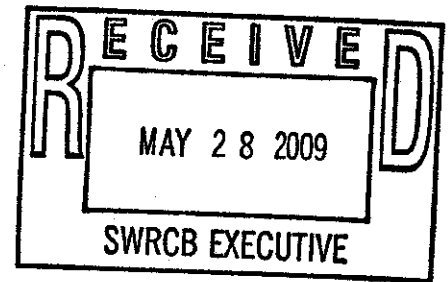


May 27, 2009

State Water Resources Control Board,
1001 I Street
Sacramento, CA 95814.

Sent via electronic mail to commentletters@waterboards.ca.gov



Dear Regional Board Members and Staff:

On behalf of San Francisco Baykeeper ("Baykeeper") and our members, we are writing to provide comments on the Total Maximum Daily Load ("TMDL") for Pathogens in Richardson Bay. We have previously submitted written comments on this draft TMDL and hereby incorporate by reference all of the details contained therein. As recognized by this TMDL, sewage discharges from houseboats, recreational vessels, storm drains, and sanitary sewer systems have and continue to compromise the designated beneficial uses of Richardson Bay. This is particularly troubling given the ecological and recreational importance of this area. We feel that every effort should be made to ensure that all of the beneficial uses of Richardson Bay are protected.

In general, we support adoption of this Basin Plan Amendment, which is necessary to protect Richardson Bay from the harmful impacts of sewage discharges and we are also supportive of using the shellfish harvesting water quality objective for the TMDL as the best way to ensure that Richardson Bay will eventually support all designated uses as required by the Clean Water Act. However, we again ask that the following changes be made to the Basin Plan Amendment prior to being considered by the Regional Board for adoption:

- **Impose additional implementation measures on sanitary sewer system owners in southern Marin, and**
- **Divide the wasteload allocation for stormwater agencies into dry and wet weather allocations and translate the allocations into numeric permit limits, as has been done by other Regional Boards in California.**

A. Additional Implementation Measures for Sanitary Sewer Systems are Necessary.

The TMDL must specify implementation measures for sanitary sewer agencies in southern Marin County that go beyond mere compliance with existing regulations. The sewage treatment plants in Marin are old, in poor condition, and lack capacity to treat wet weather flows – as evidenced by the large spills that have occurred over the past two winters in Marin. Similarly, the wastewater collection systems in Marin have chronic problems with spills. The southern Marin collection systems experienced an estimated 150 sewage spills in less than three years, which resulted in at least 50,000 gallons of raw sewage flowing to nearby surface waters, including Richardson Bay. This rate is also probably an underestimate – EPA's inspections of the sanitary sewer system collection systems in southern Marin identified problems in tracking and reporting sewage spills, and Baykeeper's own experience in reviewing city records shows that cities often experience many more sewage spills than they report to the Regional Board¹.

¹ U.S.EPA, Region IX, Sanitary Sewer Overflow Inspection Reports for the Southern Agency of Southern Marin, available at <http://www.epa.gov/region09/water/npdes/compliance.html>.

The only measure that the Richardson Bay Pathogen TMDL requires to address this deplorable situation is that they comply with the Statewide General Waste Discharge Requirements ("WDR") for Sanitary Sewer Systems². As we have explained in our previous comments, the TMDL as currently written will not provide the necessary reasonable assurances that water quality standards will be attained through implementation of the measures described in the TMDL. Although it has been in effect for several years, the Statewide General Permit has not prevented or remedied the failing conditions of the Marin sewer systems or the spills that they contribute to. We therefore reiterate our strong recommendation that the draft TMDL identify trackable implementation measures—beyond mere compliance with the General WDR—for reducing sewage spills from the sanitary sewer treatment plants and collection systems in southern Marin. These measures should address the issues identified by EPA's recent inspections of five of the six sewage collection systems that flow to the SASM wastewater facility.

Additionally, the Marin agencies should be required to establish a forum for information sharing, discussion and dispute resolution per the recommendation of a 2004 Marin Grand Jury Report entitled "Southern Marin Sewers—So Many Districts, So Few Users."³ This report concluded that the relationships between the agencies responsible for the treatment plants and those responsible for the collection systems creates an institutional barrier to reducing inflow and infiltration and, therefore, spills. The Grand Jury found that "with no overriding mandate to confer and collaborate, it is easy [for the collection agencies] to opt to conduct business as usual."⁴ The report recommends the creation of a joint powers agreement to enable the eleven agencies serving the area to share personnel, expertise, and physical resources.

Recommendation: Baykeeper recommends that the Basin Plan Amendment be revised to include trackable implementation measures and deadlines addressing each of the issues identified above, including but not limited to:

- Characterization of inflow & infiltration to the collection systems;
- Acquisition of spill response equipment and development of formal response and containment procedures;
- Development and implementation of accurate spill reporting procedures;
- Comprehensive evaluations of the agencies' Capacity, Management, Operation, and Maintenance ("CMOM") programs; and
- Creation of a joint powers agreement or some other arrangement to facilitate communication, information sharing and dispute resolution amongst the agencies.

B. The TMDL Should Establish Municipal Stormwater Wasteload Allocations for Wet and Dry Seasons and Should Provide for Numeric Effluent Limits in Stormwater Permits.

The TMDL provisions related to stormwater require two changes. First, the TMDL should establish WLAs for MS4s during the wet and dry season. During the dry season, MS4s should not be a source of fecal indicator bacteria as they should not be discharging to Richardson Bay at all. Second, the trackable implementation measures for MS4s should include numeric effluent limits. In southern California, the Los Angeles Regional Board used numeric effluent limits to implement dry weather WLAs for Santa

²California State Water Resources Control Board, Order No. 2006-0003-DWQ (May 2, 2006) (hereinafter "Statewide WDR").

³ 2003-2004 Marin County Grand Jury Report: Southern Marin Sewers – So Many Districts, So Few Users (April 27, 2004). Available at <http://www.co.marin.ca.us/depts/GJ/main/cvgrjr/2003gj/SouthernMarinSewersReport.pdf>

⁴ *Id.* at p. 11.

Monica Bay beaches. Their rationale for this approach—that dry weather WLAs do not apply to storm water and that the iterative approach in previous permits has failed to eliminate dry weather discharges—applies equally here⁵.

Recommendation: We also request that the stormwater runoff WLA be divided into wet and dry season allocations with numeric limits to implement the dry weather allocation.

C. The Houseboat and Vessel Implementation Measures Should Contain More Detail.

We strongly support the requirement that the county and local cities evaluate the adequacy and performance of sewage systems for all houseboats and vessels. But for this measure to be effective, the Board must include more details about what this entails.

Recommendation: Baykeeper recommends that the trackable implementation measures include annual (or some specified frequency) inspections for each houseboat and vessel, establishment of authority by the cities and by marina operators to inspect houseboats and vessels and enforce against those that are substandard, and establishment of an anonymous hotline for citizens to report violations⁶.

D. The Basin Plan Amendment Should Require Water Quality Monitoring and Beach Closures When Water Quality Standards are Exceeded.

While the monitoring data summarized in the TMDL staff report contains data for Schoonmaker Beach, it is unclear whether the Marin County Department of Health or other agency regularly monitors fecal coliform levels at beaches or other locations where water contact recreation is likely.

Recommendation: In order to protect human health, the Basin Plan should require regular fecal indicator bacteria monitoring at Schoonmaker Beach and other water contact recreation areas and immediate closures of these areas when water quality objectives are exceeded.

* * *

In conclusion, Baykeeper supports adoption of this TMDL provided that it is first revised to (1) impose additional implementation measures for sanitary sewer systems as necessary to address identified problems with those systems, (2) establish dry and wet weather WLAs for municipal stormwater, (3) specify that municipal stormwater WLAs will be implemented via numeric effluent limits as has been done in other parts of California, (4) provide more detail regarding vessel and houseboat implementation measures, and (5) require beach monitoring and immediate public notification when water quality standards are exceeded.

We appreciate the opportunity to provide comments on this TMDL. Please contact us if you have any questions regarding recommendations made herein.

⁵ Los Angeles Regional Water Quality Control Board, Waste Discharge Requirements for Municipal Storm Water and Urban Runoff Discharges within the County of Los Angeles, and the Incorporated Cities Therein, Except the City of Long Beach, Order No. 01-182, NPDES Permit No. Cas004001 (December 13, 2001) (amended on September 14, 2006 by Order R4-2006-0074 and on August 9, 2007 by Order R4-2007-0042).

⁶ Baykeeper regularly receives phone calls from houseboat and vessel owners complaining that other marina tenants are illegally discharging. Frequently, these callers wish to remain anonymous out of concerns about retaliation or, for other reasons, do not want to report the discharge to the harbormaster.

Sincerely,

Sejal Choksi, Baykeeper and Program Director

Amy Chastain, Staff Attorney



BAYKEEPER.

*Defending Our Waters—from the
High Sierra to the Golden Gate*

March 24, 2008

Mr. Farhad Ghodrati
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, California 94612

Sent via electronic mail to fghodrati@waterboards.ca.gov

Dear Regional Board Members and Staff:

On behalf of San Francisco Baykeeper ("Baykeeper") and our thousands of Bay Area members, we are writing to provide comments on the Total Maximum Daily Load ("TMDL") for Pathogens in Richardson Bay. Richardson Bay encompasses some of the most important habitat in the San Francisco region. It contains the second largest extant eelgrass bed in the San Francisco Bay Area and is the site of current important eelgrass bed restoration efforts. The Bay is also integral to annual winter herring runs, the last commercial fishery in the Bay, and to thousands of local and migrating birds, including the endangered California clapper rail. With its relatively protected waters, Richardson Bay is also the location of native oyster restoration and is a popular destination for swimming, kayaking, and rowing.

As recognized by this TMDL, sewage discharges from houseboats, recreational vessels, storm drains, and sanitary sewer systems have and continue to compromise the designated beneficial uses of Richardson Bay. In addition to pathogenic microorganisms that make shellfish consumption and water contact recreation unsafe, sewage contains a variety of other pollutants that threaten the health of the Richardson Bay ecosystem. These pollutants include nutrients which can contribute to depressed dissolved oxygen levels, and metals and pesticides, which can have sub-lethal but still significant impacts on all aquatic life. While fecal coliform bacteria are the focus of this TMDL, successful implementation should reduce loading of many other harmful pollutants also associated with untreated sewage.

In general, we support adoption of this Basin Plan Amendment, which is necessary to protect Richardson Bay from the harmful impacts of sewage discharges. However, we ask that the following changes be made to the Basin Plan Amendment prior to being considered by the Regional Board for adoption:

- **Impose additional implementation measures on sanitary sewer system owners in southern Marin, and**
- **Divide the wasteload allocation for stormwater agencies into dry and wet weather allocations and translate the allocations into numeric permit limits, as has been done by other Regional Boards in California.**

Apart from these changes, Baykeeper supports the Regional Board's approach, and especially the use of the water quality objective for shellfish harvesting as the TMDL. Shellfish harvesting is one of the designated beneficial uses of Richardson Bay and, therefore, the TMDL must be sufficiently stringent to protect that use. Establishing the TMDL at the same level (14 MPN/100 mL) as the water quality objective is the best way to ensure that Richardson Bay will eventually support all designated uses as required by the Clean Water Act.



Pollution hotline: 1-800 KEEP BAY
www.baykeeper.org

785 Market Street, Suite 850
San Francisco, CA 94103
Tel (415) 856-0444
Fax (415) 856-0443

We also thank Regional Board staff for including in the Basin Plan Amendment a table of implementation measures. Our comments on previous TMDLs have largely focused on the lack of detail with respect to implementation. Although our comments today still request changes to the implementation measures, the table provided in the Basin Plan represents progress and is something that we hope to see in future TMDLs.

A. Additional Implementation Measures for Sanitary Sewer Systems are Necessary.

The TMDL must specify implementation measures for sanitary sewer agencies in southern Marin County that go beyond mere compliance with existing regulations. Many, if not all, of the sewage treatment plants and collection systems in southern Marin are in poor condition and/or lack the capacity to treat wet weather flows. In January of this year, the Sewerage Agency of Southern Marin ("SASM") made many newspapers' headlines when the agency allowed more than 2.5 million gallons of raw and partially treated sewage to flow into the shallow waters of Richardson Bay on two separate occasions.

In addition to these very large spills from the treatment plant, the southern Marin collection systems experienced an estimated 150 sewage spills in less than three years, which resulted in at least 50,000 gallons of raw sewage flowing to nearby surface waters, including Richardson Bay. Not only is this spill rate unacceptably high and indicative of the dire condition of southern Marin's wastewater infrastructure, it is likely an underestimate of the actual number and volume of spills. EPA's inspections of the sanitary sewer system collection systems in southern Marin identified problems in tracking and reporting sewage spills, and Baykeeper's own experience in reviewing city records shows that cities often experience many more sewage spills than they report to the Regional Board.¹

The TMDL's sole requirement relating to these aged collection systems—that they comply with the Statewide General Waste Discharge Requirements ("WDR") for Sanitary Sewer Systems²—is wholly inadequate in light of Marin's clearly documented sewage infrastructure problems and Richardson Bay's impairment. All TMDLs must provide "reasonable assurances" that they can and will be implemented in a manner that results in timely attainment of water quality standards.³ Reasonable assurances must include an "actual demonstration that the measures identified will result in the predicted reductions and that the State is able to assure this result."⁴ The Statewide General Permit, which attempts to ensure that sanitary sewer agencies keep their collection systems in good working order, has been in effect for almost two years but has not prevented or remedied the failing conditions of the Marin sewer systems. In the absence of enforcement or additional regulation, the Marin sanitary agencies will continue to have numerous sewage spills that will cause and contribute to water quality violations in Richardson Bay.

¹ U.S. EPA, Region IX, Sanitary Sewer Overflow Inspection Reports for the Southern Agency of Southern Marin, available at <http://www.epa.gov/region09/water/npdes/compliance.html>.

² California State Water Resources Control Board, Order No. 2006-0003-DWQ (May 2, 2006) (hereinafter "Statewide WDR").

³ See U.S. EPA, Region IX, Guidance for Developing TMDLs in California, p. 12 (January 7, 2000) ("Cal. TMDL Guidance"); U.S. EPA, EPA440-4-91-001, Guidance for Water Quality-Based Decisions: The TMDL Process, ch. 3 at pp. 5-6, 1991 (available at <http://www.epa.gov/OWOW/tmdl/decisions>). ("Cal. TMDL Guidance"); EPA, 1997. New Policies for Establishing and Implementing Total Maximum Daily Loads (TMDLs). Memorandum from Robert Perciasepe to Regional Administrators, August 8, 1997.

⁴ Cal. TMDL Guidance at p. 10.

In order to provide the necessary “reasonable assurances,” Baykeeper strongly recommends amending the draft TMDL to identify trackable implementation measures—beyond mere compliance with the General WDR—for reducing sewage spills from the sanitary sewer treatment plants and collection systems in southern Marin. These measures should address the issues identified by EPA’s recent inspections of five of the six sewage collection systems that flow to the SASM wastewater facility. The issues identified by those reports that this Regional Board should address include the following:

- **Inflow and Infiltration Studies.** It is believed that inflow and infiltration (I & I) contributes significantly to treatment plant capacity issues and high spill rates, but the actual I & I rates are unknown. Moreover, the rate agreements between the agencies owning the treatment plants and those owning the collection systems provides no incentive for reduction of I & I in the collection systems.
- **Spill Response and Containment.** Many of the agencies responsible for maintaining the sewage collection system have no ability to respond to or contain sewage spills.⁵ As revealed in the EPA inspections reports, they rely on Roto-Rooter for response, but the Roto-Rooter office is often twenty or more miles away. Additionally, many Marin cities have unwritten agreements with Roto-Rooter and it is unclear whether the company’s response and containment is adequate.
- **Inadequate Spill Tracking and Reporting.** The EPA inspections confirmed what Baykeeper already knows from experience reviewing city records: many agencies that operate collection systems have inadequate spill tracking and reporting procedures and, therefore, are underreporting spills.

Additionally, the Marin agencies should be required to establish a forum for information sharing, discussion and dispute resolution per the recommendation of a 2004 Marin Grand Jury Report entitled “Southern Marin Sewers—So Many Districts, So Few Users.”⁶ This report concluded that the relationships between the agencies responsible for the treatment plants and those responsible for the collection systems creates an institutional barrier to reducing inflow and infiltration and, therefore, spills. The Grand Jury found that “with no overriding mandate to confer and collaborate, it is easy [for the collection agencies] to opt to conduct business as usual.”⁷ The report recommends the creation of a joint powers agreement to enable the eleven agencies serving the area to share personnel, expertise, and physical resources.

Recommendation: Baykeeper recommends that the Basin Plan Amendment be revised to include trackable implementation measures and deadlines addressing each of the issues identified above, including but not limited to:

- Characterization of I & I to the collection systems;
- Acquisition of spill response equipment and development of formal response and containment procedures;
- Development and implementation of accurate spill reporting procedures;
- Comprehensive evaluations of the agencies’ Capacity, Management, Operation, and Maintenance (“CMOM”) programs; and

⁵ Cities must respond to sanitary sewer spills and take all feasible steps to contain and mitigate them. Statewide WDR at p. 7.

⁶ 2003-2004 Marin County Grand Jury Report: Southern Marin Sewers – So Many Districts, So Few Users (April 27, 2004). Available at <http://www.co.marin.ca.us/depts/GJ/main/cvgrjr/2003gj/SouthernMarinSewersReport.pdf>

⁷ *Id.* at p. 11.

- Creation of a joint powers agreement or some other arrangement to facilitate communication, information sharing and dispute resolution amongst the agencies.

B. The TMDL Should Establish Municipal Stormwater Wasteload Allocations for Wet and Dry Seasons and Should Provide for Numeric Effluent Limits in Stormwater Permits.

As a preliminary matter, we note that Table 7-3 (“Density-Based Pollutant Wasteload and Load Allocations for Richardson Bay”) of the Basin Plan is confusing and requires some clarification. This table specifies an allocation for “Stormwater Runoff” but it is unclear whether this is a wasteload allocation (“WLA”) for discharges from municipal separate storm sewer systems (“MS4s”) or a load allocation for nonpoint source runoff. Assuming that it is the former, this WLA should be clearly designated as such.

In addition to clarifying the meaning of “Stormwater Runoff,” the TMDL provisions related to stormwater require two changes. First, the TMDL should establish WLAs for MS4s during the wet and dry season. During the rainy season, stormwater flows may carry animal feces and other sources of fecal indicator bacteria into MS4s. During the dry season, however, MS4s should not be a source of fecal indicator bacteria as they should not be discharging to Richardson Bay at all.

Second, the trackable implementation measures for MS4s should include numeric effluent limits. In southern California, the Los Angeles Regional Board used numeric effluent limits to implement dry weather WLAs for Santa Monica Bay beaches. Their rationale for this approach—that dry weather WLAs do not apply to storm water and that the iterative approach in previous permits has failed to eliminate dry weather discharges—applies equally here.⁸

Recommendation: Baykeeper recommends a clarification of the definition of “Stormwater Runoff.” We also request that the stormwater runoff WLA be divided into wet and dry season allocations with numeric limits to implement the dry weather allocation.

C. The Houseboat and Vessel Implementation Measures Should Contain More Detail.

We strongly support the requirement that the county and local cities evaluate the adequacy and performance of sewage systems for all houseboats and vessels. We urge the Regional Board to be more specific, however, about what this requirement entails.

Recommendation: Baykeeper recommends that the trackable implementation measures include annual (or some specified frequency) inspections for each houseboat and vessel, establishment of authority by the cities and by marina operators to inspect houseboats and vessels and enforce against those that are substandard, and establishment of an anonymous hotline for citizens to report violations.⁹

⁸ Los Angeles Regional Water Quality Control Board, Waste Discharge Requirements for Municipal Storm Water and Urban Runoff Discharges within the County of Los Angeles, and the Incorporated Cities Therein, Except the City of Long Beach, Order No. 01-182, NPDES Permit No. Cas004001 (December 13, 2001) (amended on September 14, 2006 by Order R4-2006-0074 and on August 9, 2007 by Order R4-2007-0042).

⁹ Baykeeper regularly receives phone calls from houseboat and vessel owners complaining that other marina tenants are illegally discharging. Frequently, these callers wish to remain anonymous out of concerns about retaliation or, for other reasons, do not want to report the discharge to the harbormaster.

D. The Basin Plan Amendment Should Require Water Quality Monitoring and Beach Closures When Water Quality Standards are Exceeded.

While the monitoring data summarized in the TMDL staff report contains data for Schoonmaker Beach, it is unclear whether the Marin County Department of Health or other agency regularly monitors fecal coliform levels at beaches or other locations where water contact recreation is likely. The Earth911 website, a clearinghouse for information on beach water quality, does not include any data for Marin bayside beaches.

Recommendation: In order to protect human health, the Basin Plan should require regular fecal indicator bacteria monitoring at Schoonmaker Beach and other water contact recreation areas and immediate closures of these areas when water quality objectives are exceeded.

* * *

In conclusion, Baykeeper supports adoption of this TMDL provided that it is first revised to (1) impose additional implementation measures for sanitary sewer systems as necessary to address identified problems with those systems, (2) establish dry and wet weather WLAs for municipal stormwater, (3) specify that municipal stormwater WLAs will be implemented via numeric effluent limits as has been done in other parts of California, (4) provide more detail regarding vessel and houseboat implementation measures, and (5) require beach monitoring and immediate public notification when water quality standards are exceeded.

We appreciate the opportunity to provide comments on this TMDL. Please contact us if you have any questions regarding recommendations made herein.

Sincerely,



Sejal Choksi, Baykeeper and Program Director
Amy Chastain, Staff Attorney

Attachment:

2003-2004 Marin County Grand Jury Report: Southern Marin Sewers – So Many Districts, So Few Users (April 27, 2004).

2003-2004 MARIN COUNTY GRAND JURY

TITLE OF REPORT: SOUTHERN MARIN SEWERS – So Many Districts, So Few Users

Date of Report: April 27, 2004

Reports issued by the Civil Grand Jury do not identify individuals interviewed. Penal Code Section 929 requires that reports of the Grand Jury not contain the name of any person, or facts leading to the identity of any person who provides information to the Civil Grand Jury. The California State Legislature has stated that it intends the provisions of Penal Code Section 929 prohibiting disclosure of witness identities to encourage full candor in testimony in Civil Grand Jury investigations by protecting the privacy and confidentiality of those who participate in any Civil Grand Jury investigation.

SOUTHERN MARIN SEWERS – So Many Districts, So Few Users

SUMMARY

Are the sewage collection agencies in Southern Marin so focused on their own needs that their actions may be detrimental to their neighbors and counter to the common good?

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

BACKGROUND

Marin County has a long history of vigorous support for environmental protection and conservation. Keeping our waters clean and safe is a key component of good environmental stewardship. The Grand Jury received a complaint that focused on a contract between two southern Marin County districts responsible for wastewater collection and treatment which would have resulted in the installation of additional facilities and created financial hardship for several agencies. The Grand Jury expanded its investigation of the complaint to evaluate whether the people of southern Marin County and the environment would be better served if there were changes in the governmental structure that provides sewage collection and treatment.

METHODOLOGY

The Grand Jury conducted interviews with professional staff from eleven governmental agencies in the study area, elected representatives from two agencies, and representatives from other government organizations. The Grand Jury also reviewed extensive documentation, including:

- Current budgets from each of the eleven government agencies
- Minutes, audit reports, policy statements, and ordinances from the eleven agencies
- County Registrar of Voters records for all elections by special districts in the past twenty years
- County Auditor-Controller records concerning sewer use fees charged by Marin government agencies
- Reports regarding consolidation dating back to 1967
- Marin Local Agency Formation Commission (LAFCO) documents relevant to operation and consolidation of the southern Marin sanitary districts

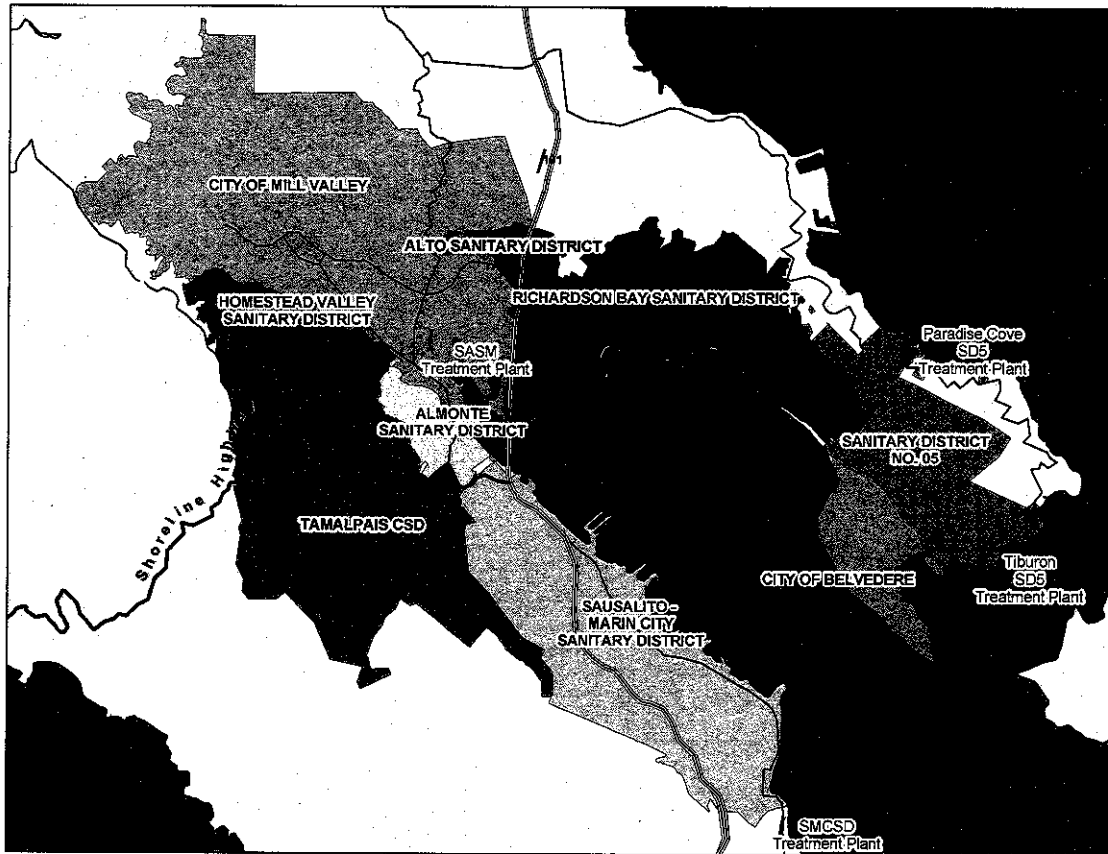
DISCUSSION

Under California law, several types of governmental agencies can be authorized by citizens to collect and treat wastewater. Cities, towns, sanitary districts, and community service districts all perform these services within the southern Marin area. This report focuses on Tiburon, Mill Valley, Sausalito, Belvedere, and the unincorporated areas surrounding these municipalities, including Marin City, Strawberry, Tam Valley, Homestead Valley, and other smaller enclaves. There are three major wastewater **treatment** plants within this area and two small treatment plants on the "back" (north) side of the Tiburon peninsula. These five plants are operated by three different agencies and one private organization. Wastewater **collection** in the area is provided by ten agencies, each having some arrangement with one or more treatment plant operators.

Southern Marin is a patchwork quilt of overlapping city and special district boundaries. Currently, sewer service in the area is provided by agencies as small as Alto Sanitary District (which serves less than 1000 people) and as large as the City of Mill Valley, (which serves over 13,000 people). Figure 1 depicts these agencies' boundaries.

Following is a description of the districts pictured in Figure 1. below:

- Almonte Sanitary District (Almonte) is responsible for wastewater collection in the unincorporated area southeast of the City of Mill Valley. Wastewater is conveyed to the Sewage Agency of Southern Marin (SASM) treatment plant.
- Alto Sanitary District (Alto) provides wastewater collection for areas east of Mill Valley, on both sides of Highway 101, including Sutton Manor and Alto. Wastewater is conveyed to the SASM treatment plant.
- The City of Belvedere (Belvedere) is responsible for the wastewater collection system within its city limits and contracts with Sanitary District No. 5 of Marin County (SD5) for wastewater treatment.

Figure 1. Southern Marin Sewer Agencies

- Homestead Valley Sanitary District (Homestead) serves Homestead, south of Mill Valley. Wastewater is conveyed to the SASM treatment plant.
- The City of Mill Valley (Mill Valley) operates the sewer system within its city limits. Wastewater is conveyed to the SASM treatment plant.
- Richardson Bay Sanitary District (Richardson) collects wastewater from Strawberry and the western half of Tiburon. Wastewater is conveyed to the SASM treatment plant.
- Sanitary District No. 5 of Marin County (SD5) serves the eastern half of Tiburon with a collection system and a wastewater treatment plant on Paradise Drive, just east of downtown. The district also operates a small treatment plant on the north side of the Tiburon peninsula.
- The Town of Sausalito (Sausalito) operates a wastewater collection system and conveys wastewater to the Sausalito-Marin City Sanitary District treatment plant.
- Sausalito-Marin City Sanitary District (SMCSD) provides wastewater collection for Marin City and treatment at a plant south of Sausalito, on Fort Baker Road.
- Sewage Agency of Southern Marin (SASM) operates a wastewater treatment plant in Mill Valley, across from Mill Valley Middle School and Bay Front Park. SASM is a joint powers

agency governed by representatives of its six member agencies (Alto, Almonte, Homestead, Richardson, Tamalpais, and Mill Valley).

- Tamalpais Community Services District (Tamalpais) is responsible for wastewater collection in the Tamalpais Valley region, and conveys wastewater to both the SASM plant and the SMCSO plant. Tamalpais also is responsible for garbage collection and operation of parks and recreation services within its boundaries.

The Town of Tiburon does not provide wastewater collection services to its residents; that service is provided by either Richardson or SD5.

Each of the agencies above (except SASM) is governed by an elected five-member board of directors and employs a part- or full-time manager and, in some cases, staff. A total of 50 elected officials and 41 employees play a role in southern Marin's wastewater collection and treatment.

Table 1: Agency Summary

| Agency | Collects Wastewater | Treats Wastewater |
|---|----------------------------|--------------------------|
| Almonte Sanitary District | X | |
| Alto Sanitary District | X | |
| City of Belvedere | X | |
| Homestead Valley Sanitary District | X | |
| City of Mill Valley | X | |
| Richardson Bay Sanitary District | X | |
| Sanitary District No. 5 of Marin County | X | X |
| Town of Sausalito | X | |
| Sausalito-Marín City Sanitary District | X | X |
| Tamalpais Community Services District | X | |
| Sewage Agency of Southern Marin | | X |

Many Districts, Few Customers

The southern Marin area served by the eleven agencies listed above has a population of approximately 55,000. In contrast, in other parts of the Bay Area, hundreds of thousands of residents are served by a single sanitary district. That eleven government agencies in southern

Marin play a role in wastewater treatment and collection is an historical artifact of the 1940's and 1950's, when many unincorporated areas had need for sewers but did not want to annex to the cities of Mill Valley, Tiburon, or Sausalito. Historically, a community, regardless of town and city boundaries could band together to form a sanitary district whenever there was a common interest in doing so.

If you look at sewer services in southern Marin today, you see a number of situations that, unless you have district boundaries in mind, would seem strange, even bizarre. Refer to Figure 2 below for the following example: If you live in Tiburon, on Tiburon Boulevard southeast of Gilmartin Drive, your wastewater will be conveyed directly to the SD5 treatment plant in Tiburon (one and half miles away), treated and discharged at Racoon Strait. But if you live next door, west of Gilmartin Drive, your wastewater will go to the SASM treatment plant in Mill Valley, where it will be treated and, with the rest of the wastewater that SASM treats, be conveyed back along Tiburon Boulevard (a total distance of ten miles) – for discharge at Racoon Strait! Why? Historically, the Richardson/SD5 boundary was drawn to maximize the use of gravity flow to treatment plants, and the Richardson treatment plant was located near Blackie's Pasture. As environmental standards for wastewater treatment were raised, the Richardson plant was converted to other uses and the City of Mill Valley's plant (now SASM) began to treat Richardson waste. However, SASM's old discharge point into Richardson Bay was not environmentally acceptable, and a main was constructed to convey treated waste to a discharge point shared with SD5 on Racoon Strait.

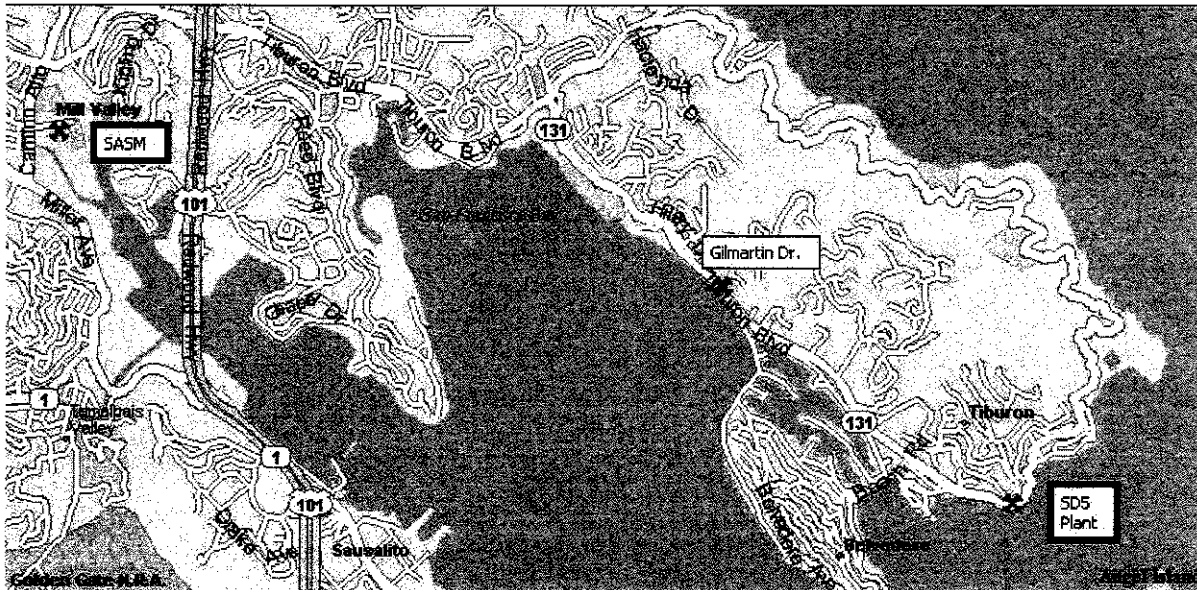


Figure 2. SD5 and SASM Plants Relative to Gilmartin Drive.

The Grand Jury identified several situations similar to the one above. Does it make sense to pay the capital costs to change the current sewer system and convey some of Richardson's wastewater to SD5, or is it more sensible to continue to pay the energy expense of conveying wastewater seven times as far? An engineering study is needed to provide the answer. What concerned the Grand Jury was that no agency has been willing to initiate such a study. It seems agency boundaries are an impediment to cooperative action and problem resolution.

The Grand Jury determined that there were ongoing efforts by the Marin Local Agency Formation Committee (LAFCO) to promote a study of consolidating some of the patchwork quilt of agencies that are involved in sewage collection and treatment in southern Marin. LAFCO is charged by the State with the responsibility for improving the efficiency and reducing the cost of local government. It does so by reviewing and approving changes to city and special district boundaries and conducting special studies to facilitate efficient government operations. However, LAFCO's staff is small and its budget is not large. Therefore, LAFCO proposed to the southern Marin sewer agencies that a consultant be hired to fully evaluate the consolidation options available, with each agency footing part of the bill. Only half of the agencies have shown an interest in participating in such a study; therefore the LAFCO proposal is stalled.

One Citizen, No Vote

Despite the multitude of governmental agencies involved, the Grand Jury learned of a number of anomalies that are tantamount to taxation without representation. The entire City of Belvedere, although it provides its own wastewater collection system, depends on the facility operated by SD5 in Tiburon to treat its waste. However, the population of Belvedere is not part of SD5, and therefore has no representation in the governance of this district. SD5 bills the City of Belvedere for treatment costs, and Belvedere passes that charge on to its taxpayers. Similarly, Tamalpais is served in part by the SMCSO, but has no voting representation on the SMCSO board. The Grand Jury is not offering an opinion concerning the appropriateness of the amounts charged by SD5 and SMCSO. Regardless, in both of these situations, southern Marin residents are being charged sewer use fees by an agency but have no opportunity to elect a representative to that agency's board of directors.

Wastewater Treatment System Operation

The Grand Jury had concerns that the multitude of agencies involved might be adversely affecting the efficient and effective operation of the wastewater treatment plants in the study area. In the course of our interviews we were impressed with the operation of the three major wastewater treatment plants in the area operated by SASM, SMCSO and SD5. Permits issued by the California Regional Water Quality Control Board to these treatment plants specify numerical limits to pollutants discharged. We received no information suggesting that there were either frequent violations of these limits, or widespread complaints from nearby residents. That is not to say that there are no issues that the treatment plants must address on a continuing basis. The SD5 and SASM plants are in the midst of populated areas and need to be sensitive to odor problems.

All wastewater treatment plants in the area have problems with increased flows during wet weather, as rain and runoff water percolate through the soil and seep into cracks and open joints in the wastewater collection system. Termed "infiltration" in the trade, this introduction of essentially clean water into the system can result in ten times the normal amount of wastewater arriving at treatment plants. Engineers design wastewater treatment plants with normal, dry weather flows in mind. It is too expensive to build plant capacity that would only be used a few days a year. Plants are therefore designed with ways of either holding excess wastewater for treatment at a later time when flows have decreased, or providing a reduced level of treatment. Since the infiltration is essentially pure rainwater, the concentration of contaminants in the incoming wastewater at the plant is reduced significantly, so that a reduced

level of treatment can usually meet permit requirements. Nonetheless, there are finite limits to the amount of wastewater that can be handled at the treatment plant and conveyed through the collection system. From the treatment plant operators' perspective, the more that infiltration is minimized, the better.

Another type of infiltration occurs in Southern Marin regardless of rainfall. Many bayside sewer pipes can experience infiltration of salt water into the collection system during high tides. Not only does this extra flow cause needless treatment at the plants, but the presence of sodium in the water makes treatment more difficult.

The Grand Jury found that all of the wastewater collection system operators were taking positive action to reduce infiltration, although some have done more than others. Correcting infiltration is, in most cases, neither easy nor cheap. The most frequent causes of infiltration are breaks in clay pipes, and pipe joint misalignment. Tree root intrusion, careless use of construction equipment, or settling of the land can contribute to this problem. In order to identify the problems in the wastewater collection system, a small television camera is used to collect information on the entire system. Problems are prioritized, and sewer pipes are either excavated and replaced, or "slip-lined" by inserting plastic pipe inside the existing pipe. Identifying trouble spots in the collection system can be time consuming, and repairing or replacing broken lines can be very expensive. This is a major reason why sewer fees increase. Districts and municipalities that have taken action early have saved their ratepayers money, as construction costs have continued to rise. Combining the eleven agencies would better assure that the issues influencing infiltration would be addressed comprehensively rather than piecemeal.

The Grand Jury often heard concerns from treatment system operators and collection system managers alike, about upcoming collection system regulations. New federal sewer system overflow regulations will tighten requirements on collection system operators to ensure that infiltration is minimized and sewers adequately maintained. The new regulations will likely increase sewer maintenance staffing needs and costs. As Alto, Almonte, and Homestead have no maintenance staff on their payrolls, the implications for these districts is significant.

A related concern is that, because SASM has no direct control over wastewater collection in its treatment area, and SMCSO controls only a small part of the collection system feeding its treatment plant, there are institutional barriers between problem and solution. The agencies that operate these treatment plants need the agencies that operate collection systems to reduce the infiltration problem in their systems, but have no direct control over how much wastewater is delivered to them.

Planning and Coordination

When interviewees from the eleven agencies were questioned about their attitude regarding consolidation, no one argued against an investigation of the possibility. What the Grand Jury did hear, to our surprise, was that few interviewees had a good understanding of the points of view of other agencies. When we probed further, we found that there was no forum for all eleven agencies to explore possible efficiencies, cost savings, and each other's viewpoints. There is a monthly meeting of a single elected representative of the six SASM member agencies, and a monthly meeting of the three treatment plant operators. One board member

commented to us that LAFCO's efforts to have a consultant study consolidation were premature. The opinion was expressed that the agencies themselves needed to come to basic agreement as to what options were possible and which were totally impossible.

The most conspicuous failure of the current sewer district patchwork is the inability to plan logically for the future without regard to district and municipal boundaries. This has led to some rather ludicrous situations in the past. For example, part of the wastewater flow from Tamalpais goes to the SASM plant in Mill Valley and part goes to the SMCSD plant in Sausalito. Tamalpais pays each plant for wastewater treatment services. Shopping to get the best price for its ratepayers, Tamalpais investigated rerouting all of its flow to SASM. Such a move would cause major financial problems for SMCSD, because it would need to spread its fixed costs over a smaller user base. Under the terms of its contract with Tamalpais, SMCSD would also have to refund approximately \$2,000,000 that Tamalpais contributed to SMCSD capital costs. Indications are that Tamalpais will not pursue this option. Their inquiry, however, shone a spotlight on the fact that one district could act in the interest of their constituents but to the detriment of other Marin residents, both financially and environmentally.

The Grand Jury concluded that the lack of coordination and consultation between sewer agencies is not a case of an overseeing state or county agency being derelict in its duties. No organization is charged with the responsibility of ensuring, on a continuing basis, that local sewer agencies act for the common good. While Marin LAFCO is responsible for defining and approving agency boundaries and conducting special studies, LAFCO has no ability to mandate joint action. Neither is LAFCO authorized to conduct the type of detailed engineering and environmental studies that are needed to evaluate alternatives like the SMCSD-Tamalpais situation or the Tiburon situation described before Figure 2.

The Case For – And Against – Small Districts

The case was repeatedly made to the Grand Jury that small special districts like Almonte and Homestead Valley serve a valuable role in their communities. They are accessible to their customers in a way that larger, more impersonal agencies cannot be. More than one district board member reported being stopped on the street by a constituent who had a sewer problem. The districts function as a focal point in communities that have no government other than Marin County to represent them. Small special districts know their local situation well, even to the point where individual district board members are aware of which sewer lines require frequent maintenance.

The Grand Jury also heard testimony that questioned whether the multitude of districts in the area made any sense. The interviewees' point was that it can't be efficient to have so many board members and employees of different districts in an area so small. Some also indicated that there was likely duplication of effort among the districts.

One might think that the small size of many of the special districts, and the fact that many of the district manager positions are part-time, would mean that it would be difficult to attract high quality personnel to staff positions in the districts. To the contrary, the Grand Jury was uniformly impressed by the knowledge, experience, and professionalism of the managers we interviewed. The districts have been creative in their use of personnel to accomplish their mission. Semi-retired managers with years of experience are in charge of several districts. One

part-time manager spends the rest of his time at SASM as a treatment plant operator. Two districts share the same manager. Several managers and staff have had extensive experience with large agencies outside of Marin. Many have worked with their treatment plants or collection systems for decades. The upshot is that the small size of the districts does not appear to be a major detriment to attracting capable staff.

The Grand Jury's conclusion was that most of the cited advantages and disadvantages of small districts were illusory. If these districts were the focal points of local communities, one would expect the public to occasionally attend board meetings or to contest a board election. By their own admission, districts seldom had members of the public attend their board meetings, and a contested election was a rare event. While some community members may know their local sanitary district board member by sight, we question whether that is common. We do know that when customers phone one of the small special districts they are answered not by a human voice, but by an answering machine that tells them that if their problem is urgent they should call Roto-Rooter, a private company that works under contract to almost all of the special districts. Roto-Rooter investigates the issue. If the problem is in the district system, Roto-Rooter resolves it and bills the district. If the problem is in the homeowner's piping, the homeowner has the option of either retaining Roto-Rooter at his own expense or resolving the problem another way.

Similarly, the most frequently cited disadvantage of the many special districts, inefficiency, is illusory. The small districts appear to be very cost-effective for their local areas, keeping spending down to an absolute minimum. Almonte, Alto, and Homestead Valley districts have no full-time employees. As previously noted, most rely on Roto-Rooter for sewer maintenance, so there is no continuing overhead expense. District Board members receive only token compensation, and the Grand Jury did not identify any large economies of scale that could arise from combined management.

It is true that district board members know their community well, and the Grand Jury saw no evidence to suggest that board members are anything other than public-spirited individuals who are dedicated to good service and low sewer rates. It is also true that public attendance at district board meetings and a contested election for a district board is rare. It is troubling that there is no watchdog individual or group as is so often seen at meetings of other, larger, public agencies. A larger sewer authority might attract more attention and get more public input.

The Grand Jury found that the biggest disadvantage of small districts was at the root of the complaint that began our investigation. Each district, responsible only to a small constituency, and striving to keep its rates low, has the potential to make decisions that are harmful to other agencies. Actions can be taken by one district that either seriously affect another district or are detrimental to the region as a whole. At some interviews, we heard that a district was grappling with problems that another district had just solved. Regionalization could bring to the table a view of southern Marin that is neither parochial nor blinded by political boundaries. In the area of wastewater collection and treatment, it should be logic, good engineering, cost-effective solutions, and environmental protection **for the entire region** that rule the day. If these districts were combined, the resulting staff might well contain the perspective and skills needed to achieve these objectives. The Grand Jury cannot leave this topic without pointing out that it talked with district and city personnel whose knowledge and enthusiasm for specific topics, like sewer rehabilitation or asset management, was obvious and refreshing. The Grand

Jury believes that the wastewater professionals in southern Marin could readily bring their expertise to a wider geographic area if there were an uncomplicated way for this expertise to cross district boundaries.

Consolidation Possibilities

If the Grand Jury were starting with a blank sheet of paper, it could envision a single agency operating all of the wastewater collection and treatment facilities in Southern Marin. Viewing the current status quo, it is hard to see how such a change can take place without a powerful ground swell of public opinion to move it along. Interestingly (but not surprisingly), many district representatives did see the value of dispensing with or consolidating districts **other** than their own. But, as we were told "they've been studying that since the Sixties and it hasn't happened yet."

A single district would not be easy to create. The California state legislation that created local area formation commissions in 1963 was intended, among other things, to ensure that special districts did not spring up willy-nilly without the concurrence of existing governments. In southern Marin, special districts had already established themselves before the LAFCO law passed, and there is no easy way of arranging for them to consolidate, even if their communities and elected boards were 100% behind such a move. The Grand Jury sought examples of such mergers from other parts of the state, and found few. This is obviously not a common situation. As best we can understand, if two districts did want to merge, the voters in those districts would have to simultaneously approve a new "super-district" and abolish the old districts. The more districts involved in this consolidation, the more complicated it becomes.

In southern Marin the situation is made more complex by the presence of multiple **types** of agencies. In other words some agencies do more than just waste water collection and/or treatment. Only like districts can merge. Each type of government – in this case municipality, sanitary district, and community service district – has its duties described and limited by a separate piece of California law. Because a community services district (such as Tamalpais, which handles wastewater, garbage collection, and parks and recreation) cannot merge with a sanitary district or a city, a far more complicated annexation process would have to take place.

A joint powers agency that assumed some of the duties of the individual special districts and cities is another possibility, with the specific boundary crossing duties negotiated with all the affected agencies. That this is possible is evidenced by SASM, which is governed by representatives of six different agencies, with management (personnel, accounting, procurement, etc.) provided by one of the member agencies (Mill Valley). A joint powers agreement could enable the eleven agencies to share personnel, expertise, and physical resources more easily and evaluate area-wide technical issues.

Clearly, in the situation that these eleven agencies are in, with no overriding mandate to confer and collaborate, it is easy to opt to conduct business as usual. It will require the initiative of each of the agencies to move forward and explore the possibilities that the Grand Jury has pointed out in this report. The Grand Jury recognizes the difficulty of this first step, and encourages LAFCO to use its good offices to aid the agencies. It is suggested that, rather than funding a consultant to prepare reports that may be ignored, LAFCO hire an impartial facilitator to forge initial agreements between all of the agencies regarding desirable improvements.

Future reports could then be based on a firm foundation, and focus on how best to achieve these improvements.

FINDINGS

- F1. It is unusual for an area as small as southern Marin to be served by so many sewage collection and treatment agencies.
- F2. The sewage treatment plants in southern Marin are operated in conformance with applicable State and Federal law and regulations.
- F3. The eleven agencies charged with the responsibility for sewage collection and treatment in their jurisdictions in southern Marin appear to be operating satisfactorily.
- F4. Belvedere residents and some Tamalpais residents have no elected representatives on sanitary district boards that impose charges on them.
- F5. Having the responsibility for sewage collection and treatment spread between so many agencies inhibits the investigation of issues that cross agency boundaries.
- F6. One agency is occasionally pitted against another as it seeks the lowest cost service for its constituency.
- F7. The public is neither vigilant nor knowledgeable about the management of the agencies that perform sewage collection and treatment, and about the price they pay for these services.
- F8. Southern Marin sewage agencies have secured the services of experienced, competent professionals to manage their affairs.
- F9. Sewage collection and treatment agencies have generally monitored the condition of their systems and planned for rehabilitation in a timely fashion.

RECOMMENDATIONS

- R1. A forum should be established, and meet regularly, as a way for staff and elected officials from all eleven sewage agencies to exchange ideas and experiences.
- R2. An impartial facilitator should be engaged to conduct a meeting of agency representatives at which opportunities for consolidation, collaboration, and cooperation are explored and short-term objectives set.
- R3. After the facilitated meeting is held, based upon consensus regarding consolidation established by the agencies, LAFCO should proceed with a study of alternatives.
- R4. The City of Belvedere should consider the possible advantages of annexing itself to Sanitary District 5 for purposes of wastewater collection and treatment.

REQUEST FOR RESPONSES

Pursuant to Penal code section 933.05, the grand jury requests responses as follows:

- Almonte Sanitary District to F5, F6, R1, R2, and R3.
- Alto Sanitary District to F5, F6, R1, R2, and R3.
- The City of Belvedere to F4, F5, F6, R1, R2, R3, and R4.
- Homestead Valley Sanitary District to F5, F6, R1, R2, and R3.
- The City of Mill Valley to F5, F6, R1, R2, and R3.
- Richardson Bay Sanitary District to F5, F6, R1, R2, and R3.
- Sanitary District No. 5 of Marin County to F4, F5, F6, R1, R2, R3, and R4.
- The Town of Sausalito to F5, F6, R1, R2, and R3.
- Almonte Sanitary District to F5, F6, R1, R2, and R3.
- Sausalito-Marín City Sanitary District to F4, F5, F6, R1, R2, and R3.
- The Sewage Agency of Southern Marin to F5, F6, R1, R2, and R3.
- Tamalpais Community Services District to F4, F5, F6, R1, R2, and R3.

Although not required by law, the Grand Jury also invites responses from:

- The Marin Local Agency Formation Commission to all findings and recommendations.