1 2 3 4 5 6 7	MICHAEL P. MURPHY, COUNTY COUNSEL (SBN 8 By: John D. Nibbelin, Deputy (SBN 184603) Hall of Justice and Records 400 County Center, 6 th Floor Redwood City, CA 94063 Telephone: (650) 363-4757 Facsimile: (650) 363-4034 Attorneys for CRYSTAL SPRINGS COUNTY SANITATION DISTRICT	3887)
8		ALTER OLL LITTLE GOVERNOL DO L. D.D.
9	BEFORE THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD	
10	SAN FRANCISC	O REGION
11		
12	In The Matter Of the	Case No. R-2-2008-0065
1	CRYSTAL SPRINGS COUNTY SANITATION DISTRICT.	RESPONSE OF THE CRYSTAL SPRINGS COUNTY SANITATION DISTRICT TO
13	SANITATION DISTRICT.	THE TENTATIVE CEASE AND DESIST
14		ORDER
15		<u>Hearing</u> :
16		Date: December 10, 2008 Time: 9:00 a.m.
17		Location: Auditorium, Elihu Harris State Building, 1515 Clay Street, Oakland
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20	Pursuant to the September 16, 2008 Notice from the California Regional Water Quality Control Board, San Francisco Bay Region (the "Board"), the Crystal Springs County Sanitation District (the	
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23	"District") hereby submits its written comments and evidence in response to the tentative cease and desist	
24	order directed at the District (the "Tentative Order").	
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27	The District has agreed to settle the Civil Liability Complaint (Complaint No. R2-2008-0065) seeking administrative civil liability in an amount of \$23,375 (the "Complaint") and has waived its right to a hearing regarding this matter.	
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20	Case No. R-2-2008-0065	

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BACKGROUND LAW AND FACTS

The following facts, which are set forth in the Board's Tentative Order, are not materially in dispute.

The District

The District, which provides sewer collection in an unincorporated area of the County, was established in 1947 pursuant to legislative authority set forth in the County Sanitation District Act, which is now codified at section 4700, et seq., of the California Health and Safety Code. The District has a population of 5,615 residents, based on 2000 census data, and approximately 1,430 sewer connections and 1,532 equivalent residential units (ERUs), based on the District's 2008-2009 sewer service charge report. The District is comprised almost exclusively of residential customers, with only four nonresidential sewer connections. Residential customers are charged for sewer services at a rate based on ERUs. (The present rate is \$900 per ERU.) The District maintains approximately 18.95 miles of sewer lines, with approximately 29% of sewer mains located in easements in backyards and side yards and the remaining 71% of sewer mains located within streets.

County Sanitation District Act

Under the Act, all powers of a county sanitation district are exercised by the district's governing board. Cal. H&S Code § 4763. As in the case of the District, where the territory of the sanitation district does not include territory located within an incorporated city or a sanitary district, the county's board of supervisors also serves as the sanitation district's governing board. Cal. H&S Code § 4730 (providing that where "the district includes no territory which is in cities or sanitary districts, then the county board of supervisors is the board of directors of the district").²

While, in cases such as this, the county's board of supervisors also serves as the board of directors of a sanitation district, it is well established that sanitation districts are separate and distinct legal entities that operate independently from the counties in which they are located. Mitchell v. County Sanitation

Sanitation districts "as formed may include incorporated or unincorporated territory, or both." Cal. H&S Code § 4711. When a sanitation district includes incorporated territory, the district's board of directors includes "the presiding officer of each city, the whole or part of which is included in the sanitation district." Cal. H&S Code § 4730.

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District No. 1 of Los Angeles County (1958) 164 Cal. App. 2d 133, 144 (holding that sanitation districts are "municipal corporations" that "operate independent of other agencies").

Such districts are vested with broad-ranging powers, such as the power to sue and be sued in its own name. Cal. H&S Code §4738. They may also employ such sanitation experts, surveyors, counsel, and other persons as are needed to carry into effect any powers of the district; own property and sewer systems; impose and collect rates, fees and charges for service provided; join with any other governmental agency in the purchase, ownership, use, construction, maintenance, or operation of a sewer system or treatment plant; contract with the county to apportion the costs of locating, or repairing, any facilities on the property of the other party; sell, lease, or otherwise dispose of any property of the district; issue bonds; incur bonded debts. Cal. H&S Code §§ 4739, 4740-4741.6, 4741.7 and 5471, 4742, 4742.4, 4743, 4746, and 4746.1. District may also cause to be levied and collected taxes upon all the taxable real property in the district sufficient to meet the obligations evidenced by its bonds, to maintain the works of the district, and to defray all other expenses incidental to the exercise of the district powers. Cal. H&S Code §4747. They shall also employ sanitation engineers to make a survey and report on the problems of the district concerning sanitation especially with reference to the matters of sewage collection, treatment, and disposal, and refuse transfer or disposal. Cal. H&S Code §§ 4748-4758. They may borrow money and incur indebtedness; (§4764) lobby for legislation (§4765); and contract with any state agency to finance any district facilities authorized by state law. Cal. H&S Code §§ 4764, 4765, 4764.5.

District Operations and Finances

The sewage collected within the District is transported through jointly used sewer trunk mains owned and operated by the Town of Hillsborough ("Hillsborough") and the City of San Mateo ("San Mateo"). The District is party to a 1989 four-party Sanitary Sewage Agreement (the "Agreement") with San Mateo, Hillsborough, and the County of San Mateo (the "County")³, which sets forth the parties'

The County of San Mateo is a party to the Agreement in its capacity as a property owner, in that it operates sewer facilities upstream from the District that also flow through sewer trunk mains owned and operated by Hillsborough and San Mateo.

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respective responsibility for the above described sewers and other jointly used facilities, including a waste water treatment plant ("WWTP") operated by San Mateo, to which waste from each of the parties' sewers flows. 4 Under the Agreement, each party is responsible for necessary maintenance, repair, and improvement of the sewers that it owns, and the Agreement also requires the District to pay a proportional share of downstream capital improvement projects in Hillsborough and San Mateo. Also, the Agreement specifies how sewage flows to the WWTP will be measured, and how plant-related expenses will be allocated between the parties, based on their respective proportional contributions to total flow to the WWTP.

Crystal Springs Sewer Master Plan, Planned System Improvements, and District Finances

In 1999, the District prepared a Crystal Springs Sewer Master Plan. The plan identified nine capital improvement projects that were deemed necessary to address capacity limitations and structural deficiencies in the sewer system. One of the nine projects, involving the replacement of sewer lines along Polhemus Road, was intended to address system capacity deficiencies, and was completed in 2003. This project was paid for out of the District's fund balance. Further, the County loaned the District approximately \$1 million dollars to help pay for the District's proportional share of liability for a capital improvement project undertaken by Hillsborough. The District has not vet repaid this loan.⁵ The other eight projects, which would correct structural deficiencies or replace deteriorating sections of the system, have not been undertaken, due to a lack of funding. Further, the City of San Mateo has nearly completed capital improvements at the WWTP and, pursuant to the Agreement, the District is responsible for a share of financial responsibility for this project.

In 2006, the District's Board of Directors attempted to raise sewer service charge rates from \$496.00 per ERU to \$1,517 per ERU, beginning in the 2006-2007 fiscal year, in order to provide the revenue necessary to pay for capital improvements to the District's sewer system and the District's share

A copy of the Agreement is attached as Exhibit A to this memorandum.

The loan was from the County's general fund, in the amount of one million dollars. The loan, which was made in 2006, is for a seven year period, with the first two years being interest only. The 2008-2009 fiscal year is the first one in which the District is required to make principal payments. A copy of the loan document is attached hereto as Exhibit B.

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of cost of downstream improvements and implement a Sewer System Management Plan for the District.⁶ However, property owners within the District mounted a successful majority protest pursuant to Article 13C of the California Constitution (Proposition 218) and the District was unable to implement the proposed rate structure. In the 2006-2007 fiscal year, the revenue from the sewer rates was approximately \$739,000.

Thereafter, District staff met multiple times with District community members/rate payers to discuss the need for increased fees to finance District operations and improvements.⁷ As a result of these efforts, the District Governing Board was able to raise the District's sewer service charge rates to \$900 per ERU, beginning in the 2007-2008 fiscal year, without a majority protest. The District's revenue from the 2007-2008 fiscal year rates was approximately \$1,349,000. This rate and the revenue it generated was anticipated to allow the District to repay the loan from the County, pursuant to the terms of the loan agreement, as well as to allow the District to pay, over a fifteen-year term, its share of the cost of improvements at the San Mateo WWTP. It does not, however, provide the revenue necessary to complete the remaining eight projects described in the Crystal Springs Sewer Master Plan, nor does it provide funds for the out-of-District projects described in the Tentative Order.

Sewer service charges have remained at the rate of \$900 per ERU during the 2008-2009 fiscal year. 8 Staff has continued to meet with members of the community to educate them on the need to increase the District's revenues in order to fund operations and maintenance activities and in- and out-of-District capital improvement projects such as those set forth in the Tentative Order. The District staff intends to recommend to its Board of Directors a sewer service charge rate increase for the 2009-2010 fiscal year. The proposed rate increase will come to the District's Board of Directors in April 2009. Assuming that the Board of Directors approves the rate increase, and further assuming that it is not the

A copy of the staff report materials proposing the increased rates is included as Exhibit C to this memorandum.

⁷ A partial list of the dates of staff meetings with District residents/rate payers is attached as Exhibit D to this memorandum.

⁸ A summary of the District's financial information as of November 7, 2008 is attached hereto as Exhibit E.

subject of a successful majority protest, the District would nevertheless not begin to receive revenue from such an increase until December 2009, as the fees are collected by the County Tax Collector on the County property tax bills, and the first annual property tax payment is not deemed late until after December 10th.

ADMINISTRATIVE CIVIL LIABILITY COMPLAINT AND TENTATIVE CEASE AND DESIST ORDER

The Board's Complaint and Tentative Order alleges that the District violated various laws and permits by allowing 22 sanitary sewer overflows ("SSOs") throughout the system since December 2004. The Board alleges that these 22 SSOs resulted in a total of 18,000 -19,000 gallons of spilled sewage, 15,000 of which resulted from one event on January 25, 2008. The Tentative Order alleges that the SSOs were caused by, among other things, debris and root blockages and storm water inflow and infiltration into the sewer collection system from leaky pipes. The administrative complaint seeks to assess a penalty of \$23,375 from the District and the District has agreed to waive its right to a hearing to challenge this penalty.

The Tentative Order would require the District, Hillsborough and San Mateo to take certain actions to eliminate the SSOs. Among other things, the District would be required to complete, by October 31, 2013, eight remaining capital improvement projects identified in the 1999 Sewer Master Plan (SMP). It would also require the District to develop an SSO Response Plan that describes emergency response and contingency procedures to address SSOs, and development of a Sewer System Cleaning and Root Control Program to ensure that at least thirty percent of the District's sewer pipe mileage is cleaned each year. The Tentative Order would also require the preparation and submission of a number of reports, assessments, plans and certifications, including a plan, due by March 15, 2011, to address short and long-term repair, rehabilitation, and replacement of sewer pipes.

The 1999 Sewer Master Plan (SMP) identified nine capital improvement projects necessary to address capacity limitations, structural deficiencies, and areas of excessive maintenance in the sewer system. One of the nine projects was completed in 2003. The other eight projects have been deferred, due to a lack of funding. It is estimated that it would cost approximately \$2.3 million to complete the remaining projects.

While the Board recognizes that District itself lacks resources to pay the administrative penalty and/or undertake the systems improvements sought in the Tentative Order, it alleges that the District is operated by the County and that the County has resources in its general fund to pay fines and undertake the activities required by the Tentative Order.

DISTRICT RESPONSE TO ADMINISTRATIVE CIVIL LIABILITY COMPLAINT

As noted, the District has waived its right to contest the imposition of the administrative civil liability in the amount of \$23,375.

DISTRICT RESPONSE TO TENTATIVE CEASE AND DESIST ORDER

By way of background, it is important to note that the District maintains nineteen miles of pipe, that there were twenty-two SSOs during the time period in question, and that there were a total of 18,763 gallons of waste spilled in connection with these SSOs. This reflects approximately 987 gallons of waste spilled for each mile of pipe during the time period at issue. It is also important to note that the one large spill discussed in the Tentative Order and the Complaint (of approximately 15,000 gallons) that occurred during a storm event significantly distorts this data. ¹⁰ If that one spill were removed from the analysis, the total gallons spilled from the District's system would be approximately 3,763 gallons and the gallons spilled per each mile of pipe would be reduced to 198.

The County Does Not Operate the District

On Page 3 of the Tentative Order, the Board asserts that the "County of San Mateo operates the Crystal Springs Sanitation District." This is factually and legally incorrect. As noted, the District is a legal entity separate and distinct from the County and the County does not operate the District's collection system. *Mitchell v. County Sanitation District No. 1 of Los Angeles County* (1958) 164 Cal.

In the Complaint, the Board states that the "SSO of 15,000 gallons to Polhemus Creek is especially grave because it reached surface waters and adversely impacted water contact recreation and aquatic life." Complaint, at 4. The discharge of 15,000 gallons was due to a root blockage and occurred during a major storm event. It was *not* caused by insufficient carrying capacity of wet weather flows in the sewer main. This discharge, while unfortunate, does not compare in size to the other discharges alleged by the Board, with the next largest one being 650 gallons. The 15,000 gallon SSO substantially distorts the total discharge quantity at issue here, as it represents approximately 80% of the total gallons discharged by the District that are cited in this action.

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27 28 App. 2d 133, 144 (holding that sanitation districts are "municipal corporations" that "operate independent of other agencies").

Rather, the District operates its own system pursuant to its authority under the County Sanitation District Act. As discussed above, the District's powers under that Act include that of retaining staff necessary for operation and maintenance of its facilities. Here, for reasons of convenience and economy, the District has chosen to utilize staff members who are employees of the County to maintain the District's system. This does not, however, mean that the County itself operates the District systems, which are owned and operated by the District under State law. For the Board to argue otherwise is to ignore the separate corporate existence that the District enjoys under State law.

Section 2.50.020 of the San Mateo County Ordinance Code recognizes, in fact, the separate legal status of each special district, including the District, formed pursuant to state law, and further requires that the County's expenses in serving such districts be recovered from them:

The [County] Director of Public Works shall be ex-officio engineer of any and all sewer maintenance, water maintenance, drainage, street lighting, flood control or sanitation districts or service areas formed to provide heretofore described services, for which the Board of Supervisors is the governing body.

For those entities for which the Director serves as ex-officio engineer, the Director shall collect all revenues, pay all bills and generally administer the affairs and coordinate the administration. To accomplish said purpose, the Director is hereby given the authority pursuant to orders of the Board of Supervisors to transfer equipment, machinery, furnishings or supplies from one district to another. Subject to the approval of the Board of Supervisors, the Director may create and abolish positions in any of the districts under the Director's supervision, or use County Public Works employees to perform the duties required therein and charge the respective districts therefore on a prorata basis.

San Mateo County Ord. Code § 2.50.020 (emphasis added). Thus, districts such as the one at issue here have their own operating budgets and the time of County Department of Public Works personnel spent working on matters for a given district is charged to it.

Factors Contributing to Violations – General Problems

In section 17 of the Tentative Order, on Page 6, the Board asserts that "[e]ach of the collection systems and the San Mateo WWTP receive high flows during the rainy season." However, the District respectfully submits that this statement is not supported by reference to any specific evidence and that the record is unclear as to what research or data was referred to in order to make this determination. The

District requests that the Board identify the data upon which it relies in making this assertion.

The Board also states, in the Tentative Order, that "the collection systems currently have insufficient capacity to handle peak wet weather flows." However, as noted above, the District's Sewer Master Plan identified only one capital improvement plan that was necessary to address hydraulic deficiencies/capacity issues. Attached hereto as Exhibit F is a copy of the Sewer Master Plan. This project, involving the replacement of sewer lines along Polhemus Road, was completed in 2003 and the District therefore requests that the Board clarify that its statement regarding insufficient capacity does not apply to the District.

The Board also states that SSOs caused by insufficient capacity can have "adverse impact to fish and other aquatic biota caused by bio-solid deposition, oil and grease, and toxic pollutants common in sewage (such as heavy metals, pesticides, personal care products, and pharmaceuticals)." This statement is potentially misleading because it suggests that if the overflows from SSOs had reached the San Mateo WWTP, the toxic pollutants identified by the Board would have been removed from the waste. This is not, however, the case. Neither the San Mateo WWTP, nor waste water treatment plants in general, are designed to remove these toxic pollutants from sewage. At a minimum, the Board's analysis should recognize this fact and avoid any inference that SSOs cause toxic pollutants to enter the water that would be removed at the WWTP.

Current Operation and Maintenance of the Town of Hillsborough Collection System

In section 30 of the Tentative Order, on Page 10, the Board reports that Hillsborough has determined that it will wait until San Mateo addresses capacity issues at the WWTP and upgrades its portions of the trunk lines before it proceeds with improvements that will increase the capacity of the Crystal Springs/El Cerrito Trunk Sewer. However, the District has received a letter, dated September 23, 2008, from Martha Debry, employed by Hillsborough, wherein she states that Hillsborough intends to proceed with the project to make improvements to the Crystal Springs/El Cerrito Trunk Sewer, such that it can be bid in the Fall of 2009. ¹¹ It seems unlikely that San Mateo will have addressed capacity issues

¹¹ A copy of this letter is attached as Exhibit G to this memorandum.

by then and, in this regard, the Tentative Order and the correspondence from Hillsborough appear to be inconsistent. The District requests that the Tentative Order be revised to resolve this apparent inconsistency.

Moreover, based on information available to it, the District anticipates that Hillsborough's project will cost approximately \$8.6 million and that the District's required contribution will be significant. As discussed, the District does not currently have the ability to pay for such improvements and the District will need additional time to adjust its rate structure to allow it to do so.

<u>Current Operation and Maintenance of the Crystal Springs County Sanitation District</u> <u>Collection System</u>

In section 35 of the Tentative Order, on page 11, the Board states that "the Polhemus Road project has reduced SSOs that were caused by insufficient capacity in the District." However, this statement is speculative in that District's Sewer Master Plan determined that there were hydraulic deficiencies in the section of pipe that was replaced, but the Tentative Order does not indicate what data it relies on to conclude that there have been SSOs in the past in the section of pipe that was replaced.

Timetable of Ordered Actions, Plans, Reports, and Coordination

In the Tentative Order, the Board has ordered the District, Hillsborough, and San Mateo to undertake a number of actions to immediately eliminate SSOs and to prepare and submit to the Board several reports and plans regarding their respective systems. The District has reviewed these requirements and concluded that it would cost the District an estimated \$13 million dollars in additional capital improvement and operations and maintenance expenses through the end of 2013 to comply with all of the actions mandated by the Tentative Order, including approximately \$447,300 in 2009 and \$17,020,300 in 2013. The District does not presently have the financial resources or the rate structure

Attached hereto as Exhibit H is a spreadsheet showing the District's analysis/estimate of the additional expenses that it would incur in complying with the Tentative Order. Further, the District notes that because there are studies that are ordered/under way (including the capacity evaluation referenced in the Board's Order Number R2-2007-0075) that may identify additional capacity-related work that needs to be done on the sewer collection system for which the District may be partially responsible, the District's ultimate costs of compliance based on potential additional identified projects, could far exceed the estimates provided herein.

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necessary to implement the Board's Tentative Order. Further, Proposition 218 provides that the District cannot raise rates unless it complies with certain constitutional mandates and unless it avoids a successful majority protest.

Collection System Capacity Assessment

For example, on page 18 of the Tentative Order, the Board sets forth a requirement that by March 15, 2009, the District, the Town of Hillsborough and the City of San Mateo "shall each install flow meters to assess average and peak dry and wet weather flow rates through its collection system." Initially, and putting aside the financial constraints facing it, the District respectfully submits that March 15, 2009 is likely to be too late in the season to yield useful data regarding average and peak dry and wet weather flows throughout the collection system. Further, by the time the hearing has occurred in this matter, and given the amount of time necessary to coordinate contracts necessary to comply with this order (and in light of the extraordinarily constrained near-term financial circumstances facing the District and other public agencies), the District is unlikely to be able to complete the consultant contracts and other financial arrangements necessary to install the mandated flow meters by March 15, 2009. Therefore, the District respectfully requests that the timeline for compliance with this flow-metering requirement be moved to the winter of 2009-2010, and that the District (and other agencies subject to this order) be required to install the flow meters by December 15, 2009. The District further requests that the other dates for completion of actions set forth in the Tentative Order that are premised on flow metering occurring beginning on March 15, 2009, be continued to correspond to flow metering taking place beginning on December 15, 2009.

Sewer System and Root Control Program

The Tentative Order requires that a number of reports, including an annual report addressing sewer cleaning and root control, be submitted to the Board. However, the Tentative Order does not indicate what actions, if any, the Board will take on these reports. For example, the District submits that the Board should consider including a timeline for the Board to review and respond to reports submitted by the District so that any Board feedback is timely. Moreover, the District requests clarification regarding the time period to be covered by reports referenced in the Tentative Order that are due on March 15th of each year.

Pump Station and Force Main Reliability Certification

The Tentative Order, in Section III.C. requires the District to submit certifications and reports regarding pump stations and force mains. However, the District does not own, operate, or maintain any pump stations or force mains and the District submits that Section III.C. should therefore be amended to delete references to the District.

Fats Oils and Grease (FOG) Blockage Control Report

The Tentative Order requires a report documenting its program to control FOG and the effectiveness of the program. The District, however, is made up almost exclusively of residential customers. Subsection 3 of Section III.D. requires the following: a FOG source control program, including ordinances, treatment, best management practice requirements, source inspections and enforcement procedures, and outreach and education efforts. The District program should not require matters such as treatment, source inspections, and enforcement procedures, as the District does not have the customers that require this (i.e., food service and preparation establishments). The Tentative Order should state the customer type base for the District and acknowledge that some of the requirements of the FOG program do not apply to it.

Collection System Condition Assessments

The Tentative Order requires a system-wide condition assessment of the District's sewers by no later than November 15, 2010. However, the sewer rate structure that the District has been able to impose beginning in the 2007-2008 fiscal year includes an element providing for system-wide CCTV inspection only on a six-year cycle. Consequently, the District will not have collected sufficient money to perform this work by November 15, 2010, even if a sewer rate increase is adopted in the near future to support this work. (Even assuming the absence of a successful majority protest, the District would not be able to begin collecting revenues associated with increased sewer service rates until December of 2009.) Consequently, the District respectfully requests that the Tentative Order be amended to set the deadline for a system-wide condition assessment for 2012-2013.

Further, the Tentative Order requires that, by March 15, 2011, the District shall complete an assessment and submit a report to the Board on the collection system flows and hydraulic capacity. The Tentative Order does not indicate whether all sewer lines are to be modeled, and often, hydraulic models

do not include sewer lines of 6 or 8 inch in diameter. The Tentative Order is not specific on this issue. Requiring a model of all sewer lines will unnecessarily increase the cost to the District and may not provide useful information regarding the system. In any event, in light of the foregoing discussion regarding its financial circumstances, the District respectfully requests, as noted in the preceding paragraph, that the Tentative Order be amended so that any such assessment shall be due during the 2012-2013 fiscal year.

Finally, the Tentative Order would require the District to complete any capacity improvements identified in the capacity assessment. While the specific financial impact on the District is unknown, the District anticipates that the amounts at issue are substantial and that the District lacks the financial ability to implement such proposals.

Sewer Repair, Rehabilitation, and Replacement

Section VI.A. of the Tentative Order requires a plan that incorporates, among other things, research and assessment of data relating to pipes repaired, rehabilitated, or replaced during the last twenty years. While record keeping has improved over time, making information regarding more recent repairs easier to locate, the District does not have the resources to dedicate to this extensive research, especially given the relatively little benefit that would flow from it.

Further, this plan also must address private lateral repair, rehabilitation and replacement as needed pursuant to the Capacity Assurance Plan in Paragraph V.B. of the Tentative Order. The District does not own the sewer laterals and the sewer service charges collected do not cover replacement of the laterals. Moreover, the Tentative Order does not specify what sections of the private laterals the plan is required to address.

Options for Coordination

Section VII of the Tentative Order requires that San Mateo, Hillsborough, and the District complete a study by March 15, 2009 that evaluates options for coordination to implement and comply with the requirements of the Tentative Order. However, there are several other activities that are to be completed within the same time period and the agencies have the daily administration, customer service, operations, and maintenance activities to perform during the same time period. This also requires coordination between three agencies, which is at time difficult to accomplish. There is insufficient time

to complete this work and the District respectfully submits that this timeline should be extended. In light of the foregoing information provided by it, the District requests that the deadline for preparation of this study be extended by one year, to March 15, 2010.

Due Dates for Annual Reports

There are several annual reports in Section VIII of the Tentative Order that are required by November 15, 2009. The order does not specifically indicate the time period that the reports are to cover. For example, are they for the previous fiscal year or some other time period?

Time Frames for Plan Review, Approval, and Implementation

Putting aside the practical difficulties with implementation of the capacity assessment-related requirements of the Tentative Order, which are discussed at length, above, the District does not presently have the funds necessary to pay for implementation of the Board's Tentative Order. The District had a fund balance of \$357,223 as of November 7, 2008, and its anticipated revenue for the 2008-2009 fiscal year is \$1,395,400. The District anticipates expending \$1,727,415 for in-District and out-of-District costs, far exceeding the District's annual revenues. Further, as discussed, District staff has estimated that it would cost approximately \$460,000, over and above the District's existing financial obligations (which the District does not presently have the revenues to meet) to implement the various mandates of the Tentative Order to be accomplished in 2009.

Given the ordinary budgetary cycle and the specific processes for, and limitations on, increasing sewer rates, the District is unable to secure the funds necessary to implement the Board's mandates to be accomplished in 2009 that are set forth in the Tentative Order. As described above, assuming no successful majority protest, the soonest that the District could anticipate increased revenues from higher sewer service rates would be December 2009 and without increased revenues, the District simply lacks the ability to implement the Board's orders.

¹³ See Exhibit G to this memorandum.

¹⁴ The in-District costs include operations and maintenance expenses and costs associated with the Sewer System master Plan. Out-of-District expenses include sewage treatment, debt service on completed projects and projected debt service on pending projects. At this point, expenditures exceed revenues by over \$300,000 per year.

Proposition 218 provides that property-related fees and charges, including those for sewer services, may not be increased if, at a public hearing, the majority of owners of parcels identified as subject to the proposed increased fees submit a written protest against the increase. *See* Cal. Const., Art. 13D, § 6. Given the constitutional mandate preventing a California local governmental agency from raising fees in the face of majority protest, the District is without the power to unilaterally raise the funds necessary to implement the Tentative Order. *Cf. Ventura Group Ventures v. Ventura Port Dist.* (2001) 24 Cal. 4th 1089, 1104 (holding that Proposition 13 prohibits the levying of property taxes in excess of 1% to pay a money judgment). Moreover, the District submits that it would be an idle act for the Board to order it to undertake measures for which funding is unavailable due to a majority protest of rate increases.

However, District staff is committed to continuing to work to educate District ratepayers on the need to increase rates, and as noted, District staff has undertaken extensive discussions and education efforts directed towards the District's residents, and beginning in the 2007-2008 fiscal year, the District was able to raise its sewer service charges to the level of \$900 per ERU. The rates of the 2008-2009 fiscal year remain at \$900 per ERU. District staff believes that continued discussion with the community may result in a willingness to increase sewer service charges to a level that would allow the District to begin implementation of the Tentative Order but again points out that, even if such increases are implemented, they will not, even under the best case scenario, result in additional revenues until December of 2009.

CONCLUSION

In light of the foregoing, the District requests that all required actions in the Tentative Order be continued for twelve months, in order to allow the District (and other affected agencies) time to take necessary action to attempt to increase sewer service charges and/or identify other revenue sources in order to meet the expenses associated with the various actions ordered therein.

Dated: November 10, 2008

MICHAEL P. MURPHY, COUNTY COUNSEL

John D. Nibbelin, Deputy

Attorneys for CRYSTAL SPRINGS COUNTY SANITATION DISTRICT

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1	PROOF OF SERVICE		
2	In the Matter of the Crystal Springs County Sanitation District – R-2-2008-0065		
3	I do hereby declare that I am a citizen of the United States employed in the County of San		
4	Mateo, over 18 years old and that my business address is 400 County Center, Redwood City, California		
5	I am not a party to the within action.		
6	On November 10, 2008, I served the following document(s):		
7	RESPONSE OF THE CRYSTAL SPRINGS COUNTY SANITATION DISTRICT TO THE TENTATIVE CEASE AND DESIST ORDER		
8	on all other parties to this action by placing a true copy of said document(s) in a sealed envelope in the		
10	following manner:		
11	(BY U.S. MAIL) by placing a true copy of said document(s) in a sealed envelope(s) addressed as shown below for collection and mailing at Redwood City, California following our ordinary business practices. I am readily familiar with this office's practice for collecting and processing correspondence for mailing. On the same day that correspondence is placed for collection and mailing, it is deposited in the ordinary course of business with the United States Postal Service in		
13 14 15 16	sealed envelope with postage fully prepaid. (BY OVERNIGHT DELIVERY) by placing a true copy of said document(s) in a sealed envelope(s) addressed as shown below for collection and delivery by an overnight delivery carrier with delivery fees paid or provided for in accordance with this office's practice. I am readily familiar with this office's practice for processing correspondence for delivery the following day by an overnight delivery carrier.		
17 18 19	(BY E-MAIL OR ELECTRONIC TRANSMISSION) Based on a court order or an agreement of the parties to accept service by e-mail or electronic transmission, I caused the documents to be sent to the persons at the e-mail address shown below. I did not receive, within a reasonable time after the transmission, any electronic message or other indication that the transmission was unsuccessful		
20	(STATE) I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.		
22			
23	ANNABELLE GAISER		
24			
25	NAME AND ADDRESS OF EACH PERSON TO WHOM SERVICE WAS MADE		
26	See Attached Service List		
27	Please see attached service list.		
28			

PROOF OF SERVICE

1	SERVICE LIST
2	Bruce Wolfe, Executive Officer
San Francisco Bay Regional Water Quality Control Board 1515 Clay Street, Suite 1400 Oakland, CA 94612	Control Board
	Oakland, CA 94612
5	(Via Fedex)
6	Dyan Whyte San Francisco Bay Regional Water Quality Cantrol Based
7 8	Control Board 1515 Clay Street, Suite 1400 Oakland, CA 94612
9	Email: dwhyte@waterboards.ca.gov
10	Michael Chee San Francisco Bay Regional Water Quality Control Board
11	1515 Clay Street, Suite 1400 Oakland, CA 94612
12	Email: mchee@waterboards.ca.gov
13	Dorothy Dickey San Francisco Bay Regional Water Quality
14	Control Board 1515 Clay Street, Suite 1400
15	Oakland, CA 94612 Email: ddickey@waterboards.ca.gov
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PROOF OF SERVICE

ORIGINAL

Four Forty Agreement

[6/27/89]

SANITARY SEWAGE AGREEMENT
BETWEEN THE TOWN OF HILLSBOROUGH,
CITY OF SAN MATEO, CRYSTAL SPRINGS
COUNTY SANITATION DISTRICT, AND
THE COUNTY OF SAN MATEO

THIS AGREEMENT, made and entered into this Aday

of July, 1989, by and between the TOWN OF

HILLSBOROUGH, a municipal corporation in the County of San Mateo,
State of California, hereinafter called "Town"; the CITY OF SAN

MATEO. a municipal corporation in the County of San Mateo, State of

California, hereinafter called "City"; the CRYSTAL SPRINGS COUNTY

SANITATION DISTRICT, a sanitation district in the County of San

Mateo. State of California, hereinafter called "District"; and the

COUNTY OF SAN MATEO, a political subdivision of the State of

California, hereinafter called "County".

RECITALS:

WHEREAS, the parties have previously entered into agreements dated May 3, 1955, March 20, 1962, and October 1, 1979, which set forth their arrangements and relationships regarding the discharge, pumping, transmission, and treatment of sewage; and

WHEREAS, the parties now wish to rescind said earlier agreements and designate their present and future relationships with respect to the use of sewage conveyance and treatment facilities by Town, District, County, and City;

NOW, THEREFORE, IT IS HEREBY AGREED as follows:

Section 1. <u>Definition of Service Areas and Trunk Sewers</u>

a. <u>Polhemus Trunk Sewer</u>. For purposes of this Agreement, there is hereby designated the Polhemus Trunk Sewer, which is defined as follows:

All sanitary sewerage conveyances and appurtenances necessary to convey sanitary sewerage from the beginning of the trunk sewer in Polhemus Road 50 feet, more or less, southeasterly of Tower Road, northwesterly along Polhemus Road, to the intersection of the Polhemus Trunk Sewer with the northerly boundary of Service Area B, at or near the District's Measuring Device (as defined below), all as generally shown on Exhibit A hereto.

b. <u>Crystal Springs/El Cerrito Trunk Sewer</u>. For purposes of this Agreement, there is hereby designated the Crystal Springs/El Cerrito Trunk Sewer, which is defined as follows:

All sanitary sewerage conveyances and appurtenances necessary to convey sanitary sewerage from the intersection of the Polhemus Trunk Sewer with the northerly boundary of Service Area B, northerly along Crystal Springs Road to El Cerrito Avenue to the intersection of the Crystal Springs/El Cerrito Trunk Sewer with the corporate city limits of City and the northerly boundary of Service Area C, at or near the El Cerrito Measuring Device, all as generally shown on Exhibit A hereto.

c. <u>Tilton/Idaho Trunk Sewer</u>. For purposes of this Agreement, there is hereby designated the Tilton/Idaho Trunk Sewer, which is defined as follows:

Those sanitary sewerage conveyances or appurtenances necessary to convey sanitary sewerage from the intersection of the Crystal Springs/El Cerrito Trunk Sewer with the corporate city limits of the City and the northerly boundary of Service Area C to the Dale Avenue Pump Station, generally east down Tilton Avenue, south along Idaho Street, and east across U.S. Highway 101 at or near Sunnybrae Avenue to the intake side of the Dale Avenue Pump Station, all as generally shown on Exhibit A hereto.

d. Yew/Borel Trunk Sewer. For purposes of this Agreement, there is hereby designated the Yew/Borel Trunk Sewer, which is defined as follows:

Those sanitary sewerage conveyance or appurtenances necessary to convey sanitary sewerage from various collection points at the corporate city limits boundaries of the Town and the City from the Tobin Clark Estates area (Service Area E) to the Dale Avenue Pump Station, generally east along Yew Street and other neighboring streets, to Borel Avenue, east along Borel Avenue, then east along Sixteenth Avenue, and across U.S. Highway 101 at or near Sixteenth Avenue, to the intake of the Dale Avenue Pump Station, generally as shown on Exhibit A hereto.

- e. <u>Service Area A.</u> Service Area A encompasses a portion of the County, as generally shown in Exhibit A hereto. The Polhemus, Crystal Springs/El Cerrito, and Tilton/Idaho Trunk Sewers serve Service Area A.
- f. Service Area B. Service Area B encompasses a portion of the District and a portion of the City, as generally shown in Exhibit A hereto. The Polhemus, Crystal Springs/El Cerrito, and Tilton/Idaho Trunk Sewers serve Service Area B.

- g. <u>Service Area C</u>. Service Area C encompasses a portion of the Town, as generally shown in Exhibit A hereto. The Crystal Springs/El Cerrito and Tilton/Idaho Trunk Sewers serve Service Area C.
- h. <u>Service Area D</u>. Service Area D encompasses a portion of the City, as generally shown in Exhibit A hereto. The Crystal Springs/El Cerrito and Tilton/Idaho Trunk Sewers serve Service Area D.
- i. <u>Service Area E</u>. Service Area E encompasses a portion of the Town, as generally shown in Exhibit A hereto. The Yew/Borel Trunk Sewer serves Service Area E.

Section 2. Definition of Jointly Used Facilities

- a. Once the sewage from Service Areas A, B, C, D, and E reaches the intake to the Dale Avenue Pump Station, it flows in common through the Dale Avenue Pump Station, through the trunk sewers connecting the Dale Avenue Pump Station and the Water Quality Control Plant (hereinafter WQCP), through the WQCP for treatment, and then through an outfall line to San Francisco Bay. The scum, grit, and ash removed from the sewage at the WQCP is transported to disposal sites.
- b. All of the facilities, equipment, personnel, and processes used in the conveyance and disposal of wastewater described in Subsection (a) above is defined for purposes of this Agreement as Jointly Used Facilities.

Section 3. Ownership of Trunk Sewers and Jointly Used Facilities

a. Those portions of the Polhemus Trunk Sewer that are within the boundaries or corporate limits of the District, County,

or City, respectively, hereby remain under the ownership of the District, County, or City, respectively.

- b. The Crystal Springs/El Cerrito Trunk Sewer hereby remains under the ownership of the Town.
- c. The Tilton/Idaho and Yew/Borel Trunk Sewers remain under the ownership of the City.
- d. The Jointly Used Facilities remain under the ownership of the City, except as may be otherwise defined by agreement between the City and Estero Municipal Improvement District [hereinafter EMID]; however, no portion or section of any agreement between the City and EMID shall be construed as creating any ownership rights in the Jointly Used Facilities by County, District, or Town.
- e. Whenever the boundaries of one of the parties to this Agreement are altered through annexation or deannexation so that a portion of a trunk sewer now lying within the boundaries of a party then lies within the boundary of another party to this Agreement, that portion of the trunk sewer shall come under the ownership of the party within which the trunk sewer then lies.

Section 4. Maintenance, Repair, Reconstruction, and Improvement Responsibility of Trunk Sewers and Jointly Used Facilities

- a. Each party to this Agreement shall be responsible for and shall perform any necessary maintenance, repair, reconstruction, replacement, enlargement, or improvement on the portion of the trunk sewers under their ownership as defined in Section 3 above.
- b. The City shall be responsible for and shall perform any necessary maintenance, repair, reconstruction, or improvement

on the Jointly Used Facilities; it is expressly understood by the parties that agreement between the City and the Estero Municipal Improvement District [EMID] may permissibly delegate or share this responsibility with EMID as to the WQCP, disposal and outfall portions of the Jointly Used Facilities.

- c. District shall construct, operate, maintain, and own a flow measuring device measuring the total flow from Service Areas A and B [hereinafter District Measuring Device] at or near the intersection of the Polhemus Trunk Sewer and the northerly boundary of Service Area B, as generally shown on Exhibit A hereto. District shall calibrate and verify the District Measuring Device not less than twice each fiscal year.
- d. City shall construct, operate, maintain, and own a flow measuring device at or near the city limits boundary between the Town and the City at or near the point of connection between the Crystal Springs/El Cerrito and Tilton/Idaho Trunk Sewers [hereinafter El Cerrito Measuring Device]. City shall calibrate and verify the El Cerrito Measuring Device at least twice each fiscal year.
- e. Should any party install any other flow measuring device in order to measure flows pursuant to this Agreement, the installing party shall verify and calibrate the measuring device at least twice each fiscal year.

Section 5. Calculation of Flows

a. Extraneous Sewer Flow.

For purposes of this Agreement, Extraneous Sewer Flow is the difference between the total yearly flow measured at the District Measuring Device and the flows determined by multiplying twelve (12) times the average monthly amount of domestic water delivered to all properties in Service Areas A and B for the five (5) winter months of November, December, January, February, and March. The total Extraneous Sewer Flow shall be pro-rated between the City, County, and District in the same ratio as each party's share of total domestic water deliveries in Service Areas A and B is to the total domestic water deliveries in the two Service Areas.

b. Service Area A.

(i) County. The total County flow from Service Area A shall be twelve (12) times the average monthly amount of domestic water delivered to properties in Service Area A in the unincorporated area of the Service Area for the five (5) winter months of November, December, January, February, and March, plus the County's share of the Extraneous Sewer Flow.

c. Service Area B.

- (i) City. The total City flow in and from Service Area B shall be twelve (12) times the average monthly amount of domestic water delivered to properties in Service Area B in the corporate City limits area of the Service Area for the five (5) winter months of November, December, January, February, and March, plus the City's share of the Extraneous Sewer Flow.
- (ii) District. The total District flow in and from Service Area B shall be the total yearly flow measured at the District's Measuring Device, less the sum of the total flows calculated for the County flow from Service Area A and the City flow from Service Area B.
- (iii) County. The total County flow in and from Service Area B shall be the County flow from Service Area A.

d. Service Area C.

- (i) Town. The total Town flow in and from Service Area C shall be the total yearly flow measured at the El Cerrito Measuring Device, less the sum of the total flows measured at the District's Measuring Device and the City flow from Service Area D.
- (ii) County. The total County flow in and from Service Area C shall be the County flow from Service Area
- (iii) District. The total District flow in and from Service Area C shall be the District flow from Service Area B.
- (iv) City. The total City flow in and from Service Area C shall be the City flow from Service Areas B and D.

e. <u>Service Area D</u>.

(i) City. The total City flow from Service Area D shall be twelve (12) times the average monthly amount of domestic water delivered to properties in Service Area D in the corporate city limits area of the Service Area for the five (5) winter months of November, December, January, February, and March.

f. Service Area E.

(i) Town. The total Town flow from Service Area E shall be twelve (12) times the average monthly amount of domestic water delivered to properties in Service Area E within the corporate Town limits area of the Service Area for the five (5) winter months of November, December, January, February, and March.

g. Tilton/Idaho Trunk Sewer.

- (i) City. The total City flow in the Tilton/Idaho
 Trunk Sewer shall be the total flow measured at the intake
 to the Dale Avenue Pump Station from the Tilton/Idaho
 Trunk Sewer, less the total flow measured at the El
 Cerrito Measuring Device, and plus the City flow from
 Service Area C.
- (ii) County, District, and Town. The respective flows of County, District, and Town shall be each party's flows from Service Area C.

h. Yew/Borel Trunk Sewer.

- (i) City. The total City flow in the Yew/Borel Trunk Sewer shall be either:
- (a) Twelve (12) times the average monthly amount of domestic water delivered to properties in the corporate City limits served by the Yew/Borel Trunk Sewer for the five (5) winter months of November, December, January, February, and March; or
- (b) The total flow measured at the intake to the Dale Avenue Pump Station from the Yew/Borel Trunk Sewer, less the Town flow from Service Area E.
- (ii) Town. The total Town flow in the Yew/Borel Trunk Sewer shall be the Town flow from Service Area E.

i. Jointly Used Facilities Flow.

(i) Flow from Intake to Dale Avenue Pump Station to Intake of the WQCP.

- (a) County and District. The County and District flows shall be each party's flows as determined for the Tilton/Idaho Trunk Sewer.
- (b) Town. Town flow shall be the Town's flows determined for the Tilton/Idaho and Yew/Borel Trunk Sewers.
- (c) City. City flow shall be the total metered flow at the intake of the WQCP, less the total metered flow at the Mariners Island #2 Pump Station, the total metered flow from EMID, and the total County, District, and Town flows described in Subsections (a) and (b) above.
- (ii) Flow through WQCP and Disposal and Outfall System.
- (a) County, District, and Town. The County, District, and Town flows shall be the same as calculated under Subsection (i) above.
- (b) City. City flows shall be the total metered flow at the intake to the WQCP, less the total metered flow from EMID and the County, District, and Town flows described in Subsection (a) above.
- j. If metered flows are available for any of the flows that are to be measured by domestic water delivery pursuant to this Section and the metered flows have been measured by the same five (5) months or more, then those metered flows shall be substituted for the domestic water delivery measurements for the applicable flows.

Section 6. <u>Records and Reports of Flows and Costs</u>
Regarding the Trunk Sewers

a. The Town, the District, and the County shall

separately maintain and provide records to the City of domestic water consumption for properties in the Town, District, and County limits, respectively, in Service Areas A, B, C, and E, pursuant to Section 5.

- b. The District shall maintain and provide records to the City from the District Measuring Device.
- c. From the records provided and its own records for City consumption and flows, including the El Cerrito Measuring Device, the City shall calculate domestic water consumption and flows pursuant to the provisions of Section 5.
- d. Each party shall maintain records of the costs of capital replacements and enhancements to, debt service for, and operation and maintenance of, that portion of each Trunk Sewer defined in Section 1 above so owned and maintained by that party.
- e. The operation, maintenance, and capital costs shall include any necessary labor, equipment, or materials used in the performance of the work, plus any mutually agreed-upon overhead or markup charges not-to-exceed 15% and normally levied by that party for such services. Each party shall notify the other parties to the Agreement before initiating any change in the computation of overhead or markup charge and obtain their approval before applying the change to the computations under this Agreement.

Section 7. Proration of Trunk Sewer Costs

- a. No later than July 30 of each year, each party shall submit to the City an accounting of the domestic consumption, flows, and costs calculated and recorded pursuant to Sections 5 and 6 above for the preceding 12-month period of July 1 to June 30.
- b. City will then calculate and prorate these costs in the ratio that each party's flow through each of the five (5) trunk

sewers defined in Section 1 above bear to the total flows passing through that trunk sewer.

Section 8. Proration of Sewage Treatment Charges

- a. City shall annually adopt a budget for the operation, maintenance, repair, and improvement of the Jointly Used Facilities, including all costs and expenses, whether direct or indirect, incurred for the operation, maintenance, repair, and improvement of the Jointly Used Facilities, including but not limited to, supplies and materials, labor, services, power, chemicals, regulatory requirements, fines, mitigations, laboratory control and monitoring, insurance and liabilities, judgments, administration, legal costs, repair and replacement costs, and capital improvement costs.
- b. Sewage treatment charges for conveyance and treatment of wastewater through the Jointly Used Facilities and emanating from Service Areas A, B, C, D, and E shall be charged to and paid by each of the parties to this Agreement as follows:
 - (i) For pumping and conveyance from the intake of the Dale Avenue Pump Station to the intake to the WQCP, in the ratio that each individual party's flows of wastewater as measured and reported pursuant to Section 5 of this Agreement bears to the total flows through this portion of the sewage system; and
 - (ii) For treatment, discharge, and disposal through the WQCP, disposal and outfall systems of the Jointly Used Facilities, in the ratio that each party's flows of wastewater as calculated pursuant to Section 5 bears to the total flows of wastewater through the WQCP.
 - c. City shall calculate the ratios and costs assigned pursuant to this Section.

Section 9. Notice of Expenditures and Method of Payment

- a. Any party that initiates a new capital expenditure, other than those identified in Section 12 below, or increases its level of maintenance that results in an impact to any other party of greater than \$20,000 in any fiscal year pursuant to this Agreement shall meet, discuss, and reach agreement on the scheduling of the proposed project and payments. Nothing in this Subsection, however, shall affect the method of proration of any project's costs as provided by this Agreement. This Subsection shall not apply to the undertaking of emergency repairs so long as notice is immediately given to the affected parties.
- b. Not later than April 1 of each year and in coordination with the other parties to this Agreement, the City shall prepare a statement estimating the flows and costs for the coming fiscal year as calculated pursuant to Sections 7 and 8 above for the Trunk Sewers and Jointly Used Facilities, including any capital additions, and the proportionate amount to be paid by each party to this Agreement during the coming fiscal year. This will be an estimate only for purposes of assisting the parties in budgeting and to make quarterly estimated payments. These cost estimates are not warranted to be actual costs for the fiscal year.
- c. Quarterly on July 1, October 1, January 1, and April 1 of each year, the parties to this Agreement shall deposit with the City one-fourth of the estimated cost as provided pursuant to Subsection (b) above; however, the October 1 payment for each fiscal year shall be increased or decreased to adjust the amount payable by the party by the difference between the actual amount due from such party for the final Section 10 total invoice from the City for Jointly Used Facilities Charges and Trunk Sewers Costs and the estimated amounts billed and paid by parties hereto for the previous fiscal year.

Section 10. Invoicing of Parties to this Agreement

- a. City shall issue a closing invoice or credit to each party for the respective costs of the trunk sewer maintenance costs and sewage treatment charges as calculated for the preceding fiscal year pursuant to Sections 7 and 8 above no later than September 1 of each year.
- b. It is expressly agreed and understood by the parties to this Agreement that the City has no responsibility whatsoever nor is any warranty or guarantee whatsoever made by City that the measurements, calculations, or records made, maintained, or provided pursuant to this Agreement by the other parties are accurate, nor that the City offers to or will act as a guarantor, collector, or adjustor between the parties for sums or credits due between the parties. The City's compilation, calculation, and invoicing is only offered to facilitate the resolution of the various interests involved in this Agreement.

Section 11. Use Rights

- a. Town, District, and County shall have a right to use capacity in the Jointly Used Facilities. These rights to use the Jointly Used Facilities are subject to the Joint Powers Agreement then in existence between the City and EMID (hereinafter JPA), including, but not limited to: (a) the rights of EMID under the JPA to use the WQCP, and the disposal and outfall systems of the Jointly Used Facilities; and (b) the reserved right of City to use 90.54% of its JPA share of capacity in the WQCP, and disposal and outfall systems of the Jointly Used Facilities.
- b. The maximum shares of capacity in the Jointly Used Facilities are percentage shares of the City's rights pursuant to the JPA to a share of the capacity of the WQCP, and disposal and outfall systems of the Jointly Used Facilities: Town, 4.16%; District, 4.93%; County, 0.37%. The parties may exceed these

established capacities until such time that another party to this Agreement makes demand for its unused capacity; upon written demand of another party to return capacity, the using party shall take steps within twelve (12) months to return the capacity by conservation, pretreatment, or whatever other unilateral steps are necessary to reduce its excess flows to its assigned maximum share of capacity. However, at no time may any party other than the City cause or allow the flows comprising the City's share pursuant to the JPA in the capacity of the WQCP to be exceeded without the written consent of the City.

Section 12. Upgrading of Jointly Used Facilities

The parties are aware of and concur in the upgrading of the Jointly Used Facilities that is projected to occur during the coming five (5) years. The Town, District, and County shall pay to City the annual charges provided by Sections 8, 9, and 10 above that include each party's share of the cost of the upgrading and modification of Jointly Used Facilities. The parties are cognizant that City has agreed to finance such capital costs to the Town, District, and County through issuance of City bonds; City will obtain reimbursement for that financing through Section 9 annual charges. The costs for the upgrading shall be shared by the parties as provided in Section 8.

Section 13. Overloading

No party shall cause or permit any of the Jointly Used Facilities to be overloaded, whether hydraulically, biologically, chemically or otherwise.

Section 14. Limitation on Discharge

a. The parties agree not to discharge or to allow the discharge into any portion of the Jointly Used Facilities of any of the pollutants violating the standards or limitations established

by the Environmental Protection Agency, the State Water Resources Control Board, the Regional Water Quality Control Board, San Francisco Bay Region, or any other Federal, State, or Regional Agency, local standards or limitations established by the City pursuant to these Federal, State, or Regional Agencies' regulations, directions, orders, or requests, or standards and limitations established through or in the City's discharge permits from Federal, State, or Regional Agencies. In addition, the parties agree not to discharge or to allow to be discharged into any portion of the Jointly Used Facilities any wastewater with a sulfide content exceeding 0.2 parts per million total.

- b. Each party agrees that it will prevent the introduction of pollutants into the Jointly Used Facilities that would cause interference or upset with the operation of those Jointly Used Facilities, including causing odor, poisoning of biota, nuisance, or interference with the use and disposal of sludge, ash, or other residual byproducts.
- c. Each party shall perform or have performed reasonable sampling and analysis to ensure compliance with this Section.
- d. Each party agrees it shall immediately pay the cost of correcting all damage caused, fines, or judgments, as well as all sampling or analytical costs and the cost of any protective measures necessary to neutralize, contain, divert, and/or remove, pollutants discharged by the party exceeding the limitations set forth herein.

Section 15. <u>Compliance With Federal and State Laws and Regulations</u>

The parties agree to comply with any and all Federal, State, and local laws, the rules, regulations, standards, mitigation, and requirements of any Federal, State, Regional, or local board, commission, agency, or similar body, and the decisions

of any court of competent jurisdiction which must be complied with to enable the City to safely and legally operate the Jointly Used Facilities and to qualify for and obtain Federal, State, or Regional permits or grants for the construction, improvement, administration, operation, maintenance, or repair of the Jointly Used Facilities.

Section 16. <u>Pretreatment Industrial Permit Requirements</u> and Sewer Use Ordinance

- a. Each party shall maintain sewer use regulations, including a pretreatment program, permit process and enforcement procedures to ensure compliance with the discharge restrictions and limitations set forth herein and as required by any and all Federal, State, Regional, and local laws, rules, regulations and standards. Within sixty (60) days of a written request by the City to enact or amend the party's sewer use regulations to comply with this Section, the party shall do so.
- b. No party shall knowingly permit any entity, within or without its jurisdiction, to discharge sewage into its wastewater collection system unless that entity complies with the pretreatment program in effect in City. If a party learns that any entity, within or without its jurisdiction, is discharging sewage into its wastewater collection system in contravention of the pretreatment program in effect in City, that party shall immediately take steps to either obtain compliance with the pretreatment program or halt further such discharges. The existing City Sanitary Sewer Use Rules and Regulations are attached to this Agreement as Exhibit B. It is expected that significant amendments to the City Sanitary Sewer Use Rules and Regulations will be made in the coming six (6) months. Whenever an amendment is made to the City Sanitary Sewer Use Rules and Regulations, City shall provide each of the parties with a copy of the amendment.
 - c. If the City duly authorizes any person to act as

Industrial Waste Inspector in order to inspect and enforce industrial pretreatment requirements of Federal, State, or Regional Agencies or local limitations and standards, each party shall allow that authorized person access to discharger facilities and enable the inspector through ordinance or resolution to sample, inspect, and police illegal discharges. The Inspector shall notify the agency in which the inspection or enforcement action is to be made before the inspection or enforcement action is performed. Costs of this inspection and sampling program incurred by City shall be included as a cost of the operation and maintenance expenses of the Jointly Used Facilities.

Section 17. Notification of New Significant Dischargers

Each party shall notify the City in writing thirty (30) days prior to the connection of any user of wastewater treatment services whose need for treatment capacity in the Jointly Used Facilities exceeds 100,000 gallons per day.

Section 18. Treatment of Wastewater

It is agreed by the parties that City neither guarantees nor warrants to the parties that the Jointly Used Facilities will be capable of adequately treating the parties' discharges. In no event shall City be liable to the other parties to this Agreement for any damage or injury resulting from the Jointly Used Facilities' inability or failure to satisfactorily receive, hold, treat, dispose, or otherwise handle or convey wastewater.

Section 19. Collection Systems and other Trunk Sewers

Each party to this Agreement shall maintain those portions of its collection and distribution systems and trunk sewers that are not designated as one of the five (5) Trunk Sewers in Section 1 or Jointly Used Facilities in Section 2 but that are within their jurisdiction, at no expense whatsoever to any of the other parties.

Section 20. Severability of Obligations

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It is specifically understood that the obligations of each of the parties herein are several and not joint, and that neither one shall be obligated to pay any sum due from another.

Section 21. Good Faith

The parties shall both conduct themselves with respect to this Agreement and to the construction, maintenance, operation, and administration of the Trunk Sewers designated in Section 1 and the Jointly Used Facilities in good faith and in a prudent, professional manner. Additionally, each party shall timely and diligently keep the other parties informed about any and all matters occurring within its jurisdiction that bear functionally, financially, or in any other foreseeable way on the relationships or obligations of the parties as defined by this Agreement.

Section 22. Fiscal Year

For purposes of this Agreement, the fiscal year shall be the fiscal year of City, as may be established from time to time, being at the date of this Agreement the period from July 1 of each year to and including the following June 30.

Section 23. Access to Records

Any and all books, documents, papers, and records prepared and/or maintained by any party to this Agreement for any activity undertaken under this Agreement shall be made accessible to the other parties upon request or to any construction grant agency as may be required by law.

Section 24. Termination and Supercession of Agreements

It is mutually agreed by all parties hereto that

agreements heretofore entered into between City and Town, District, and/or County and any and all supplements, addendums, changes, or amendments thereto regarding sewage treatment are hereby superseded and terminated.

Section 25. Term

This Agreement shall become effective on the date the parties have executed same, and shall remain in full force and effect until amended or terminated. In the event any party requests termination, that party shall submit a written notice of withdrawal at least five (5) years preceding the proposed date of withdrawal; provided, however, that no voluntary withdrawal may occur during the period that any bonded indebtedness for the upgrading of the Jointly Used Facilities described in Section 12 is outstanding.

Section 26. Notices

Unless otherwise designated in writing by the respective parties, all notices, correspondence, claims, bills or other documents transmitted by one party to the other shall be addressed as follows:

To County:

Director of General Services County of San Mateo County Government Center Redwood City, CA 94063

To District:

Director of Public Works
County of San Mateo
805 Veterans Boulevard, Suite 301
Redwood City, CA 94063

To Town:

City Engineer
Town of Hillsborough
1600 Floribunda Avenue
Hillsborough, CA 94010

To City:

Director of Public Works
City of San Mateo
330 W. 20th Avenue
San Mateo, CA 94403

Section 27. Performance and Time to be of the Essence

It is understood and agreed that full and faithful compliance with and performance of each and every covenant; and provision of this Agreement by the party or parties required to comply with or perform each such covenant or provision is and shall be of the essence; also that time is and shall be of the essence; also that such full and faithful compliance with performance of each and every covenant and provision of this Agreement shall be deemed to be a material condition of this Agreement.

Section 28. Severability

Should any part, term, or provision of this Agreement be decided by a court or competent jurisdiction to be illegal or in conflict with any law of the State of California, the United States, or otherwise be rendered unenforceable or ineffectual, the validity of the remaining portions or provisions shall not be affected thereby.

Section 29. Successors: Assignment

This Agreement shall be binding upon, and shall inure to the benefit of the successors of the parties. Except to the extent expressly provided herein, no party may sell, convey, or assign any right or obligation hereunder without the written consent of the other parties.

Section 30. Section Headings

All section headings and sub-headings contained herein are for convenience of reference only, and are not intended to define or limit the scope of any provisions of this Agreement.

Section 31. Disputes

If the parties to a dispute regarding a controversy or claim arising out of or relating to this Agreement, or the breach thereof, agree in writing, the dispute shall be settled by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association. Judgment upon the award rendered by the Arbitrator(s) may be entered in any Court having jurisdiction thereof.

Section 32. New and Unforeseen Conditions

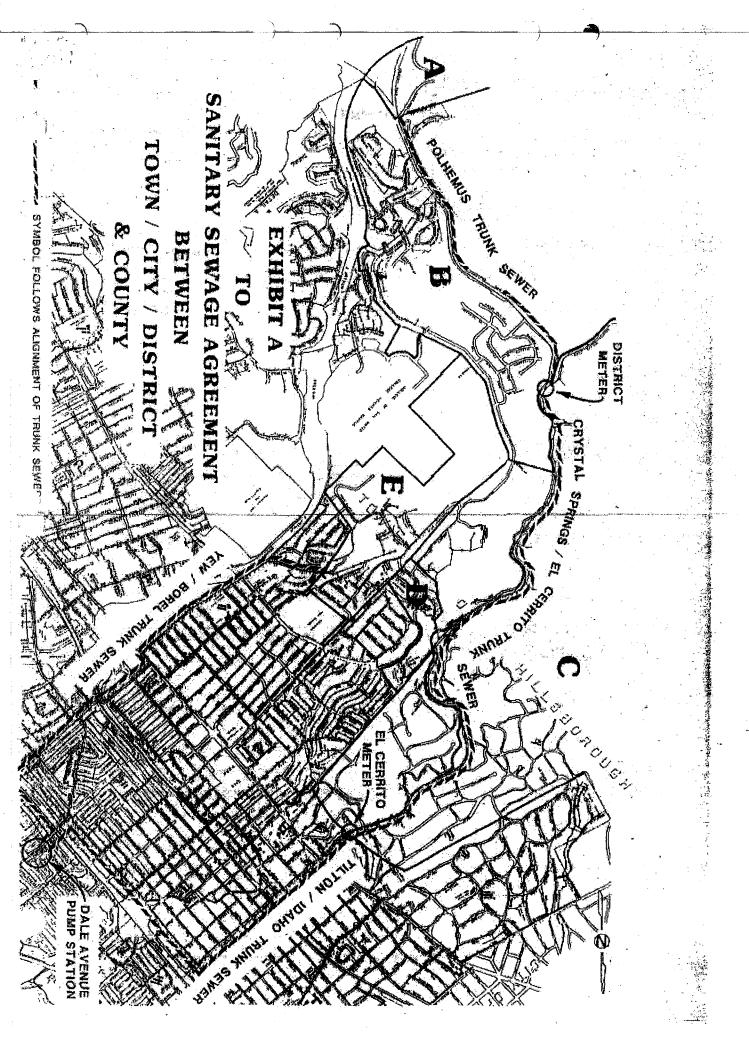
In the event there are new or unforeseen conditions not covered by this Agreement or conditions that cause any portion of this Agreement to become obsolete, undefined, or underfinanced, the Parties agree to meet, discuss, and reach a written agreement to resolve those new and unforeseen circumstance effects.

Section 33. Waivers

Waivers of a breach or default under this Agreement shall not constitute a continuing waiver or a waiver of a subsequent breach of the same or any other provision of this Agreement.

Section 34. Modification

No modification, waiver, termination, or amendment of this



Agreement is effective unless made in writing signed by all 4 of the parties hereto.

ATTEST:

TOWN OF HILLSBOROUGH

Town Clerk

Town Manager

ATTEST:

City Clerk

CITY OF SAN MATEO

Mayor

ATTEST:

CRYSTAL SPRINGS COUNTY SANITATION DISTRICT

Clerk of the District

resident,

Board of Supervisors, Ex-Officio Governing Board

ATTEST:

COUNTY OF SAN MATEO

Mary Grildin.

Certificate of Delivery (Government Code section 25103)

I certify that a copy of the original document filed in the Office of the Clerk of the Board of Supervisors of San Mateo County has been delivered to the President of the Board of Supervisors.

WALTON, Assistant

Clerk of the Board of Supervisors

DFW

RESOLUTION NO. 52913

BOARD OF SUPERVISORS, COUNTY OF SAN MATEO, STATE OF CALIFORNIA

RESOLUTION AUTHORIZING EXECUTION OF AGREEMENT
BETWEEN THE CITY OF SAN MATEO, TOWN OF HILLSBOROUGH,
COUNTY OF SAN MATEO AND
CRYSTAL SPRINGS COUNTY SANITATION DISTRICT
RE: SANITARY SEWAGE SERVICE

RESOLVED, by the Board of Supervisors, as the ex-officio governing board of the Crystal Springs County Sanitation District, County of San Mateo, State of California, that

WHEREAS, sewage generated in the Crystal Springs County Sanitation District in the unincorporated San Mateo area requires transport through the trunk sewers of the Town of Hillsborough and the City of San Mateo and treatment and disposal at the City of San Mateo's Water Quality Control Plant; and

WHEREAS, on October 1, 1979, the City of San Mateo (herein-after, "City"), the Town of Hillsborough (hereinafter, "Town"), the County of San Mateo (hereinafter, "County") and the Crystal Springs County Sanitation District (hereinafter, "District") entered into an Agreement which delineated each party's rights, responsibilities, and relationships relative to the transport, treatment and disposal of sewage; and

WHEREAS, among the responsibilities of the parties, including the District, as customers of the City's Water Quality Control

Plant, is a financial responsibility to share in the cost of operating, maintaining, upgrading and improving said plant; and

WHEREAS, the City of San Mateo has determined that a major upgrading and improvement of said plant is necessary for the City to meet the requirements of its permit to discharge treated wastewater to San Francisco Bay; and

WHEREAS, the City of San Mateo is financing the City's share of the cost of said upgrading and has agreed to finance the Town's, the County's and the District's shares as well, subject to the execution of an Agreement which provides for said financing and repayment; and

WHEREAS, because there are other changed circumstances as well, a new Agreement has been prepared which delineates the rights, responsibilities, and relationships of the City, the Town, the County and the District, including the rights, responsibilities, and relationships of said parties as they relate to the planned upgrading and improvement of the City's Water Quality Control Plant, and this Board finds it necessary and desirable that said Agreement be executed by this Board on behalf of the Crystal Springs County Sanitation District:

NOW, THEREFORE, IT IS HEREBY DETERMINED AND ORDERED that:

1. The President of this Board of Supervisors, as ex-officio governing board of the Crystal Springs County Sanitation District, be, and is hereby, authorized and directed to execute said Agreement with the City of San Mateo, the Town of Hillsborough and the County of San Mateo for and on behalf of the Crystal Springs County Sanitation District; and

2. That the Clerk of this Board shall attest the signature of the President to said Agreement.

* * * * * * * *

Regularly passed and adopted this 18th day of July, 1989.

AYES and in favor of said resolution:

Supervisors:

MARY GRIFFIN

TOM HUENING

ANNA G. ESHOO

TOM NOLAN

WILLIAM J. SCHUMACHER

NOES and against said resolution:

Supervisors:

NONE

Absent Supervisors:

NONE

(SEAL)

MARY GRIFFIN

President, Board of Supervisors County of San Mateo State of California

Certificate of Delivery (Governmental Code section 25103)

I certify that a copy of the original resolution filed in the Office of the Clerk of the Board of Supervisors of San Mateo County has been delivered to the President of the Board of Supervisors.

ELAINE S. WALTON, Assistant

Clerk of the Board of Supervisors

STATE OF CALIFORNIA)

COUNTY OF SAN MATEO)

DALE ELLEN YOUNG, Deputy Clerk, Board of Supervisors, does hereby certify that the above and foregoing is a full, true and correct copy of Resolution No. 5.2913 entered in the minutes of said Board.

In Witness Whereof, I have hereunto set my hand and the seal of said Board this 18th day of July, 1989.

ATTO

Dale Ellen Young

Deputy Clerk, Board of Supervisors



COUNTY OF SAN MATEO Inter-Departmental Correspondence

Department of Public Works

DATE:

November 3, 2005

BOARD MEETING DATE:

November 15, 2005

SPECIAL NOTICE/HEARING:

None

VOTE REQUIRED: 4

4/5ths vote required

on Appropriation

Transfer

TO:

Honorable Board of Supervisors

FROM:

Neil R. Cullen, Director of Public Works

SUBJECT:

Loan to the Crystal Springs County Sanitation District and

Associated Appropriation Transfer Request

Recommendation

- 1. Adopt a resolution as the governing board of both the Crystal Springs County Sanitation District (District) and the County of San Mateo (County), authorizing the President of the Board to execute an agreement between the District and the County which will provide a \$1,000,000 loan to the District that will be used to reimburse the Town of Hillsborough (Town) for District costs associated with the Town's Sewer Capital Improvement Project that improved the Town's sewer transmission lines that are used to transport District wastewater through the Town.
- 2. Approve an Associated Appropriation Transfer Request (ATR) to recognize the loan to the District from the County and to transfer \$177,575 from the District's "contingencies" to "contribution to other agencies" in order that these funds can also be used to reimburse the Town. (4/5ths vote required).

Vision Alignment

Commitment: Responsive, effective and collaborative government.

Goal 22: County and local governments effectively communicate, collaborate and develop strategic approaches to issues affecting the entire County.

The proposed agreement and ATR will allow the District to reimburse the Town this year for costs incurred by the Town for the benefit of the District.

Background

Previous Board Action

Acting as the governing Board of both the District and the County, entered into a four party agreement dated July 18, 1989, between the Town, the City of San Mateo (City), the District,

Subject:

Loan Agreement between the Crystal Springs County Sanitation District and

the County of San Mateo and Appropriation Transfer Request

November 3, 2005

Board Meeting Date: November 15, 2005

Page 2

and the County that designated relationships with respect to the use and ownership of sewage conveyance and treatment facilities jointly used by the four agencies.

History

The Town's sewer that is located in Crystal Springs Road and El Cerrito Avenue (Trunk Sewer) carries sewage that is collected from the District, the County's Tower Road Facilities, portions of the Town and the area within the City near De Anza Boulevard (Map Attached.). The 1989 four party agreement specifies how costs are to be distributed for usage and system upgrades.

The Town's Trunk Sewer was experiencing overflows into San Mateo Creek due to both the lack of capacity as well as the deteriorating condition of the Trunk Sewer. The Town, under the threat of sanctions by the Regional Water Quality Control Board, replaced undersized and deteriorated portions of the Trunk Line and has now determined the cost of the work for each entity pursuant to the four party agreement.

Discussion

The Town reported that the cost of the Town's project was \$2,518,873 and the cost distribution based on the four party agreement is:

County (Tower Road Facilities)	\$99,243.60
District	\$1,177,573.13
City of San Mateo	\$304,783.63.
Town of Hillsborough	937,272.64

The District is responsible for the largest percentage based on the flow from the District and the number of connections. The current sanitary sewer service charge rate levied by the District is \$496 per single-family dwelling. Sewer service charges are the primary revenue source for the District and are used to finance the maintenance of the District's sewer collection system, a proportionate share of the down stream systems (the Town's and the City's transmission systems) and the cost of treating the waste water that is collected in the District. The Town's sanitary sewer service charge rate is currently are \$1,315 per parcel and the City's is on average \$352.00 per parcel. The differences can be attributed to the number of connections and the size of the respective collection systems.

The District does not have sufficient funds to reimburse the Town from its existing reserves and we are therefore recommending the General Fund loan as a means of the District meeting its current financial obligation.

Resolutions and an agreement have been approved as to form by County Counsel.

Subject:

Loan Agreement between the Crystal Springs County Sanitation District and

the County of San Mateo and Appropriation Transfer Request

November 3, 2005

Board Meeting Date: November 15, 2005

Page 3

The proposed loan is for five (5) years at an interest rate equal to the interest rate paid on pooled reserves in the County Treasury. Payment will be made from the revenues that the District receives, primarily sewer service charges, and the loan provides that the District can accelerate payments if other revenues or funds become available to the District.

The District is evaluating the current rate structure to determine the increases that are necessary to support on-going maintenance, District capital improvement projects, and the District's share of expenses for the jointly used facilities. Proposed changes in the current rate structure will be the subject of a separate report.

There is no impact to the General Fund as the General Fund will be receiving the same interest rate as it does on its other pooled reserves. However, there may be future impacts to the General Fund associated with the County's use of the wastewater facilities used to transport and treat sewage from the County's facilities at Tower Road.

The District, County, Town and City will be developing a long range forecast of anticipated costs for on-going maintenance and capital improvement projects for the jointly used facilities. The City has plans to continue to upgrade their wastewater treatment facilities and portions of the jointly used conveyance systems. The Town plans to replace and upsize their conveyance system downstream of their last project. Currently these projects are estimated to cost \$60,500,000 within the next nine (9) years. The Town, City, and District plan to explore options for financing the proposed work including applying for State Revolving Fund money. We will also evaluate the current agreement and propose changes in order to simplify the allocation of costs and "normalize costs over a longer period of time".

Neil R. Cullen

Director of Public Works

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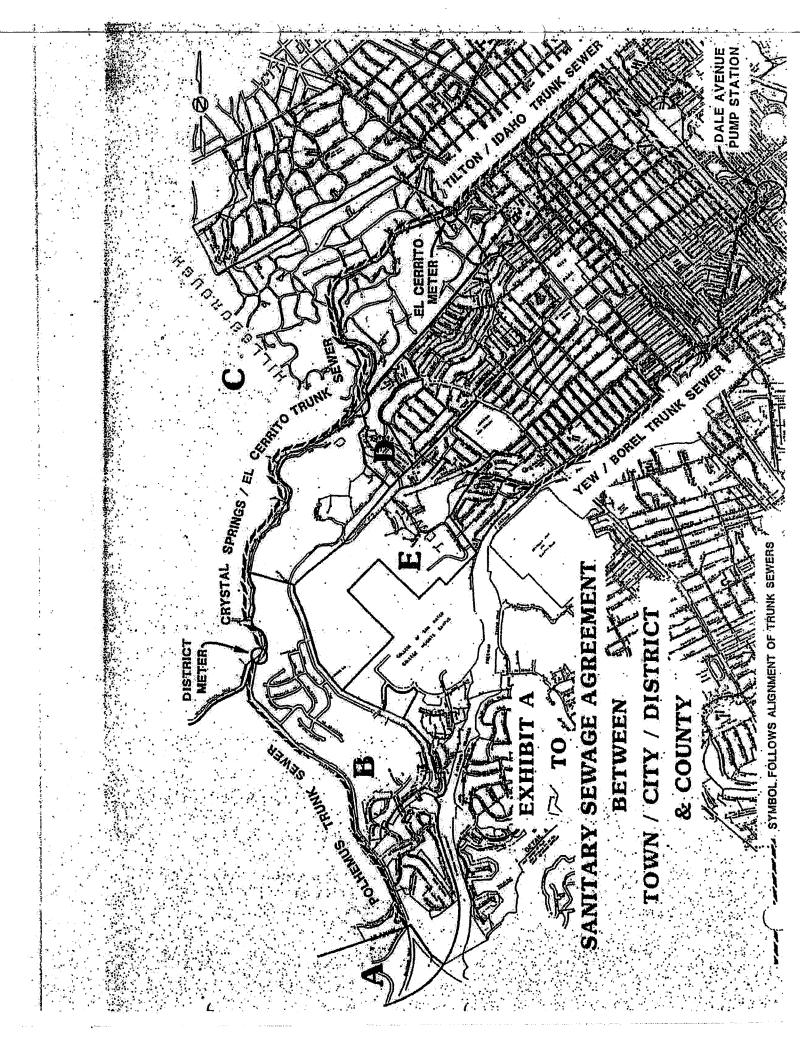
Attachment: Map

Martha DeBry, Director of Public Works, Town of Hillsborough

D. Penny Bennett, Deputy County Counsel

Brian C. Lee, P.E., Deputy Director of Public Works

Ann M. Stillman, P.E., Principal Civil Engineer, Utilities-Flood Control-Watershed Protection



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Resolution No.

Board of Supervisors, County of San Mateo, State of California

Resolution Authorizing Execution of an Agreement that Provides for a Loan to the Crystal Springs County Sanitation District from the County General Fund

RESOLVED, by the Board of Supervisors of the County of San Mateo, State of California, that

WHEREAS, the Board of Supervisors is the Governing Board of the Crystal Springs
County Sanitation District (District); and

WHEREAS, the Town of Hillsborough (Town), City of San Mateo (City), District, and the County of San Mateo (County) entered into a sanitary sewage agreement dated July 18, 1989, which designated relationships with respect to the use of sewage conveyance and treatment facilities jointly used by the Town, City, District, and County; and

WHEREAS, the agreement specifies that upgrades to jointly used facilities will be shared based on the contributions of flow from the Town, City, District, and County; and

WHEREAS, the agreement also specifies that the Town owns the Crystal Springs/El Cerrito Trunk Sewer and is responsible for any necessary repairs, reconstruction, replacement, enlargement, or improvements to their section of the sewer; and

WHEREAS, the Town completed a capital improvement project on a portion of said sewer and incurred expenses associated with the work through the 2003-04 fiscal year; and

WHEREAS, the District's share of these improvements is \$1,177,573.13 based on prorating flows in accordance with the agreement; and

WHEREAS, the District does not currently have sufficient funding to pay said costs; and

WHEREAS, Section 4764 of the Health and Safety Code of the State of California provides that county sanitation districts may borrow money to guarantee the performance of its contractual obligations; and

WHEREAS, the Director of Public Works has recommended that the District obtain a loan from the General Fund to finance the District's current obligation pursuant to said four party agreement, with said loan being repaid over a five year period with interest from the revenue of the District; and

WHEREAS, there has been presented to this Board a form of agreement providing for said loan and the repayment thereof; and

WHEREAS, this Board has reviewed and considered said agreement and the recommendation of the Director of Public Works and concurs in the Director's recommendation.

NOW THEREFORE, IT IS HEREBY DETERMINED AND ORDERED that:

The President of this Board of Supervisors be, and is hereby, authorized and directed to execute said Agreement for and on behalf of both the District and the County and signature of the Clerk of this Board shall attest thereto.

* * * * * *

Regularly passed and adopted this 15^{th} day of November, 2005.

AYES and in favor of said resolution:	
Supervisors:	JERRY HILL
	RICHARD S. GORDON
·	ROSE JACOBS GIBSON
, -	ADRIENNE TISSIER
NOES and against said resolution: Supervisors:	NONE
Absent Supervisors:	MARK CHURCH
-	
	Richard S. Gordon
	President, Board of Supervisors County of San Mateo
•	State of California

Certificate of Delivery

I certify that a copy of the original resolution filed in the Office of the Clerk of the Board of Supervisors of San Mateo County has been delivered to the President of the Board of Supervisors.

Ashnita Narayan, Deputy

Ashnita Narayan, Deputy
Clerk of the Board of Supervisors

Agreement for the Loan of \$1,000,000 to the Crystal Springs Sanitation District from the General-Fund of the County of San Mateo to Allow the District to Meet Its Current Financial Obligations to the Town of Hillsborough for the Improvement of Jointly Used Sewer Facilities

THIS AGREEMENT, entered into this _______ day of _______ day of ________, 2005, by and between the County of San Mateo, a political subdivision of the State of California, hereinafter called "County" and Crystal Springs County Sanitation District, a county sanitation district of the County of San Mateo ("District"),

WITNESSETH:

WHEREAS, Section 4764 of the Health and Safety Code of the State of California provides that county sanitation districts may borrow money to guarantee the performance of its contractual obligations; and

WHEREAS, subject to the terms and conditions set forth herein, it is necessary and desirable that the sum of \$1,000,000 be loaned to District from the County General Fund to allow the District to meet its financial obligations to the Town of Hillsborough (Town) for the reconstruction of portions of their sewer trunk main which transports sewage from the District through the Town to the City of San Mateo:

NOW, THEREFORE, IT IS AGREE BY THE PARITES HERETO as follows:

- 1. Loan Amount County agrees to lend District \$1,000,000 that will be used by the District to reimburse the Town for a portion of the District's share of the costs incurred by the Town for improvements to the Town's jointly used facilities.
- Source of Loan Funds County will make said loan to District from the County General Fund.

3. Term of Loan - District agrees to repay County said loan amount plus accrued interest no later than five (5) years from the date County disburses the payment under said loan. District shall make at least two (2) payments per year to the County no later than January 1st and June 1st of each year during the term of the loan. The District shall be allowed to repay the County at an accelerated schedule without a prepayment penalty.

1 . 3 . 3 . 3 . 3 . 3

- 4. Interest Rate on Loan District agrees to pay interest on all funds owed County under this Agreement at a rate equal to the annual interest rate paid on pooled reserves in the County Treasury.
- 5. Repayment Schedule District agrees to prepare an estimated repayment schedule for of said loan with each payment and shall deliver said schedule to the County Controller with each payment. The repayment schedule shall be based on two payments by District per year.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on

the dates set forth below.

COUNTY OF SAN MATEO

By:

Richard S. Gordon, President

Board of Supervisors

ATTEST:

John L. Maltbie, County Manager /

Clerk of the Board

CRYSTAL SPRINGS COUNTY SANITATION DISTRICT

By:

Richard S. Gordon, President

Board of Supervisors

The Governing Board of the Crystal

Springs County Sanitation District

ATTEST:

John L. Maltbie, County Manager /

Clerk of the Board

COUNTY OF SAN MATEO APPROPRIATION TRANSFER REQUEST

REQUEST NO.
ATR6 005

DEPARTMENT

PUBLIC WORKS

DATE 11/02/05

I. REQUEST TRANSFER OF APPROPRIATIONS AS LISTED BELOW:

,	C O D	ES				
	FUND OR ORG.	ACCOUNT	AMOUNT	DESCRIPTION		
- 111	45431	2546	1,000,000,00	Unanticipated Revenue Loan Proceeds-Other Funds		
From	45431	8611	177,575,00	Appropriation for Contingency		
	80110	8612	1,000,000,00	Departmental Reserves		
То	45431	6263	1,177,575,00	Project Contribution-Other Agencies		
	80110	6311	1,000,000.00	Loans to Other Funds/Agencies		

Justification. (Attach Memo if Necessary) To provide appropriation for Crystal Springs County Sanitation District's share of costs associated with the Town of Hillsborough's Sewer Capital Improvement Project. Funding will be provided by a General Fund Loan to the District and an appropriation transfer from District's contingencies account. This ATR will also transfer appropriation from the General Fund Departmental Reserves to Other Charges account to cover the General Fund loan to the District. DEPARTMENT HEAD DATE Four-Fifths Vote Required ☐ Board Action Required ☐ Board Action Not Required Remarks: PATEY O 3. Approve as Requested Approve as Revised □ Disapprove Remarks: COUNTY MANAGER DATE BY:

DO NOT WRITE BELOW THIS LINE - FOR BOARD OF SUPERVISORS' USE ONLY

BOARD OF SUPERVISORS, COUNTY OF SAN MATEO, STATE OF CALIFORNIA

RESOLUTION TRANSFERRING FUNDS

RESOLUTION NO. 683655

RESOLVED, by the Board of Supervisors of the County of San Mateo, that

WHEREAS, the Department hereinabove named in the Request for Appropriation, Allotment or Transfer of Funds has requested the transfer of certain funds as described in said Request; and

WHEREAS, the County Controller has approved said Request as to accounting and available balances, and the County Manager has recommended the transfer of funds as set forth hereinabove:

NOW, THEREFORE, IT IS HEREBY ORDERED AND DETERMINED that the recommendations of the County Manager be approved and that the transfer of funds as set forth in said Request be effected.

Regularly passed and adopted this day of November 2 197005

Regulari	passed and adopted this day	of Novem	10/6/2 , 19/2003
Ayes and	in favor of said resolution:	Noes and	d against said resolution:
Supervisors:	in favor of said resolution: ユミアル けい	Supervisors:	
	Richard S. Gordon	· *	

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COUNTY OF SAN MATEO Inter-Departmental Correspondence

Department of Public Works

DATE:

September 28, 2006

BOARD MEETING DATE:

October 17, 2006

SPECIAL NOTICE/HEARING:

None

VOTE REQUIRED: Majority

TO:

Honorable Board of Supervisors

FROM:

Neil R. Cullen, Director of Public Works

SUBJECT:

Amendment to Loan Agreement between the Crystal Springs County

Sanitation District and the County of San Mateo

Recommendation

Adopt a resolution as the governing board of both the Crystal Springs County Sanitation District (District) and the County of San Mateo (County), authorizing the President of the Board to execute Amendment No. 1 to the agreement between the District and the County for the \$1,000,000 loan to the District from the County's General Fund. The amendment will extend the term of the agreement by two (2) years and require "interest only" payments by the District for fiscal years 2006/07 and 2007/08.

Vision Alignment

Commitment: Responsive, effective and collaborative government.

Goal 20: Government decisions are based on careful consideration of future impact, rather than temporary relief or immediate gain.

The proposed amendment to the agreement will defer principal loan payments for two fiscal years in order to allow the District's limited funds to be used to finance some maintenance of District facilities.

Background

Previous Board Action

Acting as the governing Board of both the District and the County:

Subject:

Amendment to Loan Agreement between the Crystal Springs County

Sanitation District and the County of San Matco

September 28, 2006

Board Meeting Date: October 17, 2006

Page 2

- 1. Entered into a four party agreement dated July 18, 1989, between the Town of Hillsborough (Town), the City of San Mateo (City), the District, and the County that designated relationships with respect to the use and ownership of sewage conveyance and treatment facilities jointly used by the four agencies.
- 2. Authorized execution of an agreement between the District and the County which provided a \$1,000,000 loan to the District that was used to reimburse the Town of Hillsborough (Town) for District costs associated with the Town's Sewer Capital Improvement Project that improved the Town's sewer transmission lines that are used to transport District wastewater through the Town.
- 3. Adopted the sewer service charge rates that were established for the 2005-06 fiscal year for the District, as your Board was precluded from increasing rates to match District expenses due to a majority protest by the rate payers in the District pursuant to Article XIII D of the State Constitution.

History

The Town's main trunk sewer transmission line (trunk sewer) in Crystal Springs Road was experiencing overflows into San Mateo Creek due to both the lack of capacity as well as its deteriorating condition. The Town, under the threat of sanctions by the Regional Water Quality Control Board, replaced the undersized and deteriorated portions of the trunk sewer, determined the cost of the work for each entity pursuant to the four party agreement, and billed the entities. The District obtained a loan from the General Fund to reimburse the Town for its share of the upgrades as it had insufficient funds to cover this cost.

The loan agreement provided that payment of principal and interest would be made over five (5) successive years and we anticipated that the loan would be reimbursed from revenue from increased sewer service charges. However, a majority protest was received by your Board as described above, and sewer service charges could not be increased this fiscal year. Therefore, the District has insufficient funds to make the required loan payments and finance the cost of limited maintenance of the District's collection system.

Subject:

Amendment to Loan Agreement between the Crystal Springs County

Sanitation District and the County of San Mateo

September 28, 2006

Board Meeting Date: October 17, 2006

Page 3

Discussion

The proposed amendment to the agreement restructures the loan payments as follows:

Original Loan				Proposed Restructured Loan				
Loan Amount:		\$1,000,000		Loan Amount:		\$1,000,000		
Term:		5 years	5 years		Term:		7 years	
Assumed I	nterest Rate			Assumed Interest Rate				
(See note)		4.75%	4.75%		(See note)		4.75%	
	Estir	nated Payments			Estimated Payments		nents	
Payment	Principal	Interest	Total (\$)	Payment	Principal	Interest	Total (\$)	
Due Date	(\$)	(\$)	10tal (\$)	Due Date	(\$)	(\$)	Total (\$)	
Jan 2007	100,000	46,849	146,849	Jan 2007	0	46,849	46,849	
Jun 2007	100,000	17,686	117,686	Jun 2007	0	19,651	19,651	
Jan 2008	100,000	22,279	122,279	Jan 2008	0	27,849	27,849	
Jun 2008	100,000	13,809	113,809	Jun 2008	0	19,727	19,727	
Jan 2009	100,000	16,664	116,664	Jan 2009	100,000	27,773	127,773	
Jun 2009	100,000	9,825	109,825	Jun 2009	100,000	17,686	117,686	
Jan 2010	100,000	11,140	111,140	Jan 2010	100,000	22,279	122,279	
Jun 2010	100,000	5,895	105,895	Jun 2010	100,000	13,755	113,755	
Jan 2011	100,000	5,57 0	105,570	Jan 2011	100,000	16,710	116,710	
Jun 2011	100,000	1,965	101,965	Jun 2011	100,000	9,825	109,825	
Jan 2012	0	0	0	Jan 2012	100,000	11,140	111,140	
Jun 2012	0	0	0	Jun 2012	100,000	5,918	105,918	
Jan 2013	0	0	0	Jan 2013	100,000	5,555	105,555	
Jun 2013	0	0	0	Jun 2013	100,000	1,965	101,965	
Total	1,000,000	151,682	1,151,682	Total	1,000,000	246,682	1,246,682	

Note: The agreement provides that the interest rate shall be equal to the annual interest rate paid on pooled reserves in the County Treasury.

A resolution and an amendment to the agreement have been approved as to form by County Counsel.

Fiscal Impact

The proposed amendment to the loan reduces the first two year's payments by an estimated \$386,547, but increases the estimated cost of the loan by \$95,000 over the term of the loan. Payments will be made from the revenues that the District receives, primarily sewer service

Subject:

Amendment to Loan Agreement between the Crystal Springs County

Sanitation District and the County of San Mateo

September 28, 2006

Board Meeting Date: October 17, 2006

Page 4

charges, and the amendment does not change the loan provision that allows the District to accelerate payments if other revenues or funds become available to the District.

The District is re-evaluating the sewer service charge rates that are required to support on-going maintenance, District capital improvement projects, the District's share of expenses for the jointly used facilities, requirements of the RWQCB, the loan repayment, and other options for providing sewer service in the District. Recommendations regarding these issues will be the subject of separate reports.

There is no impact to the General Fund as the General Fund will be receiving interest calculated at the same rate as the General Fund receives on its other pooled reserves.

Director of Public Works

NRC:AMS:sdd

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G:\USERS\UTILITY\SEWERS\DISTRICTS\CSCSD\Amendment to CSCSD General Fund Loan - BOS Report - 10-17-06.doc F-351 (26C)

cc:

Mr. Russ Wright, President, Baywood Park Homeowners Association

Mr. Kery Weist, President, Highlands Association

D. Penny Bennett, Deputy County Counsel

Brian C. Lee, P.E., Deputy Director of Public Works

Ann M. Stillman, P.E., Principal Civil Engineer, Utilities-Flood Control-Watershed Protection

Rudy N. Gopez, Financial Services Manager

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Resolution No.	063348
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Board of Supervisors, County of San Mateo, State of California

Resolution Authorizing Execution of Amendment No. 1 to the Agreement that Provides for a Loan to the Crystal Springs County Sanitation District from the County General Fund

RESOLVED, by the Board of Supervisors of the County of San Mateo, State of California, that

WHEREAS, the Board of Supervisors is the Governing Board of the Crystal Springs
County Sanitation District (District); and

WHEREAS, Section 4746.2 of the Health and Safety Code of the State of California provides that county sanitation districts may borrow money to guarantee the performance of its contractual obligations; and

WHEREAS, the Director of Public Works recommended that the District obtain a loan from the General Fund to finance the District's obligations, with said loan to be repaid over a five (5) year period with interest from the revenue of the District; and

WHEREAS, the President of this Board of Supervisors was authorized and directed by Resolution No. 067664 to execute the Agreement entitled "Agreement for the Loan of \$1,000,000 to the Crystal Springs Sanitation District from the General Fund of the County of San Mateo to Allow the District to Meet Its Current Financial Obligations to the Town of Hillsborough for the Improvement of Jointly Used Sewer Facilities" on the 15th day of November 2005, for and on behalf of both the District and the County.

WHEREAS, based on the sewer service charge rates for the 2006-2007 fiscal year adopted by this Board on August 1, 2006, by Resolution No. 068197, the District will not receive sufficient revenue to repay the loan within the original terms of the Agreement; and

WHEREAS, there has been presented to this Board Amendment No. 1 to the Agreement stipulating an increase in the term of the loan from five (5) to seven (7) years and that payments from the District be "interest only" for those payments due on January 1, 2007, June 1, 2007, January 1, 2008, and June 1, 2008; and

WHEREAS, the Director of Public Works has recommended execution of said amendment; and

WHEREAS, this Board has reviewed and considered said Amendment No. 1 to the Agreement and the recommendation of the Director of Public Works, and concurs in the Director's recommendation.

NOW THEREFORE, IT IS HEREBY DETERMINED AND ORDERED that:

The President of this Board of Supervisors be, and is hereby, authorized and directed to execute said Amendment No. 1 to the Agreement for and on behalf of both the District and the County and signature of the Clerk of this Board shall attest thereto.

* * * * * *

Regularly passed and adopted this 17th day of October, 2006.

AYES and in favor of said resolution:

	·		
	Supervisors:	MARK CHURCH	
		JERRY HILL	
		RICHARD S. GORDON	
		ROSE JACOBS GIBSON	
		ADRIENNE J. TISSIER	· · · · · · · · · · · · · · · · · · ·
	NOES and against said resolution:		
	Supervisors:	NONE	
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ią.	Absent Supervisors:	NONE	
		Jerry Hill	
		President, Board of Supervisors	
		County of San Mateo State of California	
		State of California	

Certificate of Delivery

I certify that a copy of the original resolution filed in the Office of the Clerk of the Board of Supervisors of San Mateo County has been delivered to the President of the Board of Supervisors.

Marie L. Peterson, Deputy
Clerk of the Board of Supervisors

Amendment No. 1 to Agreement for the Loan of \$1,000,000 to the Crystal Springs Sanitation District from the General Fund of the County of San Mateo to Allow the District to Meet Its Current Financial Obligations to the Town of Hillsborough for the Improvement of Jointly Used Sewer Facilities

THIS AMENDMENT is made with respect to that certain Agreement entitled "Agreement for the Loan of \$1,000,000 to the Crystal Springs Sanitation District from the General Fund of the County of San Mateo to Allow the District to Meet Its Current Financial Obligations to the Town of Hillsborough for the Improvement of Jointly Used Sewer Facilities" between the County of San Mateo, a political subdivision of the State of California, hereinafter called "County" and Crystal Springs County Sanitation District, a County Sanitation District of the County of San Mateo ("District") dated November 15, 2005 (the "Agreement") and authorized by Resolution No. 067664, upon the terms and conditions set forth in such Agreement, subject to the following conditions and modifications:

- 1. Paragraph 3 Term of Loan is amended in its entirety to read as follows:
 - "3. Term of Loan District agrees to repay County said loan amount plus accrued interest no later than June 1, 2013. District shall make at least two (2) payments per year to the County no later than January 1st and June 1st of each year beginning on January 1, 2007, with the payments for the January 1, 2007, June 1, 2007, and January 1, 2008, and June 1, 2008, consisting of "interest only" payments. The District shall be allowed to repay the County at an accelerated schedule without a prepayment penalty."
- 2. The parties agree that, except as modified herein, all of the terms and provisions of the Agreement shall remain in effect. In the event of any inconsistency between the Agreement and this Amendment, the terms and provisions of this Amendment shall prevail.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment on the dates set forth below.

COUNTY OF SAN MATEO

By:

Fry Hil, President Board of Supervisors County of San Mateo

ATTEST:

John J. Maltbie, County Manager /

ex of the Board

Certificate of Delivery

(Government Code Section 25103)
I certify that a copy of the original document filed in the Office of the Clerk of the Board of Supervisors
San Mateo County has been delivered to the President of the Board of Supervisors.

Debuty Clerk of the Board of Supervisors

CRYSTAL SPRINGS COUNTY SANITATION DISTRICT

By:

Horry Hill President Board of Supervisors County of San Mateo

The Governing Board of the Crystal Springs County Sanitation District

ATTEST:

John L. Maltbie, County Manager /

Clerk of the Board

Government Code Section 25103)

I certify that a copy of the original document filed in the Office of the Clerk of the Board of Supervisors of the Office of the County has been delivered to the

San Mateo County has been delivered to the San Mateo County has been delivered to the San Mateo.

Deputy Clerk of the Board of Supervisors



COUNTY OF SAN MATEO Inter-Departmental Correspondence

Department of Public Works

DATE:

July 17, 2006

BOARD MEETING DATE:

August 1, 2006

SPECIAL NOTICE/HEARING:

Complied with

Publication

Requirements

VOTE REQUIRED: Majority

TO:

Honorable Board of Supervisors

FROM:

Neil R. Cullen, Director of Public Works

SUBJECT:

Adoption of the 2006-2007 Sewer Service Charges Report for County Sewer

Maintenance and Sanitation Districts

Recommendation:

Acting as the governing board of the ten (10) County Sewer/Sanitation Districts (Districts):

- 1. Hold a public hearing to consider all comments, objections, and written protests to the sewer service charges that are based on the increased sewer service charge rates previously approved.
- 2. After considering all written and oral comments, close the public hearing and determine if there is a majority protest in writing to the proposed sewer service charges in any of the Districts governed by your Board.
- 3. If there is a majority protest in writing in any of the Districts:
 - Terminate consideration of imposing the proposed sewer service charges in said District(s);
 - Adopt a resolution approving sewer service charges for said District(s) based on the sewer service charge rate previously in affect (FY 2005-2006);
 - Direct staff to recalculate the Sewer Service Charges Report (Report) based on the FY 2005-06 sewer service rates for said District(s); and
 - d. Direct staff to file a copy of the Sewer Service Charges Report with the Controller.

Subject: Adoption of the 2006-2007 Sewer Service Charges Report for County Sewer

Maintenance and Sanitation Districts

July 17, 2006

Board Meeting Date: August 1, 2006

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e. Direct staff to prioritize expenditures in said District(s) to:

- 1) meet the contractual commitments of said District(s) for the transport/treatment and for downstream capital improvement projects associated with the transport and treatment of sewage collected by said District(s);
- 2) provide "on-call" responses to clear mainline blockages that may occur after normal business hours in said District(s);
- 3) provide responses to clear mainline blockages that may occur during regular business hours; and
- 4) complete the preparation of the Sanitary Sewer Management Plan (SSMP) as required by the State.
- f. Direct staff to report back to your Board on options to either dissolve said District(s), annex areas to the adjoining cities or transfer ownership of said District(s) to a State Public Utilities Commission regulated company.
- 4. Adopt a resolution adopting the 2006-2007 Sewer Service Charges Report based on the currently adopted sewer service charge rates for the Districts where there is not a majority protest.

Vision Alignment:

Commitment: Ensure basic health and safety for all.

Goal 7: Maintain and enhance the public safety for all residents and visitors.

Background

Previous Board Action

- 1. Adopted Ordinance No. 04315 on June 6, 2006, establishing the current sewer service charge base rates.
- 2. Adopted Resolution No. 068046 on June 6, 2006 that set 9:00 A.M. on August 1, 2006, in your Chambers as the time and place for a public hearing to consider the Sewer Service Charges Report for 2006-2007 for the Sewer/Sanitation Districts governed by your Board.
- 3. Directed the Director of Public Works to send notices of the proposed rates and charges to each property owner in each District.

History

The Districts governed by your Board currently provide sanitary sewage collection, transport, treatment and disposal services as well as ancillary field and office services to over 12,000

Subject:

Adoption of the 2006-2007 Sewer Service Charges Report for County Sewer

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residences, businesses, schools, and institutions in ten (10) areas of San Mateo County. Virtually all of the revenue to provide these services in each District is generated by a user fee, the sewer service charge.

The State Regional Water Quality Control Board (RWQCB) notified staff in July 2005 of the requirement to prepare a Sewer System Management Plan (SSMP) pursuant to Section 13267 of the California Water Code, and a timetable to provide specific elements of the SSMP. They also notified us that failure to respond, a late response or incomplete response could subject the agency to civil liabilities imposed by the State of up to \$1,000 per day.

Staff, in developing the elements of the sewer service charge rates reviewed four (4) years of historic cost data to develop costs for continuing with the maintenance of the collection system, contractual commitments of the Districts for downstream transport and treatment of the sewage collected by the Districts, and to develop a SSMP that meets the provisions of the RWQCB. The cost elements that are included in the proposed sewer service charge rates are: operation and maintenance, sewage treatment, district capital improvement projects, out of district capital improvement projects, television inspections of the sewer mains, regulations, equipment replacement/upgrades, and contingencies. Attached is a pie chart for each District indicating the estimated expenditures that comprise the sewer service rate that is used to calculate the charges recommended to be levied on properties in each District.

The 2006-2007 Sewer Service Charges Report contains the individual charge for each parcel of real property receiving sewer service from the ten (10) Districts. The following table indicates the prior and the current sewer service charge rates which were used to calculate the 2006-07 Sewer Service Charges Report:

District	Prior Rate 2005-06	Current Rate 2006-07	Increase
Burlingame Hills SMD	\$ 657	\$1,524	\$ 867
Crystal Springs CSD	\$ 496	\$1,517 .	\$1,021
Devonshire CSD	\$ 404	\$ 983	\$ 579
Edgewood SMD		\$ 792	4
Emerald Lake Heights SMD			
Zone 1	\$ 482	\$ 850	\$ 368
Zone 2	\$ 353	\$ 683	\$ 330
Fair Oaks SMD	\$ 267	\$ 365	\$ 98
Harbor Industrial SMD	- \$ 268	\$ 376	\$ 108
Kensington Square SMD	\$ 352	\$ 906	\$ 554
Oak Knoll SMD .	\$ 412	\$ 695	\$ 283
Scenic Heights CSD	\$ 376	\$ 701	\$ 325

Subject:

Adoption of the 2006-2007 Sewer Service Charges Report for County Sewer

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Discussion

Our June 6, 2006, staff report (copy attached) explained the need for the additional charges and the proposed process to be followed pursuant to the County Ordinance Code. Notices were then sent to the owners of the approximately 12,000 parcels in the ten (10) County Sewer/Sanitation Districts informing them of the proposed charges for each specific property, the reason for the charges, and the time, place, and date when your Board would consider the proposed charges. The purpose of the public hearing on this report is to allow your Board to hear and consider any and all objections or written protests to the amount of the individual charges.

The following table indicates the number of written protests to the proposed increase in sewer service charges that were received at the time this report was prepared (July 17, 2006):

District	No. of Properties in District	Written Protests Received	Percent (%)
Burlingame Hills SMD	440	3	0.7
Crystal Springs CSD	1,473		1.3
Devonshire CSD	311	2	0.6
Edgewood SMD	18	0	0
Emerald Lake Heights SMD			
Zone 1	212	1	0.5
Zone 2	1,765	4.	0.2
Fair Oaks SMD	7,584	4	0.05
Harbor Industrial SMD	66	0	0
Kensington Square SMD	74	0	.0
Oak Knoll SMD	119 .	0	0
Scenic Heights CSD	-53	0	0

We will report to your Board on any written protests that are received up to and including the date of the public hearing.

Alternates to Consider:

After the close of the hearing, your Board has the following options to consider for each District, based on whether or not there is a majority protest in each District:

Districts Where There is a Written Majority Protest:

We recommend that you take the actions as recommended in the Recommendation Section of this report including:

adopting a resolution approving sewer service charges in the District(s) where there is majority protest using the sewer service charge rates previously in affect for the 2005/06 fiscal year, and directing staff to recalculate the charge and file the report with the Controller;

Subject:

Adoption of the 2006-2007 Sewer Service Charges Report for County Sewer

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July 17, 2006

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- 2) directing staff to prioritize expenditures in said Districts; and
- directing staff to report back on options to dissolve said District(s), transfer said District(s) to the adjacent cities or transfer ownership of said District(s) to a State Public Utilities Commission regulated company.

Districts Where There is No Written Majority Protest: Your Board can:

Tom Board Can:

- 1. Approve the Sewer Service Charges Report as presented for the Districts where there is no majority protest; or
- 2. Reduce the sewer service charge rates as you may determine appropriate.

Your Board, as stated above, can reduce sewer service charges at the close of the public hearing. As an example, a contingency has been included in each charge that is equivalent to approximately nine percent (9%) of the total rate. The sewer service charge could be reduced by this amount if the contingency is removed. However, a source of funding, such as a loan, would need to be found if a district incurred an expense that could not be financed from its current revenue sources. Other charges could also be reduced which can have impacts such as reduced maintenance; deferred capital improvements; or the Districts not meeting State mandates that can result in possible monetary sanctions against the Districts.

We believe the recommended Sewer Service Charges are appropriate as they have been calculated in conformance with the adopted ordinance, provide the funding necessary to maintain the collection systems of the Districts', allow the Districts to meet their contractual commitments as well as meeting the most recent State mandates in developing and financing a SSMP for each District.

A resolution has been approved as to form by County Counsel, and we will provide an alternate form of resolution if there is a majority protest in a District(s), or if your Board determines to reduce sewer service charges in a District(s) where there is no majority protest.

Fiscal Impact

The adoption of the 2006-07 Sewer Service Charges Report and its filing with the Controller will result in the user charges contained therein being placed on the tax roll. The charges will appear on the 2006-07 tax bill of each affected property and be collected in the same manner as the property tax.

Subject: Adoption of the 2006-2007 Sewer Service Charges Report for County Sewer

Maintenance and Sanitation Districts

July 17, 2006

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There is no direct impact to the General Fund. However, sewer service charges are levied on properties that are either leased or owned by the County that are in the Districts and which are provided sewer service.

Neil R. Cullen

Director of Public Works

NRC:AMS:MC:JY:sdd

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F-351 (1A)

Attachment:

June 6, 2006 Board Report

Pie Chart for each District

cc:

Fair Oaks Council

Known Home Owners Associations within the Districts

D. Penny Bennett, Deputy County Counsel

Tom Huening, Controller

Brian C. Lee, P.E., Deputy Director, Engineering & Resource Protection Division

Ann M. Stillman, P.E., Principal Civil Engineer, Utilities-Flood Control-Watershed Protection

Mark Chow, P.E., Senior Civil Engineer, Utilities-Flood Control-Watershed Protection Julie Young, Associate Civil Engineer, Utilities-Flood Control-Watershed Protection

Board of Supervisors, County of San Mateo, State of California

Resolution Setting Sewer Service Charge Rates, Authorizing the Imposition of Charges
Based on Said Rates for the 2006-2007 Fiscal Year, and Authorizing the Filing of the 20062007 Sewer Service Charges Report for
County Sewer Maintenance and Sanitation Districts

RESOLVED, by the Board of Supervisors of the County of San Mateo, State of California, as the governing board of the following Sewer Maintenance and County Sanitation Districts (Districts):

Burlingame Hills Sewer Maintenance District;
Crystal Springs County Sanitation District;
Devonshire County Sanitation District;
Edgewood Sewer Maintenance District;
Emerald Lake Heights Sewer Maintenance District;
Fair Oaks Sewer Maintenance District;
Harbor Industrial Sewer Maintenance District;
Kensington Square Sewer Maintenance District;
Oak Knoll Sewer Maintenance District;
Scenic Heights County Sanitation District.

WHEREAS, this Board adopted Ordinance No. 04315 on June 6, 2006, establishing the following sewer service charge base rates for said Districts:

District	2006-07
Burlingame Hills SMD	\$ 1,524
Crystal Springs CSD	\$ 1,517
Devonshire CSD	\$ 983
Edgewood SMD	\$ 792
Emerald Lake SMD – Zone 1	\$ 850
Emerald Lake SMD – Zone 2	\$ 683
Fair Oaks SMD	\$ 365
Harbor Industrial SMD	
Kensington Square SMD	\$ 906
Oak Knoll SMD	\$ 695
Scenic Heights CSD	\$ 701

and

WHEREAS, the Director of Public Works has prepared the report described in Section 5473, et seq., of the Health and Safety Code of the State of California, relating to the collection of sewer service charges on the tax roll based on the sewer service charge base rates adopted by Ordinance No. 04315; and

WHEREAS, a public hearing as required by Section 5473.1, et seq., of the Health and Safety Code of the State of California was duly held on August 1, 2006, at 9:00 A.M. in the Board of Supervisors' Chambers; and

WHEREAS, this Board heard and considered all objections and protests to said report at said public hearing; and

WHEREAS, it has been determined, based on the written protests submitted prior to the close of said public hearing, that the majority of property owners in the Crystal Springs County Sanitation District have submitted written protests against the levying of the proposed increase in sewer service charges in said District, and that therefore, the charges in that District shall remain the same as in 2005-2006 and

WHEREAS, this Board, has considered public testimony and determined that sewer service charges should be imposed for the 2006-2007 fiscal year.

NOW THEREFORE, IT IS HEREBY DETERMINED AND ORDERED as follows:

1. This Board hereby directs the Director of Public Works to calculate the sewer service charges for properties within the sewer sanitation/maintenance districts governed by this Board using the sewer service charge base rates listed below:

District	Base Rate for Charges to be Imposed in 2006-07
Burlingame Hills SMD	\$ 812
Crystal Springs CSD	\$ 496
Devonshire CSD	\$ 474
Edgewood SMD	\$ 655
Emerald Lake SMD - Zone 1	\$ 629
Emerald Lake SMD - Zone 2	\$ 428
Fair Oaks SMD	\$ 267
Harbor Industrial SMD	\$ 268
Kensington Square SMD	\$ 373
Oak Knoll SMD	\$ 412
Scenic Heights CSD	\$ 387

- 2. The charges as to be recalculated using the base rates as set forth above shall be, and are hereby declared as the sewer service charges to be levied on each parcel of property within said districts for the 2006-2007 Fiscal Year
- The Director of Public Works is hereby directed to submit to the Clerk of this Board, a revised report that contains the charges as recalculated, and to certify to the Clerk that the charges have been recalculated based on the revised base rates as adopted by this Board.
- 4. The Director of Public Works is also directed to file with the Controller an electronic copy of said report and a statement endorsed thereon that the charges as set forth in said electronic copy are the charges as adopted by this Board based on the certification of the Director of Public Works.
- 5. The Director of Public Works is authorized to refund, as appropriate, any overcharge contained in said report to the owner of the parcel so overcharged when the overcharge resulted from data, data entry or computation errors as determined by said Director of Public Works.

Regularly passed and adopted this \underline{I}^{st} day of August, 2006.

Supervisors:	MARK CHURCH
	JERRY HILL
· · · · · · · · · · · · · · · · · · ·	RICHARD S. GORDON
	ROSE JACOBS GIBSON
	ADRIENNE J. TISSIER
NOES and against said resolution:	
Supervisors:	NONE
سم	
Absent Supervisors:	NONE
	Jerry Hill
	President, Board of Supervisors County of San Mateo State of California

Certificate of Delivery

I certify that a copy of the original resolution filed in the Office of the Clerk of the Board of Supervisors of San Mateo County has been delivered to the President of the Board of Supervisors.

Marie L. Peterson, Deputy
Clerk of the Board of Supervisors

Ordinance No. 04326

Board of Supervisors, County of San Mateo, State of California

An Ordinance Amending Sections 4.32.020 of Chapter 4.32 of Title 4, Sanitation and Health, San Mateo County Ordinance Code,

Concerning Sewer Maintenance Districts or County Sanitation Districts

Governed by the Board of Supervisors

The Board of Supervisors of the County of San Mateo, State of California, ordains as follow:

Section 1. Chapter 4.32 of Title 4, Sanitation and Health, of the San Mateo County Ordinance Code is hereby amended to read as follows:

Section 4.32.020 RATES. Sewer Service Charges are hereby prescribed for each residential unit or residential unit equivalent per connection to each district's sanitary sewerage system, per year or portion thereof, as follows:

District	,
Burlingame Hills SMD	\$ 812
Crystal Springs CSD	\$ 496
Devonshire CSD	\$ 474
Edgewood SMD	\$ 655
Emerald Lake SMD - Zone 1	\$ 629
Emerald Lake SMD - Zone 2	\$ 428
Fair Oaks SMD	\$ 267
Harbor Industrial SMD	\$ 268
Kensington Square SMD	\$ 373
Oak Knoll SMD	\$ 412
Scenic Heights CSD	\$ 387

Section 2. This Ordinance shall be in full force and effect 30 days after its adoption.

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Regularly passed and adopted this 15th day of August, 2006.

Supervisors:	MARK CHURCH
•	JERRY HILL
**************************************	RICHARD S. GORDON
	ROSE JACOBS GIBSON
	ADRIENNE J. TISSIER
NOES and against said ordinance:	
Supervisors:	NONE
·	
Absent Supervisors:	NONE
	·
	Jerry Hill
	President, Board of Supervisors County of San Mateo
	State of California

Certificate of Delivery

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Marie L. Peterson, Deputy
Clerk of the Board of Supervisors



COUNTY OF SAN MATEO Inter-Departmental Correspondence

Department of Public Works

DATE: May 22, 2006

BOARD MEETING DATE: June 6, 2006

SPECIAL NOTICE/HEARING: None VOTE REQUIRED: Majority

TO:

Honorable Board of Supervisors

FROM:

Neil R. Cullen, Director of Public Works

SUBJECT:

Proposed Increase in Sewer Service Charges for the Ten (10) County

Governed Sewer/Sanitation Districts

Recommendation:

Acting as the governing board of the ten (10) County Sewer/Sanitation Districts (Districts), adopt:

- 1. an ordinance setting the sewer service charge rates for 2006-07 through 2010-2011, which are recommended to increase significantly in order to finance State and Federal mandates and to finance improvements in the collection systems of the agencies that transport and treat sewage from the ten (10) Districts; and
- 2. a resolution:
 - (a) setting a time and place for a public hearing to consider the sewer service charges for FY 2006-2007 for the ten (10) Districts governed by your Board; and
 - (b) directing the Director of Public Works to send a notice of the proposed rates and charges to each property owner in each district as required by the State Constitution.

Vision Alignment:

Commitment: Ensure basic health and safety for all.

Goal 7: Maintain and enhance the public safety for all residents and visitors.

Subject:

Proposed Increase in Sewer Service Charges for the Ten (10) County Governed

Sewer/Sanitation Districts

May 22, 2006

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Background

Previous Board Action

- 1. Adopted an ordinance setting the current sewer service charge rates for nine (9) sewer/sanitation districts governed by your Board.
- 2. Recently approved the formation of the Edgewood Sewer Maintenance District to serve two new subdivisions adjacent to Edgewood Road in the San Carlos area.
- 3. Authorized capital improvement projects in the Districts financed by sewer service charges levied in the district where the project was located.

History

State and Federal Regulations Regarding Sanitary Sewer Overflows from Sewer Collection Systems

The ten (10) Districts governed by your Board serve approximately 12,200 properties and finance the operation and maintenance of approximately 150 miles of sewer mains as well as the cost of treating the sewage collected by the Districts. The operation of the Districts' sewer collection systems is regulated by the California Regional Water Quality Control Board (RWQCB) and the Environmental Protection Agency (EPA) pursuant to the Federal Clean Water Act.

Sanitary Sewer Overflows (SSO) from sewer collection systems contains domestic, commercial, or industrial sewage. SSO's can pollute surface or ground waters, threaten public health, adversely affect aquatic life, and impair the recreational use and aesthetic enjoyment of surface waters. Sewer main blockages that result in SSO's can also create sewage back ups into houses causing property damage and creating a public health hazard to those who come in contact with the untreated sewage. We are currently required to report SSO's that are greater than 100 gallons to the RWQCB.

The San Francisco Bay RWQCB recently implemented a SSO control program that requires all sanitary sewer collection system agencies in the Bay Area to prepare Sewer System Management Plans (SSMP) pursuant to Section 13267 of the California Water Code. The SSMP has several elements that must be completed by August 2008. The SSMP describes the activities each sewer/sanitation district will employ to manage their wastewater collection systems effectively.

Subject:

Proposed Increase in Sewer Service Charges for the Ten (10) County Governed

Sewer/Sanitation Districts

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The State Water Resources Control Board (SWRCB) has adopted statewide waste discharge requirements and they are currently developing a reporting program to provide a consistent approach in reducing SSO's. The SWRCB reporting program will supersede the RWQCB reporting requirements once it is developed, except in instances where the RWQCB reporting requirements are more stringent.

The EPA has also developed draft permit requirements under the Clean Water Act (CWA) to regulate SSO's from collection systems. This program, when implemented, will essentially prohibit SSO's and levy penalties or sanctions for those agencies that allow SSO's to occur.

Discussion

What the Districts Must Do to Comply

The SWRCB in cooperation with the Bay Area Clean Water Agencies (BACWA), developed guidelines for effective management of wastewater collection systems through the use of a SSMP. The guidelines specify that effective management of a wastewater collection system includes:

- Maintaining or improving the condition of the collection system infrastructure in order to provide reliable service into the future.
- Cost-effectively minimizing infiltration/inflow and providing adequate sewer capacity to accommodate wet weather flows in the sewer systems.
- Minimizing the number and impact of SSO's that occur.

Financing District Operations and Mandated Programs

The Districts are funded predominantly by sewer service charges that are set by ordinance and collected together with the property tax. The Districts also receive a property tax apportionment which has been redirected by the State to balance their budget in recent years. The sewer service charge varies among Districts depending upon the size of the District, condition and age of the sewer infrastructure, access issues associated with maintenance, cost of sewage treatment, and an individual District's financial responsibility associated with the transmission and treatment of District collected sewage by other agencies.

We have evaluated the sewer service charge for each district and developed the proposed rates to finance:

Subject:

Proposed Increase in Sewer Service Charges for the Ten (10) County Governed

Sewer/Sanitation Districts

May 22, 2006

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- 1. Continued routine and emergency maintenance (operation and maintenance).
- 2. Increased costs for sewage treatment and disposal.
- 3. Development of SSMP's.
- 4. The cost to comply with additional regulatory requirements (on going television inspection of the system, spot repairs identified through the television inspections, and acquisition or replacement of equipment used to maintain and repair the collection systems).
- 5. The cost to continue to implement capital improvement projects to increase the size of sewer mains where capacity is insufficient, and to rehabilitate or replace structurally damaged sewer mains.
- 6. Contingencies for unanticipated charges, expenses, or repairs.
- 7. Payments pursuant to existing agency agreements for costs associated with downstream system or facility improvements and upgrades.

The methodology used to determine the rates is described in Attachment A.

Process to be Followed in Implementing an Increase in the Current Rate and Fee Structure The County Ordinance Code provides that sewer service charges for the Districts be collected on the tax roll. Your Board must take the following three actions by August 1, 2006, to place the sewer service charges on the tax roll for FY 2006-2007:

- 1. Amend the Ordinance Code to increase the rates used to calculate the sewer service charge fees for each property within each district.
- 2. Hold a public hearing and receive testimony.
- 3. Adopt a Resolution adopting the FY 2006-2007 Sewer Service Charges Report.

In addition, Article XIIIG and XIIID of the State Constitution requires an individual notice of the hearing to consider any new or increased property related fees including sewer fees, and a mechanism for rejecting the fees via a "majority protest" at the public hearing. We are recommending that your Board direct us to notify each owner of each property of the new annual charges by mail and to explain that protests to the charges must be in writing.

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Proposed Increase in Sewer Service Charges for the Ten (10) County Governed

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An ordinance and a resolution have been approved as to form by County Counsel.

Fiscal Impact

The following are the current rates and proposed increases in sewer service charge rates for the next five (5) years in each of the ten (10) Districts that we believe are needed to cover the costs as explained above:

	Se	Sewer Service Charge (\$/Year Per Residential Unit)					
			Pr	oposed Rates			
District	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	
Burlingame Hills SMD	\$ 657	\$ 1,524	\$ 1,585	\$ 1,648	\$ 1,714	\$ 1,783	
Crystal Springs CSD	\$ 496	\$ 1,517	\$ 2,170	\$ 1,820	\$ 2,750	\$ 1,995	
Devonshire CSD	\$ 404	\$ 983	\$ 1,011	\$ 1,021	\$ 1,033	\$ 1,075	
Edgewood SMD		\$ 792	\$ 809	\$ 799	\$ 790	\$ 822	
Emerald Lake SMD – Zone 1	\$ 482.	- \$850	- \$884-	\$919	- \$- 956	- \$994	
Emerald Lake SMD – Zone 2	\$ 353	\$ 683	\$ 709	\$ 732	\$ 756	\$ 787	
Fair Oaks SMD	\$ 267	\$ 365	\$ 379	\$ 395	\$ 410	\$ 427	
Harbor Industrial SMD	\$ 268	\$ 376	\$ 386	\$ 388	\$ 390	\$ 405	
Kensington Square SMD	\$ 352	\$ 906	\$ 942	\$ 979	\$ 1,019	\$ 1,059	
Oak Knoll SMD	\$ 412	\$ 695	\$ 723	\$ 752	\$ 782	\$ 813	
Scenic Heights CSD	\$ 376	\$ 701	\$ 718	\$ 715	\$ 714	\$ 742	

Sewer master plans were developed for the Districts in 1999, which evaluated the sewer collection system and prioritized capital improvement projects for each District based on capacity, excessive maintenance requirements, and structural deficiencies. We have completed seven (7) capital improvement projects and will complete four (4) additional projects this fiscal year. The remaining capital improvement cost (construction only) required to complete the Sewer Master Plan List is approximately \$7,600,000 in today's dollars. These projects have been financed with a "pay as you go" method.

We are currently evaluating if long term loans are available to the Districts to help finance the District's costs associated with projects to improve the transport and treatment of District collected sewage by other agencies.

Subject:

Proposed Increase in Sewer Service Charges for the Ten (10) County Governed

Sewer/Sanitation Districts

May 22, 2006

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We estimate that it will cost approximately \$12,000 (\$1 per rate payer in the Districts) to prepare, print and mail individual notices to each rate payer. This cost will be paid from the revenues of the respective Districts.

There is no impact on the General Fund.

Neil R. Cullen

Director of Public Works

NRC:AMS:MC:JY:sdd F:\USERS\ADMIN\Board of Supervisors\2006\Une 6, 2006\SetHearingMerno2006sewerservicechargesmay22.doc G:\USERS\UTILITY\SEWERS\SSC Rate Study\2006-2011 Rates\BOS\Set Hearing Memo 2006.doc F-351(1A)

Attachment:

Attachment "A" - Sewer Rate Increase Methodology

Attachment "B" - Comparison of Sewer Service Charges in Other Jurisdictions

cc:

D. Penny Bennett, Deputy County Counsel Ann M. Stillman, P.E., Principal Civil Engineer, Utilities-Flood Control-Watershed Protection Mark Chow, P.E., Senior Civil Engineer, Utilities-Flood Control-Watershed Protection Julie Young, Associate Civil Engineer, Utilities-Flood Control-Watershed Protection

Atta ent A Sewer Rate Increase Methodology

bases to supportitie required activities and financial commitments. The number of connections per district and approximate age of the collection systems; and contingency planning. The County sewer/sanitation districts are unique as they have relatively small customer The methodology used to determine the sewer rates was based on several factors. The following table indicates costs associated with improvement projects, new expenditures based on interagency agreements, anticipated expenditures due to new requirements for information which defines the factors and provides information regarding anticipated increases in existing expenditures, planned these factors for each sewer/sanitation district and represents only the 2006-2007 Fiscal Year. Also listed below is additional sewer infrastructure is presented in the subsequent table.

	See		The state of the s						100	•	
	e de la companya de l	Component	Components of Sewer Service Charge Rate Increase for Fiscal Year 2006-2007	Service Ch	arge Rate	Increase fo	r Fiscal Y	ar 2006-2	00.7		
		on the same					SSMP Related Costs	ated Costs			
Treatment	Sewer District	O&M	Treatment	District	Out of District	CCTV	Spot Repair	Regulation	Regulations Equipment	Contingency	Total
Facility	3773-1				J.		1.	1		1.	* 656 851.
City of	Burlingame Hills SMD	\$ 104,104	\$ 245,700	\$.180,538	0	\$ 31,731	\$ 23,591	\$ 2,294	\$ 8,893	2 00,000	
Burlingame City of San	Cruscial Smither CSD	\$ 239,128	\$ 301,946	\$ 221,370	\$1,082,223	\$ 82,473	\$ 79,376	\$ 7,720.	. \$ 29,921	\$ 200,000	\$2,244,156
Mateo		8 57 02 <i>K</i>	6	\$ 82.801	0	\$ 19,450	\$ 15,265	\$ 1,485	\$ 5,754	\$ 26,000	\$ 290,921
	Devonshire Call	005,20	9		0		6	26 \$	\$ 377	\$ 2,000	\$ 14,264
	Edgewood SMD	\$ 4,500	\$ 7,290	O 8		·	1.				ľ
	Emerald Lake Heights	\$ 67,455	\$ 71,500	.0	o •	\$ 17,552	\$ 11,524	\$ 1,121	\$ 4,344	\$ 14,300	\$ 187,795
	SMD - Zone 11 (1)	4	00000	9 20 730	0	\$117,462	\$ 77,122	\$ 7,501	\$ 29,071	\$ 95,700	\$ 981,889
ή (SMD - Zone 2	\$ 117,500	111,505 \$ 451,71								076 858 73
South Bayside System	Pair Oaks SMD	\$ 990,756	\$1,703,520	\$ 496,117	0 S	\$356,598	\$ 407,872	\$ 39,668	\$ \$ 153,747	\$ 410,000	44,000,440
Authority	Unarbor Industrial SMD	65	\$ 34,320	\$ 9,700	О \$	\$ 15,507	\$ 3,330	\$ 324	1,255	\$ 9,000	\$ 95,173
	Kensington Square	64	\$ 20,966	\$ 23,918	0	\$ 3,412	\$ 4,108	8 399	\$ 1,548	\$ 6,000	\$ 67,007
**************************************	SMD		33	\$ 12.747	0	\$ 9,688	\$ 6,272	\$ 610	3 2,364	\$ 7,000	\$ 81,321
	Oak Know Sivilo	- 1	€ 6	6	0	\$ 3.783	\$ 2,886	\$ 281	1 \$ 1,088	\$ 3,000	\$ 37,855
	Scenic Heights CSD	7/4,4/7	C++'01 +					6	CAE 850 3 67	\$ 833,000	\$9,215,511
	Tota	Total \$1,618,976	33,019,630	\$1,072,820	\$1,082,223	\$657,653	\$ 031,347	000,100 &	9	2.8	

Page 1 of 4

OPERATION AND MAINTENANCE (O&M)

Projected O&M costs were calculated based on the average of actual expenditures for the 2001-02 through 2004-05 Fiscal Years and O&M costs include: preventative maintenance activities (Sewer Crew Road Division, Root Control, and Pest Control), on-call and emergency service response, administration, drafting support, and have been increased by 4% per year for the proposed rates. computer system support

TREATMENT AND TRANSPORT

South Bayside System Authority (SBSA) provides sewage treatment for all the County sewer/sanitation districts, with the exception of the Burlingame Hills SMD and the Crystal Springs CSD. The City of Burlingame provides treatment to the Burlingame Hills SMD and the District has not been informed of any proposed treatment plant upgrade or expansion projects. The City of San Mateo provides treatment for the Crystal Springs CSD.

The following table indicates the approximate age of the district's facilities, the number of connections per district, and the agencies that provide downstream transport and treatment to the County sewer/sanitation districts

2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		** * * * * * * * * * * * * * * * * * *		
M. San	County Sewe	County Sewer/Sanitation District Information	Information	
Sewer/Sanitation District	Age of Sewer	Equivalent	Downstream Transport	Treatment Facility
	Facilities (vrs)*	Residential Units	Agency	
Burlingame Hills SMD	71	431	City of Burlingame	City of Burlingame
Crystal Springs QSD	59	1,479	Town of Hillsborough City of San Mateo	City of San Mateo
Demonshire CCD !!	50	296	City of San Carlos	SBSA
Edgewood SMD		18;	City of Redwood City	SBSA
Emerald Lake Heights SMD –	59	221	.City of San Carlos	SBSA
Zone I			City of Deduction	
Emerald Lake Heights SMD –	. 23	1,437	City of Redwood City	SBSA
Lone 2 Fair Oaks SMD	92	12,496	City of Redwood City	SBSA
Harbor Industrial SMD	55	253	City of San Carlos	SBSA
Kensington Square SMD	50	74;	City of Redwood City	SBSA
Oak Knoll SMD	49	117	City of Redwood City	SBSA
Scenic Heights CSD	57	. 75	City of San Carlos	SBSA
		7 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		*

ge of facilities estimated based on year district formation date.

6% during the 2006-07 fiscal year. These expenses will be passed on their treatment customers and have been incorporated into the by 5% and upgrades to their facilities will increase charges rate structure with anticipated 4% increases in subsequent fiscal years SLA - SBSA is estimating that their O&M costs will be increas

increase which will affect the Fair Oaks SMD, Oak Knoll SMD, Kensington Square SMD, Emerald Lake Heights SMD Zone City of Redwood City - The City of Redwood City has incorporated the SBSA increases into their proposed 26% rate 2, and Edgewood SMD

increase has been incorporated into the rate calculations for Scenic Heights CSD, Emerald Lake Heights SMD - Zone 1, and City of San Carlos - The City of San Carlos will be increasing their rates by 60% over the next three fiscal years. This Harbor Industrial SMD. City of San Marteo - The treatment costs for Crystal Springs CSD are estimated to increase by 3% in the first fiscal year (FY 2006-37) and by 4% in subsequent years.

City of Burlingaine – The treatment costs for Burlingame Hills SMD are estimated to increase by 5% in the first fiscal year (FY 2006-07) and by 4% in subsequent years

DISTRICT CAPITAL IMPROVEMENT PROJECTS (CIP)

Funding for the CIPs identified in the Sewer Master Plan, which have not yet been constructed have been factored into the rate structure. The CIP list is District specific and estimated costs have been allocated to the appropriate districts.

Other CIP expenses refer to downstream agency projects whereby the project costs can be passed through to a specific district based on existing interagency agreements. These projects include transport or treatment facility upgrades.

period for a \$1,000,000 loan made to the District. The loan was necessary to finance unanticipated project reimbursement obligations of the District in the amount of \$1,177,573.13 to the Town of Hillsborough for a previous capital improvement project. The Town of Hillsborough also plans to upgrade other sewer mains, which transport sewage from the Crystal Springs CSD. The estimated cost of Crystal Springs County Sanitation District - These costs include loan payments to be made to the General Fund over a 5-year the upgrade is \$8.6 million. Crystal Springs CSD's proportionate share of the Town's proposed project is estimated to be \$4.02

completed particle \$30.5 million upgrade to their treatment facility and plans to construct additional upgrades to the treatment facility The City of San Mateo will be upgrading their treatment facility and transmission lines during the next six fiscal years. The City has

estimated to cost \$10 million. Additional upgrades to the City's transmission lines are estimated at \$24 million. Crystal Springs CSD's proportionate share of the City's projects has been estimated at \$6.25 million.

SSMP REQUIREMENTS

The SSMP must contain the following elements:

- Collection system management goals
- Organization of personnel, including the chain of command and communications
- Overflow emergency response plan
- Fat, Oils and Grease (FOG) control program
- Legal authority for permitting flows into the system, inflow/infiltration control as well as enforcement of proper design installation, and testing standards, and inspection requirements for new and rehabilitated sewers
 - Measures and activities to maintain the wastewater collection system
- Design and construction standards
- Capacity Management
- Monitoring plan for SSMP program effectiveness
- Periodic SSMP Audits, periodic SSMP updates, and implementation of program

The SSMP elements will require additional funding to support the required work. The rate structure includes funding for the following key components of the SSMP: Closed Circuit Television Inspection (CCTV) – The sewer facilities within the districts will be televised once every three years (1/3 every year) to obtain condition assessment information about the system

Spot Repairs - Repairs to the sewer facilities will be performed as identified through the CCTV inspections.

Regulatory Requirements - Costs associated with specific reporting requirements and development of the SSMP.

Equipment Upgrades - Necessary equipment replacement, upgrades, or purchases needed to continue maintaining district facilities effectively.

CONTINGENCE

A contingency of 10% of the expenditure requirements has been incorporated into the proposed rates. This funding would be

Attachment B

Comparison of Sewer Service Charges in Other Jurisdictions (Equivalent Residential Units)

(Source: State Water Resources Control Board, May 1, 2006 except as noted.)

			Neighbonng garding		
Stricts Districts	2	Control of the Contro			~ .
	2005-06	Proposed	•	2002-06	•
	Territoria.	70-9006		Appended S.S.C.	
or the	Allina		Name	Allinar Co.	7
	SSC	Annual SSC	- 11	\$364	>
Name (State		YGS KO	City of Belmont	COCE	
	265			4330	
Suningame nus orac	\$496	\$1,517		\$422	die.
Crystal Springs GSD	eana	\$983	City of Foster City	6419	المعطية
OSO STREET	2010	1	Carrier Half Woon Bay		
	- CS	28/20		\$1.315	
Edgewood SIMD	evs2	\$850	City of Hillsborough.	* 8448 ·	4
Embraid Lake Heights SMD - Zone 1		ee02	Chy or Willbrae	****	
The Carlo Zone 2	\$353	2000		2000	
Emerald Lake Heights SMC Language	\$267	\$365	City of Reawage City		
Eair Oaks SMD		&27G	City of San Bruno	* ***	
	\$268	223		0/78	-
Harbor Industrial Simo	\$352	\$306	City of San Cands	· \$352 **	
Kensington Square SMD		& A G A G A	City of San Mateo	90C3	_
	77.4	2000	San Francisco	3	=
Cak Know Similar	\$376	£0/\$	City of course of the Principle	\$350	-
Scenic Heights CSD		7	East Palo Alto Sallitary State	* 06Z\$	
			Inheri Bay Sanitary Sewel Library		ı

ial rate provided by District staff.

dicates considering increases in rates.

Resolution No. 068046

Board of Supervisors, County of San Mateo, State of California

Resolution Setting Time and Place for a Public Hearing on the Filing of the Sewer Service Charges Report for Fiscal Year 2006-2007 for County Sewer Maintenance and Sanitation Districts

RESOLVED, by the Board of Supervisors of the County of San Mateo, State of California, as the governing board of the following Sewer Maintenance and County Sanitation Districts:

Burlingame Hills Sewer Maintenance District;
Crystal Springs County Sanitation District;
Devonshire County Sanitation District;
Edgewood Sewer Maintenance District;
Emerald Lake Heights Sewer Maintenance District;
Fair Oaks Sewer Maintenance District;
Harbor Industrial Sewer Maintenance District;
Kensington Square Sewer Maintenance District;
Oak Knoll Sewer Maintenance District;
Scenic Heights County Sanitation District.

that

WHEREAS, San Mateo County Ordinance Code Chapter 4.32 requires that sewer service charges for Fiscal Year (FY) 2006-2007 in the above named Sewer Maintenance and County Sanitation Districts shall be collected on the tax roll in accordance with the amounts shown for each parcel of real property receiving such services, in a written report filed with the Clerk of this Board; and

WHEREAS, the Constitution of the State of California requires that written notice of any proposed new or increased fees or charges be provided by mail to the record owner of each

parcel upon which the charge is proposed for imposition;

WHEREAS, California Health and Safety Code Section 5473.1 requires that the Clerk of this Board shall cause notice of the filing of said written report and of the time and place of a hearing thereon to be published once a week for two successive weeks prior to the date set for hearing in a newspaper of general circulation in the above named Sewer Maintenance and County Sanitation Districts:

NOW, THEREFORE, IT IS HEREBY DETERMINED AND ORDERED that:

Tuesday, August 1, 2006, at 9:00am, in the Chambers of the Board of Supervisors of the

County of San Mateo, in the Hall of Justice and Records, Redwood City, California, is hereby

fixed as the time and place of the hearing on the filing of the FY 2006-2007 Sewer Service

Charges Report for County Sewer Maintenance and Sanitation Districts with the Clerk of this

Board.

The Clerk of this Board shall cause a copy of the "NOTICE OF PUBLIC HEARING", attached hereto, to be published once a week for two successive weeks prior to the date set for hearing in the <u>San Mateo County Times</u>, a newspaper of general circulation in the above named Sewer Maintenance and County Sanitation Districts.

The Director of Public Works shall provide notice by mail to the record owner of each parcel upon which the charge is proposed for imposition.

* * * * * *

Notice of Public Hearing

The San Mateo County Board of Supervisors has scheduled a public hearing on the adoption of the Fiscal Year (FY) 2006-2007 Sewer Service Charges Report for County Sewer Maintenance and Sanitation Districts. This report contains the individual charges for each parcel of real property receiving sanitary sewer service in one of the following Sewer Maintenance or County Sanitation Districts:

Burlingame Hills Sewer Maintenance District;
Crystal Springs County Sanitation District;
Devonshire County Sanitation District;
Edgewood Sewer Maintenance District;
Emerald Lake Heights Sewer Maintenance District;
Fair Oaks Sewer Maintenance District;
Harbor Industrial Sewer Maintenance District;
Kensington Square Sewer Maintenance District;
Oak Knoll Sewer Maintenance District;
Scenic Heights County Sanitation District

The adoption of the FY 2006-2007 Sewer Service Charges Report for County Sewer Maintenance and Sanitation Districts will result in these charges being placed on the tax roll. They will appear on the tax bill of each affected property and be collected in the same manner as the property tax.

The public hearing will be held on Tuesday, August 1, 2006 at 9:00AM in the Chamber of the Board of Supervisors, located in the Hall of Justice and Records, 400 County Center, Redwood City, California. The meeting will be open to the public and anyone interested may appear and be heard on this matter or submit a written statement.

If you own property in one of these districts, you may obtain information about these charges from the San Mateo County Department of Public Works, 555 County Center, 5th Floor, Redwood City, telephone (650) 363-4100, between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday or by visiting the County of San Mateo's website at: www.co.sanmateo.ca.us and selecting Public Works.

Regularly passed and adopted this 6th day of June, 2006.

AYES and in favor of said resolution: Supervisors: MARK CHURCH JERRY HILL RICHARD S. GORDON ROSE JACOBS GIBSON

NOE	S and agains	t said resoluti	ion:				
	4 A	. *					
	Su	pervisors:	- 	NON	IE	· 	

Absent Supervisors: NONE

Jerry Hill
President, Board of Supervisors
County of San Mateo
State of California

Certificate of Delivery

I-certify that a copy of the original resolution filed in the Office of the Clerk of the Board of Supervisors of San Mateo County has been delivered to the President of the Board of Supervisors.

Marie L. Peterson, Deputy
Clerk of the Board of Supervisors

Board of Supervisors, County of San Mateo, State of California

An Ordinance Amending Sections 4.32.020 and 4.32.030 of Chapter 4.32 of Title 4,
Sanitation and Health, San Mateo County Ordinance Code,
Concerning Sewer Maintenance Districts or County Sanitation Districts
Governed by the Board of Supervisors

The Board of Supervisors of the County of San Mateo, State of California, ordains as follow:

Section 1. Chapter 4.32 of Title 4, Sanitation and Health, of the San Mateo County Ordinance Code is hereby amended to read as follows:

Section 4.32.020 RATES. Sewer Service Charges are hereby prescribed for each residential unit or residential unit equivalent per connection to each district's sanitary sewerage system, per year or portion thereof, as follows:

District	2006-07	2007-08	2008-09	2009-10	2010-11
Burlingame Hills SMD	\$ 1,524	\$ 1,585	\$ 1,648	\$ 1,714	\$ 1,783
Crystal Springs CSD	\$ 1,517	\$ 2,170	\$ 1,820	\$ 2,750	\$ 1,995
Devonshire CSD	\$ 983	\$1,011	\$ 1,021	\$ 1,033	\$ 1,075
Edgewood SMD	\$ 792	\$ 809	\$ 799	\$ 790	\$ 822
Emerald Lake SMD – Zone 1	\$ 850	\$ 884	\$ 919	\$ 956	\$ 994
Emerald Lake SMD - Zone 2	\$ 683	\$ 709	\$ 732	\$ 756	\$ 787
Fair Oaks SMD	\$ 365	\$ 379	\$ 395	\$ 410	\$ 427
Harbor Industrial SMD	\$ 376	\$ 386	\$ 388	\$. 390	\$ 405
Kensington Square SMD	\$ 906	\$ 942	\$ 979	\$ 1,019	\$ 1,059
Oak Knoll SMD	\$ 695	\$ 723	\$ 752	\$ 782	\$ 813
Scenic Heights CSD	\$ 701	\$ 718	\$ 715	\$ 714	\$ 742

Section 2. This Ordinance shall be in full force and effect 30 days after its adoption.

* * * * * *

Regularly passed and adopted this 20th day of June, 2006.

AYES and in favor of said ordinance:

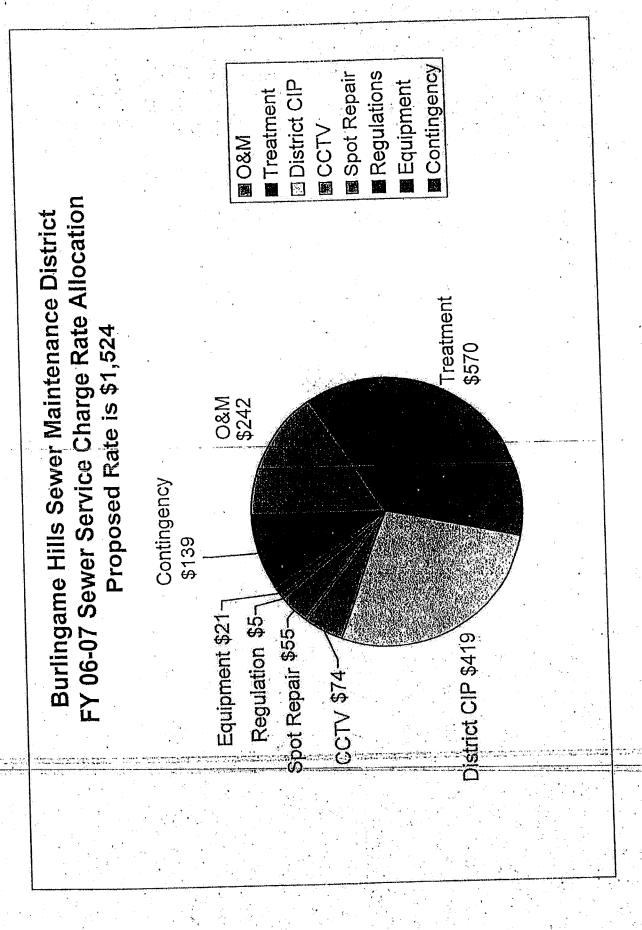
Supervisors:	MARK CHURCH			
en til som en skallen skallen Det skallen ska	JERRY HILL			
	RICHARD S. GORDON			
	ROSE JACOBS GIBSON			
	ADRIENNE J. TISSIER			
•				
NOES and against said ordinance:				
Supervisors:	NONE			
	And the state of t			
Absent Supervisors:	NONE			

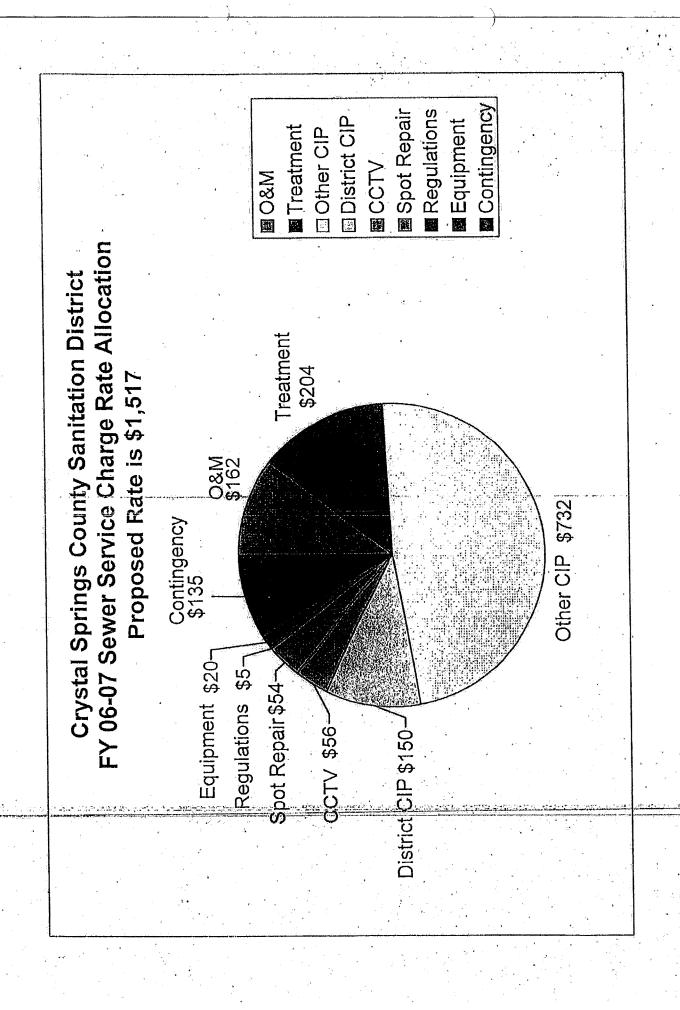
	Jerry Hill President, Board of Supervisors			
	County of San Mateo State of California			

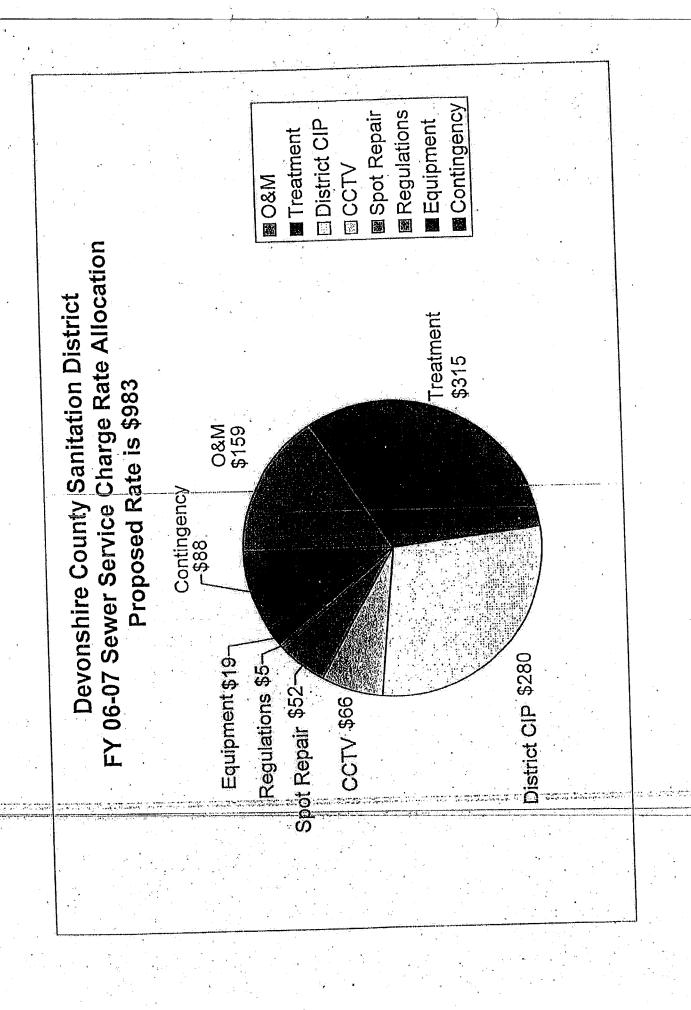
Certificate of Delivery

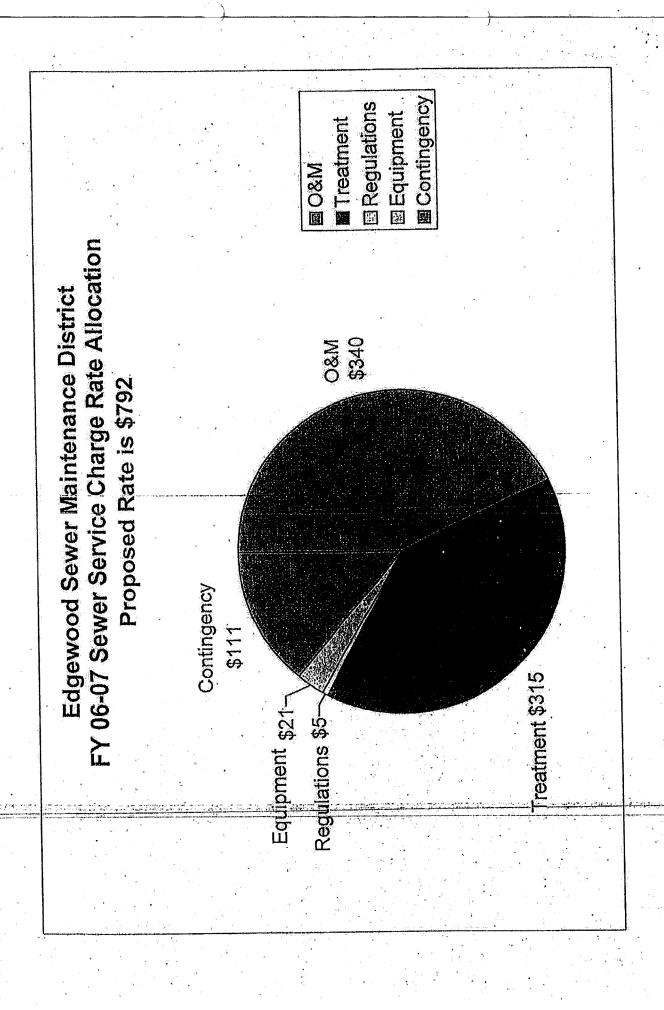
I certify that a copy of the original resolution filed in the Office of the Clerk of the Board of Supervisors of San Mateo County has been delivered to the President of the Board of Supervisors.

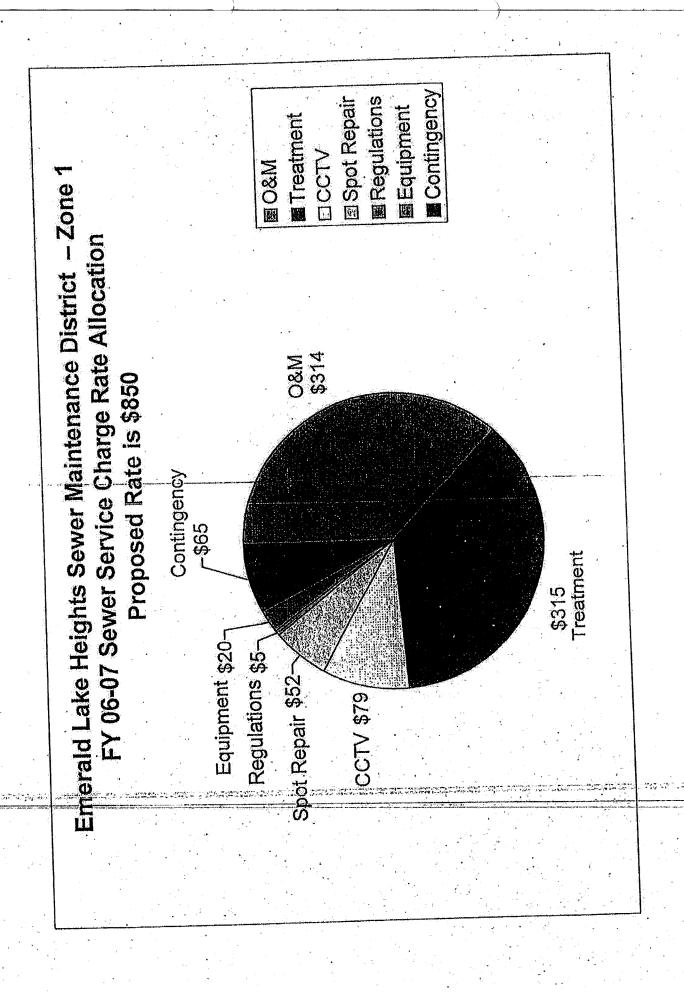
Marie L. Peterson, Deputy
Clerk of the Board of Supervisors

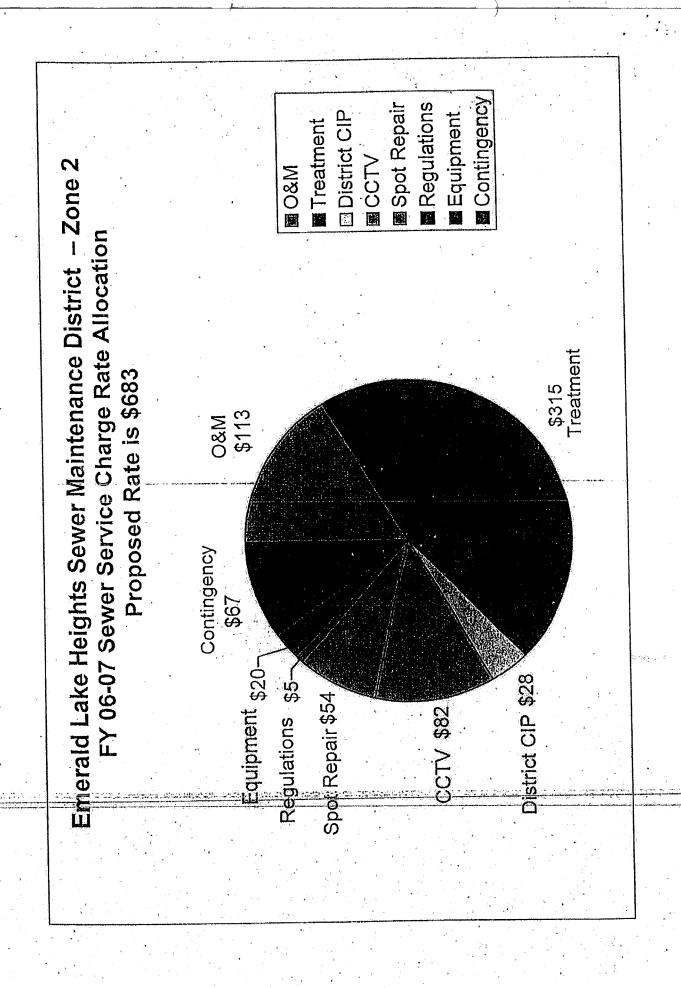


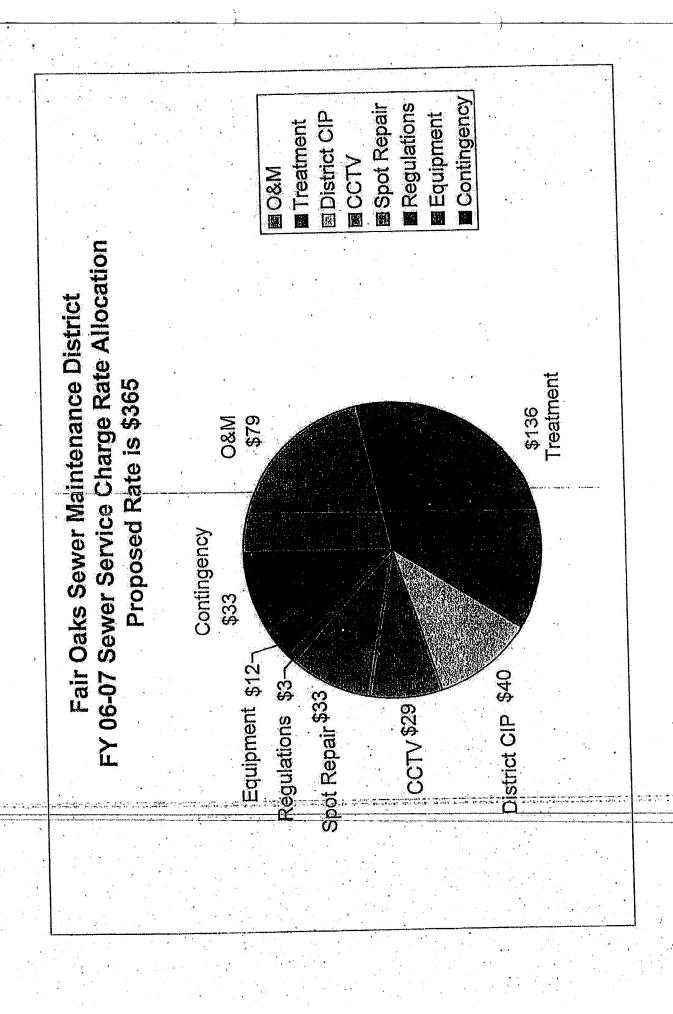


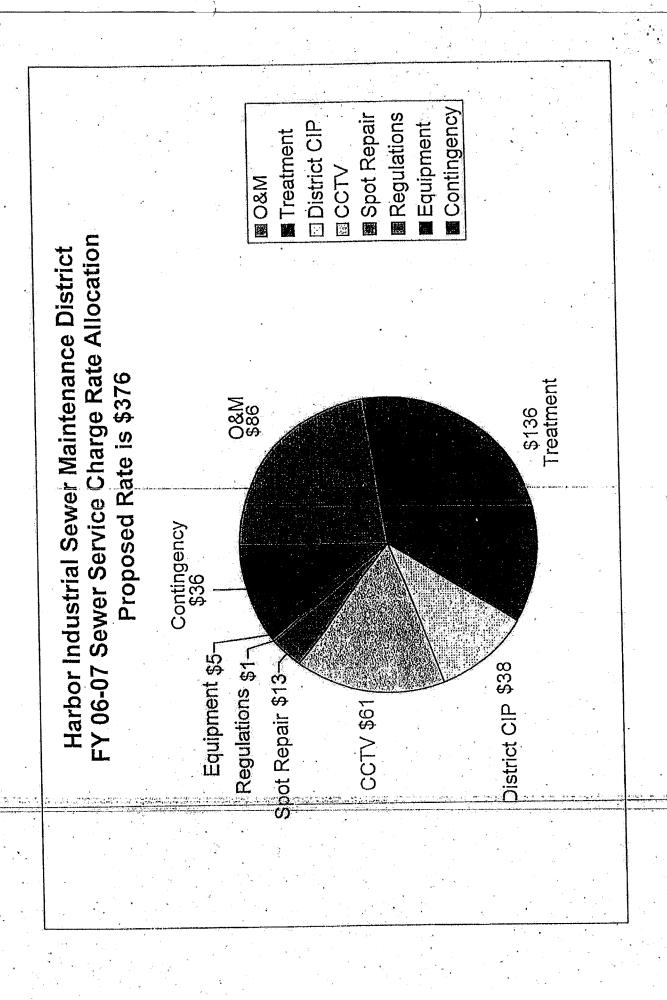


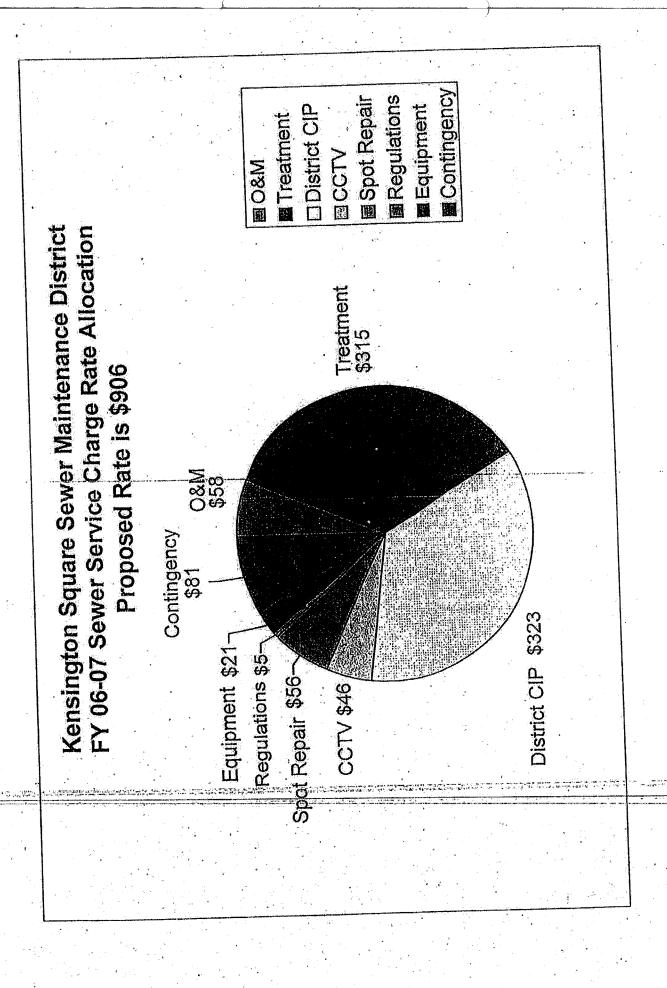


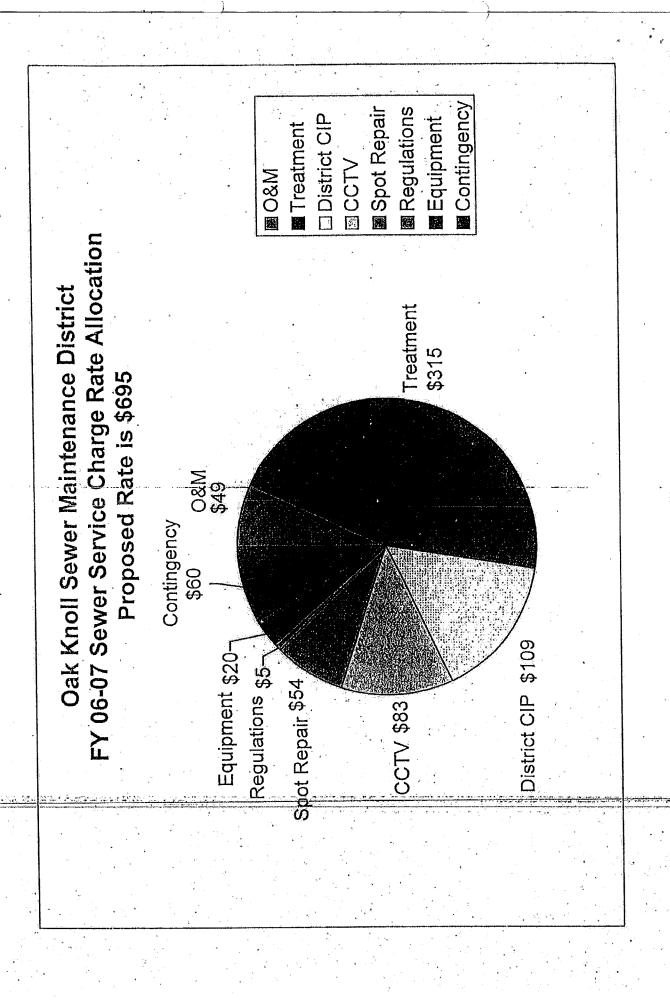


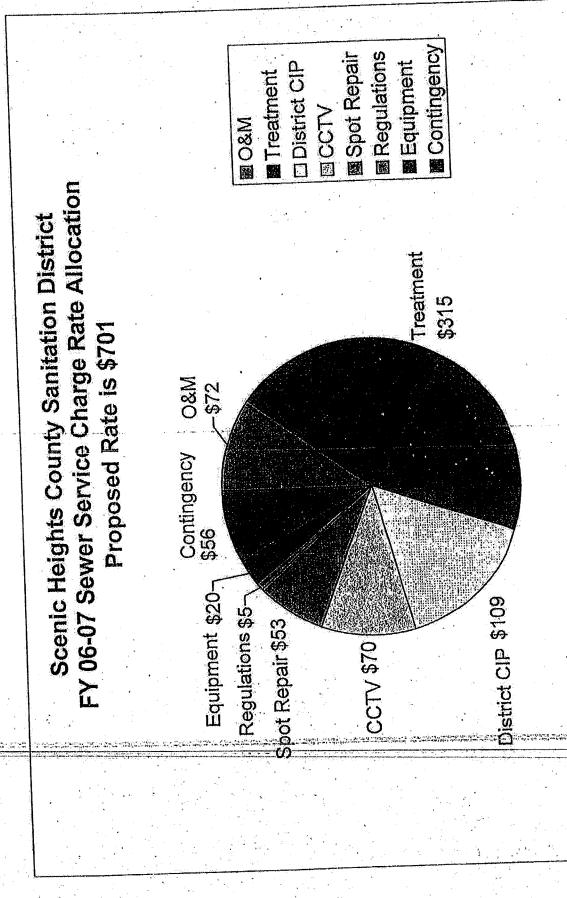












Meeting Dates and Times with Homeowner Associations within the Crystal Springs County Sanitation District

Crystal Springs County Sanitation District

March 6, 2007 @ 1:00pm – Representatives of the Highlands Community Association and the Baywood Plaza Community Association (Cliff Asvitt, Wil Pinney, Dick Axen, and Chuck Fanelli)

May 11, 2007 @ 2:00pm – Representatives of the Highlands Community Association and the Baywood Plaza Association (Pamela Merkadeau, J. Dixon Reilley, Wil Pinney, Chuck Fanelli, Demetrios Nikas, Cary Wiest, and Dick Axen)

May 29, 2007 @ 9:00am – Meeting with Cary Wiest and Pamela Merkadeau (primarily a discussion of finances)

June 18, 2007 @ 3:00pm – Meeting with Homeowner Associations in District – HOAs invited to the meeting included - Baywood Plaza Community Association, Baywood Park Homeowners Association, Highlands Community Association, Polhemus Heights Homeowners Association, and San Mateo Oaks Homeowners Association – (Gerard Ozanne with the Baywood Park HOA was the only one in attendance).

September 12, **2007** @ 3:00pm – 1st Meeting with Homeowner Associations in District – HOAs invited to the meeting included - Baywood Plaza Community Association, Baywood Park Homeowners Association, Highlands Community Association, Polhemus Heights Homeowners Association, and San Mateo Oaks Homeowners Association.

October 15, 2007 @ 4:00pm – 2nd Meeting with Homeowner Associations in District – HOAs invited to the meeting included - Baywood Plaza Community Association, Baywood Park Homeowners Association, Highlands Community Association, Polhemus Heights Homeowners Association, and San Mateo Oaks Homeowners Association.

November 19, 2007 @ 4:00pm – 3rd Meeting with Homeowner Associations in District – HOAs invited to the meeting included - Baywood Plaza Community Association, Baywood Park Homeowners Association, Highlands Community Association, Polhemus Heights Homeowners Association, and San Mateo Oaks Homeowners Association.

December 10, 2007 @ 5:30pm – 4th Meeting with Homeowner Associations in District – HOAs invited to the meeting included - Baywood Plaza Community Association, Baywood Park Homeowners Association, Highlands Community Association, Polhemus Heights Homeowners Association, and San Mateo Oaks Homeowners Association.

January 14, 2008 @ 4:00pm – 5th Meeting with Homeowner Associations in District – HOAs invited to the meeting included - Baywood Plaza Community Association, Baywood Park Homeowners Association, Highlands Community

Association, Polhemus Heights Homeowners Association, and San Mateo Oaks Homeowners Association.

February 11, 2008 @ 4:00pm – 6th Meeting with Homeowner Associations in District – HOAs invited to the meeting included - Baywood Plaza Community Association, Baywood Park Homeowners Association, Highlands Community Association, Polhemus Heights Homeowners Association, and San Mateo Oaks Homeowners Association.

March 10, 2008 @ 4:00pm – 7th Meeting with Homeowner Associations in District – HOAs invited to the meeting included - Baywood Plaza Community Association, Baywood Park Homeowners Association, Highlands Community Association, Polhemus Heights Homeowners Association, and San Mateo Oaks Homeowners Association.

April 14, 2008 @ 4:00pm – 8th Meeting with Homeowner Associations in District – HOAs invited to the meeting included - Baywood Plaza Community Association, Baywood Park Homeowners Association, Highlands Community Association, Polhemus Heights Homeowners Association, and San Mateo Oaks Homeowners Association.

May 12, 2008 @ 4:00pm – 9th Meeting with Homeowner Associations in District – HOAs invited to the meeting included - Baywood Plaza Community Association, Baywood Park Homeowners Association, Highlands Community Association, Polhemus Heights Homeowners Association, and San Mateo Oaks Homeowners Association.

July 14, 2008 @ 4:00pm – 10th Meeting with Homeowner Associations in District – HOAs invited to the meeting included - Baywood Plaza Community Association, Baywood Park Homeowners Association, Highlands Community Association, Polhemus Heights Homeowners Association, and San Mateo Oaks Homeowners Association.

September 8, 2008 @ 4:00pm – 11th Meeting with Homeowner Associations in District – HOAs invited to the meeting included - Baywood Plaza Community Association, Baywood Park Homeowners Association, Highlands Community Association, Polhemus Heights Homeowners Association, and San Mateo Oaks Homeowners Association.

October 6, 2008 @ 4:00pm – 12th Meeting with Homeowner Associations in District – HOAs invited to the meeting included - Baywood Plaza Community Association, Baywood Park Homeowners Association, Highlands Community Association, Polhemus Heights Homeowners Association, and San Mateo Oaks Homeowners Association.

Crystal Springs County Sanitation District

Financial Information for as of 11/7/08 for the CSCSD

Fund Balance, Revenue, Expenditures and Debt	Total Outstanding Debt	City of San Mateo 2006-07 and 2007-08 charges*** O&M at VWVTP Debt Service on WWVTP Phase I - 1990 WWVTP Ph II Subtotal City of San Mateo Charges	Outstanding Debt General Fund Loan for Hillsborough's past project (Anticipated FY 2008-09 principal payment deducted from outstanding balance)	Revenue Less Expenditure	Total Anticipated Expenditures	Sewer Service Charges (\$900 per ERU) Total Anticipated Revenue Anticipated Expenditures for FY 2008-09 Based on \$900/ERU Sewer Service Charge Rate In District Costs Operations and Maintenance SSMP Miscellaneous/Contingency (3%) Subtotal In-District Costs Out-of District Costs Sewage Treatment Debt Service on WWTP Phase I - 1990 General Fund Loan Payment - Interest & Principal for FY 2008-09 WWTP Ph II - 15yr Ioan @ 5%* El Certito Relief Sewer Line (\$8 mill, 20-yr, 5%)* Force Main - Dale Avenue to WWTP (\$6 mill, 20-yr, 5%)* Hillsborough Proposed Trunk Line Project - 20yr Ioan @ 2%** Capital Improvement Contingency (5%) Subtotal Out-of-District Costs	Anticipated Revenue for 2008-09 Pre Prop 13 Tax Allocation (approx 1% of property tax payment)	Fund Balance as of 11/07/08
(\$1,814,990)	\$1,840,198	457,210 148,083 434,905 \$1,040,198	\$800,000	(\$332,015)	\$1,727,415	1,350,900 \$1,395,400 \$1,395,400 244,572 73,793 22,816 \$341,181 442,182 148,082 245,459 128,797 269,188 21,145 85,140 46,241 \$1,386,234	44,500	\$357,223

NOTE: Additional Costs to the CSCSD for the City of San Mateo's Hydraulic Improvements/Outfall at the WWTP (Estimated to cost \$10,000,000) and WWTP Plant Capacity Improvements (Estimated to cost \$10,000,000), which are to be completed by 12/31/10 per City of San Mateo RWQCB Order No. R2-2007-00075 will increase the CSCSD's anticipated expenditures by \$70,000 per year (4.45% of cost) based on a 20 year loan at 5%. Approximately \$50 per ERU.

ABREVIATIONS

SSMP - Sewer System Management Plan WWTP - Wastewater Treatment Plant O&M - Operations and Maintenance **ERU - Equivalent Residential Unit**

^{*} Sewer Rate factored antipated bond financing for City of San Mateo improvements as listed above

* Sewer Rate factored antipated State Revolving Fund financing from Town of Hillsborough for improvement listed

^{***} City has requested 7% interest assessed through 9/30/07 and 12% interest on unpaid balance after 9/30/07 per letter dated August 29, 2007, however interest has not been included in the amounts billed

COUNTY OF SAN MATEO

Crystal Springs County Sanitation District

SEWER MASTER PLAN

Prepared by: Brown and Caldwell August 1999

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^{*}Foldout figure follows page number indicated.

EXECUTIVE SUMMARY

In December 1996, the County of San Mateo engaged Brown and Caldwell to prepare a sewer system master plan for the Crystal Springs County Sanitation District (CSCSD). This executive summary presents the findings, conclusion, and recommendations regarding this system. It also proposes a capital improvement plan (CIP) and summarizes recommended rates and a revenue plan to finance proposed improvements.

Background

The overall master planning process used for the sewer system master plan consisted of identifying capacity limitations along with structural deficiencies of the sewer system and developing an ongoing improvement program to correct the limitations. Part of the overall improvement program is the consideration for changing current maintenance activities to more appropriately match the needs of the sewer system. The improvement plan's goal is to develop a balance between capital projects and system maintenance to achieve a highly reliable collection system for the lowest overall cost.

A series of field inspections were performed to collect information on the collection system. Limited source detection methods (including smoke testing, manhole inspections, maintenance calls, television inspection and topographic surveying) were used to identify collection system structural deficiencies. Wet weather flow monitoring and hydraulic modeling were performed to develop a listing of hydraulic deficiencies. Projects were developed and prioritized based on the deficiencies and capital costs that were prepared. Methods for financing the recommended improvements are also included in the study.

Findings

Review of known problem areas and interviews with County maintenance crews was used to prioritize field inspections in the CSCSD. Flow monitoring was also performed to evaluate the amount of remaining capacity in the wastewater collection system. This section presents the results of the field inspection and capacity analysis.

A manhole inspection program was performed in the winter and spring of 1997. Field crews documented the condition of 257 manholes. No serious defects were noted during the inspection. Results of the inspections were used to prioritize the television inspection program.

The smoke testing program was conducted during the summer of 1998. Areas with suspected high Inflow/Infiltration (I/I) were scheduled for testing. Field crews tested approximately 50,800 linear feet of sewer lines. A total of 59 collection system defects were documented during the program. No serious defects were noted.

The television inspection program was conducted during the winter of 1999. A total of 9,271 feet of the collection system was inspected. Over 210 structural defects were documented during the inspection. Results of the television inspection program were used to develop the CIP.

Flow monitoring was performed during the winters of 1997 and 1998. The purpose of the flow monitoring was to develop peak wastewater flow rates for use in the hydraulic model of the collection system. The capacity of the major trunk sewer along Polhemus Road was evaluated for this study. Results of the analysis indicate that approximately 5,000 linear feet of the trunk sewer has inadequate capacity.

Recommendations

A CIP was developed based on the results of the field work and capacity analysis. A total of nine capital improvement projects were developed for the CSCSD. Eight of the projects are recommended to repair structural deficiencies. The remaining project is recommended to provide additional hydraulic capacity to the Polhemus Road trunk sewer. Estimated total construction costs for the projects range between \$1,570,000 and 1,850,000 depending on the selected alternative improvement. The location of the improvement projects is listed below:

- 1. Timberlane Way
- 2. South Ascension Drive
- 3. Polhemus Road (north)
- 4. Polhemus Road (south)
- 5. Rainbow Drive
- 6. Enchanted Way
- 7. Parrot Drive
- 8. Lexington Avenue
- 9. Randall Road

INTRODUCTION

This chapter introduces the sewer master planning process for the Crystal Springs County Sanitation District (CSCSD) of San Mateo County (County), including background, authorization, scope of work and report organization.

Background and Purpose of Work

The overall master planning process used for the sewer system master plan consisted of identifying capacity limitations along with structural deficiencies of the sewer system and developing an ongoing improvement program to correct the limitations. Part of the overall improvement program is the consideration for changing current maintenance activities to more appropriately match the needs of the sewer system. The improvement plan's goal is to develop a balance between capital projects and system maintenance to achieve a highly reliable collection system for the lowest overall cost.

A series of field inspections were performed to collect information on the collection system. Limited source detection methods (including smoke testing, manhole inspections, maintenance calls, television inspection and topographic surveying) were used to identify collection system structural deficiencies. Wet weather flow monitoring and hydraulic modeling were performed to develop a listing of hydraulic deficiencies. Projects were developed and prioritized based on the deficiencies and capital costs that were prepared. Methods for financing the recommended improvements are also included in the study.

The County maintains and operates nine noncontiguous sewer districts containing approximately 130 miles of sewer mains. The sewer districts are:

- 1. Burlingame Hills Sewer Maintenance District
- 2. Crystal Springs County Sanitation District
- 3. Devonshire County Sanitation District
- 4. Emerald Lake Heights Sewer Maintenance District
- 5. Fair Oaks Sewer Maintenance District
- 6. Harbor Industrial Sewer Maintenance District
- 7. Kensington Square Sewer Maintenance District
- 8. Oak Knoll Sewer Maintenance District
- 9. Scenic Heights County Sanitation District

The CSCSD is located on the San Francisco Peninsula in the area roughly bounded by the Arthur Younger Freeway (Highway 92) in the south, the Junipero Serra Freeway (I-280) in the west, Crystal Springs Road in the north and Parrot Drive in the east.

Though the County has maintained and upgraded the collection system in the past, this work has been done without the benefit of master planning. This report provides a prioritized capital

improvement program along with recommended follow-up field investigations and potential funding mechanisms.

Authorization

The County authorized this work through an agreement with Brown and Caldwell dated December 17, 1996.

Scope of Work

The scope of work includes the following activities:

Assessment of Existing Sewer Systems. To develop a meaningful capital improvement program, it was necessary to determine the structural and hydraulic condition of the CSCSD collection system. Methods used to complete the evaluation included reviewing existing maps and records drawings, interviewing County maintenance workers and checking maintenance records, manhole inspections, wet weather flow monitoring, smoke testing and television inspection. Results from the flow monitoring program were used to develop wet weather hydrographs for use in the hydraulic model and determine which areas in the system had the highest infiltration/inflow rates.

Development of Sewer System Capital Improvement Plans. A listing of sewer system deficiencies were developed based on the sewer system assessment task. Capital projects were developed to correct each identified system deficiency. Capital projects were prioritized and estimated capital costs for each project were determined. Project priorities were reviewed with County staff and an annual schedule of required capital improvements were developed. A financial plan was developed to support the recommend projects. The financial plan includes financial alternatives and recommended sewer charges and revised connection fees, if any.

Data Management. Data generated during the study was entered into a series of Access databases for future use by the County. The databases will be submitted under separate cover to the County with the Master Plans.

Master Plan Report. Prepare a sewer system master plan report for the Crystal Springs District. The master plan report is supported by a series of technical memoranda prepared as part of the previous tasks. The master plan provides completed documentation of the recommended capital improvement projects as well as financing alternatives.

Report Format

This Master Plan report has been organized as a reference report, to the extent possible. Each section in the report consists of one to two pages of descriptive text followed by a data table, graphical figure, or both. This report has 15 sections roughly divided as follows:

- Sections 1 through 3 describe the current County system and operating procedures.
- Sections 4 through 9 describe the field work programs.
- Sections 10 and 11 summarize the hydraulic modeling work.
- Sections 12 through 15 describe the capital improvement program and funding mechanisms.

Technical memoranda and backup material are also provided in the appendices following the main body of the report as identified in the Table of Contents.

EXISTING SEWERS

The general physical characteristics of the Crystal Springs County Sanitation District (CSCSD) sewer collection system are described in this section. These characteristics provide the basis for physical evaluation of the collection system and determine the system's ability to convey current and projected wastewater flows.

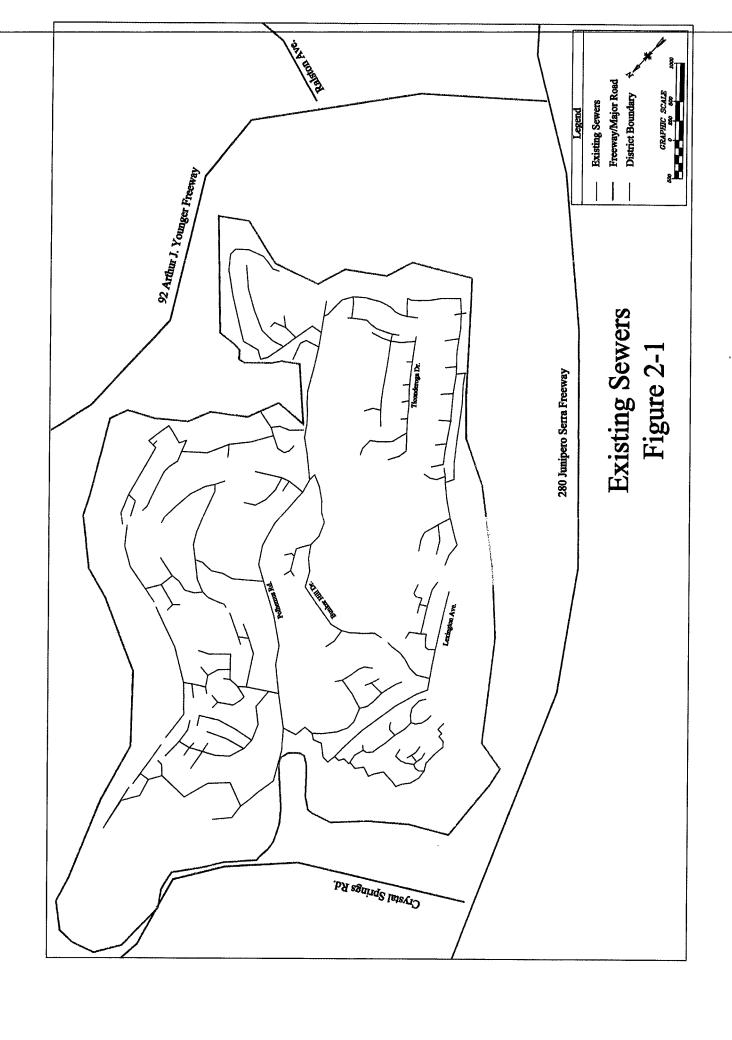
Description of Existing Facilities

The CSCSD's sewer collection system is characterized as a gravity system. Sewage pumping stations are not required due to the topography in the service area. The collection system consists of approximately 13 miles of 6-inch to 15-inch-diameter vitrified clay pipe. Most of the collection system has been constructed between the post World War II period and the present.

The main trunk sewer in the CSCSD is a 10-inch to 15-inch-diameter sewer located in the valley along Polhemus Road. This sewer roughly divides the CSCSD into two major drainage areas. The trunk sewer begins by collecting wastewater flows from County and State facilities located on Tower Road and Polhemus Road and then flows to the north and ultimately discharges wastewater flow to the Town of Hillsborough. The point of connection to the Town of Hillsborough is at the intersection of Polhemus Road and Crystal Springs Road. The CSCSD purchased capacity in the Town of Hillsborough and City of San Mateo sewer systems. Figure 2-1 depicts the CSCSD boundaries and collection system.

Manhole Number System

A manhole numbering scheme was developed to aid in data management. The manhole numbering system consists of an eight-digit alphanumeric code. The first letter identifies the District within the County (C for CSCSD). The next four numbers identify the manhole within the CSCSD. A single letter code follows and is used for manholes with duplicate numbers (typically infill manholes constructed by the County). The last two numbers in the code describe the County map number.



SEWER OPERATION AND MAINTENANCE

Prior to beginning the physical inspection of the Crystal Springs County Sanitation District (CSCSD), the current operation and maintenance procedures were reviewed. This section documents the results of that review.

Known Problem Areas

Areas of known problems within the sewer collection system were identified through discussions with County personnel and review of the CSCSD maintenance records. Problem areas were identified by line blockages from roots and grease accumulations or sewer sags. The collection systems are on a cleaning frequency of once per year minimum and can range up to four times per year based on collection system call outs. Problems associated with flat sewers are not found in the CSCSD due to the relatively steep topography in the service area. There are no known manholes or pipelines with hydrogen sulfide corrosion problems.

Several approaches are available for addressing sewer maintenance problems. Grease problems are addressed by controlling grease discharges from commercial establishments by requiring grease traps and having an enforcement program to ensure that they function properly. Grease can accumulate at sags, areas with flat slopes, roots, and offset joints in sewers. Grease problems in residential areas are addressed by increased maintenance (hydroflushing of the sewer to flush the grease accumulation downstream).

Root problems are typically addressed by using an undersized root cutter, typically a 4-inch-diameter cutter for a 6-inch sewer. The County maintenance crews prefer to use an undersized cutter to prevent damage to the pipeline. Roots can also be addressed by chemical foam application to kill the roots. Application and reapplication is typically required on a 1- to 3-year cycle. The County has recently started using chemical root treatment in the Burlingame Hills Sewer Maintenance District.

Accumulations of rocks and gravel in the sewer line can be an indicator of broken pipe in the system. Television inspection should be performed in these areas to look for pipes in bad condition. A listing of the maintenance "hot-spots" for sewer laterals in the system requiring callouts more than twice a year is provided in Table 3-1. Sewer mains requiring two or more callouts per year are summarized in Table 3-2. A description of the problem is also provided. This listing was used to develop the collection system physical inspection programs described in the following sections.

Table 3-1. Callout Summary for Sewer Laterals

		Reason for callout							
Street number	Street name	Year	Roots	Grease			Comment		
2267	Allegheny Wy	1992	х		_		Lateral OK		
2275	Allegheny Wy	1995					No cleanout, Permit 2539		
1506	Ascension Dr	1996	x				•		
1542	Ascension Dr	1990	x						
1548	Ascension Dr	1987	x						
1624	Ascension Dr	1993					Bad spot; lateral needs		
							repair		
1630	Ascension Dr	1987		x			No cleanout		
1312	Bel Aire Rd	1994					Permit 2477Lateral OK		
1327	Bel Aire Rd	1978	x				"T"-Cleanout		
1330	Bel Aire Rd	1995	x						
1366	Bel Aire Rd	1979				x			
1456	Bel Aire Rd	1978		:			No cleanout		
	Bel Aire Rd	1985	l ;				No cleanout		
20	Bennington Dr	1976					Lateral OK		
1520	Brandywine Rd	1980					Lateral OK		
1547	Brandywine Rd	1993					VOID Permit 2386.		
	, ,						Owner taking		
							responsibility of		
							uninspected work.		
2193	Bunker Hill Dr	1990	x				1		
2220	Bunker Hill Dr	1992			x		Permit 2219 & Lateral		
							OK		
5	Crown Ct	1986				x	Permit 0945		
20	Crown Ct	1986					Permit 0946		
45	Crown Ct	1987				x	Permit 1475		
1341	Enchanted Wy	1986	x				Off-set		
1354	Enchanted Wy	1993					No cleanout		
1515	Forge Rd	1996	x		x				
2011	Kings Ln	1996	x				Off-set, Lateral OK		
2034	Kings Ln	1979				x	Permit 0164		
2041	Kings Ln	1984					Lateral OK		
1261	Laurel Hill Dr	1993					No cleanout		
1263	Laurel Hill Dr	1992	x				Permit 1549 (1987), Hair		
1263	Laurel Hill Dr	1993	x		x		, , ,		
1479	Laurel Hill Dr	1996					Permit 2706 Voided -		
							Owner decided not to		
							reconstruct cleanout.		
							"T"-cleanout		
1415	Lexington Ave	1992					No cleanout		
1607	Lexington Ave	1980					No cleanout		
1628	Lexington Ave	1992					No cleanout		
1659	Lexington Ave	1987	x						
1660	Lexington Ave	1985					Cleanout OK		

						Reason for o	
Street number	Street name			Grease	Paper	Inspection	Comment
1690	Lexington Ave	1979	x				No cleanout
1719	Lexington Ave	1977					Rocks in Cleanout
1723	Lexington Ave	1995			x		Dirt, Permit 2597
1784	Lexington Ave	1994		1			Lateral OK
1880	Lexington Ave	1978	x				Lateral OK
1912	Lexington Ave	1995					Permit 2552, Non-
							standard cleanout
2036	Lexington Ave	1995					No cleanout, Lateral OK
2136	Lexington Ave	1980					Lateral OK
	Los Altos Dr	1993	1				No cleanout
	Los Altos Dr	1979	ı		x		No cleanout
1812	Los Altos Dr	1988	x				Off-set
1936	Los Altos Dr	1996					Lateral OK
	Los Altos Dr	1979	X				
15	Lundys Ln	1987	X				Improper cleanout
1707	Monticello Rd	1994	x				
1708	Monticello Rd	1987	x				
1759	Monticello Rd	1986					Repair lateral (Off-Set)
	Mountain View Pl	1995					No cleanout
	Parrott Dr	1985				X	Repair Main
	Parrott Dr	1985	x				1
	Parrott Dr	1991	x		x		
1203	Parrott Dr	1993					Lateral OK
1230	Parrott Dr	1979	x				Lateral OK
1311	Parrott Dr	1992					Mud & Needs Repair
1399	Parrott Dr	1991					Permit 2170 & Broken Pipe
1426	Parrott Dr	1980					Broken Lateral
	Parrott Dr	1993					Lateral OK
	Parrott Dr	1985		x			Combo & mud
	Parrott Dr	1977					Broken lateral
	Parrott Dr	1979	x				Lateral OK
	Parrott Dr	1980	x				Lateral OK
	Parrott Dr	1992	x				Grass
1	Parrott Dr	1975				x	Lateral OK
i	Parrott Dr	1975					No cleanout
	Parrott Dr	1996	X		x		
,	Parrott Dr	1985	x				
	Parrott Dr	1975	x				No cleanout
	Parrott Dr	1978	x				Lateral OK
	Parrott Dr	1991	x				Lateral OK
	Parrott Dr	1993					No cleanout
	Powhatan Pl	1993	x				Lateral OK
	Queens Ln	1990	x				
	Queens Ln	1996			x		

		Reason for callout					
Street number	Street name	Year	Roots	Grease		Inspection	
2030	Queens Ln	1992		Grease	aper	Поресцоп	Comment
2072	Queens Ln	1994			x		
2083	Queens Ln	1984	,		, A		
2154	Queens Ln	1996					
2177	Queens Ln	1994					
2184	Queens Ln	1991				ļ	No cleanout; too far back
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1777			İ		of property line
1427	Rainbow Dr	1991					Permit 2143, No cleanout
1844	Randall Rd	1994					Lateral OK
1876	Randall Rd	1991	X				
1884	Randall Rd	1995					Permit 2207
30	Roxbury Ln	1994	x				2
35	Roxbury Ln	1982					Permit 0407
1510	Seneca Ln	1995					"T"-cleanout connects to
							manhole. Letter sent.
25	Shelburne Pl	1993	x		x		
2224	Sheraton Pl	1985	x		x		
2230	Sheraton Pl	1992	x				Lateral OK
139	Starlite Dr	1985	x				Lateral OK
148	Starlite Dr	1993					No cleanout
163	Starlite Dr	1976			x		No cleanout
1456	Tarrytown Rd	1995					Rocks, Permit 2637
1911	Ticonderoga Dr	1978					No cleanout
1992	Ticonderoga Dr	1991			x		Lateral OK
2012	Ticonderoga Dr	1980					No cleanout
2043	Ticonderoga Dr	1980					No cleanout
2059	Ticonderoga Dr	1994					No cleanout
2096	Ticonderoga Dr	1990	x				
2124	Ticonderoga Dr	1987				x	Permit 1460
2062	Timberlane Wy	1980					Permit 0253
2083	Timberlane Wy	1986				x	Permit 1073
2087	Timberlane Wy	1986				x	Permit 1075
2095	Timberlane Wy	1986				x	Permit 1074
	White Plains Ćt	1980	x				Lateral OK
35	White Plains Ct	1977					Cleanout repair
1615	Yorktown Rd	1985	x				Off-set
1644	Yorktown Rd	1992		x			No cleanout
1712	Yorktown Rd	1978	x				Lateral OK

Table 3-2. Callout Summary for Sewer Mains

200.					Reason	for callout	
Street number	Street name	Year	Roots	Grease	Paper	Inspection	Comment
10	Burgoyne Ct	1977	x		*	•	Main OK
1359	Enchanted Wy	1978	x				
1405	Enchanted Wy	1978					Main OK (3)
1835	Parrott Dr	1980	x				` '
1835	Randall Rd	1980		x	X		
1624	Ascension Dr	1985	x	x			
1136	Parrott Dr	1985				xx	
1835	Parrott Dr	1985	xxx				
1306	Bel Aire Rd	1986				xxxx	Main OK,
							Off-Set (Bel
							Aire Rd &
							Parrot Dr)
1405	Enchanted Wy	1986	x				Main OK (2)
1250	Parrott Dr	1986					Broken Main,
							Main Ok
2029	Queens Ln	1987	xxx				

MANHOLE INSPECTION

The manhole inspection program was conducted during the winter and spring of 1997. Field crews documented the condition of 257 manholes in the Crystal Springs County Sanitation District (CSCSD). This section presents the results of the manhole inspection program.

Purpose and Objective

Manhole inspection was performed to evaluate manholes as potential infiltration/inflow (I/I) sources and document their physical condition. Additionally, the manhole inspection results were used to prioritize the smoke testing and television inspection programs. The manhole inspection program did not include all the manholes in the CSCSD. Manholes were selected for inspection to provide a representative sample of the manholes in the CSCSD.

During the inspection, the general condition of the manhole and incoming/outgoing pipelines was determined. Photographs of the incoming/outgoing pipelines were taken to determine their condition. The following conditions were documented during the inspection:

- Manhole bench/channel condition
- Roots in the manhole or pipeline
- Grease in the manhole or pipeline
- Manhole frame/cover condition
- Presence of I/I in the manhole or pipeline
- Major debris in the manhole or pipeline
- General physical condition of the pipeline.

Findings

The major manhole defects noted during the manhole inspection program are listed in Table 4-1. The major pipeline defects observed from the photographs are listed in Table 4-2. A technical memorandum, dated October 12, 1998, describing the manhole inspection in more detail is provided in Appendix A. Attachments A, B and C for the technical memorandum were provided in the original submittal. Manhole inspection forms and photographs are provided under separate cover in a series of three-ring binders.

Table 4-1. Manhole Defects

Defect type	Number
Bench/Channel Defects	10
Roots	5
Grease	23
Frame and Cover Problems	12
Active or signs of Infiltration/Inflow	7
Major Debris in Channel	12
Manholes Inspected	257

Table 4-2. Pipeline Defects Noted from Manhole Inspection Program

Pipes with separated joints greater than moderate and deflections greater	12
than 1 inch	
Pipes with greater than minor corrosion	0
Pipes with infiltration/inflow	0
Pipes with greater than light grease	25
Pipes with greater than light roots	38
Pipes with roots and grease	3
Pipes with cracks and fractures	22
Pipes with plugs and obstructions	0

FLOW MONITORING PROGRAM

A flow monitoring program was implemented to measure flow rates during dry weather and discrete rainfall events. This section describes the flow monitoring program. Flows and flow rates developed from the flow monitoring efforts are described in Sections 8 and 9.

Wastewater flows were divided into base sanitary flow (BSF) and wet weather infiltration/inflow (I/I) components for this study. Base sanitary flow factors are based on dry weather flow monitoring performed during the winter of 1997. Due to limited rainfall during the winter of 1997, additional wet weather flow monitoring was performed during the following season. El Niño effects resulted in extensive rainfall during the months of January and February of 1998. Wet weather flow projections are based on flow monitoring results from the second flow monitoring program in 1998. Results of the 1997 flow monitoring program are provided in Appendix B. Results of the 1997-1998 flow monitoring program are provided in the County of San Mateo 1997 – 1998 flow monitoring program dated January 14, 1998, and March 4, 1998.

Purpose and Objective

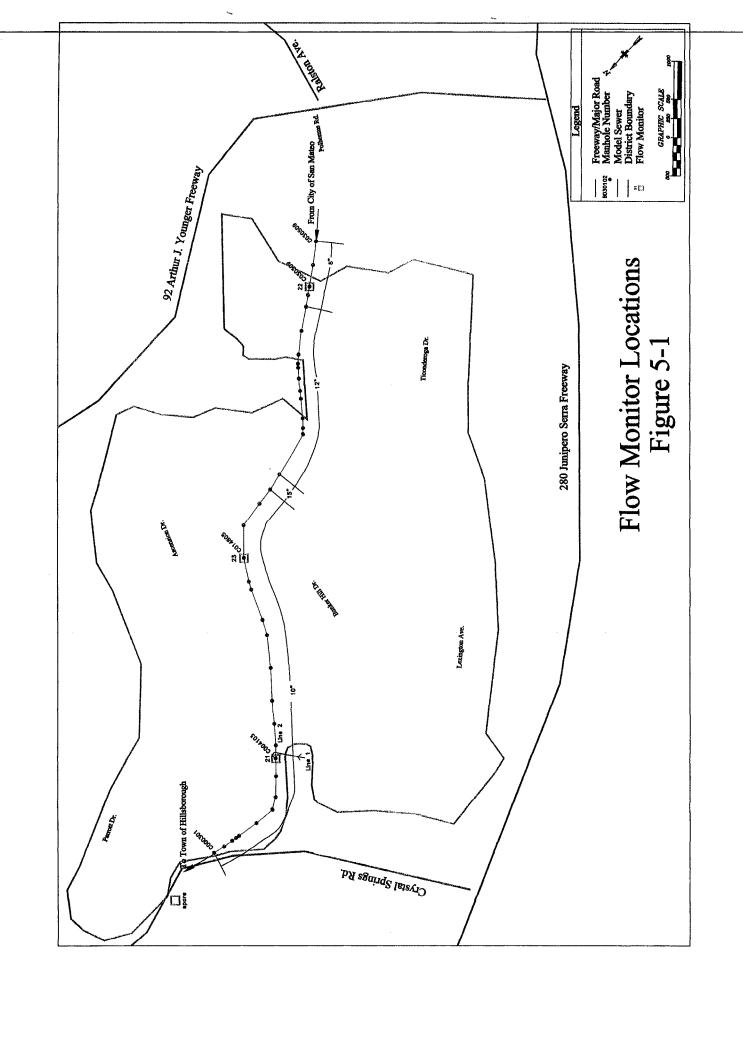
The purpose of the flow monitoring program was to measure the existing collection system flows at various locations in the Crystal Springs County Sanitation District (CSCSD). Wet weather and dry weather flow rates were measured to develop design flows for use in a hydraulic model of the collection system. Additionally, a rain gauge was installed at 2295 Cobblehill Place to determine how collection system flows reacted to various rainfall events. The rain gauge was moved to a County facility located at the 1551 Tartan Trail Road Pump House.

Table 5-1 summarizes the measured flow rates for each monitoring station in the CSCSD for the 1997/1998 flow monitoring period. The location of the flow monitors and rain gauges is shown on Figure 5-1. The technical memorandum describing the 1997 flow monitoring program is provided in Appendix B. Attachments A and B for the technical memorandum were provided in the original submittal. This memorandum describes the location of the flow monitors and rain gauges, and the complete results of the flow monitoring program.

Table 5-1. Flow Monitoring Results, million gallons per day 1997/1998

Flow	Minimum dry	Average dry	Peak wet
monitoring	weather	weather	weather
site	flow	flow	flow
21 Line 1*	0.07	0.11	0.89
21 Line 2*	0.01	0.61	4.60
22 Line 2	0.03	0.12	0.95
23	0.12	0.44	2.31

^{*}Flow monitors located in same manhole measuring two lines.



SMOKE TESTING PROGRAM

The smoke testing program was conducted during the summer of 1998. Field crews tested approximately 50,800 linear feet of sewer lines in the Crystal Springs County Sanitation District (CSCSD). This section presents the results of the smoke testing program.

Purpose and Objective

Smoke testing is a quick and effective method for identifying many types of wastewater collection system deficiencies. Typical defects encountered during a smoke testing program include the following:

- 1. Broken or deteriorated building laterals.
- 2. Improperly capped cleanouts.
- 3. Broken or deteriorated sewer mains in unpaved areas.
- 4. Unsealed or damaged manholes.
- 5. Sags and/or obstructions in the mains.
- 6. Direct and indirect connections between storm and sanitary sewer systems.
- 7. Untrapped or improper building plumbing.
- 8. Illegal sewer connections from/to storm drain systems

Although smoke testing is an efficient method of identifying collection system inadequacies, certain conditions affect the interpretation and effectiveness of the test. One factor that affects smoke testing results is the extent and porosity of the cover over the sewer main or service lateral. For instance, pilot studies have indicated that only one-third or less of lateral defects are detected by smoke testing.

Smoke Testing Results

Smoke testing was performed during the dry months of August and September 1998 to ensure that smoke was not trapped in high groundwater. The areas tested in the CSCSD area are shown on Figure 6-1. Smoke testing areas were selected based on the results of the flow monitoring program. Areas with suspected high I/I rates were selected for smoke testing.

No major defects were noted during the smoke testing program. A total of 59 defects were located and documented during the program. The most prevalent defect was missing or damaged cleanout covers. The majority of these defects are located on the private side of the property line. A summary of the smoke testing defects is provided in Table 6-1. A technical memorandum, dated October 13, 1998, describing the smoke testing program in more detail is provided in Appendix C. Smoke testing reports and photographs are also provided in Appendix C.

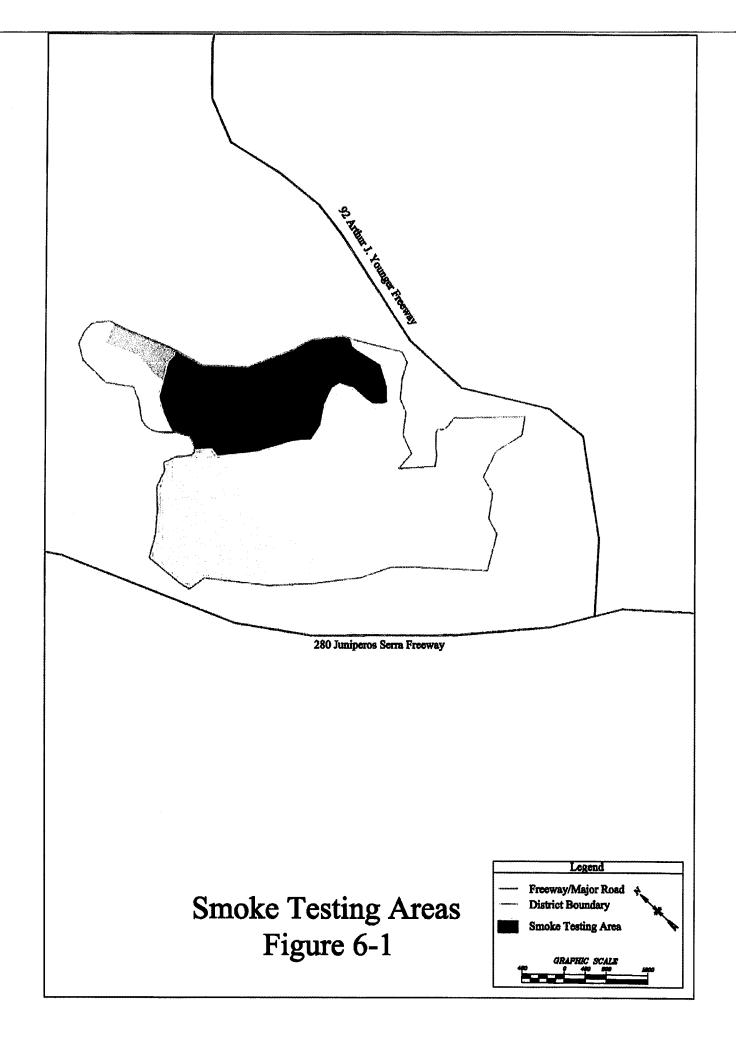


Table 6-1. Smoke Testing Defect Summary

Defect type	Number of defects	
Cleanout	52	
Lateral	2	
Illegal drain	2	
Storm drain cross connection	1	
Manhole leaks	1	
Pavement cracks	1	
Other	0	
Total footage tested:	50,794	

TELEVISION INSPECTION PROGRAM

The television inspection program was conducted during the winter of 1999. Field crews inspected approximately 9,271 linear feet of sewer lines in the Crystal Springs County Sanitation District (CSCSD). This section presents the results of the television inspection program.

Purpose and Objective

The purpose of the television inspection program of mainline sewers was to observe and document the internal condition of the pipeline in reference to infiltration/inflow (I/I) and structural deterioration. Results of the television inspection were then used to develop capital improvement programs described in Sections 13 and 14. The following conditions were observed and documented:

- 1. Structural Integrity—the number, type and extent of cracks and/or broken, crushed, shattered or collapsed pipe.
- 2. Root Intrusion—the amount and severity of the roots were documented.
- 3. I/I—the location of I/I sources were documented.
- 4. Protruding Laterals—a lateral's protrusion into the pipeline was estimated to judge if it will interfere with rehabilitation or routine maintenance.
- 5. Defective lateral connections—defective lateral connections such as broken pipe at the connections, broken saddles, cracks and the connections, pieces missing from the connection, and structural defects in the lateral were documented.
- 6. Offset or Open Joints—offset or open joints were visually estimated from the inspection to determine if they would require spot repairs prior to rehabilitation.
- 7. Pipe Sags—the extent of sags or misalignment was judged to help determine the structural integrity of the pipeline and their suitability for rehabilitation.
- 8. Corrosion—hydrogen sulfide corrosion of concrete sewers was identified and documented.

Television Inspection Results

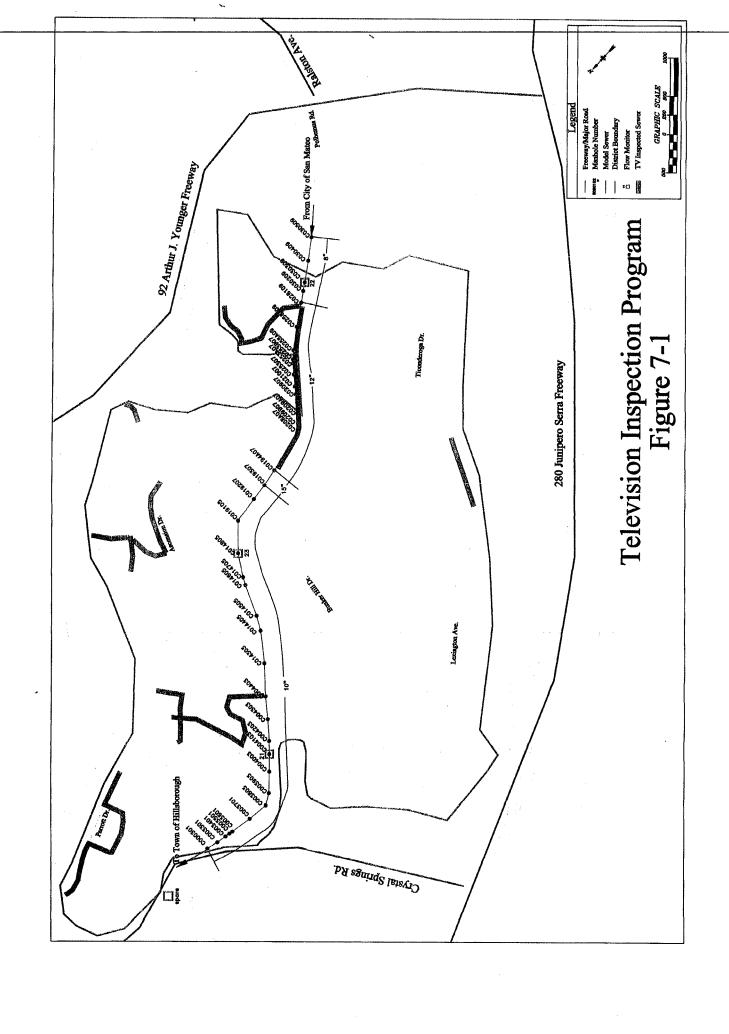
The areas scheduled for television inspection in the CSCSD area are shown on Figure 7-1. Sewers were selected for television inspection if they met one of the following four criteria:

- Excessive maintenance callouts
- Manhole inspection program noted a pipeline defect
- Special request from the County maintenance personnel
- A mainline defect was noted during the smoke testing program.

Sewers scheduled for television inspection were cleaned or flushed prior to inspection to allow for a better structural inspection. Approximately 2,000 linear feet of mainline sewer could not be inspected due to severe defects in the line, which blocked the path of the camera, or lack of access to the sewer. When a severe defect was encountered, the camera setup was reversed to attempt an inspection of the sewer whenever possible. Results of the television inspection program are summarized in Table 7-1. Complete results of the program are provided in Appendix D.

Table 7-1. Television Inspection Summary

Description	Total
Footage attempted	9,947
Footage completed	9,355
Cracks	
Radial	21
	21 2
Longitudinal	2
Joints	
Minor offset joint	0
Major offset joint	5
, ,	
Laterals	
Protruding lateral	4
Defect at connection	2
Dead connection	6
D	
Roots	4.40
Roots at joint	148
Roots at lateral	14
Infiltration/Inflow	
At joint	0
At crack	0
At roots	o o
At inside lateral	0
At lateral connection	0
At inside lateral and at connection	0
The monde internal mad be commodated.	
Alignment	
Sag in line	5
Pipe out of round	0
Structural	
Piece missing	6
Shattered/broken	2
Crushed or collapsed	2
Mineral Stains	
At joint	0
At cracks	0
0.101.0	
Sulfide Corrosion	
Minor	0



BASE SANITARY FLOWS

The results of the flow monitoring program described in Section 5 were used to establish base sanitary flow (BSF) rates. Base sanitary flow rates are used with wet weather flow rates and the hydraulic model to determine the amount of available capacity in the collection system. Wet weather flow rates and the hydraulic modeling are discussed in subsequent sections of the report. This section describes the methodology used to develop base sanitary flow rates for the Crystal Springs County Sanitation District (CSCSD).

Dry Weather Flow

BSF is wastewater contributed by residential, commercial, industrial and public users. Base flow is directly related to land use and varies throughout the day and between weekdays and weekends. BSF from residential areas has a typical diurnal pattern with peak flows occurring in the morning after 7:00 a.m. and a second smaller peak occurring in the evening. A typical dry weather hydrograph is shown on Figure 8-1.

BSF flow contributions to the hydraulic model are based on the flow monitoring data collected during dry weather periods. Actual dry weather flow hydrographs were extracted from the flow monitoring data and used in the model. Peaking factors normally estimated for subsequent use in the hydraulic analysis were not needed since the actual diurnal flow pattern from the flow monitoring could be used directly in the hydraulic model.

Dry weather periods were used to minimize the amount of groundwater infiltration (GWI) included in the calculation. GWI occurs when groundwater levels are above the sewer pipes and the pipes have defects that allow infiltration. Some groundwater infiltration is undoubtedly included in the BSF rates. However, extensive review of accurate water use data in each District would be needed to determine the amount of groundwater infiltration in each area. Based on our review of the flow monitoring, GWI is not a significant factor in the total wastewater flow in the CSCSD area. BSF projections were not prepared for future land use conditions. Land use planners for the County and affected City agencies indicated that growth or significant infilling were not expected in the future.

BSF rates used for the service area for each of the flow monitoring sites are presented in Table 8-1. A complete description of the flow monitoring program is given in Appendix B. Additionally, the technical memorandum describing the flow projections and hydraulic modeling in more detail is provided in Appendix E.

00:0 00. 00:12 00:05 00:61 00:81 00:01 00:51 00:21 00:61 Time 00:è 00:11 00:01 Ф.; 00;₆ 00: 00.jo 00.5 % 00._E 00;<u>`</u> 00:/ 00.0 + 000.0 Flow, mgd 0.150 0.200 0.050 0.300 0.250 0.100

Typical Dry Weather Hydrograph Figure 8-1

Table 8-1. Base Sanitary Flow Rates

Flow monitor	Base sanitary flow, mgd
21 Line 1*	0.195
21 Line 2*	0.286
22 Line 2	0.150
23	0.320

^{*}Flow monitor located in same manhole measuring two lines.

INFLOW/INFILTRATION RATES

The flow monitoring program described in Section 5 was performed to establish inflow/infiltration (I/I) rates. I/I rates are used in conjunction with base sanitary flow (BSF) rates (established in Section 8) and the hydraulic model to determine the amount of available capacity in the collection system. This section describes the methodology used to develop I/I rates for the Crystal Springs County Sanitation District (CSCSD).

Wet Weather Flow

I/I consists of direct inflow of stormwater runoff and rainfall-induced infiltration of stormwater percolating through the soil into the collection system. Inflow occurs when storm water enters the collection system through illegally connected catch basins, area drains or home roof gutter downspouts, or through manhole covers of cleanout lids. Inflow can become severe if surface flooding occurs and manholes and cleanouts are submerged or used to drain low-lying areas.

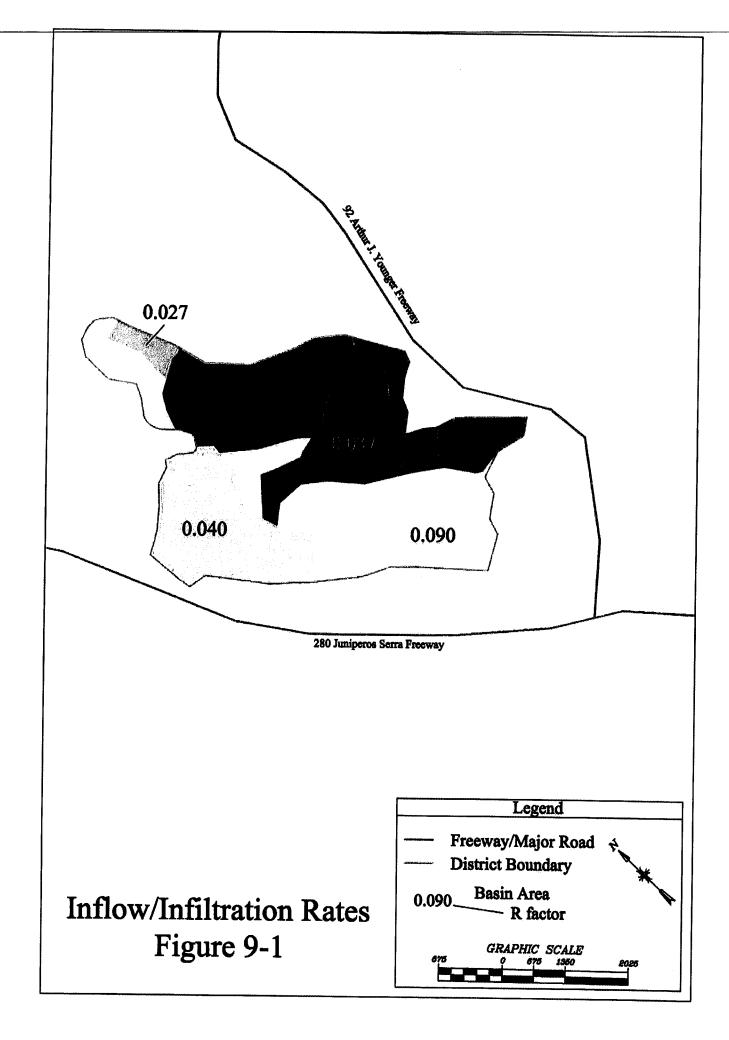
I/I accounts for the large increase in peak flows that occur during rainfall events. In areas with older sewers, I/I is typically the largest component of the total wastewater flow. I/I was evaluated by calculating the "R" factor for each of the monitored basins for each storm. An "R" factor is the percentage of rainfall volume falling on an area that enters the collection system as I/I. The composite minimum and maximum "R" factor, based on the flow monitoring data, for each flow monitoring location is listed in Table 9-1. The flow monitors service areas and R factor used for the wet weather flow projections are shown on Figure 9-1.

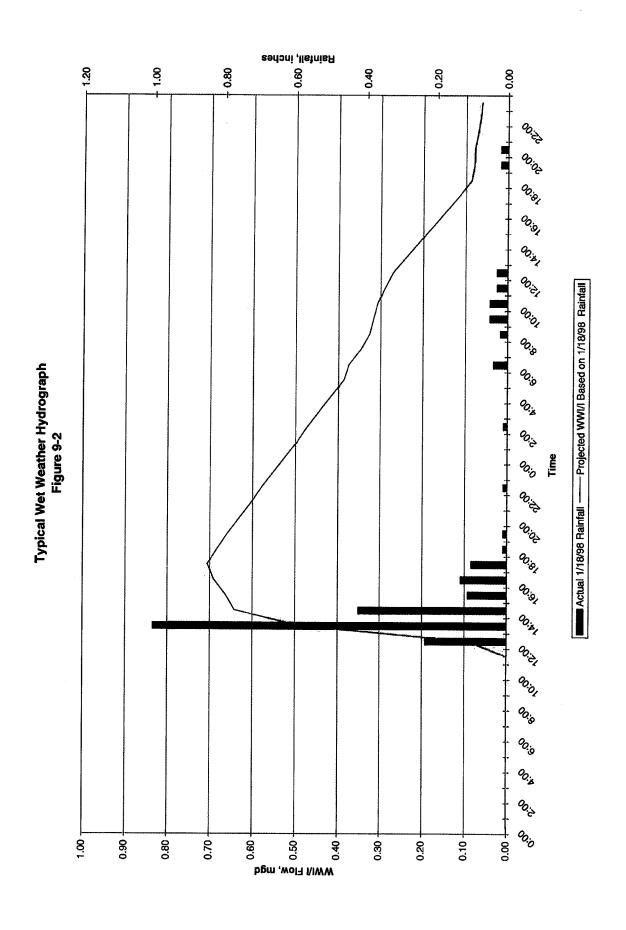
A wet weather design storm was developed to determine the effects of I/I on the capacity of the wastewater conveyance system. The January 18, 1998, rainfall event was very similar to a 5-year design storm in terms of intensity, duration, and volume. Therefore, this storm was selected as the design event. Minor adjustments were made to the rainfall hydrograph to account for differences in the volume between the actual storm and the 5-year design rainfall.

Unit hydrographs were developed for each basin to develop wet weather hydrographs for use in the model. Unit hydrographs are based on the "R" factor and the individual runoff characteristics for each basin. Synthetic hydrographs were added to the base flow hydrographs and the total flow hydrograph was then input to the hydraulic model. A typical wet weather synthetic hydrograph is shown on Figure 9-2. A complete description of the I/I flow projections is provided in the Technical Memorandum provided in Appendix E.

Table 9-1. R Factor

Flow Monitoring Site	Minimum	Maximum
21 Line 1	0.031	0.044
21 Line 2	0.054	0.091
22 Line 2	0.047	0.102
23	0.037	0.097





HYDRAULIC MODEL DESCRIPTION

A hydraulic model was prepared of the Crystal Springs County Sanitation District's (CSCSD) wastewater collection system trunk sewer. The model was used to evaluate the capacity of the pipelines to carry existing peak wet weather flows. This section presents a description of the model and the model development.

Computer Model

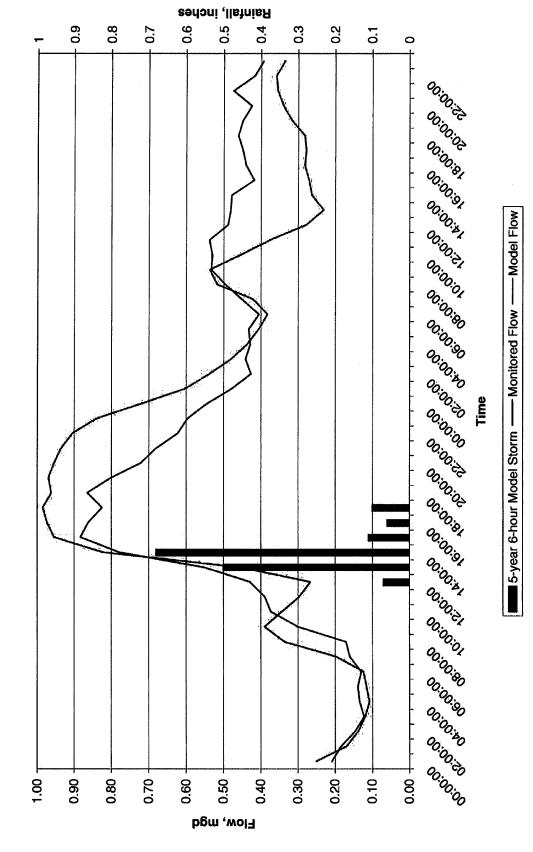
Major trunk sewers in each of the sewer Districts were modeled to determine where capacity deficiencies exist. The HYDRA model developed by PIZER, Inc., was used to simulate wastewater flows in the each of the Districts collection systems. HYDRA routes flow hydrographs (developed in Section 9) through the collection system and accounts for the time delays of peak flow from various tributary areas as the flows move downstream.

For the CSCSD, the Polhemus Road trunk sewer was modeled. This sewer includes nearly all the pipelines 8 inches in diameter or larger in the CSCSD. This trunk sewer is composed of 8-inch- and 15-inch-diameter gravity sewers in the upstream portion. Near the downstream end of the trunk sewer, the diameter decreases to 10 inches.

Most of the pipeline data used in the model was taken from the existing County collection system maps. Pipeline data required by the model includes upstream and downstream inverts and pipeline length and diameter. Surveying was completed to fill in gaps in the data or questionable data.

Modeled flow is compared to the theoretical capacity of each pipe segment. The capacity of each pipeline is a function of the pipeline slope and diameter. If capacity deficiencies were detected, then the program was used to size the appropriate relief and/or replacement sewer size. A typical example hydrograph comparing the model hydrograph to actual flow monitoring is shown on Figure 10-1. The technical memorandum describing the flow development and modeling is provided in Appendix E.

Typical Monitored to Model Flow Calibration Figure 10-1



e:\4692 San Mateo\HYDRAmd\\EPipes\Figure 10-1.xls

MODEL RESULTS

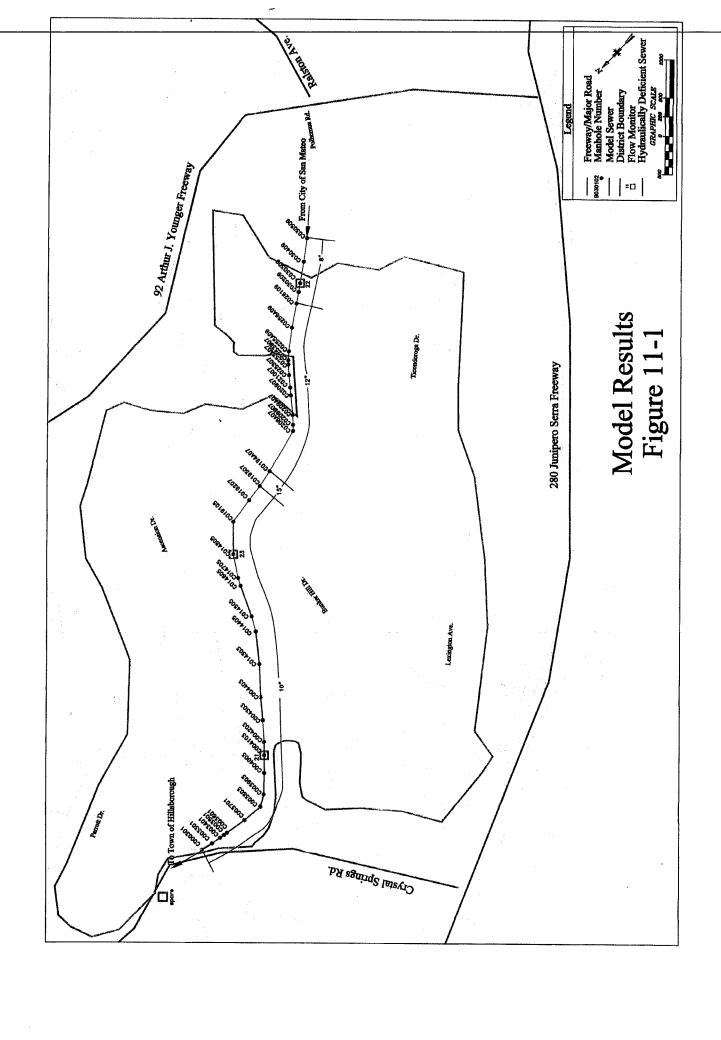
An evaluation of the pipeline capacities was performed using the flows developed in Sections 8 and 9 and the hydraulic model described in Section 10. This section describes the results of the capacity evaluation developed for the Crystal Springs County Sanitation District (CSCSD).

Capacity Analysis

The capacity of the existing system was evaluated using peak wet weather flows. This flow condition is generated by existing development in the service area (Section 8) under design storm conditions (Section 9).

The model routes the flow through the pipe network, calculates the capacities of the pipes, and compares the routed flows to the pipe capacities to identify inadequate pipes. The pipe capacity calculations are based on a Manning's roughness coefficient of 0.013. Pipes were defined to be hydraulically inadequate if the depth of flow is 100 percent or greater of the pipe diameter. The model sized relief and replacement sewer sizes for all inadequate sewers.

The results of the model indicate a severe bottleneck where the Polhemus Road trunk sewer changes to 10 inches in diameter. Nearly all the 10-inch-diameter sewer is unable to convey peak wet weather flow without surcharging. Model results are shown on Figure 11-1. The technical memorandum describing the flow development and modeling is provided in Appendix E. Additionally, the complete HYDRA modeling results are provided in Appendix E.



UNIT COSTS

This section presents the basis for the estimated unit costs that were developed for estimating the construction costs and the capital costs of recommended capital improvements. The cost index and the development of the capital costs of gravity sewer pipeline construction and rehabilitation are presented.

Capital Costs

The total capital investment necessary to complete a project consists of expenditures for construction, engineering services, contingencies, and such overhead items as legal and administrative services and financing. The various components of capital costs are described below. Unit construction costs were developed for the following construction and rehabilitation methods:

- Remove and Replace—recommended for pipelines with serious structural or hydraulic capacity deficiencies where trenchless construction is typically more expensive or not practical.
- Sliplining—recommended for pipelines with minor structural deficiencies or root intrusion and minimal sags.
- Pipe Bursting—recommended method for increasing capacity of structurally deficient 6-inch-diameter lines to 8-inch-diameter lines and provides minimal disruption to the community.
- Chemical Root Treatment—recommended for lines with root intrusion.
- Do Nothing—no capital project is recommended for lines with minor structural deficiencies and light root intrusion. For this option, television re-inspection in a maximum of 10 years is recommended.
- Increase O& M—recommended for lines with minor root intrusion and grease buildup.
- Spot Repair—recommended for lines with severe defects that create maintenance problems or where required prior to implementing other rehabilitation methods.

Cost Index. A good indicator of changes over time in construction costs is the Engineering News Record (ENR) 20-city Construction Cost Index (CCI), which is computed from prices of construction materials and labor, and based on a value of 100 in 1913. Cost data in this report are based on an ENR CCI of 6000, representing costs in March 1999.

Construction Costs. Construction costs presented in the master plan represent preliminary cost estimates of the materials, labor and services necessary to build the proposed projects. The cost estimates are prepared to be indicative of the cost of construction in the study area. In considering cost estimates, it is important to realize that changes during final design, as well as future changes in

the cost of material, labor and equipment, will cause comparable changes in the estimated costs. Unit costs used in this study were obtained from a review of pertinent sources of reliable construction cost information. Construction cost data given in this report are not intended to represent the lowest prices that can be achieved for each type of work, but rather are intended to represent planning-level estimates for budgeting purposes. The following assumptions were made in the development of the unit costs:

- Remove and Replace—Costs include excavation, backfill, compaction, haul off and asphalt repair. Material costs for 8-inch- to 21-inch-diameter sewers are for PVC or VCP. Material costs for 24-inch-diameter or larger sewers are for RCP. Replacement costs for 6-inch-diameter lines include cost for 8-inch-diameter replacement materials. The costs have been developed based on average trench depth not exceeding 15 feet.
- Sliplining—Costs include the use of HDPE as the liner material, construction of access pits and an average service lateral reconnection fee. Sewage bypass pumping is only needed on a localized basis and, therefore, is not included in the costs.
- Pipe Bursting—Costs include the use of HDPE as the liner material, construction of access pits and an average service lateral reconnection fee. Costs include the bypassing of sewage.
- Chemical Root Treatment—Costs include application and removal with hydroflush equipment. Costs also include reapplication every 2 years.
- Do nothing—Costs for this option are for television re-inspection in 10 years at a rate of \$1.50/foot for the data collection and data review.
- Spot Repair—A cost of \$800 has been included in the estimates for each spot repair occurrence.

Table 12-1 presents the unit construction costs for construction and rehabilitation of gravity sewer pipelines.

Contingencies, Engineering, and Overhead

Construction contingencies, engineering and overhead are assumed to be 40 percent of the construction cost. It is appropriate to allow for the uncertainties unavoidably associated with planning-level layout of projects. Such factors as unexpected geotechnical conditions, extraordinary utility relocation and alignment changes are a few of the items that can increase project cost for which it is wise to make allowance in preliminary estimates.

Engineering services associated with projects include preliminary investigations and reports, site and route surveys, geotechnical explorations, preparation of drawings and specifications, construction services, surveying and staking, and sampling and testing of materials. Overhead charges cover such items as legal fees, financing expenses, administrative costs, and interest during construction.

Table 12-1. Gravity Sewer Pipe Unit Construction Costs

Pipe diameter, inches	Relief and replacement sewer cost, \$/foot	Sliplining, \$/foot	Root treatment, \$/foot	Pipe bursting, l.f.
6	85	n/a	3	90
8	85	55	3	90
10	100	70	4	115
12	110	90	5	145
15	120	110	6	175
18	140	n/a	n/a	n/a
21	180	n/a	n/a	n/a
24	195	n/a	n/a	n/a
27	220	n/a	n/a	n/a
30	230	n/a	n/a	n/a
33	255	n/a	n/a	n/a
36	285	n/a	n/a	n/a
42	305	n/a	n/a	n/a
48	355	n/a	n/a	n/a

Other Costs:

\$800/spot repair

Reinspect in 10 years = \$1.50/foot

RECOMMENDED COLLECTION SYSTEM IMPROVEMENTS

Improvements will be necessary to the Crystal Springs County Sanitation District (CSCSD) collection system to adequately convey peak wet weather flows (PWWF). This section presents the recommended improvements for accommodating the hydraulic capacity problems identified in Section 11. Capital improvement projects for correcting structural deficiencies as well as the hydraulic deficiencies are provided in Section 14.

Collection System Sewer Sizing

The improvements recommended for correcting the hydraulic capacity problems are based on the model results for peak wet weather flow. The model selects pipe sizes for parallel relief pipes and replacement pipes. The main drawback to relief sewers is the increased amount of sewer pipe in the ground for the maintenance crews. For this report, alternatives and costs have been developed assuming a larger sewer will replace the existing sewer. However, the County will have to decide on a case-by-case basis during the design of each project as to whether to construct replacement or parallel relief sewers.

Sewer sizes developed by the computer model were verified and modified where necessary to reduce potential maintenance problems. Maintenance problems can arise when a larger sewer discharges into a smaller sewer. The diameters of the smaller sewers are modified to be no smaller than the upstream pipe. In some cases, a sewer is extended for several reaches to connect two portions of the collection system with hydraulic problems.

Short lengths and isolated reaches of over-capacity pipe have, in some cases, not been included with the recommended relief/replacement sewer program. These reaches are not considered significant hydraulic problems because resulting backwater would be minor.

Nearly 5,000 linear feet of the Polhemus Road trunk sewer was identified as hydraulically deficient. A 10-inch and 12-inch relief sewer is recommended to relieve the existing trunk sewer. The location of the recommended relief sewer is shown on Figure 13-1. Table 13-1 summarizes the modeling results.

Table 13-1. Recommended Replacement Sewers

				Recommended
Upstream	Downstream	Existing diameter,	Length,	replacement sewer
manhole	manhole	inches	ft	sizes, inches
C019105	C014405	10	1,714	8
C014405	C000301	10	3,280	12
Total			4,994	

Infiltration/Inflow Reduction

The use of collection system rehabilitation to reduce the overall PWWF within the basin was considered as an option prior to developing the recommendations listed in Table 13-1 for pipe replacement. Collection system rehabilitation is used to accomplish two main objectives:

- 1. Provide a continuing level of service with regard to the structural integrity of the collection system.
- 2. Reduce the overall level of I/I entering the collection system for either peak flow rates or for total I/I flow into the system.

I/I studies nationwide have demonstrated that effective removal of I/I from the collection system requires a comprehensive implementation of collection system rehabilitation of both the sanitary sewer and the private building lateral. Agencies, such as, East Bay Municipal utilities District, Vallejo Sanitation and Flood Control District, and the City and County of Honolulu have performed pilot rehabilitation programs documenting the need for comprehensive rehabilitation for effective I/I removal. The effective amount of I/I reduction possible, even with comprehensive rehabilitation, is a subject of some debate within the sewer industry. Claims range from over 90 percent removal to less than 40 percent removal of the I/I from the collection system. Many things impact the ability of the rehabilitation effectiveness in removing I/I for a long period of time (50 years is considered a reasonable time measure for effectiveness of rehabilitation program). An average long-term effectiveness of 75 percent was assumed for I/I removal from the collection system for this study, based on the results of similar work in the Bay Area.

This type of area-wide rehabilitation approach is critical for collection systems where field data from condition assessment programs show no one area of the collection system as having a significantly higher level of sewer defects that contribute to I/I in the collection system. The Crystal Springs County Sanitation District condition assessment data indicates that the entire district will require comprehensive rehabilitation to provide the required reduction in I/I related flows to avoid the capacity limitations within the existing collection system configuration.

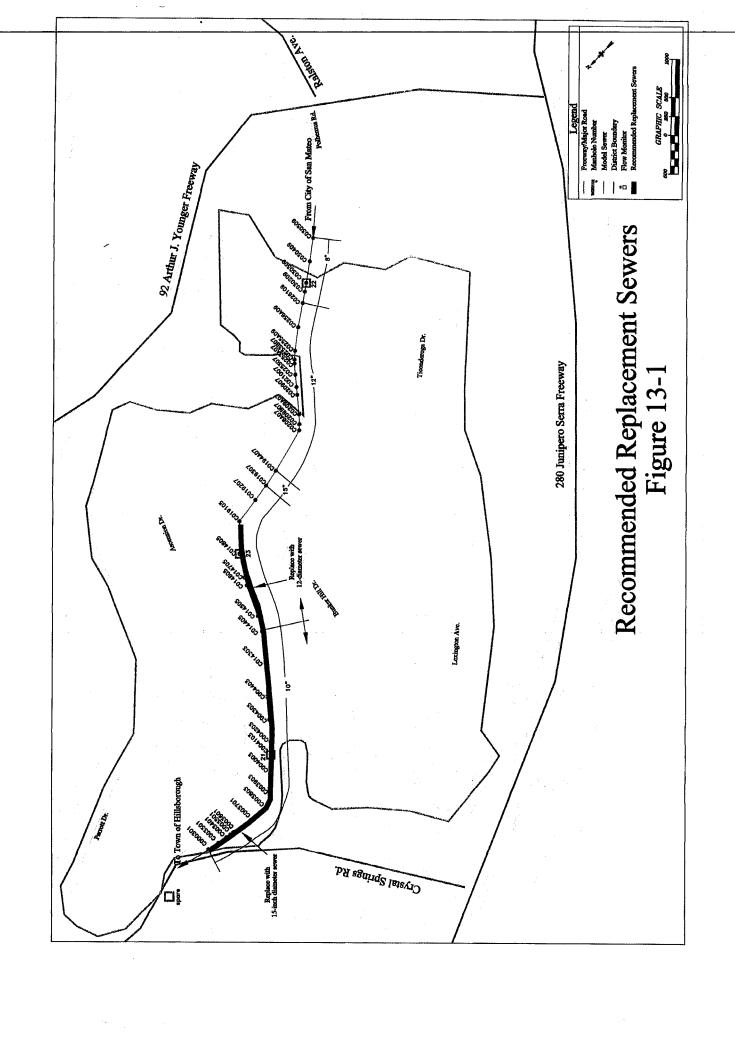
The capacity limitation of 1.74 mgd in the 10-inch sewer in Polhemus requires a 1.86 mgd reduction in the projected PWWF of 3.60 mgd as shown in Appendix E. Effectively, 52 percent of the PWWF will need to be eliminated from the system through a comprehensive rehabilitation program of the district. Using the 75 percent effectiveness criteria, which could be considered optimistic, then the entire collection system in the district will require comprehensive rehabilitation.

The cost associated with complete collection system rehabilitation, using the unit costs provided in Table 12-1, equals \$5.15 million for the 13 miles of collection system approximated as 8-inch rehabilitated sewer at \$75/lf (assumes approximately a 50/50 split between slip lining and pipe bursting of equivalent 8-inch-diameter pipe). The rehabilitation of the sewer laterals will cost approximately \$50/ft when considering landscaping replacement or the use of trenchless construction methods. The estimated total length of sewer laterals in the district is about 10 miles. Therefore, the estimated construction cost for lateral rehabilitation is \$2.64 million. The total estimated construction cost for a rehabilitation program that is effective enough to eliminate the requirement for a new larger capacity sewer is approximately \$7.79 million. The estimated replacement construction cost for the increased capacity of sewer in Polhemus Road is \$655,300 as shown for the two Polhemus Road projects listed in Table 14-1.

Wastewater Cost of Treatment

The cost of treating the increased PWWF will have to be borne by the rate payers of the district. The current cost of treatment charged by the City of San Mateo is approximately \$0.00125/gallon treated. Using this rate the cost of treating the PWWF storm event total flow of approximately 10.5 million gallons, as shown in Figure 9-2 as the area under the projected wet weather flow line, equals \$13,125 per peak flow event. Given that this is a once in five-year condition, the overall cost impact to eliminate the wet weather flows is not practical based on the cost analysis shown above. Planning and negotiation should begin with the Town of Hillsborough and the City of San Mateo regarding the need for collection system capacity down stream of the district.

The County needs to carefully review the terms of the operating agreements for accommodating wastewater flow with each of these agencies to determine who is responsible for the cost of any potential downstream improvements required as the result of construction of a new larger-capacity sewer for the district. The operating agreements should provide a basis of negotiation and planning for developing the recommended projects so that no agency is overly burdened with the cost of the new facilities and that the potential for overflows is prevented.



CAPITAL IMPROVEMENT PROGRAM

Capital improvement program (CIP) projects in the Crystal Springs County Sanitation District (CSCSD) are necessary to correct identified hydraulic and structural deficiencies. This section presents the recommended improvements for correction of the hydraulic deficiencies presented in Section 13 and the structural problems identified in Section 7.

Capital Projects

A total of nine capital improvement projects were developed for the Crystal Springs District. Eight of the projects are required to correct structural deficiencies that create increased maintenance costs or where the sewer is deteriorated to the point where failure may occur in the near future. One project was developed to provide increased hydraulic capacity to the Polhemus Road trunk sewer. Alternatives have been developed for the following projects in the Crystal Springs District:

- 1. Timberlane Way
- 2. South Ascension Drive
- 3. Polhemus Road (north)
- 4. Polhemus Road (south)
- 5. Rainbow Drive
- 6. Enchanted Way
- 7. Parrot Drive
- 8. Lexington Avenue
- 9. Randall Road

A priority ranking of 1 to 3 was applied to each of the projects to aid in the scheduling of the recommended CIP projects. The ranking was done according to the following:

- Priority 1—Required to correct hydraulic deficiencies. The only mitigation alternative available for this option is construction of relief or replacement sewers.
- Priority 2—Sewer lines with excessive maintenance requirements. Improvements to Priority 2 lines are required to prevent dry weather overflows that may be associated with blockages created by roots or other structural problems.
- Priority 3—Sewer lines with minor to major structural deficiencies. Corrective action may or may not be required on these lines depending on the severity of defects.

Table 14-1 presents the recommended projects, priority rating and minimum and maximum mitigation construction costs. Each of the recommended projects are shown on Figure 14-1. A project summary sheet is provided for each project in Appendix F. The summary sheet describes the project location, description of the deficiency, the three corrective alternatives, estimated

construction costs for each alternative and any specific project concerns (i.e., easement work, coordination with neighboring cities, etc.).

Table 14-1. Recommended Capital Improvement Program

		Minimum	Maximum
		construction cost,	construction cost,
Project Description	Priority	dollars	dollars
Polhemus Road (north)	1	N/A	582,100
Randall Road	2	61,300	73,200
Timberlane Way	2	208,115	238,900
Parrot Drive	3	180,000	180,000
Lexington Avenue	3	2,500	127,000
Enchanted Way	3	30,100	35,900
Rainbow Drive	3	271,400	325,600
South Ascension Drive	3	233,200	279,700
Polhemus Road (south)	3	4,000	4,000
Totals		\$1,572,700	\$1,846,400

Estimated construction costs for the projects range from \$1,572,700 to \$1,846,400 depending on the selected alternative. The Polhemus Road replacement sewer project will require coordination with the Town of Hillsborough. The Town of Hillsborough trunk sewer that receives flow from the Polhemus Road trunk sewer also has capacity limitations. Correcting the capacity limitations on the Polhemus Road trunk sewer may aggravate the capacity problem in the Town of Hillsborough trunk sewer.

Operation and Maintenance Program

A crucial part of the successful ongoing performance of the collection system is the operation and maintenance (O&M) program used by the agency. Current maintenance guidelines for the collection system are to clean all sewers in easements annually, and all sewers in roadways every 6 months. In addition, some sewers are cleaned more frequently where they have been identified as being prone to blockages. The purpose of this section is to provide an overview of an O&M approach for the district. It is beyond the scope of work for this project to develop a reach by reach O&M program for the district.

County staff provided a long-term history of emergency call outs to respond to potential spills and blockages. Analysis of these data confirmed that some portions of the system require more frequent cleaning than other segments, which is typical of all collection systems. Also typical cleaning practice is to clean enough material from the pipe to keep the flow moving, rather than completely clean the pipe. An example of this practice is the use of a 4-inch root cutter head to open the flow on the 6-inch-diameter sewer. This cleaning method provides only 44 percent of the available pipe cross sectional area to convey sewer flows. Cleaning to the full diameter of the sewer (use of a 6-inch root cutter in a 6-inch sewer, etc.) and removing the debris from the immediate downstream manhole, while more time consuming, will provide the maximum available sewer system capacity

without pipe replacement. The priority of the field crew should be placed on providing a clean sewer rather than the more typical production rate performance criteria.

Overall collection system maintenance should be on a regular schedule that balances the need to provide maximum available sewer capacity with the cost of maintenance. Typical cleaning frequencies in other agencies in the Bay Area range from once every 6 to 10 years, with segments of sewer cleaned more frequently (up to monthly) where needed. Adopting a program with a fixed cleaning frequency should be instituted for the district. The County has maintenance management software that is capable of establishing schedules for the maintenance crews. Initial cleaning frequencies should be extended to once every 2 years (except for known trouble spots) and then to longer return periods as the condition of the collection system relative to debris, grease, and roots build up is determined throughout the collection system. Known trouble spots that require more frequent maintenance should be placed on a 2-month cleaning schedule, or more frequent if warranted, and tracked to determine whether the cleaning frequency can be increased.

Establishing a cleaning program that relies on continuous schedule/frequency refinement will provide the district with an optimum cleaning program that provides a high level of service and reliability to the community. An added benefit to a responsive cleaning program is the ability of the maintenance crews to shift their focus to accommodate changes in the collection system as changes occur.

When the cleaning of the collection system is performed by a maintenance crew that has other assigned duties in addition to O&M on the collection system, it becomes very important to prioritize with justification, the time requirements of the maintenance crews. Other collection system activities, such as spot repairs, main line rehabilitation, manhole rehabilitation/reconstruction, and lateral rehabilitation could all be added to the duties of the maintenance crew. The impact of this type of increased work load would likely require the maintenance crews to become completely assigned to collection system O&M. This approach would allow the County to maintain the structural integrity of the collection system with a minimum amount of outside construction contracting. Larger projects where several sewers are rehabilitated at the same time should be constructed with a contractor that specializes in the rehabilitation method being used for that portion of the collection system.

The upcoming EPA regulations on sanitary sewer overflows (SSO) will likely require that each district within the County apply for and secure a National Pollutant Discharge Elimination System (NPDES) permit for the operation of the collection system. One of the key aspects proposed for the SSO regulations is the tracking and elimination of dry weather overflows. The SSO regulations will likely allow for limited overflows to occur that are related to acts of nature (severe wet weather events) and for acts of vandalism (illegal dumping of debris into a manhole). It will not allow for repeat overflow locations and will require a database/geographic information system to track the operation and maintenance and the performance of the collection system.

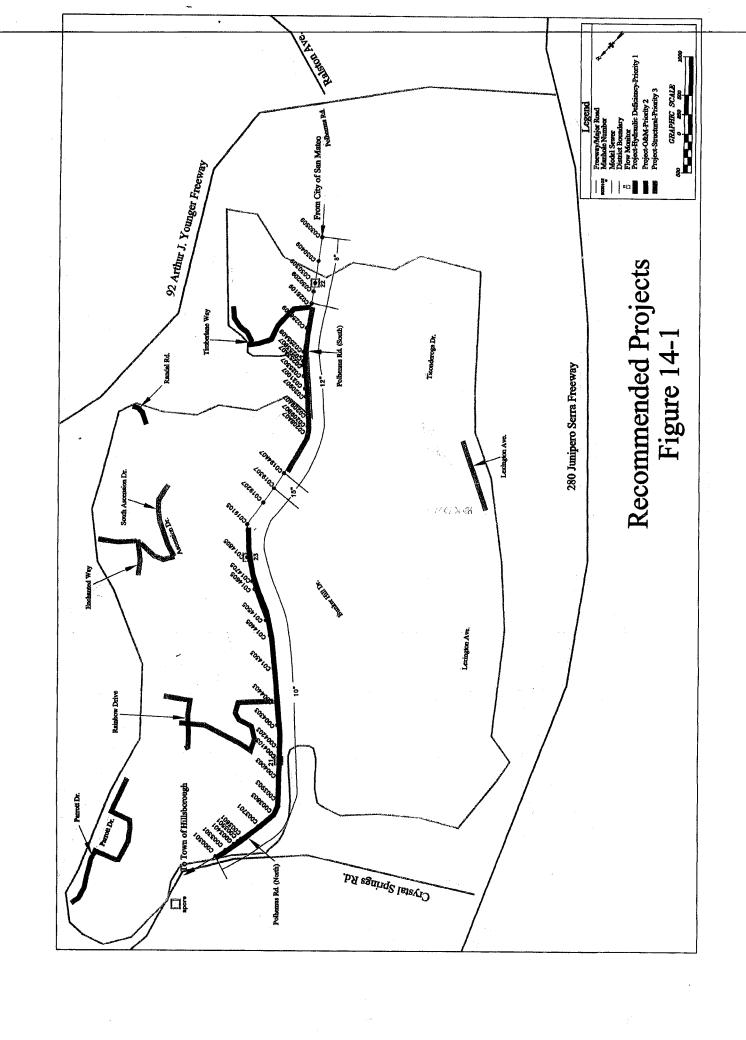
The mission of proactive collection system maintenance is to provide the longest possible life to the sewers without having to replace them with costly construction projects. The primary goal of providing the maximum capacity of the existing collection system network is what the maintenance program should achieve. Unfortunately, an aggressive O&M program will not have any effect on the amount of I/I that enters the collection system as the repairs that are completed by the

maintenance crews are selective, structurally oriented, and spread over the entire collection system, rather than a comprehensive focused rehabilitation program.

Other Collection System Options

The County could consider the impacts/benefits of other collection system options, in addition to construction and modifications of the O&M program recommendations made from this study. Two main options are presented below:

- 1. Require lateral inspection testing and repair as a condition of ownership transfer of a sewered parcel. The benefit is that the new property owner will acquire the property with a sound sewer lateral and the County will, over a long time period, have the sewer lateral located on the private property rehabilitated at no direct cost to the County. Statistically, home ownership changes an average of every 7 to 10 years. A downside to this approach is that many properties do not change ownership in this time frame and consequently the County will end up with a mix of tested and untested laterals within a neighborhood, thereby limiting the effectiveness of the rehabilitation for reducing the I/I contribution to PWWF. This type of inspection has been implemented in several communities in California and in all cases meet with considerable political resistance for impacted jurisdictions and the local real estate organizations. Where implemented, the program is now considered a minor cost of doing business within the community.
- 2. Begin a long-term sewer replacement program of the collection system. At this time, the cost of a cyclic replacement program based on the design life of the collection system is both impractical and cost prohibitive. The cost comparison of providing system capacity versus total system rehabilitation (see Section 13) to reduce I/I contribution demonstrates the economic burden on the rate payer. A key benefit of a scheduled cyclic replacement program would be establishing a reasonable expected cap to I/I related flows by establishing a schedule of replacement combined with ongoing O&M to effectively limit the amount of I/I entering the collection system.



SANITARY SEWER RATES

The implementation of the capital improvement programs (CIP) developed for Crystal Springs County Sanitation District (CSCSD) in Section 14 will require that the District invest considerably in its sanitary sewer collection system. As a consequence, the District will need to charge higher rates to its customers. The impact of the various alternative levels of CIP expenditures on District finances and a projection of this impact on the equivalent single-family residences (SFR) rate is presented in this section. SFRs currently make up approximately 98 percent of all CSCSD residential unit equivalents. The impact of various levels of CIP expenditures on the rates assessed SFRs was determined by (1) determining the various alternative levels of the CIP expenditures considered over a 5-year period, adjusted for inflation, and (2) determining current revenue requirements.

The sanitary sewer rates necessary to pay for the recommended improvements at each alternative level considered for the 5-year study period FY 1999/00 through 2003/04 were estimated. This section presents the methodology used to determine the likely impacts.

The rates derived assume no use of reserves to lower revenue requirements necessary to be recovered from rates. As such, this section contains guidelines for the County's use in determining an appropriate reserve level for the District. All supporting documentation of the development of revenue requirements and rates is contained in Appendix G.

RATE IMPACTS

Determining the impact of the CIP on the sanitary sewer rates requires that the cost of the CIP be combined with existing annual revenue requirements to estimate the increase in the rates required to meet the new level of revenue requirements. Essentially, revenue requirements are developed based on historical expenditures, offsetting revenues, and alternative levels of CIP-related expenditures for each fiscal year in the study period. This total net revenue requirement is divided by the total number of equivalent residential connections (ERC) in the District to obtain the rate per ERC.

Development of CIP

The three priority levels of capital improvements currently under consideration are discussed in detail in Section 14. The recommended financing alternative for the District for the CIP developed is pay-as-you-go financing. Although debt (e.g., Certificates of Participation [COPs] or revenue bonds) could possibly be issued by combining projects from several Districts to create a larger single issue, pay-as-you-go financing is the recommended alternative at this time.

Development of Annual Revenue Requirements

Revenue requirements for the CSCSD system were estimated from accounting information provided by County staff. For each alternative, historical and projected revenue requirements were developed. Projected expenses were developed by inflating the FY 1997/98 expenses by 3 percent per year. The capital projects expenditures (CIP) in any given year is the level of CIP divided by 5 years (assuming the projects will be paid evenly over the 5-year period) and inflated by 3 percent in each subsequent year. Offsetting revenue in the form of secure property taxes was also inflated by 3 percent per year. Other projected offsetting revenues were based on historical levels of receipts and were not inflated. It was assumed that the District does not plan to either add to or subtract from their existing reserve fund balance. This assumption may change if the County conducts a reserve study, the results of which may indicate that the reserve balance can either be used or added to. Tables 15-1, 15-2 and 15-3 contain a summary of the revenue requirements and rate development.

Impact of Revised Revenue Requirements

The impact on rates of the proposed CIP is significant regardless of what level of capital projects CSCSD choose to construct. Current rates are \$352/residential unit equivalent. The Alternative 1 CIP necessitates a maximum rate increase of 104 percent to \$718/residential unit equivalent in FY 2003/04. Alternatives 2 and 3 cause maximum rate increases of 101 percent and 96 percent to \$708/residential unit equivalent and \$690/residential unit equivalent in FY 2003/04, respectively. This analysis assumes that the increased costs, both as a result of the CIP and increases in general expenses, are absorbed equally by all customers. The tables provided in Appendix G summarize the revenue requirements including CIP levels for each alternative along with the calculated rates. As no significant growth is expected in CSCSD, the number of equivalent residential units used to calculate the rates is 1,499. The full development of the rates for the three alternatives and the average of the three alternatives is contained in Appendix G. Tables 15-1, 15-2 and 15-3 also contain a summary of the rate development.

Table 15-1. Crystal Springs Alternative 1 Summary Rate Development

		Pro	jected, dolla	rs	
Item	1999/00	2000/01	2001/02	2002/03	2003/04
Gross expenses	1,051,519	1,079,105	1,107,519	1,136,786	1,166,930
Total offsetting revenue	87,462	88,080	88,717	89,373	90,048
Use of fund balance	-	-	-	-	-
Net revenue requirements	964,056	991,025	1,018,802	1,047,413	1,076,882
Annual rate assuming					
1,499 connections	643	661	680	699	718

Table 15-2. Crystal Springs Alternative 2 Summary Rate Development

		Pro	jected, dolla	rs	
Item	1999/00	2000/01	2001/02	2002/03	2003/04
Gross expenses	1,037,882	1,065,059	1,093,052	1,121,884	1,151,582
Total offsetting revenue	87,462	88,080	88,717	89,373	90,048
Use of fund balance	-	-	-	-	-
Net revenue requirements	950,419	976,979	1,004,335	1,032,512	1,061,534
Annual rate assuming					
1,499 connections	634	652	670	689	708

Table 15-3. Crystal Springs Alternative 3 Summary Rate Development

		Pro	ojected, dolla	rs	
Item	1999/00	2000/01	2001/02	2002/03	2003/04
Gross expenses	1,013,586	1,040,034	1,067,276	1,095,335	1,124,236
Total offsetting revenue	87,462	88,080	88,717	89,373	90,048
Use of fund balance	-	-	-	-1	- -
Net revenue requirements	926,123	951,954	978,559	1,005,963	1,034,188
Annual rate assuming]				
1,499 connections	618	635	653	671	690

RESERVE RECOMMENDATION

The following list of general recommendations are for the County's use in determining the appropriate amount of reserve funds to maintain for the District.

- 1. **Working Capital Reserve**—This generally constitutes 1/6 to 1/12 (as appropriate for a utility's billing cycle) of annual operations and maintenance expenses. This is intended to cover the gap created by the need to pay for expenses incurred prior to the receipt of fees for services rendered.
- 2. **Emergency Repair Reserve**—Between 1 percent and 3 percent of the current replacement value of a system's assets can be held in reserve for use in the case of main breaks or other necessary emergency repairs.
- 3. **Self Insurance Reserve**—Between 1 percent and 3 percent of the current replacement value of a system's assets can be held in reserve as self insurance in the case of damages a system might sustain from natural or other disaster.
- 4. **Debt Service Reserve**—Generally, debt holders require that a utility maintain a minimum reserve equal to 1 year's debt service payments.

It is recommended that at a minimum, the County maintain 10 percent of annual operations and maintenance expenses as working capital reserves, or about \$100,000 in the case of Crystal Springs, along with emergency repair reserves. Assuming CSCSD has approximately 45,000 feet of equivalent 10-inch-diameter pipe (assuming 9,000 feet modeled length represents 20 percent of the system) and assuming \$100/foot replacement cost yields an estimated minimum system replacement value of \$4,500,000. Using the guideline stated above the County should thus maintain between \$45,000 and \$135,000 for emergency repair reserves. Thus the total minimum recommended reserves would be between \$145,000 and \$235,000 for CSCSD. It should be noted that this minimum level of reserves is based on the District's current O&M expenses, the above guidelines, and a rough estimate of the value of the District's assets and should be updated if better information becomes available. Current and projected fund balance levels are shown on the tables in Appendix G.

OF HILLS BODO OF STREET OF

TOWN OF HILLSBOROUGH

1600 FLORIBUNDA AVENUE HILLSBOROUGH CALIFORNIA 94010-6418

RECEIVED

SEP 25 2008

DEPARTMENT OF PUBLIC WORKS
COUNTY OF SAN MATEO

DEPARTMENT OF PUBLIC WORKS

September 23, 2008

Larry Patterson Public Works Director City of San Mateo 330 West 20th Avenue San Mateo, CA 94403

James Porter
Public Works Director
County of San Mateo
555 County Center, 5th Floor
Redwood City, CA 94063

Dear Mr. Patterson and Mr. Porter:

Please accept this letter as our notice to your agency that the Town of Hillsborough intends to retain Carollo Engineering to complete design of the Crystal Springs/El Cerrito Sewer Trunk and take the project out to bid by Fall 2009.

Per the recent tentative cease and desist order issued by the Regional Water Quality Control Board, the Town is obliged to complete the repairs prior to October 31, 2013. We anticipate the project will take place in two phases and will cost approximately \$8,000,000. The Town has arranged for a State Revolving Fund loan to finance the funds. The Town will be seeking reimbursement for its expenses as per the agreement between the agencies.

If you have any questions or comments, please contact me at your convenience. I can be reached at 375-7409.

Sincerely,

Martha DeBry

Public Works Director

CC:

Cyrus Kianpour

Brian Lee Darla Reams

Tentative Cease and Desist Timetable Requirements and Costs **Crystal Springs County Sanitation District (CSCSD)**

			the project			
000,000	6	and Hillsborough	portion of	Reduction Measures	1.13.5.	rugust 1, 2007
	/	Work with San Mateo	pay a	RWQCB Order No. R2-2007-0075 - for I/I	TR 2	Amonist 1 2009
			CSCSD will			
10,000		Work with San Mateo and Hillsborough	Yes	Submit Collaborative Implementation Plan	VII.	
ı	↔	Work to be completed by City of San Mateo	No	Submit Short-Term Contingency Plan	V.A.	
\$ 20,000	↔	Work to be performed by Consultant	Yes	Install Flow Meters	IV.B.1.	
10,000	\$ \$	Summarize past 5 years of CCTV main and manhole inspections	Yes	Submit Initial Inspections and Condition Assessment Report (mains and SSMHs)	IV.A.2.	
350,000	↔	CCTV system by Nov. 15, 2010	Yes	Submit Sewer Pipe/Manhole Inspection and Condition Assessment Plan	IV.A.1.	March 15, 2009
\$ 5,000	e \$	Gather data and prepare Reports	Yes	Submit FOG Program Report (could include enhancing FOG program)	III.D	
300	\$	Submit Statement of No Pump Stations	No	Pump Station and Force Main Reliability Certification	III.C	
\$ 2,000	\$	Must create	Yes	Submit Maintenance Management System Report	III.B	
10,000	S	Revise and enhance existing information	Yes	Implement and Submit Sewer System Cleaning and Root Control Plan (schedule of work, cycles, & PM procedures)	III.A.1.	
	\$	Revise Response Plan & Provide Training	Yes	Implement and Submit SSO Response Plan	II.A.	January 15, 2009
Estimated Cost to Complete		WorkDescription	Applicable to CSGSD	Item Description	Section Number	Completion Date
			_			

Completion Date December 31, 2010 November 15, 2009 March 15, 2011 March 15, 2010 Section Number IV.A.4. IV.B.3. I.B.3. IV.A.3 III.C.2. Submit Pump Station Certification V.B.1. Submit Capacity Assurance Plan III.C.3. | Submit Pump Station Upgrade Plan III.C.1. Submit Pump Station Report VI.A. Tentative Cease and Desist Timetable Requirements and Costs Findings of Condition Assessments (mains Submit Capacity Assessment Report Findings of Condition Assessments (mains Plan (short term [spot repairs] and long term accordance with City of San Mateo Order No. Force Main, Dale Avenue to WWTP in of San Mateo Order No. R2-2007-0075, CIP) Submit Sewer Rehabilitation and Replacemen and SSMHs) Final Report Summarizing Inspections and percentage 4.45%) \$8,000,000, CSCSD percentage 46.75%) Provision VI.C.6. (Pg. 25) (Estimated cost and SSMHs) R2-2007-0075, Provision VI.C.6. (Pg. 25) El Cerrito Relief Line in accordance with City Progress Report Summarizing Inspections and (Estimated cost \$6,000,000, CSCSD Crystal Springs County Sanitation District (CSCSD) Item Description Cost for 2011 **Cost for 2010** Cost for 2009 CSCSD wil CSCSD wi Applicable portion of the project the project portion of pay a pay a Yes Yes Yes Yes Yes Z Z Z rehabilitaion and by Consultant capacity in Force Main capacity in El Cerrrito Prepare plan for manhole inspections CCTV main and WWTP Relief Line replacement Work to be performed Summarize past year of Pump Station and between Dale Avenue CIP based on condition Propose and schedule CCTV main and Summarize year of assessment manhole inspections Project to increase Project to increase 4,020,000 447,300 53,000 Estimated Cost to Complete € 60 (**⇔** S ↔ € Ot 180 3,740,000 267,000 20,000 30,000 10,000 3,000 3,000

Crystal Springs County Sanitation District (CSCSD) Tentative Cease and Desist Timetable Requirements and Costs	
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17,020,300	8	Estimated Cost to the CSCSD of Items	timated Cos	Es		
		\$ 13,479,000	Cost for 2013			
445,000	€>	City of San Mateo Project at WWTP	CSCSD will pay a portion of the project	WWTP Capacity Improvements R2-2007-0075, Provision VI.C.6. (Pg. 25) (Estimated cost \$10,000,000, CSCSD percentage 4.45%)		
445,000	↔	City of San Mateo Project at WWTP	CSCSD will pay a portion of the project	WWTP Hydraulic Improvements/Outfall R2-2007-0075, Provision VI.C.6. (Pg. 25) (Estimated cost \$10,000,000, CSCSD percentage 4.45%)		
89,000	↔	City of San Mateo Projects	Unknown	Sewer Rehabilitation Projects (\$2,000,000/year) as identified in City of San Mateo Order No. R2-2007-0075, Provision VI.C.6. (Pg. 25) Estimate cost to CSCSD to be 4.45%	I.C.3.	December 31, 2013
2,100,000	↔	Work with San Mateo and Hillsborough	Yes	Completed Implementation of Recommended I/I Measures - RWQCB Order No. R2-2007-0075 (Includes cost of estimate for 10% of sewer laterals replaced at \$10,000 per lateral, estimate does not include projects City will construct in accordance with Order for which CSCSD will pay a portion of)		
3,000,000	59	Completion of CIP identified in condition assessment (IV)	Yes	Complete Short-Term Improvements	V.B.2.	November 15, 2013
2,500,000	↔	Not Completed	Yes	CSCSD Completes 8 Remaining Identified CIPs	I.C.2.	
4,900,000	↔	Phase II Hillsborough Improvement	CSCSD will pay a portion of the project	Hillsborough Completes Capacity Upgrade of Crystal Springs/El Cerrito Truck Sewer	I.C.1.	October 31, 2013
Estimated Cost to		Work Description	Applicable	atem Description	Section Number	Completion Date

10,000	S	Estimated Annual Reporting Cost for the CSCSD \$	ınual Report	Estimated A	
5,000	\$	Work to be performed by CSCSD staff	Yes	VI.B. Infrastructure Renewal - Annual Report	
3,000	\$	Work to be performed by Consultant	Yes	IV.B.2. Collection System Flow Monitoring	
	↔	\$	No (CSCSD has no Pump Stations)	III.B.4. Pump Station and Force Main Renovations and Upgrades	
2,000	\$	Will need to prepard	Yes	III.A.2. Sewer System Cleaning and Root Control Program	
		n 2009	15 starting i	Annual Reporting Requirements Due Nov. 15 starting in 2009	
Estimated Costro Complete	0.0	Work Description	Applicable to:@SCSD	Date Number Ttem Description	Completion Date
		(CSD) s and Costs	District (CS quirements	Crystal Springs County Sanitation District (CSCSD) Tentative Cease and Desist Timetable Requirements and Costs	