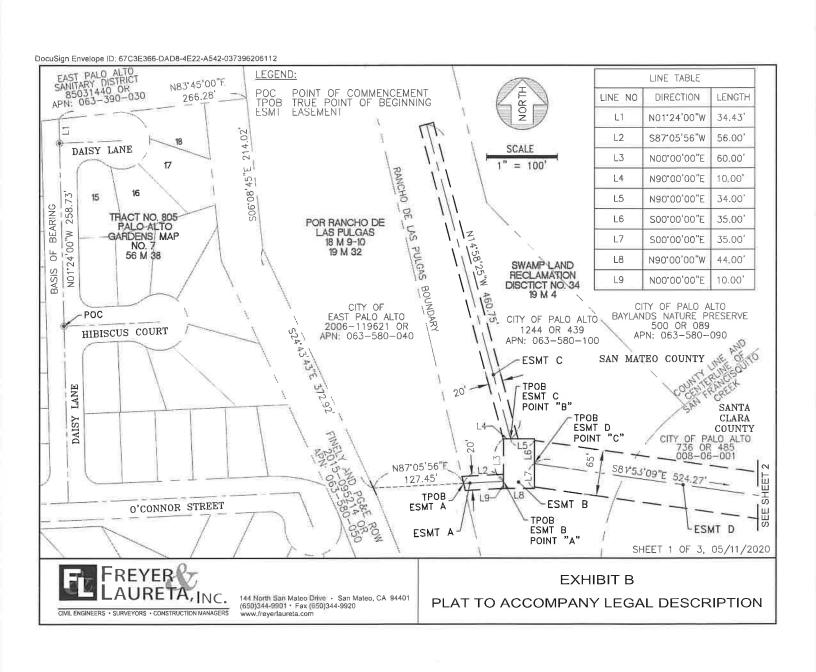
Containing 115,754 square feet (2.66 acres) more or less.

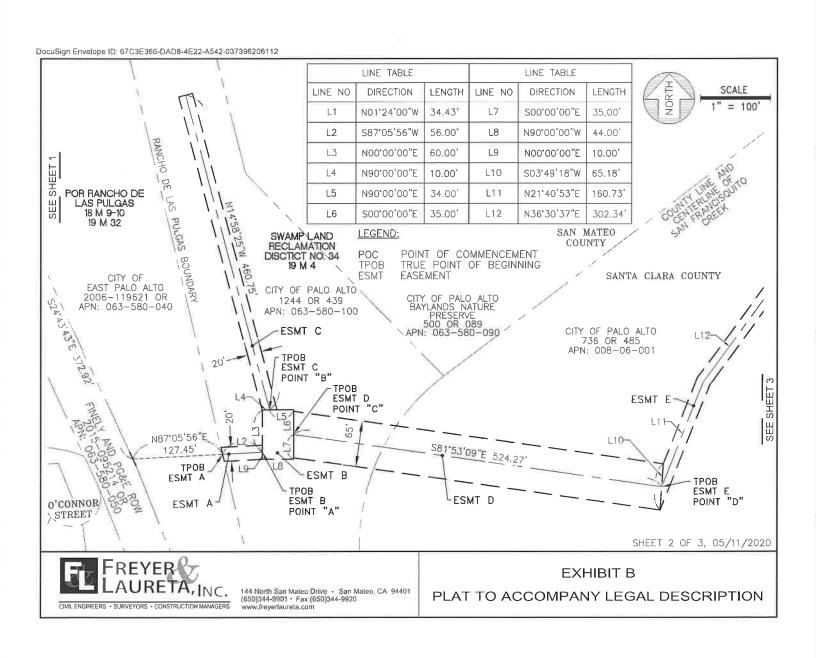
Exhibit 'B" is attached hereto and as such, made a part hereof.

This description of land is not a legal property description as defined in the Subdivision Map Act and may not be used as the basis for an offer for sale or for the sale of the lands described herein.



May 11, 2020





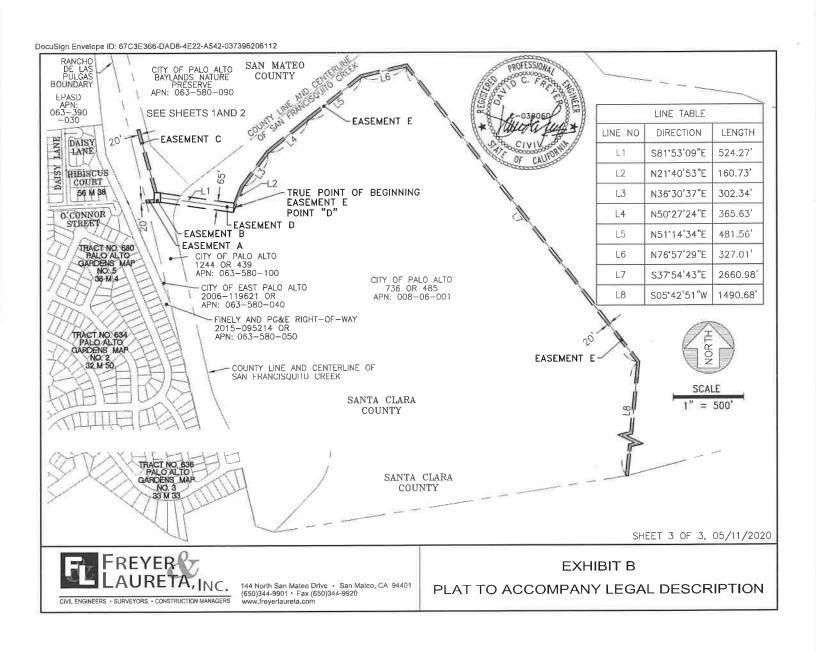


EXHIBIT C

ALLOCATION, BILLING, AND PAYMENT OF PALO ALTO REGIONAL WATER QUALITY CONTROL PLANT OPERATION AND MAINTENANCE EXPENSES

Operation and maintenance expenses shall be allocated to the below-listed expense categories in the proportions shown:

Expense Category	Proportion
Volume of sewage	34%
Chemical oxygen demand (COD)	22%
Suspended solids (SS)	22%
Ammonia (NH ₃)	22%

In subsequent years, the above percentage allocations may be altered based upon cost data derived in accordance with generally accepted accounting principles and upon agreement of all parties hereto. The volume of sewage received and the concentration of chemical oxygen demand, suspended solids, and ammonia contained therein shall be determined for each party in accordance with the criteria set forth in this Exhibit.

Treatment expense rates (per million gallons of wastewater volume and per thousand pounds of each of the other expense categories above) shall be established for each fiscal year. Each party shall pay its portion of the operation and maintenance expenses based on these rates (and the volume and quality of its wastewater).

EVALUATING EXPENSE CATEGORY ITEMS

Wastewater Volume

The wastewater volume for each party shall be measured by a flow meter or flow meters in its outfall or outfalls or such other method as agreed upon between parties. Sewage meters and their locations shall be as approved by the Manager of the Treatment Plant.

Sewage Quality

The characteristic values of COD, SS, and NH₃ shall be determined by sampling and analyzing wastewater from each party's outfall according to good laboratory and sampling practices. The best equipment and techniques reasonably available to the Regional Water Quality Control Plant personnel shall be utilized in determining these characteristic values.

All samples shall be analyzed at the laboratory of the Regional Water Quality Control Plant. If any party to the Agreement disputes the findings of the foregoing sampling programs, the disputing party may collect samples at the same monitoring points and submit them for analysis by a laboratory approved by the superintendent of Palo Alto Water Quality Control Plant at the disputing party's own expense.

DocuSign Envelope ID: 67C3E366-DAD8-4E22-A542-037396206112

C237 Exhibit D: City of Palo Alto 1999 Refunding of 1990 Utility Revenue Bonds

DEBT SERVICE SCHEDULE FOR WASTEWATER TREATMENT

For Palo Alto, East Palo Alto Sanitary District, Stanford, and Los Altos Hills

	25,00% PALO AL		11.90% EAST PALO ALT	о	·	4,10% STANFORD	0 20% LOS ALTOS HILLS	3
FISCAL YEAR		TOTAL DEBT		TOTAL DEBT		TOTAL DEBT	TOTAL DEBT	
ENDING	PRINCIPAL INTERES	T SERVICE	PRINCIPAL INTEREST	SERVICE	PRINCIPAL	INTEREST SERVICE	PRINCIPAL INTEREST SERVICE	TOTALS
G/30/00	\$ 25,691.25 \$ 47,891	.70 \$ 73,582.95	\$ 12,229.04 \$ 22,796.45	\$ 35,025.49	\$ 4,213.37	\$ 7,854.24 \$ 12,067.61	\$ 205.53 \$ 383.13 \$ 588.66	\$ 121,264.71
6/30/01	\$ 23,122.13 \$ 47,056	.74 \$ 70,178.87	7 \$ 11,006.13 \$ 22,399.01	\$ 33,405.14	\$ 3,792.03	\$ 7,717.30 \$ 11,509.33	\$ 184.98 \$ 376.45 \$ 561.43	\$ 115,654,77
6/30/02	\$ 23,978.50 \$ 46,189	.66 \$ 70,168.16	5 \$ 11,413.77 \$ 21,986.28	\$ 33,400.05	\$ 3,932.47	\$ 7,575.10 \$ 11,507.57	\$ 191.83 \$ 369.52 \$ 561.35	\$ 115,637.13
6/30/03	\$ 24,834.87 \$ 45,230	.52 \$ 70,065.39	\$ 11,821.40 \$ 21,529.73	\$ 33,351.13	\$ 4,072.92	\$ 7,417.80 \$ 11,490.72	\$ 198.68 \$ 361.84 \$ 560.52	\$ 115,467.76
6/30/04	\$ 25,691.24 \$ 44,237	.12 \$ 69,928.36	\$ 12,229.04 \$ 21,056.87	\$ 33,285.91	\$ 4,213.37	\$ 7,254.89 \$ 11,468.26	\$ 205.53 \$ 353.90 \$ 559.43	\$ 115,241.96
6/30/05	\$ 26,547.62 \$ 43,183	.78 \$ 69,731.40	\$ 12,636.67 \$ 20,555.48	\$ 33,192.15	\$ 4,353.81	\$ 7,082.14 \$ 11,435.95	\$ 212.38 \$ 345.47 \$ 557.85	\$ 114,917.35
6/30/06	\$ 28,260.37 \$ 42,068	.78 \$ 70,329.15	\$ 13,451.94 \$ 20,024.74	\$ 33,476.68	\$ 4,634.70	\$ 6,899.28 \$ 11,533.98	\$ 226.08 \$ 336.55 \$ 562.63	\$ 115,902.44
6/30/07	\$ 29,116.74 \$ 40,853	59 \$ 69,970.33	\$ \$ 13,859.57 \$ 19,446.31	\$ 33,305.88	\$ 4,775.15	\$ 6,699.99 \$ 11,475.14	\$ 232.93 \$ 326.83 \$ 559.76	
6/30/08	\$ 29,973.11 \$ 39,572	45 \$ 69,545.56	5 \$ 14,267.21 \$ 18,836.49	\$ 33,103.70	\$ 4,915.59	\$ 6,489.88 \$ 11,405.47	\$ 239.79 \$ 316.58 \$ 556.37	\$ 114,611,10
6/30/09	\$ 31,685.87 \$ 38,223	.66 \$ 69,909,53	3 \$ 15,082.48 \$ 18,194.46	\$ 33,276.94	\$ 5,196.48	\$ 6,268.68 \$ 11,465.16	\$ 253.49 \$ 305.79 \$ 559.28	
6/30/10	\$ 33,398.61 \$ 36,766.	.11 \$ 70,164.72	2 \$ 15,897.75 \$ 17,500.67	\$ 33,398.42	\$ 5,477.37	\$ 6,029.64 \$ 11,507.01	\$ 267.19 \$ 294.13 \$ 561.32	
6/30/11	\$ 35,111.37 \$ 35,196	37 \$ 70,307.74	\$ 16,713.01 \$ 16,753.47	\$ 33,466.48	\$ 5,758.27	\$ 5,772.21 \$ 11,530.48	\$ 280.89 \$ 281.57 \$ 562.46	
6/30/12	\$ 36,824.11 \$ 33,511	.03 \$ 70,335.14	\$ 17,528.28 \$ 15,951.25	\$ 33,479,53	\$ 6,039.16	\$ 5,495,81 \$ 11,534.97	\$ 294,59 \$ 268.09 \$ 562.68	
6/30/13	\$ 38,536.87 \$ 31,669	.82 \$ 70,206,69	\$ 18,343.55 \$ 15,074.83	\$ 33,418.38	\$ 6,320.05	\$ 5,193.85 \$ 11,513.90	\$ 308.30 \$ 253.36 \$ 561.66	
6/30/14	\$ 40,249.61 \$ 29,742	98 \$ 69,992.59	\$ 19,158.82 \$ 14,157.66	\$ 33,316.48	\$ 6,600.94	\$ 4,877.85 \$ 11,478.79	\$ 322.00 \$ 237.94 \$ 559.94	\$ 115,347.80
6/30/15	\$ 41,962.37 \$ 27,730	.50 \$ 69,692,86	\$ 19,974.09 \$ 13,199.72	\$ 33,173.81	\$ 6,881.83	\$ 4,547.80 \$ 11,429.63	\$ 335.70 \$ 221.84 \$ 557.54	\$ 114,853.85
6/30/16	\$ 44,531.49 \$ 25,632	.38 \$ 70,163.87	7 \$ 21,196.99 \$ 12,201.01	\$ 33,398.00	\$ 7,303.17	\$ 4,203.71 \$ 11,506.88	\$ 356.25 \$ 205.06 \$ 561.31	\$ 115,630.06
6/30/17	\$ 46,244.25 \$ 23,350	14 \$ 69,594.39	\$ 22,012.26 \$ 11,114.67	\$ 33,126,93	\$ 7,584.06	\$ 3,829.42 \$ 11,413.48	\$ 369.95 \$ 186.80 \$ 556.75	\$ 114,691.55
6/30/18	\$ 48,813.36 \$ 20,980.	.12 \$ 69,793.48	9,986.54	\$ 33,221.71	\$ 8,005.39	\$ 3,440.74 \$ 11,446.13	\$ 390.51 \$ 167.84 \$ 558.35	\$ 115,019.67
6/30/19	\$ 51,382.50 \$ 18,478	.43 \$ 69,860,93	3 \$ 24,458.07 \$ 8,795.74	\$ 33,253,81	\$ 8,426.73	\$ 3,030.46 \$ 11,457.19	\$ 411.06 \$ 147.83 \$ 558.89	\$ 115,130.82
6/30/20	\$ 53,951.62 \$ 15,780.	.85 \$ 69,732,47	7 \$ 25,680.97 \$ 7,511.68	\$ 33,192.65	\$ 8,848.07	\$ 2,588.06 \$ 11,436.13	\$ 431.61 \$ 126.25 \$ 557.86	\$ 114,919,11
6/30/21	\$ 56,520.75 \$ 12,948	.39 \$ 69,469.14	\$ 26,903.87 \$ 6,163.43	\$ 33,067,30	\$ 9,269.40	\$ 2,123.54 \$ 11,392,94	\$ 452.17 \$ 103.59 \$ 555.76	
6/30/22	\$ 59,946.24 \$ 9,981.	.05 \$ 69,927.29	\$ 28,534.42 \$ 4,750.98	\$ 33,285.40	\$ 9,831.19	\$ 1,636.89 \$ 11,468.08	\$ 479.57 \$ 79.85 \$ 559.42	\$ 115,240.19
6/30/23	\$ 63,371.75 \$ 6,833.	.87 \$ 70,205.62	2 \$ 30,164.95 \$ 3,252.92	\$ 33,417.87	\$ 10,392.97	\$ 1,120.76 \$ 11,513.73	\$ 506.97 \$ 54.67 \$ 561.64	\$ 115,698.86
6/30/24	\$ 66,797.40 \$ 3,507	.26 \$ 70,304.66	\$ 31,795.55 \$ 1,669.26	\$ 33,464.81	\$ 10,954.51	\$ 575.12 \$ 11,529.63	\$ 534.02 \$ 28.05 \$ 562.07	\$ 115,861.17
TOTALS	\$ 986,544.00 \$ 766,617	.30 \$ 1,753,161.30	\$ 469,595.00 \$ 364,909.65	\$ 834,504.65	\$ 161,793.00	\$ 125,725.16 \$ 287,518.16	\$ 7,892.00 \$ 6,132.93 \$ 14,024.93	\$ 2,889,209.04

C237 Exhibit E - City of Palo Alto 1999 Bond - New Money for Incinerator Rehabilitation Utility Revenue Bonds

DEBT SERVICE SCHEDULE FOR WASTEWATER TREATMENT

For Palo Alto, East Palo Alto Sanitary District, Stanford, and Los Altos Hills

							7.64%							1.58% LOS ALTOS HILLS										
ΓISCAL	-			PALO ALTO			EAST PALO ALTO			-	_	- 3	MINFORD	_		LUS ALTOS HILLS								
YEAR					Т	OTAL DEBT					Т	OTAL DEBT					Т	OTAL DEBT					ТС	TAL DEBT
ENDING		PRINCIPAL		INTEREST		SERVICE		PRINCIPAL		NTEREST		SERVICE		PRINCIPAL		INTEREST		SERVICE	Р	RINCIPAL	п	NTEREST		SERVICE
6/30/00	\$	74,412.00	\$	138,972.52	\$	213,384.52	\$	14,898.00	\$	27,823.63	\$	42,721.63	\$	10,257.00	\$	19,156.07	\$	29,413.07	\$	3,081.00	\$	5,754.10	\$	8,835.10
6/30/01	\$	64,872.00	\$	136,554.13	\$	201,426.13	\$	12,988.00	\$	27,339.45	\$	40,327.45	\$	8,942.00	\$	18,822.71	\$	27,764.71	\$	2,686.00	\$	5,653.97	\$	8,339.97
6/30/02	\$	68,688.00	\$	134,121.43	\$	202,809.43	\$	13,752,00	\$	26,852,40	\$	40,604.40	\$	9,468.00	\$	18,487.39	\$	27,955.39	\$	2,844.00	\$	5,553.25	\$	8,397.25
6/30/03	\$	70,596.00	\$	131,373.91	\$	201,969.91	\$	14,134.00	\$	26,302.32	\$	40,436.32	\$	9,731,00	\$	18,108.67	5	27,839,67	\$	2,923.00	\$	5,439.49	5	8,362,49
6/30/04	\$	74,412.00	\$	128,550.07	\$	202,962.07	\$	14,898,00	\$	25,736.96	\$	40,634.96	\$	10,257.00	\$	17,719.43	\$	27,976.43	\$	3,081.00	\$	5,322.57	\$	8,403.57
6/30/05	\$	80,136.00	\$	125,499.18	\$	205,635.18	\$	16,044.00	\$	25,126.15	\$	41,170.15	\$	11,046.00	\$	17,298.89	\$	28,344.89	\$	3,318.00	\$	5,196.24	\$	8,514.24
6/30/06	\$	80,136.00	\$	122,133.47	\$	202,269.47	\$	16,044.00	\$	24,452.30	\$	40,496.30	\$	11,046.00	\$	16,834.96	\$	27,880.96	\$	3,318.00	\$	5,056.89	\$	8,374,89
6/30/07	\$	85,860.00	\$	118,687.62	\$	204,547.62	\$	17,190.00	\$	23,762.41	\$	40,952.41	\$	11,835.00	\$	16,359.98	\$	28,194.98	\$	3,555.00	\$	4,914.21	\$	8,469.21
6/30/08	\$	89,676.00	\$	114,909.78	\$	204,585.78	\$	17,954.00	\$	23,006.05	\$	40,960.05	\$	12,361.00	\$	15,839.24	\$	28,200.24	\$	3,713.00	\$	4,757.79	\$	8,470.79
6/30/09	\$	91,584.00	\$	110,874.36	\$	202,458.36	\$	18,336.00	S	22,198.12	\$	40,534.12	\$	12,624.00	\$	15,283.00	\$	27,907.00	\$	3,792.00	\$	4,590.71	\$	8,382.71
6/30/10	\$	95,400.00	\$	106,661.50	\$	202,061.50	\$	19,100.00	\$	21,354.66	\$	40,454.66	\$	13,150.00	S	14,702.29	5	27,852.29	\$	3,950.00	\$	4,416.28	\$	8,366.28
6/30/11	\$	99,216.00	\$	102,177.70	\$	201,393.70	\$	19,864 00	\$	20,456.96	\$	40,320.96	\$	13,676.00	\$	14,084.24	\$	27,760.24	\$	4,108.00	\$	4,230 63	5	8,338.63
6/30/12	\$	104,940,00	\$	97,415.33	\$	202,355.33	\$	21,010.00	\$	19,503.49	\$	40,513.49	\$	14,465.00	\$	13,427.79	\$	27,892.79	\$	4,345.00	\$	4,033.44	\$	8,378,44
6/30/13	\$	112,572.00	\$	92,168.33	\$	204,740.33	\$	22,538.00	\$	18,452.99	\$	40,990,99	\$	15,517.00	\$	12,704,54	\$	28,221.54	\$	4,661.00	\$	3,816,19	\$	8,477.19
6/30/14	\$	116,388,00	\$	86,539.73	\$	202,927.73	\$	23,302.00	\$	17,326.09	\$	40,628.09	\$	16,043.00	\$	11,928.69	\$	27,971.69	\$	4,819.00	\$	3,583.14	\$	8,402,14
6/30/15	\$	124,020.00	\$	80,720.33	\$	204,740.33	\$	24,830.00	0.00	16,160.99	\$	40,990.99	\$	17,095.00	\$	11,126.54	\$	28,221.54	\$	5,135.00	\$	3,342.19	\$	8,477.19
6/30/16	\$	127,836.00	\$	74,519.33	\$	202,355.33	\$	25,594. 00	\$	14,919.49	\$	40,513,49	\$	17,621.00	\$	10,271.79	S	27,892.79	\$	5,293.00	\$	3,085.44	\$	8,378.44
6/30/1/	\$	135,468.00	\$	67,967.73	\$	203,435.73	\$	27,122.00	\$	13,607.80	\$	40,729,80	\$	18,673.00	\$	9,368.72	\$	28,041.72	\$	5,609.00	S	2,814.18	\$	8,423.18
6/30/18	\$	143,100.00	\$	61,025.00	\$	204,125.00	\$	28,650.00	\$	12,217.79	\$	40,867.79		19,725.00	\$	8,411.73	\$	28,136.73	\$	5,925.00	\$	2,526.72	\$	8,451.72
6/30/19	\$	150,732.00	\$	53,691.12	\$	204,423.12	\$		\$	10,749.48	\$	40,927.48	\$	20,777-00	\$	7,400.82	\$	28,177.82	\$	6,241.00	\$	2,223.06	\$	8,464.06
6/30/20	\$	156,456.00	\$	45,777.69	\$	202,233.69	\$	31,324.00	\$	9,165.14	\$	40,489.14	\$	21,566.00	\$	6,310.03	5	27,876.03	\$	6,478.00	S	1,895.41	\$	8,373.41
6/30/21	\$	165,996.00	\$	37,563.75	\$	203,559.75	\$	33,234.00	\$	7,520.63	\$	40,754.63	\$	22,881.00	\$	5,177.81	S	28,058.81	\$	6,873.00	\$	1,555.31	\$	8,428.31
6/30/22	\$	173,628.00	\$	28,848.96	\$	202,476.96	\$	34,762.00	\$	5,775.84	\$	40,537.84	\$	23,933.00	\$	3,976.56	\$	27,909.56	\$	7,189.00	\$	1,194.48	\$	8,383.48
6/30/23	\$	183,168.00	\$	19,733.49	\$	202,901.49	\$	36,672.00	\$	3,950.84	\$	40,622.84	\$	25,248.00	\$	2,720.08	5	27,968.08	\$	7,584.00	5	817.06	\$	8,401.06
6/30/24	\$	192,708.00	\$	10,117.17	\$	202,825.17	\$	38,582.00	\$	2,025.56	\$	40,607.56	\$	26,563.00	\$	1,394.56	\$	27,957.56	\$	7,979.00	\$	418.90	\$	8,397.90
TOTALS	\$ 2	2,862,000.00	\$:	2,226,603.63	\$!	5,088,603.63	\$	573,000.00	\$	445,787.54	\$:	1,018,787.54	\$	394,500.00	\$	306,916.53	\$	701,416.53	\$ 1	18,500.00	\$	92,191.65	\$ 2	10,691.65

DocuSign Envelope ID: 67C3E366-DAD8-4E22-A542-037396206112 Loan C-06-5044-110, Contract C-09-814-555-0 SWRCB SRF Loan (federally funded) Loan Payment Schedule

		Due t	o State of Califo	ornia	Due From	Mountain View	37.89%	Due Fr	om EPASD 7	.64%	Due Fr	9.47%	
Pmt#	Date	Principal	Interest	Repayment	Prin	Int	TOTAL	Prin	Int	TOTAL	Prin	Int	TOTAL
1	11/30/2011	\$346,228 14	\$209,498,11	\$555,726.25	\$131,185.84	\$79,378.83	\$210,564.68		\$16,005.66		\$32,787.80	\$19,839,47	\$52,627,28
2	11/30/2012	\$341,240,88	\$214,485_37	\$555,726,25	\$129,296,17	\$81,268,51	\$210,564.68		\$16,386,68		\$32,315,51	\$20,311,76	\$52,627,28
3	11/30/2013	\$350,113,15	\$205,613,10	\$555,726,25	\$132,657.87	\$77,906.80	\$210,564.68		\$15,708.84		\$33,155,72	\$19,471,56	\$52,627,28
4	11/30/2014	\$359,216,09	\$196,510,16	\$555,726.25	\$136,106,98	\$74,457_70	\$210,564.68		\$15,013,38		\$34,017,76	\$18,609.51	\$52,627.28
5	11/30/2015	\$368,555.71	\$187,170.54	\$555,726.25	\$139,645,76	\$70,918.92	\$210,564.68		\$14,299.83		\$34,902.23	\$17,725.05	\$52,627,28
6	11/30/2016	\$378,138,16	\$177,588.09	\$555,726,25	\$143,276.55	\$67,288.13	\$210,564.68		\$13,567.73		\$35,809,68	\$16,817.59	\$52,627.28
7	11/30/2017	\$387,969.75	\$167,756.50	\$555,726,25	\$147,001.74	\$63,562,94	\$210,564.68		\$12,816.60		\$36,740,74	\$15,886.54	\$52,627,28
	11/30/2018	\$398,056,96	\$157,669,29	\$555,726,25	\$150,823.78	\$59,740,89	\$210,564,68		\$12,045.93		\$37,695,99	\$14,931,28	\$52,627,28
9	11/30/2019	\$408,406,44	\$147,319.81	\$555,726,25	\$154,745,20	\$55,819,48	\$210,564,68		\$11,255,23		\$38,676.09	\$13,951,19	\$52,627,28
10	11/30/2020	\$419,025,01	\$136,701.24	\$555,726.25	\$158,768.58	\$51,796.10	\$210,564,68		\$10,443.97		\$39,681,67	\$12,945,61	\$52,627.28
11	11/30/2021	\$429,919,66	\$125,806.59	\$555,726,25	\$162,896.56	\$47,668,12	\$210,564,68	\$32,845,86		\$42,457 49	\$40,713,39	\$11,913.88	\$52,627,28
12	11/30/2022	\$441,097_57	\$114,628.68	\$555,726,25	\$167,131,87	\$43,432,81	\$210,584,68	\$33,699,85		\$42,457.49	\$41,771,94	\$10,855,34	\$52,627,28
13	11/30/2023	\$452,566,11	\$103,160_14	\$555,726,25	\$171,477.30	\$39,087.38	\$210,564.68	\$34,576,05		\$42,457,49	\$42,858,01	\$9,769.27	\$52,627,28
14	11/30/2024	\$464,332.83	\$91,393,42	\$555,726.25	\$175,935.71	\$34,628,97	\$210,564.68	\$35,475,03		\$42,457,49	\$43,972,32	\$8,654,96	\$52,627,28
15	11/30/2025	\$476,405,48	\$79,320.77	\$555,726,25	\$180,510.04	\$30,054.64	\$210,564.68	\$36,397.38		\$42,457,49	\$45,115,60	\$7,511,68	\$52,627,28
16	11/30/2026	\$488,792.02	\$66,934.23	\$555,726,25	\$185,203,30	\$25,361.38	\$210,564.68	\$37,343.71		\$42,457.49	\$46,288.60	\$6,338.67	\$52,627.28
17	11/30/2027	\$501,500,62	\$54,225,63	\$555,726,25	\$190,018.58	\$20,546,09	\$210,564.68	\$38,314.65	\$4,142.84	\$42,457.49	\$47,492.11	\$5,135.17	\$52,627,28
18	11/30/2028	\$514,539.63	\$41,186.62	\$555,726.25	\$194,959.07	\$15,605.61	\$210,564.68	\$39,310.83	\$3,146.66	\$42,457.49	\$48,726.90	\$3,900.37	\$52,627.28
19	11/30/2029	\$527,917.66	\$27,808.59	\$555,726.25	\$200,028.00	\$10,536.67	\$210,564.68	\$40,332.91	\$2,124.58	\$42,457.49	\$49,993.80	\$2,633.47	\$52,627.28
20	11/30/2030	\$541,643,40	\$14,082.73	\$555,726,13	\$205,228.68	\$5,335,95	\$210,564,63	\$41,381.56	\$1,075.92	\$42,457,48	\$51,293.63	\$1,333.63	\$52,627.26
[94],	alle)	\$8,595,665	\$2,518,860	\$11,114,525	\$3,256,898	\$954,396	\$4,211,293	\$656,709	\$192,441	\$849,150	\$814,010	\$238,536	\$1,052,546
ii a		Due t	o State of Califo	rnia	Due Fr	om Stanford 5.2	6%	Due From	Los Altos Hi	ils 1.58%	Due Fro	38.16%	
Pmt#	Date	Principal	Interest	Repayment	Prin	Int	TOTAL	Prin	Int	TOTAL	Prin	Int	TOTAL
1	11/30/2011	\$346,228 14	\$209,498.11	\$555,726.25	\$18,211,60	\$11,019,60	\$29,231,20	\$5,470.40	\$3,310.07	\$8,780.47	\$132,120,66	\$79,944,48	\$212,065 14
2	11/30/2012	\$341,240.88	\$214,485.37	\$555,726.25	\$17,949.27	\$11,281,93	\$29,231.20	\$5,391,61	\$3,388.87	\$8,780,47	\$130,217,52	\$81,847,62	\$212,065.14
3	11/30/2013	\$350,113,15	\$205,613,10	\$555,726.25	\$18,415,95	\$10,815,25	\$29,231,20	\$5,531.79	\$3,248,69	\$8,780,47	\$133,603.18	\$78,461,96	
4	11/30/2014	\$359,216.09	\$196,510.16	\$555,726.25	\$18,894.77	\$10,336.43	\$29,231.20	\$5,675.61	\$3,104.86	\$8,780.47	\$137,076.86	\$74,988.28	\$212,065.14
5	11/30/2015	\$368,555,71	\$187,170.54	\$555,726,25	\$19,386.03	\$9,845,17	\$29,231,20	\$5,823.18	\$2,957.29	\$8,780.47	\$140,640.86		
6	11/30/2016	\$378,138,16	\$177,588.09	\$555,726.25	\$19,890.07	\$9,341,13	\$29,231,20	\$5,974,58	\$2,805.89	\$8,780,47	\$144,297,52		\$212,065,14
7	11/30/2017	\$387,969.75	\$167,756,50	\$555,726,25	\$20,407,21	\$8,823,99	\$29,231.20	\$6,129,92	\$2,650,55	\$8,780.47	\$148,049,26	\$64,015,88	
8	11/30/2018	\$398,056,96	\$157,669.29	\$555,726.25	\$20,937.80	\$8,293,40	\$29,231.20	\$6,289.30	\$2,491,17	\$8,780.47	\$151,898.54	\$60,166.60	
9	11/30/2019	\$408,406.44	\$147,319.81	\$555,726.25	\$21,482.18	\$7,749,02	\$29,231,20	\$6,452,82	\$2,327.65	\$8,780,47	\$155,847.90	\$56,217,24	\$212,065.14
10	11/30/2020	\$419,025.01	\$136,701.24	\$555,726.25	\$22,040.72	\$7,190,49	\$29,231.20	\$6,620.60	\$2,159.88	\$8,780.47	\$159,899.94	\$52,165.19	\$212,065.14
11	11/30/2021	\$429,919.66	\$125,806,59	\$555,726.25	\$22,613.77	\$6,617.43	\$29,231,20	\$6,792,73	\$1,987.74	\$8,780.47	\$164,057.34		
12	11/30/2022	\$441,097.57	\$114,628.68	\$555,726.25	\$23,201.73	\$6,029,47	\$29,231,20	\$6,969,34	\$1,811,13	\$8,780_47	\$168,322.83	\$43,742.30	
13	11/30/2023	\$452,566-11	\$103,160,14	\$555,726,25	\$23,804.98	\$5,426,22	\$29,231,20	\$7,150.54	\$1,629,93	\$8,780,47	\$172,699.23	\$39,365,91	\$212,065.14
14													\$212,065.14
15	11/30/2024	\$464,332,83	\$91,393.42	\$555,726.25	\$24,423.91	\$4,807.29	\$29,231.20	\$7,336,46	\$1,444.02	\$8,780,47	\$177,189,41	\$34,875,73	
	11/30/2025	\$464,332.83 \$476,405.48	\$91,393.42 \$79,320.77	\$555,726.25 \$555,726.25	\$25,058.93	\$4,172.27	\$29,231.20	\$7,527.21	\$1,253.27	\$8,780_47	\$181,796.33	\$30,268.81	\$212,065.14
16	11/30/2025 11/30/2026	\$464,332,83 \$476,405,48 \$488,792,02	\$91,393,42 \$79,320,77 \$66,934,23	\$555,726.25 \$555,726.25 \$555,726.25	\$25,058.93 \$25,710.46	\$4,172.27 \$3,520.74	\$29,231.20 \$29,231.20	\$7,527.21 \$7,722.91	\$1,253.27 \$1,057.56	\$8,780_47 \$8,780_47	\$181,796.33 \$186,523.03	\$30,268.81 \$25,542.10	\$212,065.14 \$212,065.14
16 17	11/30/2025 11/30/2026 11/30/2027	\$464,332,83 \$476,405,48 \$488,792,02 \$501,500,62	\$91,393,42 \$79,320,77 \$66,934,23 \$54,225,63	\$555,726.25 \$555,726.25 \$555,726.25 \$555,726.25	\$25,058.93 \$25,710.46 \$26,378.93	\$4,172.27 \$3,520.74 \$2,852.27	\$29,231.20 \$29,231.20 \$29,231.20	\$7,527.21 \$7,722.91 \$7,923.71	\$1,253.27 \$1,057.56 \$856.76	\$8,780.47 \$8,780.47 \$8,780.47	\$181,796.33 \$186,523.03 \$191,372.64	\$30,268.81 \$25,542.10 \$20,692.50	\$212,065.14 \$212,065.14 \$212,065.14
16 17 18	11/30/2025 11/30/2026 11/30/2027 11/30/2028	\$464,332,83 \$476,405,48 \$488,792,02 \$501,500,62 \$514,539,63	\$91,393,42 \$79,320,77 \$66,934,23 \$54,225,63 \$41,186,62	\$555,726.25 \$555,726.25 \$555,726.25 \$555,726.25 \$555,726.25	\$25,058.93 \$25,710.46 \$26,378.93 \$27,064.78	\$4,172.27 \$3,520.74 \$2,852.27 \$2,166.42	\$29,231.20 \$29,231.20 \$29,231.20 \$29,231.20	\$7,527.21 \$7,722.91 \$7,923.71 \$8,129.73	\$1,253.27 \$1,057.56 \$856.76 \$650.75	\$8,780-47 \$8,780-47 \$8,780-47 \$8,780-47	\$181,796.33 \$186,523.03 \$191,372.64 \$196,348.32	\$30,268.81 \$25,542.10 \$20,692.50 \$15,716.81	\$212,065.14 \$212,065.14 \$212,065.14 \$212,065.14
16 17 18 19	11/30/2025 11/30/2026 11/30/2027 11/30/2028 11/30/2029	\$464,332,83 \$476,405,48 \$488,792,02 \$501,500,62 \$514,539,63 \$527,917,66	\$91,393,42 \$79,320,77 \$66,934,23 \$54,225,63 \$41,186,62 \$27,808,59	\$555,726.25 \$555,726.25 \$555,726.25 \$555,726.25 \$555,726.25 \$555,726.25 \$555,726.25	\$25,058.93 \$25,710.46 \$26,378.93 \$27,064.78 \$27,768.47	\$4,172.27 \$3,520.74 \$2,852.27 \$2,166.42 \$1,462.73	\$29,231.20 \$29,231.20 \$29,231.20 \$29,231.20 \$29,231.20	\$7,527.21 \$7,722.91 \$7,923.71 \$8,129.73 \$8,341.10	\$1,253.27 \$1,057.56 \$856.76 \$650.75 \$439.38	\$8,780_47 \$8,780_47 \$8,780_47 \$8,780_47 \$8,780_47	\$181,796.33 \$186,523.03 \$191,372.64 \$196,348.32 \$201,453.38	\$30,268.81 \$25,542.10 \$20,692.50 \$15,716.81 \$10,611.76	\$212,065.14 \$212,065.14 \$212,065.14 \$212,065.14 \$212,065.14
16 17 18 19	11/30/2025 11/30/2026 11/30/2027 11/30/2028	\$464,332,83 \$476,405,48 \$488,792,02 \$501,500,62 \$514,539,63	\$91,393,42 \$79,320,77 \$66,934,23 \$54,225,63 \$41,186,62	\$555,726.25 \$555,726.25 \$555,726.25 \$555,726.25 \$555,726.25	\$25,058.93 \$25,710.46 \$26,378.93 \$27,064.78	\$4,172.27 \$3,520.74 \$2,852.27 \$2,166.42	\$29,231.20 \$29,231.20 \$29,231.20 \$29,231.20	\$7,527.21 \$7,722.91 \$7,923.71 \$8,129.73	\$1,253.27 \$1,057.56 \$856.76 \$650.75	\$8,780-47 \$8,780-47 \$8,780-47 \$8,780-47	\$181,796.33 \$186,523.03 \$191,372.64 \$196,348.32 \$201,453.38 \$206.691.12	\$30,268.81 \$25,542.10 \$20,692.50 \$15,716.81	\$212,065.14 \$212,065.14 \$212,065.14 \$212,065.14

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-037396206112 C237 Exhibt G: Loan Payment Schedule
Sludge Dewatering and Loadout Facility Project (Project No.: C-06-8190-110; Agreement No.: D1601034-550-0)
SWRCB SRF Loan (Federally Funded), Principal is Paid Over 30 Years with 1.800% Interest Rate

Payment #		Due to	o State of Califo	rnia	Due From	Mountain View	37.89%	Due F	rom EPASD 7.		Due F	rom Los Altos	
	Date	Principal	Interest	Repayment	Principal	Interest	TOTAL	Principal	Interest	TOTAL	Principal	Interest	TOTAL
11	5/31/2020	\$696,854.46	\$395,007.24	\$1,091,861.70	\$264,038.15	\$149,668,24	\$413,706,40	\$53,239 68	\$30,178,55	\$83,418,23	\$65,992.12	\$37,407.19	\$103,399.30
2	5/31/2021	\$650,851,74	\$441,009.96	\$1,091,861,70	\$246,607,72	\$167,098,67	\$413,706,40	\$49,725.07	\$33,693,16	\$83,418,23	\$61,635,66	\$41,763,64	\$103,399,30
3	5/31/2022	\$662,567,07	\$429,294,63	\$1,091,861,70	\$251,046,66	\$162,659,74	\$413,706.40	\$50,620.12	\$32,798_11	\$83,418,23	\$62,745_10	\$40,654,20	\$103,399,30
4	5/31/2023	5674,493,28	\$417,368.42	\$1,091,861,70	\$255,565,50	\$158,140,89	5413,706.40	\$51,531,29	\$31,886,95	\$83,418,23	\$63,874,51	\$39,524,79	\$103,399,30
5	5/31/2024	5686,634,16	\$405,227.54	\$1,091,861,70	\$260,165,68	\$153,540,71	\$413,706,40	\$52,458.85	\$30,959,38	\$83,418,23	\$65,024_25	\$38,375,05	\$103,399.30
6	5/31/2025	\$698,993,57	\$392,868.13	\$1,091,861,70	\$264,848,66	\$148,857,73	\$413,706,40	\$53,403.11	\$30,015.13	583,418,23	566,194,69	\$37,204,61	\$103,399,30
7	5/31/2026	\$711,575,46	\$380,286,24	\$1,091,861,70	\$269,615,94	\$144,090,46	\$413,706.40	\$54,364,37	\$29,053,87	\$83,418,23	\$67,386,20	536,013,11	\$103,399,30
8	5/31/2027	\$724,383,82	\$367,477,88	\$1,091,861,70	\$274,469.03	\$139,237.37	\$413,706.40	\$55,342.92	\$28,075,31	\$83,418,23	\$68,599.15	\$34,800 16	\$103,399,30
9	5/31/2028	\$737,422,72	\$354,438.98	\$1,091,861,70	\$279,409,47	\$134,296,93	\$413,706,40	\$56,339.10	\$27,079,14	\$83,418,23	\$69,833,93	\$33,565,37	\$103,399,30
10	5/31/2029	\$750,696,33	\$341,165.37	\$1,091,861,70	\$284,438.84	\$129,267.56	\$413,706,40	\$57,353,20	\$26,065,03	\$83,418,23	\$71,090_94	532,308.36	\$103,399.30
11	5/31/2030	\$764,208,87	\$327,652.83	\$1,091,861,70	\$289,558.74	\$124,147,66	\$413,706,40	\$58,385,56	\$25,032,68	\$83,418,23	\$72,370,58	\$31,028,72	\$103,399,30
12	5/31/2031	\$777,964,63	\$313,897.07	\$1,091,861,70	\$294,770.80	\$118,935,60	\$413,706,40	\$59,436,50	\$23,981.74	\$83,418,23	\$73,673.25	\$29,726,05	\$103,399,30
13	5/31/2032	\$791,967,99	\$299,893.71	\$1,091,861.70	\$300,076.67	\$113,629.73	\$413,706,40	\$60,506,35	\$22,911,88	\$83,418,23	\$74,999.37	\$28,399,93	\$103,399,30
14	5/31/2033	\$806,223,41	\$285,638,29	\$1,091,861,70	\$305,478,05	\$108,228,35	\$413,706,40	\$61,595,47	\$21,822,77	\$83,418,23	\$76,349,36	\$27,049,95	\$103,399,30
15	5/31/2034	\$820,735,44	\$271,126.26	\$1,091,861,70	\$310,976.66	\$102,729,74	\$413,706,40	\$62,704.19	\$20,714.05	\$83,418,23	577 723 65	\$25,675.66	\$103,399.30
16	5/31/2035	\$835,508.67	\$256,353.03	\$1,091,861,70	\$316,574,24	\$97,132,16	\$413,706,40	\$63,832,86	\$19,585,37	583,418,23	579,122 67	\$24,276,63	\$103,399.30
17	5/31/2036	\$850,547.83	\$241,313.87	\$1,091,861.70	\$322,272.57	\$91,433.83	\$413,706.40	\$64,981,85	\$18,436,38	\$83,418.23	\$80,546,88	\$22,852,42	\$103,399_30
18	5/31/2037	\$865,857.69	\$226,004.01	\$1,091,861.70	\$328,073.48	\$85,632,92	\$413,706.40	\$66,151,53	\$17,266.71	\$83,418,23	581,996.72	\$21,402.58	\$103,399.30
19	5/31/2038	\$881,443,13	\$210,418,57	\$1,091,861,70	\$333,978,80	\$79,727,60	\$413,706.40	\$67,342,26	\$16,075.98	\$83,418,23	\$83,472,66	\$19,926.64	\$103,399,30
20	5/31/2039	\$897,309,11	\$194,552.59	\$1,091,861,70	\$339,990,42	\$73,715,98	\$413,706.40	\$68,554.42	\$14,863.82	\$83,418.23	\$84,975_17	\$18,424,13	\$103,399.30
21	5/31/2040	\$913,460,67	\$178,401.03	\$1,091,861.70	\$346,110,25	\$67,596.15	\$413,706.40	\$69,788,40	\$13,629,84	583,418,23	\$86,504,73	\$16,894,58	\$103,399.30
22	5/31/2041	\$929,902,96	\$161,958.74	\$1,091,861,70	\$352,340,23	\$61,366,17	\$413,706.40	571,044.59	512,373,65	\$83,418,23	\$88,061_81	\$15,337,49	\$103,399.30
23	5/31/2042	5946,641,22	5145,220.48	\$1,091,861.70	\$358,682.36	\$55,024.04	\$413,706.40	\$72,323,39	\$11,094.84	583,418,23	589,646,92	\$13,752.38	\$103,399,30
24	5/31/2043	\$963,680,76	\$128,180.94	\$1,091,861.70	\$365,138,64	\$48,567.76	\$413,706.40	\$73,625,21	\$9,793.02	583,418.23	\$91,260.57	512,138,74	\$103,399,30
25	5/31/2044	\$981,027.01	\$110,834.69	\$1,091,861.70	\$371,711,13	\$41,995.26	\$413,706,40	\$74,950,46	\$8,467.77	\$83,418,23	\$92,903.26	\$10,496,05	\$103,399.30
26	5/31/2045	\$998,685,50	\$93,176.20	\$1,091,861.70	\$378,401.94	\$35,304,46	\$413,706.40	\$76,299,57	\$7,118,66	\$83,418,23	\$94,575,52	\$8,823.79	\$103,399.30
27	5/31/2046	\$1,016,661,84	\$75,199.86	\$1,091,861.70	\$385,213.17	\$28,493.23	\$413,706.40	\$77,672,96	\$5,745.27	\$83,418,23	\$96,277,88	\$7,121.43	\$103,399.30
28	5/31/2047	\$1,034,961,75	\$56,899.95	\$1,091,861.70	\$392,147.01	\$21,559.39	\$413,706.40	\$79,071,08	54,347 16	\$83,418,23	\$98,010.88	\$5,388.43	\$103,399,30
29	5/31/2048	\$1,053,591,06	\$38,270.64	\$1,091,861.70	\$399,205.65	\$14,500.75	\$413,706.40	\$80,494,36	\$2,923.88	\$83,418,23	\$99,775.07	\$3,624.23	\$103,399.30
30	5/31/2049	\$1,072,555,58	\$19,306,00	\$1,091,861.58	\$406,391.31	\$7,315.04	\$413,706.35	\$81,943.25	\$1,474.98	\$83,418,22	\$101,571.01	\$1,828.28	\$103,399.29
30	3/3/1/2045	\$25,197,407.73		\$32,755,850.88				\$1,925,081.95		52,502,547.01		\$715,784.57	
			o State of Califo			rom Stanford 5.			Los Altos Hill			rom Palo Alto 3	
Payment #	Date	Principal	Interest	Repayment	Principal	Interest	TOTAL	Principal	Interest	TOTAL	Principal	Interest	TOTAL
1	5/31/2020	\$696,854.46	\$395,007.24	\$1,091,861.70	\$36,654.54	\$20,777.38	\$57,431.93	\$11,010.30	\$5,241.11	\$17,251,41	\$265,919.66	\$150,734.76	\$416,654.42
2	5/31/2021	\$650,851,74	\$441,009.96	\$1,091,861,70	\$34,234.80	\$23,197,12	\$57,431.93	\$10,283.46	\$6,967.96	\$17,251,41	\$248,365.02	\$168,289,40	\$416,654.42
3	5/31/2022	\$662,567.07	\$429,294.63	\$1,091,861.70	\$34,851,03	\$22,580.90	\$57,431,93	\$10,468.56	56,782.86	517,251,41	\$252,835.59	\$163,818,83	\$416,654,42
4	5/31/2023	\$674,493.28	\$417,368.42	\$1,091,861.70	\$35,478,35	\$21,953,58	\$57,431.93	\$10,656.99	\$6,594,42	\$17,251,41	\$257,386.64	\$159,267.79	\$416,654,42
5	5/31/2024	\$686,634,16	\$405,227.54	\$1,091,861.70	\$36,116,96	\$21,314.97	\$57,431.93	\$10,848.82	\$6,402.60	\$17,251.41	\$262,019.60	5154,634,83	\$416,654,42
6	5/31/2025	\$698,993.57	\$392,868.13	\$1,091,861.70	\$36,767,06	\$20,664.86	\$57,431.93	\$11,044.10	\$6,207.32	517,251,41	\$266,735,95	\$149,918,48	\$416,654,42
7	5/31/2026	\$711,575.46	\$380,286.24	\$1,091,861.70	\$37,428.87	\$20,003.06	\$57,431,93	\$11,242.89	\$6,008.52	\$17,251.41	\$271,537.20	5145,117.23	\$416,654.42
8	5/31/2027	\$724,383.82	\$367,477.88	\$1,091,861.70	\$38,102.59	\$19,329.34	\$57,431.93	\$11,445.26	\$5,806.15	\$17,251,41	\$276,424.87	\$140,229.56	\$416,654,42
9	5/31/2028	\$737,422,72	3354,438.98	\$1,091,861.70	\$30,700,44	\$18,643.40	\$57,431.93	\$11,651.28	\$5,600.14	\$17,251,41	\$281,400.51	\$135,253.91	\$416,654,42
10	5/31/2029	\$750,696.33	\$341,165.37	\$1,091,861.70	\$39,486.63	\$17,945.30	\$57,431.93	\$11,861.00	\$5,390.41	\$17,251.41	\$286,465.72	\$130,188.71	\$416,654,42
11	5/31/2030	\$764,208.87	\$327,652.83	\$1,091,861.70	\$40,197,39	\$17.234.54	\$57,431.93	\$12,074,50	\$5,176.91	\$17,251,41	\$291,622.10	\$125,032.32	\$416,654,42
		\$777,964.63	\$313,897.07	\$1,091,861.70	\$40,920.94	\$16,510.99	\$57,431.93	\$12,291.84	\$4,959.57	\$17,251.41	\$296,871.30	3119,783.12	\$416,654.42
12 13	5/31/2031 5/31/2032	\$791,967.99	\$299,893.71	\$1,091,861.70	\$41,657.52	\$15,774.41	\$57,431.93	\$12,513.09	\$4,738.32	\$17,251.41	\$302,214 98	\$114,439.44	\$416,654,42
14	5/31/2032		\$285,638.29	\$1,091,861.70	\$42,407.35	\$15,024.57	\$57,431.93	\$12,738,33	\$4,513.08	\$17,251,41	\$307,654.85	\$108,999.57	\$416,654.42
15	5/31/2033	\$806,223,41 \$820,735,44	\$271,126,26	\$1,091,861.70	\$43,170.68	\$14,261.24	\$57,431.93	\$12,756,55	\$4,283.79	\$17,251.41	\$313 192 64	\$103,461.78	\$416,654.42
			\$256,353.03	\$1,091,861.70	\$43,947.76	\$13,484.17	\$57,431.93	\$13,201,04	\$4,050.38	\$17,251,41	\$318,830,11	\$97,824.32	\$416,654,42
16 17	5/31/2035 5/31/2036	\$835,508,67 \$850,547,83	\$241,313.87	\$1,091,861.70	\$44,738.82	\$12,693.11	\$57,431.93	\$13,438,66	\$3,812.76	\$17,251.41	\$324,569.05	592,085.37	\$416,654.42
		\$865,857.69	\$226,004.01	\$1,091,861.70	\$45,544.11	\$11,887.81	557,431.93	\$13,680,55	\$3,570.86	\$17,251.41	\$330,411.29	\$86,243,13	\$416,654.42
18	5/31/2037		\$210,418.57	\$1,091,861.70	\$46,363,91	\$11,068.02	\$57,431,93	\$13,926.80	\$3,324.61	\$17,251.41	\$336,358.70	\$80,295.73	\$416,654.42
19 20	5/31/2038	\$881,443,13	\$194,552.59	\$1,091,861.70	\$47,198.46	\$10,233.47	\$57,431,93	\$14,177,48	\$3,073.93	\$17,251.41	\$342,413.16	\$74,241.27	\$416,654.42
20	5/31/2039 5/31/2040	\$897,309.11 \$913,460.67	\$178,401.03	\$1,091,861.70	\$48,048.03	\$9,383,89	\$57,431,93	\$14,177,48	\$2,818.74	\$17,251.41	\$348,576.59	\$68,077.83	\$416,654.42
				\$1,091,861.70	\$48,912.90	\$8,519.03	\$57,431,93	\$14,432,68	\$2,558.95	\$17,251.41	\$354,850.97	\$61,803.46	\$416,654.42
22 23	5/31/2041	\$929,902,96	\$161,958.74 \$145,220.48	\$1,091,861.70	\$49,793.33	\$7,638.60	S57,431.93	\$14,956,93	\$2,336.93	\$17,251.41	\$361,238.29	\$55,416.14	\$416,654.42
	5/31/2042	\$946,641.22		\$1,091,861.70	\$50,689,61	\$6,742.32	\$57,431,93	\$15,226,16	\$2,025.26	\$17,251,41	\$367,740,58	\$48,913.85	\$416,654.42
	5/31/2043	\$963,680,76	\$128,180.94 \$110,834.69	\$1,091,861.70	\$51,602.02	\$5,829.90	\$57,431,93	\$15,500.23	\$1,751.19	\$17,251.41	\$374,359.91	\$42,294.52	\$416,654.42
24	5/31/2044	\$981,027.01 \$998,685.50				\$4,901.07	\$57,431,93	\$15,779.23	\$1,472.18	\$17,251.41	\$381,098.39	\$35,556.04	\$416,654.42
24 25	E121/204E		\$93,176.20	\$1,091,861,70	\$52,530.86 \$53,476.41	\$3,955.51	\$57,431,93	\$16,063.26	\$1,188.16	\$17,251.41	\$387,958.16	\$28,696.27	\$416,654.42
24 25 26	5/31/2045						337 431 93		31,100-10	311,231.41			9710,004142
24 25 26 27	5/31/2046	\$1,016,661.84	\$75,199.86	\$1,091,861.70						\$17.051.41			\$416,654,49
24 25 26 27 28	5/31/2046 5/31/2047	\$1,016,661.84 \$1,034,961.75	\$56,899.95	\$1,091,861,70	\$54,438,99	\$2,992.94	\$57,431.93	\$16,352.40	\$899.02	\$17,251,41 \$17,251,41	\$394,941,40	\$21,713.02	\$416,654.42
24 25 26 27 28 29	5/31/2046 5/31/2047 5/31/2048	\$1,016,661.84 \$1,034,961.75 \$1,053,591.06	\$56,899.95 \$38,270.64	\$1,091,861.70 \$1,091,861.70	\$54,438,99 \$55,418.89	\$2,992.94 \$2,013.04	\$57,431.93 \$57,431.93	\$16,352.40 \$16,646.74	\$899.02 \$604.68	\$17,251.41	\$394,941,40 \$402,050,35	\$21,713.02 \$14,604.08	\$416,654-42
24 25 26 27 28	5/31/2046 5/31/2047	\$1,016,661.84 \$1,034,961.75	\$56,899.95	\$1,091,861,70	\$54,438,99 \$55,418,89 \$56,416,42	\$2,992.94	\$57,431,93 \$57,431,93 \$57,431,92	\$16,352,40 \$16,646.74 \$16,946.38	\$899.02	\$17,251.41 \$17,251.41	\$394,941,40	\$21,713.02 \$14,604.08 \$7,367.17	\$416,654.42 \$416,654.38

EXHIBIT H

Annual Average Flow Capacity Rights

	Capa	acity
User Agency	MGD*	%
Palo Alto	15.30	38.16
EPASD	3.06	7.64
Stanford University	2.11	5.26
Los Altos Hills	0.63	1.58
	21.1	52.64
Mountain View	15.1	37.89
Los Altos	3.8	9.47
TOTALS	40.0	100.00

^{*}Capacity expressed in Annual Average Flow (AAF), Million Gallons per Day (MGD)

EXHIBIT 5



California State Assembly Select Committee Sea Level Rise and the California Economy

Sea-Level Rise: a Slow-Moving Emergency



Select Committee Report of August 2014

Richard S. Gordon, Chair

Katcho Achadjian Toni G. Atkins Steven Bradford Rocky J. Chávez Jeff Gorell Bonnie Lowenthal Al Muratsuchi Nancy Skinner Philip Y. Ting

Ellen Hou, Committee Staff

Cover photograph was taken by Douglas Moody, Point Blue Conservation Science, on December 13, 2012 and is courtesy of the California King Tides Initiative. The photograph shows flooding from king tides at the Highway 101-1 interchange in Mill Valley. Photographs like these of king tides offer a living record of the changes to our coasts and shorelines and help Californians visualize how sea-level rise will impact their lives.

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ACKNOWLEDGEMENTS

I want to thank Speaker Emeritus John A. Pérez who authorized the formation of the Assembly's Select Committee on Sea Level Rise and the California Economy. His foresight and leadership has helped to bring attention to a looming crisis in California.

I also want to thank my Assembly colleagues who joined me in a series of Select Committee hearings. They brought their commitment to protecting and improving California to our consideration of the issues we discussed.

Thank you's should also be given to the many experts and professionals who provided engaging testimony at our hearings.

Finally, I want to offer a special thank you to Ellen Hou. Ms. Hou serves as a Legislative Assistant in my Capitol Office. She took on the assignment of staffing the Select Committee and is to be commended for doing an outstanding job. Ms. Hou organized all of our hearings, managed logistics, and compiled this report. Thank you, Ellen.

Richard S. Gordon

List Ay

Assemblymember, 24th Assembly District

Chair, Select Committee on Sea Level Rise and the California Economy

August 2014

INTRODUCTION

The sea is rising. The nation's longest continuously operating gauge of sea level, at Fort Point in San Francisco Bay, recorded a seven-inch rise in the sea level over the 20th century. As a result of climate change and global warming, sea-level rise is projected to accelerate during the next century. Even if greenhouse gas emissions are reduced, residual ocean warming will cause seas to continue to rise. A 2012 report from the National Research Council found that the average sea-level rise projections for California are an additional 6 inches by 2030, 12 inches by 2050, and 36 inches (3 feet) by 2100. As a result of these projections, sea-level rise has been called a slow-moving emergency. The fact is that California is indeed facing an emergency.

California has 840 miles of coastline ranking third among the 50 states behind Alaska and Florida for the most miles of coast. San Francisco Bay is highly developed along the shoreline and faces impacts from sea-level rise. Three quarters of California's 38 million people live near the coastline and the San Francisco Bay shoreline.

In addition to homes, existing critical infrastructure – such as roads, hospitals, schools, emergency facilities, wastewater treatment plants, and power plants – is vulnerable to sealevel rise. Several California airports are located in coastal zones and rising seas will also impact goods movement through California's ports. Sea-level rise also threatens public access to the coast and its recreational areas. Coastal waters, wetlands, estuaries, riparian areas, and beaches – which are important environmental and economic resources of California – are also at risk.

The Assembly Select Committee on Sea Level Rise and the California Economy was established in 2013 to thoroughly review the challenges ahead in addressing the expected impacts of sea-level rise on California and its economy. The Select Committee held four hearings throughout the state to examine sea-level rise's effect on various sectors and industries. Topics at the four hearings included projected impacts on: coastal agriculture, the fishing and aquaculture industry, tourism, ports, roads and bridges, and water and power infrastructure. The Committee also examined the existing authority granted to state agencies in regards to preparedness and response to anticipated sea-level rise.

This report summarizes the testimony at the hearings providing highlights as well as insightful images that put into perspective the risks California faces. The report also includes key findings and a set of recommendations that was written by committee staff and approved by the Chair. The findings and recommendations were not voted on by members of the Select Committee and may not reflect the view of each Select Committee member. This report is meant to inform and alarm so that California can be proactive in responding to the slow-moving emergency of sea-level rise.

KEY FINDINGS

The following are key findings that highlight the important takeaways from the Select Committee's four hearings.

- Key segments of California's economy are at risk. California's coastal agriculture, fishing, and tourist industries will be impacted. Airports, ports, and goods movement will be affected.
- Infrastructure is at risk. Critical infrastructure including 3,500 miles of roadways; about 280 miles of railroads; numerous schools, police and fire stations; and hospitals are located in the coastal zone. Key elements of California's wastewater treatment capacity and power generating capacity are located at current sea level.
- True vulnerability is sea-level rise plus extreme storms and king tides. King tides are
 especially high tides that occur several times each year. The combined effects of current
 sea-level rise combined with extreme storm events and king tides are already providing us
 with a preview of the new normal that can be expected as the seas continue to rise.
- Sea-level rise will exacerbate the problem of saltwater intrusion. Saltwater intrusion
 into coastal aquifers poses a high level of risk to agricultural communities along the
 California coast. Sea-level rise threatens water supply and water quality by aggravating
 saltwater intrusion in our freshwater sources like coastal aquifers, estuaries, and even the
 Delta.
- Sea-level rise will accelerate coastal and beach erosion. Erosion breaks down natural
 barriers such as cliffs, beaches, wetlands, and dunes all of which act as buffers and
 protection for our coastal communities. Beach erosion in particular will negatively impact
 California's tourism industry. Erosion will also have significant impact on private property
 including homes and businesses.
- Coordinated planning is required in order to adequately prepare. Sea-level rise is an
 issue that crosses many sectors and jurisdictions; therefore, collaboration and coordination
 are needed to ensure effective planning. Key decisions will need to be reached relative to:
 where it would be appropriate to armor the coast, where adaptation is needed, and where
 retreat from the coastal zone should be encouraged.
- Lack of funding is a barrier for taking action on sea-level rise. Responding to sea-level rise will be costly. Currently, there is even insufficient funding to support local governments and others in assessing vulnerabilities, planning, and reducing risk. In fact, applicants to the Coastal Commission's Local Coastal Program Assistance Grant Program requested over five times the amount of available funding.

POLICY RECOMMENDATIONS

Educate the public about sea-level rise and its impacts. Education and raising awareness are key in order to have buy-in from communities to prioritize the issue now. Unfortunately, sea-level rise is often seen as a future problem; however, we need to reframe the discussion and inform the public that we are in the middle of an emergency – not at the beginning. The crisis is already here and action needs to be taken now.

Ensure there is a continued repository for science in the state in order to make educated policy decisions. Science plays a vital role in informing us about future conditions and helps frame decision-making and policy responses. The California Ocean Protection Council should be encouraged and incentivized to bring the best and most current science to the state.

Establish policy, guidelines, and guidance at the state level to inform planning decisions. The state should collaborate with local and regional government agencies to provide clear, consistent, and transparent standards and guidance, including uniform data that informs and supports local decision making processes. Current projections suggest that the planning horizon anticipate three feet of sea-level rise by 2100.

Be proactive in planning for sea-level rise. The severity of the impacts of sea-level rise will be linked to how quickly we take action. Preparing for sea-level rise will be expensive, but the price will be far lower than the alternative of waiting and reacting to these impacts as they occur. Planning should include consideration of both sea-level rise and extreme events.

Incentivize sea-level rise planning and adaptation through additional funding. Lack of funding is a barrier to taking action on sea-level rise. Therefore, additional funding to support current grant programs as well as the creation of new sources of funding will lead to increased actions to address the need. It is encouraging that the 2014-15 adopted budget includes funding for planning in the new California Climate Resilience Account. Future consideration should be given to a state revolving loan fund to assist communities with adaptation.

Encourage collaborative planning efforts. Coordination and collaboration especially regional planning is essential, as sea-level rise does not stay within jurisdictional boundaries. In fact, sea-level rise affects many sectors and agencies, which are often intertwined and dependent on each other.

Take action now to address sea-level rise, it is not too late. Sea-level rise has been called a slow-moving emergency. As a result, the future is not all doom and gloom since we have time on our side to prepare and plan for sea-level rise. Sea-level rise is not a surprise. We know it is happening and will only worsen. We must take advantage of the time we have to address this impending emergency now.

SUMMARY OF SELECT COMMITTEE HEARINGS

Overview and Impact of Sea Level Rise in California Wednesday, May 15, 2013 9:30 a.m. – 12:30 p.m., Sacramento

The first Select Committee hearing brought in the Natural Resources Agency Secretary as well as scientists and academics who described the science behind why are seas rising and provided a broad overview of the threats and challenges facing California, setting the stage for the remaining hearings and discussion.

Overview of Sea Level Rise in California

John Laird, Secretary, Natural Resources Agency

Secretary Laird began by revealing that the public is aware of greenhouse gas (GHG) emissions and things that are related to it, but they have yet to develop a real comfort level with how the state is going to have to adapt to changes in the climate. Broad based education for the public is lacking.

The Natural Resources Agency is the state's lead on adaptation and is in the process of updating California's 2009 adaptation strategy, which includes oceans and coastal resources. It is clear that climate adaptation activities to date have been conducted without sufficient funding, mandate, staffing, or implementing authorities. Secretary Laird stated that the backdrop for today is that the state has much more science than in 2009 and science in many ways has started to settle the question of what might be used as a baseline for future sea-level rise. In fact, the National Research Council has projected sea level to rise in the range of 5 to 24 inches by 2050 and 17 to 66 inches by 2100. The median is somewhere around 14 inches by 2050 and somewhere around 41 or 42 inches by 2100. Secretary Laird pointed out that it is very important to look at the median because depending on the success of reducing GHG emissions, actual sea-level rise could be at the low end or high end of these projections.

Secretary Laird also pointed out that the impacts California faces are not sea-level rise alone, but extreme storms as well. He provided the metaphor that the situation is not a bathtub where there is only gradual rise. Instead he asserted that it is the 2-year old child jumping into the bathtub, which is the extreme event. And it is the extreme event that will especially drive home what the sea-level rise is and what its effects are on the coast.

The severity of impacts will be linked to how quickly action is taken. Secretary Laird shared that this is an important point to dwell on because as with Hurricane Sandy, if \$15 billion of infrastructure improvements had been done prior to the storm, it would have mitigated most of the \$60 billion costs that accrued to taxpayers after the storm. He asserted that preparing for sea-level rise will be expensive, but the price will be far lower than the alternative of waiting and reacting to these impacts as they occur. These are major issues that have to be dealt with

and part of the work is educating the public. Secretary Laird concluded by stating that he looks forward to partnering with the Legislature in these efforts.

Cat Kuhlman, Executive Director, Ocean Protection Council

Ms. Kuhlman asserted that the sea is rising and is already causing impacts to the California coast and San Francisco Bay. As a result, sea-level rise poses a severe threat for the future. She shared that recently volunteers have been taking photographs (below are two examples) during king tides, which are extreme high tides that occur at predictable intervals during the year. These king tides document how California's significant coastal resources are currently endangered and give an incredible preview of what will happen to communities as the sea rises. She stated that these images paint a visual picture of something that is otherwise hard to imagine about how California is going to be changing.





Ms. Kuhlman pointed out that climate change and sea-level rise have been strategic priorities for the Ocean Protection Council which was created by the Legislature to bring together the best science and policy for California's decision makers both at the state and local level to protect coast and ocean resources. She asserted that science plays a vital role in informing the public about future conditions and helps to frame policy responses.

Ms. Kuhlman also shared that California is a leader in taking action to address sea-level rise. In fact, the Coastal and Ocean Working Group of the California Climate Action Team (COCAT) developed the State of California Sea-Level Rise Guidance Document which is intended to help state agencies incorporate future sea-level rise impacts into planning decisions. She stated that the policy recommendations laid out in this document were drafted by consensus with 16 state agencies¹ that have jurisdiction over coastal and ocean matters for California in

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¹ The 16 state agencies included the Business, Transportation and Housing Agency, Coastal Commission, Department of Fish and Game, Department of Parks and Recreation, Department of Public Health, Department of Toxic Substances Control, Department of Transportation, Department of Water Resources, Environmental

addition to the Ocean Protection Council. She expressed that having guidance on the best available projections helps prevent confusion about which projections to use for decision-making.

Ms. Kuhlman advised that it is important to have accurate maps in addition to having good projections. She shared that the Ocean Protection Council's Coastal Mapping Program has produced detailed maps that can be used for evaluating future scenarios. In 2011, the Ocean Protection Council adopted a Sea-Level Rise Resolution stating that all state agencies and non-state entities implementing projects using state funds or on state lands should incorporate consideration of the risks posed by sea-level rise into all decisions. In terms of funding, she stated that the Ocean Protection Council provided \$2.5 million to fund projects in partnership with the Coastal Conservancy and the Coastal Commission. This funding will support sealevel rise analyses and projects that will result in updated Local Coastal Programs, which are key planning tools for addressing sea-level rise.

Furthermore, Ms. Kuhlman pointed out that many individual agencies are taking action to address sea-level rise, with projects such as:

- Caltrans Transportation Hot Spot Map recently completed;
- State Lands Commission coordinating with leases and grantees about taking action on sea-level rise;
- San Francisco Bay Conservation and Development Commission (BCDC) working with other regional governance entities on developing a Regional Adaptation Strategy for the Bay Area;
- Coastal Commission developing guidance for addressing sea-level rise for permitees;
- Department of Public Health awarded four-year funding to evaluate health impacts from climate change, including from sea-level rise; and
- Coastal Conservancy developing strategies to address sea-level rise in wetland and other shoreline habitats in San Francisco Bay.

Ms. Kuhlman emphasized the need to use the state's coastal natural resources as part of the equation for solutions. In making these decisions, the importance of the natural world must be factored in. There is a growing body of research that shows the importance both from a resource perspective and an economic perspective that protecting and restoring ecosystems is both effective and cost effective. She asserted that this is another area where additional work and additional research is going to be pivotal for the state.

Protection Agency, Governor's Office of Planning and Research, Natural Resources Agency, Ocean Science Trust, San Francisco Bay Conservation and Development Commission, State Coastal Conservancy, State Lands Commission, and State Water Resources Control Board.

While the Ocean Protection Council has made preliminary investments in science, policy, and tools for decision makers, Ms. Kuhlman conveyed that California has a solid government infrastructure that has been and can be responsive. She asserted that California is in the lead compared to other states, but the sea is rising rapidly and there is a need to redouble efforts with both energy and courage. She also recommended that achieving a resilient coastline will require partnerships, not only the ones already created, but new and innovative partnerships, sound science that is responsive to decision makers at all levels of government. Most importantly, she stated that there is a need for creative incentives and requirements to evaluate all projects in light of climate change and sea-level rise. Ms. Kuhlman concluded that the Ocean Protection Council is committed to providing leadership and funding to prepare for sea-level rise. The Ocean Protection Council's goal is to work collaboratively with the Legislature, other state agencies, local agencies and interested partners to develop long range strategies that promote the resiliency of coastal communities, and restore and protect California's natural resources.

The Impact of Sea Level Rise: Threats and Issues Facing California and its Economy

Dr. Gary Griggs, Distinguished Professor of Earth Sciences and Director of the Institute of Marine Sciences, University of California Santa Cruz

Dr. Griggs observed that climate change and sea-level rise is nothing new, and has been known about for a long time. He shared that sea-level rise became known mid-way through the last century, where scientists learned that climate differed across the world, but also that climate has changed over time. As it gets warmer, ice melts and oceans expand. Scientists believe that ice melting accounts for about two-thirds of the rise in sea level. In addition, the density of the water as it gets warmer expands, which also raises sea level. Further, large-scale tectonics essentially what the land is doing, for example sinking, can also lead to sea-level rise.

Dr. Griggs stated that in the short-term, tsunamis can raise sea levels fifty feet or more over minutes in areas affected. Tides which go in and out every day also can change sea level in the short-term. Storm surges will do this as well and an El Niño can raise sea level for several months at a time. What the Select Committee is focused on is the long-term sea-level rise over millimeters per year. He conveyed that this seems minuscule, but the impact is much greater over the long-term. It is important to note that it is the short-term events which are going to be more problematic in the near future. As demonstrated by the three images on the following page, flooding from seawater is already a problem and this is without the expected projections of additional sea-level rise. Therefore, sea-level rise will only worsen and add to the problem.

Courtesy of Dr. Gary Griggs, Presentation to Select Committee







Dr. Griggs asserted that sea-level rise over the last several hundred years prior to about 1850 did not change a whole lot. When scientists started measuring with tide gauges, sea level rose at a rate of about 1.7 millimeters per year. He stated that in the last twenty or so years, scientists can now measure sea-level rise through satellites and it appears that the rate has nearly doubled. Sea-level rise will cause waves and run-up to reach higher elevations and extend farther inland. Shoreline flooding and coastal erosion will increase in magnitude and duration over the 21st century, increasing exposure of shoreline development to impacts of waves and high water. Dr. Griggs recommended looking at recent El Niños to know what to expect for the immediate future. He also shared sobering real world realities. Oakland International Airport begins to go underwater with 16 inches of sea-level rise. San Francisco International Airport begins to go underwater at 16 inches of sea-level rise at high tide. In closing, Dr. Griggs encouraged the Select Committee and the public to think about infrastructure of that sort to spur action on the issue as well as not forgetting the short-term events when looking at the total impact of sea-level rise to communities.

Dr. Patrick Barnard, Coastal Geologist, U.S. Geological Survey Pacific Coastal and Marine Center, Santa Cruz

Dr. Barnard continued the conversation by also discussing the complexity of the situation for California's coast in particular looking at the combined effects of sea-level rise and coastal storms.

Below are the kinds of effects that can be expected in coastal settings from projected climate trends such as increased sea-level rise:

- Accelerated beach erosion rates:
- Greater incidence of cliff failures:
- Landward translation of coastal flooding and inundation;
- More dangerous navigation conditions, particularly acute for our major harbors and ports in California;
- Beach/shore safety more often compromised; and
- Saltwater intrusion into coastal aguifers.

Below are photos of vulnerable coastal communities that are located right on the beach.





In addition, critical infrastructure along the coast that is "in the line of fire" include power plants and numerous wastewater treatment plants such as the Hyperion Wastewater Treatment Plant, Los Angeles' oldest and largest wastewater treatment facility, shown below.



Furthermore sediment supply is another issue. Dr. Barnard expressed the importance and need for sand for beaches, since beaches act as a buffer as they are the first line of protection for coastal communities.

As mentioned previously, the problem is not just sea-level rise, but the combined effect of sea-level rise and extreme storm events. So instead of just a three meter bathtub based on sea-level rise and tide difference, an additional 5 meters or more resulting from an extreme storm would be added on top of a three meter rise. Dr. Barnard emphasized that this is what scientists have to model and understand because this will give a true sense of the vulnerability of the coast. Below are two images of Stinson Beach, one showing what the beach will look like with sea-level rise only and the other showing the combined effect. When the annual storm is added to the model, the flooding situation is much more severe and even shuts down the Highway 1 corridor.



Studies have shown that the frequency and intensity of events have increased off California's coast over the last half century or so and that the extreme waves are getting bigger and faster. Dr. Barnard urged that this is what especially needs to be worried about in terms of coastal impacts. He stated that today's 100-year coastal water level event in California is projected to

occur every one to five years by 2050, much more frequently, and will have the greatest impact on low-lying coastal areas such as Imperial Beach, Coronado, Mission Beach, Venice, Oxnard, and San Francisco Bay to name a few. Flooding events that are seen with king tides will also occur more frequently. Unfortunately, none of these projections incorporate shoreline change. As sea levels rise they tend to drive beaches further inland, which will increase communities' exposure.

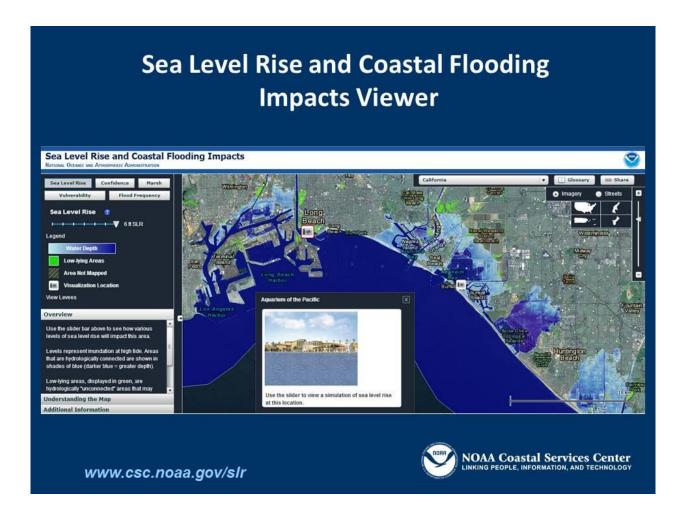
In concluding, Dr. Barnard stated that sea-level rise compounds the problem. Process-based models need to take into account all aspects of future coastal water levels, especially due to extreme storms. He suggested that models should also include regional and local sea-level rise factors to reflect coastal vulnerability. Therefore, a statewide, systematic approach to assess the impact of climate change must include sea-level rise and storms.

Becky Smyth, West Coast Director / Regional Division Chief, National Oceanic and Atmospheric Administration Coastal Services Center

Ms. Smyth's presentation took the next step and talked about how a decision maker in the state or local government gets information on sea-level rise in a useable format. She also spoke to what tools are available, what tools are still needed, and how the National Oceanic and Atmospheric Administration (NOAA) is starting to move forward on this.

Ms. Smyth stated that there are a lot of tools from the local, state, and national level that take all this information related to sea-level rise and start putting it into places that can help make decisions. She pointed out that these tools do not make decisions for policymakers or planners, instead they provide information in a way that decision makers can start assessing the tradeoffs and risks. Ms. Smyth explained that the different types of tools vary on what she called "The Simpsons" scale, from a tool that Homer Simpson would use which would be easy and simply visualizes the sea-level rise to more complex tools that Lisa Simpson would likely use.

One tool in Ventura that the Nature Conservancy is utilizing with many local, state, and federal partners is the Coastal Resilience tool, which looks at how natural systems can be used to help with adaptation as opposed to only relying on seawalls. Our Coast Our Future is a local Bay Area tool that is more sophisticated and looks at the full range of impacts and what will that mean, in line with what Dr. Barnard was suggesting. In addition, the California Energy Commission funded research that is presented through Cal-Adapt which provides a sea-level rise threatened areas map in order to view areas along the coast that may be most at risk, providing a baseline look statewide.



Ms. Smyth also discussed NOAA's Sea Level Rise and Coastal Flooding Impacts Viewer (shown above). This is a screening tool that shows where the vulnerable areas are, with up to six feet of sea-level rise. Communities can utilize this tool to start looking at planning for three feet of sea-level rise for example and find out where their vulnerable areas are at this level of rise and then where more studies are needed. Included in this viewer is a visualization tool that can show the public how their region will be impacted by a specified amount of sea-level rise. There is also a social vulnerability screening tool.

She stated that California is fortunate in that people are already using this information to change the way that they are making decisions. For example, planning and permitting staff at San Francisco Bay Conservation and Development Commission (BCDC) used the Sea Level Rise Coastal Flooding Impacts Viewer and associated data for screening proposed projects. In addition, the Sea Level Rise and Coastal Flooding Impacts Viewer is included in grant criteria for project applications to the state's Local Coastal Program Sea-level Rise Grant Program.

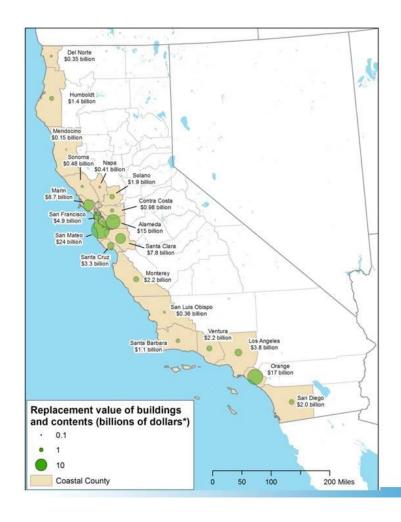
Ms. Smyth concluded that NOAA has worked with an enormous number of state agencies and that California is a leader on this issue.

Dr. Peter Gleick, President, Pacific Institute

According to Dr. Gleick, climate change will inevitably change the character of the California coast at very high economic cost through increased flooding and erosion. As a result, large populations and infrastructure are at risk simply because of the way the state has developed. Dr. Gleick shared that the Pacific Institute, with support from the state, completed a detailed analysis of the current population, infrastructure, and property at risk from projected sea-level rise if no actions are taken to protect the coast. The Pacific Institute's report entitled *The Impacts of Sea-Level Rise on the California Coast* uses projections developed by the state from current best estimates, but does not reflect the worst-case sea-level rise that could occur. The report also evaluates the cost of building structural measures to protect high-valued locations, but Dr. Gleick pointed out that if development continues in threatened areas, all of these estimates will rise substantially.

Below are a few of the key findings from the report:

- sea level increases will put 480,000 people at risk of a 100-year flood event, given today's population (populations in San Mateo, Alameda, and Orange Counties are especially vulnerable);
- sections of the coast not vulnerable to flooding are often highly susceptible to erosion and the Pacific Institute estimated that a 1.4 meter sea-level rise will accelerate erosion, resulting in a loss of 41 square miles of California's coast by 2100;
- among those affected are large numbers of low-income people and communities of color;
- a wide range of critical infrastructure, such as roads, hospitals, schools, emergency facilities, wastewater treatment plants, power plants, and more will also be at increased risk of inundation in a 100-year flood event; and
- as a partial estimate of what is at risk, the study calculated that nearly \$100 billion (in year 2000 dollars) of property (measured as the current replacement value of buildings and contents) is at risk in the expanded flood zones as shown by the image on the next page.



Property at Risk

- \$100 billion dollars at current value and level of development.
- Only buildings and contents.



So, what can be done? Dr. Gleick provided the following recommendation to the Select Committee. He suggested that the state integrate climate change and sea-level rise into all coastal design and that new development needs to be limited in high risk areas. In addition, the remaining wetlands and nearby undeveloped areas need to be protected. Furthermore, there is a need to measure the social and environmental costs of adaptation strategies including environmental justice implications of the risks that are faced. Dr. Gleick also mentioned modernizing flood insurance maps and programs that need to be done at the federal level and the state level. Disaster planning is also key and has to take into account those who are the most vulnerable. Communities most vulnerable to harm have to be involved in decisions about future development such as preparation and adaptation strategies. Finally, Dr. Gleick asserted that adaptation planning needs to begin now in order to substantially reduce the risks that California faces. He concluded that if nothing is done, the infrastructure, buildings, and resources that are going to be at risk are going to have a larger impact and will be more expensive.

Preparing for the Effects of Global Warming: The American Public's Perspective on Sea Level Rise

Meg Caldwell, Executive Director, Center for Ocean Solutions, Stanford Woods Institute for the Environment

Climate change is a major priority for the state of California, and preparation for the unavoidable consequences of climate change is a priority for Governor Brown's administration. California state agencies, departments, commissions and councils have conducted numerous studies on the impacts of climate change and are poised to implement adaptation strategies and policies. Yet coastal managers throughout the state express concern about political will and public support for action, and note these to be barriers to successful implementation plans. However, a recent Stanford University poll suggests that the public strongly supports adaptation action and that these perceived barriers to progress may reflect a misunderstanding of the public's concerns. Ms. Caldwell presented the results of this survey which are the product of Stanford University's Center for Ocean Solutions and the Stanford Woods Institute for the Environment.

The following are the overarching findings of the poll:

- The California public believes that global warming will cause sea levels to rise (76%) and that global warming-induced sea-level rise will be a serious problem for the U.S. (79%).
- The California public overwhelmingly supports preparing now for the impacts of global warming (85%) rather than waiting (13%).
- The California public, more so than the general U.S. public, believes state government should take significant steps to lessen the consequences (59% of Californians vs. 53% of the national public) of sea-level rise.
- Californians are most supportive of adaptation strategies that include:
 - improving building standards for coastal development (62%),
 - limiting rebuilding of damaged structures (55%),
 - o limiting new development in flood and inundation zones (53%), and
 - building sand dunes as a means of coastal protection (48%).
- The California public, more so than the U.S. public, believes that adaptation action will have a positive impact on the state's economy (52% vs. 38% for the U.S.) and jobs (60% vs. 42% for the U.S.).

Ms. Caldwell concluded that while previous work on climate adaptation has shown that there are many barriers that coastal practitioners face in successfully adapting to climate change (including lack of time, lack of capacity and money), one barrier frequently mentioned by coastal practitioners is lack of political will and public support. However, she pointed out that these results suggest that the American and Californian public firmly believes that climate

change is happening and it is causing sea levels to rise and storms to be worse and that these are bad. She further expressed that the public strongly supports preparing for these changes before damage is done and Californians believe preparation will help the California economy and jobs; they also support a leadership role for government in proactively addressing development in coastal hazard areas.

Impact of Sea Level Rise on California's Coastal Agriculture, Fishing and Aquaculture Industry, and Tourism Wednesday, July 24, 2013 2:00 p.m. – 5:00 p.m., Half Moon Bay

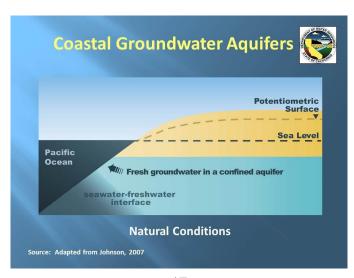
The second Select Committee hearing looked in-depth at three industries vital to California's economy that are affected by sea-level rise: coastal agriculture, fishing and aquaculture industry, and tourism. Representatives from each of these three industries discussed how they were being directly impacted.

Impact of Sea Level Rise on Coastal Agriculture

Mary Scruggs, Supervising Engineering Geologist, California Department of Water Resources

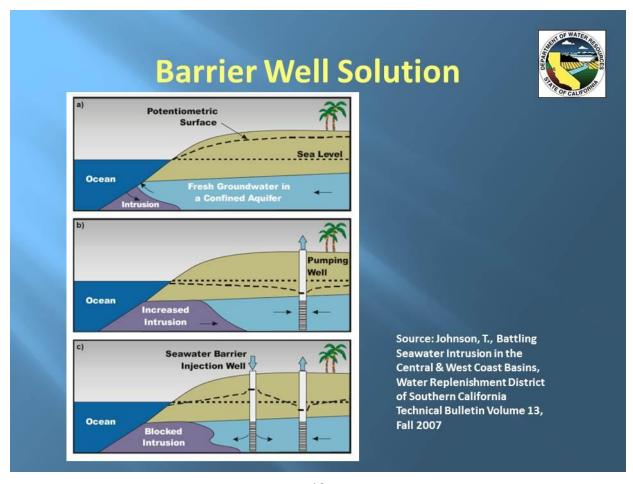
Ms. Scruggs provided an overview of groundwater and the issue of saltwater/seawater intrusion that sea-level rise exacerbates. Groundwater varies throughout the state and is managed at the local level in California. There are 515 alluvial basins and sub-basins in California. Groundwater provides 32 to 48 percent of the state's overall water supply based on numbers from 2005-2010. This is an enormous amount of the water use in the state.

Ms. Scruggs pointed out that seawater intrusion in California is not a new issue. Back in 1975, the Department of Water Resources published a bulletin, which identified areas that were impacted by seawater intrusion. She stated that seawater intrusion is the movement of ocean water into fresh groundwater, causing contamination of the groundwater by salt. It is a natural process that can be made worse by human activities and sea-level rise. Virtually all coastal aquifers around the world experience seawater intrusion to some degree due to the density differences between saltwater and freshwater. Saltwater is heavier and more dense so it is going to sink and freshwater is lighter so it is going to float more. The image below is of a confined aquifer and shows the mixing zone between the freshwater and seawater.



When a well is added and pumping occurs, seawater is pulled in towards the well. Therefore, seawater intrusion is induced by groundwater pumping. With sea-level rise in addition, there will be additional pressure which will exacerbate seawater intrusion due to the differences in density. Ms. Scruggs emphasized that whether there is groundwater pumping, sea-level rise, or both, seawater intrusion should be paid attention to because once the groundwater is contaminated with saltwater the aquifer is often lost. In coastal areas where groundwater is used for potable or agricultural purposes such as the Central and West Coast Basins in Los Angeles County, intrusion can be a serious problem resulting in the shutdown of wells or necessitating expensive desalination treatment.

So, what can be done to prevent saltwater from contaminating groundwater? There are several potential protective measures. Ms. Scruggs commented that it depends on the type of basin, the political dynamics of the area, the authority to take action, and the funding available. One option is reducing groundwater use through conservation and by limiting the groundwater pumping. Another option is developing new water supplies such as tertiary treated water for agricultural crops, expanding or rehabilitating of surface water reservoirs, and importing new surface water supplies. Also, on-site control can be implemented, such as refraining from pumping the well, moving the well further into the basin, or adding an injection well (shown below) to inject freshwater back into the ground to act as a barrier and block the intrusion.



In order to prevent and utilize the protective measures, Ms. Scruggs stated that monitoring is critical. A program initiated by the Legislature in 2009, is the California Statewide Groundwater Elevation Monitoring (CASGEM). It is a program that Department of Water Resources is responsible for and provides groundwater elevations and monitoring throughout the state.

Groundwater has ongoing challenges, especially funding, since programs are often not funded at the state or local level. Fortunately, CASGEM's funding was reauthorized in the 2014-2015 budget in order to continue the implementation of the program. This is definitely a start, but additional funding is still needed. Ms. Scruggs conveyed that authority is also a huge issue. Who has the authority to do it? There are overlapping jurisdictions. As a result, groundwater management varies from very well managed to not managed at all. The importance of the groundwater varies throughout the state too, so this is why lack of publicly available data Fundamental data is needed such as assessments and continues to be a challenge. monitoring because by the time a problem occurs such as saltwater having entered the groundwater, the aquifer is lost and it is too late. Proactive steps need to be taken. In addition, the increasing demand on groundwater is another challenge. Ms. Scruggs pointed out that as dry years continue, reliance on groundwater increases. Saltwater intrusion and how sea-level rise will exacerbate the problem and impact the water quality is a critical issue In her closing, Ms. Scruggs emphasized that cooperation and that the state is facing. integration is needed to meet these challenges moving forward.

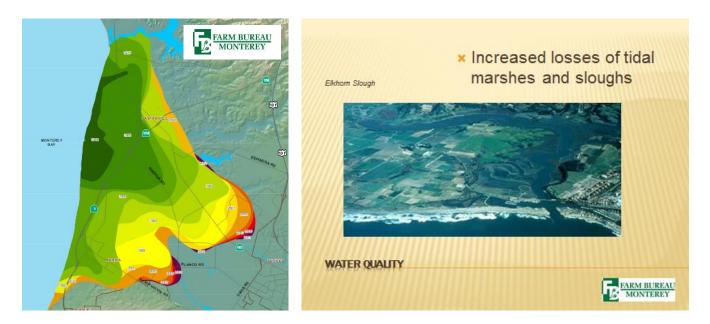
Norm Groot, Executive Director, Monterey County Farm Bureau

Mr. Groot began his presentation by referencing a 2011 survey that stated that the economic value of all agricultural production in Monterey County is \$8.2 billion. He also shared that the agricultural industry, which supports one of every three jobs in Monterey County, is over three times greater than the tourism industry in the County. Over 45,000 people in the county are employed in direct agricultural production and the agricultural sector in the county is the 4th largest in state and larger than 20 other states.

Monterey County has an estimated 22,000 acres of irrigated agriculture where much of the land is at current sea level elevations and are protected by sand dunes. Salt levels are already building in soils due to ocean proximity. As a result, Mr. Groot asserted that saltwater intrusion is one of the biggest issues right now. In Monterey County, saltwater intrusion was first determined in the 1940s due to over pumping of the Salinas River Groundwater Basin. Because of the intrusion, the grower community built and paid for numerous projects that are designed to halt and eventually reverse saltwater intrusion. About \$330 million was invested to date in net present value to actively try to solve the issue.

The image on the left side of the next page shows a saltwater intrusion map from a 2011 survey by the Monterey County Water Resource Agency. The image illustrates the extent of saltwater intrusion at its farthest point, almost 10 miles inland, encroaching on city of Salinas.

Colors reflect periods of time of saltwater intrusion and in recent years the colors have gotten a lot smaller. Saltwater intrusion is slowing due to the projects that have been built to stop the intrusion and the growers hope to continue to see positive results.



Mr. Groot also pointed out that sea-level rise also affects increased losses of tidal marshes and sloughs. The image above on the right side of the page shows a slough adjacent to farmland which is vulnerable to flooding as sea levels rise.

Mr. Groot stressed that reductions in viable land within the coastal zone will curtail agricultural production of products such as artichokes, leafy greens and strawberries in Monterey County. In addition, the development of the Monterey County wine corridor will be impacted due to increased salinity in the soils and wells, as the land could become barren. Forced conversion to other uses will impact coastal zone areas with valuable farmland which will be lost when sand dune barriers collapse. In addition, costs to protect levees and coastal estuaries may be more than locals can afford. Further, water quality will change in the Delta region as sea levels change and fresh water can become more brackish and scarce. Mr. Groot is concerned that this will affect California's economy and environment. Locally in Monterey County, municipal water supplies that depend on local groundwater basins are also starting to see impacts and will incur additional costs for treating higher salinity levels.

In conclusion, Mr. Groot stated that saltwater intrusion into aquifers is slowing, but the pressures are going to mount as sea levels rise and lead to more groundwater contamination and soil salinity. The future of agriculture is at stake and deeply impacted by this issue.

Dr. Rosemary Knight, Professor of Geophysics, Stanford University

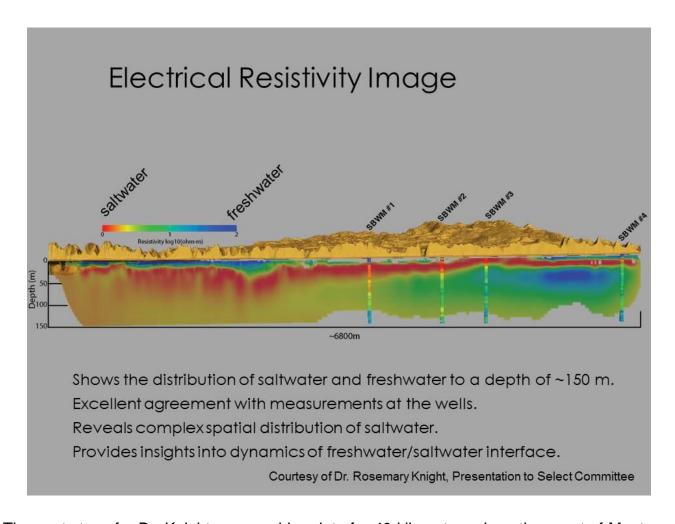
Saltwater intrusion poses a high level of risk to agricultural communities along the California coast, where there is a dependence on coastal aquifers for irrigation. Saltwater intrusion is driven by withdrawal of groundwater from aquifers, and by rising sea level. Dr. Knight revealed that while saltwater intrusion can occur gradually over decades, there is a critical point beyond which the dramatic change in salinity can be irreversible, resulting in the loss of a supply of freshwater. Thus, she asserted that there is a compelling need to map and monitor the freshwater/saltwater interface in coastal areas so that appropriate water management strategies can be put in place.

This is why the Center for Groundwater Evaluation and Management at Stanford University is using geophysics to image saltwater intrusion along the California coast. New and emerging technologies in this instance are being used as tools for groundwater management practices such as monitoring. The project that Dr. Knight undertook proposed the use of "sentinel geophysics" as a new approach to mapping and monitoring the freshwater/saltwater interface. Geophysical methods, which employ sensors on the ground surface (as shown below), can image the freshwater/saltwater interface hundreds of meters below the ground and so could be used as a long-term measurement system to understand and monitor saltwater intrusion.



Courtesy of Dr. Rosemary Knight, Presentation to Select Committee

Over the past two years Dr. Knight acquired a high-resolution large-scale geophysical image of saltwater intrusion along a seven kilometer segment of beach between Seaside, CA and Marina, CA. The data provided a 2D image (seen on the following page) of the electrical resistivity to a depth of approximately 150 meters. What is clearly seen in the image are regions of saltwater (warm colors, reds) and freshwater (cool colors, blue).



The next steps for Dr. Knight are acquiring data for 40 kilometers along the coast of Monterey Bay in order to see to a depth of 300 meters. She would like to do similar measurements, but this time, fly a helicopter along the California coast using airborne electromagnetic survey to get similar images.

Dr. Knight asserted that the threat of saltwater intrusion requires a proactive, data-driven approach. At the small scale and large scale, data is needed to provide an improved understanding of the extent of, and controls on saltwater intrusion. A large-scale, big picture perspective is critically important as groundwater and seawater do not stop at jurisdictional boundaries. Long-term monitoring allows for adaptive groundwater management. Dr. Knight concluded that geophysical methods offer fantastic tools that can provide a cost effective means of undertaking this form of data-driven, science-based groundwater management.

Impact of Sea Level Rise on Fishing and Aquaculture Industry and the Effects of Ocean Acidification

Dr. Gretchen Hofmann, Professor of Marine Biology, University of California Santa Barbara

Dr. Hofmann stated that ocean acidification related to climate change is an economic and emerging issue for California. Ocean acidification is a carbon dioxide problem. 30 to 50 percent of atmospheric CO₂ is absorbed by the world's oceans. When greenhouse gases dissolve, it changes the pH of the ocean and makes the ocean more acidic. In fact since preindustrial revolution global ocean pH has declined (become more acidic) by 0.1 pH, which can mean life or death for some of the ocean's organisms. As Dr. Hofmann reminded, big things can happen with just a small change in the number. Organisms that make calcium carbonate hard parts (shells and skeletons) are affected by the change in the ocean's chemistry, which decreases carbonate ions which are the building blocks for organisms' shells. With fewer building blocks, the harder it is to make a shell. Calcifying organisms such as the ones shown below are threatened by ocean acidification. Oysters and sea urchins have a large economic importance. Calcifying algae, an important part of the ecosystem, and coccolithophores, which make oxygen, are both affected.

Courtesy of Dr. Gretchen Hofmann, Presentation to Select Committee

Challenges to calcifying organisms

Those that make calcium carbonate hard parts



Oysters



Sea urchins



Calcifying algae



Dr. Hofmann asserted that the state stands to lose coastal ecosystems, cultural identity as Californians, food sources (aquaculture), and recreation in the form of fishing and clamming. In order to avoid emergency room science and address this issue, decision-making and science need to be combined. Three strategies that Dr. Hofmann suggested that can be done now are: (1) learn about the natural variability of pH in important coastal marine ecosystems through sensors in the water measuring pH along the California coast; (2) assess adaptive capacity of key organisms such oysters, sea urchin, or rock fish and look for genetic variation and their physiological resilience and tolerance; and (3) most importantly work collaboratively as a scientific community to address these challenges.

Zeke Grader, Executive Director, Pacific Coast Federation of Fishermen's Associations

The Pacific Coast Federation of Fisherman Association represents commercial fisherman along the coast, mostly owner operators, family fisherman, and small boat fisherman. Mr. Grader stated that commercial fishing is expected to be one of the industries to be affected first by climate change as well as being one of those to suffer the most severe impacts. Those anticipated impacts include: (1) ocean acidification and its effect on both shellfish and finfish populations, (2) a rise in sea temperature and changing currents affecting fishing patterns and fish migration, (3) more severe weather conditions affecting safety and days-at-sea fishing (expected to reduce annual productivity of fishing men and women), and (4) sea-level rise affecting the infrastructure that supports the commercial fishing fleet. Mr. Grader conveyed that fishermen are already witnessing far more extreme weather conditions in the Bering Sea and ocean acidification threatens the shellfish fishery of the Pacific Northwest.

Sea-level rise is expected to cause many facilities serving commercial fisheries – from ports, harbors, jetties and breakwaters, marinas, and a panoply of service facilities from fish processing plants, to boatyards, to ice and fuel docks (as well as the roads and assess ways to them) to be more vulnerable to wave and surge conditions, if not completely inundated. Although California has taken some steps to begin to curb carbon emissions aimed at the causes of climate change, the state still must prepare to adapt for the inevitable change as a result of past and current carbon emissions into the atmosphere. For commercial fisheries this means identifying structures and facilities within the coastal zone most at risk from sea-level rise and begin preparations for their renovation or replacement to meet the anticipated rise in sea level.

For the physical impacts of sea-level rise, Mr. Grader recommended a three-pronged approach. First, complete a comprehensive assessment and inventory of current ports and what is likely going to be changed by sea-level rise projections and whether changes will be made for 50 years out and 100 years out. The second approach involves requiring planning to build, rebuild, strengthen, or replace structures and facilities within these ports so that planners are mindful and must consider what the sea level is going to be in the future in the next 25, 50 or 100 years. Finally, funding becomes a key question. Mr. Grader acknowledged that this is going to be expensive, so sources of funding will need to be identified to assist local governments and private businesses to adapt. He asserted that this is where the Legislature could play a big role. One possibility that Mr. Grader suggested is establishing something similar to what the Department of Boating and Waterways has which is a low-interest revolving loan program that could provide the funding that is needed to try and make it less of an economic hardship for those (local governments and private businesses) that are going to be affected. In his closing, Mr. Grader articulated that California needs to look at investing in how we adapt to climate change emphasizing the need for the continuation of scientific research and the development of technology.

Greg Dale, Southwest Operations Manager, Coast Seafoods Company

As a shellfish farmer in Humboldt Bay, Mr. Dale has been following sea-level rise and ocean acidification for some time. He admitted that it is frightening to think about. Mr. Dale sees the issue of sea-level rise as a planning exercise since sea-level rise is happening and will only worsen. In Humboldt Bay, Mr. Dale shared that they have 10 inches of geologic activity that adds to and would exacerbate sea-level rise. In addition, issues like subsidence and storm events such as king tides need to be considered when thinking about sea-level rise and what the impacts will be.

Failing infrastructure will also result from sea-level rise. In fact, Mr. Dale pointed to an instance during king tides where the sewer lines floated. If they are not a high pressure sewer line or they are not full of water, then they end up floating out of the ground. When this happened, Humboldt Bay was closed which also closed the area where shellfish are harvested. In addition, most wastewater treatment plants are at the bottom of the hill and not elevated so they are going to see these impacts of sea-level rise. Jetties and harbors and other structures are extremely expensive to engineer and develop. Mr. Dale shared that the jetty in Humboldt Bay is frequently overtopped by large storms, waves, and king tides. In addition, the local transportation infrastructure such as road systems and rail is affected by king tides more frequently as well. Mr. Dale stated that this presents many questions such as: should cities be protected by levees and pumping; should the area be built up; should infrastructure and cities be moved; and how much is this going to cost? This is why communities need to plan for future impacts.



Mr. Dale conveyed that oyster farmers have similar concerns about water quality, infrastructure, near shore ecology and see the need for planning ahead. Humboldt County and the Harbor District are trying to address the levee system around Humboldt Bay. Many private levees being maintained by private landowners are getting very expensive to maintain. If there is one person that does not maintain the levee or barrier or protection, then any action taken to provide protection is a moot point. Another problem is that since the infrastructure is not in enough disrepair, it is difficult getting funds to fix these problems. The issues that the shellfish industry faces are not just infrastructure. A lot of their coastal dependent industrial sites have legacy contaminants on them. Those legacy contaminants today are not necessarily an issue because many of them have been identified and they are not mobilized or moving. However, as the water rises, a lot of those legacy contaminants are going to be mobilized and move into estuaries and near shore environments, which will affect the ecological processes and impact species living in these environments.

Bruce Steele, Commercial Fisherman

Sea-level rise is tied to ocean heating. Mr. Steele stated that most of sea-level rise so far is due to the expansion of seawater as it heats up plus some supply from glacier melting. However Mr. Steele also pointed out that moving into the future, sea-level rise is going to be dependent on the melting of the ice caps in Antarctica and Greenland.

Mr. Steele revealed that a projection of a five degree increase in average temperature by 2090 would make oceans in southern California similar to Hawaii today, approximately 80 degrees Fahrenheit. Heat spikes in ocean temperature, like during the 1997-1998 El Niño, would raise temperatures to greater than 80 degrees which would lead to mortality for some species such as purple sea urchins, which would greatly impact commercial fisherman.

As has been previously mentioned, it is the confluence of events – major storms, king tides, and sea-level rise – that will do most damage to California's coastal harbors and communities including infrastructure that supports the fishing industry.

So, what can be done? Mr. Steele urged that the state needs to protect our estuary systems which are essential to fisheries. Bolsa Chica Ecological Reserve is a good example of a wetland that has been restored. He also recommended that planning for the future needs to begin now in addition to investing in science. Mr. Steele concluded that collaboration is essential. In fact, industry is working with scientists. A great example is the oyster industry working with scientists to deal with the issue of ocean acidification. More of this is needed in moving forward with issues related to climate change.

Impact of Sea Level Rise on Tourism

Jay Chamberlin, Chief of Natural Resources Division, California State Parks

114 State Parks out of 280 are located on California's coast, totaling about 340 linear miles of the coastline. Mr. Chamberlin stated that State Parks has a tremendous interest in the future and the impacts of sea-level rise. These 114 coastal park units include portions of State Parks, portions of State Wilderness areas, portions of State Reserves and of course State Beaches. The topic of tourism comes up. These units generate a tremendous amount of economic benefit for Californians. State Beaches alone generate more than 3 billion dollars of revenue to the state each year. More broadly looking at tourism especially in southern California, Mr. Chamberlin pointed out that the tourism industry is something of a 14 plus billion dollar industry annually. State Parks knows that about 41 million visitors go to state beaches alone each year.

State Parks is not simply in the recreation delivery business, but also in the education business. Mr. Chamberlin suggested that this is a tremendous opportunity to communicate with the people of California about the importance of sea-level rise. Another element of State Parks' mission is protecting the resources of the state. Some may not realize, but California holds some of the gems even of coastal ecosystems of the resources of the state. About a third of the remaining dune systems of the state are protected in the State Parks system alone along the coast. Those systems are especially important for protecting rare and endangered plants. But they are also really important for providing buffering for our communities. Dune systems are extremely significant in that regard. State Parks also have over 100 estuaries, which are important to fisheries of California as well as habitat for rare and endangered species. Additionally, the sandy beaches of the state, are significant from a rare endangered species point of view.

So what might the future hold for some of California's state parks systems? Using simplistic models and overlaying elevations of sea-level rise on top of current elevations shows a sobering view of the possible future of some of California's state parks. Many of the state beaches can be inundated and will be inundated under the projected scenarios of 2100. These simplistic models are much more useful as conversation starters and as potential examples of what could be. State Parks is using images like the one of Carmel River State Beach on the next page to put before their managers and help them understand that sea-level rise is coming. State Parks is attempting to help their field managers understand what the potential implications can be going forward.



Sea-level rise is one set of scenarios and of course there are also king tides and extreme events which are very much on the mind of State Parks and probably more so in the near term because of the impacts they have already felt. State Parks have significant infrastructure already impacted by sea-level rise or related phenomena at places like the Malibu Pier and MacKerricher State Park. Mr. Chamberlin recommended that the state needs to look broadly at all of the tools in their proverbial toolbox as planners and managers of coastal resources. State Parks has many previous investments that they have already made such as protecting dune systems. Mr. Chamberlin stated that State Parks is still asking themselves what can they do today to make those systems more resilient to climate change impacts.

In his conclusion, Mr. Chamberlin asserted that when looking forward into the future, State Parks is looking to building a robust set of approaches to protect those investments that they have already made and capitalize on their investments going forward.

Aaron McGregor, Associate Scientist, California Ocean Science Trust

Mr. McGregor discussed sea-level rise's impact on tourism and recreation which drive the beach economy in California. It is evident that sea-level rise will effect beach visitation and supporting spending and economic wellbeing. Mr. McGregor asserted that there will likely be some winners and losers at least in the economic category. Additionally, he acknowledged that sea-level rise impacts on the beach economy is one aspect of climate change and climate change is one of many things that coastal communities must consider when they plan for the future. He stated that how coastal communities consider how to manage their beach resources will likely reflect their local values as well as tradeoffs that result in other systems of the coast being altered.

Annually millions of visitors visit the beach and in the process spend money on items such as gas, food, lodging, and incidentals. It is estimated that of California residents only, there are about 15 million users and 150 plus million visits to beaches annually. This results in billions of dollars annually that flow into city, county, state, and federal economies. In addition, many local visitors to California beaches have the opportunity to enjoy the day at the beach for little or no cost. But, they still receive extensive economic benefit from their presence. This benefit is real and most often realized when beaches experience a change in quality or are permanently or temporary closed for an event like an oil spill. This demonstrates why beaches like the one shown below are important for the California economy.



Courtesy of Aaron McGregor, Presentation to Select Committee

The nexus Mr. McGregor wanted to establish between the physical and economic engines of the coast is that sea-level rise will change the character of our beaches. There are two dynamics that need to be discussed. The first is that gradually over time sea-level rise will result in beach inundation and secondly, storm events on top of rising seas will result in altered erosion patterns along the coast. As the profiles of our beaches change, this will result in

changes in beach width that will in turn affect the demand for beach going. As this demand changes so will the spending.

These fundamentals were best captured in a study² that was conducted for the state. The main goal of the study was to examine the effects of changing beach widths to sites in Los Angeles and Orange County. The key economic theory behind the study is that people will choose whether or not to go to the beach and what beach to visit depending on the option that provides them the greatest utility or value.

The study concluded that size (beach width) does matter and generally speaking narrower beaches in California have the most to lose with respect to their local economies. But, size is not all that matters. The study also demonstrated that beach width can have diminishing and even negative returns in certain contexts. People go to the beach not only because of the width, but depending on the activities they prefer. They also place a high value on other types of amenities such as water quality, the availability of lifeguards, parking, and a number of other different activities. So, the losses of beach width can be mitigated if beaches choose to strategically know their users and make investments in these other amenities that matter. The study focused on Los Angeles and Orange County beaches. There are dozens of beaches in these counties all with a high level of amenities. But when looking at other parts of the coast, such as central and northern California that have beaches that are fewer and farther apart, the impacts are likely to be much greater as there will be fewer substitutes and options for beach visitors.

Mr. McGregor concluded that the effects of climate change and sea-level rise in particular are uneven. As he mentioned, there will be winners and losers. However, sea-level rise is just one climate change impact. To get the true economic cost of adaptation decisions, Mr. McGregor suggested that other impacts need to be considered as well.

http://geomorph.geology.ufl.edu/adamsp/Outgoing/Pubs/Pendleton_EtAl_2011_ClimChng.pdf

² Source: Pendleton et al. *Estimating the potential economic impacts of climate change on Southern California beaches.* November 2011.

Impact of Sea Level Rise on California's Infrastructure Friday, October 25, 2013 1:00 p.m. – 5:00 p.m., Long Beach

The Select Committee's third hearing focused on the impacts of sea-level rise to California's infrastructure, such as its effect on ports, airports, roads, bridges, as well as water and power infrastructure. Again, the Select Committee brought representatives from each of these affected industries to speak to the issues they are facing first-hand. This hearing was also a joint hearing with the Select Committee on Ports.

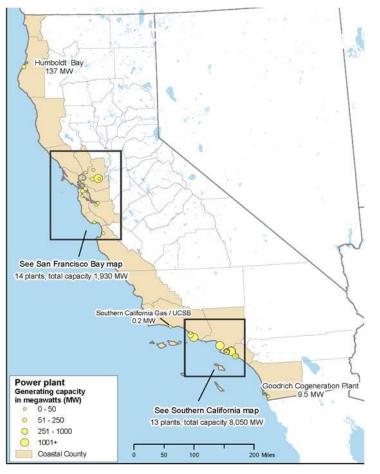
Sea Level Rise and California's Infrastructure

Heather Cooley, Water Program Co-Director, Pacific Institute

In 2008, the Pacific Institute conducted a statewide assessment of sea-level rise and its impacts on population, infrastructure, and on property. Ms. Cooley focused on some of the results of that analysis namely dealing with California's infrastructure.

Soberingly, Ms. Cooley pointed out that even if greenhouse gas emissions were cut to zero today, sea levels will continue to rise for centuries due to a time lag effect. Thus a continued amount of sea-level rise is unavoidable. As a result, Ms. Cooley advised that climate response must be based on managing the unavoidable and avoiding the unmanageable. California can expect a range of impacts both in the natural and human environment as a result of sea-level rise. Specifically, Ms. Cooley shared that California can expect increased flooding, increased coastal erosion, altered sediment supply and movement, and saltwater intrusion in coastal aquifers and into estuaries.

The Pacific Institute's sea-level rise assessment focused on coastal flooding and erosion. The Pacific Institute used a sea-level rise projection of 55 inches because that was the estimate for California at the time. The Pacific Institute in their assessment evaluated the people, property, and infrastructure and ecosystems that would be a risk.



- 30 coastal power plants
- Generating capacity of 10,000 MW



A map above shows coastal power plants that will be vulnerable to sea-level rise of 55 inches. They are located on the coast because that is where the demand is, but also because many of these power plants are using or were using seawater for cooling. However, because of their location on the coast, they are vulnerable to sea-level rise. There are 30 power plants located along the coast and the combined generating capacity of these power plants that are at risk is approximately 10,000 megawatts hours. This demonstrates that sea-level rise would have a huge impact on the state's energy infrastructure.



- 28 wastewater treatment plants
- Combined capacity of 530 million gallons per day

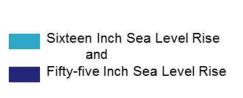


In addition to power plants, the map above shows wastewater treatment plants along the coast that are also at risk. Wastewater treatment plants are often situated at the lowest part of a service area or a water utility in order to take advantage of gravity to get waste to the treatment plant and then discharge it. However, again because of their location, they are vulnerable to sea-level rise. The Pacific Institute identified 28 wastewater treatment plants along the California coast. These have a combined capacity of around 530 million gallons per day. 21 of them are clustered within the San Francisco Bay alone. Possible impacts to these facilities would be flooding of the facilities, submerging outfall potentially causing backflow or overflow, increased pumping costs, and seawater intrusion in the treatment works.

In addition, our airports are vulnerable and in particular San Francisco International Airport which is located right next to the San Francisco Bay. This is a similar story with the Oakland International Airport (shown on the next page), another very low-lying airport.



Oakland International Airport





There is a range of other infrastructure at risk. The Pacific Institute identified 3,500 miles of roadways at risk of flooding. About 280 miles of railroads, 140 schools, 34 police and fire stations, 55 healthcare facilities, parks, ports, bridge access and all types of California infrastructure are vulnerable to sea-level rise. Therefore, Ms. Cooley urged that planning must begin now to ensure that these facilities are able to continue operating in the future.

Ms. Cooley concluded that he state needs to continue to improve the science on risks and enhance our understanding. In addition, she advised that we need to be focusing on mitigation to reduce the severity of the problem, hence avoiding the unmanageable. Further, enhancing state and local capacity to manage unavoidable impacts is necessary. She mentioned that shining a light about what is going on and what more needs to be done in regards to sea-level rise is critical. Finally, she recommended that building public understanding was needed because California still has a long way to go in terms of increasing awareness around these issues.

Impact of Sea Level Rise on California's Ports

Richard Cameron, Acting Managing Director of Environmental Affairs & Planning, Port of Long Beach



The Port of Long Beach over the last 10 to 15 years has changed its culture in terms of initially being reactive to now being more proactive and having a vision for the future. Mr. Cameron declared that the port, knowing that sea-level rise and climate change is going to be a challenge, started to move forward and embark on a planning effort to address these challenges.

It has been the case that the port's planning horizon has been 20-40 years. However, talking about the impacts of sea-level rise and climate change, the planning horizon becomes much longer for example 80 to 100 years. Therefore, the port realizes that even in their current development plans, they needed to consider those factors of sea-level rise in the design. Currently, the port is incorporating sea-level rise in their designs of a major redevelopment of a marine terminal because the port does not want the situation of having to rebuild their wharfs in 15 years to adapt to an impact of significant sea-level rise. The Port of Long Beach is a

great example of an entity that has started well in advance in starting to address sea-level rise in their development.

Specifically, the Port of Long Beach is embarking on creating a Climate Change Adaptation and Coastal Resiliency Strategic Plan, which will be a three-year process. The port through their Climate Change Adaptation and Coastal Resiliency Strategic Plan will be going through asset inventories, looking at the effects of sea-level rise, and assessing the Long Beach breakwater. Next, the port will be examining what areas of the port are most vulnerable and how do they assess those in terms of priorities. Some of the actions that may come out of this plan are going to be focused on changing and adapting what the port needs to do in terms of standards. The following are the objectives of the port's Climate Change Adaptation and Coastal Resiliency Strategic Plan:

- 1) Incorporate port policy-making, planning, infrastructure design, construction, maintenance, and operational activities;
- 2) Assess climate change risks;
- 3) Ensure resilience and business continuity of port operations and its transportation system;
- 4) Develop strategy to protect the built environment within the Harbor District;
- 5) Promote outreach and education; and
- 6) Provide methodology for climate change adaptation and coastal resiliency planning to other seaports

Mr. Cameron concluded that a plan or strategy should not be so much about evading sea-level rise, but being prepared for it and being resilient. Their goal is to keep the port and its customers up and running as the Port of Long Beach is a vital economic driver of the state as well as the nation.

Antonio Gioiello, Chief Harbor Engineer, Port of Los Angeles

Mr. Gioiello spoke about the port's experience in looking at the issue of sea-level rise and specifically discussed the port's collaboration with the RAND Corporation. In 2012, RAND prepared a white paper entitled *Characterizing Uncertain Sea Level Rise Projections to Support Investment Decisions*. The paper examined how to characterize deeply uncertain climate change projections to support such decision by examining a question facing the Port of Los Angeles: how to address the potential for presumably low probability but large impact levels of extreme sea-level rise in its investment plans. This study used a robust decision making analysis to address two questions: (1) under what future conditions would a Port of Los Angeles decision to harden its facilities against extreme sea-level rise at the next upgrade pass a cost-benefit test, and (2) does current science and other available information suggest such conditions are sufficiently likely to justify such an investment?

The goals of this collaboration through the white paper were to help the port develop an initial analysis of potential vulnerabilities and response to future sea-level rise; demonstrate applicability of robust decision methods to infrastructure planning under uncertainty; and evaluate effectiveness of these new methods compared to other approaches.

Below are the potential threats to the Port of Los Angeles due to climate change.



Many Expected Changes Pose Risks for the Port of Los Angeles

Climate Change Manifestations	Threats for the Port of Los Angeles
Sea level rise with added storm surge	Chronic flooding or inundation of connecting highway, rail Chronic flooding of open storage areas Reduced bridge clearance Liquefaction of substrate soils Dispersion of buried contaminants
More frequent, more intense, and longer lasting storms (greater precipitation, surge, waves, and wind)	Ship/wharf collisions Containers and other cargo from open storage physically dislodged Wharf or pier structures damaged Terminal buildings damaged or destroyed Specialized terminal equipment damaged or destroyed Pavement and foundations damaged or undermined Flooding of connecting highway, rail Stormwater system capacity overwhelmed Increased storm-related Port closures Increased underwater debris buildup, blockages or loss of markers hindering channel navigation Increased dredging requirements
More intense river runoff and flooding	Increased dredging requirements Increased flooding of adjacent low-lying areas
Potential opening of Arctic shipping routes	Changed shipping patterns leading to loss of business for Port

An important disclaimer and caveat that Mr. Gioiello discussed at the hearing is that even with sea-level rise projections there is still many unknowns and are likely to change as new evidence becomes available. In summary, the robust decision making approach used in the study could prove useful for many decisions related to sea-level rise and would be a model to help the port make decisions. The main thing that the port will be doing in the next several years is come up with a monitoring program. The port looked at the projections, but they do not know what the accelerations of the sea-level rise will be. The approach that the port will be taking for the next several years is to keep monitoring and building towards design guidelines to include some mitigations for the future.

Richard Sinkoff, Director of Environmental Programs & Planning, Port of Oakland

Richard Sinkoff, Director of Environmental Programs and Planning at the Port of Oakland, discussed raising awareness of sea-level rise and assessing the scale of the threat of sealevel rise to California seaports. In addition, Mr. Sinkoff presented the specific impacts to the Port of Oakland as well as the port's response to these challenges.

Below is an image of the Port of Oakland and some facts about the port that demonstrate its economic impact to not only the state, but also the nation.



A study³ was done at Stanford University that looked broadly at whether seaport and aviation managers are prepared for sea-level rise and essentially there were two major findings. One is that many are concerned, but under-informed and another is that the planning horizon for port infrastructure is often not in line with climate change trajectory. In other words, sea-level rise may happen quicker than the life cycle of port facilities.

³ Source: Becker, Austin; "Port Perceptions of Sea Level Rise - An Overview" (World Ocean Council, Sustainable Ocean Summit 2013)

Mr. Sinkoff further discussed that specifically the port's wharves, marine terminals, and railyards are vulnerable to flooding due to sea-level rise. In addition, state tidelands and habitat conservation areas that the port is managing are vulnerable as well. The port's efforts right now are mostly focused on the planning. The port is working with regional agencies in the Bay Area such as the Joint Policy Committee which is doing a resiliency study that involves the San Francisco Bay Conservation and Development Commission; the Association of Bay Area Governments; the Metropolitan Transportation Commission; and the Bay Area Air Quality Management District. The port is also conducting a sub-regional multi-hazard assessment of the port's vulnerable Oakland International Airport, which includes an integrated look at sealevel rise but also earthquake, flooding, and other hazards. The point is that there needs to be a more integrated approach to understanding the risks as they are all interrelated. The port is currently undergoing a project to raise the levee at the South Field of the Oakland International Airport. The project was initiated to protect the major passenger terminal and added a foot of height to the engineering to address the projected sea-level rise. Despite this project, there is still a lot of work to be done.

The port also has several projects underway that continue to deal with the greenhouse gas emissions side of the equation. Like many of the southern California ports, the Port of Oakland has a comprehensive air quality management program. In addition, the port is trying to shift their renewable energy resources procurement to meet the state standards, but also to address a more sustainable model for energy at the port.

Lastly, Mr. Sinkoff described the following policy considerations beginning first with the need for better data on the height of sea-level rise in addition we need better standardized specifications. Further, Mr. Sinkoff suggested there is a need for improved coordination among public and private entities; a need for a blend of regulations and incentives for adaptation strategies (especially a need for funding these studies); a need for a paradigm shift in bay fill to promote "living shorelines"; and a need to work with hydrology because there are ways where natural hydrological systems can actually help in this matter, so it is a combination of engineering and natural coastal systems. Mr. Sinkoff concluded his presentation by stating acknowledge the problem, take action, and figure out ways to adapt.

Kristin Decas, Executive Director, Port of Hueneme

Ms. Decas spoke to how the Port of Hueneme is addressing sea-level rise. The Port of Hueneme created in 1937 by the State Legislature, is a Special District of the state of California governed by five elected harbor commissioners. The port plays a vital role as a U.S. Port of Entry and is one of California's 11 strategic ports as shown on the following page.



Ms. Decas relayed that the port understands that it must be actively engaged on the issues surrounding climate change and sea-level rise since it will directly impact the future of infrastructure and operations. Emerging regulations and technical guidance are providing criteria to evaluate their harbor complex for varying scenarios of sea-level rise. The port developed an environmental framework that includes a strategic action plan dedicated to climate change. The first step of this plan is to conduct a baseline inventory to identify the short and long-term direct and indirect effects of sea-level rise. The findings of this assessment will allow the port to effectively begin incorporating changes to policy and contracting by incorporating considerations for sea-level rise in facility design and maintenance.

Given that the port is just launching the implementation of their strategic action plan on climate change, the port does not have hard evidence of associated impacts. However, there is the concern of how climate change may directly impact trade export activity and their regional economy since sea-level rise has the potential to significantly affect local beneficial groundwater resources in Ventura County and its robust agricultural production which represents an important export commodity.

In addition erosion is of particular concern to the port and surrounding areas because it breaks down natural barriers such as cliffs, beaches, wetlands, and dunes which provide protection to shore side structures. The Port of Hueneme operates at less than three meters above sea level which puts it at relatively high risk of damage should heavy flooding or wave activity occur. The port has already seen water breach the sea wall and deposit rocks and sediment on port property.

As a result, port infrastructure is a major concern. A port-wide conditions study will help determine the remaining life of certain infrastructure along with the cost/benefit analysis and whether maintenance, retrofits or new-builds are needed moving forward. The port also foresees indirect effects such as coastal storm surges and changes in runoff from watersheds affecting operations. Consistent with the findings of the port's initial climate change assessment, climate adaptation and sea-level rise can best be considered in the design and implementation of new equipment and infrastructure.

The port is responding to sea-level challenges through port policy, partnerships, and the implementation of projects that reduce greenhouse gasses. In 2012, the port's Board of Commissioners updated the port's environmental policy statement which led to the adoption of a Climate Change Adaptation Plan as an element of the port's Environmental Management Framework. The Climate Change Adaptation Plan seeks to identify measures, both short- and long-term, which the port can implement to improve its understanding, planning, administration, partnerships, and technical approach to anticipated effects of climate change.

The Climate Adaptation Plan is focused on two main objectives:

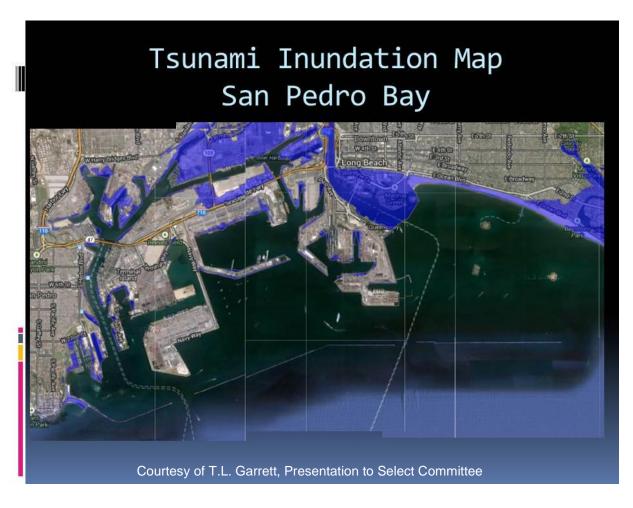
- 1) Tracking new and emerging studies that may provide better regional and local resolution of predicted potential impacts, and
- 2) Identifying strategies that can be implemented by the port to reduce operational and environmental impacts.

The port has also identified regional partners and is looking to actively engage those working to address the potential impacts of climate change and sea-level rise, including the United States Navy. The port has identified the U.S. Navy as a partner in developing and evaluating harbor specific data and information that can be used to support changes in policies and strategies allowing for continued operations of the harbor that accommodate anticipated sea-level rise. Additionally, the port has been tracking funding opportunities provided by the state and the Ocean Protection Council to support more detailed sea-level rise assessments. Further, the collaboration provided by Ventura County Coastal Resilience brings together state and national resources managers, regulatory agencies, and local level perspectives. In terms of what is needed to better respond, Ms. Decas stated that the port seeks clear guidance and information from state leaders and regulatory partners in order to adequately plan and develop their facilities to accommodate sea-level rise and other impacts from climate change.

T.L. Garrett, Vice President, Pacific Merchant Shipping Association

The Pacific Merchant Shipping Association is a trade association that represents terminal operators and ocean carriers that call on the West Coast of the United States. It is clear that preparation for sea-level rise needs to start sooner rather than later, especially because Mr. Garrett pointed out that sea-level rise is on top of surges, storms, and tsunamis. Like most people, Mr. Garrett had more questions than he had answers. Key questions he raised are: should more essential services (electrical generation, water, emergency services) be dedicated to the California port complexes to ensure uninterrupted operations in response to increasing sea-level rise that will intensify the effect of surges, storms, and even tsunamis, and then importantly when locating these services in the port, can they be protected?

To illustrate the effects of a tsunami on San Pedro Bay, below is a map of the Ports of Los Angeles and Long Beach from the Science Applications for Risk Reduction (SAFRR) report, which was led by the U.S. Geological Survey (USGS) and the California Geological Survey (CGS).



This is a worst-case scenario. The inundation map assumed a 9.1 earthquake in Alaska setting off a tsunami that reaches the California Coast, specifically San Pedro Bay. It was

estimated that the statewide cost would be \$8 billion from a tsunami of this magnitude, that the ports could potentially be shut for several days due to inundation and currents. The estimated cost of the San Pedro Bay port interruption would be somewhere between \$200 million and \$4.3 billion depending on the implementation of the recommended repairs estimated to cost \$100 million. It was also estimated that one in three recreational vessels/boats in coastal harbor and ports would be extensively damaged or sunk as a result of such an event. Interestingly, the report looked at the event occurring at high tide and as a result, the effects of the event would be much greater during high tide which speaks directly to sea-level rise.

Again, this is a worse case, but it surely must inform future decisions. Mr. Garrett suggested additional study is needed. The above scenario is an Alaska generated tsunami. It might be useful to do an additional study on the impacts of a California coastal event, or another event along the Pacific Rim. Further, after Hurricane Sandy the increased effects of storms and surge on coastal areas and ports must be considered. Mr. Garrett recommended that there are lessons that can be learned on coastal protection from the Fukushima Tsunami or Hurricane Sandy that could be applicable to our consideration of sea-level rise on California's coast. Of course, there is also the key question of where will the money come from to complete improvements that are going to be necessary to deal with this issue?

In discussing priorities and concerns, Mr. Garrett stated that safety will always be the number one priority. Safe transit to the berth, safe and stable berthing of the vessel while being worked, safe access by road and rail, and safe transit for public, workers, commuters, recreational users, and tourists, that regularly use the port complexes. Along with safe operations, security is essential to protect the vital national interests provided by the ports and maritime industry. Another priority is uninterrupted cargo movement. In addition to the economic importance of the ports, they provide a vital response capability in the event of a disaster. Further, vessel protection from surges, storms, and tsunamis and protecting supporting infrastructure such as power, road, and rail must be additional priorities. Finally, emergency response should be a priority. Large portions of the ports are isolated and if a significant event occurs, there needs to be adequate emergency services. Those services must also be protected to be of any use.

Impact of Sea Level Rise on California's Transportation Infrastructure: Airports, Highways and Roads, and Bridges

Paul Manasjan, Environmental Affairs Director, San Diego International Airport

Mr. Manasjan spoke about how the San Diego International Airport would be affected by sealevel rise. San Diego International Airport is the 3rd largest airport in the state of California. The airport services over 17 million passengers a year and contributes over \$10 billion to the local economy. The airport does all of this on 661 acres and is located in the northern portion

of San Diego Bay. The airport is right on the bay as evidenced by the image below with the airport highlighted in red.



The airport was built completely on fill and is entirely within the tidal zone. The airport is also home to the endangered California Least Tern, which nests right next to their runway and taxiways.

The airport's stormwater drainage system has 14 outfalls to the bay, so stormwater is a major issue for the airport. There is some relationship if you look at a whole systems approach to it, mitigating sea-level rise impacts and also mitigating their stormwater discharges.

The airport already experiences some flooding in its northern region. Since the entire airport boundary is within the tidal zone, the tide goes up everyday underneath their property through the storm drain system. Mr. Manasjan stated that about 2/3 mile away from the shoreline, the airport staff is seeing eel grass from the bay in their stormwater catch basins, which has been transported by the tide. When there is a high tide plus a storm event, the storm drain system fills up with the bay water and so there is no where for the surface water to go. As a result of

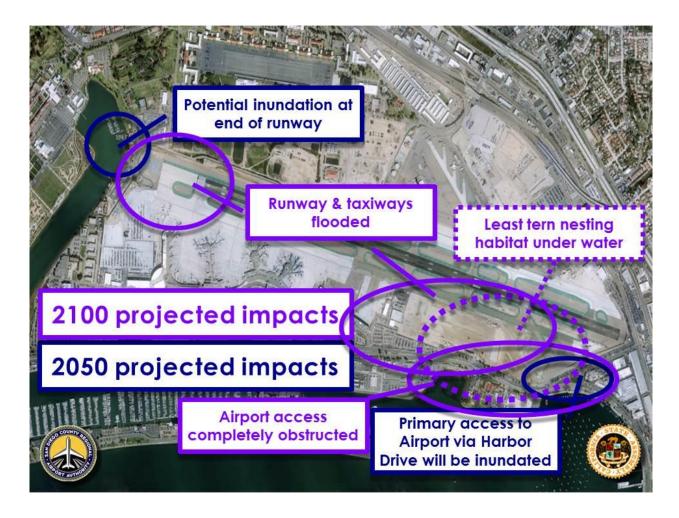
this, the airport experiences flooding in low areas. Fortunately, it has not impacted the runways or taxiways yet. But Mr. Manasjan stated that the airport believes it will eventually.

Good news that Mr. Manasjan shared is that there has been activity in the San Diego area to address the impacts of climate change. The San Diego Foundation realizing the vulnerability of the area's infrastructure along the bay and impacts to the community came out with a report focused on 2050 and looks specifically at the impacts of climate change on San Diego. People often think about the sea-level rise issues, but there are many more issues that the airport is concerned about when it comes to climate change including extreme heat events, impacts to water supply, water shortage, impacts to energy usage, public health effects, and fires which affect their activity at the airport.

In addition, a lot of climate science has been coming out of San Diego through work being done at local universities in regards to research relating to sea-level rise. There have been inundation studies done collectively and that information was taken into an effort to look at what is the impact of sea-level rise to the entire bay. This was an effort that was funded by the San Diego Foundation, ICLEI Local Governments for Sustainability administered it, and the Tijuana River Coastal Training Program helped with stakeholder engagement. The five cities around the bay, the Port of San Diego, and the airport participated in this effort, clearly a collective effort. The study itself was a comprehensive regional assessment of climate change impacts to the bay. The study also looked at various strategies for adaptation that could be utilized by those various municipalities around the bay. The study specifically looked at two time periods, 2050 and 2100. The study also differentiated between only sea-level rise impacts, which would be inundation, and sea-level rise combined with tidal surges and a storm event, which would lead to additional flooding.

Mr. Manasjan stated that the sea-level rise adaptation strategy for San Diego Bay was recognized nationally and is a prime example of what collaboration should be. The Steering Committee and Stakeholder Working Group assembled and established a process for adaptation strategy.

The airport faces various vulnerabilities. Storm drains will be inundated, primary access to the airport via Harbor Drive will be inundated, runway and taxiways will be inundated, and Least Tern nesting habitat will be underwater as shown in the map on the next page, which was included in the adaptation strategy report.



It is important to note that this map only shows inundations due to sea-level rise alone. It does not include storm events, which would exacerbate the problems. This demonstrates the potential and future impacts to the airport's terminal infrastructure and especially impacts to their runways, which would make it impossible for the airport to operate.

The adaptation strategies that came out of the bay report include hard structure such as seawalls, revetment, bulkhead, sea dike; soft structures such as beach nourishment, wetlands, green infrastructure; withdrawal such as buffers, setback and zoning, managed retreat; and accommodation such as raised ground level, raised foundations, floodable development, and floating structures. So, what is the airport doing now to address these impacts? Mr. Manasjan declared that the airport is taking a whole systems approach to how water comes on to their property and leaves their property. Specifically, the airport is looking at maximizing on-site retention of stormwater through pervious pavement with subsurface infiltration chambers such as in their parking lots, bio-retention swales, and rainwater capture and reuse cisterns. Another adaptation strategy that the airport is examining within the storm drain system itself is backflow prevention devices. Also at the end of the stormwater outflows there will be flapper gates installed.

The airport is in the process now of preparing a comprehensive strategic stormwater drainage master plan by looking at how the airport can maximize their opportunities for infiltration, but also collection and reuse of that stormwater as well. Next year, the airport hopes to conduct a more detailed site-specific airport infrastructure vulnerability assessment. Additionally, the airport recently joined the San Diego Regional Climate Collaborative because collaboration is essential in the work they are doing to address sea-level rise. Mr. Manasjan illustrated that if the city streets that access the airport are flooded, the airport has no control of that. So, if the city does nothing, the airport cannot operate. Therefore, collaboration is essential in the process. Mr. Manasjan concluded that the airport will be expanding opportunities for regional collaborations on climate resilience and will be identifying potential funding sources for studies and adaptation strategies.

Joe Birrer, Principal Engineer, San Francisco International Airport

Mr. Birrer spoke about the geography of San Francisco International Airport, its economic importance, and how SFO is addressing sea-level rise through their adaptation plan. San Francisco International Airport is on San Francisco Bay and is owned by the City and County of San Francisco, but uniquely resides in San Mateo County. The bay front perimeter at the airport is approximately 8 miles and the airport is built on fill over bay mud, so subsidence is an issue for the airport as well. Below is a good representation of the airport's location on the bay and geography.



The majority of the airfield and terminal areas lie at an elevation of approximately 6 to 10 feet. The image below puts the issue into perspective in that it will not take much in the area of sealevel rise to adversely affect the airport. Therefore, as the image says status quo is not an option. The airport realizes it must address sea-level rise and they are looking into it and trying to work proactively.



Status Quo is not an Option!



It is important to protect the airport because it is a huge economic engine for the San Francisco Bay region. In 2012, the airport directly accounted for over \$5 billion to the local economy and supported 33,000 jobs. Businesses at SFO generated \$2.5 billion in state and local tax revenues. Off-site businesses directly dependent on the airport contributed over \$31 billion to the Bay Area economy and supported 153,000 jobs. The airport served 44 million passengers in fiscal year 2012-2013, which is a record for the airport. These statistics demonstrate how important airports such as SFO are to communities and their economy and why airport infrastructure needs to be protected from sea-level rise.

The airport has been proactive in sustainability and mitigating their environmental impact, but even with that, the airport is still vulnerable to sea-level rise. The airport would like to take the same proactive approach to this problem.

Below is a map from the San Francisco Bay Conservation and Development Commission (BCDC) showing areas vulnerable to 16 inches and 55 inches of sea-level rise, including the airport shown in the circle which according to the projections would be underwater.



Even at 16 inches of sea-level rise it is not just the airport that is inundated, but it is also Highway 101, portions of the airport's neighboring cities, Caltrain, even potentially BART is affected. It will not take much to affect many different pieces of infrastructure in and around the airport.

If focusing specifically on the airport, not only is sea-level rise a looming problem for the airport, but also the airport is also very focused now on addressing the short-term potential flooding.

Being on the San Francisco Bay, the airport has protections in place. There are different types of seawalls that surround the airport as shown on the following page.







The image of the concrete seawall in particular illustrates the vulnerability of the airport due to the current water levels in the bay.

So, what is the airport doing about this? SFO has a Shoreline Protection Feasibility Study that started in January 2013 and is a two-year study. In this study, the airport is looking at determining the deficiencies of their seawalls and levee systems, assessing their interior drainage system and developing their adaptation plans going forward. The airport would also like to get recommendations from the study on the types of projects the airport needs to bring forward and implement to protect themselves against sea-level rise. Knowing that the airport is vulnerable, they have started to engage with other stakeholders such as the City and County of San Francisco, Army Corps of Engineers, San Mateo County Board of Supervisors, BCDC, State Coastal Conservancy, Caltrans, Federal Aviation Administration, U.S. Coast Guard, and business community in order to work collaboratively to address sea-level rise in the region.

So what is needed to move this issue forward? The development of policies and guidelines would be beneficial. Identifying lead agencies at the state to help airports move projects through when they do come up and start going on them. Further, of course funding opportunities whether through the state or federal government will be important to identify. Legislation that could facilitate collaborative approach among local and regional communities would be important in order to establish a balanced approach to address sea-level rise. Of course it will be very difficult to go forward without the support of the community so any educational or outreach programs that can help the community understand this issue, its scope, and cost will be imperative. Lastly, sea-level rise cannot be addressed in isolation. It will affect all of us whether it is the state, counties, or agencies like the airport. It really is going to need to be solved at a regional level. The airport could build a seawall to protect itself to the year 2100 and beyond, but if their neighbors are not equally protecting themselves, the airport would be flooded from its north and south boundaries. So, only by working with their neighbors and having a coherent and cohesive plan can they solve the issue for the airport. The final point Mr. Birrer wanted to express is to recognize that airports are going to have unique shoreline protection requirements. Wetland type projects or projects that would bring wildlife especially birds closer to airports are extremely dangerous to aircrafts and the flying public. To airports, the safety of the travelling public is going to be paramount. So, the projects that airports put forward to address sea-level rise may not look like other projects that are being implemented around the bay. This is going to be important for people to understand that one size does not fit all in terms of planning for sea-level rise.

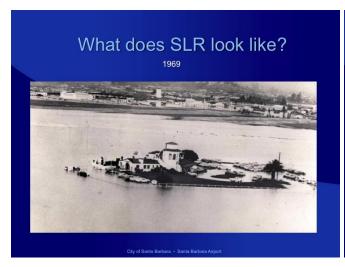
Andrew Bermond, Project Planner, Santa Barbara Municipal Airport

Mr. Bermond spoke about sea-level rise issues that are anticipated to impact the airport as well as unique situations at the airport that are offering a sea-level rise preview. The Santa Barbara Airport is located on the south coast of Santa Barbara County and is a city department. This is the largest airport on the central coast of California and has approximately 750,000 passengers a year. The airport also has 450 of their 1,200 acres of property designated as the Goleta Slough Ecological Reserve, which is primarily tidal wetland and surrounds roughly half of their airfield, which is shown below in green.



Mr. Bermond discussed the risk of sea-level rise for their airport, which is not rising tides coming in from the beach. It is flooding of stormwater that will stay around longer, cover larger areas, so that places that are rarely flooded will be flooded more often. The airport already sees a little of this happening when there are major storms and high tide events. As has

happened every twenty years or so the airport ends up underwater. Below are images of flooding at the airport.





History keeps repeating itself and these pictures are going to show up more often as a result of sea-level rise. Sea-level rise will result in more flooding that is more severe, which will result in habitat change or habitat loss. Therefore more urgently and immediately, the airport is seeing a change in bird behavior which leads to an increase in bird strike hazards. Not all birds are created equal at airports and the most dangerous are large migrating waterfowl such as ducks and geese that will be attracted to deeper waters which sea-level rise and extreme storms bring. To address this, the airport has an aggressive bird strike monitoring and reporting program. They still have relatively fewer bird strikes than other airports in the state, but Mr. Bermond believes that this is largely attributed to the airport's tidal wetland restoration project, which removed barriers to tidal flows into what used to be seasonal wetlands. The airport found through a three year study in partnership, with the Federal Aviation Administration, Coastal Conservancy, and Coastal Commission that by making this habitat change, the airport was changing the bird type such as local shore birds that was using the wetlands and they were therefore improving safety because these birds were less likely to incur on runways.

Part of the problem in addressing sea-level rise and adaptation strategies is that there is a very complex regulatory framework and as a result a difficult permit path for adaptation. There are a number of agencies from the federal, state, and local level that are involved and every one of them has the ability to either deny or issue special conditions. Under the adaptation strategy that the airport has outlined, the airport would be subject to the California Environmental Quality Act, they would have to get landowner permission from the State Lands Commission, they would need a coastal development permit, a streambed alteration agreement, and more. Mr. Bermond asserted that it is a convoluted process and promotes inaction because it is much simpler to wait for the emergency to arise and address it with some rapid and low cost engineering solution rather than adopting a large-scale management strategy.

The airport has been working collaboratively for a couple decades with the Goleta Slough Management Committee to address environmental issues and in the past two years the Committee has taken sea-level rise as a big threat to the Goleta Slough. The concern is habitat change and loss as well as long-term threats to infrastructure including runways and taxiways, access roads, and wastewater treatment facilities. The airport and others on this Committee are trying to get ahead of this threat and identify what needs to be abandoned, what needs to be moved, and what strategies are needed for proactive management to maximize resource and infrastructure protection.

Garth Hopkins, Office Chief for the Office of Regional and Interagency Planning, California Department of Transportation

Mr. Hopkins discussed the impacts of sea-level rise to California's transportation infrastructure such as highways, roads, and bridges. California's transportation system is a complex multi-modal system and the highway system is just one element of the statewide transportation network.

Caltrans is the owner and operator of the largest and most complex highway system in the country. Caltrans is responsible for maintaining over 50,000 lane miles of roadway, 12,000 bridges, 250,000 acres of roadside including 25,000 landscaped acres, 88 rest stops, 340 park and ride lots, and more than 400 maintenance yards with a fleet of more than 14,000 pieces of equipment. In 2012, there was approximately 180 billion miles of travel on the State Highway System. Caltrans works with local transportation agencies and other stakeholders such as the coastal commission to ensure the road network is safe and efficient.

California has the longest coastline in the nation – equivalent to 11 east coast states from New Hampshire to Georgia. There are thousands of miles of roadway along the coast – including the State Highway System and local streets and roads. In addition to roads, there is other infrastructure such as bridges and tunnels. In order to protect expensive real estate and other infrastructure, over one third of the southern California coast is armored.

Under current sea levels, approximately 1,900 miles (State Highway System and local streets) are at risk of a 100 year flood event and 4.5 feet of sea-level rise would put about 430 miles of highways at risk of flood.⁴

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⁴ Source: Pacific Institute. *The Impacts of Sea-Level Rise on the California Coast.* May 2009. http://www.pacinst.org/wp-content/uploads/2013/02/report16.pdf

Courtesy of Garth Hopkins, Presentation to Select Committee





Mr. Hopkins stated that the State Highway System currently experiences flooding. Portions of the State Highway System are inundated during large storms, and extreme events such as king tides in San Francisco, which are the highest tides of the year and occur during winter storms.

Flooding can cause temporary shut down of facilities, but can cause permanent damage to some infrastructure such as corrosion on metal signs, posts and culverts and pavement deterioration.

Courtesy of Garth Hopkins, Presentation to Select Committee



Mendocino County flood from storm surge



Coastal flood from king tide event in Marin County

In addition, transportation routes along coastal bluffs are vulnerable to erosion. As sea levels rise, waves will break closer to the shoreline accelerating the erosion of beaches, dunes and cliffs. Erosion rates vary based on coastal geology, and the degree of coastal armoring. The 2012 National Research Council report on sea-level rise for California, Oregon and Washington stated that with a one meter rise in sea level, the central and northern California

coast would lose 31 square miles or 20,000 acres of land to erosion by 2100. Mr. Hopkins revealed that billions of dollars have been spent protecting and relocating portions of Highway 1 from landslides and erosion. Caltrans protects infrastructure using retaining walls, shoreline armoring, soil nailing, and reinforcing embankments. Extreme cases may require relocation.





Retaining wall supporting Highway 1 in Monterey County



Coastal erosion along Highway 1 in Marin County

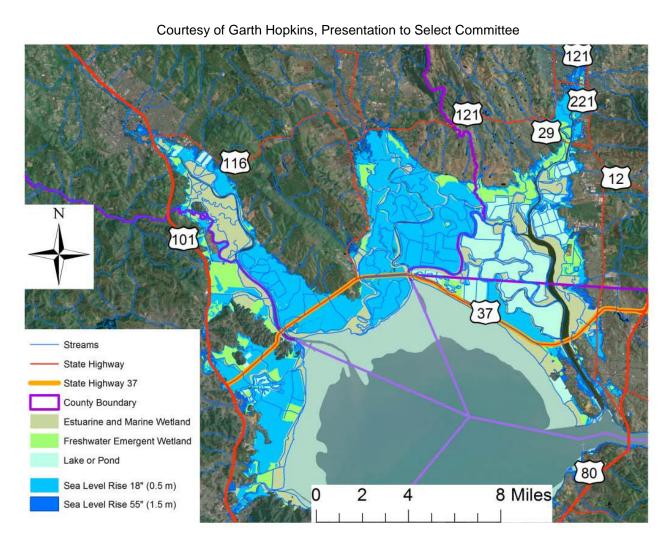
Bridge scour, which is the removal of sediment from bridge piers and abutments, has also become an issue. The sediment acts as a supporting material, helping to keep the structure properly "connected" to the ground to keep it well supported. Bridge scour occurs when water moves swiftly past bridge infrastructure. Scour is one of the three main causes of bridge failure. It is the most common cause of highway bridge failure, responsible for 60% of all bridge failures in the U.S. As sea levels rise, coastal bridges will need to withstand more and larger wave action, potentially accelerating bridge scour. In the future, design standards will likely need to change to recognize this impact of sea-level rise as there will be more scour situations.



Courtesy of Garth Hopkins, Presentation to Select Committee



Mr. Hopkins also shared how Caltrans is specifically addressing this critical issue. Caltrans' Divisions of Transportation Planning, Design and Environmental Analysis developed guidance for incorporating sea-level rise into the early engineering of projects. The document will be updated to become guidance for Caltrans staff on considering and incorporating sea-level rise into design and planning. In addition, Caltrans District 4 and regional partners are working with UC Davis to conduct a study of State Route 37, which is vulnerable to sea-level rise. It is a 21 mile route along the northern shore of San Pablo Bay that connects I-80 to Route 101. It is a key regional connector highway for the North Bay area, and is a designated emergency response route. Increasing traffic demands often create long bottlenecks which greatly reduces the level of service. It spans the northern shore of the San Pablo Bay, and is extremely vulnerable to sea-level rise. The study is examining alternatives to either relocate or elevate the road to increase capacity and potentially include transit options. Difficulties in determining the best alternative includes environmental considerations and transportation options. The land around the route is a vital marshland with high environmental sensitivity contains threatened species and environments. The current study is scheduled for completion in mid-2014. Below is a map that shows State Route 37 and its vulnerability to sea-level rise.



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Caltrans is also working to identify where the State Highway System is vulnerable to impacts from climate change, including sea-level rise. In District 1 (Del Norte, Humboldt, Mendocino, and Lake Counties) a vulnerability assessment is currently underway which has received funding from the Federal Highway Administration and Caltrans. The vulnerability assessment is looking at all potential impacts from climate change. Portions of the State Highway System in District 1 are highly vulnerable to sea-level rise, those areas will be identified and adaptation options will be studied. In District 4 (San Francisco Bay Area), a vulnerability assessment through BCDC's Adapting to Rising Tides project is also underway to identify how climate change may impact Bay Area communities. This is the second phase of the Adapting to Rising Tides project, also received funding from Federal Highway Administration and Caltrans. Both will be complete by late 2014. Caltrans headquarters will be conducting vulnerability assessments in other areas to get a statewide understanding of where the State Highway System is vulnerable to climate change and extreme events.

There are numerous sea-level rise projections in use. Mr. Hopkins asserted that to successfully plan and design projects to consider sea-level rise, a common set of projections needs to be agreed upon by all federal, state and local agencies. This will ensure consistency among agencies and help streamline regulatory/permitting processes. Mr. Hopkins concluded by suggesting that the Coastal and Ocean Resources Working Group for the Climate Action Team (CO-CAT) may be the appropriate group to make the sea-level rise projection determination.

Impact of Sea Level Rise on California's Water and Power Infrastructure: Stormwater Facilities, Wastewater Treatment Facilities, and Power Plant Facilities

Shahram Kharaghani, Watershed Protection Program Manager, City of Los Angeles Bureau of Sanitation

Mr. Kharaghani provided background on the Los Angeles flood control system and described the expected impact of sea-level rise to this system focusing on stormwater infrastructure. The Los Angeles flood control system consists of over 1,000 miles of storm drain pipes, 35 miles of open channels, 39,451 catch basins, 63 debris basins, and 18 stormwater pump plants. This infrastructure was created in the 1960s and 1970s and the population over the decades has grown substantially since; however, the backbone of this system is still in the same place that we were in the 1960s and 1970s.

The flood control system is vulnerable to flooding and inundation and sea-level rise would exacerbate flooding in low lying areas that are at or near sea level. Specifically, wastewater and storm water collection systems are sensitive to inflow from high tides, storm-related floods, and groundwater, which reduce their conveyance capacity. In addition, wastewater treatment plants and pumping plants are vulnerable to flooding and inundation because their electrical equipment and process operations can be damaged. Sea-level rise would only worsen the

problem. In fact, there is flooding occurring now. In January 2010, Harbor Boulevard between 5th Street and 6th Street in San Pedro flooded, as shown by the image below.



Courtesy of Shahram Kharaghani, Presentation to Select Committee

Most storm drain systems for cities and other jurisdictions discharge stormwater in the ocean, where the pipes are above the ocean level. However, during the day this photograph was taken, there was a severe storm and there was a high tide which acts like a wall and blocks the flow of stormwater into the ocean. As a result, the pipes backed up and flooding occurred. Imagine the problems that a permanent high tide such as sea-level rise will present for this area as well as the economic costs of addressing flooding. Mr. Kharaghani mentioned that this is more of what can expected if no appropriate planning is done.

Mr. Kharaghani stated that the Bureau of Sanitation has undertaken some efforts to make their assets more resilient to sea-level rise, and especially storm-related flooding. Two years ago, a microburst storm event caused sewage to back-up into homes in a handful of locations. This became the impetus to examine how the impacts of sea-level rise could impact the Venice Pumping Plant and sewer drains in San Pedro. The Bureau of Sanitation is planning to expand this vulnerability study to other sites to better understand what can be expected and how to prepare. In addition, the City of Los Angeles has incorporated sea-level rise in their planning documents and design for a proactive approach.

However, the challenge then becomes whether there is funding to actually implement the planning that has been done. Mr. Kharaghani urged that a stable funding source is needed in order to address sea-level rise and be proactive. He hopes that in the future a regional or municipal assessed stormwater fee could be the answer, but admitted that the two-thirds vote requirement established by Proposition 218 of 1996 is a major challenge, which he suggested should be reexamined.

Kevin Hardy, General Manager, Encina Wastewater Authority

In addition, to his work at the Encina Wastewater Authority, Mr. Hardy is also Second Vice President of the California Association of Sanitation Agencies (CASA), a statewide organization representing 106 local public agencies that provide wastewater collection, treatment, resource recovery and water recycling services to more than 25 million Californians. Mr. Hardy relayed that CASA members are actively engaged in a number of California's initiatives designed to mitigate climate change impacts by 2020 and address sea-level rise on wastewater treatment facilities.



Courtesy of Kevin Hardy, Presentation to Select Committee

Public wastewater agencies can play an important role in crafting and delivering climate change solutions while simultaneously accomplishing their core mission of protecting public health and the environment. Mr. Hardy stated that CASA believes their member agencies will experience the first significant infrastructure impacts of climate change. Wastewater treatment facilities will be among the hardest hit by climate change, in part, because treatment plants are generally located at the low point in each watershed to make efficient use of gravity for conveyance purposes. This means that in coastal areas, wastewater facilities are often located along the coast or within an estuary – and like the Encina Water Pollution Control

Facility that Mr. Hardy manages in Carlsbad, have an ocean outfall with a direct hydraulic connection to the facility. Even in the case of inland locations, plants and the outfalls are often found within river valleys and floodplains. As the sea level rises and storm surges increase in coastal areas, facility outfall elevations may need to be increased or may require pumping in order to discharge. Inundation of facilities, including higher coastal groundwater levels causes more inflow of brackish or salty water that in turn requires higher volumes or treatment levels and makes water recycling more energy intensive. In addition, extreme storms can result in water inflow that exceeds the current capacity of much of the wastewater infrastructure, meaning that wastewater agencies will need to invest significantly in upgrading systems to prevent sewage overflows and potential impacts to public health. Increased inland flooding events will put critical infrastructure and service at risk of failure meaning flood protection adaptation measures such as levees and seawalls will be needed. Thus, wastewater agencies will acutely experience the effects of sea-level rise and storm events attributable to climate change.

Climate change will pose unique challenges to California's and the nation's water, wastewater and stormwater utilities. Mr. Hardy stated that wastewater utilities across California and the U.S. can expect:

- Sea-level rise and storm surge impacts,
- Increased service disruptions from flooding,
- Increased extreme precipitation events,
- Increased treatment requirements,
- Higher energy demand,
- Increased emergency response and recovery, and
- Declining safe and reliable water supplies.

In addition, Mr. Hardy discussed some of the adaptation strategies that wastewater facilities will likely use to address these challenges which included the following:

- Elevating pumping stations, building levees and, in some circumstances, relocating treatment facilities to avoid rising sea levels from rendering the wastewater plant inoperable.
- Increased mitigation of brackish groundwater infiltration into the collection systems where influenced by rising sea levels.
- Increased focus on integrated watershed planning and use of the full toolbox of management techniques to manage systems holistically. This may include use of both green and gray infrastructure, real time management and optimization techniques, and other processes to manage wet weather flows, as well as more efficient treatment technologies.
- Increasing the treatment of wastewater, including cooling of the effluent, to address likely increased surface water temperatures of receiving bodies whose ecological health will be compromised under changed climate conditions.

Relying more heavily on reuse technologies so that wastewater can help compensate
for the decrease in drinking water availability. In California, we have seen a dramatic
increase in the interest to develop such projects to respond to the drought and ensure a
safe and reliable water supply.

CASA also believes that climate change presents them with unique opportunities. As wastewater agencies consider ways to confront this threat, their agencies are finding new ways to build upon the innovative energy savings developed over the past few decades. In addition to a focus on the impacts on infrastructure and operations of wastewater treatment systems related to sea-level rise, renewable energy production should also be addressed. Public wastewater agencies have the ability to develop and expand the utilization of alternative, renewable energy technologies and are in an excellent position to help reduce greenhouse gas emissions.

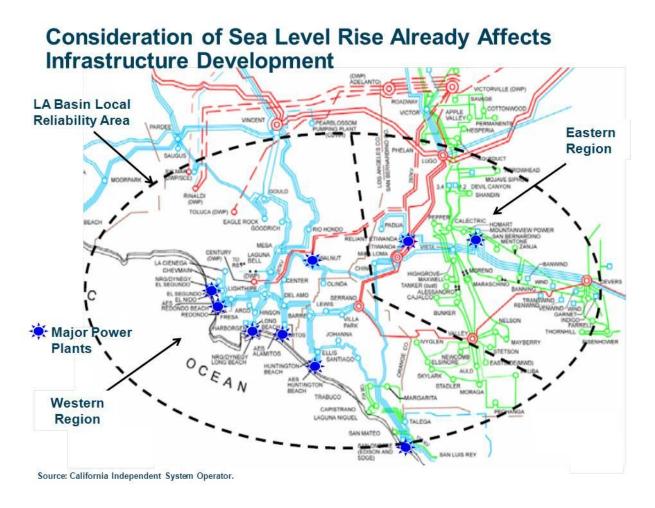
Mr. Hardy concluded by saying that California is a leader in the campaign to address climate change, and wastewater treatment plants can serve as very proactive partners in achieving state mandates adopted for this purpose. However, legislative and regulatory support is needed as well as increased funding opportunities to assist wastewater agencies in these efforts while they fulfill their primary mission to protect human health and the environment.

Stephen O'Kane, Manager of Sustainability and Regulatory Compliance, AES Southland

AES is a global power and utility provider in 21 countries serving millions of customers. When power plant operators look at adaptation and sea-level rise, it is a little more immediate as AES is currently in the process of redeveloping some very old, but very important pieces of infrastructure to the California power grid. AES has facilities in southern California in Huntington Beach, Long Beach, and Redondo Beach. The AES Long Beach power plant is now the largest power generating facility in southern California. All of AES' facilities are located on the coast originally to take advantage of the efficiency of ocean water for cooling and Mr. O'Kane asserts that power plants now need to remain on the coast for an entirely different reason. Over 15 million people and over 3 million businesses in southern California are dependent on electricity. So, it is critical that the infrastructure is kept in place. As AES looks at developing their sites, they do have to consider what the effect of the environment is on their facilities and what the future will look like.

There is a tremendous load of people who need electricity in southern California. Going forward Mr. O'Kane believes that if we want to meet our 2050 climate change goals, the only way is through aggressive electrification of the rest of our economy, such as at ports facilities and through the transportation network. This means increasing the demand and load near the coast. On the following page is a picture of the western Los Angeles reliability area for the independent system operator. The light blue lines are the 230 kilovolt transmission lines and the red lines are the 500 kilovolt longer range transmission lines that move power around the

western Los Angeles Basin. The blue dots are the major utility scale power plants that are located within this basin.



Again, Mr. O'Kane pointed out that these power plants are concentrated along the coast. Some may say that the easiest thing to do in order to mitigate for sea level changes is to move the power plants. However, Mr. O'Kane believes this is not the appropriate approach. He asserted that if we remove power plants or power lines that infrastructure is gone forever and may increase the risk for the businesses and economy that depend on the power in those areas. As a result, power plants would be in less effective locations having to generate more fuel and produce more power in order to serve the same number of people and businesses. Mr. O'Kane believes this issue has to be looked at holistically.

For AES it is reasonably easier to address sea-level rise since their facilities are small sites compared to ports and airports. For example, the AES Long Beach Power Plant, the largest in southern California, is only on 63 acres. From an engineering perspective, even at the outset of the 100 year prediction, it would not be difficult for AES to maintain and protect that site saving the infrastructure due to a number of factors. Currently, AES' lowest facility is 14 feet above sea level and by the end of that facility's life there may be a 2 or 3 feet sea-level rise. This is something that AES can manage. In addition, there is a relatively short planning

horizon for power plants since their facilities only have a 30 to 40 year time horizon. Therefore, in 2050 notwithstanding sea-level rise, the power plants will still be looking to rebuild.

Nevertheless, there are challenges for power plants in addressing sea-level rise in the future. Mr. O'Kane pointed out that no standard, code, or consensus exists for design requirements. In this absence, design and construction will be based on risk assessments and he stated that the final arbitrator on risk is the financial markets who will either be willing to provide the capital for development or not, using risk analysis to see is a return on their investment. Having the money to actually pay for projects to address this issue is the most pressing challenge.

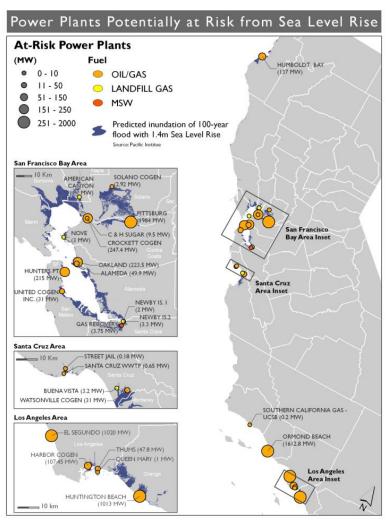
Since AES cannot foresee the future, they plan for multiple scenarios. In terms of design options for the near term to mitigate for some of the risks, AES does not want to be dependent on any of the variables that are changing. Therefore, AES has eliminated the use of ocean water in their design going forward. The other major plan of action to address future sea-level rise is making sure the major component of technology that the power plant is looking to implement is not at risk, so moving the maintenance and parts off site makes sense. Also when planning for an unknown future, civil works and site layout should allow for mitigation and adaptation options such as dikes, levees, seawalls which may need to be added. Mr. O'Kane in his closing stressed that as power plants move forward on developing sites to ensure safe reliable sustainable energy for the future, a key aspect is never giving up on options.

Roger Johnson, Deputy Director for the Siting, Transmission and Environmental Protection Division, California Energy Commission

Roger Johnson is the Deputy Director for Siting, Transmission and Environmental Protection at the California Energy Commission. He addressed sea-level rise and its potential effect on coastal power plants in California. The Energy Commission is the state's authority for permitting large thermal power plants. These include gas fired power plants, geothermal power plants, and solar thermal power plants. The Commission was designed to provide statewide consistency for permitting these large power plants. The Commission also has authority for permitting all related facilities associated with those power plants such as transmission lines, water supply systems, natural gas pipelines, waste disposal facilities, and access roads. The Commission oversees the construction, operation, and closure of power plants.

Mr. Johnson relayed that no California power plants are currently affected by sea-level rise. However, this does not mean that power plants are not at risk from sea-level rise. The NRG Long Beach power plant in the Port of Long Beach is located on land that is below sea level due to subsidence from past oil field extractions, but the project is protected by a dike. Recent planning studies suggest 25 power plants and 86 substations are at risk of flooding or compromised operation due to a 100-year flood with a 1.4 meter sea-level rise. Therefore,

much can be done to minimize or eliminate the risks. Below is a map showing California's power plants that are potentially at risk from sea-level rise courtesy of the Pacific Institute.



Source: Pacific Institute

So, how is the California Energy Commission preparing for future sea-level rise in the siting and the California Environmental Quality Act process? The Engineering Office of the Commission prepares assessments of site vulnerability to sea-level rise during siting and amendment proceedings. Consistent with other environmental impacts, sea-level rise is evaluated for the "reasonably foreseeable" life of the project, usually 30 years. Staff utilizes the latest projections about sea-level rise to assess whether or not the proposed project has adequate separation from groundwater or surface water features, which are the most direct threats from sea-level rise.

Power plant vulnerability relative to sea-level rise is related to 100-year flooding scenarios predicted by the Federal Emergency Management Agency (FEMA) Flood Insurance Rate maps (FIRM). Current projections that show power plants at risk are based on a sea-level rise scenario of 1.4 meters in 100 years plus FEMA flood inundation depth. The Commission is not

aware of any plants that have needed to, or are proposing any risk reduction measures at this time. Although in the future, some owners may choose engineered solutions to increase their flood protection. A response from an individual power plant may depend on how or if FIRM maps change.

So what is needed to better respond? Mr. Johnson stated that all the current projections for sea-level rise in California are for planning purposes. Site specific assessments are now being performed by Commission staff during active proceedings, but not necessarily for all existing power plants that are not amending their project or site. This would appear to be a gap. Perhaps the Commission could look at doing additional site specific assessments.

How State Agencies are Addressing Sea Level Rise in California Thursday, January 16, 2014 9:00 a.m. – 12:30 p.m., Sacramento

The Select Committee's fourth and final hearing brought the discussion back to the State Capitol. After hearing from affected industries, we turned our attention to how the state is addressing sea-level rise and what role the Legislature could play in responding to this challenge.

San Francisco Bay Conservation and Development Commission

R. Zachary Wasserman, Chair, San Francisco Bay Conservation and Development Commission (BCDC)

Four years ago, as part of its efforts to address rising sea levels, BCDC released its USGS-generated "inundation maps" that caused both great interest and much consternation. They showed the results of rising sea level in the bay, both within BCDC's jurisdiction and farther inland. BCDC recognized then, and certainly continues to recognize now, that California needs to plan for a rising bay to protect the long-term safety, wellbeing, and vitality of the Bay Area's communities, natural resources, and economy.

Chair Wasserman discussed two projects underway at BCDC that demonstrate the agency's attempt to help the Bay Area adapt to a rising sea level. The first is the Adapting to Rising Tides (ART) Pilot Project. BCDC is working in partnership with National Oceanic and Atmospheric Administration (NOAA) and with assistance from ICLEI Local Governments for Sustainability, Metropolitan Transportation Commission, and the Caltrans on the project. ART is a community-based collaborative planning effort that addresses two questions:

- 1) How will climate change impacts of rising sea level and storm events affect the future of Bay Area communities, infrastructure, ecosystems and economy; and,
- 2) What strategies can BCDC and its stakeholders pursue, both locally and regionally, to reduce and manage these risks?

ART is being conducted in a portion of the Alameda County shoreline, from Emeryville to Union City. ART has assessed the subregion's vulnerability and its risks, and has evaluated the vulnerability of the assets in the subregion, including transportation, community land use, parks and recreation, contaminated lands, structural and non-structural shorelines, the Port of Oakland, Oakland International Airport, stormwater/wastewater, hazardous waste sites and pipelines. Also, ART developed a portfolio of possible adaptation responses to address the subregion's vulnerabilities. ART is using four lenses through which to analyze communities' resiliency and ability to adapt: society and equity; economy; environment; and governance.

Secondly, BCDC and the Association of Bay Area Governments (ABAG) are leading the development of a collaborative regional planning and implementation program called "Resilient Shorelines" to address sea-level rise and storms, as well as earthquakes. Further, BCDC is starting to work formally with the State Coastal Conservancy to expand their cooperation, collaboration, and partnerships, as both agencies are conducting projects together and separately that promote regional resilience. The projects in the Resilient Shorelines program will help local and regional governments build the capacity to be active and successful participants so that local and regional strategies to address multiple hazards to the built environment and natural resources can be formulated and implemented from the bottom up. Some of the strategies will be integrated into the 2017 Bay Area Sustainable Communities Strategy to be adopted by the Joint Policy Committee.

From BCDC's experience examining the issue of sea-level rise, Chair Wasserman offered the following conclusions and recommendations to the Select Committee. The State should collaborate with local and regional government agencies to provide clear, consistent, and transparent standards and guidance, including agreed upon uniform data that informs and supports local decision-making processes. Land use decisions should continue to be made on the local level. The State should also support a wide variety of on-the-ground, community-based, and scalable resilience programs that exemplify best practices, provide necessary and useful policy information for a region's resilience, measure and monitor results, and are applicable to a wide variety of locales. Lastly, all levels of government must engage the public in constructive discussions to answer jurisdictional and policy issues. To solve the challenges and implement the recommendations of BCDC, Chair Wasserman asserted that the state needs an integrated, crosscutting, agency-wide policy development and implementation strategy, with funding to implement that strategy.

Natural Resources Agency

John Laird, Secretary, Natural Resources Agency

Secretary Laird testified before the Select Committee at the first hearing. There have been some developments since he testified, but as he stated, the basic problem is still present, if not more dramatic.

Rising sea level and the impact of erosion are severe. Of our 38 million people in California, three quarters of the population live in close proximity to the coast where sea-level rise is very much an issue. Among those are significant numbers of low-income people and communities of color who are especially vulnerable and might not have the same ability to respond.

There is critical infrastructure, such as roads, hospitals, schools, emergency facilities, wastewater treatment plants, power plants that are at increased risk of inundation, as are vast

areas of wetlands and other natural ecosystems. State-of-the-art modeling shows that a single extreme winter storm in California could cost on the order of \$725 billion – with total direct property losses of nearly \$400 billion. Sea-level rise threatens water supply by exacerbating saltwater intrusion in our freshwater sources like the Delta. It is estimated that \$900 billion of assets in California are at risk due to water dependency.

A great point that Secretary Laird made in his opening is that individuals often view sea-level rise as a future problem. However, he said that looking back, there has already been seven inches of sea-level rise over the 20th century. This demonstrates that California is in the middle of the problem and is not just looking at this prospectively. The crisis is already here and action needs to be taken now.

Secretary Laird shared that in December 2013, the Natural Resources Agency released a public review draft of the Safeguarding California Plan for ways to reduce climate risk, provide guidance, and take action. This plan is a policy guidance document for state decision makers and includes a chapter on Ocean and Coastal Ecosystems and Resources, which discusses risks from sea-level rise and recommendations for action still needed. The Safeguarding California Plan is a multi-sectoral plan meant to work in conjunction with sector specific implementation efforts such as Ocean Protection Council's sea-level rise resolution and sea-level rise guidance document. The Safeguarding California Plan recommends careful consideration of new development in areas vulnerable to flooding, inundation, and sea-level rise to minimize the adverse effects of sea-level rise and storms.

In addition, Secretary Laird said that the administration released the draft of the Bay Delta Conservation Plan which seeks to avoid water supply disruption and protect water quality by modernizing and updating California's water delivery facilities. He emphasized that the rising sea level will impact the Delta in two important ways: 1) increase the risk of overtopping and other forms of levee failure and 2) increased saline/brackish tidal pressure, which if not counteracted by increases in freshwater outflows will lead to increased saltwater intrusion and higher salinity levels in the Delta.

Even Governor Brown is involved in these issues as he has been appointed to President Obama's Task Force on Climate Preparedness and Resilience. The Natural Resources Agency, along with other state agencies and departments, are helping to staff this effort to provide recommendations to the task force and the federal government to encourage actions and support efforts to preparing for climate risks including sea-level rise.

In terms of other work the administration is doing to specifically address sea-level rise, the Ocean Protection Council in 2011 collaborated with a dozen other partners to implement a Coastal Climate Needs Assessment. The survey showed that the top two barriers for taking action on sea-level rise are lack of funding and lack of staff. As a result, the Natural Resources Agency has developed partnerships to address these barriers to support local

governments in assessing vulnerabilities and developing plans to reduce risk. To lessen these barriers, two coordinated grant programs were implemented. The Coastal Commission's Local Coastal Program (LCP) Assistance Grant Program and the Ocean Protection Council's Local Coastal Program (LCP) Sea-Level Rise Grant Program. The 2013 Budget Act approved an appropriation of \$1 million to the Coastal Commission to provide these grants which are the first LCP planning grants available since fiscal year 2000-2001. The Ocean Protection Council authorized \$2.5 million for their grant program. A second round of these grants has already been announced for another \$1 million from the Coastal Commission and another \$1.2 million from the Ocean Protection Council.

As demonstrated by these grant programs, local governments in all regions of the state are interested in taking action to reduce risk from sea-level rise. In fact many local governments are in the phase of conducting vulnerability assessments for sea-level rise, while others are working on developing land-use policies to address the issue. However, there is not enough state funding appropriated to support local governments in assessing vulnerabilities and reducing risk – applicants to the Coastal Commission's grant round requested over five times the amount of available funding. This still remains a challenge.

Secretary Laird asserted that public awareness and education needs to be a focus in order to tackle the issue of sea-level rise. The Natural Resources Agency, along with other government agencies and non-profit partners, are helping to raise awareness about sea-level rise and its accompanying risks through the California King Tides Initiative for example. The initiative asks the public to take pictures of king tides to show potential effects of future sea-level rise. The photographs provide coastal managers important information on the most vulnerable areas and provide a glimpse into the impacts of rising seas.

Secretary Laird concluded that sea-level rise is a slow-moving train wreck, but reminded nonetheless that it is still a train wreck. Just because sea-level rise will have more dramatic impacts in 50 years, does not mean that planners should wait until 50 years to address the problem. The Natural Resources Agency through their Safeguarding California Plan, through the work of the Ocean Protection Council, and through the King Tides Initiative are trying to provide guidance to the public and raise awareness that sea-level rise with all its impacts is coming and people must take action.

California Coastal Commission

Dr. Charles Lester, Executive Director of the California Coastal Commission

Dr. Lester discussed the Commission's work related to preparing for sea-level rise. Since 1972 California's coastal program has a tremendous record of protecting the values of the coast, including providing thousands of public accessways to and along the shoreline, preserving and restoring thousands of acres of marine, wetland, and terrestrial habitats, and

keeping hundreds of miles of rural agricultural and scenic coastlines nearly the same as they were 40 years ago.

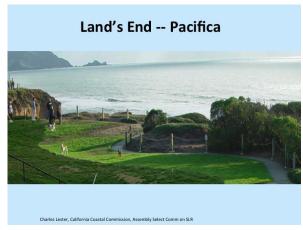
The success of the coastal program has been built on a strong and vital partnership between the state and local governments and active public participation. The Commission has 76 local governments (61 coastal cities and 15 coastal counties) in the coastal zone and in recognition of this the Commission established the Local Coastal Program (LCP) to implement statewide interests at the local level – 85% of coastal zone governed by an LCP developed by local governments in partnership with the Commission.

Finally, coastal management and land use planning is inherently dynamic. Change is constant, there is inherent uncertainty in many areas, and thus, constant management effort is needed. California must change, adapt, and update land use plans and development rules to address changing conditions such as sea-level rise.

Since its inception the Commission has addressed coastal hazards and new development by attempting to set back development sufficiently to be "safe" for its economic life. Coastal erosion can also be episodic, not incremental, creating emergency situations if planning is not done. Setbacks due to inadequate planning also lead to seawall and other shoreline structure developments that have adverse impacts on public access, recreation, and other coastal resources.

Dr. Lester gave the Lands End apartment complex as a good example. The Lands End apartments were built just before the Commission began regulating coastal development. At that time the apartments were set back from the bluff edge 150 feet based on an assumed 75 year life and 2 feet of erosion a year. The buildings were actually endangered less than 40 years later. The Lands End Apartments in Pacifica lost over 90 feet of bluff land in places over several months in 2009-2010, illustrating the sometimes "episodic" nature of bluff erosion, and placing the buildings in an emergency situation. In August, 2013, the Commission gave its final approval to the large emergency seawall to protect the buildings. On the next page you can view two sets of comparison images of the bluff, before and after the erosion.

Before:



After:



Before:



After:



To further guard against inherent uncertainties, Dr. Lester stated that the Commission has also applied a strong regulatory program to require that property owners assume the risks of developing in inherently hazardous locations. The challenge squarely in front the state is how to address accelerating sea-level rise in already urbanized or developed areas, in a way to protect private property interests and public trust resources.

Port Hueneme is another example that illustrates the tension between emergency response and proactive planning. \$2 million was approved by the Legislature to pay for the emergency revetment placed to protect coastal road, infrastructure and public access, due to the cessation of historic beach replenishment from the adjacent harbor dredging. The Commission is also working actively with Caltrans to plan for and relocate Highway One in numerous locations along the coast, as well as integrate the consideration of sea-level rise into major public highway projects, such as the I-5 expansion in San Diego.

Sea-level rise will significantly exacerbate coastal hazards, including accelerating bluff and shoreline erosion, and exacerbating storm conditions, wave attack and coastal flooding. The best available science establishes that sea levels will be rising, though there is some

uncertainty as to exactly how much. No matter what is done with greenhouse gas emissions, sea level will continue to rise for hundreds of years. Thus, adapting in some way to this geophysical reality cannot be avoided.

Dr. Lester shared that the Commission adopted a Strategic Plan in April of 2013 that includes a Multi-Pronged Strategy to Address Climate Change. The Commission is also currently in the development of comprehensive Sea-Level Rise Guidance for local governments and development applicants. The draft Sea-Level Rise Policy Guidance was out for public review on October 15, 2013. The guidance includes direction to:

- Use best available science to identify locally-relevant sea-level rise
- Assess local risks and impacts
- Analyze planning scenarios and development constraints
- Identify adaptation measures
- Update LCPs/design projects to address hazards (be adaptive) and protect other coastal resources
- Monitor and revise

The central piece of the Commission's coastal adaptation strategy is to enhance the LCP planning program. The primary goal is to update LCPs with new policies and land use planning to provide for intelligent adaptation to sea-level rise and other climate changes. Most LCPs were approved in the 1980s and are significantly out of date. In addition to the Commission's Strategic Plan, both the 2009 California Adaptation Strategy and the recently released draft Safeguarding California Plan recognize the importance of updating LCPs to address climate change.

However, the planning capacity of the Commission and local governments is significantly constrained. Increased investment, like the budget augmentation that the Commission received last year for the LCP program, will need to be sustained. In addition, more local assistance funds will be needed to support local government. On January 8, 2014, the Commission awarded \$1 million in LCP assistance grants to 11 local jurisdictions, but 28 applications requesting \$5.2 million had been submitted, illustrating the clear need for additional planning resources. The Commission will be allocating an additional \$1 million later this year.

In summary, Dr. Lester shared that the Commission's overarching strategy for coastal adaptation planning and responding to sea-level rise is centered on the existing LCP program and update of local community plans to provide for intelligent adaption to coastal hazards while protecting coastal resources. The Strategy requires investment in vulnerability assessments to inform LCP updates, and on-going intergovernmental coordination across five primary sectors: public access and recreation, sensitive resources, urban development, critical industrial infrastructure, and transportation infrastructure. New agencies or programs are not required;

rather, the state should invest in existing programs and institutions to achieve its coastal adaptation objectives.

Dr. Lester concluded by stating that people will adapt to a changing climate and environment. The important questions are: how and when? Comprehensive planning and investment in adaptation strategies will lead to more sustainable adaptation that both provides for a strong economy and a healthy environment.

California State Lands Commission

Jennifer Lucchesi, Executive Officer, California State Lands Commission

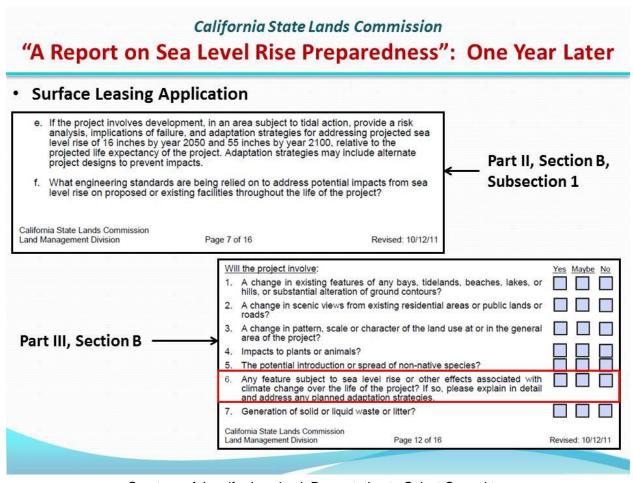
Ms. Lucchesi discussed her agency's experience with addressing sea-level rise. As background, the State Lands Commission serves the people of California by managing and protecting over 4 million acres of sovereign land, including the beds of California's navigable rivers, lakes and streams, and the state's tide and submerged lands. The Commission's jurisdiction extends along the state's over 1,100 miles of coastline and offshore islands from the ordinary high water mark to three nautical miles offshore. The Commission also exercises residual oversight authority over sovereign public trust lands granted in trust by the Legislature to approximately 80 local jurisdictions.

There are a tremendous amount of State owned land and resources under the Commission's jurisdiction that will be impacted by rising sea levels. Increased storm intensity and sea-level rise may put existing structures at risk and may lead to the loss of sandy beaches in some areas along the coast, while some areas may see an increase in the amount of sand deposited on the beach. One significant impact of sea-level rise as it relates to the Commission's jurisdiction will be to property boundaries from the resultant changes in the elevation of the mean high tide line. Because the boundaries of these lands are typically based upon this mean high tide line, sea-level rise can impact boundaries between state-owned sovereign land and private uplands.

Ms. Lucchesi shared that the Commission's efforts to address sea-level rise go back to 2009 when the Commission considered and approved "A Report on Sea Level Rise Preparedness," which was prepared to address concerns expressed by the Commission about sea-level rise and its implications for California's economic and social future. The Report included the results of a survey conducted by staff to assess the extent to which the Commission's grantees and lessees had considered the potential impacts of sea-level rise on their public trust lands. Of the 140 surveys sent out, only 40 responses were received. Based on the answers provided, it became apparent to Commission staff that the majority of the respondents had not yet begun to comprehensively consider the impacts of sea-level rise. As a follow-up in July 2010, Commission staff resurveyed 110 major lessees and grantees. Twenty seven

responses were received, 13 of which were first time responders. Of the 27 responses, 13 said that they had considered no action to address sea-level rise.

In addition to addressing the survey responses, the 2009 Report offered recommendations to better assess the impacts of sea-level rise on existing facilities, as well as future development proposals that may be considered by the Commission. One of the recommendations that the Commission implemented, was revising its surface leasing application to require applicants proposing new development to address whether any feature of the project would be subject to sea-level rise or other effects associated with climate change over the life of the project; and if so, the applicant must include an explanation of proposed adaptation strategies. This revision to the leasing application is shown below.



Courtesy of Jennifer Lucchesi, Presentation to Select Committee

In addition to these internal efforts, Ms. Lucchesi stated that the Commission is an active participant in addressing sea-level rise in many external ways. For example, the Commission actively participates on the state's Coastal and Oceans Climate Action Team which is working together with a multitude of stakeholders to educate and advise policymakers on mechanisms to prepare and plan for climate change and sea-level rise. The Commission has also worked

hard to address the impacts of sea-level rise on granted public trust lands, which includes tidal and submerged lands underlying the state's ports, harbors, and marinas.

Facilities and coastal access within the Commission's jurisdiction are especially vulnerable to incremental sea-level rise and storm surges with extreme high tides. Other climate change and sea-level rise related impacts affecting the Commission's administration of its jurisdiction include a potential increase in the number of applications the Commission receives to build seawalls or other protective structures.

Ms. Lucchesi conveyed that the Commission will also have to address the impacts of sea-level rise on property it manages pursuant to other agreements. An example is the historic Bolsa Chica Lowlands Restoration Project in Orange County that involves four state agencies, four federal agencies, and the Ports of Los Angeles and Long Beach. The \$151 million Restoration Project was completed in 2006, and resulted in the successful restoration of hundreds of acres of coastal wetlands on land also owned by the Commission. The Restoration Project was designed long before the current sea-level rise projections were in place. The Commission, however, as the landowner and financial trustee for the Restoration Project, will play a leading role in the long-term preservation of the habitat created by the Restoration Project, including protection from sea-level rise. In addition, as sea levels continue to rise the Commission's staff anticipates receiving more applications for large scale beach nourishment projects to address erosion.

In her close, Ms. Lucchessi suggested that the Legislature continue thinking about how to identify and prioritize sea-level rise planning goals, including providing agencies with the funding and resources necessary to address sea-level rise. The Commission also suggested that the Legislature begin thinking about how to provide guidance to mitigate potential public access conflicts and that guidance from the Legislature should reflect the importance of public access and the special/unique characteristics of public trust lands. Finally, she recommended that state and local governments should continue to coordinate their planning efforts and establish goals that are consistent and complementary to ensure effective planning for sealevel rise.

California State Coastal Conservancy

Nadine Peterson, Deputy Executive Officer, California State Coastal Conservancy

The Coastal Conservancy is the non-regulatory arm of the state's coastal management program. Their geographic boundaries include the entire coastline and its watersheds, the San Francisco Bay 9-county region, and the near-shore ocean area. The Conservancy's authority was expanded through SB 1066 in 2012. This legislation provided the Conservancy with explicit authority to help communities address climate change impacts and reduce greenhouse gas emissions while prioritizing expenditures on projects that maximize public

benefits. Ms. Peterson stated that the Conservancy's work on climate change is focused within four categories: policy and guidance; developing basic data including research, modeling, and decision-support tools; supporting local and regional resiliency planning; and implementing pilot and other projects that improve resiliency.

The Conservancy's climate work fits within the overall statewide policy context of the Natural Resources Agency's "Draft Safeguarding California Plan" and the Office of Planning and Research's "Draft Environmental Goals and Policy Report," which promote integration of climate resiliency measures into all policies, escalation of efforts to safeguard the state's natural systems and critical infrastructure, and building sustainable regions that support healthy livable communities.

Ms. Peterson shared that the Conservancy prioritizes project funding decisions based on a number of its adopted policies, project selection criteria, strategic plan, and on requirements specific to funding sources. These are updated as needed to respond to emerging issues and state policies. In response to the Governor's 2008 Executive Order and subsequent work by CO-CAT and the Ocean Protection Council, the Conservancy adopted its own Climate Change Policy and Project Selection Criteria, which requires consideration of a range of sea-level rise scenarios, and to the extent possible, projects must reduce risks and increase resiliency to sea-level rise.

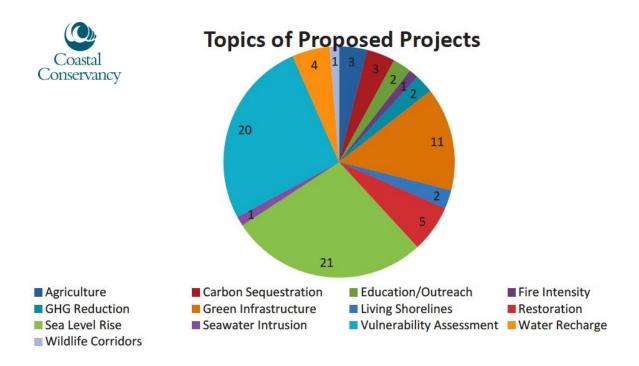
The Conservancy has also provided funding for development of several regional sea-level rise assessments. Each has a different set of regional and site-specific characteristics that must be factored in to effectively plan for future conditions.

The most successful adaptation planning work is collaborative, and involves local stakeholders working hand in hand with policy makers, planners and experts. Many tools are now available that allow stakeholders to visualize modeling results for multiple scenarios of sea-level rise, and to assess and compare the benefits and costs of alternatives adaptation measures. Humboldt Bay is one example of where the Conservancy has supported sea-level rise planning with community involvement.

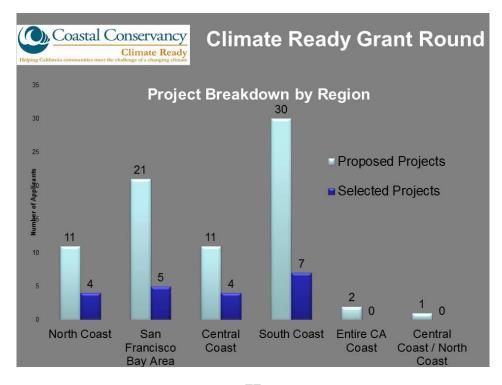
Preparing for sea-level rise is expensive, but not preparing for it will be more expensive.

Over the last year, small amounts of funding have been approved to help some communities plan for sea-level rise. The Conservancy is partnering with the Ocean Protection Council and Coastal Commission to help work on grants to fund local communities Local Coastal Program (LCP) updates. In addition, the Conservancy ran its own Climate Ready Grant Program. These grants were available to local governments and non-profit organizations throughout the coastal and San Francisco Bay Area. Originally, a total of \$1.5 million was available for awards through this competitive grant program. However, the Conservancy received 76 proposals, totaling just over \$13 million in requests. 21 of the proposals requested assistance

in addressing sea-level rise and extreme weather and tidal events as shown in the pie chart below.



At the end of the selection process, the Conservancy identified the 20 highest ranked projects and on January 23, 2014 the Board approved funding these projects, which totaled just over \$3 million. The chart below shows the number of Climate Ready Grant proposals requested and selected for each region.



In addition, the Conservancy identified the following legislative actions that they recommend to further support effective preparation for sea-level rise.

- 1) Direct state agencies to develop and utilize coastal climate smart goals and principles and a shared definition of climate resiliency. Examples of climate smart principles include prioritizing solutions that rely on natural infrastructure.
- 2) Direct coastal zone management agencies to identify the work that is needed to complete coastal adaptation and resilience plans for the entire coast and bay.
- 3) Create a Coastal Zone Management Resiliency Account to allow funds to be deposited from various new and existing sources for the specific purpose of supporting SLR resiliency.
- 4) Require LCPs to address climate change, including sea-level rise and extreme events.
- 5) Support beneficial re-use of sediment by adopting a resolution requesting the federal government to mandate that funding be spent on harbor maintenance projects and allowing beneficial re-use to be an eligible expenditure.

To effectively prepare for rising seas and extreme events, Ms. Peterson suggested that California must make it a priority to fund needed technical and planning work, staff resources, and construction and implementation of on-the-ground resiliency projects. Sea-level rise is going to happen. It will cost money to protect our communities, recreational amenities, and natural resources, but not doing so will result in tremendous losses of life, property, recreational resources, and natural resources.

CONCLUSION

This report is the product of the work of the Assembly Select Committee on Sea Level Rise and the California Economy and shows what the Select Committee has done to address and especially inform the Legislature and the public about the expected impacts of sea-level rise.

Our first hearing brought in scientists and academics who described the science behind why seas are rising and provided a broad overview of the threats and challenges facing California, setting the stage for our remaining hearings. Our second hearing looked in-depth at industries vital to California's economy that are affected by sea-level rise, such as coastal agriculture, fishing and aquaculture industry, and tourism. Our third hearing focused on the impacts of sea-level rise to California's infrastructure, such as its effect on ports, airports, roads, bridges, as well as water and power infrastructure. After hearing directly from affected industries, our fourth hearing turned our attention to how the state is addressing sea-level rise and what role the Legislature could play in responding to this challenge. Agendas, presentation materials, and videos of the four hearings as well as an electronic copy of this report can be found on the Select Committee's website at http://sealevelrise.assembly.ca.gov/ or by contacting committee staff.

This report is meant to provide the highlights from our four hearings, which informs why sealevel rise is happening and what the impacts will be. This report then goes further and attempts to answer the question "so what can we do about it" by providing policy recommendations that could be implemented though legislation, the budget, and by the administration.

While the Select Committee examined many issues related to sea-level rise and affected entities, there is still much more that can and should be investigated. For example, the impacts to public health have been mentioned briefly, but could be examined further. In addition, the role of the federal government and its agencies should be looked into especially since collaboration among all levels of government is crucial to adequately respond to the impacts of sea-level rise. Further, the issue of flood insurance could encompass an entire hearing. These are just a few examples of additional topics that should be explored.

Sea-level rise is a critical threat to Californians and our state's economy. This has been called a slow-moving emergency, but it is an emergency nonetheless. Therefore, action must be taken now in order to best prepare and adapt for the future. There is a lot of work to be done as we face many impacts from sea-level rise; however, we have time on our side, so let us begin.

ACTIONS TAKEN FROM POLICY RECOMMENDATIONS

From the Select Committee's policy recommendations the following legislation has been introduced in the 2014 Legislative Session:

- AB 2516 (Gordon, Achadjian, Lowenthal, Muratsuchi, Skinner, and Ting) would establish an online statewide Planning for Sea Level Rise Database overseen by the Natural Resources Agency and the Ocean Protection Council. The database would serve as a single source of information that portrays where California is in terms of preparing for, and adapting to sea-level rise. A statewide database would allow coastal zone management agencies and other involved state entities to coordinate and continue a discussion of sea-level rise preparedness. In addition, the database could be utilized as an educational vehicle for state agencies to engage the public about what is currently being done and what could be done to address this threat.
- ACR 160 (Gordon, Achadjian, Lowenthal, Muratsuchi, Skinner, and Ting) would encourage state agencies and non-state partners to consider establishing coastal climate adaptation goals and planning principles to help prepare for the impacts sealevel rise. The resolution would also encourage state agencies to communicate with the public and other entities regarding the risks of sea-level rise and the development and implementation of adaptive and protective measures to address those risks.

From the Select Committee's policy recommendations the following budget actions have been supported and are included in the 2014-15 adopted budget:

- The creation of the California Climate Resilience Account which will be spent by the state's Coastal Zone Management Agencies for coastal zone management activities related to addressing the risks and impacts of climate change, sea-level rise, and associated extreme events to coastal and bay communities and natural resources. Additionally, the budget appropriates \$2.5 million into this Account for planning and implementation activities to address the risks and impacts of climate change and sea-level rise, which will include local assistance grants.
- Additional funding to the California Coastal Commission to work in partnership with local
 governments to accelerate the completion and updates of Local Coastal Programs
 (LCPs). This LCP work will include critical climate change adaptation planning and
 methods to address projected accelerated sea-level rise consistent with the objectives
 in the Administration's draft Safeguarding California Plan.

APPENDIX 1: SELECT COMMITTEE WORKPLAN



Assembly Select Committee on Sea Level Rise and the California Economy Richard S. Gordon, Chair

Mission Statement:

The Select Committee on Sea Level Rise and the California Economy has been established to thoroughly review the challenges ahead in addressing the expected impacts of climate change on the California Economy. The Select Committee will examine in research and hearings the impact of sea-level rise on coastal agriculture, parks and other state lands, the fishing industry, and ports and infrastructure, as well as examine the existing authority granted to state entities such as the Coastal Commission, the State Lands Commission, the San Francisco Bay Conservation and Development Commission, and the Coastal Conservancy.

Deliverables:

The Select Committee will develop a report to the Assembly on key issues facing California, strategic potential legislative responses, and possible recommendations for future budget action.

Process:

Staff of the Select Committee will meet with key stakeholders and review reports and existing research in order to create an Assembly database on key issues.

The Committee will hold the following four public hearings.

Hearing Schedule:

Date	Location	Issues and Potential Witnesses
May 15, 2013	Sacramento	Overview and Impact of Sea Level Rise in California Threats and issues facing California and its economy
		Natural Resources Agency Ocean Protection Council Academics

July 24, 2013	Half Moon Bay	Agriculture, the Fishing and Aquaculture Industry, and Tourism Ocean Science and Ocean Acidification Farm Bureau Fishing and Aquaculture Industry State Parks
October 25, 2013	Long Beach	Infrastructure: Ports, Airports, Bridges, Roads and Highways, Water, and Power Port of Long Beach / Port of Los Angeles Port of Oakland San Francisco Airport / San Diego Airport Caltrans
January 16, 2014	Sacramento	 How State Agencies are Addressing Sea Level Rise Are agencies prepared to respond? What work is being done to address this challenge? How can the Legislature help agencies better respond to this threat? BCDC Natural Resources Agency Coastal Commission State Lands Commission Coastal Conservancy

APPENDIX 2: SELECT COMMITTEE HEARING AGENDAS

Members
Katcho Achadjian
Toni Atkins
Steven Bradford
Rocky Chávez
Jeff Gorell
Bonnie Lowenthal
Al Muratsuchi
Nancy Skinner
Philip Y. Ting

Assembly California Legislature



ASSEMBLY SELECT COMMITTEE ON SEA LEVEL RISE AND THE CALIFORNIA ECONOMY

RICHARD S. GORDON, CHAIR ASSEMBLYMEMBER, TWENTY-FOURTH DISTRICT

Overview and Impact of Sea Level Rise in California Wednesday, May 15, 2013 9:30 a.m. – 12:30 p.m., State Capitol, Room 444

AGENDA

9:30 a.m. Welcome and Opening Remarks

- Chairman Rich Gordon
- Members of the Select Committee

9:45 a.m. Overview of Sea Level Rise in California

- John Laird, Secretary, Natural Resources Agency
- Cat Kuhlman, Executive Director, Ocean Protection Council

10:15 a.m. The Impact of Sea Level Rise: Threats and Issues facing California and its Economy

- Dr. Gary Griggs, Distinguished Professor of Earth Sciences and Director of the Institute of Marine Sciences, University of California Santa Cruz
- Dr. Patrick Barnard, Coastal Geologist, U.S. Geological Survey Pacific Coastal and Marine Center, Santa Cruz
- Becky Smyth, West Coast Director / Regional Division Chief, National Oceanic and Atmospheric Administration Coastal Services Center
- Dr. Peter Gleick, President, The Pacific Institute

11:35 a.m. Preparing for the Effects of Global Warming: The American Public's Perspective on Sea Level Rise

 Meg Caldwell, Executive Director, Center for Ocean Solutions, Stanford Woods Institute for the Environment

12:00 p.m. Public Comment

12:15 p.m. Closing Comments and Next Steps for the Select Committee

Chairman Rich Gordon

Members
Katcho Achadjian
Toni Atkins
Steven Bradford
Rocky Chávez
Jeff Gorell
Bonnie Lowenthal
Al Muratsuchi
Nancy Skinner
Philip Y. Ting

Assembly California Legislature



ASSEMBLY SELECT COMMITTEE ON SEA LEVEL RISE AND THE CALIFORNIA ECONOMY

RICHARD S. GORDON, CHAIR ASSEMBLYMEMBER, TWENTY-FOURTH DISTRICT

Impact of Sea Level Rise on California's Coastal Agriculture, Fishing and Aquaculture Industry, and Tourism Wednesday, July 24, 2013

Half Moon Bay Department Operations Center 537 Kelly Avenue Half Moon Bay 2:00 p.m. – 5:00 p.m.

AGENDA

- 2:00 p.m. Welcome and Opening Remarks
 - · Chairman Rich Gordon
 - Members of the Select Committee
- 2:15 p.m. Impact of Sea Level Rise on Coastal Agriculture
 - Mary Scruggs, Supervising Engineering Geologist, California Department of Water Resources
 - Norm Groot, Executive Director, Monterey County Farm Bureau
 - Dr. Rosemary Knight, Professor of Geophysics, Stanford University
- 3:00 p.m. Impact of Sea Level Rise on Fishing and Aquaculture Industry and the Effects of Ocean Acidification
 - Dr. Gretchen Hofmann, Professor of Marine Biology, University of California Santa Barbara
 - · Zeke Grader, Executive Director, Pacific Coast Federation of Fishermen's Associations
 - Greg Dale, Southwest Operations Manager, Coast Seafoods Company
 - Bruce Steele, Commercial Fisherman
- 4:00 p.m. Impact of Sea Level Rise on Tourism
 - Jay Chamberlin, Chief of Natural Resources Division, California State Parks
 - Aaron McGregor, Associate Scientist, California Ocean Science Trust
- 4:35 p.m. Public Comment
- 4:50 p.m. Closing Comments
 - Chairman Rich Gordon

Sea Level Rise Members
Kateho Achadjian
Toni Atkins
Steven Bradford
Rocky Chávez
Jeff Gorell
Bonnie Lowenthal
Al Muratsuchi
Nancy Skinner
Philip Y. Ting

Ports Members Toni Atkins Rob Bonta

Wesley Chesbro

Isadore Hall, III

Al Muratsuchi

Brian Nestande Nancy Skinner

Jeff Gorell

Ken Cooley Susan Talamantes Eggman

Assembly California Legislature



JOINT HEARING

SELECT COMMITTEE ON SEA LEVEL RISE AND THE CALIFORNIA ECONOMY

AND SELECT COMMITTEE ON PORTS

RICHARD S. GORDON, BONNIE LOWENTHAL, CHAIRS

Impact of Sea Level Rise on California's Infrastructure Friday, October 25, 2013 Aquarium of the Pacific 100 Aquarium Way, Long Beach 1:00 p.m. – 5:00 p.m.

AGENDA

1:00 p.m. Welcome and Opening Remarks

- Chair Rich Gordon, Chair Bonnie Lowenthal
- Members of the Select Committees

1:20 p.m. Sea Level Rise and California's Infrastructure

• Heather Cooley, Water Program Co-Director, Pacific Institute

1:35 p.m. Impact of Sea Level Rise on California's Ports

- Richard Cameron, Acting Managing Director of Environmental Affairs & Planning, Port of Long Beach
- Antonio Gioiello, Chief Harbor Engineer, Port of Los Angeles
- Richard Sinkoff, Director of Environmental Programs & Planning, Port of Oakland
- Kristin Decas, Executive Director, Port of Hueneme
- T.L. Garrett, Vice President, Pacific Merchant Shipping Association

2:40 p.m. Impact of Sea Level Rise on California's Transportation Infrastructure: Airports, Highways and Roads, and Bridges

- Paul Manasjan, Environmental Affairs Director, San Diego International Airport
- Joe Birrer, Principal Engineer, San Francisco International Airport
- Andrew Bermond, Project Planner, Santa Barbara Municipal Airport
- Garth Hopkins, Office Chief for the Office of Regional and Interagency Planning, California Department of Transportation

3:40 p.m. Impact of Sea Level Rise on California's Water and Power Infrastructure: Stormwater Facilities,

Wastewater Treatment Facilities, and Power Plant Facilities

- Shahram Kharaghani, Watershed Protection Program Manager, City of Los Angeles Bureau of Sanitation
- Kevin Hardy, General Manager, Encina Wastewater Authority
- Stephen O'Kane, Manager of Sustainability and Regulatory Compliance, AES Southland
- Roger Johnson, Deputy Director for the Siting, Transmission and Environmental Protection Division,
 California Energy Commission

4:35 p.m. Public Comment

4:50 p.m. Closing Comments

Chair Rich Gordon, Chair Bonnie Lowenthal

Members
Katcho Achadjian
Toni Atkins
Steven Bradford
Rocky Chávez
Jeff Gorell
Bonnie Lowenthal
Al Muratsuchi
Nancy Skinner
Philip Y. Ting

Assembly California Legislature



ASSEMBLY SELECT COMMITTEE ON SEA LEVEL RISE AND THE CALIFORNIA ECONOMY

RICHARD S. GORDON, CHAIR ASSEMBLYMEMBER, TWENTY-FOURTH DISTRICT

How State Agencies are Addressing Sea Level Rise in California Thursday, January 16, 2014 State Capitol, Room 126 9:00 a.m. – 12:30 p.m.

AGENDA

9:00 a.m.	Welcome and Opening Remarks		
	Chairman Rich Gordon		
	 Members of the Select Committee 		
9:15 a.m.	San Francisco Bay Conservation and Development Commission		
	 R. Zachary Wasserman, Chair, San Francisco Bay Conservation and Development 		
	Commission		
9:50 a.m.	Natural Resources Agency		
	 John Laird, Secretary, Natural Resources Agency 		
10.05			
10:25 a.m.	Coastal Commission		
	 Dr. Charles Lester, Executive Director, California Coastal Commission 		
11:00 a.m.	State Lands Commission		
11.00 u.iii.	Jennifer Lucchesi, Executive Officer, California State Lands Commission		
	5 Veninter Edechesi, Executive Officer, Camorina State Edites Commission		
11:35 a.m.	Coastal Conservancy		
	Nadine Peterson, Deputy Executive Officer, California State Coastal Conservancy		
12:10 p.m.	Public Comment		
12:25 p.m.	Closing Comments		
	Chairman Rich Gordon		