

**SOUTHERN MARIN SEWER AGENCIES
SERVICE REVIEW AND
SPHERE OF INFLUENCE UPDATE**

Marin Local Agency Formation Commission

July 2011

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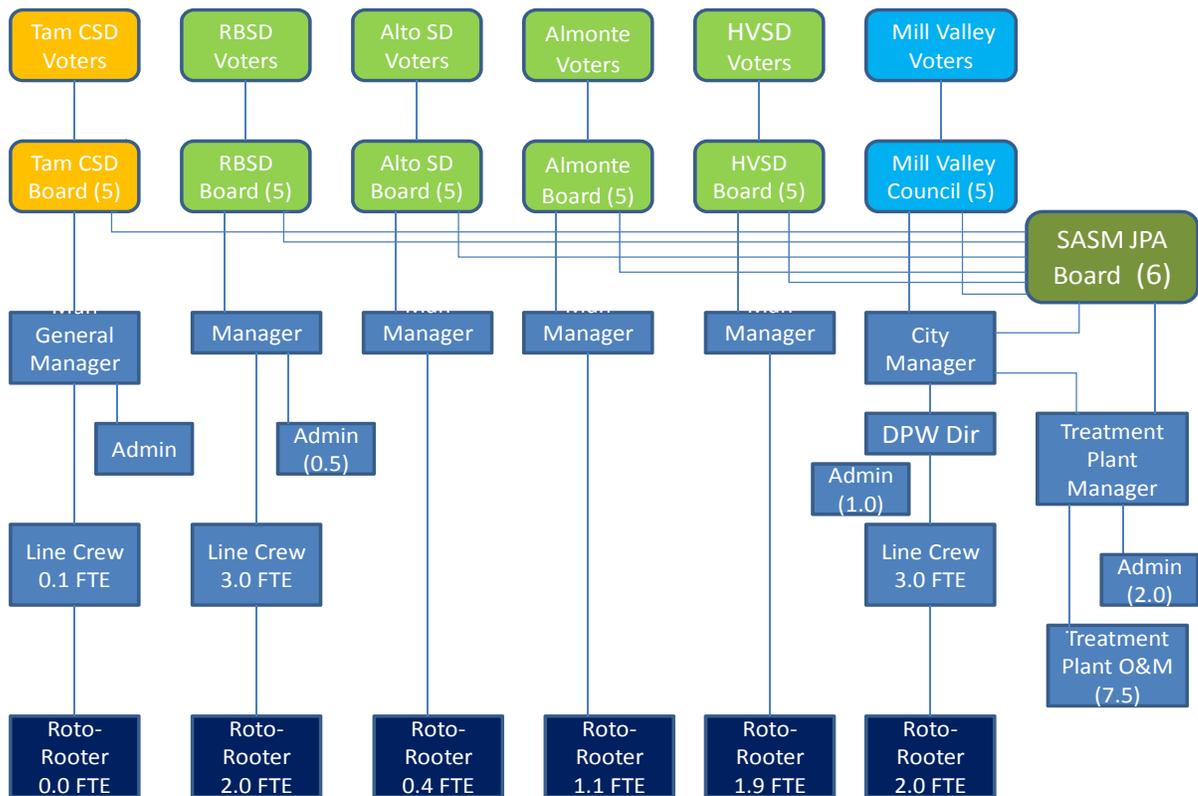
ACKNOWLEDGEMENT

The staff of Marin LAFCO acknowledges the courtesy and cooperation received from the board members and managers of the seven agencies that are the subjects of this study. Their generosity in this regard was extended despite wide differences of opinion on a variety of issues, and is entirely consistent with their long and dedicated public service. LAFCO staff offers its respect and many thanks.

SUMMARY & RECOMMENDATION

This report covers seven sewer service agencies: one city (Mill Valley), one community services district (Tamalpais CSD), four sanitary districts (Alto, Almonte, Homestead Valley and Richardson Bay) and one joint exercise of powers agency, the Sewerage Authority of Southern Marin (SASM).

The entire system serves a population of approximately 29,700, a modest size even among other sewer service organizations in Marin County. However, the diverse and complex service arrangements within the SASM system are unusual as shown in its organization chart.



In 2005, Marin LAFCO performed a municipal services review of sewer service agencies in southern Marin County and adopted new spheres of influence (boundary plans) for those agencies. The study identified significant potential cost savings through consolidation of sewer agencies and adopted "interim"

sphere of influence designations encouraging “functional consolidations” of agency operations in the short-term (voluntary collaboration or joint exercise of powers between existing agencies) as transitional steps toward more permanent political consolidation of agencies. The adopted service review determinations were also critical of the management efficiency and political accountability of existing southern Marin sewer agencies, stating “Continued segmentation of sewer service between collection and treatment functions and between very small neighborhood areas no longer adds value to the provision of this (sewer) service.”

State law and LAFCO policy require periodic update of adopted sphere of influence designations. Under the Commission’s policy, “Spheres may be restudied where significant changes in land use, planning policy, demand for public service, service capabilities, or relationship to other government agencies have occurred.” In January 2011, LAFCO directed its staff to restudy the services and adopted spheres of influence of sewer service agencies in southern Marin for the following reasons:

- ❑ To assess the effectiveness of functional consolidation efforts undertaken by southern Marin sewer agencies since interim sphere of influence designations were adopted in 2005;
- ❑ To review and update the determinations made by the Commission in its service review and sphere of influence studies in 2005;
- ❑ To re-examine the ability of SASM and its member agencies to provide sewer services in light of significant sewage spills in early 2008;
- ❑ To provide a basis for responding to new legislative authority granted to Marin LAFCO under AB 1232 (Government Code Section 56375.2), which enables consolidation of SASM and its member agencies without protest proceedings;

Based on data and observations presented in the body of the report, staff has drawn a series of conclusions upon which to base its recommendations.

The Commission’s sphere of influence review should set the stage for addressing infrastructure and operational problems by streamlining the government structure of SASM’s member agencies a way that the previous “interim” sphere of influence designations did not. The language of the 2005 sphere of influence resolutions anticipating political consolidation only after a series of successful contractual collaborations has not produced significant results due to the effort

and complexity of six member agencies attempting to work together. The coercive force of the EPA's Administrative Order following sewage spills of 2008 has imposed some unity of action, but neither leadership nor cohesion has otherwise emerged that integrates the management, service standards or decision making process that could produce the improvements anticipated by the Commission's 2005 study.

LAFCO and the public should recognize the earnest and energetic efforts of SASM and its member agencies in addressing problems in sewer facilities and operations following the spills of 2008. However, recent improvements in performance and reinvigorated efforts to improve facilities do not justify preservation of an obsolete government structure. The EPA's Administrative Order has required the collection agencies to thoroughly rebuild their systems, requiring a very substantial increase in fee revenue from the public. This would be the time to create some uniformity of approach and accountability for results through the consolidation of four of SASM's six member agencies.

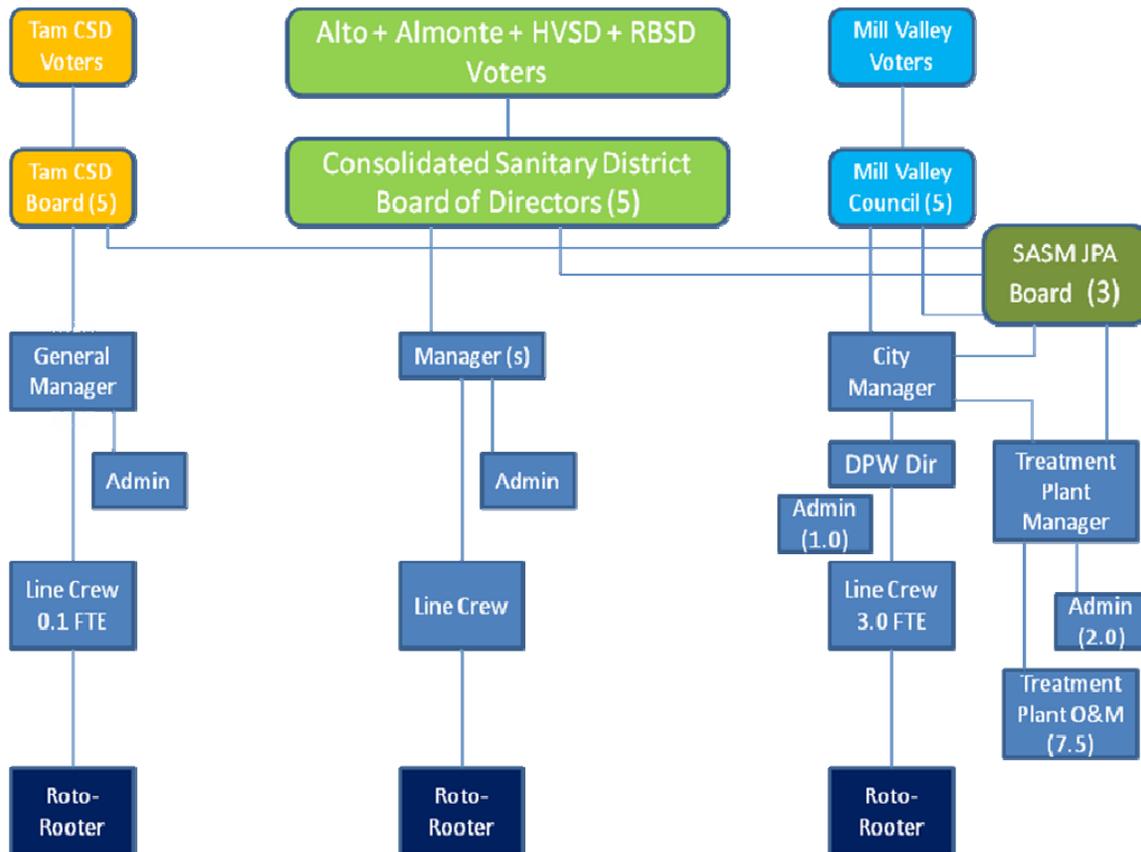
Among the seven agencies, 36 elected and appointed officials and eight managers operating the existing sewer system, no one is responsible or accountable for the spills of 2008. The present structure of SASM and its six member agencies dilutes responsibility and accountability for sewer service to the point of near inconsequence for single purpose sanitary district members. There is no need and no purpose in preserving small political subdivisions of the State of California that operate with no discernable political activity in their meetings, decisions or elections. The public is disinterested in participation in district meetings or standing for election because so little is at stake within each jurisdiction when that jurisdiction is responsible for only a small part of a small sewer system.

All of the member agencies are responsible to some undetermined degree, but no agency or board has any overall responsibility for the performance of the system. The political divisions within SASM and its members create an environment that does not allow the public to understand the governance of the sewer services that it receives. Staff believes that the system's complexity has created confusion, disengagement and apathy with regard to the operations of the agencies and in public participation.

With the new authority granted to the Commission under AB 1232, LAFCO is in a position to implement its adopted policies on special district consolidation and its 2005 service review determinations. Implementation of these policies should be pursued if the eventual result increases overall economy, clarifies

responsibility for sewer service, enhances public understanding and accountability and provides an equitable outcome for ratepayers and employees.

Although AB 1232 authorizes Marin LAFCO to consolidate or reorganize “SASM and its member agencies,” a number of practical and legal obstacles stand in the way of combining all seven existing agencies into a single sanitary or sanitation district. The recommended alternative advanced by this staff report would consolidate the four sanitary district members of SASM, the Alto, Almonte, Homestead Valley and Richardson Bay Sanitary Districts. The proposed consolidation would clarify accountability among the remaining agencies, improve management efficiency by reducing management staff and allow estimated cost savings in operations and maintenance ranging from \$228,000 to \$269,000. Governance and staffing of this alternative are shown in the following chart:



The effect of this alternative would be to reduce the number of member agencies in the SASM joint powers agency from six to three. Subsequent action by the

three remaining members of SASM would be likely to reduce membership to two and make other adjustments to the SASM joint-powers agreement.

Under proposed terms and conditions of approval, the consolidated sanitary district would be governed by an expanded board of directors composed of members of all four predecessor district boards. The new district would be required to employ regular and contract employees for a minimum period of time and to administer separate rate zones in place of the predecessor district boundaries in order to equitably account for differences in reserves, rates and property tax revenues. Other terms and conditions would address the variety of implementation issues inherent in altering the existing agency structure.

Recommended Actions

Staff recommends that Marin LAFCO take the following actions:

1. Open the public hearing, continue for at least 60 day for public comment to the Commission's September 8, 2011 meeting. Request that affected agencies wishing to comment do so in writing by August 26th.
2. Following completion of this public hearing:
 - a. Adopt updated service review determinations required by Government Code 56430 based on the content of Chapter II of this report.
 - b. Amend 2005 sphere of influence determinations for Alto, Almonte, Homestead Valley and Richardson Bay Sanitary Districts in the following manner:

Section 1. The sphere of influence designation of the (example) - Almonte Sanitary District is amended as ~~an Interim Sphere of Influence designation, to include all areas currently within the boundaries of the District as of the date of this resolution as shown on Attachment A. The purpose of the Interim designation is to express this Commission's expectation that Almonte Sanitary District will continue to provide service within its present boundaries as shown on Attachment A while engaged in functional collaboration efforts with neighboring sewer agencies and that political consolidations will be eventually undertaken by southern Marin sewer agencies in the future at a time and in an order yet to~~

~~be determined.~~ to be a sphere of influence "in common" to include the areas served by Almonte, Alto, Homestead Valley and Richardson Bay Sanitary Districts. This designation is assigned to reflect the Commission's conclusion that the services provided by Almonte, Alto, Homestead Valley and Richardson Bay Sanitary Districts would be most efficiently provided by a single special district. This designation indicates the Commission's determination that these districts should be combined through consolidation or other reorganization process.

3. Direct staff to publish notice of intent to initiate proceedings for consolidation of Alto, Almonte, Homestead Valley and Richardson Bay Sanitary Districts at a public hearing on a date at least 21 days from the date of the notice;
4. Following completion of the public hearing so noticed, adopt a resolution approving the consolidation of Alto, Almonte, Homestead Valley and Richardson Bay Sanitary Districts, under the special provisions of AB 1232 (Government Code Section 56375.2) subject to the terms and conditions of approval described earlier in this report.

It is further recommended that the Commission, prior to taking final action on the proposed consolidation, provide a 30 to 60 day consultation period for the affected agencies to work with the Commission's staff in the further development of terms and conditions of approval if requested to do so by two or more of the agencies subject to consolidation.

CHAPTER 1. INTRODUCTION

This report is presented as part of a process mandated by Section 56425 of the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000. As stated in that section, "In order to carry out its purposes and responsibilities for planning and shaping the logical and orderly development and coordination of local government agencies so as to advantageously provide for the present and future needs of the county and its communities, the Local Agency Formation Commission shall develop and determine the sphere of influence of each local governmental agency within the county." As used in this section, "*sphere of influence*" means a plan for the probable physical boundaries and service area of a local government agency.

In determining a sphere of influence, the Commission is required to consider and make written findings with respect to the following factors:

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

Government Code Section 56425(f) requires the Commission to periodically review adopted spheres of influence:

- (f) Upon determination of a sphere of influence, the commission shall adopt that sphere, and shall review and update, as necessary, the adopted sphere not less than once every 5 years.

The Commission's adopted Policies, Procedures and Guidelines include provisions for compliance with Section 56425 requirements

1. Spheres of influence authorized for restudy will be examined for changes in conditions and policies since adoption or most recent review.

Five years have elapsed since the Commission adopted spheres of influence for sewer service agencies in the southern Marin area.

Changes to State law effective on January 1, 2001 require LAFCOs to study the service relationships between agencies providing municipal services within different sub-regions in each county prior to the periodic review of adopted spheres of influence. In this report, discussion of service review determinations precedes recommendations for revision of the spheres of influence of four of the member agencies of SASM, including the Alto, Almonte, Homestead Valley and Richardson Bay Sanitary Districts.

The actual effect of these or any other adopted spheres of influence will be to provide LAFCO and local communities with policy guidance on matters relating to the boundaries and organization of local government agencies. In short, the purpose of the Commission's sphere determinations is to answer the question, "What local agencies should provide which services to what geographical area as communities change?"

In addition, Marin LAFCO has adopted policies with respect to special district consolidation or reorganization of special districts which are of particular interest in this update. Those policies include the following provisions:

CHAPTER III. POLICIES AND PROCEDURES FOR THE EVALUATION OF PROPOSALS

Section 1. General Policies & Standards

A. Agency Consolidation Policy

It is the intent of LAFCO to encourage the rationalization of local government organization through the elimination or consolidation of small, single purpose special districts. Wherever the full range of urban services is required, general-purpose governments are preferred to special districts for the provision of services.

It is the intent of LAFCO to strengthen the role of city governments in the provision of urban services. In the city-centered corridor of Marin County as designated in the Marin Countywide Plan, general-purpose governments are preferred over special districts for the provision of services. Where provision of a service by a general purpose local government is not practical, LAFCO favors the consolidation or reorganization of small, single purpose special districts when such consolidation can be shown to reduce aggregate costs of service and/or improve local government accountability.

LAFCO discourages the proliferation of local governmental agencies and the existence of overlapping public service responsibilities. LAFCO discourages the formation of new special districts where service can be provided by existing local government agencies.

....

Section 5. Polices & Procedures for Specific Application Types

A.

1.

B. It is the policy of the Marin Local Agency Formation Commission to prefer, but not require, that proposals be submitted by petition of voters or landowners or by resolution of application by an affected local agency. The Commission will consider initiation of such proposals in instances in which the following conditions apply:

- A sphere of influence or other governmental study has shown that a proposal may result in lower overall public service costs, greater local government access and accountability, or both.
- The Commission can complete the necessary review, analysis, and processing with its own staff resources, or funds are available to pay for additional assistance needed to complete the review and processing of the proposal.

The Commission reserves its discretion to initiate such proceedings in exceptional circumstances in which there exists a level of public concern about a district's services or governance which, in the Commission's view, warrants initiation of a proposal.

More information on LAFCO and on all of Marin County's local governments, services and boundaries may be found on the Commission's website at <http://lafco.marin.org>.

I. SASM & Member Agencies

This report covers seven sewer service agencies: one city (Mill Valley), one community services district (Tamalpais CSD), four sanitary districts (Alto, Almonte, Homestead Valley and Richardson Bay) and one joint exercise of powers agency, the Sewerage Authority of Southern Marin (SASM).

The entire system serves a population of approximately 29,700, a modest size even among other sewer service organizations in Marin County. However, the diverse and complex service arrangements within the SASM system are unusual.

A. Collection

The six member agencies operate sewage collection systems of varying sizes, all leading to the SASM treatment plant. SASM also operates some collection facilities where collection facilities serve more than one of its member agencies. Figure 1 shows the jurisdictional areas of the six SASM member agencies. Table 1 shows the collection facilities operated by each agency and the relative sizes of the member agencies in terms of equivalent dwelling units (EDUs). The

collection agencies are not responsible for sewer laterals that connect private facilities to the public sewer.

B. Treatment

SASM operates a single sewage treatment plant located in the City of Mill Valley, also shown on Figure 1. The SASM treatment plant is jointly owned by each of the six collection agencies. Their ownership shares are very different as measured in EDUs of the treatment plant's capacity, as shown in Table 1 (page 13).

Figure 1

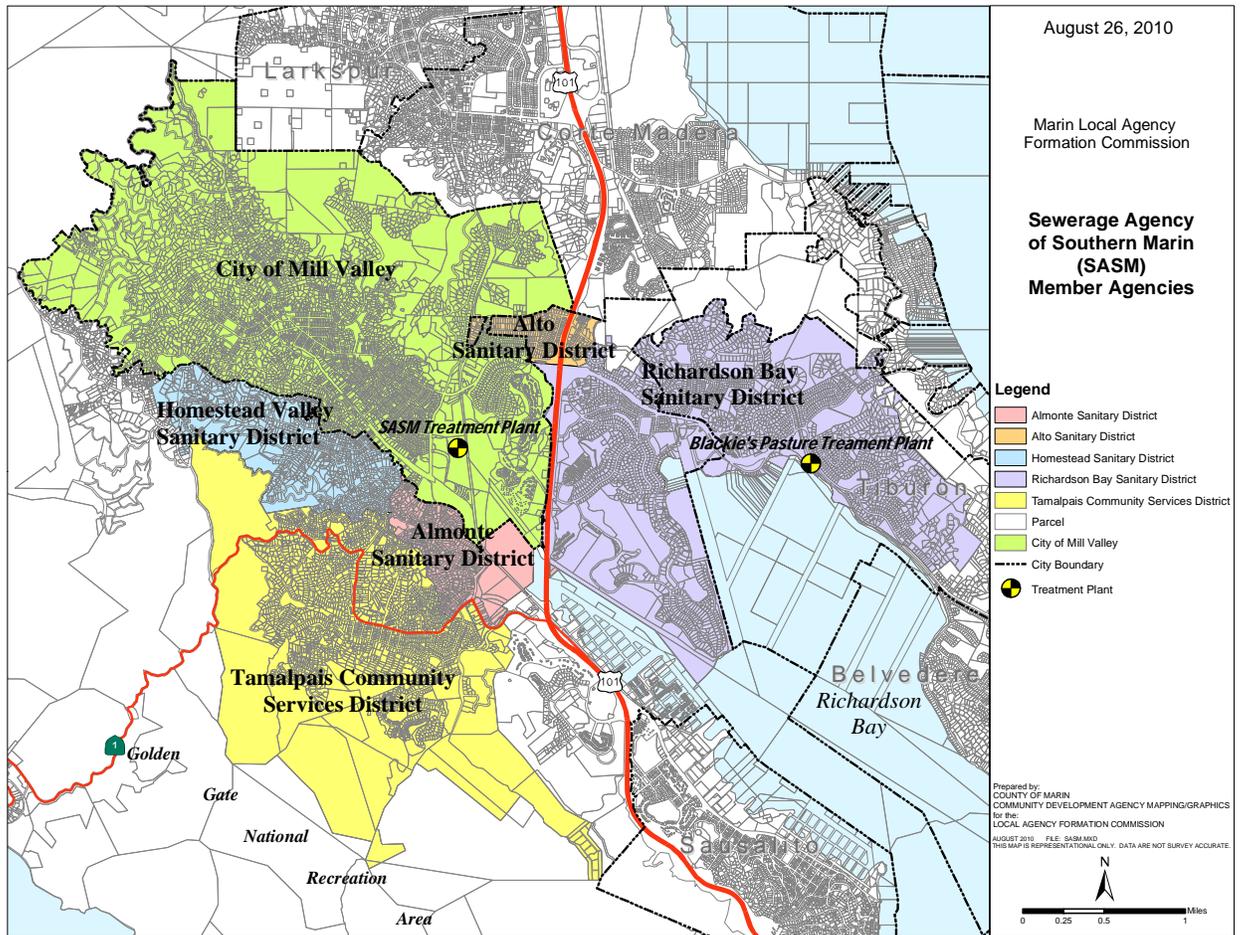


Table 1

Equivalent Dwelling Units	Treatment Plant Capacity (EDUs)	Percent	Line Miles
Alto Sanitary	612	0.03	3
Almonte Sanitary	936	0.05	6
Homestead Valley Sanitary	1314	0.07	10
Richardson Bay Sanitary	6030	0.34	44
City of Mill Valley	8856	0.49	59
Tamalpais CSD (SASM only)	252	0.01	1.2
SASM	----	----	9
Total SASM	18,000	100%	132.2

C. Governance

Each of these six collection agencies is governed by its own independent five-member council or board of directors. Each of these six agencies appoints one member to the governing board of the Sewerage Agency of Southern Marin (SASM), a joint-exercise-of-powers agency. Each appointee has an equal vote on the SASM board regardless of its ownership interest in the SASM treatment plant.

D. Management & Staffing

Staffing resources are unequally available to the various members of the seven constituent agencies. Two of the six member agencies, City of Mill Valley and Tamalpais CSD, provide services other than sewer service within their jurisdictions. They enjoy full time management and other staff resources to serve their governing boards and the public. Of the four sanitary districts, only Richardson Bay has full time staff and office facilities. Alto, Almonte and Homestead have part time managers only and no visible, physical facilities in their communities above ground.

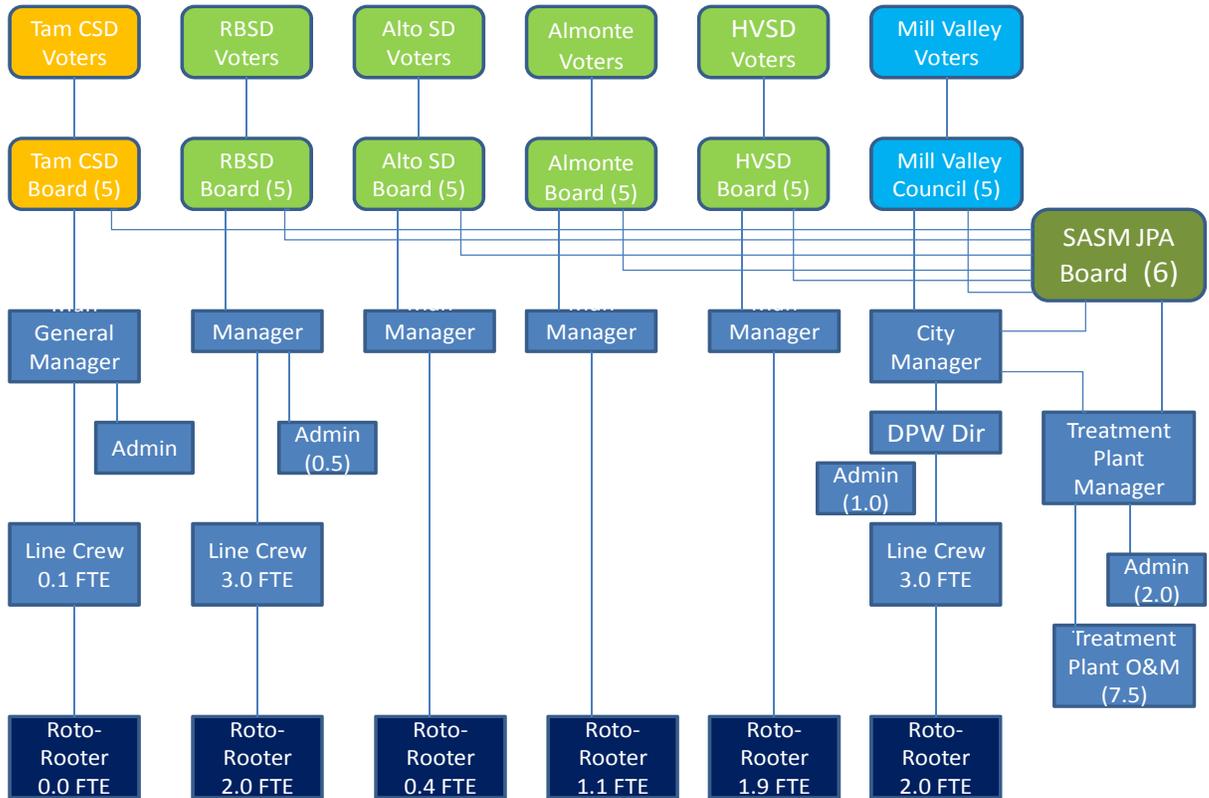
SASM has full time management and line staff to operate the sewage treatment plant and support the SASM board. However, SASM receives its staffing resources through an operations and maintenance agreement with the City of Mill Valley, i.e. the City's employees provide staff to SASM for operating the treatment plant and serving the SASM board of directors. Staff resources are available to SASM and its members as shown in Table 2.

Table 2
Summary Data - SASM & Member Sanitary Service Agencies

City/District	Services	Date Formed	Service Popul.	Area (sq. mi.)	Full-Time Staff	Operating Revenue
Almonte Sanitary District <i>Health & Safety Code 6400</i>	Sewage collection Solid waste disposal	1952	2000	0.5	0.3	\$.43 mil
Alto Sanitary District <i>Health & Safety Code 6400</i>	Sewage collection Solid waste disposal	1951	1200	0.2	0.125	\$.27 mil
Homestead Valley San. Dist. <i>Health & Safety Code 6400</i>	Sewage collection Solid waste disposal	1931	2400	0.75	0.25	\$.96 mil
Richardson Bay Sanitary Dist. <i>Health & Safety Code 6400</i>	Sewage collection Water reclamation	1946	9522	2.9	4	\$2.89 mil
Tamalpais Community Services District <i>Government Code 61000</i>	Sewage collection Solid waste disposal (other dist. services)	1955	6859	1.7	2.6	n/a
City of Mill Valley	Sewage collection Solid waste disposal (other city services)	1900	15122	4.8	2.5	n/a
Sewerage Agency of Southern Marin <i>Government Code 6500</i>	Sewage treatment & disposal Water reclamation	1979	29526	5.3	15	\$3.04 mil

The organization of SASM and its member agencies is shown in the following organization chart:

Figure 2
Current Organization of SASM & Member Agencies



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CHAPTER 2. MUNICIPAL SERVICE REVIEW

I. Background: Synopses of Related Consolidation Studies & Documents

A. *Southern Marin Sewers – So Many Districts, So Few Users* (2003-2004 Marin County Civil Grand Jury, April 2004):

The summary of this report reads:

The Marin County Civil Grand Jury (Grand Jury) reviewed the operations of the eleven agencies that collect and treat wastewater in Mill Valley, Sausalito, Tiburon, Belvedere, and nearby unincorporated areas. The Grand Jury found that, for the most part, these agencies appear to be operating in a responsible and environmentally sound manner. This unique patchwork quilt of agencies, however, lacks a forum for cooperatively examining issues that transcend district boundaries. This has led to disputes in the past. Moreover, it has meant that one agency can make decisions that can harm another without realizing it. The Grand Jury also concluded that closer collaboration and interaction between the professionals who work for wastewater agencies could lead to improved systems operation and maintenance.

The Grand Jury also found that numerous southern Marin residents are unable to vote for the directors of agencies that impose sewer charges on them, a situation that clearly should be corrected.

- The Grand Jury recommends that:
- A periodic forum for interagency information sharing, discussion, and dispute resolution be established
- A facilitator-run meeting of the eleven agencies involved in southern Marin's wastewater collection be held to identify opportunities for consolidation, collaboration, and cooperation
- The opportunities identified in the facilitated meeting become the basis for an in-depth study of consolidation options
- The City of Belvedere should explore the advantages of annexation to Sanitation District Number 5 for wastewater collection and treatment services

The entire report and the responses of subject agencies are available at:
<http://www.co.marin.ca.us/depts/GJ/main/cvgrjr/2003gj/SouthernMarinSewersReport.pdf>

B. *Southern Marin Sewers: Cracks in the System* (2008-2009 Marin County Civil Grand Jury, May 2008)

Following spills at SASM in January 2008, the Grand Jury focused on the structure of SASM and its member agencies and on the role of private property owners in maintaining sewer laterals. The Grand Jury's recommendations include consolidation of SASM and its member agencies, but recognize difficulties in that process. The summary of the report is included in this report as Attachment 1. The entire report and agency responses are available at <http://www.co.marin.ca.us/depts/GJ/main/cvgrjr/2008gj/index2008.cfm>

C. *Southern Marin Service Review & Sphere of Influence Update* (Marin County Local Agency Formation Commission, April 2004)

LAFCO adopted spheres of influence for most of the cities and special districts under study, but elected to expand study of southern Marin sewer agencies with the aid of a consultant as described below.

D. *Southern Marin Sewer Service Alternatives Study* (PB Consult, July 2005):

The study included 11 sewer agencies in southern Marin, including SASM and its members. The study design aimed to evaluate the potential cost savings from the permanent political consolidation of southern Marin sewer agencies, but also to define short-term actions that could be undertaken by the existing agencies to improve service and save money by working together – in what the study called “functional collaboration.” **A key assumption of the study was that functional collaboration was a useful and necessary antecedent to political consolidation of these agencies.**

The study also separately estimated cost savings under current and future costs bases, accounting for expected costs of new regulatory requirements that have been implemented since 2005. The future basis cost savings for functional consolidation involving all 11 southern Marin sewer agencies was estimated at \$1.9 million per year or over 12% of projected budgets. The future cost basis savings from political consolidation of SASM agencies was estimated at \$750,000 per year or approximately 10% of total projected costs. The report noted that “These additional savings of future year cost increases will come from the economies of scale gained from implementing a consolidated SSMP/SSO¹

¹ This acronym refers to new regulatory requirements for sewer system management plans and the management of sanitary sewer overflows implemented by the State Water Resources Control Board since completion of the study.

program and pooled capital projects for infrastructure replacement and again, are potentially additive to savings already achieved by working collaboratively.”

At the conclusion of the study, LAFCO adopted resolutions for its municipal service review and adopted sphere of influence determinations for the sanitary districts in southern Marin. The sphere of influence determinations for the sanitary districts were “interim” designations. As stated in the text of the resolutions, “The purpose of the Interim designation is to express this Commission’s expectation that Almonte Sanitary District will continue to provide service within its present boundaries while engaged in functional collaboration efforts with neighboring sewer agencies and that political consolidations should be evaluated by southern Marin sewer agencies in the future as appropriate.”

A separate resolution making determinations for the Commission’s municipal service review requirements incorporates the summary of the study’s analysis of potential cost savings and also addresses the issues of management efficiency and local government political accountability. In those sections, the Commission determined that:

1. The management and staffing resources of the current decentralized sewer services agency are inefficiently deployed. Management, operations and administrative staffing redundancy are inherent in the existing decentralized, multi-agency structure.
2. The level of public participation in matters relating to sewer service in southern Marin is very low...²

And;

3. The local control over a municipal service afforded by a special district board is meaningful if the scope of activities and decisions of that governing board are known to the public and attract participation by constituents. Where this is not the case because the district’s service role is very limited or the budget is small or the governing board’s discretion over spending is very narrow, local control has little practical meaning. The political accountability of agencies of very small size or limited scope of service may be improved if consolidation would create a larger, more capable organization with a more prominent presence in the community and an enhanced ability to communicate effectively with the public.

² Exceptions were noted for specific efforts of SMCSO, TCSO and HVSD rate review processes.

Fewer and larger organizations with full-time staff capabilities would be better able to maintain public awareness, access to information and increased participation at lower cost. Continued segmentation of sewer service between collection and treatment functions and between very small neighborhood areas no longer adds value to the provision of this service.

The full text of LAFCO resolution 05-07, including a summary of the sewer alternatives study, is included in this report as Attachment 2. The complete *Southern Marin Sewer Service Alternatives Study* is available at http://lafco.marin.org/staff_reports/pdf/Sewer%20Services%20Report%20FINAL_29Jul05.pdf. This study and the resolutions adopted by LAFCO as a result of it represent the information that this report seeks to update.

II. Background: Legislative & Regulatory Changes Since 2005

A. Regulatory and Legal Changes

Since the original 2005 Consolidation Study, major changes in the regulatory environment in the State of California and the Bay Area have occurred that have a direct affect on the SASM Collection System operations. In May 2006, after many collection system overflow problems across the State, increasing public concern with sewage overflows and closed beaches and due to increasing litigation over these performance failures, the State Water Resources Control Board adopted statewide Waste Discharge Regulations (WDR) for Sanitary Sewer Systems greater than one mile in an order that required all collection system agencies to report to a State Reporting System (CIWQS) and manage their collection systems according to Sanitary Sewer Management Plans (SSMP) containing certain required elements. The stated objective was “to reduce the numbers and volumes of SSOs across the state through the proper operations and maintenance of sanitary sewer systems.” It was the SWRCB’s perspective that many collection system agencies were operating with a diverse set of standards and performance levels that were not consistent with good public policy as most collection systems were not directly permitted by any state or federal agency prior to these new regulations.

While the Marin Agencies had already been working under San Francisco Bay Regional Water Quality Control Board rules, the new requirements were intended to create uniform regulations across the state to achieve the stated goals and objectives of the SWRCB and to begin to provide uniform information on the

numbers and quantity of sewage escaping from sanitary sewer collection systems. In addition, for the first time these regulations brought uniformity to the regulations that were being applied differently in regional board areas in hopes of assuring enhanced management and information about the systems along with better public access to real time information regarding SSOs. These regulations were broader and demanded more information to be made public in hopes of driving better, more professional system management and operations.

At the same time as these regulations were being promulgated, there was a significant increase in statewide litigation over the discharge of untreated sewage from collection systems in violation of the Federal Clean Water Act. Most litigation was brought by environmental groups or “NGOs” who believed that the EPA and the SWRCB were not doing enough to properly implement and enforce the provisions of the Clean Water Act. These lawsuits and legal actions by the environmental community have and are continuing to this date and have resulted in many administrative orders, consent decrees and settlements with large and small agencies across the state including in Marin County and the San Francisco Bay Area where a disproportionately large number and volume of SSOs have been found to occur.

As we prepare this report, SASM and its member agencies are currently operating under an Order for Compliance (or “Administrative Order”) from the EPA for the spills and violations of both the SASM Treatment Plant NPDES Permit and the WDR regulations affecting the SASM satellite agencies. These legal challenges have significantly increased the concern with SSOs resulting from infiltration and inflow from both public and private sewer pipes and poor collection system management. This last concern deals with the renewal and replacement of systems that have deteriorated due to multiple factors such as age, under design, poor construction, land movement, tree root damage, grease or other factors that may not have been adequately addressed and which had traditionally been ignored by system managers in the past.

In addition, the SWRCB is currently in the process of revising the waste discharge regulations and it is expected that additional requirements will be placed upon collection system agencies to further push agencies to expand and enhance management and oversight of their systems. These new regulations may require reporting of all private sewer lateral SSOs, identification and communications with upstream collection systems, preparation of staffing and operational risk management plans as well as significantly expanding information requested by the SWRCB about each agency’s operations. Finally, the SWRCB has also stated that they will be expanding their audit and enforcement efforts on collection systems that either have not complied with the

WDRs or who show performance results that are above or significantly below statewide or local averages for similar systems. These efforts will be pursued by both the SWRCB Enforcement Branch and the local Regional Water Quality Control Board staffs in order to ensure proper compliance with the regulations.

B. Assembly Bill 1232

Assembly Bill 1232 was passed by the State Legislature and signed into law in late 2009. The bill's provisions affect only Marin LAFCO, SASM and its member agencies and results directly from the sewage spills of early 2008. The bill authorizes – but does not require - Marin LAFCO to initiate and approve a reorganization or consolidation of the Sewerage Agency of Southern Marin and its member agencies, without protest hearings beginning January 1, 2011. The year between passage of the bill and the effective date of these provisions was intended to allow SASM member agencies to undertake action to consolidate before Marin LAFCO gained unilateral authority to consolidate those agencies. SASM member agencies took no action. The special provisions of AB 1232 have no expiration date and may be invoked by Marin LAFCO at any time after January 1, 2011. The updates provided in this report are intended to provide the basis for Marin LAFCO's decisions on how to implement the provisions of AB 1232. The text of AB 1232 is included in this report at Attachment 3.

III. Background: Other Events & Related Documents Since 2005

In September 2005, southern Marin sewer agencies, including SASM and its member agencies, all adopted a "Resolution declaring intent to explore and implement opportunities for functional collaboration....." In the resolution, each agency resolved as follows:

The Board of Directors of (e.g. Almonte) Sanitary District of Marin County therefore resolves to explore and implement functional collaboration options as described in the findings of this resolution, and any other opportunities for collaboration which may from time to time be found to be advantageous to Sanitary District No. 5 of Marin County and other public agencies, by:

- Participating in the formation of a Steering Committee.
- Participating in the development of a list of target activities.
- Participating on subcommittees and working groups.
- Participating in the development of a decision making process.
- Receiving and reviewing progress reports at least twice per year.

- Seeking an implementation framework for feasible options. Joint Powers Agreements will be considered.
- Establishing an initial time frame of three years to complete the exploration and implementation of feasible collaborative efforts.

Southern Marin sewer agencies followed up this resolution by forming a working group of agency managers to identify collaborative actions to improve aggregate operational efficiency. Actions that resulted from this effort will be described later in this report (see Attachment 4).

The working group ceased meeting after approximately one year.

A. *SASM January 2008 Spill Investigation Report* (State Water Resources Control Board Office of Enforcement, April 2008)

This report's Background section provides an extensive description of two spill events including the following statements:

1. During January 2008, the Sewerage Agency of Southern Marin (SASM) reported two storm-related spill events from SASM's Wastewater Treatment Plant (WWTP) located at 450 Sycamore Street, Mill Valley, CA.
...
2. Between 18:00 hours and midnight on January 25, 2008, SASM by-passed 2.45 million gallons (MG) of screened sewage influent to the equalization ponds (also referred to as emergency storage ponds) and then to Pickleweed Inlet, which is connected to Richardson Bay ...
3. Between 17:30 and 20:30 hours on January 31, 2008, another incident at SASM resulted in a spill of partially treated (screened only) wastewater to Pickleweed Inlet, a near shore, shallow water body adjacent to Richardson Bay. SASM initially reported the volume of the spill as 2.7 MG; however, they revised that estimate on February 23, 2008 to 0.962 MG...

The investigation report goes on to examine the interactions of the weather, the actions of the operators of the SASM treatment plant, the actions of Redwood Security Systems, a private alarm company, and the inflow & infiltration received from the six sewage collection agencies that own the SASM plant.

The conclusions of the investigation are:

- The primary cause of the January 25, 2008, overflow was extremely high infiltration and inflow into the sewage collection system. The inflow and infiltration is caused by extremely poor condition of the SASM's ageing collection system. This is a serious chronic problem that has been neglected for the last 25 years. Similar incidents have occurred in the past and will likely continue in the future during the periods of heavy and prolonged rainfall.
- The January 31, 2008 spill was caused primarily by operator error. The situation was exacerbated by high flows due to excessive inflow and infiltration and the failure of the alarm company to follow the established alarm response procedures. However, had the operators made the appropriate decisions, the spill could have been completely avoided.
- In general, SASM's standard and emergency operating procedures are deficient and outdated.
- Staffing levels in both the operation and maintenance departments (of SASM) are lower now than they were a few years ago. There is a significant backlog of maintenance work orders, although most of the major problems at the plant are being taken care of.
- SASM and its member agencies are not in compliance with the NPDES permit requirements pertaining to the operation and maintenance of the collection system. Currently, there is no incentive to improve the condition of their collection systems because each agency pays its share of treatment costs based on the number of EDUs connected to the system and not the actual flow. The occasional spill, controlled by bypass or blending event that occurs periodically during wet weather is typically justified as an event beyond the discharger's control.
- Preventive maintenance of the collection system is almost non-existent. With each satellite agency being responsible for the maintenance of its own collection system, there is generally very little attention or resources allocated to preventive maintenance and collection system rehabilitation. In 2003-04, Marin County LAFCO published a report addressing these and other organizational deficiencies and suggested changes for the satellite agencies to improve maintenance and collection system problems.
- Collection system problems such as spills and blockages are typically handled by contractors like Roto-Rooter. The contractor's staff generally responds to the spills and estimate and document the volume of the spill.

The accuracy of such estimates is highly questionable since the estimates generally assume that the spill starts at the time it is reported or at the time the responders arrive to the site.

- The NPDES permit appears to be unnecessarily complicated, primarily because of numerous redundancies contained in it.

The recommendations in the report are very general and usually defer to enforcement agencies, including the Environmental Protection Agency, which subsequently issued an Administrative Order (Docket No. CWA-309(a)-08-030) applying to both SASM and its member collection agencies as described below. The body of the report (without its appendices) is included in this report as Attachment 5.

B. Findings of Violation and Amended Order for Compliance (United States Environmental Protection Agency Region IX, September 2, 2008)

Following the results of the Spill Investigation Report, the EPA found SASM and its member agencies in violation of their NPDES permits that required each agency to maintain its collection system, control inflow and infiltration and manage overflows. "... EPA finds that on various occasions, SASM ... (and member agencies) have each discharged, or have caused and contributed to the discharge of, pollutants to waters of the U.S. in violation of section 301 (a) of the (Clean Water) Act." The Order itself requires SASM and each member agency to take actions and file reports in seven different areas within timeframes specified on an accompanying schedule:

1. Elimination of Collection System Spills
2. Spill Response, Recordkeeping, Notification & Reporting
3. Collection System Maintenance & Management
4. Collection System Assessments
5. Capacity Assurance
6. Infrastructure Renewal
7. Implementation Study & Report

The full text of the EPA's administrative order can be found at <http://www.epa.gov/region9/water/npdes/compliance.html#marin>

C. *Sewerage Agency of Southern Marin External Audit Report* (Larry Walker Associates, August 2008)

This study was undertaken by SASM to comply with Item 4 of the EPA's Administrative Order that required SASM to complete an external audit of its wastewater treatment and collection system facilities. The various components of the system were scored on a three-point scale: Category 1 (current condition or practice is acceptable or complies with established requirements or standard practices), Category 2 (current condition or practice deviates from standard practices, but has been addressed by planned future actions) and Category 3 (current condition or practice deviates from established requirements and has not been addressed).

The External Audit examined the adequacy of 86 different operational aspects of SASM and its member agencies. Although it is important to note that not all measured components have equal weight or importance, 41 of the study's 86 assessments were scored Category 3, meaning that 48% of audited current conditions deviated from established requirements and had not been addressed as of August 2008.

Of particular interest here were Category 3 findings relating to the lack of flow monitoring between the member agencies collection systems (imposing difficulty in identifying problem areas and inability to fairly allocate treatment costs among member agencies). Also, the audit scored Category 2 findings relating to member agencies flow contributions and activities impacting peak flows. These findings were later used unsuccessfully to argue (see below) that the poor condition of member agency collection systems and the peak flows from those systems in 2008 remained within the design parameters of the SASM treatment plant and therefore should not be subject to sanction by the EPA.

Attachment 6 contains a table summarizing the findings of the report by listing the subjects of the External Audit and the category scores for each subject area.

D. *Letter of Bonner Beuhler*, (Manager, Almonte and Richardson Bay Sanitary Districts, September 2008)

Following issuance of the EPA Administrative Order summarized above, Mr. Beuhler submitted a letter of rebuttal to Mr. Ken Greenberg, a compliance officer of the EPA. The letter responds to the above findings that the spill of January 25, 2008 was caused by excessive inflow and infiltration and the spill of January 31, 2008 was caused by operator error exacerbated by excessive inflow and

infiltration and a faulty alarm process. Mr. Beuhler asserts (based on the referenced *External Audit Report*, see above) that inflow and infiltration from SASM member agency collection systems was not the cause of the spills and presents arguments with respect to the first of the two January 2008 spills:

The findings of the Regional Water Quality Control Board that SASM reported peak flows from its member agencies of 44 MGD, exceeding the 32 MGD design capacity of the SASM treatment plant were based on a data anomaly (rapid closing and opening of the gate to the influent wet well where measurements are taken) and that actual peak flows to the SASM plant exclusive of the anomalies were approximately equal to the plant's original 32 MGD design capacity. The member agency collection systems had therefore not deteriorated since construction of the SASM plant. Furthermore, had the SASM plant been operated correctly under its wet-weather operating procedures, the spill would not have occurred.

In November 2008, EPA rejected the request to modify the compliance order, stating that although some actions had been taken to improve the Almonte and RBSD collection systems, that other important actions identified by an external audit (such as increasing pumping capacity and capacity of SASM holding ponds) had not been implemented. The compliance order was allowed to stand as the means of assuring that SASM and member agencies carried through on these actions.³

In other communications, Mr. Beuhler has argued that the apparent lack of reinvestment in the SASM member agency collection systems is the product of a rational, intentional and heretofore widely accepted policy. In managing the causes of potential spills, sewer agencies can choose to allocate their resources either to direct repairs to the collection system or to expanding the downstream capacity of the system to transport and treat greater volumes of effluent from inflow and infiltration. The "convey and treat" strategy was often the most cost-effective strategy as opposed to redressing multiple smaller sources of inflow and infiltration in miles of collection sewers and thousands of privately owned sewer laterals. The regulatory agencies have, however more recently applied a strict liability standard on the collection agencies. SASM agencies are now engaged in multiple strategies of expanding the capacity of the SASM plant (larger holding ponds), cleaning and repairing collection facilities and offering homeowners aid in repairing laterals.

³ Letter of Ken Greenberg, Chief, CWA Compliance Office Water Division, U. S. Environmental Protection Agency Region IX, November 2008.

The full text of Mr. Beuhler's letter and Mr. Greenberg's response are found in Attachment 7.

E. AB 1232 - *How We Got Here and Where Do We Go From Here* (Almonte Sanitary District, March 2011)

This document was compiled specifically for communication with Assemblyman Jared Huffman, author of AB 1232. It contains much of the information previously cited above by Bonner Beuhler, Almonte Sanitary District's General Manager. The major assertions in opposition of consolidation are found in its letter of transmittal:

- Successful and continuing compliance with all regulatory orders and waste discharge requirements
- Proactive and collaborative actions taken by the various agencies
- Independent analysis demonstrates that SASM member agency collections systems have not deteriorated over the past 30 years
- Independent analysis shows SASM collection agencies were not at fault for the spills of January 2008
- A lack of evidence that consolidation will decrease SSOs or result in substantial increases in efficiency, effectiveness or cost savings for our ratepayers
- A long history of responsive, cost-effective and environmentally responsible local governance

IV. Municipal Service Review Determinations

The following sections address the Municipal Service Review factors specified in Government Code Section 56430.

A. Growth and population projections for the affected area

The Commission's 2005 service review determinations pointed out that southern Marin had little land available for development and that the area's anticipated growth rate was less than 1% per year. The very small changes since 2005 in demand for service from SASM member agencies as measured in equivalent dwelling units bears out this conclusion.

Table 3
Change in Equivalent Dwelling Units, SASM Member Agencies

<u>District</u>	<u>EDUs</u> <u>2005</u>	<u>EDUs</u> <u>2011</u>	<u>Percent</u> <u>Change</u>
Alto Sanitary District	508	525	3.3%
Almonte Sanitary District	789	785	-0.5%
Homestead Valley Sanitary District	1,064	1,085	2.0%
Richardson Bay Sanitary District	4,664	4,697	0.7%
City of Mill Valley	7,204	7,496	4.1%
Tamalpais CSD (SASM only)	165	166	0.6%
Total SASM	14,394	14,754	2.5%

New demand for service from these agencies could occur from amendment to the sphere of influence of HVSD and annexation of Muir Woods Park. The Muir Woods Park Community Association has initiated study of extension of service by HVSD to replace on-site wastewater facilities. Annexation of the entire area would add approximately 287 existing and 15 potential dwelling units to HVSD’s collection system and utilize an equal number of EDUs in SASM’s treatment capacity. However, extension of service from HVSD’s existing system will be costly relative to units to be served and environmental impact analysis has not been performed. Discussions to date have not led to an application to amend the HVSD sphere of influence.

Opponents of sewer service have sought to be removed from the boundaries of the annexation area. Proponents expect to again investigate the feasibility of routing waste from limited parts of Muir Woods Park through the facilities of the City of Mill Valley. Each of these eventualities would reduce the scope of expansion of HVSD’s service area.

B. Present and planned capacity of public facilities and adequacy of public services, including infrastructure needs or deficiencies

Given the low historical and projected rate of growth and the remaining treatment capacity in the SASM plant, the condition and capacity of the member agencies collection systems are the most significant infrastructure issue

1. Overflow data (7/1/2007 to 5/31/2011)

- a) Appears to be no consistent pipeline cleaning cycle currently in use for three agencies (range 1 to 3 year cycle).

Data tables in Attachment 8 show spill data for SASM member collection agencies. The data for all sewer agencies has been tracked as part of SSO/SSMP requirements instituted in 2006. The data for SASM member agencies (not including January 2008 spills at SASM) show:

- High frequency of spills relative to state averages per 100 line miles per year, City of Mill Valley's collection system particularly poor;
- Small spill volume/low incidence of spills reaching waters of the state in gallons per 100 line miles per year; Average spill volume for sanitary districts is approximately 100 gallons/spill, City of Mill Valley almost 200 gallons;
- Very low percentage of spilled effluent recovered;
- Apparent improvement by some agencies since 2008.

2. Dissimilarity of Member Agencies

Each member agency has characteristics that they feel they are handling better than the other members, and hence do not wish to be weakened by consolidation with other members. Some members maintain substantial reserves, others virtually no reserve. Some agencies collection systems are in better condition than others and each has thereby adopted a different capital improvement standard to address physical deficiencies. None of the agencies, prior to the Administrative Order, were concerned with long-term renewal and replacement of lines and services. Each agency responded only upon failure of facilities or identification of problem areas resulting from customer complaints or maintenance problems. None of the agencies had a defined standard for the renewal and replacement of their collection systems and regarded private sewer laterals as outside their responsibility or concern.

Each agency receives a different proportion of property taxes and this - in combination with other differences - has caused each member agency to adopt a different rate structure. Some agencies enjoy the services of a full time general manager, others only limited part time staff. Some member agencies have a physical presence in their community in the form of office facilities, other member agencies may be contacted only by telephone.

Lastly, a joint powers organization such as SASM cannot be directly involved in a consolidation process under State law and the consolidation of single-purpose sanitary districts with multi-purpose agencies such as City of Mill Valley or TCSD would be problematic at best.

Table 4
Available Capacity, SASM Treatment Plant

Equivalent Dwelling Units	Treatment Plant Capacity (EDUs)	Current Use	Available Capacity	Percent Available
Alto Sanitary	612	525	87	14%
Almonte Sanitary	936	785	151	16%
Homestead Valley Sanitary	1314	1,085	229	17%
Richardson Bay Sanitary	6030	4,697	1,333	22%
City of Mill Valley	8856	7,496	1,360	15%
Tamalpais CSD (SASM only)	252	166	86	34%
Total SASM	18,000	14,754	3,246	18%

3. Improvements to Operations & Facilities Since 2005

Beginning in 2005, SASM and its member agencies have complied with new regulatory requirements. Each of the seven agencies separately adopted sanitary sewer management plans (SSMP). All agencies comply with requirements for reporting, measuring and remediating sewer system overflows (SSOs). Recently, all agencies adopted uniform contracts with Roto-Rooter for after-hours response to SSOs. Prior to these contracts, each agency handled maintenance and emergency response separately.

In response to the spills of 2008, SASM has expanded the capacity of its holding ponds, installed new effluent and recirculation pumps, an electronic pump control and notification systems. In addition, SASM staff organizes monthly meetings of member agency managers, coordinates studies and reporting for compliance with EPA administrative orders and administers the revolving fund for lateral replacement (established as a “supplemental environmental program” utilizing a portion of \$1.6 million in fines from the spills). Treatment plant staff and charges to member agencies have been increased.

The EPA’s administrative order following the spills also mandated operational changes and improvements to the member agency collection systems. The four

independent sanitary district members of SASM report recent improvements that meet or exceed the administrative order as follows:

- Richardson Bay
 - Budgeted \$600,000 per year for pipeline replacement
 - Replaced 14% of total pipeline miles
 - Rehabilitated 10% of manholes
 - Increased private lateral replacement (x20)
 - Increased education & outreach
 - Decreased general & operating expenses by 3.25%
 - Reduced SSOs by 85% in past four years (from 20/yr to 3/yr)

- Homestead Valley
 - Cleans 1/3 of collection lines each year
 - Entire collection system evaluated by TV
 - Replaced 20% of total pipeline miles last 11 years
 - 3.5% of collection lines to be replaced this year
 - Lateral replacement programs being developed
 - Only 1 spill in 2010

- Almonte
 - District committed to replacing 2% pipeline miles each year
 - Replaced/rehabbed 12% of total pipeline miles
 - Cleans 100% pipeline miles each year
 - Entire collection system evaluated by TV
 - Increased private lateral replacement
 - Increased education & outreach, upgraded website
 - Reduced SSOs to average 1/yr last 3 years

- Alto
 - Replaced 21% of total pipeline miles in last 10 years
 - Entire collection system evaluated by TV
 - Cleans ½ pipeline miles each year
 - Lateral replacement programs being developed
 - Reduced SSOs to 0 in 2010

4. Long-Term Management

Three agencies with part-time contract employees (Almonte, Alto and Homestead Valley) presently have responsive managers in no small part because they live within their agency's service area, or in Alto's case, very nearby. It is unlikely that when these managers need to be replaced, there will be qualified candidates available with the same ability to respond quickly available in such close proximity to these districts' service areas and willing to work on a part-time basis.

5. Control Measures & Quality Assurance

There has been an historical relationship between all of the member agencies and Roto-Rooter, a nationwide firm with a franchise in Novato. Roto-Rooter presently provides all after hours response services to all SASM member agencies and provides all sewer services to three member agencies as well as most routine services to two others. Until recently, no member agencies or SASM had written contracts for services. There has been no competitive bidding for services, primarily because no other firm was willing to provide timely after hours response. This effectively sole-sources Roto-Rooter's after hours service, giving public agencies no means to fairly negotiate or provide competitive pricing for this service.

Other firms can provide contract cleaning, repairs and inspections, and yet there has been little interest in separating routine maintenance and inspection work from trouble calls. However, in July 2010, the City of Mill Valley competitively bid two cleaning and inspection contracts. Total price differences of over 75% were found between the contracting firms, clearly indicating the potential for savings.

SASM member agencies generally believe that Roto-Rooter does a good job of providing services that protect the environment from damage. However, the agencies have not been able to recover most spilled sewage and the results in this area are well below the statewide average for recovery. The potential advantage of consolidating agencies in this regard would be to create the possibility of an alternative to over dependence on a single company. None of the SASM agencies is large enough to provide in-house after-hours emergency response. Consolidation would provide an alternative to this lack of competition because a larger agency could realistically consider the benefits of providing in-house services for both normal cleaning and after-hours emergency response. If this change were to take place it would also provide better response times to reported

SSOs. Although this is not a new idea, SASM and its members have been unable to agree on a means of evaluating this strategy as a functional consolidation measure identified in 2005 studies.

With regard to engineering services, since none of the district managers (except Mill Valley DPW) are licensed civil engineers, there is a great reliance on consultants for engineering decisions. Some managers have a great deal of technical experience, but design services must be performed by a private firm. All SASM agencies except for the City of Mill Valley contract with Nute Engineering. Once again, there appears to have been no consideration given historically to the value of competition between potential providers of this service.

Finally, each of the member agency managers has differing abilities and areas of expertise in technical, administrative, communications and other aspects of provision of sewer service. It is not likely that all managers are equally familiar with issues such as risk management, public contracting requirements, the environmental review process or with the wide variety of government statutes that may apply to operating public sewers. This creates uneven levels of support for decisions undertaken by the boards of the different member agencies. Further, most of the current managers do not generally participate in local professional organizations such as the Bay Area Clean Water Associations Collection Systems Committee that meets regularly to discuss and share important information about collection system operations and regulatory requirements.

C. Financial ability of agencies to provide services.

1. Rates and Charges

Table 5 below shows changes in sewer rates for each subject agency since 2005. The rates per EDU of each SASM agency are shown with property tax proceeds per EDU in order to provide an overall picture of charges for sewer service for each agency. Substantial increases have occurred and are continuing, driven by SASM costs (including \$2.8 million in costs of 2008 spills paid from SASM reserves) and regulatory compliance, especially mandated increases in capital spending.

The rate charged by the City of Mill Valley has lagged those of member districts, but substantial rate increases have been recently approved. The current total cost per EDU (rate + property tax) ranges from \$486 to \$711 for sanitary districts. The total cost shown for the City of Mill Valley does not include any portion of the

City's property tax revenue. In six years, rates for sanitary agencies have increased between 120% and 240%

Property tax receipts have increased even more, between 43% and 560% due to new development and revaluation of existing properties. There is wide variation in per EDU property tax revenue received by the four sanitary districts, an artifact of property tax rates charged prior to Proposition 13. The City of Mill Valley allocates no property taxes to its sewer fund. The proportion of property tax revenue in total revenue has increased since 2005 from 10% to 20% for the four sanitary districts, thereby increasing reliance on property taxes rather than rates even with the substantial rate increases. It should be pointed out that the continued allocation of property tax revenues to enterprise districts may be subject to legislative action in the future. That is, these revenues may be re-allocated in the future to non-enterprise agencies by the State legislature.

Table 5
Change in Sewer Service Rates, 2005 & 2011

District	Rate/EDU 2005	Rate/EDU 2011	% Increase
Alto Sanitary District	\$ 285	\$ 400	40%
Almonte Sanitary District	250	400	60%
Homestead Valley Sanitary District	250	425	70%
Richardson Bay Sanitary District	246	436	77%
City of Mill Valley	297	694	134%
Tamalpais CSD (SASM only)	301	1,014	237%
SASM Treatment Charge	142	200	41%

Change in Property Tax/EDU, 2005 & 2011

District	Prop Tax/ EDU 2005	Prop Tax/ EDU 2011	% Increase
Alto Sanitary District	\$ 20	\$ 132	560%
Almonte Sanitary District	60	86	43%
Homestead Valley Sanitary District	30	172	473%
Richardson Bay Sanitary District	190	275	45%
City of Mill Valley	n/a	n/a	n/a
Tamalpais CSD (SASM only)	n/a	n/a	n/a

Change in Total Cost/EDU, 2005 & 2011

District	Total Cost /EDU 2005	Total Cost /EDU 2011	% Increase
Alto Sanitary District	\$ 305	\$ 532	74%
Almonte Sanitary District	310	486	57%
Homestead Valley Sanitary District	280	597	113%
Richardson Bay Sanitary District	436	711	63%
City of Mill Valley	297	694	134%
Tamalpais CSD (SASM only)	301	1,014	237%

2. Budgets

SASM treatment costs range from 30 to 33% of total sanitary district budgets. The SASM board reviews its costs and bills its members according to their proportionate share of the EDU count. This process, conducted among members of a joint powers agency, is not subject to Proposition 218 proceeding requirements. Each district sets its own sewer rate to fund its total, anticipated expenditures including treatment costs levied by SASM, in proceedings that are subject to Proposition 218 requirements.

Sanitary District budgets have increased 171% to 286% since 2005 reflecting the costs of new regulatory requirements applicable to all sewer service agencies, the additional costs of the 2008 spills and the resulting expansion of capital spending for both treatment and collection facilities. Staffing costs as percentage of collection system operations and maintenance varies widely among the member agencies due to differing mixes of in-house and contract services, ranging from 5.5% to 58.5%. Cost per mile of pipeline operations and maintenance range from \$113 to \$168 due to dissimilarities in pipeline condition and differences in operational approach by each district.

The State owes the four sanitary districts \$97,500 or 6% of total agency property taxes, supposedly to be repaid in 2013 with interest. Further financial incursions by the State legislature to limit or remove property tax revenues from enterprise districts are possible. Recommendations by the Little Hoover Commission and others have continued to support the elimination of property tax revenue from enterprise special districts such as the four sanitary districts.

All of the agencies have increased their capital investments, as shown in Table 6, in renewed and rehabilitated pipelines since the 2005 Study. These changes have been driven by the results of the agency audits and the findings of the EPA subsequent to the 2008 spill. Most changes have been mandated in the EPA Administrative Order that now requires each agency to project capital and renewal and replacement investments for both short (5 years) and long-term (ten year) periods into the future. These improvements were mandated as stated in the Administrative Order because "various spills from the sewage collection systems ... have been caused, and resultant public health and environmental impacts have been exacerbated, by infiltration and inflow into those collection systems and by inadequate control of blockages within those systems." (Finding 23, Administrative Order CWA-309(a)-08-030). Prior to this requirement, the agencies were not found to be conducting adequate planning or funding for the renewal and replacements of their collection system assets.

These new capital plans for the first time are to be driven by extensive reviews and evaluations of the actual infrastructure in place in order to assure that adequate capacity and system blockages are found and managed in a proactive manner to assure a reduction in SSOs as well as assuring that all water that is discharged can safely be transmitted to the SASM treatment plant. In addition, the agencies have also been required to begin the process of understanding and evaluating the significant increases in wet weather flows that may result from either leaking main lines sewers or private sewer laterals. This has led to one of the projects approved from the SASM fine amount to be used to begin a program of private lateral replacement. It is no longer possible for agencies to assume that because they own substantial unused capacity at the SASM Plant, that they do not need to be concerned about a wet-weather event causing a fifteen times increase in flow over average daily dry weather flows.

Table 6
Changes in Capital and Renewal Spending on Pipelines
2005 to 2010

Agency	2005*	2010/2011**	Percent Change	Next Five Years
Almonte SD	35,000	120,000	342%	600,000
Alto SD	75,000	90,000	120%	550,000
Homestead SD	125,000	475,000	380%	1,325,000
Richardson Bay SD	349,350	495,000	142%	2,400,000
City of Mill Valley	450,000	550,000	122%	2,750,000
Tamalpais CSD	620,000	0	0%	0
Totals	1,654,350	1,730,000		7,625,000
Average per year				1,525,000
SASM		25,000		325,000

* Numbers from Appendix J, LAFCO Study 2005

** Figures from October 2010 Sewage Spill Reduction Action Plan, Volume III

In addition to the above outlays and plans, Richardson Bay (\$740,000 over six years), the City of Mill Valley (\$82,000 - five years) and SASM (\$3,485,000 over five years) have capital plans for improvements to pumps stations and treatment systems that are required in addition to the pipeline work identified above.

Finally, because only Richardson Bay appears to have a true funding strategy for renewal and replacement, it is expected that the agencies will need to increase

their spending levels in the future to account for the legacy unfunded costs for renewal and replacement. These are the costs for the replacement of assets prior to the current round of expenditures for the costs of replacement for the years leading to 2008 as well as new expenses for the future replacement of the newly replaced assets placed in service from the capital programs discussed above. None of the agencies are currently believed to include the full cost of operations, maintenance and replacement in their current rate structures as good asset management philosophy would suggest.

All SASM member agencies have raised their rates to pay for new maintenance requirements. Future rate increases will be driven by infrastructure reinvestment requirements, inflation and limited growth of the rate base. These requirements will apply to both the SASM treatment plant, for which each sanitary district has a proportionate share, and to their own the collection system facilities.

D. Status of, and opportunities for, shared facilities

1. Collaboration

Prior to 2005, SASM and member agencies engaged in some forms of collaborative activity including the SASM joint-powers treatment plant, one general manager common to two districts, use of a common engineering consultant (though the latter two do not necessarily constitute collaboration), and occasional ad hoc cooperative efforts. LAFCO's 2005 study listed the following areas of potential collaboration that might precede consideration of political consolidation of SASM agencies:

a. Sanitary Sewer Overflow Program

- **Common SSMP templates, agency plans, and incident response protocols** – A single contract can provide economies of scale and incremental savings for SSMP plan development. Many common elements can be developed as a generic template for customization by each agency.
- **Shared sewer collection maintenance, TV inspection, cleaning, blockages, repairs** – Shared sewer collection system maintenance on pipes and pump stations provides potential annualized operational savings on services such as sewer cleaning/inspections, blockages, fully utilized VACTOR/Rodding trucks and crews, blanket contracts for external services (e.g., Roto Rooter).

-
- **Pooled capital expenditures for replacement and rehabilitation of aging infrastructure** using pooled design, construction, construction management and financing.
 - **Shared set-up and operation of a regional emergency call center and shared incident response and reporting of SSO events.** An integrated call center and incident response capability can be achieved through some combination of shared staff resources and outsourced services.

b. Capital Improvement Program Collaboration

- Contracts for pooled engineering/design services.
- Contracts for pooled construction management services.
- Contracts for pooled construction services.
- Issuance of debt/revenue bonds to finance member agency capital projects.

c. Shared Services/Resources

Benchmarking comparisons show that Southern Marin sewer agencies have substantially higher staffing levels than other consolidated agencies with similar demographic profiles (e.g., EDUs, miles of sewer pipe, daily wastewater treatment volume). There are also redundancies in facilities and equipment in addition to the staff personnel. Examples of potential shared resources and staffing consolidations include:

- Shared Administrative Resources including insurance, worker pool and training [Worker Pool – Collection (TCMS, RBSD, MV, SD5); Worker Pool
- Mechanical and Electrical/Instrumentation Maintenance
- Monitoring and Laboratory analytical services
- Consolidation/shared General Manager/Management Resources
- Vehicle/Fleet Maintenance
- Human resource management (benefits, grievances, training, certification, promotional criteria, job descriptions and classifications, etc)
- Shared human resources services (hiring, contract negotiations, payroll and taxes, retirement, benefits)

All the above measures were identified by the Commission's consultants as methods of reducing cost under the current government structure and without political consolidation. All sewer service agencies in southern Marin

adopted resolutions agreeing to pursue such cost savings. The committee set up for this purpose met for approximately one year, then discontinued meeting. Following the spills of 2008, the managers of the SASM agencies resumed meeting to collaborate on response to federal and state regulatory agencies.

Of the measures identified in the 2005 study, only a few have been pursued by SASM and its members, including:

- **Common SSMP templates** (agency plans and incident response protocols were developed individually, but following the 2008 spills, all were supplanted by sewer spill reduction action plans prepared by a single consultant and required by EPA and RWQCB);
- **Contracts for pooled engineering/design services** (a single engineering company prepared all agencies sewage spill reduction action plans and an external audit report covering both treatment and collection systems following the spills of 2008);
- **Contracts for pooled construction services** (in two instances, small projects of two districts were jointly contracted. Project scale remained small, no cost savings were identified);
- **Laboratory analytical services.** These test are now available to the member agencies at the SASM treatment plant laboratory and do not require outside testing. In addition, SASM provides all of the sampling kits required for collection system SSO analysis.

SASM and its member agencies report a wide variety of other collaborative efforts that were not mentioned as cost-saving measures in the 2005 study and not previously mentioned in this report. These measures include most prominently:

- Monthly meetings of SASM and member agency managers;
- Engineering services related to spills of 2008;
- Written, uniform contract with Roto-Rooter;
- Standardized geographic information system;
- Financing program for private lateral replacement (replacement programs themselves remain the individual responsibilities of the separate agencies);
- SSO sampling kit.

The full listing of collaborative measures reported by SASM and its member agencies for this study is shown in Attachment 9.

Discussions of more far-reaching strategies for collaboration and cost saving measures have been on-going among the member agencies during SASM's strategic planning process and on other occasions in the past five years. However, comparison of the measures identified in LAFCO's 2005 study and measures actually implemented by SASM and its member agencies since the study was published shows that the agencies have successfully worked together on small projects and/or under regulatory duress, but that they remain operationally autonomous, without acting on the main proposals of the 2005 study.

2. Duplication of Services

Under the current agency structure, any changes to ordinances (e.g. lateral replacement program) must be done by all agencies not just one – each has separate operating ordinances and standards for the regulation and operation of these ordinances.

SASM and its six member agencies are operated with 30 elected officials and 8 general managers (including both independent contractors, managers of single-purpose and multi-function agencies), providing one service to a population the size of a single small city. Each agency maintains a variety of distinctly separate services, each of which has startup and ongoing effort that has duplicative aspects, such as:

- Independent financing and accounting systems
- Independent websites, other public communications
- Separate office facilities (except for Alto, Almonte & Homestead)
- Independent engineering services contracts
- Independent legal support services either with the County of Marin or separate outside counsel.
- Independent maintenance services
- Separate maintenance management and GIS databases
- Individual ordinances, policies and rate structures
- Independent financial and rate evaluation professional assistance
- Separate lateral replacement programs
- Separate purchasing procedures
- Separate capital improvement programs
- Separate Sanitary Sewer Management Plans
- Separate EPA Compliance Order Action Plans (prepared by the same contractor)

Redundancy in these service activities is rarely of assistance to, or mutually reinforcing as backup capability from one member agency to another except in the case of multiple general managers' ability to cover for each other during illness and vacation.

3. Detrimental Independence of Actions within SASM

The 2004 Civil Grand Jury Report found, "this unique patchwork of agencies, however, lacks a forum for cooperatively examining issues that transcend district boundaries. This has led to disputes in the past. Moreover, it has meant that one agency can make decisions that can harm another without realizing it."

Each agency acts completely independently, even if it is to the detriment of its fellow member agency. Although cooperation and partnership among the general managers is now much improved through regular meetings of agency managers, this is in no small part due to and directly related to the EPA's Administrative Order. For example, SASM has never taken any position toward the member agencies for making inflow and infiltration control reduction a priority. SASM's charges to its member agencies are based on their share in ownership of the SASM facility, not on flow to the plant from each agency's collection system. The individual performance of each agency's collection system as measured by flow is only measured once annually, and only because it is required in the EPA's Administrative Order.

Consequently, member agencies have focused on system repairs that benefit their system, such as sags, root intrusion and insufficient pipe size, not necessarily measures that would improve the integrity of the collection system in wet weather. SASM wet weather capacity issues can be addressed by either increasing capacity or reducing flow. Historically SASM has worked to expand capacity while, prior to the Administrative Order, the member agencies were inconsistent, at best, in their efforts to control I&I. Since payment of fines and other costs of the spills in 2008 was distributed on the basis ownership share in SASM (from SASM reserves) rather than on flow or peaking performance, agencies that had done a better job maintaining their collection system were unfairly penalized by the poorer performance of those that did not.

E. Accountability for community service needs, including government structure and operational efficiencies

1. Local Control

Small agencies consider themselves to be more responsive to individuals than what might be seen as a larger, less approachable or neighborly organization. Board members tout longstanding relationships with their constituents and consider themselves to be highly accessible and accountable. The detailed collection system knowledge of managers and board members of smaller jurisdictions is presumed to increase responsiveness and quality of service. However, none of the member agencies, with one vote each, can be held accountable for any aspect of the sewage treatment function and each must allocate approximately 30% of its budget to SASM to pay for the treatment function outside of its control. The appointed SASM board is accountable only to its member agencies, not the public and is, in this sense, not under "local control." In addition, three of the member agencies (Alto, Almonte & Homestead) rely entirely on Roto-Rooter or other contractors to provide their services. The services provided are under the company's control, not directly under the control of the three member districts. Finally, attendance at Board meetings is basically non-existent, further indicating a lack of public knowledge and interest in sewer related issues at the local level.

2. Elections

There appears to be little community opposition to the status quo. Board meetings are not well attended, if at all. Elections for special district boards are rarely required, as incumbents run unopposed. In theory, if citizens were dissatisfied with their sewer service, board meetings would be more lively events and other candidates would stand for election.

In the cases of some unincorporated areas served by SASM and its member agencies, a special district boundary is the only clear means of physically defining that community as was the case when these agencies were originally formed in the middle of the 1940s and 1950's. Citizens often feel strongly positive about being a part of their community having a place name and a boundary and their own local government organization and their own elected representatives.

LAFCO's 2005 study found different rates of contested elections between cities, community service districts and sanitary districts with high rates of contested elections for cities and CSDs and much lower rates for sanitary district board

membership. Updated research on SASM member agency elections shows that in possible elections in the eleven years since 2000, elections were contested in all TCSD elections and all but one election for Mill Valley City Council. In 20 possible elections for sanitary district board seats, only one was contested (HVSD in 2001).

During that period, incumbent sanitary district board members have continued their service, being unopposed at election. When mid-term vacancies have occurred, the remaining members of the district board have 60 days to recruit, interview and appoint a replacement. There were twelve mid-term appointments by the boards of the four sanitary districts (see Attachment 10). None of the board members of the four SASM member sanitary districts have been elected by voters in the last ten years.

3. Public Meetings & Participation

Within the SASM agencies, there is a significant disparity between public participation in the affairs of the two multi-purpose agencies (City of Mill Valley and TCSD), the four sanitary districts and the SASM joint powers governing board. Public attendance is steady at meetings of the City and TCSD, agencies with diverse agendas and business activity. Slightly more than half of the meetings of the SASM board are attended by members of the public. Public attendance at the meetings of the four sanitary district boards is extremely rare as shown on the table below.

Table 7
SASM Member Agency Meetings - Public Attendance

	Alto	HVSD	Almonte	RBSD	SASM
Number of Meetings - Jan 2008 to March 2011	39	40	38	44	40
Meetings w/ Public in attendance*	1	3	1	2	22

Source: agency meeting minutes. Data excludes attendance by agency consultants, contractors or officials of other SASM member agencies.

4. Public Outreach & Communication

SASM and its member agencies vary widely with respect to their capabilities in public outreach and communication. Websites for the seven agencies can be found at the following locations:

SASM:	www.cityofmillvalley.org/Index.aspx?page=449
City of Mill Valley:	www.cityofmillvalley.org
Tamalpais CSD:	http://tcsd.us
Alto Sanitary:	(none)
Almonte Sanitary:	http://www.almontesd.org/
Homestead Sanitary:	http://communitypartners.marin.org/HVSD/
Richardson Bay:	http://richardsonbaysd.org/index.html

The websites of the City, TCSD, SASM (included on the City's website) and Almonte and RBSD are extensive in their information and regularly updated. The Homestead Valley Sanitary District maintains a rudimentary website. As of the date of this report, Alto Sanitary District does not operate a website.

In addition, the City (including content relating to SASM) and TCSD regularly publish extensive newsletters mailed to their residents. Almonte Sanitary annually publishes and distributes a calendar which includes public information on sewer and solid waste services. All four SASM member sanitary districts produce and distribute mailers to residents on an as-needed basis. The quality and information value of mailed communications varies widely, from the regularly distributed newsletter of TCSD to the "opinion survey" distributed by Alto Sanitary District (see Attachment 11).

SASM member agency managers and board members hold themselves personally accountable to their respective constituents for day to day sewer issues and are accessible should there be a question or need for assistance. Three agencies contract with Roto-Rooter for all the services their agency provides except management. Only TCSD, Mill Valley and SASM publish agendas and minutes on-line. Only the City of Mill Valley publishes its budget online. This budget does include both the SASM budget and the City collection system budget. None of the agencies provide copies of their Sewer System Management Plans required by the waste discharge regulations on their websites. As a result the public is not able to access the document that would provide background information for their local systems. Only by knowing that these documents were required to be prepared would a citizen know to request copies.

Three agencies (Alto, Almonte and Homestead Valley) have no office or staff availability except by phone message or e-mail. These agencies direct citizens to contact Roto-Rooter when overflows occur, bypassing the agency entirely until Roto-Rooter either determines the need for an agency representative to get involved or sends an invoice for services incurred by the citizen's call. Callers to the telephone of the Alto, Almonte and Homestead Valley Sanitary Districts are greeted by an answering machine with a recording such as:

“This is the Alto Sanitary District. If you are calling to report a stoppage or overflow of a district sewer, please call our maintenance contractor Roto-Rooter at 892-____. If you would like to leave a message, you may do so after the beep.”

Generally, district managers quickly respond to left messages.

It is also likely that the citizens of member agencies (excluding the City and TCSD) are unaware of how much they pay for sewer service in total. The four independent sanitary districts charge users a sewer service charge, but also receive widely varying property tax revenues that affect how those sewer rates are set. This information does not appear on property tax statements and sewer service bills nor is furnished by the member agencies.

5. Management Efficiency

SASM and its member agencies are responsible for a sewer system composed of six collection areas and a single sewage treatment plant, governed by 30 elected and 6 appointed officials, managed with the involvement of 8 general managers and operated by a variety of full and part-time staff plus contract personnel (see Figure 2, page 15). Considering the complexity of SASM and its member agencies, the constituent organizations have demonstrated a solid ability to work together to provide service under normal circumstances. LAFCO's report of 2005 and other parts of this report document the relatively smooth functioning of the existing agencies under normal circumstances. Unfortunately, the aftermath of the spills of 2008 exposed significant costs, inherent conflicts and other inadequacies in these service arrangements.

Financial liability for the costs of the 2008 spills was assumed – from the outset – by SASM. Members of the SASM board were immediately aware of costs that would be associated with the spills for expected fines, legal and engineering services. The SASM board, composed of 1 member of each constituent organization, authorized use of SASM's reserves for purposes relating to the

spills. The question of actual or legal liability for the costs of the spills was never directly addressed despite Section 10 of SASM's operations and maintenance agreement with the City of Mill Valley:

Section 10. Hold Harmless

CITY shall hold harmless, defend and indemnify AGENCY (SASM) and all AGENCY Member Agencies including the Almonte, Alto, Homestead Valley and Richardson Bay Sanitary Districts and the Tamalpais Community Services District for any loss or damage to real or personal property, or any injury or death to any person, or any expense, including litigation expense and attorney's fees, fine, or forfeiture which is directly or proximately caused by City's failure to perform its obligations as set forth in this Agreement....

Several problems were exposed in the structure of SASM and its member agencies following the spills of 2008. It may clearly be argued that the City of Mill Valley - not SASM - was liable for at least \$2.8 million in costs under the terms of the O&M Agreement. However, there is no record of the question of liability for the spills being addressed by the SASM board or the boards of any of the constituent organizations and hence no public awareness of any kind that this issue existed. With the exceptions of the City of Mill Valley and RBSD, there is no indication that the boards of the SASM member agencies ever agendaized this issue for discussion (in public or executive session), received a written staff report, or sought legal advice to guide their decisions or to instruct their representatives on the SASM board with respect to the use of SASM's reserves or the possibility that the City alone would be liable under the agreement. It is unclear whether or not all members of the SASM board were aware or were made aware of the hold-harmless indemnification language in the agreement between SASM and the City.

When the spills occurred, communication and lines of authority between the SASM board and staff at the treatment plant became immediately problematic. In the days and weeks following the spill, the SASM General Manager could clearly communicate only with his supervisor, the Mill Valley City Manager. The SASM General Manager could not effectively communicate with the members of the SASM board or with the boards of member agencies without the possibility that his statements could invoke the City's liability under the O&M Agreement or that the accuracy of his statements could be thought to be affected, by his employer's potential liability. Responsibility for public communications was assigned to an officer of the City's Police Department.⁴

⁴ The criticism here is directed at the structure that would allow these questions and uncertainties to arise, not toward the actions of the SASM General Manager in 2008 of which LAFCO staff has no direct

In 2009, RBSD directed its legal counsel to examine the question of the City’s liability for costs of the spills under the terms of the O&M Agreement with SASM. The District drafted a letter to the SASM board, requesting that SASM seek relief from the City under the hold-harmless clause. The letter was not transmitted to SASM until late, 2010 (see Attachment 12).

Asserting that the City is liable under the terms of the O&M agreement would require action by the SASM board, which has just revised and extended its O&M agreement with the City. RBSD may be the only one of the member agencies that has enough at stake (compared to the cost of litigation) to vote to undertake legal action in this circumstance. Alto, Almonte and Homestead sanitary districts and TCSD have little to recover due to the small sizes of their shares/contributions to SASM expenses. Without four votes at SASM to seek relief from City of Mill Valley, it is unclear if or how RBSD would take such action as an individual member of SASM, though RBSD is clearly a “real party in interest.” The following table shows the \$2.8 million paid from SASM reserves as allocated to SASM members contributing to that reserve.

Table 8

District	EDUs	Spill Liability
Alto Sanitary District	525	\$ 99,614
Almonte Sanitary District	785	\$ 148,976
Homestead Valley Sanitary District	1,085	\$ 205,947
Richardson Bay Sanitary District	4,697	\$ 891,387
City of Mill Valley	7,496	\$ 1,422,576
Tamalpais CSD (SASM only)	166	\$ 31,503
Total	14,754	\$ 2,800,004

As of June 2011, SASM’s reserves are depleted and member agencies are now faced with a significant increase in charges from SASM to restore to reserve funds that were spent on spill-related costs. The SASM board has requested loans from its member agencies to fund its capital improvement program and a short-term revenue anticipation loan from the County of Marin to temporarily fund its operations until new member assessments are received.

knowledge.

The use of SASM reserves to fund costs related to the spills of 2008 may or may not have been appropriate. The point of this discussion is that the SASM governing board never critically evaluated for its own purposes the question of fault for the spills of 2008 and did not evaluate the possible liability of the City of Mill Valley under the terms of O&M Agreement. Among all of the constituent agencies, none sought legal advice on this issue except for RBSD. Other than RBSD's recent action to seek relief under the terms of the O&M agreement between SASM and the City, the public has never been informed that the issue ever existed because it has never appeared on the agenda or been the subject of a written staff analysis, web-posting or newsletter article of any of the constituent agencies. The \$2.8 million total direct cost of the spills in 2008 is equivalent to approximately \$190 per EDU.

6. Government Structure Alternatives

a. Status Quo

Existing service arrangements are described above beginning on page 11. The existing agency structure would continue in the absence of action by one or more affected agencies, petition by affected registered voters or property owners. Special authority granted to LAFCO under provisions of AB 1232 enables LAFCO to complete consolidation of SASM member agencies, but does not require this action to be taken at any specific time.

The current institutional arrangements that define the status quo in the SASM study area were developed at a time when the service areas of the six member agencies were more widely separated, when there were no other available organizational alternatives to provide sewer service and when there existed no restraint on the formation of new agencies by LAFCO or other similar governmental oversight mechanism. Provision of sewer service to a small service area (approximately 29,700 population total) by six independent agencies and a joint powers agency is widely recognized as obsolete. The arguments over organization center around the proposition that changes to the status quo would not generate sufficient advantage to justify consolidation or reorganization or that certain features of the existing service arrangements are actually beneficial.

It can be argued that small sanitary districts have acted efficiently and in the best interests of rate payers, despite the EPA Administrative Order finding overflows and inflow/infiltration to be excessive. Some of the agencies can be said to have reasonable rates, healthy reserves and active cleaning, inspection and repair programs.

There is a belief among some SASM officials that there is no cost benefit to political consolidation. Findings of the Civil Grand Jury asserting cost inefficiencies and duplication of service were contested by some member agencies on the premise that there is no redundancy. Earlier Grand Jury findings (prior to studies in 2005) have noted that the small sanitary districts appear to be very cost effective, and that there are no identified large scale economies that could arise from combined management.

The organization chart for the existing agencies is shown at the beginning of this report as Figure 1. Table 9 below summarizes advantages and disadvantages of this alternative.

Table 9
Alternative 1: Status Quo – No Change to Existing Political Organization

	Advantages/Incentives	Disadvantages/Obstacles
Service Level, Operations, or Operational Efficiency	Current operations of SASM & member agencies provide service in compliance with requirements of EPA Administrative Orders	Duplication of effort/activity in governing boards, meetings, meeting prep; record-keeping, training, regulatory response/reporting, emergency staff response; inconsistent service standards, policies/procedures; Fragmented, inconsistent lateral rehab. Programs, dependence on sole-source contractor services.
Cost Savings	Avoidance of short-term costs associated with change in established methods.	Overlapping/duplicative appropriations for governing boards, managers, meeting preparation,, audits, regulatory reporting, permits, insurance, SSMP audits, office expense, communications, document & permit preparation, capital project management, design & administration;
Political Accountability, Management Efficiency	Approachable, neighbor-to-neighbor scale. Institutional knowledge preserved by many elected officials and managers.	Difficulty in resolving issues across political boundaries; continued local control on a very small scale; small scale, inefficient public communications; treatment charges by ownership rather than flow (no treatment cost incentive for collection system improvement); divisions in agency governance dilute accountability and create public disengagement - uncontested elections; SASM manager not accountable to SASM governing board.

b. Functional Consolidation

The 2005 study concluded that many of the cost efficiencies of consolidation of SASM agencies could be attained through “functional consolidation” or collaboration of existing agencies prior to their political consolidation. All SASM agencies formally agreed to pursue this strategy. The managers of the agencies met regularly to pursue collaborative activities, but ceased meeting one year after adopting their resolutions.

Member agencies worked together on a variety of projects in the past six years as described above, but did not approach the more substantial cost savings envisioned by the 2005 study which involved a new or expanded joint-powers agency that would allow integrated collection system operations. New or expanded joint powers operations were intermittently discussed and continue to be discussed, but not attempted. Cost savings through collaborative activity have been minimal.

Multiple agencies working together is simply more difficult than a single agency determining its own course of action. Generally, the SASM agencies continue to have difficulty in agreeing on what collaborative activities to pursue as shown by a survey conducted during SASM’s strategic planning process in late 2010 (see Attachment 13). The strategic planning process undertaken by SASM in 2010 required several months to complete.

c. Consolidation/Reorganization of SASM & All Member Agencies

Under the provisions of AB 1232, Marin LAFCO “.... shall have the authority to require consolidation of SASM and its member districts into one new district.” Complete consolidation of SASM and its member districts would mean the combining of four sanitary districts, one city, one community services district and a joint exercise of powers agency into a single successor agency. The full extent of this consolidation raises two difficulties. First, the City of Mill Valley and Tamalpais Community Services District are multi-purpose local government agencies: there is neither a sensible way to combine such dissimilar agencies nor an obvious way to separate the sewer service function (its facilities, employees etc.) from the City and TCSD and transfer responsibility for that function to another agency.

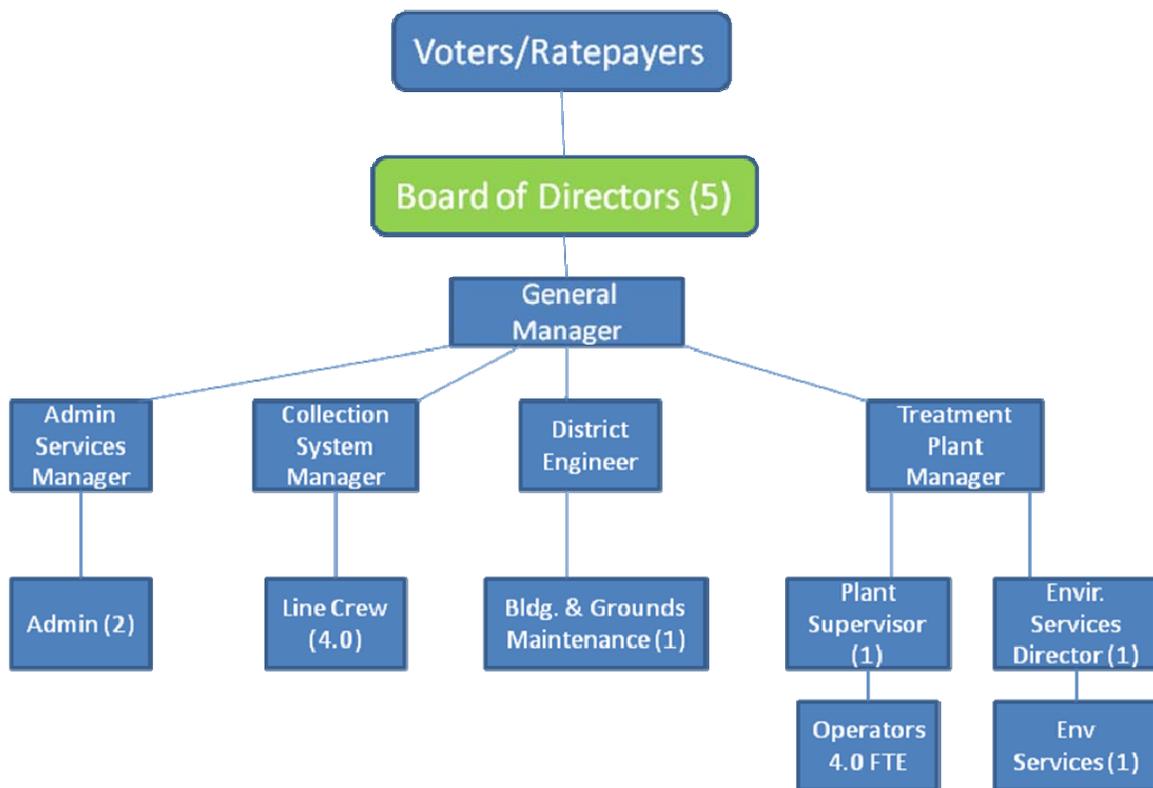
Secondly, joint-powers agencies such as SASM are contractual arrangements between local government agencies. Government Code Section 56121 lists the following prohibition on the scope of LAFCO decisions:

56121. No change of organization or reorganization, or any term or condition of a change of organization or reorganization, shall impair the rights of any bondholder or other creditor of any county, city, or district. Nor shall any change of organization or reorganization, or any term or condition of a change of organization or reorganization, impair the contract rights, *or contracts entered into by a public entity created by a joint exercise of powers agreement* established pursuant to Article 1 (commencing with Section 6500) of Chapter 5 of Division 7 of Title 1 of the Government Code. (emphasis added)

These facts tend to legally circumscribe the scope of LAFCO’s action under AB 1232, limiting action to consolidation or reorganization of the four independent sanitary district members of SASM.

The primary advantage of this alternative is that it unites collection and treatment functions of sewer service in a single agency. The organization chart for this alternative represents the simplest means of governing and managing a single-purpose sewer service agency.

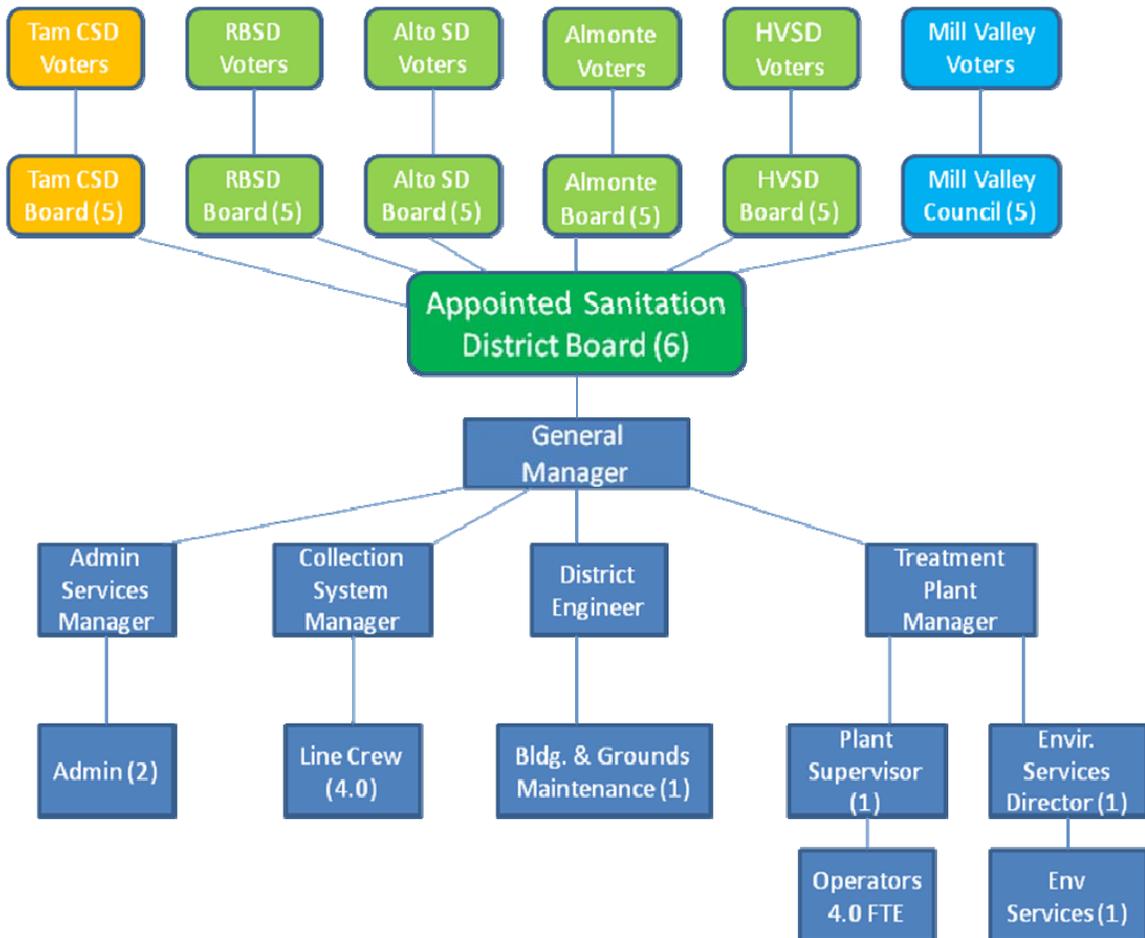
Figure 3
Alternative: Consolidation of SASM and Member Agencies into a Single Sanitary District



d. County Sanitation District:

SASM and its member agencies could be reorganized as a county sanitation district under Health and Safety Code. However, such a district is composed of other underlying local agencies empowered to provide sewer service and is governed by an appointed board with one member from each underlying agency. In this case, the governing board of a county sanitation district, with its members appointed by each of the existing SASM member agencies, would only replace the SASM joint-powers board, appointed in exactly the same way. No consolidation of agencies would take place. The conceivable advantage of this alternative is that it would allow the member agencies to transfer all operational responsibility for sewer service to the new sanitation district, thereby integrating collection and treatment functions under a single entity. However, this course of action is already available through expansion of the scope of the SASM agreement and, if implemented, the continuing roles of the remaining and underlying member agencies would be even further diminished. Therefore, this alternative offers no substantive change from the status quo.

**Figure 4
County Sanitation District**



e. Re-Organization of RBSD and Other Sanitary Districts:

Under this alternative, the jurisdictional areas of Alto, Almonte and Homestead Valley sanitary districts would be annexed to the Richardson Bay Sanitary District (RBSD) and the Alto, Almonte and Homestead Valley sanitary districts would be dissolved. All existing functions of the three dissolved predecessor districts would be provided by the newly expanded RBSD, unless subsequently altered by its board of directors.

The five-member RBSD governing board would remain in place and become responsible for service in the expanded service area. Board members of the three dissolved sanitary districts could be retained in an informal, advisory capacity for a period of transition if mutually agreed by RBSD and other district boards. Because RBSD is the only affected district that owns and operates physical facilities, it is presumed that operations of the consolidated district would be based at those facilities.

Table 10 below summarizes advantages and disadvantages of this alternative.

Table 10
Alternative 2: Reorganization of Four SASM Member Sanitary Districts, Including Annexations to Richardson Bay Sanitary District and Dissolution of Alto, Almonte, & Homestead Valley Sanitary Districts

	Advantages/Incentives	Disadvantages/Obstacles
Service Level, Operations, or Operational Efficiency	Fewer meetings, meeting prep; reduced reporting, greater uniformity/consistency in regulatory reporting; broader emergency staff response; consistent financial/reserve policies & practices; business office hours with live response; ability to consider expansion of in-house maintenance functions/reduction of dependence on contractors;	Need for new public information initiatives; Separate rate zone administration requirements; Reconciliation of differences in system condition, service standards;
Cost Savings	Elimination of three agencies' overlapping boards/stipends, managers, meeting preparation, audits, regulatory reporting, permits, insurance, SSMP audits, office expense, communications, document & permit preparation, possible reductions in capital project management, design & administration. Approximate total cost savings: \$228 - 269,000	Short-term costs of consolidation (e.g. new public communications efforts); Potential loss of operational information from current employees & board members; Increased probability of election expense; Cost savings not realized immediately without staff attrition/realignment
Political Accountability, Management Efficiency	Increased probability of contested elections; reduced number of managers & elected officials - simplified decision-making process; larger scale, more effective public communications;	Fairness of new Board representation prior to first election; Potential perception of use of funds/reserves for areas other than where funds were generated; Varying property tax revenues among rate zones; Customer recognition of the change in governance; Transition of EPA Administrative Order to new agency

f. Consolidation of SASM Member Sanitary Districts:

This alternative would consist of consolidation of all of the four sanitary district members of SASM under the provisions of the Cortese-Knox Hertzberg Act, with or without special provisions of AB 1232. All existing functions of all four predecessor districts would be provided by the consolidated district. A new name for this district would need to be designated and used.

The governing board of the consolidated district could be temporarily expanded to as many as eleven members and could provide for appointment of members of each of the predecessor district boards. The expanded governing board would be reduced to five members as terms expire. (see terms and conditions in sample resolution, Attachment 14). LAFCO may consider a variety of possibilities for the size and composition of the consolidated governing board for inclusion in the specific wording of its terms and conditions.

Because RBSD is the only affected district that owns and operates physical facilities, it is presumed that operations of the consolidated district would be based in those facilities. Terms and conditions of approval should act to protect existing employees at their present rates of compensation and benefits for a minimum period, perhaps two years. RBSD is the only district of the four that currently has permanent employees. The presumption is therefore that the contract managers of the other three districts would either continue to be retained on a contractual basis or join the existing personnel structure established under RBSD. These positions would be eliminated at the end of a specified period or upon voluntary departure, termination for cause or retirement. After attrition, only one general manager position would be required for the consolidated district, resulting in reduction of .7 FTE general manager level positions.

The consolidated district's governing board would be in a position to consider replacement or alteration of its contractual services in three districts with an additional in-house collection system crew. The current budgets for collection system emergency response and regular collection system maintenance for the four sanitary districts identifies expenditures of approximately \$412,000 per year for these services. It is not completely clear exactly what these budget expenditures require in the way of services. One available option for these services may be to evaluate moving this service in-house as part of the consolidation and providing this service utilizing full in-

house staffing. Utilizing the current middle of the salary range for a neighboring sanitary district in Marin County suggests that the in-house burdened employee annual compensation (salary plus 50% for benefits) would cost approximately \$285,000 per year. This crew would be composed of the following three full time employees:

Crew Leader
Collection System Worker II
Collection System Worker I

It is further anticipated that the service would require materials and supplies estimated at an additional \$50,000 to \$75,000 per year for a total annual budget of \$335,000 or \$360,000. It is possible that the crew could be composed of just two employees depending upon many factors related to worker safety and leave requirements but this would need to be determined as part of a thorough evaluation of this alternative by the board of the consolidated sanitary district. The estimated annual total cost for this smaller crew size would be approximately \$250,000. These figures clearly indicate that an evaluation of this alternative is warranted given the savings that might result.

The evaluation would need to review the current expenditures by each of the four sanitary districts, discuss the annual performance results of the work now being provided by the outside contractor over the last several years and project the future service requirements based upon the agencies service plans submitted in compliance with the Administrative Order. In addition, it would be necessary to evaluate the appropriateness of either a two or three man crew size based upon several variables and also to establish the operating procedures for a two-crew operation with the current Richardson Bay staffing. Finally, the evaluation would establish the projected budget for this service expansion including the identification of materials, supplies and equipment necessary to support the new maintenance crew and provide the advantages and disadvantages from a change in service.

The anticipated operational analysis of this change may or may not find enhanced service to customers, more timely responses to overflows, enhanced cleaning results in the system and savings to the customers. Table 11 below shows a range of potential annual cost savings for this alternative from simplified contract administration due to one agency instead of four to expansion of in-house staffing (10-20% of cleaning, emergency response costs) and other areas of overlapping budget appropriation.

Table 11
Anticipated Costs Savings: Consolidation of
SASM Member Sanitary Districts

Annual Ongoing Savings

Board meeting and travel costs	7,400	7,500	6,100	10,000	31,000	21,000
General Manager	54,072	15,600	22,200	131,789	223,661	91,872
Waste Discharge Permit Annual Fees	1,226	1,226	1,226	1,000	4,678	3,678
Insurance Premiums	3,500	700	3,000	35,000	42,200	7,200
Annual Audit Costs	7,000	6,000	6,000	9,250	28,250	19,000
Compliance Reporting	20,000	7,000	1,000	28,774	56,774	28,000
Office Expenses	1,500	1,500	1,700	27,150	31,850	4,700
Bookkeeping	2,400				2,400	2,400
CCTV	6,500	5,000	30,000		41,500	4,500
Sewer Cleaning and Emergency Response	97,000	70,000	75,000	170,000	412,000	41-82,000
Administration and Memberships	5,000				5,000	5,000
Total					\$228,000 - \$269,000	

In addition to savings in annual operating costs, consolidation under this alternative can be expected to generate cost savings in implementation of capital improvement plans. The new consolidated sanitary district will become responsible for the capital projects that are currently included in the 5 and 10 year capital programs reported to the EPA of the four former districts.

It is expected that the average annual project cost over the first five years following consolidation will be \$1,525,000 or a total project value of \$7,625,000.

If management of these projects is unified under a single agency, it can be anticipated that one time cost savings will result throughout the project duration from single contracts as opposed to four separate contracts for design, bidding, construction, inspection and testing of separate projects. These efforts are likely to:

- ❑ Reduce the number of plans and specification documents to be prepared by design engineers;
- ❑ Save on mobilization and demobilization expenses for the contractor which can be as high as 10% of the constructed value of any project;
- ❑ Establish uniform construction standards thereby reducing contractor concerns during construction;
- ❑ Reduce construction inspection and testing costs for the single project;
- ❑ May reduce billing, invoicing and overhead costs for consultants and contractors;
- ❑ Reduce the testing and inspection needs as the inspectors are familiar with the engineers and contractors requirements for quality construction assurance;
- ❑ Reduce overall project management staff requirements for single projects versus multiple projects;
- ❑ Increase both design engineering and contractor interest in larger valued projects resulting in more competitive proposals and a larger number of bidders.

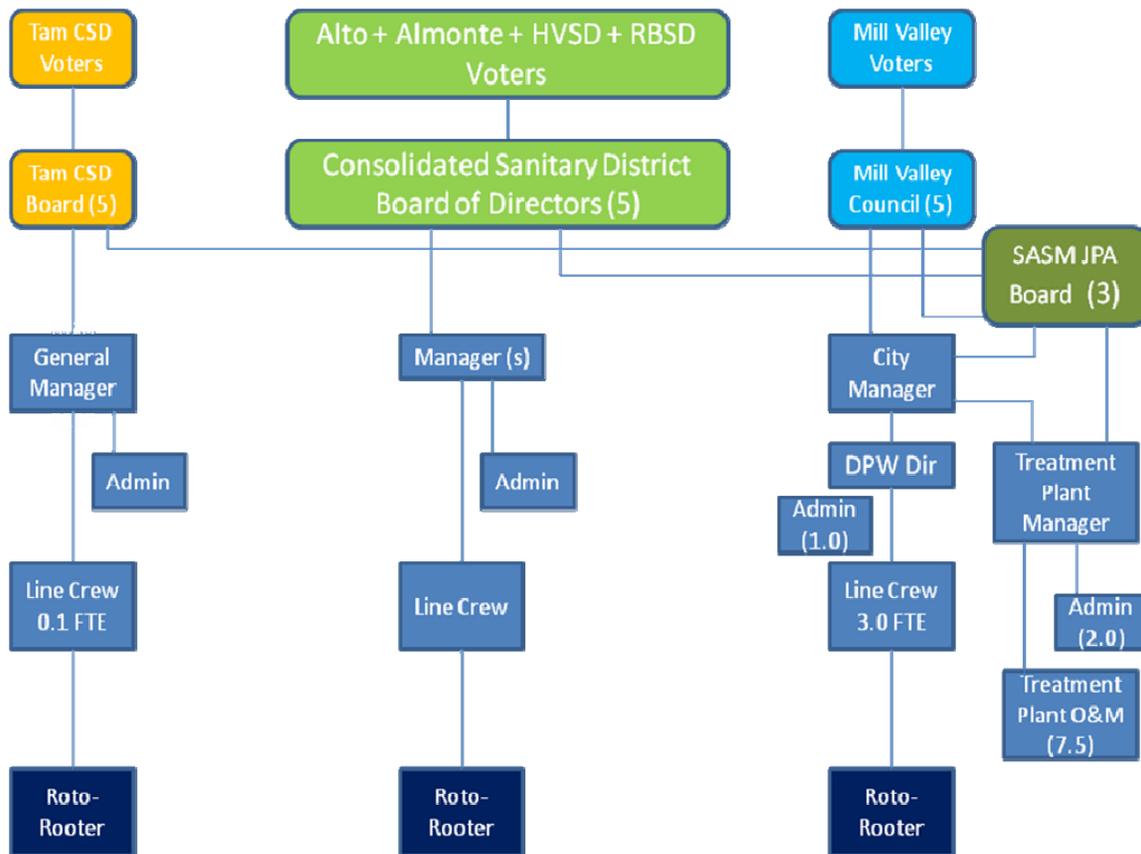
These one time savings are anticipated to be a minimum of 10% of the annual and total project value or \$152,000 per year or \$760,000 over the five year capital budget. Any funds saved from these consolidated projects can then be used to increase the final footage of renewal and replacements of the collection system assets as well as reduce the final total project cost to customers and rate payers over the life of the capital programs.

Previous attempts by the some SASM member agencies to combine project activity was said to have resulted in no significant savings from their joint efforts. However, these efforts remained small in project value, significantly less than the sizes currently anticipated in the SSROP capital programs, especially for pipeline replacements. It is believed that by consolidating the four agency projects that the size and scope of these consolidated projects will result in cost savings. In addition, the increased interest in these projects from contractors and engineers (whose operations are generally running on very thin profit margins in the current economic conditions) should make for much more competitive prices for these services.

While these savings may be hard to identify and quantify, there is little question that the portfolio of planned projects of the four agencies consolidating under this alternative would benefit financially from unified effort.

In order to initiate proceedings for consolidation, LAFCO would be required to prepare all standard proposal documents, including an application, plan for services and resolution initiating proceedings. No map and legal description would be required (waived by State Board of Equalization). Consolidation of the four sanitary districts would be exempt from CEQA under Guidelines Section 15320.

Figure 5



It should be noted in this context that SASM member agencies receive different property tax allocations and charge different sewer service rates. In addition, some agencies maintain adequate reserves and utilize those reserves

according to adopted policy and others do not. And member agencies have adopted different capital improvement plans, as previously noted. These differences would necessitate the use of rate zones following political consolidation. This means that present boundaries of the member agencies would continue within the consolidated district for financial and equity purposes unless and until the rates, taxes, reserves and capital needs of the predecessor agencies could be made more equal in the long term.

Table 12 below summarizes advantages and disadvantages of this alternative.

Table 12
Alternative 3: Consolidation of Four SASM Member Sanitary Districts
(Richardson Bay, Alto, Almonte, & Homestead Valley Sanitary Districts)

	Advantages/Incentives	Disadvantages/Obstacles
Service Level, Operations, or Operational Efficiency	Fewer meetings, meeting prep; reduced reporting, greater uniformity/consistency in regulatory reporting; broader emergency staff response; consistent financial/reserve policies & practices; business office hours with live response; ability to consider expansion of in-house maintenance functions/reduction of dependence on contractors;	Need for new public information initiatives; Separate rate zone administration requirements; Reconciliation of differences in system condition, service standards;
Cost Savings	Elimination of three agencies' overlapping boards/stipends, managers, meeting preparation, audits, regulatory reporting, permits, insurance, SSMP audits, office expense, communications, document & permit preparation, possible reductions in capital project management, design & administration. Approximate annual cost savings: \$228 - 269,000 plus one-time capital cost savings.	Short-term costs of consolidation (e.g. new public communications efforts); Potential loss of operational information from current employees & board members; Increased probability of election expense; Cost savings not realized immediately without staff attrition/realignment
Political Accountability, Management Efficiency	Increased public interest & probability of contested elections; reduced number of managers & elected officials - simplified decision-making process; larger scale, more effective public communications;	Potential perception of use of funds/reserves for areas other than where funds were generated; Varying property tax revenues among rate zones; Customer recognition of the change in governance; Transition of EPA Administrative Order to new agency.

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CHAPTER 3. SPHERE OF INFLUENCE REVIEW AND UPDATE

I. Current Sphere of Influence

Because of the special circumstances created by AB 1232 and its applicability only to SASM and its member agencies, this study has focused on only those agencies. LAFCO reviewed and reaffirmed sphere of influence designations for the City of Mill Valley and TCSD in 2010. As multi-function agencies, their boundary plans would not be affected by recommendations for reorganization of the single service that is the subject of this study. Also discussed elsewhere in this report, consolidation of unlike, multi-function agencies with single purpose sanitary districts and/or action to directly affect a joint powers agency would be problematic.

As stated above, LAFCO adopted resolutions making sphere of influence determinations for the sanitary districts in southern Marin in 2005. The sphere of influence determinations for the sanitary districts were all “interim” designations. As stated in the text of the resolutions, “The purpose of the Interim designation is to express this Commission’s expectation that _____ Sanitary District will continue to provide service within its present boundaries while engaged in functional collaboration efforts with neighboring sewer agencies and that political consolidations should be evaluated by southern Marin sewer agencies in the future as appropriate.” Experience since 2005, both in attempts at collaboration and the response to the spills of 2008, shows that more focused action may be desirable.

II. Problems with the Status Quo

The sewage spills of 2008 revealed a sewer system with significant problems in its structure, facilities and its operations. In the past, SASM and its member agencies have pursued a strategy of allowing persistent problems in the collection systems to go unaddressed in favor of taking action downstream to expand pumping, emergency storage and treatment capacity in order to contain wet weather flows. While it has been argued by some of the SASM member agencies that the SASM plant design was sufficient to handle the 2008 peak wet weather flow, the EPA clearly does not accept (or no longer accepts) this “downstreaming” strategy.

The statements in each of the agencies’ audits subsequent to the spills regarding high inflow and infiltration rates show high rates of inflow and infiltration. In the

measurements of temporary flow meters, 31 of 38 meters show flows of greater than 10 times dry weather flow. The EPA is clearly very concerned with these high rates (typically any over 3 to 5 times average daily flows) and have been requiring agencies to deal with these concerns through administrative orders, consent decrees or Orders of Compliance such as SASM and its members operate under now. The EPA's administrative orders and other demands of regulatory agencies now require very significant increases in capital spending to improve the performance of both the member agency collection systems and the SASM treatment plant.

As pointed out in earlier portions of this report, the SASM member agencies are assessed for the cost of treatment on the basis of ownership, not on the basis of flow. Under this method, there has been no incentive to improve performance and there continues to be no ability to measure the inflow and the infiltration from their collection systems in storm events except on a temporary basis. Within SASM, the member agencies have no way to be accountable to each other for excellent or poor performance. The possibility of further sanctions and/or third-party lawsuits brought against one or all members under a general lack of management control make the divisions between the various constituent parts of the system a continuing problem that could be reduced by a simpler form of organization.

A single sewer system with separate responsibility for seven component parts defeats accountability for major system failures, as shown by spills in 2008. Reports of the regulatory agencies on those spills showed a system with preventable failures in all component organizations. Yet there were no management or electoral consequences. Who is in charge? What public board was responsible for the spills? What hearings were held? What public outreach was undertaken to explain the spills or the follow-up decisions? What public officials could dissatisfied customers logically seek to replace? These questions have no satisfactory answers under the current structure.

An examination of special district election records shows that there has been no contested election for any of the twenty board positions of the four sanitary districts in the past decade. At the same time, there have been 12 mid-term appointments by sanitary district boards to replace resigning or deceased members. The four sanitary district boards have, to that extent, become self-selecting rather than publicly elected.

An examination of the minutes of the four sanitary district's board meeting activity shows that each of the four agencies holds at least twelve meetings per year. Each of those meetings requires between 10 and 32 hours of staff

preparation time and board stipends of between \$420 and \$625 for each meeting with a total annual cost of approximately \$80,000 (see Table 13 below).

Table 13
SASM & Member Agencies Governing Board & Meeting Costs

	Meetings Per Year	Prep Time Hrs	Avg Time Meeting	Rate/Hr	Staff Cost	Board Stipends	Cost/ Meeting	Annual Cost	
Alto	12								
Manager		10	0.6	\$ 50	\$ 530		\$ 1,055	\$ 12,660	
Board						\$ 525			
Almonte	12						\$ 1,200	\$ 14,399	
Manager		10	1.7	\$ 67	\$ 780				
Board						\$ 420			
Homestead	12						\$ 2,253	\$ 27,036	
Manager		25	1.2	\$ 65	\$ 1,703				
Board						\$ 550			
Richardson Bay	12						\$ 2,197	\$ 26,363	
Manager		4	1.1	\$ 63	\$ 323				
Clerk		28		\$ 45	\$ 1,249				
Board						\$ 625			
TCS D	---	(comparison not applied to multi-function agencies)							
Mill Valley		(comparison not applied to multi-function agencies)							
SASM	12						\$ 2,794	\$ 33,528	
Manager		30	1.4	\$ 75	\$ 2,355				
Admin Aide		8		\$ 40	\$ 320				
Chief Ops		1		\$ 66	\$ 66				
Lab Analyst		1		\$ 53	\$ 53				
						\$ -			

Public participation in the meetings of the four sanitary districts is extremely rare: in a total of 161 sanitary district board meetings between January 2008 and March 2011, seven were attended by members of the public other than officials of the other districts or district contractors. In 67 of those 161 meetings, no action was taken by the board beyond routine internal administrative matters. Over the total 161 sanitary district board meetings in that time period, an average of 1.04 votes of the district board were taken at each meeting.⁵

⁵ The count of actions taken by the sanitary district boards excludes votes to approve agendas, minutes, warrants, election of officers & routine financial reports.

The pattern of governing board activity as portrayed in the minutes is one of very low workload, spread over many meetings of different agencies, with a large fraction of meeting time devoted to reports on the activities of the other SASM members. Each collection agency handles such a small fraction of the total business of the sewer system that the role of each is severely circumscribed. Over and above the costs of conducting separate business, the number of personnel and person-hours involved in the governance of the four sanitary districts is unreasonable given the modest number of substantive votes that have been required even during a period of unusual activity from 2008 to 2010. These efforts can be handled just as efficiently and more economically with a single board rather than four separate boards.

Finally, the chances for conflicting and inconsistent decision making of these systems from a regulatory and water quality perspective are great when four separate managers and boards deal with the same issues confronting this very small service area. All decisions required for the best interest of this area can and should be handled with a minimum of opportunity for inconsistent direction and approach. Having multiple boards decide issues affecting the service area can create unnecessary efforts to reach consensus on important operating and water quality concerns.

III. Conclusions & Recommendations

The Commission's sphere of influence review should set the stage for addressing infrastructure and operational problems by streamlining the government structure of SASM's member agencies a way that the previous "interim" sphere of influence designations did not. The language of the 2005 sphere of influence resolutions anticipating political consolidation only after a series of successful contractual collaborations has not produced significant results due to the effort and complexity of six member agencies attempting to work together. The coercion of the EPA's Administrative order has imposed some unity of response, but neither leadership nor cohesion has otherwise emerged that integrates the management, service standards or decision making process that could produce the improvements anticipated by the Commission's 2005 study.

With the new authority granted to the Commission under AB 1232, LAFCO is in a position to implement its adopted policies on special district consolidation and its 2005 service review determinations. Implementation of these policies should be pursued if the eventual result increases overall economy, clarifies responsibility for sewer service, enhances public understanding and accountability and provides an equitable outcome for ratepayers and employees.

Other consolidations in southern Marin have been successfully processed by LAFCO and implemented by successor agencies. Most recently, the Alto-Richardson Bay Fire Protection District consolidated with the Tamalpais Fire Protection District to form the Southern Marin Fire Protection District (SMFPD). SMFPD reported significant cost savings and service improvements in the first year following consolidation in 2000. There have been no assertions of loss of local control from areas served by the two predecessor fire protection districts.⁶ The City of Belvedere transferred responsibility for sewer service to the Tiburon Sanitary District through annexation in 2006, which combined responsibility for collection and treatment under the control of a single governing board. A separate rate zone for Belvedere has been successfully utilized to set differential rates for service, accounting for higher costs of service and lack of property tax contribution in Belvedere. Residents of the City of Belvedere have been elected to the Tiburon Sanitary District governing board.

LAFCO and the public should recognize the earnest and energetic efforts of SASM and its member agencies in addressing problems in sewer facilities following the spills of 2008. However, recent improvements in performance and reinvigorated efforts to improve facilities do not justify preservation of an obsolete government structure. The EPAs administrative order has required the collection agencies to thoroughly rebuild their systems, requiring a very substantial increase in fee revenue from the public. This would be the time to create some uniformity of approach and accountability for results.

The present structure of SASM and its six member agencies dilutes responsibility and accountability for sewer service to the point of near inconsequence for single purpose sanitary district members. There is no need and no purpose in preserving small political subdivisions of the state that operate with no discernable political activity in their meetings, decisions or elections. The public is disinterested in participation in district meetings or standing for election because so little is at stake within each jurisdiction when that jurisdiction is responsible for only a small segment of a small sewer system.

Among the seven agencies, 36 elected and appointed officials and eight managers, no one is responsible or accountable for the spills of 2008. All of the member agencies are responsible to some undetermined degree, but no agency or board has any overall responsibility for the performance of the system. The political divisions within SASM and its members create an environment that

⁶ Consolidation of fire districts in 1999 affected all residents of sanitary districts that are the subjects of this study (Alto, Almonte, Homestead Valley and Richardson Bay Sanitary Districts and Tamalpais CSD, except for RBSD residents east of Trestle Glen).

does not allow the public to understand the governance of the sewer services that it receives. Staff believes that the system's complexity has created confusion, disengagement and apathy with regard to the operations of the agencies and in public participation.

IV. Alternative Courses of Action

LAFCO has wide discretion to act in response to this study. The Commission may choose any of the organizational alternatives described above in Chapter 2, IV, E, section 6 including the status quo or no-action alternative. In so doing, the actions that the Commission would take would be to:

- ❑ Amend or reaffirm municipal service review determinations of 2005;
- ❑ Amend or reaffirm sphere of influence determinations of 2005;
- ❑ Initiate or refrain from initiating proceedings for consolidation of SASM member agencies under special provisions of AB 1232 (Government Code Section 56375.2).

V. Recommended Alternative

Staff recommends that the Commission utilize the special authority granted to it under AB 1232 to initiate and complete Alternative 2, consolidation of Alto, Almonte, Homestead Valley and Richardson Bay Sanitary districts. The resulting consolidated sanitary district would have the boundaries shown on Figure 6 and the organizational structure shown in Figure 5.

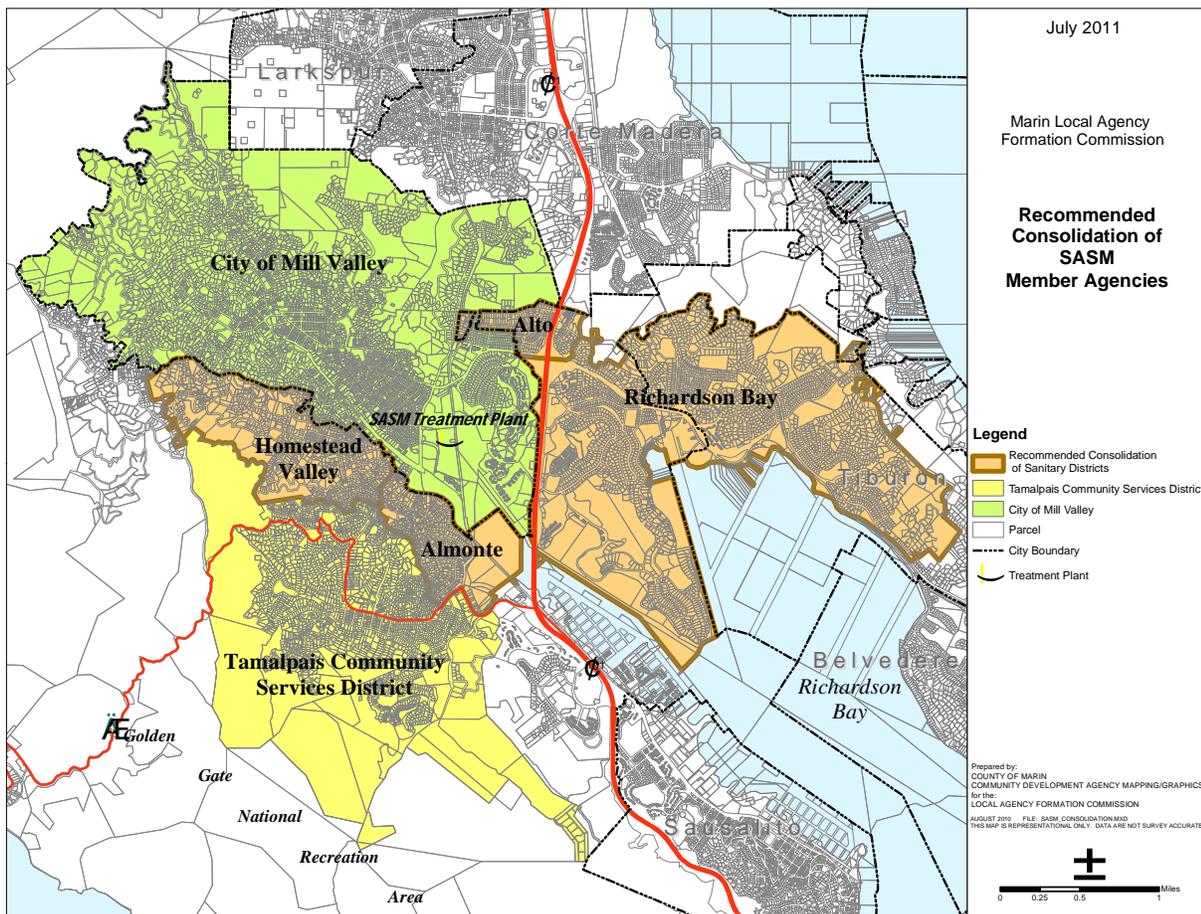
This alternative offers modest potential for direct cost savings of \$228 – 269,000 and the prospect of further cost savings by a more unified organization that can simply do its work rather than work at working together with many others. In addition, consolidation should result in cost saving to the County of Marin, regulatory agencies and outside vendors from reduced administrative demand, sewer service charge and tax processing, invoicing and account reductions to a single agency rather than four separate agencies.

Consolidation of four of the six member agencies of SASM would yield simplified governance of the system, composed of the City of Mill Valley and a single sanitary district, each owning a 49% share of the SASM treatment plant, and TCSD with a less than 2% share. SASM would remain unaltered as a joint powers agency, except for having a three member governing board. Although LAFCO's action to consolidate the four sanitary districts could not directly affect

the composition of SASM (other than by reducing the number of members), the three remaining members of the SASM JPA would be likely to act to correct the disproportionate and inappropriate voting power of TCSD as an equal member. Effectively, consolidation of the sanitary districts would result in a two member joint powers organization, each with similar population, collection system line mileage and jurisdictional area. Lines of authority and responsibility would be simplified and clarified as shown in Figure 5.

The consolidated district would operate approximately 61 miles of sewer in an area of approximately 5 square miles with a service population of approximately 15,000 - similar in these aspects of scale to the City of Mill Valley.

Figure 6



Consolidation of the four sanitary district members of SASM would be a relatively simple change of organization (compared with consolidation of fire service agencies), greatly aided by the lack of permanent employees, labor contracts, pension systems and

debt. In order to assure a positive outcome without inappropriately constraining the actions of the consolidated sanitary district, the Commission would need to attach terms and conditions of approval addressing the following issues:

1. The name of the consolidated sanitary district;
2. The effective date of consolidation;
3. The composition of the governing board of the consolidated sanitary district (the Commission may expand the size of the governing board temporarily to a maximum of 11 members and provide for inclusion of representatives of each of the predecessor district boards);
4. The appropriation limit of the consolidated district;
5. The applicability of existing laws, ordinances, contracts, policies etc;
6. The sphere of influence of the consolidated district;
7. A requirement that the successor district establish separate rate zones equal to the boundaries of the four predecessor districts in order to provide for the establishment of equitable rates and use of accumulated reserves for a minimum period of time;
8. Transfer of predecessor district assets and liabilities to consolidated sanitary district;
9. Protection of the rights of bondholders and creditors;
10. Retention of current regular and contract employees at current rates of compensation for a minimum period of time;
11. Transfer of ad valorem property tax and all other revenues to the consolidated sanitary district.

It is possible to view the recommended alternative as a combining of the four existing governing boards into one board with only the minimal constraints imposed by the above terms and conditions. There would be fewer board members. Existing staff members would remain in place for the near-term. The existing rates, contracts, assets, liabilities and service arrangements would remain in place until the board of the consolidated district made the changes it deemed necessary and useful.

Attachment 14 contains a draft resolution initiating consolidation proceedings including example terms and conditions of approval. A similar draft resolution has been circulated to the four sanitary districts for their comment and input, but the districts have, to date, declined to participate in its development. If the Commission initiates consolidation proceedings as recommended in this staff report, the districts should be afforded a further opportunity to become involved in the effective implementation of consolidation through the mechanism of terms and conditions of approval.

If approved and implemented, the recommended alternative – consolidation of four of the six SASM member agencies - would generate two types of benefit: cost savings and improved political accountability. Although consolidation of member agencies could not directly change the terms of the SASM joint powers agreement, the remaining three members of SASM could be expected to make logical modifications to that agreement to improve its functioning, beginning with adjusting voting power on the JPA board from three to two voting members. With a two member JPA board, SASM would be able to function as a partnership, with clear and equal responsibility for each of its members. Neither member would be in a position to claim that the actions of the SASM board were anything other than its own responsibility. In this way, the recommended alternative approximates integration of collection and treatment functions, by reducing the number of involved managers and board members.

The recommended alternative would not achieve the full extent of consolidation envisioned by AB 1232. It would “set the table” for a larger sanitary district about the same size and configuration as Las Gallinas Valley Sanitary District to serve the City of Mill Valley as well as the unincorporated areas now served by the four sanitary districts. This would become logical and possible if the collection-only district formed from Alto, Almonte, Homestead Valley and Richardson Bay Sanitary Districts establishes its standards and methods of operation to the extent that the City of Mill Valley can transfer its present responsibility for sewer service to the consolidated sanitary district. The transfer of sewer service from Mill Valley to the consolidated sanitary district would be similar to the annexation of the City of Belvedere to Tiburon Sanitary District in 2005. If this eventually occurs – and if the very small interest of TCSD in SASM is also resolved – SASM can be dissolved and all sewer service functions can be united under the control of a single sanitary district board of directors. The recommended alternative is an appropriate, manageable evolutionary step in this direction.

The use of rate zones would be an important part of the functioning of a consolidated sanitary district. Rate zones reflecting the boundaries of the four predecessor districts would allow for the equitable use of revenues and reserves in the areas that accumulated them. This concept is especially important with respect to the large reserve fund accumulated by Richardson Bay Sanitary District and the lack of similar reserves in Alto, Almonte, and Homestead Valley Sanitary Districts. Over time, as the new district establishes uniform standards and methods of operation, the need for four separate rate zones may diminish, but terms and conditions of consolidation approval should set a minimum period requiring their use.

There is an obvious relationship between the size of sanitary districts and their level of political participation. The consolidation of the four small sanitary district members of SASM – and the accompanying increase in budget and scale of operations can be expected to increase public interest in service on its board of directors and hence the likelihood of contested elections (see Attachment 15). The electoral process can in turn be expected to clarify the responsibility of that board for sewer service to unincorporated areas of southern Marin.

VI. Recommended Actions

Staff recommends that the Commission take the following actions:

1. Open the public hearing, continue for at least 60 day for public comment to the Commission's September 8, 2011 meeting. Request that affected agencies wishing to comment do so in writing by August 26th.

Following completion of this public hearing:

- a. Adopt updated service review determinations required by Government Code 56430 based on the content of Chapter II of this report.
- b. Amend 2005 sphere of influence determinations for Alto, Almonte, Homestead Valley and Richardson Bay Sanitary Districts in the following manner:

Section 1. The sphere of influence designation of the (example) - Almonte Sanitary District is amended as ~~an Interim Sphere of Influence designation, to include all areas currently within the boundaries of the District as of the date of this resolution as shown on Attachment A. The purpose of the Interim designation is to express this Commission's expectation that Almonte Sanitary District will continue to provide service within its present boundaries as shown on Attachment A while engaged in functional collaboration efforts with neighboring sewer agencies and that political consolidations will be eventually undertaken by southern Marin sewer agencies in the future at a time and in an order yet to be determined.~~ to be a sphere of influence "in common" to include the areas served by Almonte, Alto, Homestead Valley and Richardson Bay Sanitary Districts. This designation is assigned to reflect the Commission's conclusion that the services provided by Almonte, Alto, Homestead Valley and Richardson Bay Sanitary Districts would be most efficiently provided

by a single special district. This designation indicates the Commission's determination that these districts should be combined through consolidation or other reorganization process.

2. Direct staff to publish notice of intent to initiate proceedings for consolidation of Alto, Almonte, Homestead Valley and Richardson Bay Sanitary Districts and prepare standard application materials for the Commission's consideration.

3. Following completion of the public hearing so noticed, adopt a resolution approving the consolidation of Alto, Almonte, Homestead Valley and Richardson Bay Sanitary Districts, under the special provisions of AB 1232 (Government Code Section 56375.2) subject to the terms and conditions of approval described earlier in this report.

It is further recommended that the Commission, prior to taking final action on the proposed consolidation, provide a 30 to 60 day consultation period for the affected agencies to work with the Commission's staff in the further development of terms and conditions of approval if requested to do so by two or more of the agencies subject to consolidation.

Attachments:

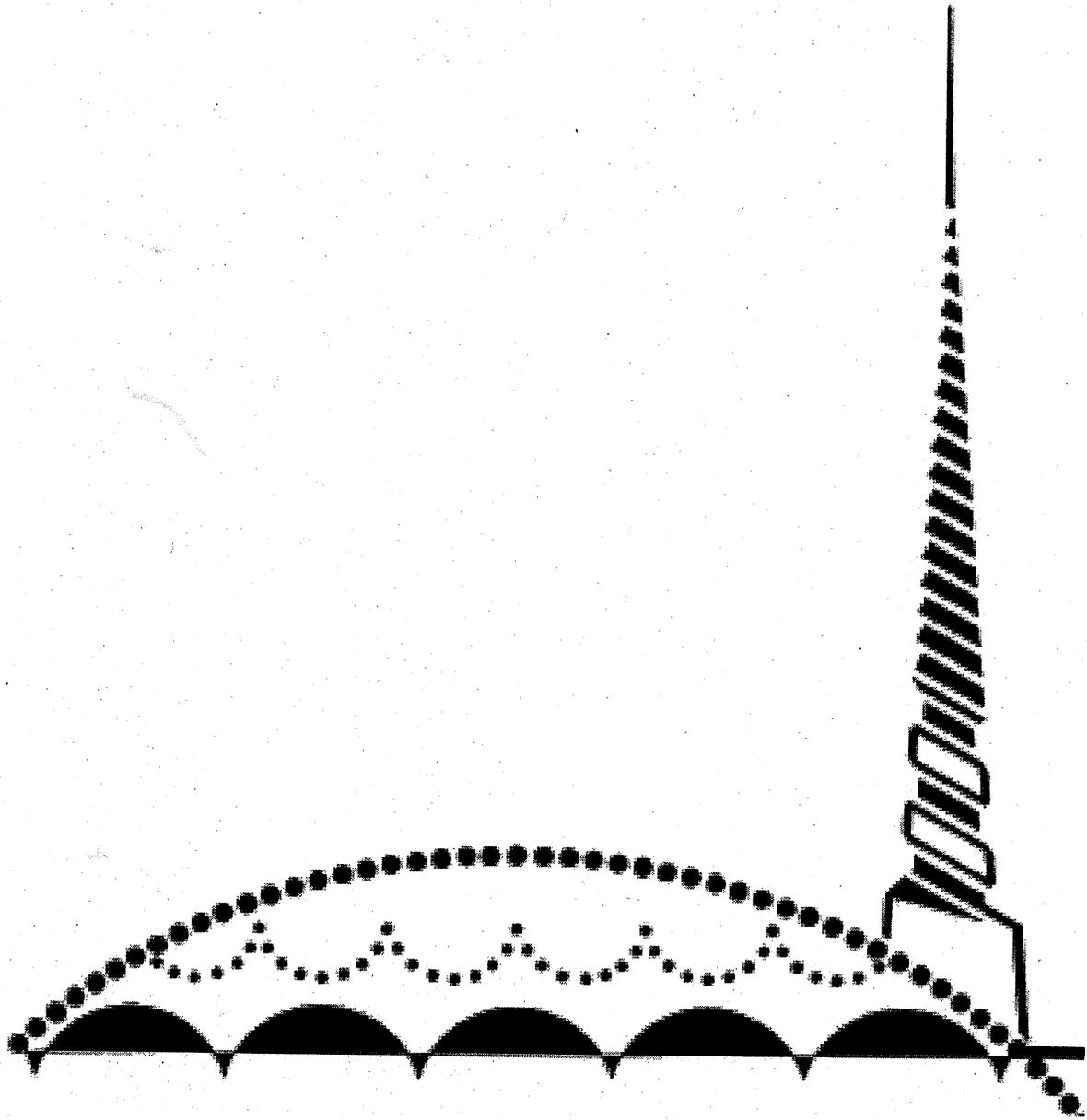
- Attachment 1: *Southern Marin Sewers: Cracks in the System* (2008-2009 Marin County Grand Jury, May 2008) – Summary only
- Attachment 2: LAFCO Resolution 05-07 with Exhibit A
- Attachment 3: Assembly Bill 1232
- Attachment 4: Resolution for Collaboration Adopted by Southern Marin Sewer Agencies
- Attachment 5: *SASM January 2008 Spill Investigation Report* (State Water Resources Control Board Office of Enforcement, April 2008) - without appendices
- Attachment 6: Table summarizing the findings of the External Audit
- Attachment 7: Letter of Bonner Beuhler, Richardson Bay Sanitary District to Ken Greenberg, USEPA (October 2008)
- Attachment 8: Spill data tables
- Attachment 9: Listing of collaborative measures reported by SASM and its member agencies
- Attachment 10: Table of Contested Elections and Mid-Term Appointments
- Attachment 11: TCSD Newsletter, Alto Sanitary District Opinion Poll
- Attachment 12: RBSD correspondence to SASM (2010)
- Attachment 13: SASM member survey on collaborative measures
- Attachment 14: Draft resolution initiating consolidation
- Attachment 15: Frequency of contested elections, Marin County Sanitary Districts

ATTACHMENT 1

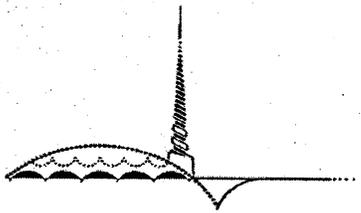
2008-2009 MARIN COUNTY CIVIL GRAND JURY

Southern Marin sewers: Cracks in the system

May 5, 2009



Marin County Civil Grand Jury



SUMMARY

Sewage spilling into San Francisco Bay is a news headline that grabs our attention. In January 2008, the Sewerage Agency of Southern Marin (SASM) released 2.4 million gallons of raw sewage on one day and another 962,000 gallons of partially treated sewage six days later. Since then, governmental orders have been issued, stiff fines imposed and operational failures corrected. But underlying problems persist beyond the headlines, and long-term solutions will require creativity, patience and cooperation.

SASM operates one of six large public sewage treatment facilities in Marin County. There are another eight smaller ones. Each of those plants is publicly owned and operated within its own watershed area. There are at least 10 additional special districts that collect and transport sewage to their treatment plants.

SASM is made up of six independent member districts. Each district owns and maintains a sanitary sewer collection system that transports untreated sanitary waste from homes and businesses to the SASM treatment plant. Five of the six SASM collection districts have their own five-member governing board. The sixth is governed by the City of Mill Valley. Each of the six districts has one seat on the SASM Board of Directors and has its own budget and staff. In addition, SASM itself has its own manager, staff and budget. All of this governance structure is combined to serve a grand total of about 28,000 residents in southern Marin County.

The focus of this report is two-fold:

- how SASM is structured, and what steps might be taken to improve the way it serves an area representing about one-tenth of Marin's population
- the important role home and business owners can play in maintaining sewer lines on their property and the impact they can have on the wet weather flows that played a significant part in the noxious spills of 2008

While this report is confined to SASM, many of the same problems and eventual lessons to be learned apply throughout the county. All property owners need to be more aware and more vigilant in maintaining the sewer lines that run beneath their property. This report might also be an organizational model for Marin's other special districts and treatment facilities to consider.

Most of the operational failures of 2008 have been corrected. However, the amount of rainwater in the sewage collection systems can be a serious problem that still needs to be

minimized. Aging infrastructure and lack of diligent maintenance allow increased amounts of rainwater to flow into our sewage systems. During winter storms, rainwater increases the flow into the SASM wastewater treatment plant by a factor of up to 10 times what it is during dry weather. Much of this increased wet-weather flow (influent) is directly attributable to faulty sewer lines, called private laterals, owned by property owners. The laterals are the responsibility of the property owner.

The flow of sewage from its source, through treatment, and finally to discharge into the Bay must be viewed as one seamless process. If the property owner, the collection district or the treatment facility does not effectively manage its portion of the process, then the efficiency and health and safety of the whole system may be compromised. The homeowners must maintain their private laterals and not discharge inappropriate materials. The collection district must help educate the homeowner and properly maintain the sewer mains and pump stations. The treatment facility must provide responsible treatment and coordinate wastewater strategic planning oversight for the region.

The Grand Jury strongly believes that consolidation of SASM and its member districts into one seamless agency is the best organizational structure for this small area with only 28,000 people. It will not be easy, it will take time, and it will require some changes in the long-standing political will. But eventually it should happen because the public expects an efficient system that serves the entire community responsibly at a reasonable cost.

The Grand Jury acknowledges that the politically and territorially entrenched labyrinth of districts that exists today will be difficult to deconstruct and reformat. Change can occur in stages, over time. Our recommendations realize this and focus on steps that can be taken to provide better and more seamless service leading to consolidation. The process may be complicated, arduous and time-consuming; but it should begin now, and in the end will be well worth the struggle for the districts, their employees and the people they serve.

BACKGROUND

The SASM service area is the portion of Marin encompassed by the City of Mill Valley, the unincorporated area on both sides of U.S. 101 surrounding Mill Valley north of Sausalito but south of Corte Madera, and a portion of the Tiburon Peninsula. (See **Figure 1** on the following page.)

ATTACHMENT 2

MARIN LOCAL AGENCY FORMATION COMMISSION

RESOLUTION NO 05-07

**ADOPTION OF DETERMINATIONS
FOR THE SOUTHERN MARIN SEWER SERVICE REVIEW**

WHEREAS, Section 56430 of the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 requires that Local Agency Formation Commissions (LAFCOs) conduct service reviews prior to, or in conjunction with, consideration of actions to establish a Sphere of Influence (SOI) as defined in Section 56076, and in accordance with Section 56425 or 56426.5, or update an SOI pursuant to Section 56425; and

WHEREAS, as part of such reviews, LAFCOs must compile and evaluate service-related information and make written determinations regarding infrastructure needs or deficiencies, growth and population projections for the affected area, financing constraints and opportunities for shared facilities, government structure options, including advantages and disadvantages of consolidation or reorganization of service providers, evaluation of management efficiencies, and local accountability and governance; and

WHEREAS, Marin Local Agency Formation Commission initiated a service review of local government services in the Southern Marin area concurrently with a review of adopted spheres of influence in the Southern Marin area as described in the *Southern Marin Service Review and Spheres of Influence* on April 26, 2004; and

WHEREAS, Marin LAFCO consulted with affected and interested agencies, interested parties; and

WHEREAS, Marin LAFCO gathered and compiled the information necessary to conduct the required review and independently evaluated such information; and

WHEREAS, Marin LAFCO issued a the Southern Marin Sewer Services Alternatives Study on July 29, 2005 and provided a 21-day public review of said document; and

WHEREAS, Marin LAFCO considered the data, recommendations and determinations contained in the *Southern Marin Service Review and Spheres of Influence* report and the *Southern Marin Sewer Services Alternatives Study Report* at noticed public hearings on September 13, 2005 and October 13, 2005 and received all oral testimony and evidence, which were made, presented or filed, and all persons present were given

the opportunity to hear and be heard in respect to any matter relating to the review, its data, recommendations and determinations; and

WHEREAS, Marin LAFCO considered project related environmental factors and determined that the subject project is Exempt from provisions of the California Environmental Quality Act (CEQA) pursuant to Section 15061 of the State CEQA Guidelines;

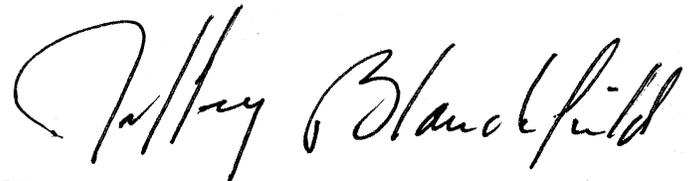
NOW, THEREFORE, BE IT RESOLVED, that pursuant to powers provided in Section 56430 of the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, the Marin Local Agency Formation Commission adopts written determinations as set forth in Exhibit A.

PASSED AND ADOPTED by the Marin Local Agency Formation Commission on this 13th day of October, 2005, by the following vote:

AYES: Commissioners Asbo, Adams, Blanchfield, Heller, McGlashan, Rodoni and Slavitz

NOES: None

ABSENT: None



JEFFRY BLANCHFIELD, Chairperson

ATTEST:


PETER V. BANNING, Executive Officer

EXHIBIT A

Statement of Written Determinations Southern Marin Sewer Service Review

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

Functional collaboration and political consolidation both afford financial and service level benefits in addressing infrastructure needs. Collection system assets include the gravity and forced main sewers, manholes and pump stations. The major drivers for these future investments are the new California Sanitary Sewer Overflow/Sanitary Sewer Management Plan regulations and parallel EPA/state enforcement actions for correcting sewer hydraulic capacity and/or structural deficiencies that lead to excessive wet weather inflow and sewer overflows. Debris, roots, oils/fats/grease and deteriorated sewer condition are all contributors to reduce gravity sewer capacity. Aging sewers and pump stations require periodic investments. The following table illustrates an order-of-magnitude reinvestment rate assuming a 75 year service life for sewers and a 25-year service life for pump station mechanical, electrical and instrumentation systems.

Collection System Component	Amount/Units	Cost Factor Replacement*	Replacement Rate	Projected Increase (\$millions)*
Gravity Sewers	221 miles	\$200/ft	3 miles per year	\$3.20
Pressurized Mains	21 miles	\$500/ft	0.28 miles per year	\$0.70
Pump Stations	69	\$250,000/PS	2.75/year	\$0.70
Annual Incremental Capital Spending Increase				\$4.60

* Baseline Year – 2005; all costs in 2005 Dollars

Based on differences in system age and additional information on individual agency levels of historic capital investment to maintain sewers, manholes and pump stations, the Commission's consultants forecasted that the Southern Marin sewer agencies will need to spend an additional \$3.3 million per year over the baseline \$12.2 million per year for FY 2004/2005. The combined \$3.3 million of infrastructure-related cost increase forecasts include both maintenance and capital investment (\$2005, no inflation included) and the capital investment component for replacement/rehabilitation of aging infrastructure was forecast at \$2.0 million per year.

The three (3) treatment agencies all have future capital investments planned for replacement/rehabilitation as well as modernization and efficiency improvements of the treatment plant facilities.

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

The April 2004 Draft Sphere of Influence Report projected a less than 1% annual growth rate in the urbanized areas of Southern Marin County. Sanitary District No. 5 has the greatest potential for modest future growth in areas like Paradise Drive where there are plans to extend the sewers and pump to the Tiburon Main Plant. There are similar future plans for the Muir Woods Park area which would be added to the City of Mill Valley collection system and the SASM treatment plant. With these exceptions, most of the urbanized areas in Southern Marin County are built out and have limited future development potential. This means that financing of future capital improvement investments will need to be borne largely by existing ratepayers and that future sewer rate increases will be based on infrastructure reinvestment requirements, inflation and limited growth in rate base.

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

Compounding the challenges of providing funding for major capital expenditures are the restrictive financing options available to many of the current agencies. The smaller agencies in Southern Marin are not candidates for issuing revenue bonds using public finance methods as they have "reviewed" rather than audited financial statements and do not have established bond agency ratings. Moreover, the transaction cost of bond issuance for underwriters and attorneys fees would be prohibitively expensive relative to the size of the bond offerings. In short, some of the eleven agencies are not able to approach the bond markets on an individual basis. The smaller Southern Marin agencies will be more inclined to pay-as-you-go financing of capital improvements.

The mature rate base and limited growth forecasts in Southern Marin also contribute to future financial challenges. Higher operating and capital costs will be borne largely by existing ratepayers.

Southern Marin Sewer agencies do have capital financing mechanisms available through collaborative organizations such as the California Special Districts Association (CSDA) and/or low interest rate loans through state revolving funds (SRF). SRF funding pool is limited. CSDA does bond financing transactions on behalf of coalitions of participating special districts. Coalition members in a bond offering can involve dozens and even hundreds of sanitary districts. The CSDA

capital projects collaboration provides participating sanitary districts with market-rate financing. This option is available to the ten agencies - either in concert or individually.

The study identified opportunities for capital program collaboration efficiencies, both through economies of scale for shared design, construction and construction management services and pooled financing. Joint Powers Agencies such as SASM have legal standing to establish credit and sell bonds.

4. Regarding cost avoidance opportunities, the Commission determines:

Both functional collaboration and political consolidation offer opportunities for achieving some cost avoidance through economies-of-scale and the service and operational efficiencies gained through collaborative efforts. The tables from the executive summary of the Study report are illustrative of the cost avoidance potential. The first table below summarize cost avoidance potential for current operations. The second table illustrates cost avoidance potential for the implementing the future SSO/SSMP and infrastructure replacement and rehabilitation program on a collaborative basis. Note that the functional collaboration and political consolidation savings potential were analyzed independently, when in fact they should be a least partially additive.

Potential Cost Savings – Current Cost Basis

Option	Current Cost Basis Operating & Capital Budget (\$000)*	Annual Potential Savings (\$000)*	Annual Potential Savings
Functional Collaboration	\$12,300	\$1,330	11%
Integrated SASM Sanitary District	\$5,700	\$490	8.5%
Integrated SMCS D Sanitary District	\$3,700	\$275	7.5%

* Baseline Year – 2005; all costs in 2005 Dollars

Potential Cost Savings – Future Cost Basis

Option	Future Cost Basis Operating & Capital Budget (\$000)*	Annual Potential Savings (\$000)*	Annual Potential Savings
Functional Collaboration	\$15,500	\$1,830	12%
Integrated SASM Sanitary District	\$7,400	\$750	10%
Integrated SMCS D Sanitary District	\$4,700	\$375	8%

* Baseline Year – 2005; all costs in 2005 Dollars

The Study also identified opportunities where collaboration can reduce legal risk and thus provide some potential future cost avoidance. Collaborative efforts on the SSO/SSMP program will reduce costs through economies of scale and also reduce the risks for future enforcement actions for sewer overflows and through

citizens' suits. A shared dispatch/emergency response center will help assure uniform effective response to an incident that meets the requirements.

5. Regarding opportunities for rate restructuring, the Commission determines:

Political consolidations afford the greatest potential for future rate restructuring but must be approached with caution to assure fairness. The following table is an excerpt from a Marin County sewer rate survey conducted by SASM in December 2004. There is a broad range of rates among the eleven agencies at the time of the survey.

Marin County Sewer Service Charge Survey June 2005										
Agency	Annual sewer service charge per EDU				Projected 5 years from now	2003/2004 property tax revenue	Current EDU count	Current SSC + [tax / EDU]	Revenues	EDUs by Region
	Current	increase(s)		5 years ago						
		Year	Amount							
Southern Marin										
Almonte SD	\$250			\$275	\$250	\$47,250	789	\$310	\$244,500	
Alto SD	\$285			\$285	\$285	\$10,000	508	\$305	\$154,780	
Belvedere, City of	\$700	2005-06	\$890	\$875		\$0	1,126	\$700	\$788,200	
Homestead Valley SD	\$250			\$100	\$250	\$32,000	1,064	\$280	\$298,000	
Mill Valley, City	\$297			\$243	\$325	\$0	7,204	\$297	\$2,139,588	
Richardson Bay SD	\$246			\$246	\$246	\$887,484	4,664	\$436	\$2,034,828	
Sausalito, City of	\$473					\$0	6,115	\$473	\$2,892,395	
Sausalito/Marin City SD	\$349			\$160	per CPI	\$302,965	2,133	\$491	\$1,047,382	
SD #5 of Marin County	\$300	2005-06	\$351	\$300	\$700	\$380,000	2,740	\$439	\$1,202,000	
		2006-07	\$411							
		2007-08	\$480							
Tamalpais Valley CSD	\$301	2005-06	\$421	\$301		\$0	2,560	\$301	\$770,560	
		2006-07	\$573							
		2007-08	\$711							
Average charge per EDU:								\$400	\$11,572,233	28,903
SASM	\$142			\$142	\$156	\$0	14,484	\$142	\$2,056,728	

Belvedere. Annexation to SD #5 effective 7-1-05. Thereafter, SD #5 will set the rates.

Terms and conditions of any political consolidation will require careful analysis to assure rate payer equity. The use of separate rate zones to temporarily segregate costs and allocate the use of reserves is central to maintaining ratepayer equity in consolidating sewer agencies. Eventually the consolidated utility may be able to move toward a unified rate structure.

6. Regarding opportunities for shared resources, the Commission determines:

The Study methodology screened a broad cross-section of potential functional collaboration areas for the Southern Marin Agencies and selected the following three collaboration areas for more detailed evaluation. Shared resources and staffing in areas like laboratory operations, pump station maintenance and so on

are one of the targeted areas, but the SSO/SSMP and capital program collaboration areas will also achieve savings through shared resources (e.g., integrated cleaning and inspection, pooled capital projects and construction management).

- **Sanitary Sewer Overflow(SSO)/Sanitary Sewer Management Plans (SSMP) Program Activities:** collaboration on the development of the required plan(s) and implementation of specific elements of the plan(s) to prevent and manage SSO events, including cleaning, TVing, and inspection of collection systems.
- **Capital Projects:** collaboration on the identification of and planning for capital projects; financing of capital projects, delivering design, construction services and construction management.
- **Shared Resources and Staffing:** collaboration on the sharing of specialized equipment and staff resources; access to resources and staff expertise not currently available to all agencies.

Shared resources savings represent a significant opportunity. The ten southern Marin agencies are in the process of adopting resolutions that commit sources and participation of each agency in collaboration efforts. Shared resources through collaboration have the potential to save up to \$1.3 million annually or 11% from the current \$12.3 million combined annual operating expenses and capital spending costs. Shared resources have the potential to save up to \$1.8 million or 12% annually from the projected \$15.5 million combined annual operating expense and capital spending budget.

In addition, there are non-financial benefits that may be achieved through shared resources. Examples include improved employee career paths, improved staff skills and knowledge, better customer service levels and more rigorous inspection of field construction and service activities.

7. Regarding government structure options, including advantages and disadvantages of consolidation or reorganization of the service providers, the Commission determines:

The Study methodology also screened a number of political consolidations. The following two were selected for a more detailed evaluation. Modeled after the City of Belvedere annexation by Sanitary District No.5, the GSO-1 and GSO-2 consolidated sanitary districts would be responsible for the collection sewers sending wastewater to the SASM and SMCS D treatment plants respectively. The advantages and disadvantages of Alternatives GSO-1 and GSO-2 are summarized in the tables below.

- **Government Structure Option 1 (GSO-1):** SASM Integrated Sanitary District Consolidation of current SASM agencies into a single integrated sanitary district, including the portion of TCSD collection system that flows to the SASM wastewater treatment plant
- **Government Structure Option 2 (GSO-2):** SMCSM Integrated Sanitary District Expansion of the Sausalito Marin City Sanitary District (SMCSM) to include the City of Sausalito's collection system and that portion of the TCSD service area that flows to the SMCSM wastewater treatment plant.

Advantages and Disadvantages of GSO-1 Political Consolidation

Advantages	Disadvantages/Issues/Barriers
<ul style="list-style-type: none"> ▪ Higher resource productivity for sewer collection maintenance, cleaning, inspection and SSMP program management ▪ Higher resource productivity for Pump Station Maintenance and related mechanical, electrical/instrumentation maintenance ▪ Potential for staff specialists/crews if cost savings over contractor – higher work volume (e.g., electrical/instrumentation maintenance and sewer inspection) ▪ Consolidation of GM positions ▪ Career path resulting from expanded staff ▪ More efficient 24/7 off-shift coverage, relief staffing and emergency response capability from larger staff. ▪ Better regional sewer service integration for Southern Marin as well as coordinated management of watershed environmental impacts ▪ Builds on successful SASM JPA ▪ More staff and financial resources to address future program needs and capital investments (e.g., SSO/SSMP, regional water quality) 	<ul style="list-style-type: none"> ▪ Staff transitions issues (salaries, tenure, role in new organization, retirement) ▪ Differences in infrastructure condition and future capital investment requirements for replacement/rehabilitation ▪ Sewer rate differences, including phase out of property tax contribution ▪ Stakeholder opinion- perceived loss of local control ▪ Transition of existing debt/bond issue obligations ▪ LAFCO cannot enact consolidations ▪ Implementation issue of multiple corporate yards must be addressed ▪ Treatment of reserves and dispensation must be addressed ▪ Disparity of geographic rate assignments for different needs, e.g. TCSD ▪ Retention of local area expertise & knowledge becomes a potential issue ▪ Likelihood of existing boundaries continuing despite the consolidations

The potential capital and operating costs savings (future basis) with GSO-2 SASM Agency Consolidation (2005\$ per Equivalent Dwelling Unit.) is up to \$50/EDU.

Advantages and Disadvantages of Potential Political Consolidation GSO-2

Advantages	Disadvantages/Issues/Barriers
<ul style="list-style-type: none"> ▪ Higher resource productivity for sewer collection maintenance, cleaning, inspection and SSMP program management ▪ Higher resource productivity for Pump Station Maintenance and related mechanical, electrical/instrumentation maintenance ▪ Potential for staff specialists/crews if cost savings over contractor – higher work volume (e.g., electrical/instrumentation maintenance and sewer inspection) ▪ Career path resulting from expanded staff ▪ More efficient 24/7 off-shift coverage, relief staffing and emergency response capability from larger staff. ▪ Better regional sewer service integration for Southern Marin ▪ Provide TCSD ratepayers with board representation ▪ More staff and financial resources to address future program needs and capital investments (e.g., SSO/SSMP, regional water quality) ▪ Move toward integrated regional management of sewage collection and treatment 	<ul style="list-style-type: none"> ▪ Staff transition issues (salaries, tenure, role in new organization, retirement) ▪ Differences in infrastructure condition and future capital investment requirements for replacement/rehabilitation ▪ Sewer rate differences, including phase out of property tax contribution ▪ Stakeholder opinion regarding possibility for loss of local control ▪ Transition of existing debt/bond issue obligations ▪ TCSD staffing transition because of multi-functional roles ▪ Stranded management and costs in both the City of Sausalito and TCSD ▪ Negotiation of equitable asset transfer costs and/or stranded asset investments (e.g., cleaning equipment if activities is outsourced and not staffed)

The potential capital and operating costs savings (future basis) with GSO-1 SMCS Agency Consolidation (2005\$ per Equivalent Dwelling Unit.) is up to \$30/EDU.

It should be noted that political consolidation is very unlikely unless there is successful prior functional collaboration. There are clearly major issues/barriers to overcome as illustrated in the above tables. The pathway to political restructuring is through a track record of successful collaborations that builds trust and relationships among the stakeholders.

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

The management and staffing resources of the current decentralized sewer services agency are inefficiently deployed. Management, operations and administrative staffing redundancy are inherent in the existing decentralized, multi-agency structure. Some needed skills or agency capabilities are not available (e.g., human resources, training) to small organizations due to budget constraints. The same is true of the deployment of vehicle and equipment fleets. External services contracts such as Roto Rooter are negotiated from a disadvantageous contract size basis. Construction projects are smaller so the design, mobilization/demobilization and construction management costs are a higher percentage of total project cost. The Study estimated a management and staffing savings potential of over \$900,000 annually was feasible under alternative organizational alternatives.

Reaching this level of efficiency may require some significant capital investments, for example in Supervisory Control and Data Acquisition (SCADA) software to automate the treatment plants and permit unattended off-shift operations. Also, staffing consolidations in public sector organizations are best done through attrition rather than a planned workforce reduction.

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

The six independent sanitary districts in southern Marin are each governed by independent, five-member boards of directors. Board members receive stipends of \$75 to \$100 per monthly meeting for their service. The appointed members of the SASM board receive no additional compensation. City council and community service district board members receive no separate stipend for the sewer services provided by their general-purpose agencies.

The level of public participation in matters relating to sewer service in southern Marin is very low for the cities, special districts and SASM. Public attendance at board meetings is rare. Public information on sewer operations through budgets, audits, progress reports and websites is not widely distributed. Exceptions to this general pattern include recent capital improvement planning and rate review processes undertaken by Sausalito-Marín City, and Homestead Valley Sanitary Districts and the Tamalpais CSD in the last three years.

Since 1990, members of the six sanitary district governing boards have stood for election only five times in a total of 33 possible elections. In all other instances, seats were filled by appointment or re-appointment. At an election rate of 15%, sanitary districts have by far the lowest rate of contested elections among local governments in southern Marin as shown in the table below. Among collection-only sanitary districts (Alto, Almonte, Homestead Valley and Richardson Bay), the contested elections rate is under 10%. Political participation in selection of governing board membership is generally higher in other types of local government units as shown in the table. Some sanitary districts do not budget for election costs, given the infrequency of contested elections.

Table 15
Contested Elections Since 1990
by Agency Type

Type of Agency	Possible Elections Since 1990	Contested Elections	Percent Contested
Cities	23	18	78%
Community Service Districts	12	7	58%
Sanitary Districts	33	5	15%
Fire Districts	7	2	29%
Recreation Districts	6	3	50%
Water District	13	7	54%

The two cities, Tamalpais CSD and four of the six sanitary districts are collection-only sewer agencies. The greater part of their annual sewer service expenditures goes to the cost of contract treatment service by an external organization. The operation and maintenance of a collection system generally does not create issues requiring the policy guidance of an elected board on a month-to-month basis, particularly in areas of small area and population.

All eleven sewer agencies adopt budgets and hold regular public meetings. Three of the collection-only sanitary districts (Alto, Almonte and Homestead Valley) maintain no office facilities and are accessible only through a telephone answering machine. All agencies except SASM obtain billing services from the County of Marin as part of the County's property tax collection system.

Public communication and outreach with respect to sewer service is most critical during consideration of rate increases and funding for capital improvements. The Sausalito-Marín City Sanitary District undertook extensive public outreach efforts to communicate its recently adopted capital improvement program and the associated rate increase. Homestead Valley Sanitary District held a widely-noticed special meeting before adopting a rate increase to fund replacement of deteriorated portions of its collection system.

In the absence of rate increases or other special events, the implementation of newsletters and other means of customer communications media is not considered as justified by the six sanitary districts which rely on external local newspapers for meeting notices and other communications. The three cities and TCSD are able to include communication on sewer service matters as a part of their own more general customer outreach efforts.

The local control over a municipal service afforded by a special district board is meaningful if the scope of activities and decisions of that governing board are known to the public and attract participation by constituents. Where this is not the case because the district's service role is very limited or the budget is small or the governing board's discretion over spending is very narrow, local control has little practical meaning. The political accountability of agencies of very small size or limited scope of service may be improved if consolidation would create a larger, more capable organization with a more prominent presence in the community and an enhanced ability to communicate effectively with the public.

Fewer and larger organizations with full-time staff capabilities would be better able to maintain public awareness, access to information and increased participation at lower cost. Continued segmentation of sewer service between collection and treatment functions and between very small neighborhood areas no longer adds value to the provision of this service.

ATTACHMENT 3

Assembly Bill No. 1232

CHAPTER 518

An act to add Section 56375.2 to the Government Code, relating to local government.

[Filed with Secretary of State October 11, 2009.]

LEGISLATIVE COUNSEL'S DIGEST

AB 1232, Huffman. Local agency formation commissions: powers and duties.

Existing law requires the local agency formation commission in each county to, among other things, review and approve or disapprove proposals for changes of organization, or reorganization, and authorizes the commission to initiate proposals for the formation, consolidation, or dissolution of a district, a merger, or the establishment of a subsidiary district, as specified.

This bill would, on and after January 1, 2011, authorize the Marin County Local Agency Formation Commission to initiate and approve the reorganization or consolidation of the Sewerage Agency of Southern Marin (SASM) and its member districts, and would also authorize the commission to require SASM and its member districts to pay the commission's costs associated with the reorganization or consolidation.

The people of the State of California do enact as follows:

SECTION 1. The Legislature hereby finds and declares the following:

(a) The federal Clean Water Act prohibits the discharge of pollutants into waters of the United States except in compliance with various sections of that act, including permits for treated discharge of wastewater.

(b) Wastewater sewer systems collect, transport, and treat wastewater sewage. However, illegal sewage spills of raw or partially treated sewage are a serious problem in aging sewer systems and are commonly caused by severe weather and improper system operation and maintenance.

(c) The United States Environmental Protection Agency estimates that there are at least 40,000 sewage spills each year. The sewage from these spills can contaminate surface and groundwater, causing serious water quality problems.

(d) Untreated sewage discharged into San Francisco Bay can cause significant harm to an estuary that supports large numbers of birds, fish, and wildlife, including threatened and endangered species. The bay and estuary are also linked to the water supply for over two-thirds of the state's population.

(e) The United States Environmental Protection Agency reports that from 2004 to early 2008, the Sewerage Agency of Southern Marin (SASM) and its six member districts had over 200 illegal sewage spills.

(f) On January 25, 2008, in Marin County, SASM illegally spilled over 2.5 million gallons of raw and partially treated sewage to the San Francisco Bay. As a result of this illegal spill, the United States Environmental Protection Agency and the San Francisco Bay Regional Water Quality Control Board issued violation notices and required operational improvements and payment of one million six hundred thousand dollars (\$1,600,000) in fines.

(g) The Marin County Grand Jury reviewed and reported on the southern Marin sewage problem in 2004, and again in 2009. The Grand Jury recommended in their 2009 report that "SASM and its six member districts consolidate into one central agency with a single budget and staff" and indicated that consolidation could occur gradually, but planning should begin now.

(h) The Marin Local Area Formation Commission (LAFCO), in preparation for the 2005 Municipal Service Review, conducted an evaluation of the southern Marin sewer agencies. The study concluded that there is a strong and positive case for southern Marin sewer agencies to initially pursue more collaborative working relationships, and to secondly pursue political and governance consolidations in order to achieve improvements in efficiency and effectiveness and reduce demands for budget increases.

(i) It is the intent of the Legislature that SASM and its member districts take action immediately to increase the effectiveness and efficiency of its operations in order to provide more cost-effective customer service and to reduce the impacts on water quality due to illegal sewage spills. It is also the intent of the Legislature that if SASM and its member districts do not act to address the inefficiencies of their operations, that the Marin LAFCO shall have the authority to require consolidation of SASM and its member districts into one new district.

SEC. 2. Section 56375.2 is added to the Government Code, to read:

56375.2. (a) In addition to those powers enumerated in Section 56375, the Marin Local Area Formation Commission may initiate and approve, after notice and hearing, a reorganization or consolidation of the Sewerage Agency of Southern Marin and its member districts, without protest hearings.

(b) If the commission initiates and approves the reorganization or consolidation pursuant to subdivision (a), the commission may impose terms and conditions on the reorganization or consolidation that would require the Sewerage Agency of Southern Marin and its member agencies to be responsible for payment of the commission's costs incurred in association with the reorganization or consolidation.

(c) This section shall become effective on January 1, 2011.

SEC. 3. The Legislature finds and declares that, because of the unique circumstances applicable to the County of Marin, a statute of general applicability cannot be enacted within the meaning of subdivision (b) of

Section 16 of Article IV of the California Constitution. Therefore, this special statute is necessary.

O

ATTACHMENT 4

Resolution No. 2005-07

Sanitary District No. 5 of Marin County

Resolution Declaring Intent to Explore and Implement Opportunities for Functional Collaboration with Other Southern Marin Wastewater Service Providers

The Board of Directors of the Sanitary District No. 5 of Marin County finds and determines as follows:

1. The following ten public agencies provide the majority of wastewater collection, treatment, reclamation and disposal of wastewater generated in Southern Marin County:
 - 1.1. Almonte Sanitary District
 - 1.2. Alto Sanitary District
 - 1.3. City of Mill Valley
 - 1.4. City of Sausalito
 - 1.5. Homestead Valley Sanitary District
 - 1.6. Richardson Bay Sanitary District
 - 1.7. Sanitary District No. 5 of Marin County
 - 1.8. Sausalito/Marin City Sanitary District
 - 1.9. Sewerage Agency of Southern Marin
 - 1.10. Tamalpais Community Services District
2. Representatives of these ten agencies have met on several occasions over the course of the past two years and have agreed in principle to work together in a collaborative way to further improve the way that wastewater services are provided to their constituents.
3. Representatives of these ten agencies have identified and agreed to the following common interests:
 - 3.1. Efficient use of resources.
 - 3.2. Protect the environment.
 - 3.3. Cost effective solutions.
 - 3.4. Compliance with laws and regulations.
 - 3.5. Access to resources.
 - 3.6. Protect ratepayers interests.
 - 3.7. Provide best service possible to constituents.
4. Representatives of these ten agencies have agreed that functional collaboration between them in the performance of certain elements of their operations warrant further consideration, including the following:
 - 4.1. Sewer System Management Plans (SSMP) and sewer system maintenance. Collaboration on the development of the required plan(s) and implementation of specific elements of the plan(s) to prevent and manage Sanitary Sewer Overflow (SSO) events including cleaning, televising, and inspection of collection systems.
 - 4.2. Capital projects. Collaboration on the identification of and planning for capital projects; financing

of capital projects; delivering design, construction services and construction management.

4.3. Shared resources and staffing.

Collaboration on the staffing of specialized equipment and staff resources; access to resources and staff expertise not currently available to all agencies.

The Board of Directors of Sanitary District No. 5 of Marin County therefore resolves to explore and implement functional collaboration options as described in the findings of this resolution, and any other opportunities for collaboration which may from time to time be found to be advantageous to Sanitary District No. 5 of Marin County and other public agencies, by:

1. Participating in the formation of a Steering Committee.
2. Participating in the development of a list of target activities.
3. Participating on subcommittees and working groups.
4. Participating in the development of a decision making process.
5. Receiving and reviewing progress reports at least twice per year.
6. Seeking an implementation framework for feasible options. Joint Powers Agreements will be considered.
7. Establishing an initial time frame of three years to complete the exploration and implementation of feasible collaborative efforts.

This resolution does not commit the District to any course of action and has no fiscal impact.

Adopted by the Board of Directors of Sanitary District No. 5 of Marin County, at its regular meeting thereof, held on the 20th day of September, 2005, by the following vote:

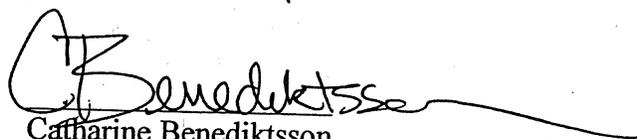
Ayes, in favor thereof, Directors: Catharine Benediktsson, Richard Weinstein, Fred C. Hannahs, Casey Kawamoto

Noes, Directors: None

Abstain, Directors: None

Absent, Directors: Peter Hoyt Berg

Approved:


Catharine Benediktsson
President, Board of Directors

Attest:


Richard Weinstein
Secretary, Board of Directors

ATTACHMENT 5

SASM January 2008 Spill Investigation Report

I. BACKGROUND

During January 2008, the Sewerage Agency of Southern Marin (SASM) reported two storm-related spill events from SASM's Wastewater Treatment Plant (WWTP) located at 450 Sycamore Street, Mill Valley, CA. This WWTP (including SASM's associated wastewater collection system) is regulated by the San Francisco Bay Regional Water Quality Control Board (Regional Water Board) under its Order No. R2-2007-0056 (NPDES Permit No. CA0037711) and the Regional Water Board's Water Quality Control Plan (**Attachment 1**). Additionally, SASM's six satellite collection systems are also regulated under the State Water Resources Control Board's (SWRCB or State Water Board) General Waste Discharge Requirements for Sanitary Sewer Systems (Order No. 2006-0003 DWQ) (**Attachment 2**).

Between 18:00 hours and midnight on January 25, 2008, SASM by-passed 2.45 million gallons (MG) of screened sewage influent to the equalization ponds (also referred to as emergency storage ponds) and then to Pickleweed Inlet, which is connected to Richardson Bay. Although the Regional Water Board was notified of this spill via e-mail on January 26, 2008, the e-mail misreported the date of the spill as January 15, 2008; however, SASM's January 28, 2008 follow-up report correctly reported the date of the spill as January 25, 2008 (**Attachment 3**). SASM did not sample the spill or the receiving water. Regional Water Board staff indicated in an email dated January 28 in response to this spill report that SASM would have needed to sample for overflow and receiving water according to the permit (**Attachment 3**). SASM did not reply.

Between 17:30 and 20:30 hours on January 31, 2008, another incident at SASM resulted in a spill of partially treated (screened only) wastewater to Pickleweed Inlet, a near shore, shallow water body adjacent to Richardson Bay. SASM initially reported the volume of the spill as 2.7 MG (**Attachment 4**); however, they revised that estimate on February 23, 2008 to 0.962 MG (**Attachment 5**). According to the notes taken by a Regional Water Board representative who was on site on February 1, 2008, the Regional Water Board, Marin County Health Department and the Department of Fish and Game inspected the spill location and receiving water on February 1, 2008 but observed no visible evidence of the spill, or immediate impacts to aquatic life (**Attachment 6**). Marin County Health Department took receiving water samples and posted signage warnings against human contact with the water, and closed public beaches until February 6, 2008 (**Attachment 7**).

In response to the State and Regional Water Boards' requests to investigate SASM spills, on February 7, 2008, State Water Board's Office of Enforcement, EPA Region 9, and Regional Water Board staff visited the site to interview the WWTP staff about both incidents.

The following individuals were present at the WWTP during February 7, 2008 visit.

Name	Title	Organization	Phone Number
Steven Danehy	General Manager	SASM	415-388-2402 (Ext. 16)
John Ehni	WWTP Operator	SASM	415-877-0179
Roger Paskett	WWTP Operator	SASM	415-729-6082 (cell)
Mike Aries	Maintenance Manager	SASM	415-877-0180 (cell)
Greg Arthur	Env. Engineer	USEPA	415-972-3504
Lila Tang	Sr. WRCE	RWQCB	510-622-2425
Karol Enferadi	Eng. Geologist	SWRCB	916-327-8363
Boris Trgovcich	WRCE Engineer	SWRCB	916-341-5893

On February 8, 2008, the Regional Water Board issued Cleanup and Abatement Order No. R2-2008-0010 to SASM that requires the submission of records related to the January spills.

On March 5, 2008, the Office of Enforcement staff was on-site for continued fact finding about both incidents.

The following individuals were present at the WWTP during part or the entire March 5, 2008 visit.

Name	Title	Organization	Phone Number
Steven Danehy	General Manager	SASM	415-388-2402 (Ext.16)
Dennis Parker	WWTP Operator	SASM	415-877-0179
Roger Paskett	WWTP Operator	SASM	415-877-0179
Elizabeth Falejczyk	Laboratory Director	SASM	415-877-0179
Gregory Broderick	Attorney	Downey Brand	916-444-1000 (Ext.6277)
Robert Smith	Consultant	Larry Walker	530-753-6400
		Assoc	
Karol Enferadi	Eng. Geologist	SWRCB	916-327-8363
Richard McHenry	Sr. WRCE	SWRCB	916-341-5773

On March 5, 2008, the Office of Enforcement staff also met with and interviewed the owner of Redwood Security Systems, Inc., Mr. Robert Nagy, at the business office located at 166 Almonte Street, Mill Valley, CA (415-388-5355). Mr. Nagy met with, answered questions and provided copies of the alarm and call logs for the January 25 and 31, 2008 storm events.

Subsequent to these visits, additional phone discussions were conducted with Mr. Danehy, Mr. Nagy, and Mr. Declan Grant, General Manager for Redwood Security Systems.

II. INVESTIGATION OBJECTIVES

The primary objectives of this investigation include:

1. Determination of the cause(s) of the two spills;
2. Evaluation of SASM's spill response following these two incidents;
3. Evaluation of the operation and maintenance procedures at the SASM WWTP; and
4. Determination of SASM's compliance with the permit requirements pertaining to the January 25 and January 31, 2008 overflows.

This report is not intended to fully address other problems discovered during this investigation. However, some of the potentially significant problems are noted and may require further evaluation by the State and Regional Water Boards.

III. FACILITY DESCRIPTION

A. Wastewater Treatment Plant

The SASM WWTP is a secondary treatment facility designed for an Average Dry Weather Flow (ADWF) of 2.9 million gallons per day (MGD). This capacity was re-rated in 1988 to 3.6 MGD, which is the current permitted ADWF capacity. The design Peak Wet Weather Flow (PWWF) or maximum 24-hour average is listed in the Operation and Maintenance (O & M) Manual as 24.7 MGD. This is the maximum flow that the secondary treatment system can theoretically handle over a 24-hour period. The design peak hour flow is listed as 32.7 MGD.

Attachment 8 includes a plant schematic and some of the design criteria from the existing (O&M) Manual.

The effluent outfall is also rated at 32.7 MGD. The outfall terminates about 840 feet offshore in Raccoon Strait of Central San Francisco Bay at an 84-foot depth below mean sea level. However, SASM shares this outfall with another WWTP (operated by Marin County Sanitary District No. 5). According to the March 7, 1983 agreement between the two agencies (**Attachment 9**), SASM's share of the outfall capacity is limited to a maximum flow of 24.7 MGD. This is also SASM's effluent pumping capacity when all six effluent pumps are in operation. The practical consequence of this arrangement is that sustained flows above 25 MGD are likely to result in overflow and flooding of the SASM WWTP. The

actual flow that SASM can transport through this outfall may also be affected by tides and the gravity effluent flow from Sanitary District No. 5.

The WWTP treats domestic wastewater from six SASM member agencies: City of Mill Valley, Almonte Sanitary District, Alto Sanitary District, Homestead Valley Sanitary District, Richardson Bay Sanitary District, and the Kay Park Area of Tamalpais Community Services District. The present service area population is approximately 28,000. The member agencies finance the operation and maintenance of the WWTP in proportion to the number of Equivalent Dwelling Units (EDUs) in the service area. An EDU is equal to 200 gallons per day. Each agency's estimated share is listed in the January 27, 2000 "Restated Joint Exercise of Powers Agreement." This agreement also stipulates that each agency is responsible for the operation and maintenance of its own collection system (**Attachment 10**).

The treatment process consists of screening facilities, grit removal, primary sedimentation clarifiers, biological treatment using trickling filters, secondary clarification, chlorination, and dechlorination. Chlorine contact time occurs in the six-mile effluent force main line, and dechlorination occurs prior to entrance into the outfall by Marin County Sanitary District No. 5. The final effluent is combined with treated, disinfected, and dechlorinated effluent from Marin County Sanitary District No. 5 and discharged through the same outfall.

The actual average dry weather flows between 2002 and 2005 were in the range of 2.2 – 2.6 MGD. The City of Mill Valley and Richardson Bay Sanitary District are the two largest member agencies contributing 51% and 32% of the total flow, respectively.

Wet weather conditions can cause the influent flow to exceed 24.7 MGD or the design capacity of the biological treatment processes. Influent flows exceeding 24.7 MGD are diverted after screening to two earthen unlined equalization basins with a combined capacity of 1.9 MG. Above 24.7 MGD two dedicated influent pumps can pump the excess flow to the equalization basins at a maximum combined flow rate of about 12 MGD. After the high influent flows subside, the diverted flow is returned back to the headworks for full treatment. This wet weather operation protocol is consistent with the SASM WWTP's O & M Manual.

The equalization basins include an overflow pipe which leads directly to Pickleweed Inlet. This is an unpermitted discharge location. The pipe conveys excess influent (at this point just screened and diluted raw sewage) into Pickleweed Inlet when the flows exceed the plant's hydraulic capacity. This near shore, shallow water discharge pipe is the

old outfall line from an older treatment facility. The existing SASM treatment plant was upgraded in 1986.

IV. PERMIT REQUIREMENTS

During January 2008, the SASM WWTP and the collection system were regulated by Order No. R2-2007-0056, NPDES Permit No. CA0037711 (**Attachment 1**). In general, the permit states that the Discharger's collection system is part of the facility that is subject to the Order. Further, the Discharger must properly operate and maintain its collection system, report any noncompliance, and mitigate any discharge from the collection system in violation of this Order.

The collection system is also subject to the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (SWRCB Order No. 2006-0003-DWQ), which includes requirements for operation and maintenance of collections systems and for reporting and mitigating sanitary sewer overflows (SSOs)(**Attachment 2**).

The following are the excerpts from the two permits that may pertain to the January 2008 spills at SASM.

ORDER NO. R2-2007-0056 (NPDES PERMIT NO. CA0037711), states, in part, the following:

Section III – DISCHARGE PROHIBITIONS

- A. The discharge of treated wastewater at a location or in a manner different from that described in this order is prohibited.
- D. The bypass of untreated or partially treated wastewater to waters of the United States is prohibited, except as provided for in the conditions stated in 40 CFR 122.41(m)(4) and in A.12 [*sic*] of the Standard Provisions and Reporting Requirements for NPDES Surface Water Discharge permits, August 1993 (**Attachment G**).
- E. Any sanitary sewer overflow that results in a discharge of untreated or partially treated wastewater to waters of the United States is prohibited.

Section V – RECEIVING WATER LIMITATIONS

A. Surface Water Limitations

- 1. The discharge shall not cause the following conditions to exist in the waters of the State at any place:

- a. Floating, suspended, or deposited microscopic particulate matter or foam in concentrations that cause nuisance or adversely affect beneficial uses.
2. The discharge shall not cause nuisance or adversely affect the beneficial uses of the receiving water.

Section VI – PROVISIONS

C. Special Provisions

6. Construction, Operation and Maintenance Specifications

b. Operation and Maintenance Manual (O&M) Review and Status Reports

(2) The Discharger shall regularly review, revise, or update, as necessary, the O&M manual(s) so the documents(s) may remain useful and relevant to current equipment and operation practices. Review shall be conducted annually and revisions and updates shall be completed as necessary....

7. Special Provisions

b. Sanitary Sewer Overflows and Sewer System Management Plan:

The Discharger's collection system is part of the facility that is subject to this Order. As such, the Discharger must properly operate and maintain its collection system (Attachment D, Standard Provisions – Permit Compliance, subsection I. D). The Discharger must report any noncompliance (Attachment D, Standard Provision – Reporting, subsections V. E. 1 and V. E. 2) and mitigate any discharge from the Discharger's collection system in violation of this Order (Attachment D, Standard Provisions – Permit Compliance, subsection I. C). The General Waste Discharge Requirements for Collection System Agencies (Order No. 2006-0003 DWQ), has requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows. While the Discharger must comply with both the General Waste Discharge requirements for Collection system Agencies and this Order (General Collection System WDR) and this Order, the General Collection System WDR more clearly and specifically stipulates requirements for operation and maintenance and for reporting and mitigating sanitary sewer overflows. Implementation of the General Collection System WDR requirements for proper operation and

maintenance and mitigation of spills will satisfy the corresponding federal NPDES requirements specified in this Order. Following reporting requirements in the General Collection System WDR will satisfy NPDES reporting requirements for sewage spills. Furthermore, the Discharger shall comply with the schedule for development of sewer system management plans (SSMP's) as indicated in the letter issued by the Regional Water board on July 7, 2005, pursuant to Water Code Section 13267. Until the statewide on-line reporting system becomes operational, the Discharger shall report sanitary sewer overflows electronically according to the Regional Water Board's SSO reporting program.

c. Identification and Notification of Blending:

The Discharger shall install instrumentation no later than January 4, 2008; to indicate when blending occurs....

Attachment D – FEDERAL STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

D. Proper operation and maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Discharger to achieve compliance....

G. Bypass

1. Definitions

a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility [40 CFR 122.41(m)(1)(i)(4)].

3. Prohibition of bypasses - Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass unless

- a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- b. There were no feasible alternatives to the bypass...; and
- c. The Discharger submitted notice to the Regional Water Board....

**Attachment G – REGIONAL WATER BOARD STANDARD PROVISIONS
(Included in Order No. R2-2007-0056 at VI.A.2)**

A. GENERAL PROVISIONS

1. Neither the treatment nor the discharge of pollutants shall create a pollution, contamination, or nuisance as defined by Section 13050 of the California Water Code.
13. Bypass (the intentional diversion of waste streams from any portion of a treatment facility) is prohibited. The Board may take enforcement action against the discharger for plant bypass unless:
 - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage... ;
 - b. There were no feasible alternatives to the bypass,...; and
 - c. The discharger submitted advance notice of the need for a bypass to the Board. If the discharger knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass. The discharger shall submit notice of an unanticipated bypass as required by 40 CFR 122.41(l)(6) (24 hour notice), as required in paragraph E.6.d.

The discharger may allow a bypass to occur that does not cause effluent limitations to be exceeded, but only if it is for essential maintenance to assure efficient operation.

D. TREATMENT RELIABILITY

1. The discharger shall, at all times, properly operate and maintain all facilities and systems of treatment disposal and control (and related appurtenances) which are installed or used by the discharger to achieve compliance with this order and permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. All of these procedures shall be described in an Operation and Maintenance Manual. The discharger shall keep in a state of readiness all systems necessary to achieve compliance with the conditions of this order and permit. All systems, both those in service and reserve, shall be inspected and maintained on a regular basis. Records shall be kept of the tests and made available to the Board. [40 CFR 122.41(e)]

E. GENERAL REPORTING REQUIREMENTS

2. Should the discharger discover that it failed to submit any relevant facts or that it submitted incorrect information in any report, it shall

promptly submit the missing or correct information. [40 CFR 122.41(l)(8)]

**Attachment G -SELF-MONITORING PROGRAM, PART A, NPDES PERMITS
(Included in the Order No. R2-2007-0056 by reference in section VI.B)**

Section C. SPECIFICATIONS FOR SAMPLING AND ANALYSES

2. Effluent

- h. When any type of bypass occurs, composite samples shall be collected on a daily basis for all constituents at all affected discharge point which have effluent limits for the duration of the bypass.**

SWRCB ORDER NO. 2006-0003-DWQ

The following are the sections of the SWRCB's General WDRs pertaining to operation and maintenance of collection systems.

C. PROHIBITIONS

- 1. Any SSO that results in a discharge of untreated or partially treated wastewater to waters of the United States is prohibited.**
- 2. Any SSO that results in a discharge of untreated or partially treated wastewater that creates a nuisance as defined in California Water Code Section 13050(m) is prohibited.**

D. PROVISIONS

13(iv) Operation and Maintenance Program. The Sewer System Management Plan (SSMP) must include those elements listed below that are appropriate and applicable to the Enrollee's system:

(This section of the SWRCB's Order lists several specific requirements that the permittee is required to implement. A copy of the order is included in **Attachment 2**.)

SAN FRANCISCO BAY BASIN WATER QUALITY CONTROL PLAN (Amended January 18, 2007):

Section 4.2, Prohibition 5 at Table 4-1, which states in part:

"It shall be prohibited to discharge:

- 5. Any wastewater which has particular characteristics of concern to beneficial uses to ... Richardson Bay (between Sausalito Point and Peninsula Point)."**

V. DISCUSSION

A. January 25, 2008 Bypass

On Friday, January 25, 2008, a winter storm hit Marin County and the flows entering the SASM wastewater plant exceeded the plant capacity. According to SASM's January 2008 Self-Monitoring Report, the peak influent flow for that day was about 44 MGD (**Attachment 11**). Mr. Danehy's letter to the Regional Water Board dated January 28, 2008 states that the average and peak daily flows on January 25 were 11.62 and 44 MGD).

Flow charts indicate that the influent flow peaked at about 44 MGD between 14:00 and 15:00 hours and remained at a sustained flow rate of about 30 MGD between 15:00 hours and midnight (**Attachment 12**). The equalization basins started overflowing into the Pickleweed Inlet of Richardson Bay at about 18:00 hours.

From 18:00 hours to midnight on January 25th, approximately 2.45 MGD of screened, but untreated sewage overflowed to Pickleweed Inlet. Flow charts indicate that, during that period of time, effluent pumps were discharging about 23 MGD and continued to discharge at that rate until about 05:00 the following morning (**Attachment 13**). Mr. Danehy's report dated February 14, 2008 states that five of the six effluent pumps were in service (**Attachment 14**). The sole operator on duty during the day shift was the General Manager. The following two shifts were staffed by operators John Ehni and Roger Paskett.

Mr. Danehy notified the Regional Water Board of the bypass via e-mail the following morning but inadvertently reported the date of the spill as January 15, 2008. He did not submit a report of the bypass (within required 24 hours) to the Office of Emergency Services (OES) until February 6, 2008. The OES report of this event documents it as a 2.4 MGD emergency bypass (**Attachment 15**). SASM asserts the bypass complied with "the approved Operation and Maintenance plan" for the facility.

After the emergency ponds started overflowing at about 18:00, the operator on duty (John Ehni) was under the impression that a blend of primary and secondary effluent was discharged through the effluent outfall. He set up a composite sampler at about 19:30 hours and also collected grab samples. However, according to the laboratory director (**Attachment 16**), these samples were not collected at the appropriate location and most of them were not analyzed (although they were preserved and stored for a while). Subsequently, SASM determined that, based on the review of the

Recirculation Wet Well charts that blending did not occur because the water level in the wet well did not exceed 13 feet (**Attachment 14**).

A total coliform test performed on one grab sample resulted in 130 Most Probable Number (MPN)/100 ml, which was within the permit limit. However, this sample was taken at the normal designated effluent sampling point, Air Relief Valve #1 (**Attachment 16**), at 21:40 hours and did not include any of the bypassed untreated sewage.

In the event of a bypass event, the Laboratory Director had identified sampling stations in the marsh headlands, both up and downstream of the discharge. Nonetheless, the Laboratory Director was not present during this event but had prepared sample bottles in anticipation of another non-permitted blending event, not an emergency storage pond bypass. The lack of specific guidance or Standard Operating Procedures (SOPs) (including the safety precautions) for sampling during emergency situations was certainly a major factor that resulted in the failure to sample in accordance with the permit requirements.

For the January 25, 2008 bypass, SASM provided justification on March 26, 2008, that it was an allowed bypass exempt from Prohibition III.D. The Regional Water Board disagrees with SASM's conclusion and contends that SASM has violated Prohibition III.D based on the following rationale.

Prohibition III.D prohibits bypasses except as provided in 40 CFR 122.41(m)(4) and in A.13 of the permit's Attachment G. SASM's January 25, 2008 bypass does not meet all the conditions necessary for the exception to apply under either 40 CFR, or Attachment G section A.13.

40 CFR 122.41(m)(4) at (i) prohibits bypass, but (ii) allows an anticipated bypass if it meets the three conditions in (i) and after considering its adverse impacts. SASM fails to meet (ii) for an allowed bypass for two reasons: (1) it failed to provide prior notice which is one of the three conditions in 122.41(m)(4)(i), and (2) it failed to perform the required sampling to allow a full assessment of adverse impacts.

The sustained high influent flows in the hours preceding the January 25, 2008 bypass should have alerted SASM that a discharge from its equalization ponds would occur. SASM should have anticipated the bypass and provide notice to the Regional Water Board (and OES) much earlier than January 26. Thus, it failed to meet 122.41(m)(4)(i)(C) that requires submittal of "prior notice...of the bypass" for anticipated bypasses.

Even if it could be argued that SASM could not have anticipated the need for the bypass, because it did not perform the required sampling of the January 25, 2008 bypass, it is not possible to adequately consider adverse

impacts. Also, because the bypass did not receive any treatment beyond screening, it is possible that there could have been adverse impacts. Based on these two factors, a bypass under 40 CFR 122.41(m)(4)(ii) cannot be allowed.

Finally, Section A.13 of Attachment G, like 40 CFR 122.41(m)(4)(i), prohibits bypasses. The difference is that Section A.13 allows bypasses "only for essential maintenance to assure efficient operation" [consistent with 40 CFR 122.41(m)(2)]. The January 25, 2008 bypass was not for essential maintenance, so Section A.13 cannot be used as an exception for that bypass.

B. January 31, 2008 Overflow

According to the WWTP staff (Steven Danehy and John Ehni) the weather forecast for Thursday, January 31, 2008, called for light showers (**Attachment 17**) and approximately a half an inch of rain. Mr. Ehni, a Grade III operator, completed his day shift and went home at about 14:30 hours. The influent flow at that time was between 7 and 8 MGD (**Attachment 18**). Prior to leaving the facility Mr. Ehni left two of the six effluent pumps in the automatic position which was adequate for a flow of 14 MGD.

According to Mr. Danehy, when he left the plant at approximately 15:40 hours the flow was about 9 MGD. By that time the rain was steady and heavier than was predicted earlier in the day.

According to the plant records, the influent flow reached 18 MGD by 16:30 hours and an alarm signal was automatically sent out to the alarm company dispatcher (**Attachment 19**). The dispatcher called the normally scheduled on-call operator (Roger Paskett) and left messages at his home and on his cell phone. SASM operators stated that the dispatcher did not continue calling other operators on the list until finally reaching someone.

By about 17:30 hours, partially treated wastewater was overflowing the secondary treatment structures because the treated volume exceeded the capacity of the two effluent pumps that were on-line. According to Mr. Danehy, the wastewater flowed through the Corporation Yard parking lot, into the vehicle and equipment storage areas, into other out-buildings and eventually exited Corte Madera Creek via a storm drain. Corte Madera Creek empties a short distance below into Pickleweed inlet of Richardson Bay.

After a few hours at home Mr. Ehni realized that the rain was still coming down strong. Just before 20:00 hrs he decided to check the plant flows from his lap-top computer. When he noticed that the effluent pumps were

discharging 14 MGD (their full capacity) he immediately called Mr. Paskett. They both arrived to the plant within 15 minutes and noticed that the wastewater was flowing over the clarifier walls. They turned on the remaining effluent pumps, which stopped the overflow.

On that particular day, the operator "on-call duty" was supposed to be Mr. Roger Paskett, however, he had arranged with another operator, Mr. Dennis Parker, to cover for him that day. This change should not have affected the eventual outcome as long as the alarm company dispatcher followed existing notification procedures and called the next person on the list.

The overflow caused significant damage at the treatment plant, which required several days to clean up. The return sludge pumping facility located in the dry well near the secondary clarifiers was completely inundated. Both the Regional Water Board and OES were notified in a timely manner, however, no samples of the overflow were taken. Mr. Danehy stated that overflow and receiving water samples were not taken because of safety concerns.

The investigators, during their February 7, 2008 visit to the facility (good weather conditions) did not observe any obvious safety issues or hazardous terrain that would prevent sampling of the receiving water or the discharge from the emergency storage ponds. It appeared that the operators could have easily collected grab samples from the storage ponds.

Typically, during normal operation, the O&M Manual recommends that all of the pumps should be programmed according to a certain sequence and left in an automatic mode (**Attachment 20**). Following this procedure would be even more critical if the plant is not attended because it would ensure that the plant has available its entire pumping capacity during unexpectedly high flows.

According to Mr. Ehni, his decision to leave only two effluent pumps in the automatic mode involved consideration of several factors including the weather forecast, a mechanical problem with the wet well level control system associated with the effluent pump No. 6, and an out of service chlorination line.

Other plant staff acknowledged the problems with the hypochlorite line and the level control system (see the Maintenance Department section of this report for additional details). However, they also felt that the high flow on January 31, 2008 could have been handled properly despite these problems. Both Mr. Ehni and Mr. Danehy acknowledged that some errors in judgment were made during both events and they would accept their share of responsibility.

In retrospect, the prudent decision for January 31, 2008 would have been to have had at least one operator on duty during the entire day. The flows only briefly exceeded 26 MGD and could have been handled by the emergency storage ponds for a short period of time.

Even with no one at the plant, the duration of overflow could have been reduced significantly (by about 3 hours) if the alarm company had followed the SASM's alarm response instructions.

C. Other wet weather overflows/blending events

Flow data for the last three years indicate that flows in excess of the WWTP's design capacity are relatively common during wet weather conditions (**Attachment 21**). Between January 2004 and February 2008 maximum daily flows have exceeded 25 MGD on at least 17 occasions. It is unclear how often blending events occur and whether or not they result in violations of permit effluent limits.

The SASM WWTP Operations Log (**Attachment 22**) shows that all six effluent pumps were in service around noon on January 4, 2008. Influent flows to the plant on January 4, 2008 exceeded 25 MGD for about three hours and peaked at approximately 32 MGD (**Attachment 23**). Influent and effluent flow charts for this day strongly suggest a blending event occurred whereby flows in excess of 25 MG bypass the trickling filters to combine with secondary effluent.

There are no permit provisions that allow treatment units to be bypassed. SASM staff was aware that flow conditions resulting from the storm event on January 4, 2008 made it highly likely that blending occurred. After consultation with the General Manager, the Laboratory Director consulted with the Regional Water Board about the nature of sampling required during a blending event because both she and the General Manager felt the SASM permit is unclear on this point.

According to the Laboratory Director, the Regional Water Board contact instructed the Laboratory Director to follow the permit language in the Sausalito Permit about sampling a blended effluent (Regional Water Board staff subsequently instructed SASM to sample future blending events according to Section C.2.h of the Sampling and Monitoring Plan). The coliform sample test results for January 4, 2008 came back with >16,000 MPN/100 ml, exceeding the 10,000 MPN/100 ml daily maximum limit.

On December 30 and 31, 2005, a storm event resulted in a peak flow of 32.5 and 37 MGD, respectively. A 1.4 MGD bypass of screened, untreated sewage from the equalization ponds took place between 06:00 and 16:15

hours on December 31, 2005. There is no information about sampling and test results during this event.

D Redwood Security Systems, Inc., Procedures and Response:

According to Mr. Danehy, SASM contracted with the Redwood Security Systems (RSS) in 1999 to install an alarm transmitter at the treatment plant and connect it to a receiver at the County Communication Center (**Attachments 24 A and B**). At that time, the County was responsible for responding to the incoming alarms.

Subsequently (probably around February 2004), the County transferred all 90 county-wide alarms to RSS (**Attachment 24 C**). According to Mr. Danehy, SASM provided RSS with a call-out procedure and a list of operators designated as "primary responders" (**Attachment 25**). According to these instructions, after receiving an alarm, the RSS dispatcher is supposed to call WWTP operators on "call duty." If there is no response from the first responder within 10 minute, the dispatcher is supposed to call next responder on the list. If no response from the list, the dispatcher is supposed to call the General Manager (Mr. Danehy). Burglar alarms were supposed to be forwarded directly to the Mill Valley Police Department.

WWTP and RSS records indicate that, on January 31, 2008, RSS received a "non-burglar" alarm at 16:30. At 16:34 hours, the RSS dispatcher called the "on-call" operator, Mr. Paskett, and left a message on his home answering machine. At 16:45 hours, the dispatcher called and left a message on his cell phone (**Attachments 26 A and B**). There is no evidence that the dispatcher continued calling until reaching the General Manager (in accordance with the "*Alarm Response Instructions for Redwood Security*" provided by SASM).

The following discussion is included primarily because, after the January 31, 2008 spill, RSS owner/Vice President, Mr. Robert Nagy, denied that the "equipment failure" alarms were considered "emergency" alarms or that RSS had any contractual obligation to respond to those alarms because there was no written service agreement between RSS and SASM for monitoring alarms. He also stated that SASM is not billed for monitoring and response and that RSS was "doing the City a favor" by responding to alarms.

Mr. Nagy, interviewed during this investigation, stated that prior to January 31, 2008, RSS had no idea of the nature of the systems being monitored.

According to Mr. Nagy, the SASM circuits monitored by RSS are labeled "*trouble, wastewater equipment.*" RSS categorizes alarms with appropriate

response times and "trouble" alarms are not considered an emergency event. The response time is an hour plus, therefore not an emergency. Nagy stated that SASM never said their alarm was an emergency event. Because trouble signals are a common occurrence, RSS did not call further numbers on January 31.

Mr. Nagy also stated that RSS was charging SASM \$20 per month only for equipment maintenance and that RSS does not monitor alarms or emergency situations for \$20 per month. After we found RSS invoices showing that SASM was paying RSS \$65/month for equipment and burglar alarm service (**Attachment 27**), Mr. Nagy stated this was because RSS increased their rates.

Documentation provided by Mr. Nagy and one of his employee's statements do not entirely support Mr. Nagy's explanation. Mr. Nagy provided the investigators with a copy of the same "*Alarm Response Instructions for Redwood Security*" that we also obtained from SASM. Judging by the date stamp on the document (**Attachment 28**), Mr. Nagy's copy was received (updated) from SASM on November 5, 2007 via FAX. The instructions list the "primary responders" assigned to the "on call" duty between November 24, 2007 and February 13, 2009, instruct the dispatcher to call the primary responders, and if none of them respond, to call the SASM's General Manager.

RSS's General Manager, Mr. Declan Grant, stated on March 28, 2008, during a separate conversation with the investigators, that RSS's responsibility is to follow SASM's instructions. SASM periodically updates those instructions and sends them to RSS. When specifically asked if the dispatcher is required to continue calling until reaching a live person, Mr. Grant again referred us to SASM's instructions. He also noted that the dispatcher would have no idea which piece of equipment triggers the alarm since there may be numerous pieces of equipment connected to the same alarm relay. The dispatcher only sees a "blip" which indicates an alarm situation. Subsequent to this conversation, Mr. Danehy confirmed that the dispatcher would not know which piece of equipment triggered the alarm since there are 18 different alarms connected to the same relay (Attachment 29**).**

Mr. Nagy's explanation is also inconsistent with a February 18, 2004 SASM memo, (**Attachment 24 C**) documenting a conversation between SASM's former Chief Plant Operator (CPO) and Mr. Grant. The memo indicates that Mr. Grant understood that all WWTP alarms were to be treated as "true alarms." The same document shows that the Account No. 0009 was transferred from the County to RSS and that SASM provided RSS with updated alarm response instructions effective that same day.

Alarm and phone logs provided by Mr. Nagy also show that the dispatchers responded immediately (or within a few minutes) to the previous WWTP equipment alarms. For example, the alarm records for January 25, 2008, show that RSS called four numbers in an attempt to reach two operators (**Attachments 30 A and 30 B**). Two were answered by a live person and the response was that the operator would "reset the alarm."

The RSS phone log for the January 31 alarm response shows that RSS had dialed the on-call operator's home and cell numbers per the SASM written alarm instructions. The on-call operator of record was unavailable to answer because he had previously traded on-call status with a co-worker. The fact that the operators traded their duties for the day is irrelevant, as long as the dispatcher followed the written instructions (i.e. continues calling until someone is finally reached).

According to SASM, during the past year, RSS dispatchers called after hours on at least a dozen occasions in response to equipment alarms. Most of these alarms were related to low chlorine residual.

Another internal SASM memo and statements by Mr. Danehy indicate that, in the past, SASM had been generally satisfied with RSS's handling of alarm situations (**Attachment 31**).

Neither SASM nor RSS were able to provide a copy of a formal contract that defines the responsibility of each entity. In the absence of such a contract, it is possible that RSS does not legally have any contractual obligations to respond to incoming alarm signals from SASM. However, other facts indicate that both entities have certain expectations which, up to January 2008, had been fulfilled by both sides.

RSS acknowledged that all alarm functions for the entire County were transferred to RSS in 2004. This included the physical relocation of receiving equipment previously located at the County offices. A written contract between RSS and SASM dated 1985 shows that RSS agreed to provide alarm response and maintenance service at the WWTP for a quarterly fee of \$150 (**Attachment 32**). A 1999 contract shows that RSS is contractually obligated to maintain a transmitter (at the WWTP) and a receiver (located at the time at the County Communication Center) installed for SASM for \$20/month. Neither agency was able to provide a written agreement for specific alarm services since the County transferred its alarm response function to RSS.

However, RSS currently bills SASM \$195/quarter (\$65/month) for unspecified "service" at the WWTP (**Attachment 27**). One hundred twenty (\$120) of this fee is charged for "Site 1"; the remaining \$75/quarter is for "Site 2," which appears to be the burglar portion of the alarm. The address

for both sites is listed as the "Mill Valley Wastewater Treatment Plant." SASM has been paying for this service since at least early 2006. RSS' General Manager acknowledged that RSS provides service to SASM in accordance with the written instructions that SASM periodically updates and sends to RSS.

Since the January 31 spill, RSS' response procedures appeared to have changed slightly. The new procedure, dated February 5, 2008, and provided to us by Mr. Nagy requires the RSS dispatcher to first call Mr. Danehy followed by the on-call operators and maintenance staff (**Attachment 33**). If no one answers, the dispatcher is then required to call the sheriff. As of April 4, 2008, Mr. Danehy was not aware of this change and was puzzled why a recent alarm call from RSS went to him first.

E. Spill Response Procedures

SASM's internal spill reporting procedure has been updated three times since 1998. The last update was in October 2005 (**Attachment 34**). However, some of the information included in it is outdated or inaccurate. For example, Mr. David Coe is no longer the General Manager of SASM. Also, the permit requires sampling of any bypass for all constituents, while the spill response procedure requires limited sampling only for spills over 1000 gallons "when the overflow may imminently and substantially endanger human health or cause fish kills."

There are a number of other deficiencies in the internal spill reporting procedures. For example, sampling points are not clearly identified; spills of oil and hazardous materials are not addressed; different response and reporting procedures for spills, bypasses and blending situations are not addressed. Some of these are areas in which the treatment plant staff demonstrated varying degrees of failure and confusion during the January 25 and 31, 2008 overflow events.

In the event of a blending event, the Laboratory Director had identified sampling stations in the marsh headlands, both up and downstream of the effluent deep-water discharge point. The Laboratory Director states that the staff wasn't trained for sampling non-permitted occurrences. On January 25th, the written procedures for sampling consisted of "post-it notes." Nonetheless, the Laboratory Director was not present during this event but had prepared sample bottles in anticipation of another non-permitted blending event, not a holding basin bypass that discharged into Pickleweed Inlet, a different location from the effluent outfall.

The Regional Water Board's permit addresses the spill response and reporting requirement but a complete understanding of the permit's requirements requires a thorough review of the permit and several

attachments referenced in the main section of the permit. The operators apparently did not fully understand the permit sampling requirements during blending events or overflows. The Laboratory Director and the CPO were unclear on the permit's requirements regarding sampling during blending events and sought Regional Water Board's clarification around January 4, 2008. Regional Water Board staff initially misinformed them about the requirements but quickly realized their mistake and provided SASM with corrected information by January 8 (**Attachment 35**). The instructions basically directed SASM to sample for all pollutants with limits during blending events (Part A, Section C(2)(h) of the permit requirements).

F. WWTP Operation and Maintenance - Operations Department

We did not evaluate all the operational practices or any process control data to determine if the SASM's operating practices conform with the basic industry standards. Such evaluation is highly recommended to better assess the plant reliability, compliance with permit requirements and the condition and efficiency of the various unit processes. A brief review of the self-monitoring reports indicates that the facility occasionally violates its permit effluent limits but is otherwise in substantial compliance.

One problem noted during this investigation is general lack of standard operating procedures. This problem is discussed in more detail in other sections of this report.

The treatment plant is currently staffed by three operators and a Laboratory Director/Analyst (**Attachment 36**). Mr. Danehy is listed both as the General Manager and the Chief Plant Operator (CPO). The entire treatment plant staff felt that the facility is understaffed. They pointed out that, several years ago, the plant had a General Manager, a CPO, and a clerical assistant.

Mr. Danehy currently spends most of his time on managerial and clerical duties. This does not leave him much time to focus on the operational needs of the plant.

The fact that Mr. Danehy was a sole operator during the day shift on January 25, 2008 may also be an indicator of a staffing problem. According to Mr. Danehy, on Fridays and Mondays the plant is sometimes understaffed because of the 7-day coverage which stretches the staff resources. Vacations and sick days can add to the staffing problem.

Comparison of the 1996 and current organizational charts (**Attachment 37**) show that the total number of staff at the plant was higher in 1996 by at least four positions. The most significant difference in 1996 was that there were dedicated positions for a CPO and the lead maintenance mechanic.

Both of those positions have since been eliminated or combined with other positions. Although the average dry weather flows have not increased significantly since 1996, the plant currently requires more attention than before (see maintenance issues discussed below).

G. WWTP Maintenance Department

The maintenance department consists of a Maintenance Supervisor (Mr. Mike Aries), two maintenance mechanics, a mechanic's aide and a painter (**Attachment 36**). Instrumentation work is contracted out to Telstar, a private contractor. The maintenance staff performs most of the corrective maintenance.

The department is currently understaffed. According to Mr. Aries, he is short one mechanics' aide and it took him almost a year to replace the last experienced mechanic. He recalls having more staff when the facility was new and needed less attention. He can make up for some of the staffing shortage by contracting out some of the work.

His priorities at the plant are to keep the plant running by staying on top of the "fix it" work orders and securing a reliable parts inventory. The other important function of his department is preventive maintenance, some of which is shared by the operators.

When someone at the plant observes a problem, a work order is normally generated and the work is prioritized. The work is tracked through a computerized maintenance management system (MP2 software). However, most of the electrical and instrumentation work does not appear to be tracked by this system because the work on it is normally contracted out.

A partial review of the maintenance records shows that, as of February 2008, there were approximately 50 "open" work orders, some of them dating back to 2005 (**Attachment 38**). Most of them appeared to be related to deteriorating and rusting equipment. However, several of the more critical pieces of equipment also appeared on this list.

During the interviews with the plant staff, they noted that the operation of the effluent pumps was affected by two outstanding problems. However, neither of these problems appeared in the maintenance records.

The first was a defective microswitch associated with the wet well controller. This switch affects the operation of effluent pump No. 6 and the sequencing of some of the other pumps when operated in automatic mode. This problem was noted several months ago by Telstar and they recommended replacing the level controller with a Programmable Logic Controller.

Because the switch is considered part of the instrumentation, it did not appear as a work order in the maintenance management system.

The other problem was a broken hypochlorite line that feeds the disinfectant to the final effluent. There are two such lines feeding to the effluent pump station. Each is associated with three effluent pumps. With one line out of service, control of chlorine and chlorine residual becomes more difficult when all the pumps are operating in the automatic mode. Although this does not appear to be a significant problem during normal flows, it did affect Mr. Ehni's decision making process when he decided to leave only two pumps in the automatic mode on January 31. This item also did not appear as a work order, apparently as a result of poor communication between the maintenance and operations staff.

These omissions raise a question about the accuracy and completeness of the maintenance records. Another indicator of this problem is the frequent discrepancies in the "Request" and "Completion" dates on the completed work orders. Quite frequently, it appears that a work order was completed before it was issued (**Attachment 39**). It is unclear if these were simply typographical errors or if it is an indicator of a more serious problem.

Attachment 39 also indicates that some of the work orders issued in 2004-2006 took several months (in some cases more than two years) to complete.

H. Collection System Operation and Maintenance

The SASM collection system serves a population of about 28,000 via six satellite member agencies including: City of Mill Valley, Tamalpais Community Services District, Almonte Sanitary District, Alto Sanitary District, Homestead Valley Sanitary District, and Richardson Bay Sanitary District. SASM charges members for wastewater treatment and disposal based upon the number of connections within their system rather than by flow.

This investigation did not evaluate SASM's collection system condition or operation and maintenance program. Judging by the wet weather flows and the results of a 1983 Infiltration and Inflow (I/I) study and rehabilitation project, it is quite clear that the entire system is in poor condition and long **overdue for considerable replacement and rehabilitation.**

Judging by the extremely high I/I during the wet season, SASM's collection system had been in an unusually poor condition for more than twenty-five years. At some point, the discharger, including the satellite agencies, made a conscious decision to attempt and treat excessive I/I during wet season rather than repair and upgrade the collection system. This is evident by the

fact that the treatment plant was designed to treat an average dry weather flow of about 2.9 MGD, and a peak wet weather flow of about 24.7 MGD (a peaking factor of 8.5). Typically, similar plants are designed with peaking factors of between 2 and 5, with a peaking factor of 5 considered unusually high.

The State and Regional Water Boards tacitly approved this strategy by providing grant funding in 1983 to eliminate only 28% of I/I and treat the remaining 72% (**Attachment 40**). At the time that strategy was considered a "cost effective" way of dealing with excessive I/I. Since 1983 there is no evidence that SASM engaged in major replacement or rehabilitation of its aging and deteriorating collection system.

In October 2007, USEPA Region 9 and its contractor inspected five of the six SASM member sanitary sewer systems and interviewed facility representatives to document the history of sewage spills, identify spill response and prevention programs, sewer maintenance activities and the accuracy and reliability of their spill reporting procedures.

Based on the USEPA's assessment of the SASM's collection system, it appears that most of the maintenance work on the collection system is reactive rather than proactive. Such work is generally performed by contractors such as Roto Rooter with which the Districts do not have formal written agreements or procedures. It is clear that SASM and its satellite agencies are not in compliance with the permit's provisions pertaining to operation and maintenance of the collection system (Section C. VI.7.b). SASM and its satellite agencies still have approximately one year to comply with the Sewer System Management Plan (SSMP) required by the Statewide General WDRs (Provision D. 13).

The USEPA's reported findings were published February 11, 2008 (**Attachment 41**) and are summarized below.

1. USEPA Findings on SASM Collection System

The SASM Sanitary Sewer District owns and operates about five miles of mostly gravity sewer, sections of force main, and six lift stations in Mill Valley. Roto-Rooter and Roy's Sewer Service handle system maintenance and spill response.

SASM does not have the equipment to respond to and contain spills and mitigate the impacts per Part D(3) of WQO No. 2006-0003. The average distance between SASM and Roto-Rooter in Novato is about 18 miles and the typical response time is about one hour. The lack of equipment and formal written agreements does not appear to be in compliance with

requirements, and SASM appears ill prepared to respond to a spill, catastrophic or otherwise.

In December 2004, the SASM WWTP experienced problems with total suspended solids during periods of heavy rainfall and with conductivity during periods of high tides. These problems are typically associated with infiltration and inflow (I&I) issues within a collection system.

SASM reported three sewage spills in 2005 and no spills in either 2006 or 2007. Reported spills totaled about 7,700 gallons of sewage reaching the waters of the State. SASM failed to maintain adequate records for past reported spills. There were no records or documentation of past spills apart from contractor billing invoices.

When the State mandated reporting of SSO information in May 2007, SASM personnel entered required information directly into the State's website and did not retain supporting records. Very little documentation exists of spills prior to October 2007 when SASM initiated the use of a SASM Overflow Report.

2. USEPA Findings on Tamalpais Community Services District

The Tamalpais Community Services District owns and operates 27 miles of gravity sewer pipes, about one mile of force main and two pump stations. Two pump stations were under construction in August 2007. District staff state that a large percentage of the collection system is made of clay and was installed in the 1950s – 1960s. Private easements make on-going maintenance difficult. Roto-Rooter responds to off-hour sanitary sewer issues.

Only sewage from a small subdivision, Kay Park, is pumped to the SASM WWTP for treatment and disposal. The remainder is pumped to the Sausalito-Marin Sanitary District for treatment and disposal. The quantity of flow directed to SASM is unmeasured; however Kay Park serves about 140 connections. District wide, there is a wet weather peaking factor of 2.5 to 3.

3. USEPA Findings on Richardson Bay Sanitary District

The Richardson Bay Sanitary District owns and operates about 40 miles of gravity sewer pipe, four miles of force main, 15 pump stations, and eight lift stations. There are 4,600 service connections within the Cities of Mill Valley and Tiburon.

The District representative gave current flow information about the SASM WWTP, and no relevant information about the District collection

system. The District has little or no incentive to investigate and minimize I&I impacts on the SASM WWTP because District treatment costs are based upon EDU's, not the volume of flow.

During normal business hours the District responds to all service calls, contacts the appropriate regulatory agency and submits spill reports. Since the District does not have appropriate equipment or procedures to effectively respond to or contain spills and mitigate impacts from SSO's, the District relies upon Roto-Rooter to contain spills, clear blockages, and clean-up impacted areas. Roto-Rooter's response time is about one hour from receipt of a customer call.

Although the District hired a contractor to televise all District sewer lines in 2003 and generate a defect report, the District has only allocated \$145,000 to sewer line rehabilitation over the next five years. The District has yet to prioritize or pursue remedies for identified effects. The majority of reported spills resulted from blockages directly related to operation and maintenance issues.

4. USEPA Findings on Homestead Valley Sanitary District

The Homestead Valley Sanitary District owns and operates about 11 miles of gravity sewer in the City of Mill Valley. There are about 1,000 service connections, including one fast food restaurant. Sewer maintenance, blockage and spill response is handled by Roto-Rooter.

The District does not have a method to estimate or measure base flow or the wet-weather flow being discharged to the SASM WWTP. Sewer maintenance, blockage and spill response is handled by Roto-Rooter with a 30 minute to one hour response time.

Sewage spills have occurred in the District but records are either missing or inadequate and under reporting appears likely. Three of six spills reported in the 2006 annual report exceeded 100 gallons but were not reported to the On-Line Database. The procedures used for estimating the spill volumes are based on the time Roto-Rooter arrived on site, not when the overflow was first identified and reported.

The District has not focused on correcting the significant I&I problems identified in the 1983/1984 collection system report because the District is billed by EDU's, and not by the volume of flow sent to the SASM WWTP. Majority of the SSO's were caused by tree root intrusion.

5. USEPA Findings on Alto Sanitary District

The Alto Sanitary District owns and operates about six miles of gravity sewer in Mill Valley. There are about 515 service connections, 25 of these are commercial. Sewer maintenance, blockage and spill response is handled by Roto-Rooter.

The District representative was unaware of wastewater flow from Alto to the SASM WWTP because SASM bills for treatment based upon the number of residential connections rather than flow. The District has not conducted I&I studies and does not budget funds for I&I control, although some funds are allocated for replacement of aging sewer lines.

The District does not have equipment or training to respond to and contain spills and mitigate the impacts. Sewer maintenance, blockage and spill response is handled by Roto-Rooter. Their response time is estimated to be from 30 minutes to one hour. Roto-Rooter would not respond to telephone inquiries to discuss their spill response procedures and/or their procedures for estimating spill volumes.

Two spills were only reported in the District's 2006 annual report, however, the sole documentation consisted of a Roto-Rooter one page report. Both spills were attributed to root intrusion. District documentation for 2006 and prior year spills are missing.

6. USEPA Findings on Almonte Sanitary District

The Almonte Sanitary District owns and operates about 5.5 miles of gravity sewer in Mill Valley. There are about 780 service connections that include three restaurants. The District estimates average dry weather flow at 0.11 – 0.13 MGD; wet weather peak flows are about 1 MGD with a peaking factor of 7.5-9. Sewer maintenance, blockage and spill response is handled by Roto-Rooter.

The District has not undertaken any activities to prevent I&I in the collection system because capacity has not been a major cause of spills and overflows for the District, and because the District is billed based on EDU's, and not on flow.

The District reported two sewage spills in 2005; three spills in 2006; and one spill between January and May 2007. All of the spills were the result of root intrusion which is directly related to operation and maintenance issues.

The District has no equipment or staff to contain or mitigate SSO's. Sewer maintenance, blockage and spill response is handled by Roto-

Rooter. Their response time typically ranges between 30 minutes to an hour. Roto-Rooter would not respond to telephone inquiries to discuss their spill response procedures.

VI. POTENTIAL PERMIT ISSUES

While the Discharger must comply with both the General Waste Discharge Requirements for Collection System Agencies and the NPDES permit, it is not clear which permit prevails in the case of a conflict. The General WDRs (Finding 11) states that NPDES permits that regulate sanitary sewer systems may be more stringent or more prescriptive. However, based on Section VI.C.7.b of the NPDES permit (parts of which are cited previously in this report) compliance with General WDRs also satisfies the NPDES permit requirements as it relates to the sewage collection system owned and operated by SASM.

It could be problematic that the Regional Water Board permit's Attachment C, Flow Schematic, identifies an emergency overflow line leading from the equalizations ponds to Richardson Bay. This may be interpreted to suggest that bypass of diluted raw sewage is an option. However, the permit's Prohibition III.D clearly prohibits such a discharge and SASM's violation of this prohibition is described in more detail in the section below entitled SASM's compliance with Permit Requirements. Also, the Regional Water Board's Basin Plan Prohibition 5 in Section 4.2 specifically prohibits wastewater discharges to Richardson Bay.

The SASM staff that was interviewed believed that the permit prohibits both the blending of primary and secondary effluents and overflows from the emergency storage ponds.

The compliance sampling points specified in the permit do not appear appropriate. For example, coliform samples should not be taken prior to dechlorination because excessive chlorine concentration in the effluent will not be fully neutralized by the dechlorinating agent in the sample bottle. In addition, most of the other samples should be collected at a location that is representative of the final effluent, which in this case is after dechlorination. However, SASM's effluent dechlorination is performed at the outfall, which is several miles away from the treatment plant.

Finally, the permit appears to be unnecessarily redundant. Some of the requirements are repeated in different sections of the permit with slightly different wording. For example, the permit includes two sets of Standard Provisions (one included as Attachment D, the other as Attachment G). Although both sets of Standard Provisions appear to be based on Federal Regulations, and generally include the same requirements, the wording and organization of two documents are significantly different.

VII. CONCLUSIONS

A. Cause of Overflows

The primary cause of the January 25, 2008, overflow was extremely high infiltration and inflow (I/I) into the sewage collection system. The I/I is caused by extremely poor condition of the SASM's ageing collection system. This is a serious chronic problem that had been neglected for the last 25 years. Similar incidents have occurred in the past and will likely continue in the future during the periods of heavy and prolonged rainfall.

The January 31, 2008 spill was caused primarily by operator error. The situation was exacerbated by high flows due to excessive I/I and the failure of the alarm company to follow the established alarm response procedures. However, had the operators made the appropriate decisions, the spill could have been completely avoided.

The operators' errors included:

- 1. With rain intensity increasing during the day (contrary the forecast that predicted light rain on January 31) the operator who took the responsibility to set the effluent pumps in the automatic mode did not leave an adequate number of pumps in service (automatic mode) prior to leaving the plant.**
- 2. The CPO who left the facility about an hour later (with influent flows steadily increasing), failed to check the effluent pump settings. Had he noticed before leaving that only two effluent pumps were going to be available, he could have programmed additional pumps into service or he could have made a decision to staff the next two shifts.**
- 3. With rain intensifying during the early afternoon hours, the plant should have been attended during all three shifts, or until the flows started subsiding.**
- 4. During both events, SASM failed to monitor and sample the discharge and the receiving water as required by the permit. Failure to collect the appropriate samples in a timely manner is an omission that is that is difficult to justify or excuse since only two weeks before the January 25 bypass both the Laboratory Director and the CPO had discussed sampling requirements with the Regional Water Board staff.**
- 5. The January 25 spill was misreported to the Regional Water Board (the date of the spill was initially reported as January 15) and was not reported at all to the OES until February 6, 2008. Upon inquiry by the Regional Water Board on January 28, SASM did not respond.**

The January 31 magnitude of the spill could have been significantly reduced if the alarm company followed the established instructions provided to them by SASM. The alarm company's failure to fully follow instructions prolonged the duration of the spill by at least three hours.

The alarm company (Redwood Security) owner denied any responsibility for responding to the SASM alarm signals pertaining to equipment failure claiming that these were not considered "emergency" alarms. Neither the alarm company nor SASM were able to provide a recent contractual agreement that specifies each party's legal obligations. However, available documentation and subsequent statements by the alarm company's General Manager showed that the alarm company's past actions established an expectation that it would respond to alarms per SASM's written instructions. Up to January 31, 2008, SASM staff was satisfied with the alarm company's responses to alarm situations.

It should be noted that, during our February 7, 2008 visit, the WWTP staff were very cooperative and responsive to investigators' requests for information. They acknowledged their mistakes and generally accepted responsibility for their actions.

B. Spill Response

In general, SASM's standard and emergency operating procedures are deficient and outdated. The operators are not fully familiar with the permit's reporting and sampling requirements.

During the January 25, 2008 bypass in particular, there appeared to be some confusion whether or not a blending of the primary and secondary effluent occurred and where and how to collect samples. This was an event that was predictable and there was ample time to prepare for emergency sampling, to consult with the Regional Water Board staff if necessary and to prepare for required notifications of designated agencies.

During both January 25 and January 31 incidents, additional staff should have been called to the treatment plant.

C. Operation and maintenance

The operator's decision to leave only two pumps in service was influenced by at least two maintenance issues (hypochlorite line and a broken microswitch associated with the wet well level controller) that had been neglected for an extended period of time. Had both of those pieces of equipment been fully functional, the operator's decision would have probably been quite different. Although the maintenance of the WWTP appeared to be satisfactory, the problems with these two items were not corrected in a timely manner.

The O & M manual for SASM's collection system is 25 years old and some of the information contained in it is either inaccurate or outdated. For example, there is a discrepancy between the current rated capacity and some design criteria. The pumping capacities stated in the manual are questionable in some cases. Emergency operating procedures are generally inadequate.

Staffing levels in both the operation and maintenance departments are lower now than they were a few years ago. There is a significant backlog of maintenance work orders, although, most of the major problems at the plant are being taken care of. The CPO should be sending most of his time on supervising operation and maintenance activities, updating procedures and monitoring process control data. Currently, most of his time is spent on clerical duties and those associated with his position as the General Manager.

D. SASM's Compliance With Permit Requirements

SASM and its member agencies are not in compliance with the NPDES permit requirements pertaining to the operation and maintenance of the collection system. Currently, there is no incentive to improve the condition of their collection systems because each agency pays its share of treatment costs based on the number of EDUs connected to the system and not the actual flow. The occasional spill, controlled bypass or blending event that occurs periodically during wet weather is typically justified as an event beyond the discharger's control.

The O&M requirements under the General WDRs are much more specific than the NPDES permit, however, they technically do not go into effect until about January 2009.

As noted above, SASM failed to comply with the NPDES permit's sampling requirements during both incidents. It also failed to notify OES during the January 25 incident.

Because all of the required samples were not taken during either spill event it would be difficult to assess compliance with all the effluent limits during both incidents or the extent of the spills' impact (if any) on the human health or the environment. However, depending on the extent of the infiltration (groundwater seeping into the collection system through damaged pipes or leaking pipe joints) there is a significant potential for the sewage to exfiltrate from the collection system's leaking pipes during the dry season. This process would be difficult to identify and the potential damage to the groundwater would depend on the depth of the groundwater and the volume of sewage escaping the system.

For the January 25 bypass, SASM provided justification on March 26, 2008, that it was an allowed bypass exempt from Prohibition III.D. The Regional Water Board disagrees with SASM's conclusion and contends that SASM has violated Prohibition III.D.

The leaky collection system may also be causing occasional violations of the effluent Total Dissolved Solids (TDS) limits as the high tides saturate the ground and force salt water into the collection system. This investigation did not attempt to evaluate SASM's past compliance with the permit's effluent limits.

E. Collection System Maintenance

Preventive maintenance of the collection system is almost non-existent. With each satellite agency being responsible for the maintenance of its own collection system there is generally very little attention or resources allocated to preventive maintenance and collection system rehabilitation. In 2003 – 2004, Marin County LAFCO published a report addressing these and other organizational deficiencies and suggested changes for the satellite agencies to improve maintenance and collection system problems.

Collection system problems such as spills and blockages are typically handled by contractors like Roto-Rooter. The contractor's staff generally responds to the spills and estimate and document the volume of the spill. The accuracy of such estimates is highly questionable since the estimates generally assume that the spill starts at the time it is reported or at the time the responders arrive to the site.

F. Permit Issues

The NPDES permit appears to be unnecessarily complicated, primarily because of numerous redundancies contained in it. For example, the permit includes two sets of Standard Provisions (one included as Attachment D, the other in attachment G). Although both sets of Standard Provisions basically state the same requirements the wording is often different.

Technically, sampling locations identified in the permit may not be consistent with the Federal Regulations. Generally, compliance samples should be representative of the final effluent (i.e. taken after the last treatment process). Sampling prior to dechlorination is not representative of the discharge. If this is not feasible, measures should be required to ensure that the alternate sampling location provides samples that are representative of the discharge as required by federal regulations [40 CFR 122.41(j)(1)].

On the issue of blending, the permit could be clarified. The permit prohibits bypass of untreated or partially treated wastewater (Discharge Prohibition III D). The permit also outlines specific monitoring and compliance requirements when this occurs. Blending involves the bypass of partially treated wastewater and is prohibited by the permit unless all the conditions specified in 40 CFR 122.41(m)(4) are met.

VIII. RECOMMENDATIONS

A. Future Spill/Bypass Prevention

SASM and its satellite collection system agencies must develop both short and long-term plans to significantly reduce the amount of I/I during wet weather periods.

SASM, including the satellite agencies, must comply with the General WDRs, particularly with the Sewer System Management Plan and the Time Schedule for implementing the plan.

SASM must develop standard operating procedures for both normal and emergency operating conditions including, but not limited to, spill response, operation of influent, effluent and recirculation pumps, blending events, sampling protocols and locations, collection system maintenance, emergency pond operation, and disinfection during unusually high flows.

SASM's staff and contractors that respond to collection system problems must be trained in spill response, estimation of spill volume and reporting procedures.

Both SASM and its contractors must maintain a complete and accurate record keeping system that documents all spill events and collection system problems.

B. Operation and Maintenance of the WWTP

Staffing levels in both the operation and maintenance departments should be increased. The agency should seriously consider establishing a dedicated Chief Plant Operator position rather than a combined CPO/General Manager position currently in place.

During heavy rains, the WWTP should be staffed 24-hours per day.

All effluent pumps must be fully operational in both automatic and manual modes.

The O & M Manual should be carefully reviewed and updated to reflect current conditions at the WWTP.

C. Permit Issues

The Regional Water Board should carefully review the current NPDES permit and eliminate potential ambiguities related to the emergency bypass line from the equalization ponds and conflicts with the General WDRs.

Requirements pertaining to sampling, reporting and bypass/blending issues should be consistent with Federal Regulations. The permit at Attachment C should be changed to clearly indicate that the equalization ponds' emergency overflow to Richardson Bay is prohibited.

D. Enforcement

The Water Board should take appropriate enforcement action for the January 25 and January 31, 2008, spills. Enforcement actions should include both actions to address the past violations (such as penalties or referrals for outside enforcement actions) and actions that assure future compliance (such as time schedules to ensure the above issues are addressed).

ATTACHMENT 6

Summary: Results of SASM & Member Agencies External Audit
 Larry Walker Associates, August 31, 2008

<u>Subject Area</u>	<u>Audit Finding</u>
Laboratory Operations	
Current Certificate	Category 1
Laboratory Staffing Level	Category 2
QA Program Manual	Category 1
Standard Operating Procedures	Category 2
Data Review by Peer Analyst	Category 2
Analyst Training	Category 2
Adherence to Sampling Methods	Category 1
Adherence to Analytical Methods	Category 1
Maintenance Program	Category 1
Treatment Plant Control & SCADA System	
Alarm Monitoring Software	Category 3
Data Analysis	Category 3
Data Review	Category 3
Pump Station Control System	Category 3
Standby Electrical Power Generating	Category 2
Treatment Plant Operation & Maintenance Procedures	
Policies	Category 3
Standard Operating Procedures	Category 3
Emergency Response Plans	Category 3
Spill Response Plans & Procedures	Category 2
Safety Program	Category 1
Employee Relations	Category 1
Organization Structure	Category 2
Staffing Plan & Positions	Category 2
Qualifications & Competency	Category 1
Training Program	Category 2
Work Environment	Category 2
Operations & Maintenance Manual	Category 3
Scheduling	Category 3
Communication	Category 1
Parts & Supplies Inventory	Category 1
Process Control	Category 1
Operations & Maintenance Manual	Category 3
Maintenance Management System	Category 3
Corrective Maintenance	Category 2
Predictive Maintenance	Category 2

Scheduling	Category 2
Communication	Category 1
Specifications, Manuals	Category 1
Parts & Supplies Inventory	Category 1
Critical Spare Parts	Category 3
Recordkeeping & Reporting	Category 3
Budget & Cost Tracking	Category 3

Peak Wet Weather Design Features

Influent Flow Measurement Capacity	Category 1
Influent Flow Measurement Metering	Category 3
Effluent Flow Measurement Facilities	Category 3
Influent Pumping Station	Category 1
Trickling Filter Pumping Station	Category 3
Effluent Pumping Station	Category 3
Screening Facilities	Category 1
Degritting Facilities	Category 1
Primary Sedimentation Tanks	Category 3
Trickling Filter	Category 1
Secondary Clarifiers	Category 3
Equalization Basins - volume	Category 3
Outlet Structure	Category 3
Chlorination System	Category 2

SASM Finances

Performance Measures	Category 1
Internal Audit/Financial Planning	Category 3
Regular Financial Reporting	Category 1
Long-term Financial Planning	Category 3
Expense Policies	Category 1
Online Financial & Performance Doc.	Category 3
Distribution of Infiltration/Inflow Costs	Category 3
Distribution of Basic Treatment Costs	Category 1
Legislative & Regulatory Tracking	Category 1
Summary of Budget	Category 3
CIP & Budget	Category 1
Accounting Basis	Category 3
Budgeted vs. Actual Figures	Category 3
Reserves & Operating Exp - Op. Ratio	Category 3
Emergency Reserve Fund & Policies	Category 3
Separate Emergency Reserve Funds	Category 3
Investment Policy	Category 1
Capital Demands/Debt - Long-term	Category 1

Debt Funding Policy	Category 3
Replacement Fund & Policies	Category 3
Capitalization Threshold	Category 1
Fixed Assets Inventory	Category 1
Debt Service Coverage Ratio	Category 1
Revenues - Assessment Levels	Category 3
Capacity/Impact Fees	Category 3
Rate Affordability	Category 1
Regular Assessment Increases	Category 3
Surcharge for Strength/High Flow	Category 3

SASM Collection System

Nature of 2008 Storm Events	Category 3
Member Agency Flow Contribution to Jan. 25 & 26 Peak Flow Event	Category 2
Member Agency Collection System Activities Impacting Peak Flows	Category 2

ATTACHMENT 7



RICHARDSON BAY SANITARY DISTRICT

500 Tiburon Blvd., Tiburon, CA 94920 Tel 415.386.1345 Fax 415.388.1339

September 16, 2008

Ken Greenberg
Water Division (WTR-7)
U.S. Environmental Protection Agency, Region 9 (WTR-9)
75 Hawthorne Street
San Francisco, CA 94105

Re: Sewerage Agency of Southern Marin ("SASM"), et al., Administrative Order Docket No. CWA-309(a)-08-030

Dear Mr. Greenberg:

As a result of the overflows of dilute raw or partially treated wastewater on January 25 and 31, 2008 from the Sewerage Agency of Southern Marin (SASM) facility, the California Regional Water Quality Control Board (RWQCB) for the San Francisco Bay Region issued Cleanup and Abatement Order No. R2-2008-0010. As a part of this order, Item No. 4 required SASM to hire an independent external auditor to conduct a comprehensive audit to "demonstrate that the ongoing threat of discharge of wastes into the waters of the State and the threat to create a condition of pollution and nuisance have been abated.

This audit was completed by Larry Walker Associates on August 31, 2008 and transmitted to the RWQCB on September 2, 2008. SASM and its member agencies received the report via email on September 3, 2008.

The information and analysis contained in the Larry Walker Associates' independent audit report and additional information, analysis and documentation provided below, calls into question the accuracy and sufficiency of certain facts as described in the Findings used in support of the above referenced EPA order. In addition, while many of the facts detailed in support of the order may be true on their face, these facts nonetheless fail to rise to a level of such seriousness or are indistinguishable from facts and conditions that exist in many, if not most, other sewer collection systems subject to EPA regulation but not subject to similar orders. There is insufficient evidence to support the order or justify inclusion of each and every satellite collection agency tributary to the facility owned by the Sewerage Agency of Southern Marin and operated under contract by the City of Mill Valley.

Therefore, I request that EPA administrative order: Sewerage Agency of Southern Marin ("SASM"), et al., Administrative Order Docket No. CWA-309(a)-08-030 be rescinded or in the alternative, that the EPA remove the Richardson Bay and Almonte Sanitary Districts as named parties in the Order.

This request is based on the following facts and analysis:

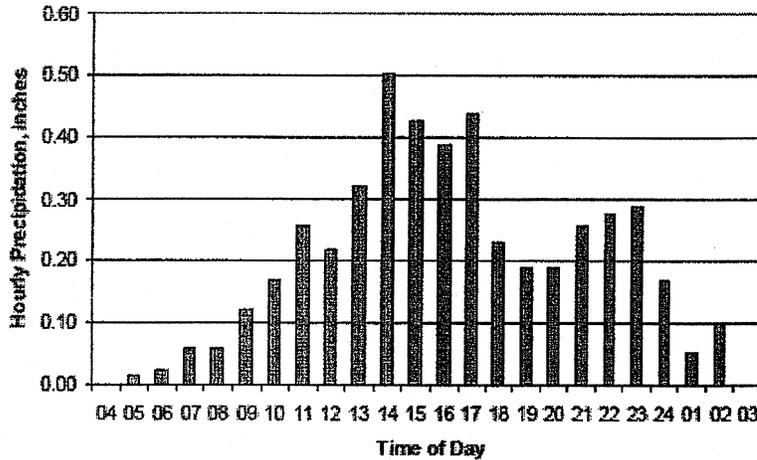
Larry Walker Associates Independent Audit Report:

The final section of this audit deals with an analysis of the storm event of January 25 and 26, 2008 and how it impacted collection systems of the SASM member agencies and ultimately in the amount and timing of wastewater actually received by SASM.

Rainfall:

The storm event on January 25 and 26, 2008 was characterized as a long duration, moderate intensity event with an overall duration of 22 hours, a peak 60 minute intensity of 0.49 inches/hour and an average intensity of 0.22 inches per hour. The January 25 and 26, 2008 event approached the intensity of a 20 year return interval storm (0.22 inches per hour at 22 hours, Larry Walker Associates report).

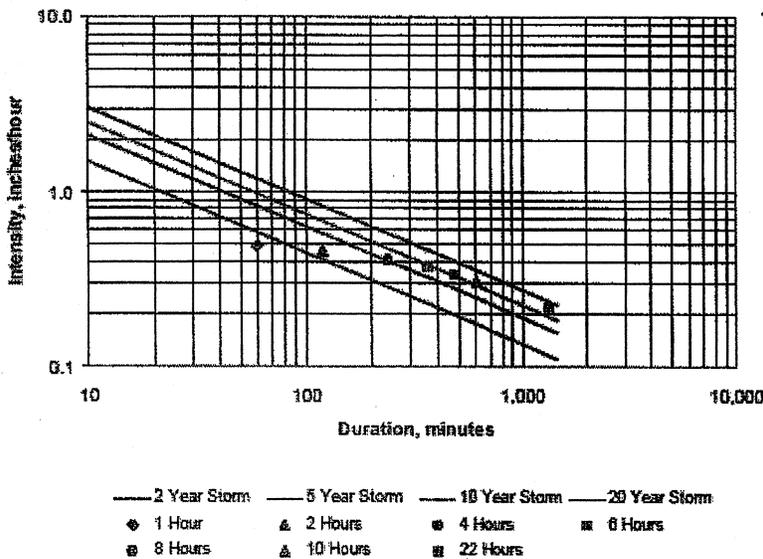
Figure 3: January 25 and 26, 2008 Hourly Precipitation



Source: Linda Vista Drive Rain Gauge (KCAMILLV12)

¹⁰ Reassessment of Coyote Creek Channel Management Requirements, Philip Williams & Associates, January 10 2005 (http://www.co.marin.ca.us/depts/pw/main/floodcontrol/Z3/PWA_Final_Report_01_10_2005.pdf).

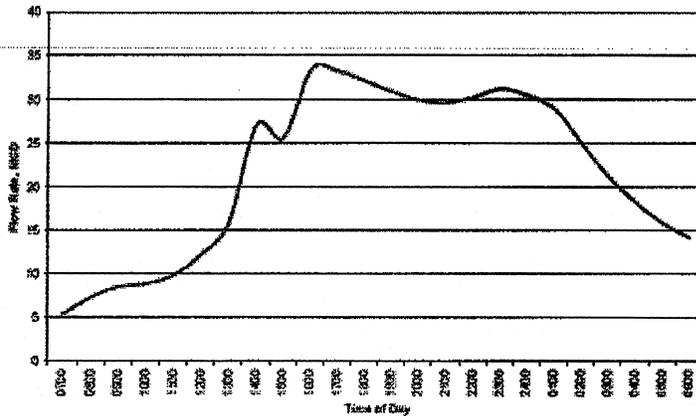
Figure 5: January 25 and 26, 2008 Storm Return Interval Analysis¹⁰



I&I and Influent Flow;

The impact of the January 25 and 26, 2008 storm and the satellite collection systems response to it is shown below in the influent flow received at the SASM Wastewater treatment plant.

Figure 4: SASM Wastewater Treatment Plant Influent Flow for January 25 and 26, 2008



Source: SASM SCADA Influent Flowmeter Data

Although the Peak hourly flow rate was originally reported by SASM staff as **44 million gallons per day**, the actual peak flow was **33.5 million gallons per day** for a relatively short period of time.

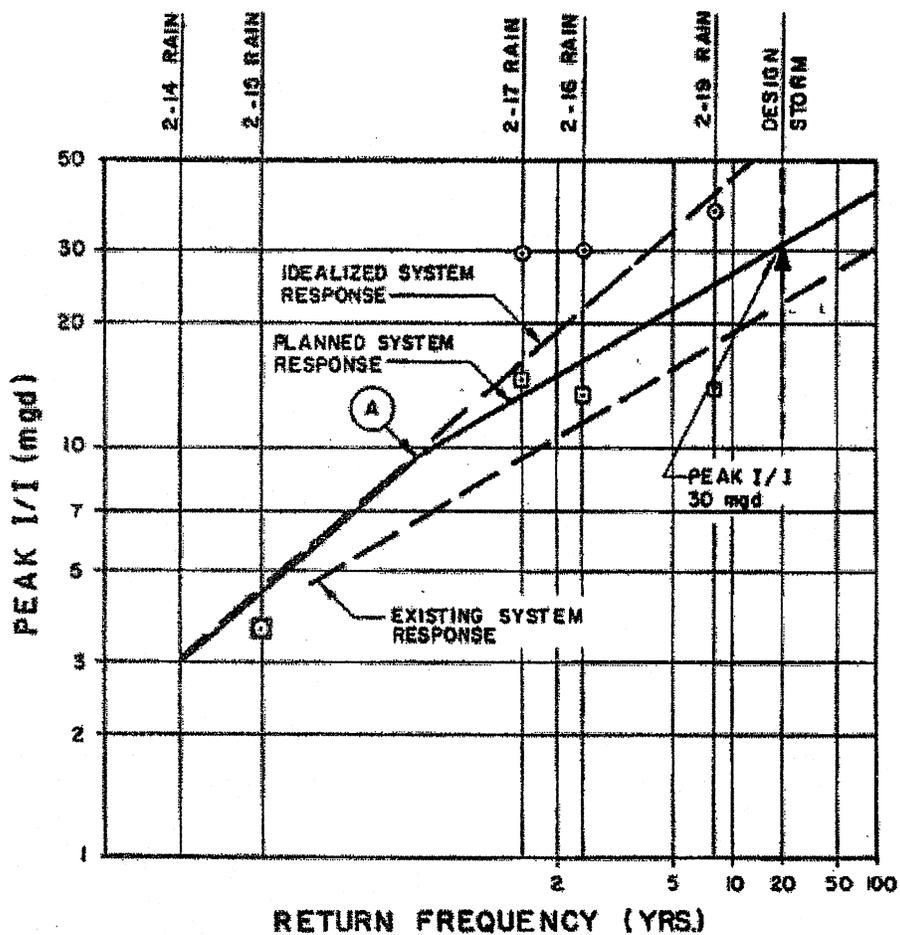
The actual 33.5 million gallon peak corresponds closely to the anticipated peak design flow of 32.7 million gallons per day based on the original twenty year return storm design and is essentially equivalent given the accuracy of the parshall flume used to measure SASM influent flow.

During the original design phase of the SASM treatment facilities and as a prerequisite for Federal and State grant funding, Black and Veatch prepared a Sewer System Evaluation Survey to determine expected peak wet weather flows, quantify excessive infiltration and provide the necessary background information.

The expected rate of peak I&I is shown below as the planned system response curve. (Black & Veatch 1980 Sewer System Evaluation Survey).

Figure 7-3

PEAK RATE OF I/I vs RETURN FREQUENCY
FOR MILL VALLEY NETWORK



LEGEND¹

- I/I RATE EXTRAPOLATED FROM SUBAREAS
- I/I RATE CALCULATED FROM OVERFLOW DATA WITH GATE CLOSED
- Ⓐ MAXIMUM CAPACITY OF EXISTING SYSTEM INCLUDING SURCHARGE UNDER PLANNED OPERATING CONDITIONS

(Black & Veatch 1980 Sewer System Evaluation Survey)

The Larry Walker Audit approximated Member Agency Contribution to the January 25 and 26, 2008 Peak Flows and is detailed below:

Table 3: Member Agency Contribution to January 25 and 26 Peak Flows

Service Areas	Peak Hour Flow, MGD ¹	Service Area, Acres ²	Peak Hour Flow, GPAD	Peak RDI/I Flow, GPAD ³
Kay Park plus 40% of Almonte SD	1.3	146	9,900	8,300
Alto SD plus Homestead Valley SD plus Mill Valley plus 60% of Almonte SD	22.6	3,832	5,900	5,300
Richardson Bay SD	9.6	1,926	5,900	4,400
Total	23.5	5,924		
SASM Member Agency Average⁴				6,100

Notes:

1. MGD = million gallons per day
2. Service areas were estimated using Member Agency CAD maps and Mill Valley GIS.
3. Peak hour RDI/I rates were estimated using the peak hour flow on January 25 and subtracting groundwater infiltration (GWI) + base wastewater flow (BWF) estimated at 175 gallons per connection per day.
4. SASM Member Agency Average was estimated using the peak hour treatment plant influent flow divided by the total service area.

This compares closely with the design flows from the 1980 Black & Veatch study:

Table 7-8. WATERSHED DESIGN FLOW SUMMARY

Watershed Source	Design ^a ADWF	Design ^c I/I	Design PWWF
Mill Valley ^b	1.9	21.5	23.4
Salt Works ^b	0.4	3.1	3.5
Ricardo Road ^b	0.3	2.1	2.4
Trestle Glen ^d	<u>0.3</u>	<u>3.1</u>	<u>3.4</u>
Total	2.9	29.8	32.7

^aConcept approval dated October 23, 1979.

^bDistribution of 2.6 ADWF and 3.9 PDWF approved by State in accordance with Addendum to Facilities Plan dated July, 1979.

^cResult of SSES and Cost-Effectiveness Analysis conducted Dec-Mar 1980.

^d10% Design Submittal by J. Warren Nute, Inc.

DESIGN FLOWS

The projected design wastewater flows to be treated and disposed of in the SASM service area are presented in Table 7-8. The flows are tabulated as average dry weather flow, inflow/infiltration, and peak wet weather flow which is the sum of average dry weather flow (ADWF) and I/I. The Mill Valley design flow includes the flow contribution from the Almonte, Alto, Homestead, and Kay Park S.D. The Salt Works, Ricardo Road, and Trestle Glen watersheds are included in the Richardson Bay system. The SASM treatment facility will be designed to treat a peak wet weather flow of 32.7 mgd (2.9 ADWF and 29.8 I/I).

The maximum daily flow, maximum weekly flow, and maximum monthly flow were also determined and are presented in Table 7-9. These flows were

**Table 7-9. SASM TREATMENT FACILITY
DESIGN FLOW SUMMARY**

Description	Flow
Peak Wet Weather Flow	32.7 mgd
Maximum Daily Flow	24.7 mgd
Maximum Weekly Flow	15.0 mgd
Maximum Monthly Flow	8.5 mgd

establishing a relationship between total precipitation, total I/I, and storm return frequency. An I/I storm flow hydrograph was also developed through utilization of the SSES flow data and is presented in Appendix C. It was assumed that the storm hydrograph shape is valid for other rain-storms; therefore, hydrographs of varying precipitation or of known peak flow rates can be synthesized.

By combining the maximum flow data and the synthesized hydrographs presented in Appendix C, an additional analysis of treatment plant process size could be developed. It is recognized that the headworks of the SASM treatment facility will be required to pump the peak wet weather flow of 32.7 mgd. However, equalization storage facilities within the treatment plant will reduce the size of the secondary plant process. The required volume of the equalization storage basin was calculated against the reduction of peak flows. A curve of this relationship is presented in Figure 7-7. This curve will be used in the design effort to size the equalization basin and the secondary treatment facilities.

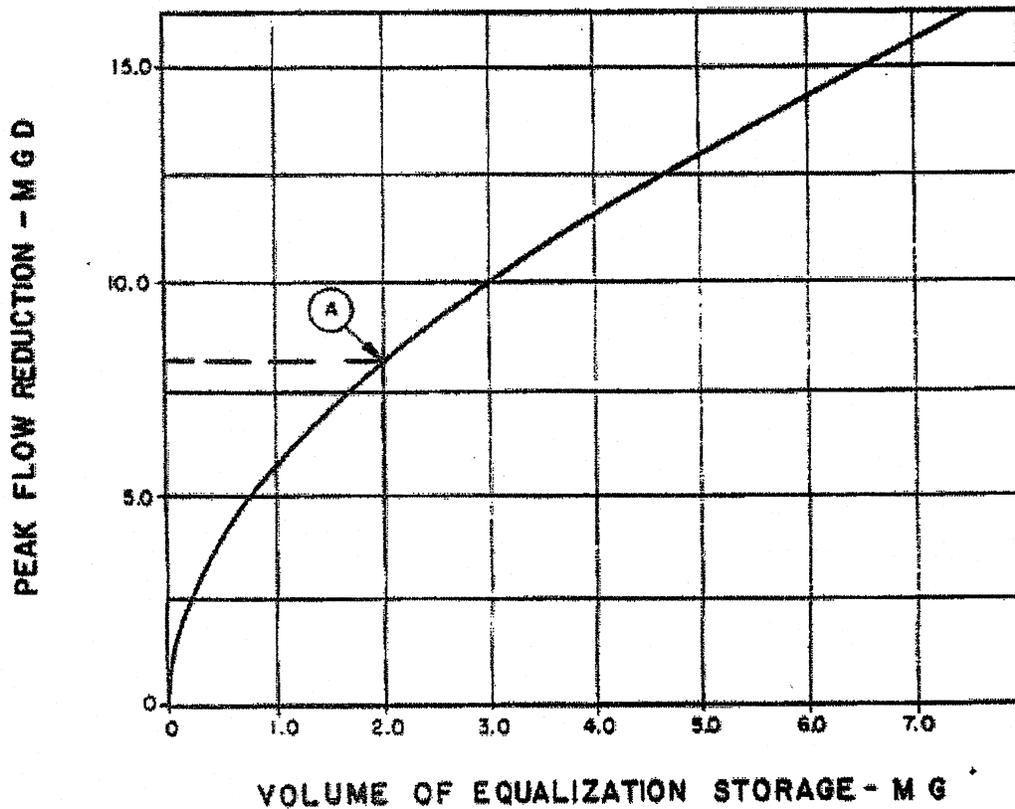
The selected design peak flows are based on 20-year recurrence interval probability analyses and when reduced by cost-effective I/I reductions and equalization storage, represent the most cost-effective design value for the treatment facilities during the storm period.

Figure 7-7 from the 1980 Black & Veatch report shows the required equalization capacity was originally sized at 2.0 million gallons. The SWRCB final inspection report dated October 22, 1984, states that the Equalization basin was designed to operate with a 1.6 million gallon capacity at 2.0 feet

of freeboard with a maximum capacity of 3.6 million gallons at zero freeboard. The plant O&M manual reflected this error which was incorrect due to translation errors in converting acre-feet to gallons. Actual zero freeboard capacity was determined to be approximately 2.3 million. The discovery of this calculation error led to a survey of the EQ basins and a subsequent project that added additional capacity to the ponds in 2000. (see attached memos)

Figure 7-7

**REDUCTION OF PEAK I/I vs. EQUALIZATION STORAGE
FOR SASM SERVICE AREA**



**(A) 8 M G D REDUCTION IN PEAK FLOW RATE AVAILABLE FROM
2.0 M G EQUALIZATION STORAGE AT TREATMENT PLANT**

Inflow and Infiltration (I&I) Reduction:

The December 1977 Southern Marin Planning Unit Report prepared by J. Warren Nute, Inc., Jenks & Harrison, Trotter/Yoder and Bartle Wells & Associates discusses the need for a comprehensive evaluation of I&I to comply with the Federal and State requirements necessary to receive grant funding.

Federal Water Pollution Control Act of 1972

The need to eliminate excessive infiltration and inflow conditions in sewer systems received considerable emphasis in the Federal Water Pollution Control Act of 1972. The act states that:

The Administration shall not approve any grant after July 1, 1973 for treatment works ... unless the applicant shows to the satisfaction of the Administrator that each sewer collection system discharging into such treatment works is not subject to "excessive" infiltration.

The Federal definition of what constitutes "excessive" infiltration is as follows:

Excessive Infiltration/Inflow--the quantities of infiltration/inflow which can be economically eliminated from a sewer system by rehabilitation, as determined by a cost-effectiveness analysis that (for the design life of the treatment works) compares correcting the infiltration/inflow conditions with increasing the treatment works capacity to provide the required wastewater treatment for the quantities of infiltration/inflow.

Accordingly, since implementation of the Eastern Marin-South Sonoma Wastewater Management Program depends upon receipt of substantial Federal and State grant assistance, it is essential that the program participants proceed with the necessary investigations to determine whether or not excessive infiltration/inflow exists.

For the purpose of identifying the various components of extraneous water entering the sewer system, the following definitions have been set forth in the Federal Rules and Regulations published in the FEDERAL REGISTER on February 28, 1973:

INFILTRATION--The water entering a sewer system and service connections from the ground, through such means as, but not limited to, defective pipes, pipe joints, connections, or manhole walls. Infiltration does not include, and is distinguished from, inflow.

INFLOW--The water discharged into a sewer system and service connections from such sources as, but not limited to, roof leaders, cellar, yard, and area drains, foundation drains, cooling water discharges, drains from springs and swampy areas, manhole covers, cross connections from storm sewers and combined sewers, catch basins, storm waters, surface runoff, street wash waters, or drainage. Inflow does not include, and is distinguished from, infiltration.

INFILTRATION/INFLOW--The total quantity of water from both infiltration and inflow without distinguishing the source.

Scope of the Wet Weather Flow Control Analysis

As now proposed in the Rules and Regulations, for the conduct of the sewer system evaluations which were published in the FEDERAL REGISTER on February 28, 1973, the first step in the evaluation consists of the preparation of an infiltration/inflow analysis to determine if possible excessive infiltration/inflow exists in the system. If it is shown that possible excessive infiltration/inflow conditions exist, then the applicant for grant assistance must undertake a systematic sewer system evaluation survey to determine the location, flow rate, and cost for correction of each definable element of the total infiltration/inflow problem.

The required cost-effective analysis to reduce I&I to qualify for grant funding was as described in the 1980 Black & Veatch Report below:

COST-EFFECTIVE ANALYSIS

A cost-effectiveness analysis was conducted to determine how much infiltration/inflow may be economically removed from the system and how much may be economically accommodated in the treatment and disposal facilities. The peak wet weather flow from the sewer system, which must be ultimately treated and disposed of, was determined by balancing the cost of sewer system rehabilitation against the cost of conveyance, treatment, and disposal. The cost-effectiveness analysis was prepared separately for the Mill Valley and Richardson Bay networks and is shown in Figures 7-5 and 7-6, respectively.

An estimate of the cost-effectiveness of I/I reduction must be made before the I/I reductions can be evaluated against the incremental cost reduction of smaller collection, treatment, and disposal facilities. The estimated unit costs of I/I correction/rehabilitation tasks used in this analysis are presented in Table 7-6. The correction methods for inflow sources are relatively simple and have been estimated as 75 percent effective. The rehabilitation methods for infiltration sources have been estimated as 40 percent effective.

Detailed cost estimates were also prepared for treatment costs associated with flow rates of 15 through 40 mgd and are shown in Appendix D. The cost estimates were calculated in 5 mgd increments. The resulting cost curves for I/I correction, conveyance, treatment, and outfall facilities are plotted, respectively, in Figures 7-5 and 7-6.

The most cost-effective I/I reduction value is determined by adding each of the individual cost elements. The lowest point on the combined cost curve corresponds to the most cost-effective I/I reduction value. For the Mill

Figure 7-5
COST EFFECTIVE ANALYSIS MILL VALLEY NETWORK

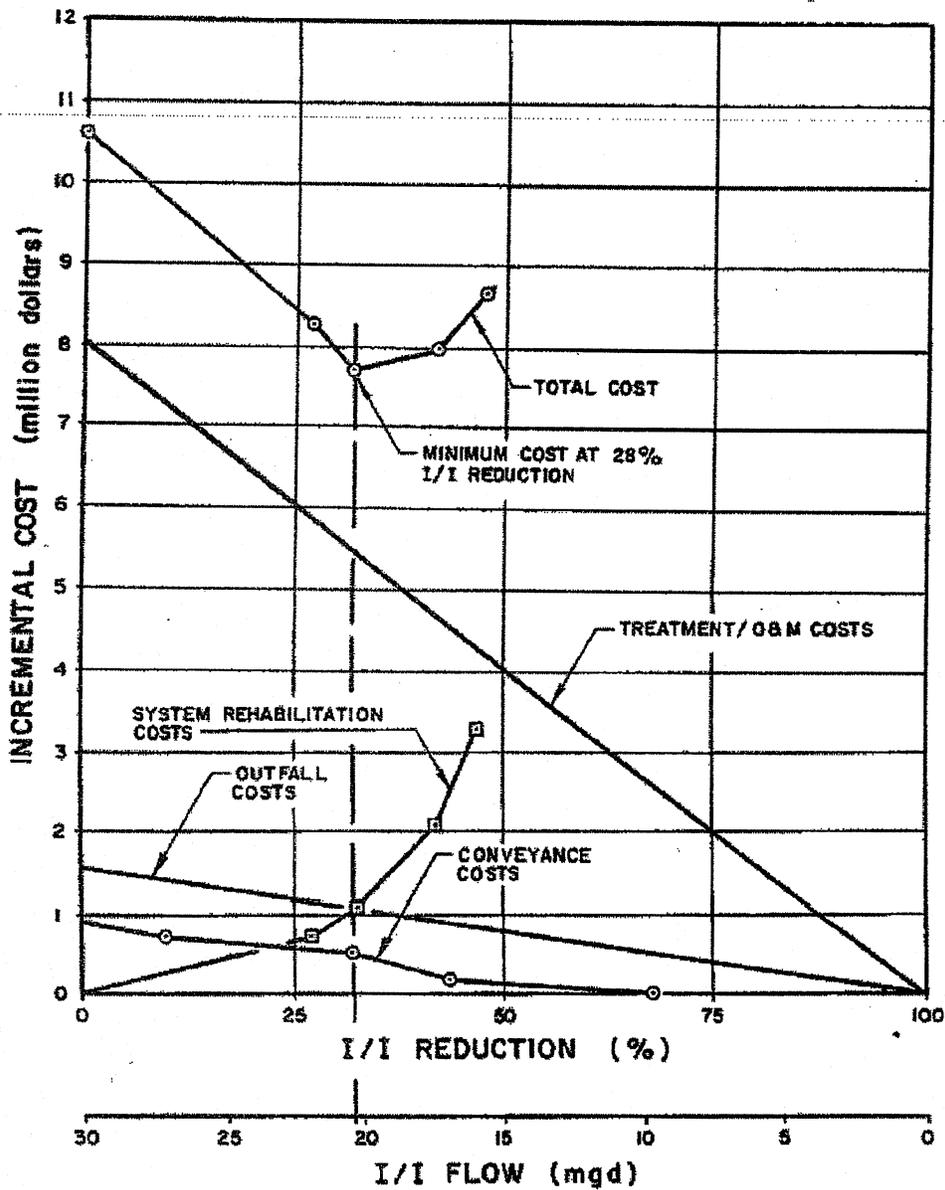
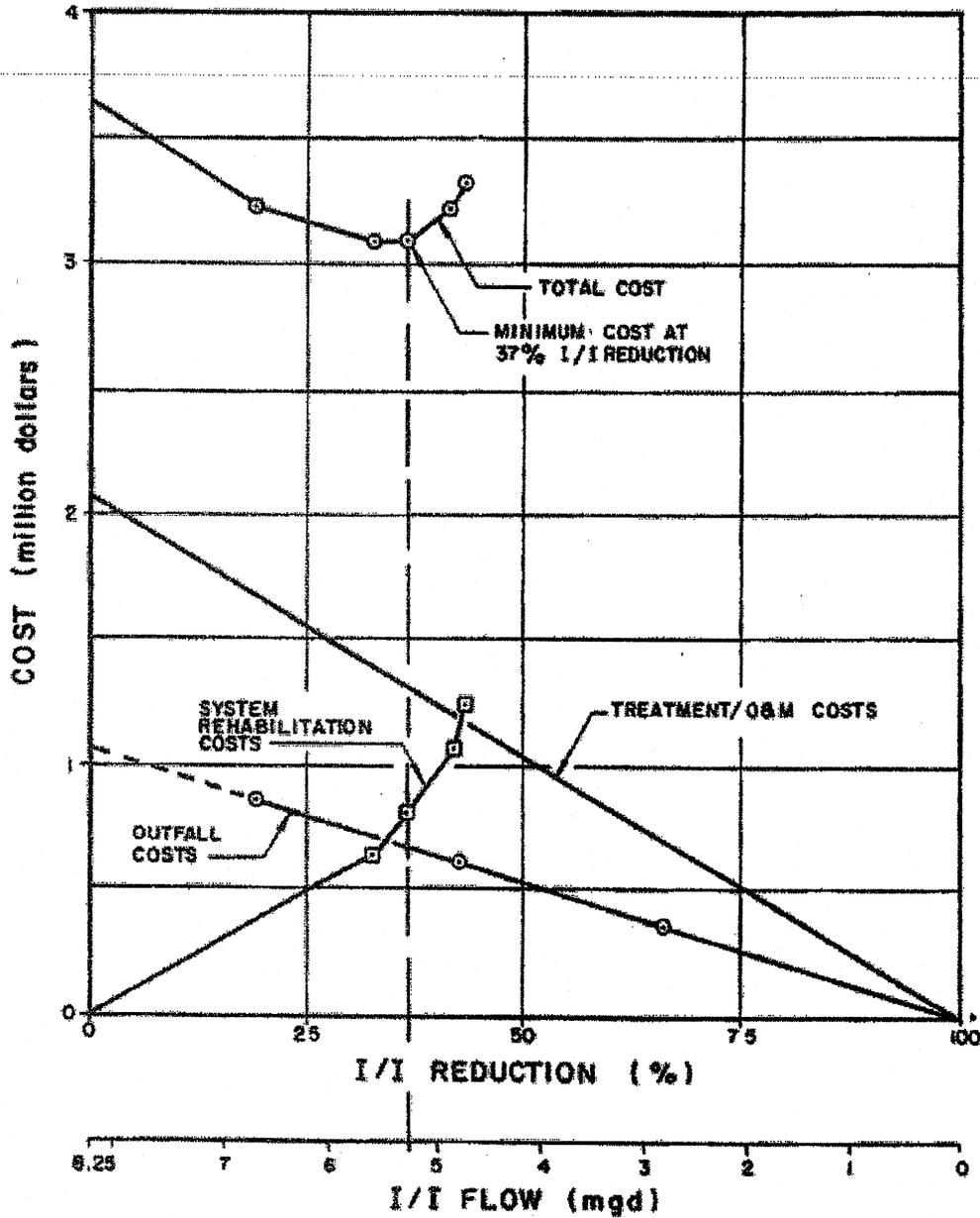


Figure 7-6
COST EFFECTIVE ANALYSIS
RICHARDSON BAY NETWORK ^a



^a SALT WORKS AND RICARDO/ROAD WATERSHED, ONLY

Table 7-6. ESTIMATED COSTS I/I CORRECTION/REHABILITATION

Task	Cost, \$/lf
Physical Survey	0.35
Rainfall Simulation (smoke testing)	0.20
Cleaning & Internal Inspection	2.34
Inflow Corrections	1.25
Infiltration Corrections	
Grouting (95%)	5.35
Excavation/Replacement (5%)	35.00
Flow Monitoring	0.43

Valley network it appears cost-effective to reduce the I/I from 30 mgd to 21.5 mgd or 28 percent. For the Richardson Bay network, it appears cost-effective to reduce the I/I from 8.25 mgd to 5.2 mgd, or 37 percent. A summary of the cost-effectiveness analysis is presented in Table 7-7.

Table 7-7. COST-EFFECTIVE PEAK RATE OF I/I SASM SERVICE AREA

Service Area	Projected ^{a)} Peak Rate of I/I 20-yr Return Frequency, mgd	Cost-Effective ^{b)} Peak Rate of I/I 20-yr Return Frequency, mgd	% Reduction
Mill Valley	30.0	21.5	28
Richardson Bay ^{c)}	11.7	8.3	29
SASM (Total) ^{c)}	41.7	29.8	28

a) No corrections to collection system

b) Cost-effective corrections to collection system

c) Includes Trestle Glen watershed

The SASM treatment plant went online in the fall of 1983 prior to the construction of relief sewers and I&I reduction efforts. In a July 26, 1985 letter, Black & Veatch discussed the I&I Collection System Rehabilitation Project.

BLACK & VEATCH
ENGINEERS - ARCHITECTS

F
1419

TEL. (415) 944-5770

3470 BUSKIRK AVENUE
MAILING ADDRESS: P.O. BOX NO. 4247
WALNUT CREEK, CALIFORNIA 94596

Sewerage Agency of Southern Marin
I/I Collection System Rehabilitation
Project No. C-06-2466-100
10 Percent Design Submittal

B&V Project 11453.400
July 26, 1985

Sewerage Agency of Southern Marin
P.O. Box 1029
Mill Valley, CA 94942

Attention: Mr. David Coe

$$41.8 - (.28)(41.8) = 30.1$$

or 32.7

Gentlemen:

Enclosed is the 10 percent design submittal for the subject project for your submission to the state.

Concept approval for this project contains two points that should be reviewed and evaluated based upon this 10 percent design. A goal of reducing the peak wet weather flow by 28 percent was identified in the 1980 SSES and carried into the concept approval. This 28 percent was based upon an estimated peak I/I rate of 41.8 mgd. This flow was estimated because flows above 7 mgd could not be measured by the old treatment facilities, and a recommended treatment plant design peak I/I rate capacity of 32.7 mgd. Since 1980 the new treatment plant has been in operation for two wet weather periods and the I/I reduction goal should be reevaluated based upon actual operating data.

The goal of the collection system rehabilitation program should now be to eliminate and/or transport all collection system overflows to the treatment plant and reduce peak I/I rate to a level that the treatment plant can process in accordance with discharge standards, except 85 percent removal. Based upon the five significant storms during the last two seasons, the peak I/I rate appears to be about 41 mgd without relief facilities in operation. Because peak I/I rates are sustained for a shorter duration than estimated in 1980 and because of the conservative nature of design hydraulics, the firm plant capacity may be nearer 35 mgd peak I/I rate. Thus, the reduction goal seems to be about 6 mgd, without consideration of the relief facilities currently under construction.

Estimated reduction after repair of the defects identified from smoke testing is 5.3 mgd. This is about half of the concept approval stated goal and about 85 percent of what may be necessary without knowing the effect of relief facilities. In either case, the second point in the concept approval letter that must be evaluated in light of this information is that a second phase of rehabilitation will be necessary as provided for in the concept approval.

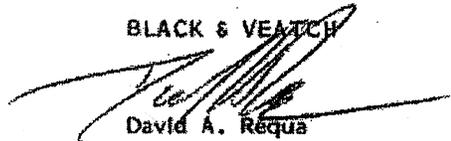
After the state staff has completed their review of this submittal package, we recommend that we hold a study session with the state staff to review the status of the program and to evaluate the alternative action steps available. This will ensure that we all fully understand and agree with the course of action. The basic options are as follows:

1. Proceed with identified rehabilitation and monitor the results of both the rehabilitation and relief facilities during the 1986-87 wet weather season and scope a second rehabilitation phase to achieve the remaining reduction required.
2. Increase the scope of this rehabilitation phase in an attempt to ensure achieving the necessary reduction in one phase. The additional work would be televising the highest priority areas as identified in the 1980 SSES, and applying the most effective rehabilitation methods identified in the 1983 pilot project.

If you have any questions, please call at your convenience.

Very truly yours,

BLACK & VEATCH



David A. Requa

er
Enclosure

Of note were the observations based on two years of actual plant operation and five significant storm events and also the recommendation to eliminate and/or transport all collection system overflows and to reduce I&I to levels that allow the treatment plant to comply all permit requirements except the 85 percent removal.

In a January 29, 1986 letter to the SWRCB seeking to expedite approval of the Phase I I&I plans and specifications, David Coe provided a summary to date of SASM's I&I project.

S A S M
SEWERAGE AGENCY OF
SOUTHERN MARIN

A Joint Powers Agency

- Almonte S.D. - Homestead Valley S.D.
- Aho S.D. - Richardson Bay S.D.
- City of Mill Valley - Tamalpais C.S.D.

January 29, 1986

E
1419

Virginia Dong
State Water Resources Control Board
Division of Clean Water Grants
P.O. Box 100
Sacramento, CA 95801

Subject: I/I Rehabilitation Project
Project No. C-06-2466-120

Dear Ms. Dong:

As you know, we are trying to complete the SASM I/I Rehabilitation Project that you and Ms. Sergent are currently reviewing as quickly and efficiently as possible. It is necessary that this project be constructed prior to the 1986 winter rain, which ordinarily begins in November, so that the effectiveness of our efforts can be ascertained. Failure to do so could result in a one year delay in our efforts.

As per Ms. Sergent's conversation with Black & Veatch, we expect to receive plans and specifications approval about February 7. Based on this key date, we anticipate the following schedule:

- 2-7-86 SWRCB approval on plans and specs
- Incorporate corrections into P and S
- 2-24-86 Advertise for bids
- 3-26-86 Open bids
- 4-1-86 Submit application for ATA to State
- 5-1-86 Receive ATA from State
- 5-5-86 Date of Notice to Proceed
- 11-1-86 Substantial completion required
- 11-21-86 Required completion

As you can see, this schedule will be cutting it pretty close. Your assistance in meeting this schedule is critical.

If there is any way we can facilitate your assistance in meeting this schedule, please contact us. Your continued helpful consideration of our efforts in this regard will be appreciated.

Very truly yours,


David A. Coe
Manager

SASH'S INFLOW/INFILTRATION PROJECT

INFLOW - Rainwater that enters the sanitary sewer system through direct connection (crossconnected storm drain or area drain, uncapped pipes or cleanouts, connected roof drains, broken pipes, etc.)

INFILTRATION - Groundwater that enters the sanitary sewer through joints, pipe walls and cracks in pipe. Significant during rain due to saturated ground.

COMPARATIVE FLOW DATA FOR SASH SERVICE AREA

Dry Weather: 3 MGD = Daily Flow

6 MGD = Peak Flow

Wet Weather: 12 MGD = Inflow

20 year
storm

29 MGD = Infiltration

41 MGD = Total Amount of Rainwater Entering Sewer

44 MGD = Total Peak Flow to Plant for 20 Year Storm

Actual highest flow observed at the plant to date
is 38 MGD.

PLANT SIZE VERSUS I/I RENABILITATION

Excess wet weather flow can be handled by building a bigger treatment plant or by reducing flow to the plant by fixing pipeline leaks. A cost comparison was conducted in 1980 resulting in the decision to build a treatment plant with capacity to treat 32 MGD and to reduce rainwater inflow from 41 MGD to 29 MGD (12 MGD or 29% reduction).

The plant has been built and is in operation with a design peak capacity of 32 MGD.

The work of reducing Inflow to the sewer is underway at this time.

THE I/I REDUCTION PROGRAM

1980 SSES - Determined level of I/I problem, established cost effective level of I/I reduction, and recommended pilot program to verify.

1981 to 1983 Pilot Program - Demonstrated through actual rehabilitation in a 76 acre area that 30% reduction in I/I could be achieved in a cost effective way. Recommendation to proceed to smoke test and television inspect entire sewer system tributary to SASM Plant. State approved smoking all but held off on T.V. approval.

1984 Smoke Test - Identified 292 cost effective repairs on public sewers and 177 repairs on private sewer systems. Recommended and received go-ahead to T.V. inspect only 10% of system.

1985 Television Inspection and Rehabilitation Design - Inspection and design completed and submitted to State for O.K. to go out to bid.

1986 I/I REHABILITATION CONSTRUCTION PROJECT

Anticipated Construction Period: June through December

Estimated Construction Cost: \$610,000

Work Will Include:

	Number of <u>Locations</u>	Number of <u>Feet</u>
Manhole rehabilitation & replacement	40	
Sever Replacement	115	5600
Slip Line Existing Sewer	9	2170
Repair Sever by External Banding	4	
Joint Repair (clean, test & seal)	29	6410
Miscellaneous	15	

	213	

Work will be conducted in 147 different locations in the City of Hill Valley

I/I PROJECT COSTS

BSES.....	210,000
Pilot Study.....	118,000
Pilot Rehab by Hill Valley.....	77,000
Design Relief Sewer.....	61,000
Build Relief Sewer.....	325,000
Inspect Relief Sewer.....	35,000
Design I/I Rehabilitation.....	357,000
Build I/I Rehab (Phase I).....	610,000
Inspect I/I Rehab.....	145,000
Design & Build Phase II.....	?

\$2,107,000*

Total commitment to reimburse by the State and EPA for this work is approximately \$1,790,000.

ADDITIONAL NOTES

Private Property I/I Reduction. A program is currently underway under SASM's administration to correct problems on private property.

I/I Relief Sewer. Although not discussed elsewhere in these notes, this project has been an important part of the overall sewer improvement program. Costs for this project are reflected above.

I/I Rehabilitation - Phase II. It has been recognized from the outset that the first Rehab project may not achieve the target reduction in I/I and that a second project may be necessary. Staff is currently attempting to gain authorization from the State to proceed with the preliminary work on this second project at this time.

As noted in both the Black & Veatch letter of July 25, 1985 and David Coe's Additional Notes above, the Phase I I&I reduction plan was expected to fall significantly short in achieving the 28% reduction in I&I. SASM submitted a request for grant funding of a Phase II I&I reduction project to achieve full compliance with the 28% I&I reduction as an integral part of the wastewater facility design. This request was denied as detailed in the April 11, 1986 letter from the SWRCB Division of Clean Water grants below.

STATE WATER RESOURCES CONTROL BOARD
DIVISION OF CLEAN WATER GRANTSPAUL R. BONDERSON BUILDING
901 P STREET
P.O. BOX 100
SACRAMENTO, CALIFORNIA 95801
(916) 324-0938RECEIVED
S. A. S. M.

APR 17 1986

F
1418cc: JOE CONELLO
DAVID REQUA

APR 11 1986

BY: _____
FILE: _____In Reply Refer
to: 550:ARMr. David Coe, Manager
Sewerage Agency of Southern Marin
450 Sycamore Avenue
Mill Valley, CA 94941

Dear Mr. Coe:

SEWERAGE AGENCY OF SOUTHERN MARIN, PROJECT NO. C-06-2466-120, REQUEST FOR
AMENDMENT TO CONCEPT APPROVAL

We have reviewed your December 23, 1985 report titled "Request For Amendment to Concept Approval of I/I Rehabilitation Project." Central to this request is a grant increase request to cover the estimated cost of completing the Phase II rehabilitation work with Phase I rehabilitation work.

Your request is denied for the following reasons: The requisite grant monies are not available this fiscal year and the funding outlook for the future is uncertain; and, a grant increase of \$1,452,250 was previously awarded (June 24, 1985) in order to reduce peak wet weather flows by 28 percent. It was understood that this increase would suffice to achieve the 28 percent reduction. The February 6-7, 1985 State Water Resources Control Board Workshop Agenda states "This grant increase is requested to cover the infiltration/Inflow (I/I) collection system work and the relief sewer needed to complete the total project." Even if grant funds were available, an additional increase for a second change in scope would have to be approved by the State Board and would require justification why the previous increase was insufficient. Also the June 17, 1983 letter from Mr. Dave Requa to Mr. Robert Bradford and the December 22, 1983 Concept Approval amendment indicated that the total estimated cost of the I/I correction is \$1,100,000 to \$1,500,000. Your December 1985 report indicates the total cost is now approximately \$2,600,000. An additional increase to fund work (Phase II) that was covered by the previous increase cannot be justified at this point.

Since there are sufficient grant funds for your identified Phase I work and you have received plans and specifications approval, we can only approve continuation of Phase I. Also, one of the conditions of Concept Approval indicated that work may only continue through 1987 in order to limit the "open endedness" of the rehabilitation - monitoring work. Therefore, the grants program's responsibility will only continue through Phase I completion.

Please contact me at (916) 322-8456 or Alan Ratcliff at (916) 324-0938 if you have any questions or comments.

Sincerely,

Sandra J. Houck
Senior WRC Engineercc: Mr. Dave Requa
Black & Veatch Consultants
P.O. Box 4247
Walnut Creek, CA 94596Mr. Richard Condit
CRWQCB, San Francisco Bay Region (2)
1111 Jackson Street, Room 6040
Oakland, CA 94607

Based on the above correspondence the status of collection system I&I rehabilitation and treatment plant response approaching the winter of 1986/87 was as follows:

1. The Phase I grant funded I&I reduction project was forecast to reduce I&I by about 5.3 mgd or about half of the 28% reduction called for in the integrated SASM facility design (plant upgrade, flow equalization and I&I reduction);
2. The SASM request for additional grant-funded I&I work was denied;
3. Based on two years of wet weather experience (5 significant storm events over 83/84 and 84/85) Black & Veatch estimated peak flows to SASM at about 41.0 million gallons without relief sewers in operation;
4. "Because peak I&I rates are sustained for a shorter duration than estimated in 1980 and because of the conservative nature of design hydraulics, the firm capacity (of the WWTP) may be nearer 35 mgd peak I&I rate" rather than the 32.7 million gallon peak I&I design;
5. Black & Veatch recommended that the goal of the collection system rehabilitation program should now be *"to eliminate and/or transport all collection system overflows to the treatment plant and reduce peak I&I rate to a level that the treatment plant can process in accordance with discharge standards, except 85% removal."*

Original Goal of Removing Excessive Infiltration Apparently Met:

As noted above, SASM was required to remove "excessive infiltration" as a condition of Federal and State eligibility for grant funding. The Federal definition of what constitutes "excessive infiltration" operative at the time of design and construction is as follows:

Excessive Infiltration/Inflow—the quantities of infiltration/inflow which can be economically eliminated from a sewer system by rehabilitation, as determined by a cost-effectiveness analysis that (for the design line of the treatment works) compares correcting the infiltration/inflow conditions with increasing the treatment works capacity to provide the required wastewater treatment for the quantities of infiltration/inflow.

Based on the influent flow analysis for January 25 and 26, 2008 storm provided in the Larry Walker Associates audit report, it appears that the wastewater contributions from the SASM member agencies, both individually and in the aggregate, essentially duplicate the expected amounts reflected in the original design estimates for a twenty year return frequency storm, which the January 25th storm approximated.

Despite the following circumstances:

1. Projections that the grant funded Phase I I&I rehabilitation project would only achieve only about half of the required 28% reduction in "excessive infiltration";
2. Grant funding for a Phase II I&I rehabilitation program was denied;
3. The construction of I&I relief sewers that have added to expected influent flow peaks;
4. The construction of pump station improvements (Camino Alto, Trestle Glen, Sutton Manor and Rosemont) designed to decrease collection system surcharging and eliminate wet weather SSOs but that add to the expected peak flows received by SASM;
5. Population growth and new construction within the SASM area;
6. The normal aging and deterioration of not only District sewers but of private laterals connected to SASM member agency sewers;

SASM and its member agencies have, in the normal course of repairing and replacing their sewer lines over the past 20 years, eliminated the Phase I "excessive infiltration" peak shortfall of approximately

5.0 million gallons projected by Black & Veatch and achieved a level of I&I reduction that complies with the original design requirements of eliminating "excessive infiltration" by a 28% reduction of the expected peak wet weather flow.

Collection System Repair and Rehabilitation Efforts:

In the course of meeting with the EPA during their August and October 2007 inspections, in correspondence regarding the factual accuracy and conclusions contained in those reports and in responding to the subject order, SASM member agencies have provided the EPA with documentation of significant repair and rehabilitation efforts spanning many years.

Beginning in 1987, Richardson Bay has spent millions replacing all of its antiquated pneumatic ejector pump stations with state of the art submersible stations that dramatically increased pumping capacity and reduced or eliminated wet weather collection system surcharging. To date, 12 stations were converted and 4 new stations were added. In response to the significant storm over the New Year's holiday in 2005/06, 3 stations were upgraded to almost double the pumping capacity and RBSD just rehabilitated 4 of the 12 because they were 20 years old. In addition, RBSD has replaced thousands of feet of sewer line (both gravity and force main) and spent hundreds of thousands of dollars on replacement and repair efforts. Currently out to bid is a job to replace 6,000 plus feet of some of the oldest sewers in the District.

Almonte has pipe burst a number of lines that were subject to problematic SSOs and has diligently repaired problems as they are discovered.

The City of Mill Valley routinely repairs or replaces sewer lines in conjunction with their street repair program.

Tam Valley Community Services District replaced substantially all the sewers in the area connected to SASM.

Alto and Homestead Valley have engaged in a number of joint sewer replacement efforts as well as other repair efforts.

As a result of the agency actions described above, the collection systems of the SASM member agencies performed as designed and delivered to SASM quantities of wastewater within original design parameters and in within their contractual capacity allocations with SASM . Of note is that to my knowledge there were no reported wet weather related SSOs in the entire collection system tributary to SASM during the January 25 and 26, 2008 storm.

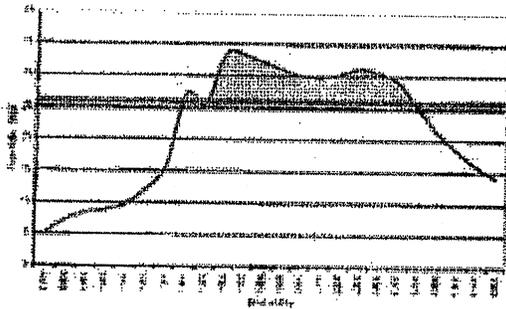
In Conclusion:

A fair reading of the entire Larry Walker Associates audit indicates that operational choices made by SASM staff made prior to and on the days of the January 2008 spills were the major factors contributing to the spills rather than the volume of wastewater received, although influent flows to the treatment plant were in the upper design range.

There remains a question as to whether the spill resulting from the January 25 and 26, 2008 storm could have been entirely avoided. More analysis would be needed to determine if the storage capacity of the equalization basins would have ultimately been exhausted even if SASM staff had operated the plant to maximize plant throughput and effluent pumping in order to conserve equalization storage capacity. In the modified influent flow graph below, the redline represents the historic maximum

effluent pumping rate of approximately 26.0 mgd (six pumps running) and the yellow area under the curve is the amount of water that would have had to have been stored in the equalization basins. This does not take into account storage in the SASM treatment processes.

Figure 4: SASM Wastewater Treatment Plant Influent Flow for January 25 and 26, 2008



Source: SASM SCADA Influent Flowmeter Data

Overflows from the SASM equalization ponds due to extreme wet weather events have occurred on four occasions since the facility went online in 1983. The first in November 1994 was the result of a storm with a hundred year return frequency. The second, in February 1998, resulted from a protracted storm similar to the one on January 25 and 26, 2008, the third occurred during the major storm of New Years 2006 and the last on January 25 and 26, 2008.

Storms that produce protracted moderate to heavy rainfall such as this one, especially when preceded by substantial rainfall that results in saturated soil conditions are the most problematic for facilities that rely on equalization to moderate peak flows.

The common thread for wastewater agencies is that storm events significantly in excess of WWTP or collection system design parameters are likely to result in overflows somewhere in the system. SASM is not unique in this regard.

The Larry Walker Associates report notes that a storm event of this magnitude (January 25 and 26, 2008) would have been problematic for many of the wastewater collection and treatment facilities in the San Francisco Bay Area.

In the past, the regulatory community has taken into account the magnitude of storm events, the limitations of facilities to deal with wet weather events in excess of facility design and the mitigating factors of an extremely dilute overflow and significant dilution provided by rain, runoff, tidal flushing, etc.

In the end, it is incumbent on agencies to comply with all spill response protocols and provide regulators with timely and accurate information so that there is a factual basis to guide enforcement action. It is equally important that regulators remain objective, weigh and consider all information provided, act diligently in their investigation, delay action until all the facts are known and then take reasonable enforcement actions that reflect culpability and lead to realistic and affordable corrective actions.

Respectfully submitted,

Bonner Beuhler
Manager, RBSD and Almonte Sanitary District

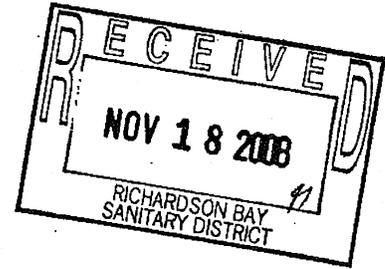


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, CA 94105-3901

NOV 18 2008



CERTIFIED MAIL 7004 2510 0006 9180 4179
Return Receipt Requested

Mr. Bonner Buehler
Manager
Almonte Sanitary District
Richardson Bay Sanitary District
500 Tiburon Blvd.
Tiburon, CA 94920

Re: Request to Rescind or Modify Order for Compliance, In the Matter of Sewerage Agency of Southern Marin ("SASM"), et al., Docket No. CWA-309(a)-08-030

Dear Mr. Buehler:

I am writing in response to your request that EPA rescind the subject Order for Compliance or alternatively, remove Richardson Bay Sanitary District and Almonte Sanitary District as named parties in the subject Order. EPA has considered your letter dated September 16, 2008, the Larry Walker Associates External Audit Report dated August 31, 2008, and other engineering studies by Nute Engineering and Black & Veatch from 1987 to 2000. After careful review of these materials, EPA has determined that the requested rescission or modification of the subject Order for Compliance is not warranted.

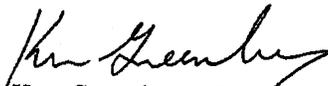
The External Audit Report by Larry Walker Associates evaluated the ability of the Sewerage Agency of Southern Marin to respond to wet weather, peak flow, and emergency conditions and to comply with NPDES requirements. Although the External Audit Report confirms that a number of actions have been taken to improve operations, there are a number of further actions recommended by Larry Walker Associates. For example, the External Audit Report recommends that an engineering study be performed to determine the feasibility of increasing the effluent pumping capacity. The report also recommends an engineering study be completed to reassess the capacity of the restored equalization basins. To completely prevent overflows, the report indicates, the storage volume would have to be increased substantially or the wet weather infiltration and inflow from member agencies reduced substantially. EPA concludes that retaining the

subject Order is appropriate in order to assure that these or other actions needed to achieve compliance with the Clean Water Act are completed.

We recognize that Richardson Bay Sanitary District and Almonte Sanitary District have completed some important improvements; however, more work is needed to fully comply with the Clean Water Act. The completed actions identified in the External Audit Report can be addressed in future submissions to EPA that are required by the subject Order. In these submissions, Richardson Bay Sanitary District and Almonte Sanitary District should include a description of improvements completed to date, further actions proposed, and how these actions support the requirements of the Order.

We look forward to working with you to meet the Order's requirements. If you have any questions, please contact Fatima Ty at (415) 972-3550 or myself at (415) 972-3577.

Sincerely,



Ken Greenberg, Chief
CWA Compliance Office, Water Division

cc:

Tom Roberts, Manager
Alto Sanitary District
Homestead Valley Sanitary District
P.O. Box 163
Mill Valley, CA 94942

Wayne Bush, Director of Public Works
City of Mill Valley
26 Corte Madera Avenue
Mill Valley, CA 94941

Stephen Danehy, General Manager
Sewerage Agency of Southern Marin
26 Corte Madera Avenue
Mill Valley, CA 94941

Jon Elam, General Manager
Tamalpais Community Services District
305 Bell Lane
Mill Valley, CA 94941

ATTACHMENT 8

**Total Sewer System Overflows
SASM & Member Agencies
2007 -2010**

	2007	Rate per 100 Miles	2008	Rate per 100 Miles	2009	Rate per 100 Miles	2010	Rate per 100 Miles	CIWQS Miles
Almonte	6	100.0	0	0	1	16.6	2	33.3	6.0
Alto	0	0.0	1	31.2	3	93.7	0	0	3.2
Homestead	0	0.0	6	54.5	2	18.1	2	18.1	11.0
Richardson Bay	12	25.0	21	43.7	9	18.7	3	6.2	48.0
Sanitary District Subtotal	18	26.4	28	41.1	15	22.0	7	10.3	68.2
City of Mill Valley	53	89.8	70	118.6	48	81.3	22	37.2	59.0
SASM	0	0	2	22.2	1	11.1	1	11.1	9.0
Total System	71	52.1	100	73.4	64	47.0	30	22.0	136.2
Tamalpais Community SD, total system	3	7.3	7	17.0	6	14.6	4	9.7	41
Totals With TCSD	74	41.8	107	60.4	70	39.5	34	19.2	177.2
Statewide Averages, cumulative numbers	5,453	5.5	10,974	5.3	15,718	7.4			

**Spill Volume Reaching Waters of the United States
SASM & Member Agencies
2007 -2010**

	2007	Gals per 100 Miles	2008	Gals per 100 Miles	2009	Gals per 100 Miles	2010	Gals per 100 Miles	CIWQS Miles
Almonte	980	0	0	0	145	0	150	0	6
Alto	0	0	15	0	150	0	0	0	3.2
Homestead	0	0	30	0	700	0	35	0	11
Richardson Bay	1570	93.7	2050	1229.1	1008	0	130	0	48
Sanitary District Subtotal	2550	37.4	2095	30.7	2003	29.4	315	4.6	68.2
City of Mill Valley	9,349	5085	9,288	102	9,404	6373	1,869	0	59
SASM	0	0	0	1111.1	0	0	0	0	9
Total System	11,899	8,736	11,383	8,358	11,407	8,375	2,184	1604	136
Tamalpais Community SD, total syste	225	549	615	1,500	795	1,939	300	732	41
Totals With TCSD	12,124	6,842	11,998	6,771	12,202	6,886	2,484	1402	177
Statewide Averages, cumulative numbers	31,001,728	26,720	35,769,735	13,166	55,340,238	21,374			

**Spill Volume Recovered
SASM & Member Agencies
2007 -2010**

	2007	Percent Recovered	2008	Percent Recovered	2009	Percent Recovered	2010	Percent Recovered
Almonte	0	0	0	0	5	3%	0	0
Alto	0	0	0	0	100	66%	0	0
Homestead	0	0	70	70	0	0	0	0
Richardson Bay	5	2%	265	11%	150	12%	410	75%
Sanitary District Subtotal	5	0.2%	335	16.0%	255	12.7%	410	130.2%
City of Mill Valley	1000	9%	2450	20%	1792	16%	170	5%
SASM	0	0	160	100%	50	100%	10	100%
Total System	1005	8.4%	2945	25.9%	2097	18.4%	590	27.0%
Tamalpais Community SD, total system	0	0	0	0	0	0	30	9%
Totals With TCSD	1005	8.3%	2945	24.5%	2097	17.2%	620	25.0%
Statewide Averages, cumulative numbers	10,784,696	35%	12,459,502	35%	13,783,909	25%		

ATTACHMENT 9

ATTACHMENT 10

Contested & Uncontested Elections for SASM Member Agencies, 2000 - 2011

Election Dates	City of MV		Alto San		Almonte San		Homestead San		RBSD		Tam CSD	
2000				Uncontested	Uncontested	Uncontested	Uncontested	Uncontested				
Mid-term appts.					Ward for vacant seat	Nov 00 Harper for Spafford						
2001		Contested	Uncontested	Uncontested			Contested	Uncontested				Contested
Mid-term appts.						Oct 01 Noble for Vaughn						
2002					Uncontested							
Mid-term appts.												
2003		Uncontested	Uncontested	Uncontested			Uncontested	Uncontested				Contested
Mid-term appts.					Jul 03 Nelson for Huston							Sep 03 Jacobs for Gallagher
2004					Uncontested							
Mid-term appts.			Aug 04 Kennedy for McVae	Uncontested	May 04 Ward for vacant seat							
2005		Contested	Uncontested	Uncontested			Uncontested	Uncontested				Contested
Mid-term appts.					Sept 05 Shirado for Nelson	May 05 Tregoning for Harper			Dec 05 V. Brunini for L. Brunini			
2006					Uncontested							
Mid-term appts.					Mar 06 Reilly for Hobler							
2007		Contested	Uncontested	Uncontested			Uncontested	Uncontested				Contested
Mid-term appts.						Jan 07 Westbrook for Glazier						
2008					Uncontested							
Mid-term appts.									Jan 08 Abbott for V. Brunini			Feb 08 Johnson for Denebeim
2009		Contested	Uncontested	Uncontested			Uncontested	Uncontested				Contested
Mid-term appts.												
2010					Uncontested							
Mid-term appts.					Dec 10 Fraser for Cobey							Sep 10 Brown for Johnson
Total Possible Elections		5	5	5	6	6	6	5	5	5		5

ATTACHMENT 11



TCS D News

...about your parks, recreation, refuse and sanitation services

April 2011

TAMALPAIS COMMUNITY SERVICES DISTRICT

UPCOMING EVENTS

Paper Shredding & Medical Waste Disposal Day
Sat, 4/16, 9am-1pm

Green Waste Collection
Sat, 4/23, 8am-1pm

Debris Day
Sat, 5/14, 8am-1pm

Garage Sale
Sun, 5/15, 9am

See back cover for our upcoming TCS D Waste Collection events

Recreation Programs:

Programs are located at TVCC, 203 Marin Ave., unless noted

Gallery 305 - TCS D Office
M-F, 11-4pm (see page 6)

Rhubarb Revue
Sun, 5/1, door 1pm, curtain 2pm
Fri/Sat, 5/6,7,13 & 14, door 6:30pm, curtain 7pm
see page 6

Learn to Ride A Bike
see page 7

Bike Club @ Tam Valley
Th, 4/21,28, 5/5,12,19,26
6/2&9 3-4:30pm
see page 7

Wheel Escape Bike Club Camp
Tue/Th, 4/12 & 14, 9am-noon
see page 7

Wildflower Hike
Sat, 5/14, 3-5pm

Full Moon Hike
Tue, 5/17, 7:30-10:30pm

Farmers Market Opens
Tue, 5/17, 3-7pm

Tam Valley Seniors Schedule
see page 5

Dining with the Artists Gala
Sat, 5/21, 6pm
see page 7

Internet Safety Workshop
Mon, 5/23, 7pm
see page 9

Baptiste Inspired Yoga
Tu/Th, 8:30am
see page 10

Tennis Classes - All
see page 11



TAM VALLEY HAPPENINGS

TCS D prides itself on being an information center for Tam Valley. We receive numerous calls every day on a variety of topics and wanted to share that information with our residents:

Delano's Market Closing – we've received numerous calls since Delano's and our local postal annex closed. The store itself remains under lease with the Kroger Foods Corporation based in Philadelphia. Their lease will continue until early

2012. The challenge with any perspective tenants for the space is negotiation of a sublease, then extended lease. TCS D will continue to keep residents informed on this situation.

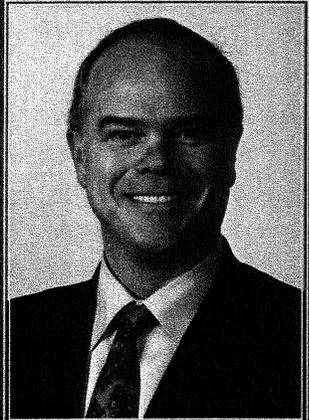
Tam Junction Center – In addition to the question of a new tenant for the Delano's space, many residents have raised the question about the center as a whole. At the February 28th Gateway Advisory Meeting, County Supervisor Charles McGlashan addressed this issue with residents and County Planning staff. Supervisor McGlashan asked Tam Valley resident Alan Jones to chair a workgroup to study and discuss the issue. If you are interested in participating, please contact Alan at (415) 381-6904 or Supervisor McGlashan's office at (415) 499-7593.

Sidewalk & Safety Improvements on Marin Avenue

– The Marin County Board of Supervisors is scheduled to open bids for a sidewalk and safety improvements along Marin Avenue between Spruce Street and the entrance to Tam Valley Elementary School. This work is projected to begin this summer and will resolve many of the pedestrian and bike access issues that have been a concern.

Tam Valley Trail Upgrades – Another long awaited project scheduled for Summer 2011 is the pathway and trail upgrades between the Mill Valley bike path corridor and Marin Avenue (across from the entrance to the Tam Valley Community Center). This multi-million dollar project will include a pedestrian crossing and traffic light at the intersection of Tennessee Valley Road and Shoreline Highway. This trail will also relocate the existing pathway out of the flood plain and an extension of the trail to extend to the Manzanita Park and Ride lot for easier access for commuters to catch public transit.

There are also upgrades scheduled for the Tam Valley Elementary School site – check with the Mill Valley Unified School District for more information.



IN-MEMORIAM
Marin County Supervisor
Charles McGlashan
1961-2011
*A Strong Friend
of Tam Valley*

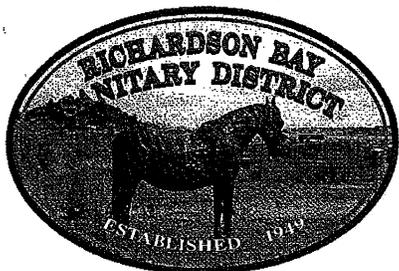
Photo: Marin County Supervisors Office

Results of Constituent Survey

1. Are you aware that Assemblyman Jarred Huffman has secured passage of legislation that denies only constituents in Southern Marin, including those in the Alto Sanitary District, of the ability to vote on consolidation of their District with other sanitary agencies?
Yes **12%** No **83%**
2. Are you aware that beginning in 2011, the Local Agency Formation Commission ("LAFCO") can now force the consolidation of the Alto Sanitary District with other single service special districts in Southern Marin? Yes **13%** No **85%**
3. Are you aware that the sewerage discharge from the Sewerage Agency of Southern Marin (SASM) Plant which occurred on January 31, 2008 was the result of an outside contractor (night security) failing to follow established protocols for emergencies which could have prevented the discharge? Yes **26%** No **71%**
4. Are you aware that SASM and the individual agencies which comprise it, including the Alto Sanitary District, have taken steps to prevent any sewerage discharge such as occurred on January 31, 2008 from happening again? Yes **34%** No **62%**
5. Are you aware that SASM and the individual agencies which comprise it, including the Alto Sanitary District, has enlarged the holding capacity of the sewerage treatment plant to address excess storm water infiltrating the treatment system as occurred on January 31, 2008? Yes **22%** No **75%**
6. Are you aware that SASM and the individual agencies which comprise it, including the Alto Sanitary District, has implemented a plan to address infiltration from household sewer laterals? Yes **20%** No **75%**
7. Are you satisfied with the service provided by the Alto Sanitary District? Yes **87%** No **8%**
Please explain why you are, or are not, satisfied with the Service of the Alto Sanitary District:

8. Are you aware that the various independent sewer agencies which comprise the SASM sewer treatment system have different rate schedules, have set different refuse/recycling fees, and have different sewer hook-up fees? Yes **30%** No **68%**
9. Are you aware that if LAFCO forces consolidation of the Alto Sanitary District with other agencies, your sewer rates, garbage recycling rate, and/or sewer hook-up fee may increase above the level set by the Alto Sanitary District? Yes **30%** No **67%**
10. Are you in favor of giving up local control of your sanitary district? Yes **8%** No **87%**

ATTACHMENT 12



RICHARDSON BAY SANITARY DISTRICT

500 Tiburon Blvd., Tiburon, CA 94920 Tel 415.388.1345 Fax 415.388.1339

January 19, 2011

Sewerage Agency of Southern Marin
26 Corte Madera Avenue
Mill Valley, CA 94941

Dear Members of the SASM Commission:

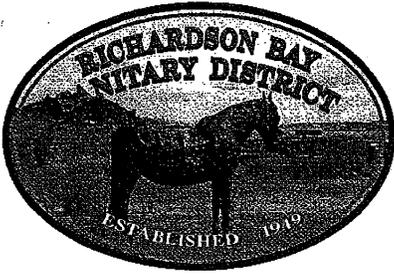
The attached letter, dated January 21, 2010, was prepared by the attorney for Richardson Bay Sanitary District at the behest of the RBSD BOD. It has been held pending developments at SASM.

I have been directed to forward the letter to you.

Sincerely,

A handwritten signature in black ink, appearing to read "Bruce D. Abbott". The signature is written in a cursive, flowing style.

Bruce D. Abbott
President



RICHARDSON BAY SANITARY DISTRICT

500 Tiburon Blvd., Tiburon, CA 94920

Tel 415.388.1345 Fax 415.388.1339

January 19, 2011

Sewerage Agency of Southern Marin
26 Corte Madera Avenue
Mill Valley, CA 94941

Dear Commissioners,

The RBSD board is troubled by the apparent acceptance by the SASM Commissioners of the "Act of God" explanation for the spill of 2008. RBSD does not accept that excuse, which is applicable only in those cases involving an extreme natural event which could not have been anticipated and which resulted in consequences that could not have been avoided. It is based on the premise that one cannot be held responsible for that which he could not have prevented. It is the opinion of the RBSD board that the weather event of 2008 could have been anticipated, and that the spill could have been prevented, and further that this opinion is shared by a number of regulatory agencies; otherwise no blame would have attached and no penalty would have ensued. RBSD challenges the Commissioners to explain why, if the "Act of God" defense was applicable to the operator of the SASM treatment facility, was it not availed by SASM and its member agencies?

RBSD is concerned that acceptance of the "Act of God" explanation for the 2008 spill could dampen the urgency necessary to prepare for and prevent future such spills. The fact is that the potential for future severe weather is as great as, or even greater than, the weather event of 2008, as evidenced by recent changes in world weather patterns. It is the opinion of the RBSD board that regulatory agencies will be unsympathetic to any attempt to characterize future weather events of similar or even greater intensity as "Acts of God" and that failure to prepare for such events will result in even harsher punitive measures. RBSD challenges the SASM Commissioners to address the concerns expressed by Bonner Buehler at the December 16th meeting that SASM was unprepared for severe weather, and offered a

number of immediate, intermediate steps that could be implemented to avoid spills.

RBSD is concerned that the recent Planning Sessions conducted by SASM were not sufficiently focused on correction of the underlying problems that led to the spill of 2008.

RMC SPILL REDUCTION PLAN

The Sewage Spill Reduction Acton Plan prepared by RMC was inconclusive in its findings and recommendations, and during the course of its presentation the RMC representative made the point on several occasions that the statistical data it contained could not go beyond generalities and could not be relied on to identify any specific problem areas. The models that were constructed to identify problems are speculative and lack hard supporting data. I&I is a major problem, and we lack precise information on its correction. To the extent that laterals contribute to the overall problem, they remain the responsibility of the individual collection agencies. No effort is in prospect to adopt a SASM wide policy on correction of lateral I&I, and there is no apparent willingness to initiate the steps that must be taken for correction. The funds earmarked for improving laterals have attracted only "a couple of dozen" applicants and it is evident that at this pace, those funds will do little to address the I&I problem, and unless this program is revised or a variance obtained to employ them in a different capacity, they risk being lost. Further, it is evident that the public cannot be cajoled to voluntarily address individual lateral problems without regulations that mandate them.

The precise location and severity of major I&I problems remains a mystery, and beyond regulatory mandates, the individual districts are free to proceed, at their own pace to identify and correct them. In the meantime, we are all exposed to the consequences of a major I&I event that could be located in one or several districts over which the remaining districts have no authority or control.

O&M Contract

Evidently the O&M contract with Mill Valley is to be left largely undisturbed, with some modifications, but with many of the concerns raised by RBSD unanswered. Mill Valley employees prepare the budget, which is presented to the Commission by the SASM GM, who remains an employee of Mill Valley, and thus whose loyalty to the SASM Commissioners is subject to compromise. The Commissioners gather only once a month in a brief meeting at which their loyalties are primarily toward the district they represent. They do not have the benefit of a dedicated GM whose undivided loyalty is exclusively theirs, and are required to rely on data that is prepared by Mill Valley. The Commissioners do not have the time, nor is it structurally possible, for them to devote the attention that would be required to develop a completely independent evaluation. The SASM agenda is prepared mostly by Mill Valley employees, and the meetings are devoted mostly to the presentations by the GM. (Nothing herein is intended to impugn the integrity of the GM, but rather to illustrate the impossibility of one man serving two masters.)

In short, RBST is not convinced that SASM has taken sufficient measures to prevent future spills, and remains skeptical that the structure of the SASM board is appropriate to the needs of the rate payers its serves. More should be done to improve the treatment facility and to identify and correct I&I and to ensure the independence of the SASM board.

Sincerely,

A handwritten signature in cursive script, appearing to read "Bruce Abbott".

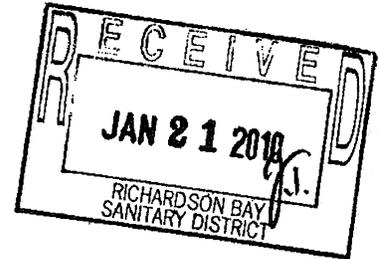
Bruce Abbott
President



RICHARDSON BAY SANITARY DISTRICT

500 Tiburon Blvd., Tiburon, CA 94920 Tel 415.388.1345 Fax 415.388.1339

January 21, 2010



Commissioners
Sewer Agency of Southern Marin
450 Sycamore Street
Mill Valley, CA 94941

Re: Imposed fine on SASM

Dear Commissioners:

As you know, the California Regional Water Quality Control Board has imposed a fine of \$1,600,000 upon SASM for unpermitted sewage flows from the treatment plant occurring on January 25, 2008, and January 31, 2008.

The Regional Water Quality Control Board has found that the January 25th event caused approximately 2.45 million gallons of untreated sewage to overflow into the Pickleweed inlet and the January 31, 2008, incident involved the spillover of many more gallons of untreated sewage.

In January 2008, when these events occurred, the SASM plant was being managed and staffed by the City of Mill Valley pursuant to an operational management agreement with the City of February of 1983. Under this agreement the City of Mill Valley agreed to operate, maintain and manage the wastewater treatment and disposal facilities of the Agency. In 2002, the contract was extended and modified pursuant to discussions and negotiations with various member agencies.

FACTS

One of the provisions agreed to in the 2000 Administrative Agreement, Paragraph 17, included a requirement that the City provide a full-time onsite manager to manage the affairs of the Agency.

In the 2000 Agreement, the City of Mill Valley agreed to maintain and manage the wastewater treatment and disposal facilities owned by the Agency to the satisfaction of the Agency. The City agreed to maintain these facilities in accordance with all relevant regulations and permit

Commissioners
SASM
January 21, 2010
Page 2

requirements, including, but not limited to, the NPDES permit requirements and all Federal and State cleanwater regulations.

Under Section 3 of the Agreement, the City of Mill Valley assumed the duty to maintain, operate and manage the Agency facilities, as an independent contractor and to perform "all acts necessary" for the exercise of said power. This included, but was not limited to, providing administration, to employ Agency's consultants and employees, and to maintain and operate and manage the Agency's buildings, works and improvements. Under Paragraph 3 the City agreed to be obligated to deal with all emergencies, and make "all appropriate provisions for emergency responses affecting the Agency's operations and facility."

In return for providing these services, the City of Mill Valley was entitled, under the contract, to "administrative compensation for the duties set forth in the Agreement," and has been paid thousands of dollars per year to do so.

Under Section 7 of the Agreement, the staffing of the Agency was be "the exclusive responsibility of the City," and all employees of SASM were to become employees of the City.

Pursuant to Section 10 of the Agreement, the City agreed to hold harmless and indemnify the Agency and all Agency members for any loss or damage to any real property or personal property, or from any expenses including litigation expenses and attorney fees, fines or forfeitures which were directly or proximate caused by the City's failure to perform its obligation set forth in the Agreement.

The operation of the facility and staffing requirements of the treatment plant were spelled out in SASM's Operation and Maintenance Manual and the State Wastewater Treatment Plant Regulations effective August 19, 1994.

Over the years the City of Mill Valley has recommended, and implemented a number of changes and consolidation of employee positions for running the plant. These changes and consolidations reduced the cost and expense of the City in administering and performing under the contract.

In the past these changes have been the subject matter of a number of questions and communications from, and by, the

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Richardson Bay Sanitary District as to their advisability and propriety given existing regulations.

A number of those questions concerned the City of Mill Valley's consolidation of the wastewater treatment plant manager's duties to also include management of the City's Engineer and Public Works Department. In response to inquiries and questions regarding whether the consolidation changes would comply with all applicable rules and regulations including the wastewater treatment plant classification and operator certification regulation promulgated by the California State Water Resource Control Board the City of Mill Valley by letter dated September 1, 1998, advised and represented to SASM that the City of Mill Valley's operation and staffing fully complied with all regulations. It stated that the EPA "guidelines" used "many years ago" by SASM engineers for design of the plant were "simply guidelines."

On September 17, 1998, David Coe reported to SASM with respect to the consolidations and delegation of certain duties that he felt "rushed" on several occasions when dealing with staff problems. He also pointed out that some employees had voiced objections over the consolidation, and pointed out that two or three of needed improvement projects "would probably be completed by now, if the manager were available full time."

Although consolidation of the staffing positions at the Agency was the subject of consideration and affirmative approval by members of the Board of Directors of SASM, the changes, consolidations and reductions in personnel were approved based on affirmative representations by the City that the staffing reductions did not make, or was not making, SASM "out of compliance," with the EPA regulations and Regional Water Quality Control Board regulations."

Findings of the Regional Water Quality Control Board.

In the Regional Water Quality Control Board's complaint and proposed penalty recommendation, it made the findings that the overflow events of 2008 were the result of understaffing, inadequate design features of the plant, (primarily the overflow ponds) and inadequate and improper compliance with the discharge regulations and improper compliance with emergency notification and testing requirements.

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Specifically, the Regional Water Quality Control Board made the following findings:

WWTP is currently staffed by three operators and one Laboratory Director/Analyst. Stephen Danehy serves dual roles of General Manager and Chief Plant Operator. At one time, the WWTP had a General Manager separate from the Chief Plant Operator and it also had a Clerical Assistant. Mr. Danehy reports that he currently spends most of his time on managerial and clerical duties, leaving him little time to focus on operational needs of the WWTP. An organizational chart for SASM's Operations Department in 1996 shows that it had at least four more positions than it has now. The reduction in staff has occurred despite the fact that the WWTP's capacity needs have remained the same, but the need for maintenance and repairs has increased. Formerly, SASM had a separate Chief Plant Operator and a separate Lead Maintenance Mechanic. Both positions have been eliminated or combined with other positions. The maintenance department currently consists of a Maintenance Supervisor and two maintenance mechanics, a mechanic's aide and a painter. The Maintenance Supervisor, Mike Aries, reports that he had more staff in the past, and that the department is understaffed. As a result of under staffing, as of February 2008, a review of work orders showed that there were 50 open work orders, some dating back to 2005. While most dealt with non-operating repairs, such as rusting equipment, there were several open work orders dealing with critical pieces of equipment that involved plant operations, such as a work order for a defective micro-switch associated with the wet well controller and a broken hypochlorite line that feeds the disinfectant to the final effluent.

The January 25, 2008, discharge resulted in a significant volume of partially treated waste being discharged to surface waters. The discharge occurred as a result of a system unable to handle heavy inflow volume compounded by understaffing.

The January 31, 2008 discharge occurred in part because of understaffing and miscalculations about the intensity of the rain event that day.

Both these bypasses were avoidable had SASM taken appropriate measures in advance of the rain events.

SASM does not have a stand-alone plan, but instead relies upon outdated and irrelevant information contained in the 1984 Engineering Design document which dates back to when the present facility was constructed. When storm events occurred in January 2008, SASM staff decisions were not well-planned or executed with deliberation. Instead, errors of judgment contributed significantly to the inability to meet the terms and conditions of the SASM discharge permit.

SASM is fully culpable for the events described herein. With respect to the January 25 discharge, SASM has been aware for years of the potential for high inflow volume to exceed the WWTP's capacity.

The magnitude of the January 2008 discharges could likely have been substantially reduced if SASM had had more staff to monitor the amount of rain coming down and properly operated its WWTP systems during the events.

. . . in all likelihood, the alarm company notification failure could have been avoided if SASM employed a person to remain at the WWTP instead of relying on an off-site contractor. SASM is responsible for making sure that it conducts its own assessments of staff needs in order to prevent discharges and meet NPDES permit requirements. Based upon the investigation, it appears that the discharges could have been prevented had SASM had in place additional, properly trained staff.

Again, SASM is solely responsible to assure that its staff is fully and properly trained. The events of January 2008 suggest that this was not the case. There were failures in pump operations,

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reporting and in monitoring. It is clear that SASM has failed to provide its staff with training, for example, about the NPDES permit requirements. Training could have helped to prevent the discharge and their effects on the environment. SASM realized an unknown savings by failing to conduct appropriate and timely training in system operations, reporting and monitoring.

The Regional Water Board staff estimated that SASM saved \$355,600 by understaffing the Waste Water Treatment Plant. It found that SASM should have employed an additional treatment plant operator to assist in operating the WWTP and an additional maintenance worker to keep up on necessary repairs. It found that had these additional two positions been filled, SASM's General Manager would have been in a better position to plan and manage overall operations, update plans and manuals, and provide staff training, all of which could have avoided the poor judgments made before and during the events.

Hold Harmless Agreement with the City of Mill Valley.

As indicated, the administrative contract between SASM and the City of Mill Valley contains a requirement that the City comply in all respects with all relevant regulations and permit requirements including the NPDES permit requirements and all Federal and State cleanwater regulations. In the Agreement, the City agreed to hold harmless and defend and indemnify the Agency for "any loss or damage" to property and any expenses including litigation and attorney fees, and finds or forfeitures which were proximately caused by the City's failure to perform its obligations under the contract.

The contract in question and the hold harmless agreement was specifically drafted by the City of Mill Valley.

It appears from the findings of the Regional Water Quality Control Board that the overflow incidents of January 2008 were occasioned by the failure of the Agency's facilities caused by the City's conduct in staffing and operating the facility.

The consolidation and elimination of positions directly benefitted the City of Mill Valley and reduced their cost in performing under the contract. The Regional Water Quality Control Board's findings point out the apparent savings

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in cost achieved by eliminating or consolidating staff positions. The factual findings of the Board directly establish that these overflows occurred and the resulting fines have been imposed on SASM because of improper management and maintenance of SASM facilities which were at all times under the control and management of the City of Mill Valley.

The Commissioners of SASM should make a demand to the City of Mill Valley for indemnification and payment of the Regional Water Quality Control Board fine by the City of Mill Valley by reason of the provisions of the contract between SASM and the City and the City's obligations under the management agreement and hold harmless an indemnification agreement.

Very truly yours,

Roy Benvenuti
Commissioner of SASM

RB/bar
Attachment - 1

Operation And Maintenance Agreement

**Between
Sewerage Agency Of Southern Marin
And
City Of Mill Valley**

This AGREEMENT, entered into this 17th day of July, 2000 by and between the SEWERAGE AGENCY OF SOUTHERN MARIN ("Agency") and the CITY OF MILL VALLEY ("City"), becomes effective on the date first above written, which is the same as the last date of execution by the two parties. Both AGENCY and CITY hereby agree as follows:

Section 1. Purpose

The purpose of this Agreement is to empower CITY to operate, maintain and manage, to the satisfaction of AGENCY, those wastewater treatment and disposal facilities owned by AGENCY as of the date of this Agreement, and any such facilities subsequently obtained by AGENCY. CITY hereby agrees to operate and maintain those facilities in accordance with all relevant regulations and permit requirements, especially including, but not limited to NPDES permit requirements, and Federal and State Clean Water Grant regulations.

Section 2. Term And Effect

This Agreement shall continue in full force and effect until terminated as herein provided. This Agreement may be terminated by either party after one year's written advance notice to the other party. AGENCY agrees that such termination shall require a vote of its governing Board with at least a majority of its member entity representatives as of that date voting to terminate.

Section 3. Duties And Powers Of City

Within the constraints of the budget (see section 4 below), and subject to the direction of the AGENCY, CITY shall have the duty, power and authorization to maintain, operate and manage AGENCY facilities. CITY is hereby authorized and directed, as an independent contractor, to perform all acts necessary for the exercise of said power, including but not limited to the following: To provide administration; to prepare annual budgets; to make and enter into contracts; to employ agents, consultants, and employees; and to maintain, operate and manage AGENCY buildings, works, or improvements. CITY shall have the power to cope with emergencies, including implementation of the City's Emergency Plan and shall make appropriate provisions for emergency responses affecting the AGENCY'S operations and facilities.

Section 4. Budget Preparation And Approval

CITY shall prepare an Annual Report setting forth the needs and plans for the maintenance, operation, management, and capital improvement of AGENCY facilities. This Report shall include the annual budget, which will be submitted to AGENCY for consideration and approval prior to May 1, of each year. AGENCY recognizes that CITY shall be entitled to administrative compensation for the duties set forth in this Agreement. The amount of such compensation shall reflect appropriate costs from areas including City Manager, Personnel, and Finance, and shall be approved in the annual budget. CITY shall periodically submit the specific rationale and formula for calculation of the administrative compensation to AGENCY for approval. Approval by AGENCY will not be unreasonably withheld or delayed. Any increase in the budget of a non-emergency nature shall require prior approval of Agency, which approval shall not unreasonably be withheld.

In the event that the budget is not approved by AGENCY by July 1 of any given year, CITY shall be empowered to operate on a month-by-month basis with an extension of the previous year's budget. AGENCY agrees to assume liability for additional operating costs during this period, subject to final budget approval and such limitation as may be found in Section 3 or elsewhere in this Agreement.

This Annual Report shall provide a forum for a review by both CITY and AGENCY of City's stewardship during the preceding year, and also provide an opportunity for discussion and resolution of changes that might be beneficial to both parties.

Section 5. Revenue And Financing

AGENCY agrees to maintain and fund an Operating Fund to pay all costs associated with the operation, maintenance, administration and capital improvements of AGENCY facilities.

AGENCY shall receive an annual independent audit of CITY records pertaining to AGENCY activities. AGENCY shall have access to CITY records pertaining to AGENCY activities at any time during normal business hours. CITY agrees to keep and maintain separate and complete records and files on all AGENCY facilities, operations, and maintenance, and on financial, insurance, legal, regulatory, and institutional matters.

Section 6. Method And Schedule Of Payments

Budgeted expenditures will be proportionately charged by CITY to AGENCY member entities based on a method to be specified by AGENCY. Semi-annual installments of the operating budget will be due and payable during the months of February and June of each budget year. Interest shall be charged on all delinquent payments at a rate based on

the average interest earnings of the CITY in the month preceding the date the payment was due.

Section 7. Staffing

The staff of employees for the operation and maintenance of AGENCY facilities shall be the exclusive responsibility of CITY. When hired, employees shall become employees of CITY, subject to the same rights and regulations of all other CITY employees. CITY will provide worker's compensation coverage for all CITY employees.

It is understood that with approval of the AGENCY for substantial modifications employees may perform services for both AGENCY and for CITY, in which instances CITY shall account separately for the time of such employees to be charged to AGENCY. For certain positions where it may be impractical to separate CITY and AGENCY responsibilities, a prorated estimate of costs shall be included, reviewed and approved in the annual budget.

Job descriptions and employment standards shall be in accordance with the Operation and Maintenance Manuals maintained by the AGENCY General Manager, although they may be modified by CITY. Substantial modifications will require AGENCY approval.

Section 8. City An Independent Contractor

It is understood and agreed that CITY is, in its capacity of providing operations and maintenance management of AGENCY facilities, an independent contractor. Nothing contained herein shall be construed as making CITY, or any individual whose compensation for services is paid by CITY, an agent or employee of AGENCY, or authorizing CITY to create or assume any obligation for or on behalf of AGENCY.

Section 9. Insurance

AGENCY agrees to procure at its sole expense, and to maintain during the life of this Agreement, public liability insurance to protect against loss from liability imposed by law for damages on account of bodily injury, property damage, and personal injury. AGENCY agrees that all such insurance shall name the City of Mill Valley, its officers and employees, as additional insureds under all such policies, and evidence of such insurance shall be provided to CITY. AGENCY also agrees that CITY shall be named as additional insured on all insurance policies covering all real and personal property of AGENCY.

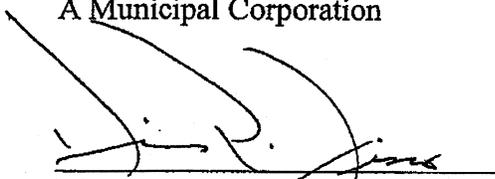
Section 10. Hold Harmless

CITY shall hold harmless, defend and indemnify AGENCY and all AGENCY Member Agencies including the Almonte, Alto, Homestead Valley and Richardson Bay Sanitary Districts and the Tamalpais Community Services District for any loss or damage to real

or personal property, or any injury or death to any person, or any expense, including litigation expense and attorney's fees, fine, or forfeiture which is directly or proximately caused by City's failure to perform its obligations as set forth in this Agreement. However, CITY shall not be responsible for any loss, damage, injury, death, expense, fine, or forfeiture which is occasioned by a failure of any portion of Agency's facilities not directly or proximately caused by City's conduct, including misfeasance or nonfeasance, or which is caused by an Act of God. CITY shall not be responsible for any action resulting from Agency's or any Member Agency's negligence.

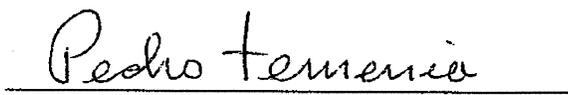
IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed and attested by their proper officers thereunto duly authorized, and their official seals to be hereto affixed, as of the day and year first above written.

City Of Mill Valley
A Municipal Corporation

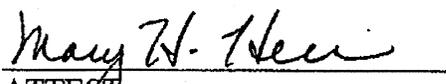


Mayor Dennis Fisco

Sewerage Agency Of Southern Marin
A Joint Powers Agency



Vice President Pedro Femenia



ATTEST

(SEAL)



ATTEST

(SEAL)

ATTACHMENT 13

Functional Consolidation
 Summary of Responses to Questions
 Question

Almonte Alto HVSD MV RBSD TCSD

Question	Almonte	Alto	HVSD	MV	RBSD	TCSD
1) ...interested in concept of consolidation ...of ... collection services...for some or all member agencies?	? see below	YES	YES	YES	NO *	NO
2) What collection services should be considered?						
O & M?	NO	YES	YES	YES		NO
Engineering Services?	YES	YES	YES	YES		NO
Bonding?	NO	NO	YES	YES		NO
Contracting for Major Projects?	YES	YES	YES	YES		YES
Customer Service?	NO	YES	YES	YES		YES
Other (Clerical Support) (pipe and lift station maintenance, SSO response) (equipment sharing, cleaning services)		YES	YES			YES
What agencies/ entities would you like to see provide proposals?						
?	YES	YES	NO	YES		YES
Tamalpais CSD?	NO	YES	NO	YES		YES
City of ?	NO	YES	NO	YES		YES
SASM?	NO	YES	YES	YES		YES
Other?						
4) Is your agency interested in providing these collection services for other SASM member agencies?	NO - limited staff	NO	NO	?-see below	*	?-see below

ATTACHMENT 14

MARIN LOCAL AGENCY FORMATION COMMISSION

RESOLUTION NO. 12-__

**RESOLUTION INITIATING PROCEEDINGS FOR THE CONSOLIDATION OF
THE RICHARDSON BAY SANITARY DISTRICT, THE ALTO SANITARY
DISTRICT, THE HOMESTEAD VALLEY SANITARY DISTRICT, AND THE
ALMONTE SANITARY DISTRICT (LAFCO File No. 13__)**

WHEREAS, AB 1232 expressed a preference for southern Marin sewer agencies to pursue more collaborative working relationships, as well as governance consolidations to improve efficiency and effectiveness and to reduce budget demands; and

WHEREAS, AB 1232 empowers the Local Agency Formation Commission of Marin ("Commission") to reorganize or consolidate the Sewerage Agency of Southern Marin and its member districts into one district in the event the member districts do not act to address operational inefficiencies; and

WHEREAS, the Commission desires to use the authority given by AB 1232 to initiate a proposal that will provide the greatest economies of scale and efficiencies, while providing the least duplication of administration and bureaucracy; and

WHEREAS, the Commission desires to initiate a proposal pursuant to the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, commencing with Section 56000 of the California Government Code, for the consolidation of Richardson Bay Sanitary District, the Alto Sanitary District, the Homestead Sanitary District, and the Almonte Sanitary District (collectively, the "Districts into a consolidated successor district; and

WHEREAS, a notice of intent to adopt this resolution is not required and has not been given; and

WHEREAS, the territory proposed to be reorganized is legally inhabited and includes the entirety of the boundaries of the Districts; and

WHEREAS, this proposal is consistent with the spheres of influence of the Districts; and

WHEREAS, the reasons for the proposed reorganization are as follows: potential benefits are likely to be achieved by consolidation through economies of scale, management efficiency and local political accountability that warrant further consideration; and

WHEREAS, the Commission certifies that the proposed consolidation is categorically exempt from CEQA pursuant to Section 15320 of the State CEQA Guidelines (Class 20 categorical exemption); and

WHEREAS, this proposal, if approved would be subject to the following terms and conditions, subject to further review:

1. The effective date of the reorganization will be July 1, 2012.
2. The name of the consolidated district shall be the (e.g. Southern Marin Sanitary District).
3. All existing laws, ordinances, resolutions, actions, contracts, agreements, rules and regulations, policies and procedures, that have been enacted, adopted or passed by either district prior to the effective date of the consolidation shall remain in effect after the reorganization until superseded, amended, modified or deleted by the Board of Directors of the Successor District. Any conflict in the application of the aforementioned issues that arise after the reorganization shall be resolved at the discretion of the Board of Directors of the Successor District.
4. As a condition of reorganization, the boards of Alto, Almonte, Homestead Valley and Richardson Bay Sanitary Districts shall create a governing board for the Southern Marin Sanitary District with directors being elected at large. The governing board shall be composed initially of nine members and subsequently reduced to five members in the following manner:
 - a. The governing board of the Alto Sanitary District shall designate two of its members to serve until December 31, 2014.
 - b. The governing board of the Almonte Sanitary District shall designate two of its members to serve until December 31, 2014.
 - c. The governing board of the Homestead Valley Sanitary District shall designate two of its members to serve until December 31, 2014.
 - d. The governing board of the Richardson Bay Sanitary District shall designate three of its members to serve until December 31, 2014.
 - e. If the any district fails to so designate members for inclusion on the Southern Marin Sanitary District board of directors within 60 days of LAFCO's resolution approving consolidation, the County Board of Supervisors shall appoint residents of that District to serve.
 - f. All terms of office for board members appointed according to the above provisions shall expire December 31, 2014. Election for terms beginning January 1, 2015 shall be for a governing board of five members, three to be elected for four-year terms and thereafter for four-year terms and two shall be elected for two-year terms and four-year terms thereafter.

5. The appropriation limit of the Successor District for Fiscal Year 2011/2012 shall be established by LAFCO at \$_____, which is the sum of the appropriations limits of the predecessor districts.
6. The sphere of influence of the Southern Marin Sanitary District shall be as shown in Exhibit __.
7. The Southern Marin Sanitary District has the discretionary authority to impose and collect all charges, fees, and assessments previously approved by the four predecessor districts.
8. The Southern Marin Sanitary District shall establish separate rate or billing zones for the predecessor Districts' collection system service operations.
9. The Southern Marin Sanitary District shall provide evidence to the satisfaction of LAFCO that separate account(s) for funds previously held by the predecessor districts have been established and are maintained for the restricted purpose of use in performing the contracts, capital replacement, or reconstruction functions in the territories of the predecessor districts. Funds held in trust by the Southern Marin Sanitary District for a prescribed purpose shall be used only for that prescribed purpose. All delinquent fees, charges, and any other collections or assets that would have accrued to the predecessor districts shall accrue and be transferred to the Southern Marin Sanitary District.
10. This consolidation shall not impair any rights of any bondholder or creditor of the predecessor districts.
11. To the extent possible, the contract general managers of the predecessor districts will become contractors or employees of the Southern Marin Sanitary District, performing the same services after the effective date of this reorganization as were performed prior to the effective date, and requiring no interruption in the performance of service responsibility. Funds that are transferred to the Southern Marin Sanitary District from the predecessor districts shall be used to compensate the managers for all payments for vested vacation, sick leave and any other personal leave time remaining on the books before they become contractors or employees of the Southern Marin Sanitary District.
12. All available ad valorem-based property tax revenue levied and collected from properties located in Marin County, previously payable to the predecessor districts shall be transferred to the Southern Marin Sanitary District, which shall account for said funds separately in established rate zones.

13. Upon the effective date of this consolidation, all assets (including but not limited to all real or personal property, all water systems, cash on hand, long and short term investments, reserve funds, and monies due but uncollected, and all assets included in and allocated according to the SASM JEPAs) of the predecessor districts shall be transferred to the Southern Marin Sanitary District.
14. The capacity entitlements in the treatment plant and other jointly used SASM capital facilities owned by the predecessor districts, including those capacity entitlements increased pursuant to Section 19.5 of the SASM JEPAs, shall be allocated to the Southern Marin Sanitary District.
15. All debts, liabilities, contracts, and obligations of the predecessor districts, including any bond indebtedness and Certificate of Participation Financing, shall be transferred and assigned to the Southern Marin Sanitary District. The Southern Marin Sanitary District shall arrange for collection of revenues sufficient to pay principal and interest and for payment of debt service when due. Any assets securing the predecessor districts' debts liabilities, contracts, or obligations assigned or transferred to the Southern Marin Sanitary District shall continue to secure the payment and discharge of such debts, liabilities, contracts, and obligations to the extent they are determined to be properly due and owing. Any assessments levied on behalf of the predecessor districts or any bills or statements rendered by or on behalf of the predecessor districts shall continue to be a debt or obligation of the person or property against whom levied, assessed, or rendered unless relieved by the Southern Marin Sanitary District.

NOW THEREFORE, the Marin Local Agency Formation DOES HEREBY RESOLVE, DETERMINE AND ORDER as follows:

Section 1. That proceedings for the consolidation of Richardson Bay Sanitary District, the Alto Sanitary District, the Homestead Valley Sanitary District, and the Almonte Sanitary District into the consolidated Southern Marin Sanitary District, are initiated in the manner provided by the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 and the provisions of Government Code Section 56375.2.

Section 2. The Executive Officer is hereby authorized and directed to compile all application materials for the processing of this proposal, including a plan for providing services, in the manner prescribed by Section 56653 of the Government Code and as specified in the Policies, Procedures and Guidelines adopted by this Commission.

PASSED AND ADOPTED by the Marin Local Agency Formation Commission on this __th day of _____, 2012, by the following vote:

AYES:

NOES:

ABSENT:

ATTEST:

JEFFRY BLANCHFIELD, Chairperson

PETER V. BANNING, Executive Officer

ATTACHMENT 15

Contested Elections, Marin County Sanitary Districts, 2000 - 2011

Sanitary District	Population	Total Elections	Contested Elections	Percent Contested
Alto	939	5	0	0%
Almonte	1,478	5	0	0%
Homestead Valley	2,354	6	1	17%
Tiburon	8,749	5	3	60%
Richardson Bay	9,494	5	0	0%
Sausalito-Marin City	10,756	5	2	40%
Las Gallinas Valley	30,000	5	5	100%
Ross Valley	49,000	6	3	50%
Novato	60,500	6	5	83%

(Service population as reported to LAFCO for update of Directory of Marin County Local Governments)