



CENTRAL MARIN REGIONALIZATION SCENARIOS EVALUATION

FINAL

Prepared for the Board of Commissioners of the
Central Marin Sanitation Agency

March 2, 2005

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EXECUTIVE SUMMARY

The Central Marin Sanitation Agency is a Joint Powers Agency composed of four member agencies: Sanitary District #1, Sanitary District #2, San Rafael Sanitation District, and the City of Larkspur. The issue of combination or “regionalization” of these member agencies with CMSA has been contemplated since CMSA was formed in 1979. Although several studies examining the issue have been completed in the past by CMSA staff, no formal regionalization efforts have been undertaken to date.

Following some recent planning activities, the CMSA Board of Commissioners feel that issue of regionalization again needs to be addressed. Current issues facing the agencies, namely capacity issues at the plant and in the collection systems, continued regulatory pressures and aging infrastructure throughout the collection systems are pressing enough that the effectiveness of the current multi-agency structure should be evaluated against other regional solutions. This study addresses the issue of regionalization for the Central Marin utilities in two phases. In Phase I an independent evaluation of the strengths and weaknesses of the current multi-agency organizational structure is presented. In Phase II, regionalization scenarios are identified and then the advantages and disadvantages of each are discussed. Red Oak also offers its recommendations for the Commissioner’s consideration.

The results from the Phase I analysis indicate that there are both strengths and weaknesses to the current structure. The most notable strengths are that the structure allows the member agencies to retain local control of their systems and spend their resources according to their community’s priorities. In addition, the current structure allows the districts to maintain relaxed, informal cultures where small levels of staff have intimate knowledge of their particular systems. SD #2 and SRSD freely share resources with their associated Departments of Public Works. However, this small size and local control also create weaknesses in the current structure. Most importantly, although the districts are ultimately liable for any plant violations, the CMSA rate and governance policies provide no incentives to the districts to consider the implications of their actions on CMSA, on other member agencies or on the environment as a whole. The current structure inherently creates conflicts of interest for the CMSA Commissioners and, at times, appears to facilitate delays in needed investments in infrastructure in their own systems and in the CMSA facilities. Finally the current structure makes it more difficult to identify and implement optimal regional solutions because of the decentralized decision process that derives from the existence of four separate organizations.

Faced with the need to evaluate their options for action, the Commissioners identified four possible regionalization scenarios that should be considered:

- Scenario 1A: Joint Powers Agreement (no change from current structure)
- Scenario 1B: Modified Joint Powers Agreement
- Scenario 2: Partial Combination of one or several of the agencies
- Scenario 3: Total Combination of CMSA and all member agencies

The Commissioners discussed the advantages and disadvantages of each scenario and determined that Scenario 1A, the current structure, does not adequately allow the agencies to collectively address their needs and therefore it is not viable. In addition, they felt that Scenario 2 does not provide any benefits over Scenario 1B and would be harder to implement and therefore it is not a viable alternative.

Based on the two viable options remaining, Scenarios 1B and 3, Red Oak recommends that the Commissioners implement modifications to the Joint Powers Agreement (Scenario 1B) while researching and moving forward with Total Combination (Scenario 3). Red Oak believes this arrangement is the most feasible within the current political environment and allows the member agencies to build the trust necessary among each other to reach total combination. Through the implementation of several JPA modifications, many details that would be applicable under a total combination scenario could be worked out. Therefore, a modified JPA could be an incremental step toward a total combination. Finally, Red Oak believes that this approach would allow the Commissioners to gain the momentum and support necessary to make total combination a successful end result.

1.0 INTRODUCTION

1.1 EVALUATION PURPOSE AND METHODOLOGY

As a result of recent long term planning, the Central Marin Sanitation Agency (CMSA) Board of Commissioners (the Commissioners) requested that Red Oak Consulting conduct a study to identify several scenarios for the possible reorganization or “regionalization” of the services and/or organizations of the four wastewater agencies currently serving the Central Marin area. The Commissioners felt that there were two main drivers that necessitated the study:

- 1) they wanted to proactively manage a regionalization process themselves and
- 2) they have a duty as elected representatives of the system’s customers to investigate all opportunities to best serve the needs of the region as a whole.

The study is intended to build on the work of previous regionalization efforts undertaken by CMSA staff and assess the potential advantages and disadvantages associated with various regionalization scenarios. The results of the study will serve as the basis for future activities and, ultimately, a decision by all involved parties regarding the most appropriate approach to delivering wastewater services within the service area. This approach could be a new approach or a continuation of the current arrangements.

This study is divided into two phases. The objective of Phase 1 is to provide an independent evaluation of the strengths and weaknesses of the current multi-agency organization structure. The current structure was evaluated using the following methodology:

- Document Review: Existing documents from the member agencies were reviewed and evaluated to understand current operations in four major areas: legal/political, administration/management, technical and financial.
- Field Investigation and Interviews: Half-day visits were made to each of the member agencies on October 5-7, 2004 and CMSA on October 7 to understand the actual functioning of the member agencies and CMSA. Interviews were conducted with key staff and observations were made of staff work practices.

The objective of Phase 2 is for the Commissioners and Red Oak Consulting to jointly identify up to three regionalization scenarios and then to assess the relative advantages and disadvantages of each compared to the current multi-agency organization structure. The assessment was conducted during a day workshop with the Commissioners on November 10, 2004. The results of this report include the presentation of essential background information and the identification of several regionalization scenarios that could be practically implemented and could meet the needs of the CMSA and its member agencies. It is recommended that the Commissioners conduct more detailed analyses of

the selected scenarios to select the most preferred alternative or combination of alternatives.

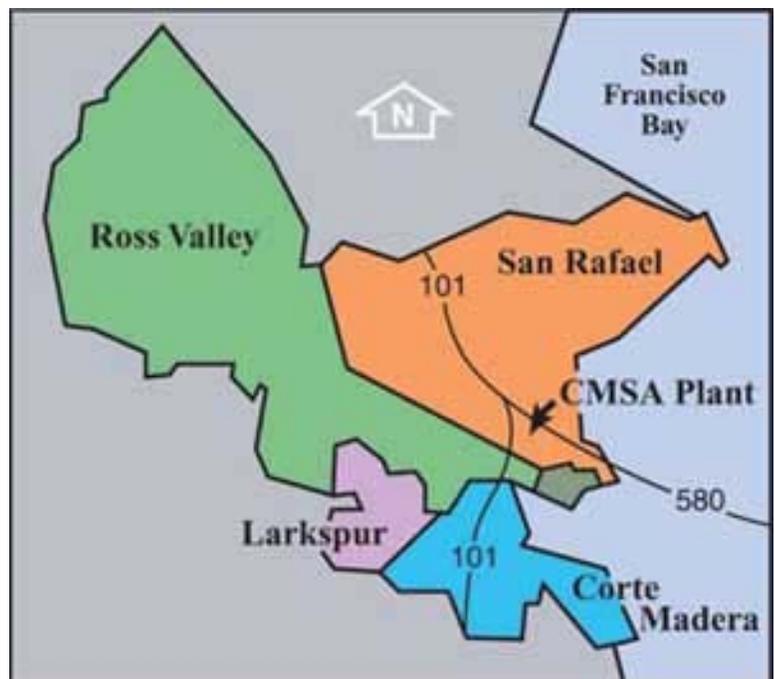
1.2 BACKGROUND

CMSA is a joint powers agency (JPA) created in 1979 by four member agencies:

- Sanitary District No. 1 of Marin County (aka: Ross Valley Sanitary District or SD #1)
- San Rafael Sanitation District (SRSD)
- Sanitary District No. 2 of Marin County (aka Corte Madera or SD #2)
- The City of Larkspur

A map depicting the location of the member agencies is presented in Figure 1 to the right. CMSA was formed to plan, construct and operate a wastewater treatment and disposal facility that would replace outdated facilities owned and operated by the member agencies. Operation of the CMSA's treatment and disposal facilities began in January 1985. CMSA is governed by a Board of Commissioners (the Commissioners) whose members are appointed by the member agencies. SD #1 and SRSD each have two representatives on the Board, while SD #2 and the City of Larkspur each have one representative. In 1993, SD #1 annexed the City of Larkspur's wastewater assets. However, the City of Larkspur maintains its own representation on the CMSA Board.

Figure 1-1: Map of the Member Agencies



The issue of combination or “regionalization” of the member agencies with Central Marin Sanitation Agency has been contemplated since CMSA was formed in 1979. The issue was addressed in the recitals section of the Joint Powers Agreement that created CMSA and in the resolutions adopted by the member agencies establishing the JPA. The issue was evaluated by Bartle Wells Associates in 1983 and 1984 and again in late 1995 and early 1996, when Joseph Remley, then CMSA General Manager, completed an evaluation of consolidation issues, culminating with the publication of a report in April

1996. Although several analyses on the feasibility of consolidation were made and specific recommendations to pursue combination of resources were suggested, efforts to do so have never been pursued by the member agencies. In late 2003, the CMSA Commissioners established an Exploratory Committee to identify ways in which the member agencies and CMSA could share assets and resources among one another. This Committee decided in April 2004 to keep the Committee intact, but that there were no opportunities for any formal programs that should be pursued.

More recently, during a workshop conducted as part of the CMSA's Strategic Business Plan (SBP) project in May 2004, the Commissioners identified the need to explore the impacts of various regionalization opportunities on all of the agencies' abilities to deliver efficient, effective, and sustainable wastewater services to the public. More specifically, the Commissioners decided that the regionalization issue should be formally addressed and decisions made in the interest of providing all customers in the Central Marin service area with high quality, efficient services. This need was incorporated as a draft goal in the CMSA SBP, stating:

“In partnership with member agencies, CMSA will facilitate practical solutions that address opportunities and challenges within the service area to providing wastewater collection, treatment and disposal services.”

1.3 LONG TERM PLANNING CONSIDERATIONS

During the Exploratory Committee and the strategic planning processes, the CMSA Commissioners discussed changes within the CMSA and member agencies and trends in the agencies' operating environment that will impact the manner in which all of the organizations must operate in the future. These changes and trends included:

- Increasing regulatory requirements and scrutiny,
- Treatment plant and collection system capacity constraints,
- Aging infrastructure, particularly the collection systems, and
- The public's insistence on increased government accountability and efficiency.

These trends affect the member agencies' decisions regarding regionalization and are discussed in more detail below. The member agencies are conscious of these changes and are addressing them with specific initiatives, which are also presented below.

1.3.1 Regulatory

Federal: With the implementation of the Capacity, Management, Operations and Maintenance (CMOM) initiative, the USEPA will enforce a “no tolerance” rule on municipal collection systems for sanitary sewer overflows (SSOs), which are prohibited by the Clean Water Act. Although this program had been stalled, the EPA submitted a CSO/SSO report to Congress in August 2004 and is moving forward with the program.

Local: In advance of CMOM, the San Francisco Bay Regional Water Quality Control Board (Water Board) and the Bay Area Clean Water Agencies (BACWA), an

organization representing many of the municipal wastewater dischargers in the Bay Area, are collaboratively developing a program that will require every Bay Area sewer agency to develop and implement a Sewer System Management Plan (SSMP) by the end of 2007. A SSMP will outline how a particular agency will effectively manage its collection system to:

- Minimize the number and impact of SSOs
- Provide sewer capacity to accommodate wet weather induced flows
- Maintain or improve the condition of the collection system infrastructure in order to provide reliable service into the future.

These federal and local regulatory pressures will require the member agencies to invest in infrastructure upgrades, proactively maintain their systems, and improve record keeping procedures. The tightening regulatory environment will likely mean increased scrutiny of all public wastewater agencies in the State.

Recent Initiatives to Address the Regulatory Changes:

As part of the development of its SSMP, SD #1 is conducting an asset inventory and has started a flow modeling program. As a second step, SD #1 plans to conduct a structural evaluation of its sewer system. This asset inventory and condition assessment will help SD #1 address some of its system capacity constraints (described below).

CMSA has submitted a cost proposal to SD #2 to help it initiate a Fats, Oils and Grease (FOG) control program. This program is intended to develop pretreatment and other pollution prevention methods to keep grease from entering the collection system.

1.3.2 Capacity Constraints

Treatment Plant: CMSA is facing wet weather capacity constraints at the treatment plant. Maximum peak flows have been approximately 14 times the average dry weather flow and more than 10 times average daily flow into the plant over the past two years, often surpassing the 90 MGD plant process capacity (plant hydraulic capacity is up to 130 MGD). Flow data for the past five years from the plant are presented in Table 1 below. A more detailed graph of historic flows at the plant is included in Appendix A.

Table 1-1: CMSA Flows (in mgd)

Year	ADWF ¹	Average	Max. day	Max. hour	Max. peak	Max Peak : ADWF	Max Peak : Average
1999	7.8	10.9	66.1	84.7	91.7	11.8:1	8.4:1
2000	8.0	11.1	76.5	96.9	100.4	12.5:1	9.0:1
2001	7.3	11.1	68.3	101.1			
2002	7.3	10.3	67.3	99.0	107.4	14.7:1	10.4:1
2003	8.0	10.9	74.4	104.5	109.2	13.6:1	10.0:1

¹ ADWF - Average Dry Weather Flow

By comparison, many Bay Area utilities operate at a PWWF/ADWF ratio of approximately 3:1 as illustrated in Table 1-2. CMSA's flow ratio is clearly above the norm for most other plants. As shown in Table 1-2 below, only two other Bay Area wastewater treatment plants have wet weather flow ratios close to CMSA's, Sewerage Agency of Southern Marin (SASM) and Las Gallinas Valley Sanitary District (LGVSD). A ratio of less than 5:1 is much more common.

Table 1-2: Comparison of Peak Wet Weather to Average Dry Weather Flows at Selected California Wastewater Treatment Plants

Facility	Avg. Dry Weather Flow	Peak Wet Weather Flow	Ratio
Sewerage Agency of Southern Marin	3	32	10:01
Los Gallinas Valley Sanitary District	2.2	21	10:01
Novato Sanitary District	4.5	40	8.8:1
Oro Loma Sanitary District	13.6	100	7.4:1
Sonoma Valley County Sanitary District	3	22	7.3:1
Sausalito/Marin City Sanitation District	1.5	10	6.7:1
Napa Sanitation District	6.8	40	5.9:1
East Bay Municipal Utility District	85	480	5.6:1
San Francisco PUC Southeast WWTP	67	250	5:01
Vallejo Sanitation District	12	60	5:01
Montecito Sanitary District	1	4	4:01
West County Wastewater District	9	32	3.6:1
Central Contra Costa Sanitation District	42	130	3.1:1
City of Vacaville	7.8	22	2.8:1
Union Sanitation District	33	85	2.6:1
City of San Jose	119	250	2.1:1
City of Santa Rosa – Laguna Plant	19	40	2.1:1
City of Petaluma	5	10	2:01
Fairfield/Suisun Sewer District	16.5	32	1.9:1
Delta Diablo Sanitation District	19.8	24.7	1.3:1

According to the Wastewater Facilities Plan drafted by the Central Marin Planning Unit in December 1977, all of the districts were experiencing some level of infiltration and inflow (I/I) at the time the plant was being designed. CMSA's NPDES permit indicates that the member agencies are responsible for controlling I/I. Over the past several years, the member agencies have spent approximately \$1 to \$2 million per year on gravity system replacement and improvements to control I/I. However, wet weather flows into the plant have been rising steadily since the plant was constructed. The current wet weather flows into the plant not only exceed its hydraulic capacity, but also compromise its treatment ability.

Collection System: SD #1, and to a lesser extent SRSD, is facing capacity constraints in parts of their collection system, primarily due to the pump stations.

Recent Initiatives to Address Capacity Constraints

Recently, all of the member agencies have made improvements to their pump stations to alleviate increased hydraulic loads in their systems and prevent sanitary sewer overflows (SSOs). These pump station upgrades have alleviated collection system hydraulic problems but exacerbated the problem at the wastewater treatment plant.

A force main study of all of three collection systems was completed by CMSA in September 2004. Pump station data has been gathered and some of the districts are beginning to install flow meters at various locations within the mains. SD #2 has begun a program to line private laterals to reduce infiltration. It is also concentrating capital expenditures on line replacement to reduce infiltration since their system suffers from breakage due to differential settling. SRSD is starting to address infiltration and inflow (I/I) in their system by engaging a contractor to conduct smoke testing as a first step of this program in the Sun Valley Basin. They have also installed five flow meters in the same basin to monitor wet weather flows. SD #1 has recently started a flow modeling program on their system. They are also contemplating a lateral replacement grant program to help control I/I.

1.3.3 Aging Infrastructure

Collection System: All of the member agencies are faced with aging infrastructure that is subject to infiltration, failure, and root intrusion. The age of the lines in the member agency systems is listed in Table 3.

Table 1-3: Age of Collection System Lines

	Lines < 20 years old	Lines 20-50 years old	Lines > 50 years old
SD #1	15%	45%	40%
SD #2	12%	53%	35%
SRSD	10%	40%	50%

Recent Initiatives to Address Aging Infrastructure

SRSD and SD#2 have developed long term Capital Improvement Programs (CIPs) that contain, to varying extents, monies for pipe replacement. SD #1 has developed a list of projects that they prioritize for their capital funds. These CIPs and capital project lists are revisited by each district and updated on an annual basis. A more detailed discussion on the emphases of the various capital programs is presented in the Financial section of this report.

1.3.4 Government Reduction and Accountability

Local Agency Formation Commissions: In recent years, there has been a movement at the state level to consolidate like agencies in an effort to streamline government. The local agency formation commissions (LAFCOs) statewide were given the power to initiate consolidation of like agencies.

Grand Jury Investigation in Southern Marin: In April 2004, the Marin County Grand Jury published a report on the Southern Marin sewage collection agencies charging that these agencies are operating in a “patchwork” fashion that could be detrimental to their neighbors and the common good.

While only four entities provide wastewater services in the Central Marin area as opposed to the 11 in Southern Marin, it is likely that a Grand Jury Investigation of the Central Marin area would reach similar conclusions. Although the wastewater agencies in Central Marin have collaborated more effectively recently, they may face additional public pressures to do more.

2.0 PHASE I – EVALUATION OF CURRENT STRUCTURE

The following section presents the results of the evaluation of the current structure of the member agencies and CMSA. A summary of the current situation from the legal/political, administration/management, technical and financial perspectives is presented for each member agency. Pertinent FY 05 data for the member agencies and CMSA are consolidated in a table included as Appendix B. The strengths and weaknesses of the current structure are outlined. This information was prepared to assist the Commissioners with analyzing the advantages and disadvantages of various regionalization scenarios identified in Phase II.

2.1 EVALUATION OF EXISTING ORGANIZATION STRUCTURE, OPERATIONS, AND PROCEDURES

The information presented in this section is based on documents submitted by the member agencies (see list of documents submitted in Appendix C) and interviews conducted at the member agencies in October 2004.

2.1.1 Legal/Political

Sanitary District #1: SD #1 was formed as a special enterprise district organization in 1899 under the Sanitary District Act of the California Health and Safety Code. The District currently provides sewer collection, pumping, and system maintenance in its Service Area. SD #1 also administers the solid waste franchise in two unincorporated portions of its Service Area.

In 1982, SD #1 annexed the collection system of the San Quentin Prison and in 1993, annexed the collection system of the City of Larkspur¹. Thus, SD #1 operates and maintains both of those systems. SD #1 is the only member agency that is not directly or indirectly tied to a city.

System Service Area: 27.13 square miles (SD #1: 25 sq. mi.; Larkspur: 1.75 sq. mi.; San Quentin Prison: 0.375 sq. mi.)

Area Serviced through Contract: 0.27 square miles (San Quentin Village: 0.188 sq. mi.; Murray Park: 0.083 sq. mi.).

Communities Served: SD #1 (Towns of Fairfax, San Anselmo, Ross; unincorporated areas of Sleepy Hollow, Kentfield, Kent Woodlands, Oak Manor and Greenbrae); City of Larkspur; San Quentin Prison and Village; Murray Park

Estimated Population: 56,000 (SD #1: 38,000; Larkspur: 12,000; San Quentin Prison: 6,000)

¹ Throughout the remainder of this report, references to the infrastructure assets of SD #1 are meant to include those annexed from the City of Larkspur and the San Quentin Prison.

Governance: SD #1 is governed by a 5-member Board of Directors. Each Board member is directly elected by the constituents of the District. Directors serve four-year terms, with 2 or 3 positions up for election every two years.

Main Service Agreements: SD #1 operates and maintains the collection systems for San Quentin Village through a service agreement with the State Bureau of Corrections. SD #1 maintains the Murray Park Sewer Maintenance District through a service agreement.

Union Agreements: Employees of SD #1 are represented by AFSCME Local 2167 with a Memorandum of Understanding between the parties that is in effect until June 30, 2006.

Sanitary District #2: SD #2 was formed as a special enterprise district in 1901 under the Sanitary District Act of the California Health and Safety Code. SD #2 became a Subsidiary District of the Town of Corte Madera in 1969. The District currently provides sewer collection and system maintenance to the Town of Corte Madera and two small unincorporated areas. SD #2 transports sewage to SD #1 that in turn, transports it to CMSA for treatment.

System Service Area: 4.5 square miles

Communities Served: Town of Corte Madera; and unincorporated portions of the Tiburon Peninsula and Greenbrae (east of Highway 101 and south of the Corte Madera Creek)

Estimated Population: 9,400

Governance: SD #2 is governed by a 5 member Board of Directors that consists of the 5 members of the Corte Madera Town Council.

Main Service Agreements: CMSA operates and maintains the pump stations and force mains for SD #2 through a service agreement.

SD #2 maintains a number of contracts with outside providers who assist with such services as: line repair and replacement, line maintenance, and cleaning trouble spots.

Union Agreements: Town of Corte Madera employees who work part time for the District are represented by Service Employees International Union 949. The Union holds a Memorandum of Understanding with the Town of Corte Madera that is effective until December 31, 2004.

San Rafael Sanitation District: SRSD was formed as a dependent District in 1951 under the Sanitation District Act of the California Health and Safety Code. The City of San Rafael transferred ownership of its gravity collection system to the SRSD in 1987. The District currently provides pump station and collection system maintenance of the gravity lines and force mains.

System Service Area: 11.05 square miles

Communities Served: City of San Rafael

Estimated Population: 33,000

Governance: SRSD is governed by a 3-member Board of Directors consisting of two appointed San Rafael City Council members and one appointed County Supervisor.

Main Service Agreements: SRSD contracts with various providers for such services as: regular and emergency system repair, blockage removal, television inspection, electrical repairs, emergency power and PLC maintenance engineering.

Union Agreements: SRSD employees are represented by Service Employees International Union 949. The Union holds a Memorandum of Understanding with the District that is effective until June 30, 2006.

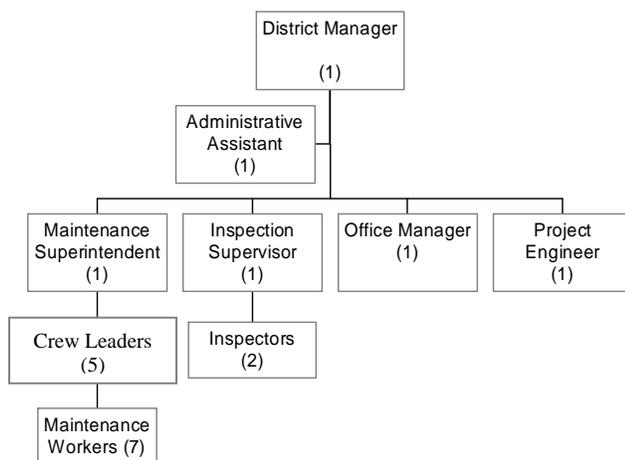
2.1.2 Administration/Management

Sanitary District #1: Daily management is carried out by a full time District Manager who oversees 19 staff members and reports to the Board. An organization chart for SD#1 and additional information on specific administrative and management topics is summarized below.

Employees (FTE):
Management – 3
Superintendent-1
Inspectors - 3
Engineering - 1
Field Crews - 12
Total - 20

Services Provided by SD #1 personnel: Gravity line maintenance, force main maintenance, line spot repair, pump station operation and maintenance, electronic and paper record keeping, procurement, minor fleet maintenance, customer service (fielding customer complaints), inspection, engineering,

Sanitary District #1 Organization Chart



mapping (GIS), traffic control, marking, training, billing for tax exempt customers, payroll, accounting and finance.

Services Provided by County: Customer billing, permitting

Services Provided by Outside Contractors: Large line repair and replacement; CIP development, design and construction; fleet repairs; recruitment and hiring (when needed); control system repairs; electrical repairs; and television inspection.

Sanitary District #2 : SD #2 technically has no employees; rather, the Town of Corte Madera Public Works employees provide services to SD #2 on a part-time basis. Management of SD #2 is administered by the Director of Public Works for the Town of Corte Madera. The Director oversees a Superintendent of Public Works who also functions as the Superintendent for SD #2. The Superintendent is responsible for the daily operations of SD #2. The Superintendent oversees the Town Public Works staff consisting of 1 Assistant Superintendent, 1 Supervisor and 11 field personnel. Work done on the sewer system by the Public Works staff is recorded and charged appropriately to SD #2. SD #2 relies heavily on outside contractors for engineering, maintenance and construction work. An organization chart for the Public Works staff that assist SD#2 and additional information on specific topics are presented below.

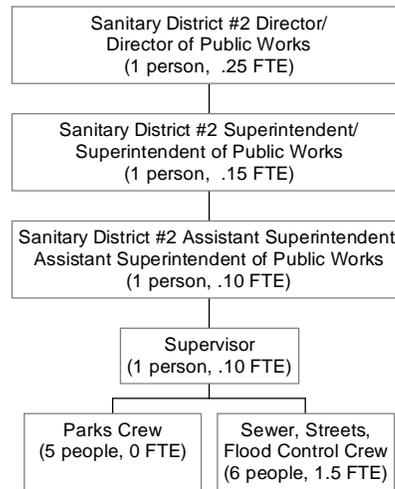
Employees (FTE):

Management – 0.25
 Supervisory - 0.20
 Engineering - 0.50
 Field Crews - 0.35
 Total - 1.35

Services Provided by Town of Corte Madera personnel:

Gravity line maintenance, television inspection (new), paper record keeping, some engineering (most engineering work is contracted out), inspection, mapping (GIS), training, safety committee, human resources (including payroll, benefits, recruitment and hiring), fleet maintenance, procurement, permitting, customer service, customer billing, accounting, IT maintenance.

**Sanitary District #2
 Organization Chart**



FTE= Full Time Equivalent

Services Provided by Outside Contractors: Trouble spot cleaning; engineering; pump station and force main maintenance (conducted by CMSA); large line repair

and replacement; CIP development, design and construction; recruitment and hiring (when needed); control system repairs; electrical repairs.

San Rafael Sanitation District: Daily management of SRSD is carried out by an Administrator who oversees a staff of 11. The Administrator spends approximately 85% of his time as the Director of Public Works for the City of San Rafael. The Deputy District Administrator spends approximately 85% of this time as the Assistant Director of Public Works. An organization chart for SRSD and additional information on District administrative matters are presented below. The District is dependent on the City of San Rafael for some administrative functions, such as human resources. The District is dependent on the County of Marin for accounts payable and legal services. Most of the CIP design work is performed by Nute Engineering.

Employees (FTE):

Management –	0.3
Administration –	1.0
Supervisory -	2.0
Engineering -	0.5
(City employee)	
Field Crews -	<u>7.0</u>
Total -	10.8

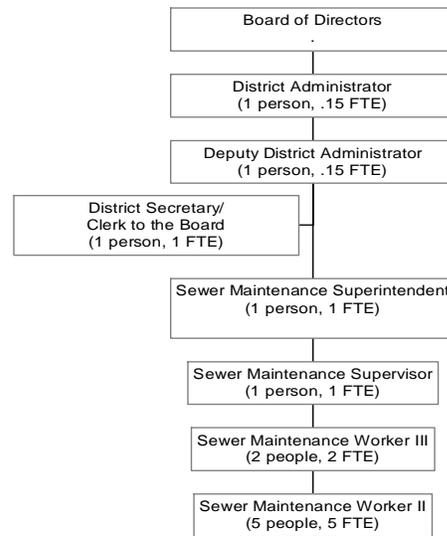
Services Provided by SRSD personnel: Gravity line maintenance, pump station maintenance, budget preparation, plan review, policy and program updates, processing of sewer main extensions, easements, government deeds, permitting, connection fees, billing and customer service, paper record keeping.

Services Provided by City of San

Rafael personnel: Engineering, inspection, mapping (GIS), training, safety committee, human resources (including payroll, benefits, recruitment and hiring), accounting, fleet maintenance, procurement, permitting, billing, IT maintenance.

Services Provided by Outside Contractors: Blockage removal; main maintenance; line repair and replacement; CIP development, design and construction; other engineering; television inspection; recruitment and hiring (when needed); control system repairs; electrical repairs.

San Rafael Sanitation District Organization Chart



FTE= Full Time Equivalent

2.1.3 Technical

Sanitary District #1: The District has five designated crews of 2-3 workers that perform such tasks as pump station inspections, pump station maintenance, sewer line cleaning, sewer line spot repairs and construction inspections. All SD#1 field workers are cross-trained and, with the exception of the crew leaders, rotate jobs. The philosophy of SD#1 is to keep the same number of crews working as much as possible and staff a crew with fewer workers, if necessary. Outside contractors are hired to perform maintenance and repairs at the discretion of the District Manager and the District Superintendent. SD #1 considers capacity as their primary issue related to the pump stations and roots/grease as the primary issue related to the collection system. Specific information regarding SD #1's technical operations is summarized below.

Work Order Process: Paper work orders are generated from customer complaints received and conditions discovered in the field. The five to ten work orders generated weekly are prioritized by the crew leaders with the regularly scheduled maintenance. Work completed is marked on a centrally posted map. The District is currently developing an electronic process to generate and track work orders.

Crew Staffing: Pump Station Inspections – 1 crew of 2
Trouble Spot Cleaning – 1 crew of 3
Routine Maintenance Crews - 2 crews of 2
Point Repair Crew – 1 crew of 3
Inspection – 3 Inspectors

O&M Procedures - General: In general, crews will address problem areas and customer complaints first. SD #1 maintains a standard service level of responding to a customer complaint with a site visit within 45 minutes of the call. Routine cleaning is generally done by 2 crews of 2 individuals that work their way through the service area to clean the entire system.

O&M Procedures for Roots: Historically, SD #1 has both contracted out chemical root treatment and used their own equipment to chemically treat roots. They did not find chemical treatment of roots to be effective and prefer to mechanically remove roots with portable and truck-mounted power rodders. Root removal activities are scheduled according to historical priority and complaints received. There is no routine root removal schedule, but the crews try to clean roots from known problem areas every six months.

O&M Procedures for Grease: SD #1 has learned through experience which areas of the system have problems. They have a defined program of cleaning these problem areas every six months. SD #1 does not have a formal FOG program.

Equipment: SD #1 owns a 1996, two-fan VACTOR with a ¾-inch hose. If the VACTOR is incapable of reaching an area because of easements or topography, a power or hand rodder is used. SD #1 also has 3 rodders, a TV inspection unit, 2

dump trucks, 1 backhoe and a variety of other trucks and equipment as detailed in Appendix B.

Sanitary District #2: Daily operations and work orders for the Town Public Works staff are prioritized and assigned by the Superintendent and the Assistant Superintendent. The Supervisor provides direct oversight of the field personnel. Although the 11 field personnel are cross trained, they are generally divided into two crews: one crew of five concentrating on parks, and the other crew of six concentrating on flood control, sewer system maintenance, and streets. The crew responsible for sewer maintenance spends approximately 25% of its time on sewer cleaning and stoppage removal in the SD #2 service area.

The philosophy of the District is to contract out most services for the collection system. Because of the limited amount of sewer cleaning conducted by the Town Public Works crews, the majority of the O&M and all of the repairs to the collection system are done by a contracted sewer maintenance company. An emergency response contractor is retained through annual contract. The pump stations and force mains are operated and maintained by contract with CMSA.

SD #2 considers I/I due to differential settling and hydrogen sulfide corrosion as major issues along with roots and grease. The District is focused on replacing all their collector pipes and lining virtually all of the homeowner laterals that tie into the system. The District is starting to televise and inspect every line after it has been cleaned with a recently (August 2004) purchased push rod camera. Additional information on SD #2's technical approach to operations follows.

Work Order Process: Work orders are generated verbally and are initiated by complaints or routine O&M based on historical knowledge. Paper log sheets are generated by the crews to track the work orders.

O&M Procedures - General: SD #2 contracts with a sewer maintenance company to conduct regular cleaning of their collection system. The Town Public Works crews spend a small amount of time on general cleaning of the gravity system.

O&M Procedures for Roots: SD #2 does not have any root removal equipment. Their contracted sewer maintenance company also takes care of root removal in the system.

O&M Procedures for Grease: The contracted sewer maintenance company takes care of most of the grease removal in the system. However, the Public Works crews do focus their cleaning on areas in the system with known grease problems and try to clean specific problem areas every three months. SD #2 has contacted CMSA about developing a FOG program in its area.

Equipment: SD #2 owns a 1998 VACTOR with a 1 inch hose which is shared with the Town of Corte Madera. SD #2 also owns a small push-rod camera which it is starting to use on lines after they have been cleaned. SD #2 shares other construction and related equipment with the Town as indicated in Appendix B.

San Rafael Sanitation District: SRSD has a dedicated field staff but shares their Director and Assistant Director with the City of San Rafael Department of Public Works (DPW). SRSD employees work out of the same facility as Public Works staff. SRSD workers occasionally do tasks for other City Departments and they track their time accordingly. However, this work is not necessarily compensated to the SRSD by the other departments. SRSD workers are cross-trained, but routinely perform the same primary tasks, such as pump station inspections, pump station maintenance, and collection system cleaning. Promotions are from within both DPW and SRSD so employees of either can apply for positions in either department.

SRSD contracts for collection system repair work and occasionally for routine O&M. The philosophy of SRSD is to staff crews fully and, if needed, reduce the number of crews to maintain full staffing levels. SRSD considers capacity as their primary issue related to the pump stations and roots/grease as the primary issue related to the collection system. A summary of SRSD's technical operations follows.

Work Order Process: Daily work is recorded by hand in one of two diaries. Ideally, work performed is recorded daily, or at the least, is recorded weekly.

Collection Staffing: SRSD has 3 workers for pump station maintenance and 4 workers for gravity system maintenance. The crew size is determined by the job and if there is a shortage of workers on any given day. The tasks assigned for that day are modified to accommodate the number of staff present. In general, two workers will be assigned to work on the cleaning equipment. Rarely, if ever, will the equipment be operated by a crew of one. Occasionally, workers from the City DPW will be assigned to a crew if the SRSD is severely short handed or needs to perform critical tasks.

O&M Procedures for Roots: SRSD has used root chemicals in the past but has not found them to be effective. The gravity system crew uses continuous hand or truck-mounted rodders to mechanically cut and remove roots from their system. Root removal activities are scheduled according to historical priority and complaints received. There is no set schedule for routine root removal.

O&M Procedures for Grease: SRSD does not have a FOG program. SRSD does consider grease to be a problem and they routinely flush and/or rod lines that historically have suffered from grease buildup. They do not use chemicals to pre-treat their lines.

Equipment: SRSD uses a 1995, three-fan VACTOR with a 1-inch hose that they jointly own and share with the DPW, which is being replaced. The combination

truck is maintained by the City fleet maintenance crew. Other specific equipment owned and used by the District is outlined in Appendix B. SRSD has all of its equipment on a 10-year replacement program.

2.1.4 Financial

Sanitary District #1: SD #1 uses revenue to fund their operations and capital investments (i.e., a “pay as you go” approach). A little more than 28% of their revenue comes from property tax, 68% comes from the sewer service charge, while the remaining 4% comes from miscellaneous sources. SD #1 carries approximately \$8.6 M of reserves that have been earmarked for certain capital projects and \$1.8 M of unallocated reserves. SD #1 has no debt outstanding and owns a parcel of land where its treatment plant was formerly located. The parcel has a value of approximately \$12.5 million. SD #1, like the other Districts, is facing sharp increases in the costs of retirement, health care and insurance. A summary of SD #1’s pertinent financial information is presented in a comparison table with the other Districts in Appendix B. Other descriptive information is summarized below.

Rates: Because SD #1 is not able to receive property taxes from the residents of the City of Larkspur, those customers pay a higher sewer service charge (\$292 per equivalent dwelling unit (EDU) annually) than customers located in the SD #1 service area (\$215 per EDU annually). However, the difference between the two rates has been decreasing as residents in the SD #1 service area contribute proportionally less money to SD#1 through property tax. San Quentin Prison is billed based on average water usage that is measured quarterly. SD#1 has raised its rates approximately 3% - 6% (approximately 2% - 3% for the City of Larkspur) on an annual basis since 1999 to keep up with rising costs of operation, capital projects and treatment. FY 05 is the last year of authorized rate increases, so SD #1 is planning to conduct a rate study this year. Like all of the districts, the CMSA treatment charge of \$119/EDU per year is built into SD #1’s rates.

Property Tax Income: With the passage of Proposition 13 and the recent state budget proposals, SD #1, like all of the districts, will no longer be able to rely on as much property tax as a source of revenue. For FY 05, SD #1 has reduced their anticipated revenue from property tax by 25% from the FY 04 level. Although they have reduced some operating expenses, it is likely that SD #1 will have to raise sewer rates to offset the reduction in property tax income. It is likely that the passage of State Proposition 1A will impact SD#1’s revenue stream, but such impact is not known at this time.

Capital Expenditures: SD #1 maintains a number of different funds that hold monies for specific planned capital expenditures. In FY 04, fund monies were mostly spent on pump station replacement and some force main replacement. As these projects are completed, the District has budgeted proportionally more on gravity line replacement in FY 05. Anticipating that additional force main

replacement is necessary in the future, SD #1 is building reserves for such projects now. In general, capital expenditures have run at slightly over \$1 M per year in the past and are anticipated to be around \$4.1 M in FY 05.

Sanitary District #2: SD #2 exists primarily as a fiscal entity for the Town of Corte Madera. Occasionally, SD #2 transfers monies to the Town's general fund, which the Town later pays back with appropriate interest to SD #2. SD #2 keeps its costs low by using part time administrative staff and contracting out most of its maintenance and capital work. SD #2 has used some debt to fund previous capital projects, but paid off its remaining debt in 2003. In general, it pays for capital projects with reserves. Currently, it has approximately \$5.4 M in unrestricted reserves that are earmarked for capital projects.

Rates: At \$188 per EDU annually, SD #2 has the lowest sewer service charge of all the districts. SD #2 relies on property tax for 43% of its revenue. The sewer service charge, investment earnings and other earnings comprise 50%, 7%, and less than 1%, respectively, of SD #2's revenue. It has held this rate constant for approximately the past 10 years.

Property Tax Income: SD #2 anticipates a reduction in property tax revenue in the years upcoming and is prepared to raise its rates to make up for the offset in funds. It is likely that the passage of State Proposition 1A will also impact SD#2's revenue stream, but such impact is not known at this time.

Capital Expenditures: SD #2 developed a Sewer System Master Plan in 2003 that includes a 40-year Capital Improvement Program (CIP). Currently, SD #2 is focusing its capital expenditures on I/I reduction through lining of private laterals and gravity line repair and replacement. It has also made some pump station upgrades. SD #2 spent from \$0.7 M to \$1.2 M on capital projects over the past four years. While it anticipated spending \$3.3 M in capital projects in FY 04, primarily on lateral replacement and pump station upgrades, this higher level of capital spending did not occur due to several project delays. Thus, these projects will carry over and the anticipated spending in FY 05 and FY 06 will be approximately \$4.4M and \$6.7M, respectively. Thereafter, SD #2 expects to spend about \$1.2 M per year on capital projects.

San Rafael Sanitation District: SRSD has used a "pay as you go" approach to pay for operations and capital investments. SRSD recently refinanced debt of \$4.7 M in 2001 for a term of 10 years to help pay for their 10% portion of the new public works corporation yard, which realized a net savings of \$750,000. SRSD currently has no reserves and has a philosophy of not maintaining reserves. The District has seen significant increases in its retirement and health care expenses in the past year which have put added pressure on rates.

Rates: SRSD relies on its sewer service charges as its primary source of revenue (i.e., 90%). SRSD has the highest annual sewer service charge of the districts:

\$308 per EDU in FY 05. SRSD has been increasing its rates 4 to 5% annually over the past five years.

Property Tax Income: Of all the districts, SRSD relies the least on property taxes for revenue. Property taxes comprise less than 9% of annual revenue, while sewer service charge and other revenue comprise 90% and 1%, respectively. Because their apportionment of revenue from property tax is already low, SRSD is not anticipating a large change in its property tax revenue going forward.

Capital Expenditures: SRSD started its CIP in earnest in 1995 concentrating on the transportation system and pump station upgrades as their highest priorities, followed by collection system upgrades, spending approximately \$5M between 1995 and 2000. Recently, SRSD has made investments in its' infrastructure through pump station upgrades, line rehabilitation, including the replacement of old corrugated metal pipe, and some force main upgrades. It has spent approximately \$1 M per year on capital projects over the past ten years and has a budget of \$ 1.32M for FY 05. SRSD anticipates increasing its current CIP budget by 5% per year over the next seven years as it continues to implement its 2000 Capital Improvement Program that focuses on pump station upgrades and line replacement. SRSD spends every available dollar on CIP improvements with no cash reserve.

2.2 STRENGTHS AND WEAKNESSES OF THE CURRENT STRUCTURE

The current JPA structure has both strengths and weaknesses. While based on the information collected from the member agencies and CMSA during this study, these strengths and weaknesses are inherently somewhat subjective. They are based upon the professional opinion of Red Oak Consulting and are presented for the Commissioner's consideration as they weigh potential regionalization scenarios.

2.2.1 Strengths of Current Structure

In general, the current structure allows each district to manage its system, independent of the other member agencies and CMSA, in the way that each district believes best uses its resources and serves its community. Operations can be handled simply and effectively with small crews of individuals who know the specific system and its history.

- **Adequate Representation for District Customers:** Because the communities are relatively small, each Board member, whether directly elected or appointed by another elected body, represents a relatively small number of people. Customers within SD #1 and SRSD are ensured that they are properly represented. This is also true for SD #2, where its board is elected by citizens of the Town of Corte Madera. However, customers of SD #2 who live in the unincorporated portion of its service area (approximately 16% of total customers who live outside of the Town of Corte Madera) are not represented by the SD #2 Board.

- **Local Alignment:** Assignment of local elected officials to the boards of the member agencies facilitates alignment of the actions of their district with other city initiatives.
- **Autonomy:** Local districts have the independence to develop priorities based on their small community's needs.
- **Informal, Flexible Culture:** The small structures foster an informal culture, making it easy for managers and staff to communicate and maintain open, amicable work environments.
- **Lean Staffing:** SD #2 and SRSD are able to perform their administrative duties with a minimum of staff, using internal staff or relying on their associated cities.
- **Informal processes and procedures:** Because of the small staff size and because many employees have been with their respective districts for a long time, the districts can function with minimum formal written policies and procedures.
- **Collaboration:** SRSD and SD#2 have good working relationships with their associated Departments of Public Works and freely share resources.

2.2.2 Weaknesses of Current Structure

The small size and local control of the districts also create weaknesses in the current structure. With the current structure, districts have no incentive to consider what happens beyond their boundaries. Although they are ultimately liable for any plant violations, the CMSA rate and governance policies do not encourage the districts to consider the implications of their actions, to CMSA, to the other member agencies, or to the environment as a whole. The current structure has allowed the districts to operate successfully on a local, year-to-year basis, but it appears that a number of needed investments in infrastructure and improvements in operations procedures have been deferred.

- **CMSA Regional Charge:** Member agencies pay CMSA their share of the cost of wastewater treatment based on dwelling units. This method of billing, while reflective of the member agencies' relative contribution, does not provide any incentive for the districts to effectively manage actual flow contribution to the plant. While there has been little relative growth in the region, wet weather flows have increased dramatically (see Appendix A) over time, indicating that the condition of the collection systems is deteriorating in some areas. As a result, the tendency of the districts in the past has been to solve local flooding and sewer overflow problems that occur during wet weather events by "exporting" the flow to CMSA through the expansion of pumping station capacity. This was a reasonable strategy when excess capacity was available at the CMSA plant; however, the plant now reaches or exceeds its rated process capacity during wet weather events and can exceed hydraulic capacity when tides are higher than two and a half feet. Thus, the "export" strategy is not a viable long term solution for

the overall wet weather problem. To their credit, it must be noted that the member agencies are actively pursuing a variety of projects and programs to reduce wet weather flows in their systems; however, to our knowledge, data are not yet available that would indicate to what extent these programs will reduce the wet weather flows at the CMSA plant. The Joint Powers Agreement originally established the CMSA Regional Charge to be based on relative volume and quantity of wastewater generated. However, it also allows for the Commissioners to calculate contributions based on dwelling units. The Commissioners chose this option originally, but have never reviewed their decision to ensure that the approach best serves the overall interest of Central Marin area customers.

- **Limited Vision:** By maintaining local control and governance, districts prioritize and do what is best within their individual service areas. These actions may not be what are best for the region as a whole. The tendency to “export” flows noted above is an example of this issue. At times, some districts tend to focus on the tactical day-to-day operations rather than the long term implications to their area or the region. The current structure of separate, independent member agencies does not provide an incentive to think of the regional collection systems as one interrelated system and do what is best for the Central Marin customers and environment as a whole.
- **Gravity System Low Priority:** Because two of the districts are somewhat dependent on their cities and are governed by City or County officials, these districts must often compete for the time and attention of personnel who are responsible for other City projects and facilities. Because the sewer system is underground and therefore out of sight, it may be “out of mind,” and may receive a lower priority among the other initiatives that the city is contemplating or undertaking.
- **Public Outreach:** While SD #1 maintains a website and has plans to publish a newsletter, in general, the districts have little opportunity to communicate with and educate the public. SD #2 and SRSD rely on their related cities to perform this function and sewer issues may or may not be publicized. As sewer rates increase and the regulatory environment continues to tighten, it will be necessary for the districts to proactively communicate with their customers regarding their services and initiatives.
- **Succession and Knowledge Management:** Many wastewater utilities are facing problems in with and aging generation of workers in their organizations. The districts will also face potential loss of institutional knowledge as older workers retire because there are no written processes or procedures that capture their knowledge and pass it on to new workers.
- **Employee Development:** Although the districts take as many opportunities as they can to cross train their employees, many services are outsourced. Because of the small size of these organizations, the limited services performed, and tightly-

defined job parameters, there is less opportunity for promotion than there would be in a larger, more full-service wastewater utility.

- **Tightening Finances:** The financial difficulties of the State of California and the resulting reduction the property tax revenues available to special districts and other local governments has led many special districts to conclude that property taxes may not be a sustainable source of revenue in the long term. In the near term, most special districts will experience reduced property taxes revenues over the next two years. This loss of income, coupled with sharp rises in the costs of retirement, health care, insurance, and treatment, is putting significant pressure on the districts to raise rates. This tightening fiscal environment also puts pressure on the districts' ability generate reserves that can be used for capital projects.
- **Record Keeping:** Work orders in all of the districts are partially based on paper records and the knowledge that the field workers and the supervisors have of their system. There is currently no process in place in any of the districts to permanently store and build on that data, although SD#1 is working to develop an electronic record. SRSD is currently integrating a software package to link operations maintenance into its GIS mapping. Most larger wastewater utilities are now using computerized maintenance management systems (CMMS) to store and manage their maintenance data and to generate and manage work orders.
- **Equipment Use:** The limited equipment available to each district restricts their O&M effectiveness. Financial constraints limit the ability of some of the districts to purchase additional or more appropriate equipment. A combination VACTOR unit using high volumes and low pressure (such as owned by SRSD and SD#2) meets the needs of most areas and is good for debris removal as well as grease and root removal in areas without steep grades. A combination unit using low volumes and high pressure (such as owned by SD#1) is limited in its ability to remove debris but is effective for removing grease and roots in areas with steep grades. Rodders do not remove debris but are intended to remove blockages caused by roots, grease or debris buildup. Thus, because of their limited resources, the districts are not always using the equipment that would be optimal for the maintenance situation at hand. A larger utility organization or a more integrated organization would have the opportunity to better optimize the use of equipment in the performance of collection system maintenance.
- **Best Practices:** There may be opportunities to improve operations by implementing selected industry best practices in all of the districts. For example:
 - **Roots** - The districts all agree that chemical root treatment has not worked for them in the past. They have relied on rodders to remove the roots. However, this technology is labor intensive has not generally proven effective on fine and medium roots. The districts should explore the chemical root treatment further rather than routinely cutting them using rodders.

- Grease - Historical knowledge as to where major grease buildups occur has allowed the districts to conduct periodic flushing or rodding to alleviate those potential problems. However, none of the districts comprehensively addressed the problem. For example, none have source control plans and none routinely treats those areas with enzymes or utilize other suitable pre-treatment methods.

3.0 PHASE II – EVALUATION OF REGIONALIZATION SCENARIOS

On November 10, 2004, the CMSA Commissioners held a 4-hour workshop to identify potential regionalization scenarios for CMSA and its member agencies and jointly analyze the advantages and disadvantages of each scenario. The Commissioners agreed that while the current arrangement provides some benefits such as local control, the issues facing the agencies, in particular the capacity concerns, warranted continued exploration of potential regionalization. The discussion at the workshop focused primarily on what structures or options would address the current issues facing the CMSA and the Member Agencies. The specific organizational and legal details of the structures would be determined in subsequent studies after alternatives are prioritized.

This section summarizes the findings of the workshop, provides some additional analysis of the scenarios and outlines next steps for the Commissioners' consideration. Opinions added by Red Oak are clearly distinguished in the text from scenario analysis conducted by the Commissioners during the workshop. The goal of this phase is to provide an initial screening of all potential regionalization scenarios and select those scenarios that are feasible, practical, and should be considered for further evaluation by the Commission and participating agencies.

3.1 ESSENTIAL COMPONENTS FOR REGIONALIZATION EFFORTS

3.1.1 Commissioner Concerns

At the beginning of the workshop, the Commissioners discussed their concerns with any regionalization effort. It was important for each Commissioner to voice concerns among the entire group to provide context for evaluating potential scenarios and to facilitate an open dialog among workshop participants. Concerns expressed were:

- What scope of regionalization options do we consider? Do we look at a bigger picture that may include other utilities or larger regions?
- The tendency of a larger organization to have to spend more money.
- Who would control the levels, type and procedures for customer service?
- The Governance of a new organization
 - How would the governing body be structured?
 - How would its members be elected or appointed?
- How would a new structure address the different values of current assets among the Member Agencies?
- How would a new structure address the different businesses and/or services each Member Agencies provides (e.g., SD #1 garbage franchise)?

- How do we determine the appropriate policies and ordinances for any new structure?
- How could we ensure all employees retain equal pay, equal benefits, and job security with the implementation of any new structure?
- How will we evaluate the benefits of in-sourcing versus out-sourcing under a new structure?
- How do we build trust among the member agencies to successfully move forward?

It is Red Oak's opinion that many of these concerns will be addressed as the Commissioners further evaluate any preferred regionalization alternative. Many of these concerns, such as governance, policies, employee benefits, and asset valuation, relate to the organization of the new entity. Before any new structure is implemented, these details are worked out thorough continued study and discussion among all participating agencies. For example, one of the next steps in a regionalization effort would be to build a detailed financial model that could project future budgets and resulting rate structures of preferred regionalization scenarios. This model would have to take into consideration assumptions on asset valuation, employee benefits, policies on repair and replacement spending, etc. These types of models are extremely valuable in allowing the participating agencies to ask "What if.." type questions. The answers to these questions can then be used to make informed decisions on the regionalization alternatives and initiate the decision-making process for a new structure.

Other concerns, however, such as building trust among the agencies, relate to how the agencies approach the issue of regionalization and come to a mutually agreeable solution. Historically there have been tensions among the agencies and past regionalization efforts have not been successful. Thus, it is critical to factor this issue when selecting any regionalization scenario.

3.1.2 Principles for a Successful Change

After voicing their concerns, the Commissioners identified those principles that must be considered for any change in organizational structure to be successful. These critical principles are that:

1. Any structural change must realize cost savings or improve productivity.
2. Any action must provide equal or better service to our customers.
3. A new customer charge resulting from a change must equate to the level of service provided.
4. Existing monetary reserves must stay with the appropriate Member Agency (In other words, the reserves must be available to the contributing customers).

These principles were considered when first evaluating the possible regionalization scenarios. However, they will become more critical if a particular scenario is pursued and as details of that structure become more clear. The Commissioners must continue to

reflect on these principles as they move forward to ensure that any new structure satisfies the needs of all the participating agencies.

3.2 IDENTIFICATION OF REGIONALIZATION SCENARIOS

There are a number of different scenarios through which the CMSA and its member agencies could achieve some type of regionalization – from executing a number of service contracts among each other to total consolidation of all Central Marin utilities. After discussing the scope of the scenarios they should consider, the Commissioners opted to focus on only those scenarios that address current issues, are able to be practically implemented, and are politically and economically desirable.

Following are brief descriptions of the scenarios identified by the Commissioners as being possible to achieve integration of wastewater authorities to best serve the people of Central Marin. Each scenario may contain a number of options that could be included.

Scenario 1A: Joint Powers Agreement (no change from current structure) – California law authorizes governmental agencies to contract with each other to implement many types of mutual service programs, including sewerage functions using Joint Exercise of Powers Agreements. Two or more agencies with common powers are needed to create a joint powers authority. The CMSA was created in 1979 and is operated through a Joint Powers Agreement (JPA) among the Member Agencies. This scenario entails retaining the JPA as currently written and continuing the current level of interagency service contracts.

Scenario 1B: Modified Joint Powers Agreement – The existing JPA can be amended by agreement of all parties. The Agreement allows the member agencies great flexibility in the type of modifications that can be executed, from changes in the member service charge structure to initiation of interagency service contracts. This scenario would involve some modifications to the JPA. These modifications could be executed in one step at a particular time or in a series of sequential steps, over a period of time. The JPA could be modified, for example, to include all or the some of the following provisions:

1. Restructuring the basis of the member agency charge from the current equivalent dwelling units (EDU) to contributed flow and/or load.
2. Developing a coordinated, regional approach to CIP planning
The Commissioners noted that before this could be done, member agencies would need to:
 - a. Conduct a condition assessment of their collection systems.
 - b. Review the status and findings of current initiatives among Member Agencies (flow studies, smoke testing, etc)
3. Allowing CMSA to purchase and provide resources, such as equipment, information systems, policies and procedures, and/or specialized technical personnel, to member agencies through lease or other cost sharing agreements.

Scenario 2: Partial Combination – Two or more agencies could be combined through the creation of a new agency or expansion of one of the existing agencies. Partial combination could include the combination of CMSA with one or two of the member agencies or combination of two or three of the member agencies. Legal authority would be based on the type of combination selected by consensus of the participating member agencies.

Scenario 3: Total Combination – The CMSA and all three Member Agencies would combine to form one agency through the expansion of an existing agency or the creation of a new one.

If the participating agencies decide that a new agency should be created, there are fifteen governmental forms in California that have the power to provide sewerage service. In 1984, Bartle Wells Associates evaluated these governmental forms in their Consolidation Alternatives Study. The results of their analysis, summarized in the table below, indicated that three agency forms would best serve as the legal structure for total combination: 1) a Joint Powers Agency (JPA), 2) a Sanitary District (SD) (with qualifications) and 3) a County Sanitation District (CSD) (the three preferred structures are highlighted by a red box). Further evaluation of this scenario would have to be conducted to determine what the optimal legal structure would be.

Table 3-1: Institutional Selection Criteria for CMSA and Member Agencies

	Statutory Agency															
	City	County	Cal WD	CFD	CmSD	CSD	CSA	CWD	CWWD	ID	MUD	MWD	PUD	SD	SWD	JP Agency
Functional Authority - collection, treatment, disposal, reclamation	√	√	√		√	√	√	√	√		√	√	√	√		√
Area Served - serve incorporated and unincorporated area		√	√			√	√	√			√			√		√
Financing Powers - issue revenue bonds and notes, collect fees and charges	√	√	√		√	√	√	√			√	√	√	√	√	√
Governing Body - Board to represent area served through election or appointment of elected officials	√				√	η		√		√	√	√	√	√		√
Formation Procedure - Formed easily by agreement among governing boards	√	√		√		√	√		√					η	√	√
Recommended Alternatives						√								√		√

Source: Bartle Wells Associates Consolidation Alternatives Study. January 1984

There are a number of other scenarios which could serve the purpose of providing wastewater services to the Central Marin region, including total combination of all regional utilities. However, the time and complexity of implementing such scenarios would be considerable and it is unlikely these scenarios would be best able to fulfill the current needs of the CMSA and its member agencies. Thus, the four scenarios outlined above were the only ones considered to be practical options at the present time.

3.3 ADVANTAGES AND DISADVANTAGES OF REGIONALIZATION SCENARIOS

The following table summarizes the major advantages and disadvantages associated with each regionalization scenario. Advantages and disadvantages identified by Red Oak Consulting are indicated with an asterix. Based on the advantages and disadvantages, the Commissioners concluded which scenarios could be viable. These conclusions are also captured in the table.

Scenario 1A - Current Joint Powers Agreement (no change)

Advantages	<ul style="list-style-type: none"> • This scenario has some advantages, as outlined in Section 2 of this report.*
Disadvantages	<ul style="list-style-type: none"> • Does not allow the CMSA or member agencies to efficiently address its current problems, particularly the capacity problems.
Commissioners' Conclusion	<ul style="list-style-type: none"> • This scenario is <u>not</u> viable.

Scenario 1B – Modified Joint Powers Agreement

Advantages	<ul style="list-style-type: none"> • Allows member agencies to build trust. • Allows member agencies to retain autonomy. • Allows for ongoing investigation of other regionalization scenarios (i.e., can be an intermediate step toward another regional structure). • Allows Flexibility among agencies. • Provides economies of scale for personnel, equipment, legal services, and other services (i.e., pooling of resources). • Allows for an easier exit from contractual arrangements.
Disadvantages	<ul style="list-style-type: none"> • Does not provide the CMSA with any enforceable power to affect change. • Could result in difficulties during emergencies if the Member Agencies have to compete for CMSA resources. • Could result in many contractual arrangements that would need close monitoring and administration.

**Disadvantages
(continued)**

- Would require execution of programs in an efficient and effective manner.
- Could require additional staff or staff modification administer contracts.
- Could be limited in potential by legal authority. Member Agencies and CMSA would have to determine what types of modifications would be legally acceptable with the use of JPA.
- Would retain 4 separate agencies and thus does not achieve efficiency in government.*

**Commissioners'
Conclusion**

- This scenario is viable.
- Note: this scenario could be used as a stepping stone to total combination (Scenario 3).

Scenario 2 – Partial Combination

Advantages

Note: although this scenario could provide some advantages, the Commissioners felt that it did not provide any incremental advantages over the other scenarios.

Disadvantages

- Would involve complex organizational arrangements that would be more difficult to execute than other scenarios

**Commissioners'
Conclusion**

- This scenario is not viable.

Scenario 3 – Total Combination

Advantages

- Provides clarity among all agencies regarding mission/vision/goals.
- Allows for efficiency in operations and management.
- Provides a structural solution to the system-wide wet weather problem and needed CIP.
- Integrates a regional approach to emergencies.
- Allows for a reduction in facility costs such as offices and corporate yards.
- Results in a more streamlined management structure.
- Allows for 100% focus from all employees.
- Allows for resource optimization across all functions within the combined utility organization.
- Results in a more efficient decision-making process at the Board and management levels.
- Allows for a more rational governance structure that would be

**Advantages
(continued)**

- simpler, easier to understand, and more transparent.
- Provides an improved ability to optimize environmental protection.
- Improves ability to utilize debt to finance the CIP, etc.
- Realizes efficiency in the provision of wastewater utility services through the creation of a single regional entity.*

Disadvantages

- Results in a loss of local control.
- Could reduce alignment with city or municipal priorities.
- Could provide the potential for the inequitable use of reserves.
- May decrease the ability to customize local service.
- Would require a rate structure change.
- Could potentially cause loss of property tax revenue.
- Would impact on Public Works departments in Corte Madera and San Rafael from the loss of shared resources.
- Could be potential for job insecurity among a transition that could lead to reduced employee morale and potentially employees leaving (i.e., a brain drain).

**Commissioners’
Conclusion**

This scenario is viable.

3.4 RED OAK RECOMMENDATIONS AND PLAN FOR ACTION

3.4.1 Red Oak Recommendations

At the workshop, all of the Commissioners agreed that the current JPA structure was not a viable scenario for the CMSA and the member agencies going forward because it did not address their collective problems. Capacity issues are pressing enough throughout the systems that something must be done soon, and on a regional basis, to address them. It is Red Oak’s professional opinion that the Commissioners have three feasible options for moving forward:

Option 1: Implement Scenario 3 -Total Combination

In our opinion, this option would be the most preferable for the Commissioners and the member agencies to pursue because it would allow the participating agencies to collectively design a new or expanded agency, collaborate on solutions to problems in which all members have a vested interest, and share their strengths with one another. Many of the Commissioner’s concerns expressed during the workshop could be addressed during the establishment of the combined agency. By creating a combined agency that is responsible for the collection, transmission, treatment, and disposal systems that are already interrelated, efficiencies could be gained through economies of scale. In addition, there would be an improved ability to fund capital investment and

collectively share best practices. Finally, total combination would mean that all employees would be aligned, working to achieve one set of regional goals and priorities. Successful implementation of this option would result in the most efficient structure and ultimately, the best service for the people of Central Marin.

This option, however, would take some time to implement. Structures would have to be investigated and details of the new or expanded agency would have to be agreed upon. In addition, this option currently does not have complete political support among all the member agencies, due in part to valid concerns about autonomy and local control. This option can be implemented successfully, but implementing this option immediately has a higher risk of failure than taking a gradual implementation approach.

Option 2: Implement Scenario 1B – Modified Joint Powers Agreement

This option has advantages because it allows the member agencies to come to agreement on specific, narrowly-focused topics relatively quickly. In addition, the existing JPA allows for interagency service contracts to be established without modification. During the workshop, the Commissioners identified a number of modifications that would increasingly share resources and services among the participating agencies. In fact, if most of these modifications are implemented, it would functionally bring the agencies quite close to total combination. Under this option, it will be important to openly discuss all proposed modifications or service agreements among CMSA and all member agencies to avoid the perception of side dealings or alliances.

The most important modification mentioned was the restructuring of the member agency Regional Charge based on flow rather than EDU. Because housing growth has been relatively stable but contributed flows have been increasing, this change is essential to properly distribute the CMSA operating costs among member agencies based on usage. Though politically controversial, this proposed modification is the first modification the Commissioners should implement. It would demonstrate good faith toward collectively addressing the capacity problems of the regional system and would provide an excellent foundation for the development of other modifications to the JPA.

As noted in the workshop, this option on its own has several drawbacks. Most importantly, accountability and enforceability are more cumbersome and difficult to achieve. For example, it is difficult to write contracts that provide all of the flexibility necessary for the operation of a fairly sophisticated utility system. In the event of a disagreement, enforcement of inter-agency contracts would likely require significant negotiation and perhaps even litigation. By comparison, a consolidated regional organization with a single board and a well aligned staff could probably deal with most operating difficulties more easily.

In addition, there is the problem of conflicting allegiances and priorities. Currently, each CMSA board member has two allegiances—one to his or her member agency and one to CMSA. While, most of the time, the needs or priorities of CMSA are aligned with those of the member agency, there are times when the priorities are not aligned. This places the

CMSA board member in a situation where he or she must decide which priority is more important. This potential for conflicting priorities would not change under a modified JPA. Each member agency would remain responsible for its own system and collectively for CMSA, retaining the structure for potentially conflicting priorities. In addition, there may be limits to the modifications that are allowed under a Joint Powers Agreement. The limitations of this legal structure would have to be researched.

Option 3: Implement Scenario 1B (Modified JPA) immediately while researching Scenario 3 (Total Combination)

Red Oak recommends that the Commissioners and the member agencies pursue this option because it provides an incremental approach toward total combination. The modifications to the JPA could be viewed as “stepping stones” toward total combination and crucial decisions could be made that would facilitate total combination. It allows the CMSA and member agencies to focus on their immediate priorities. Additionally, ironing out issues during the execution of such modifications would also facilitate the establishment of any new structure. This option allows for the establishment of trust among the participants and for the continued momentum toward an ultimate goal.

The concept of total combination could easily be pushed aside under this option and, in five years, the Commissioners could find themselves in the same place they are today. Thus, it will be important to continue to investigate and made critical decisions toward total combination as if that scenario were being pursued alone.

3.4.2 Plan for Action

The major steps necessary to evaluate, select and implement Option3: (implement modified JPA while researching Total Combination) are:

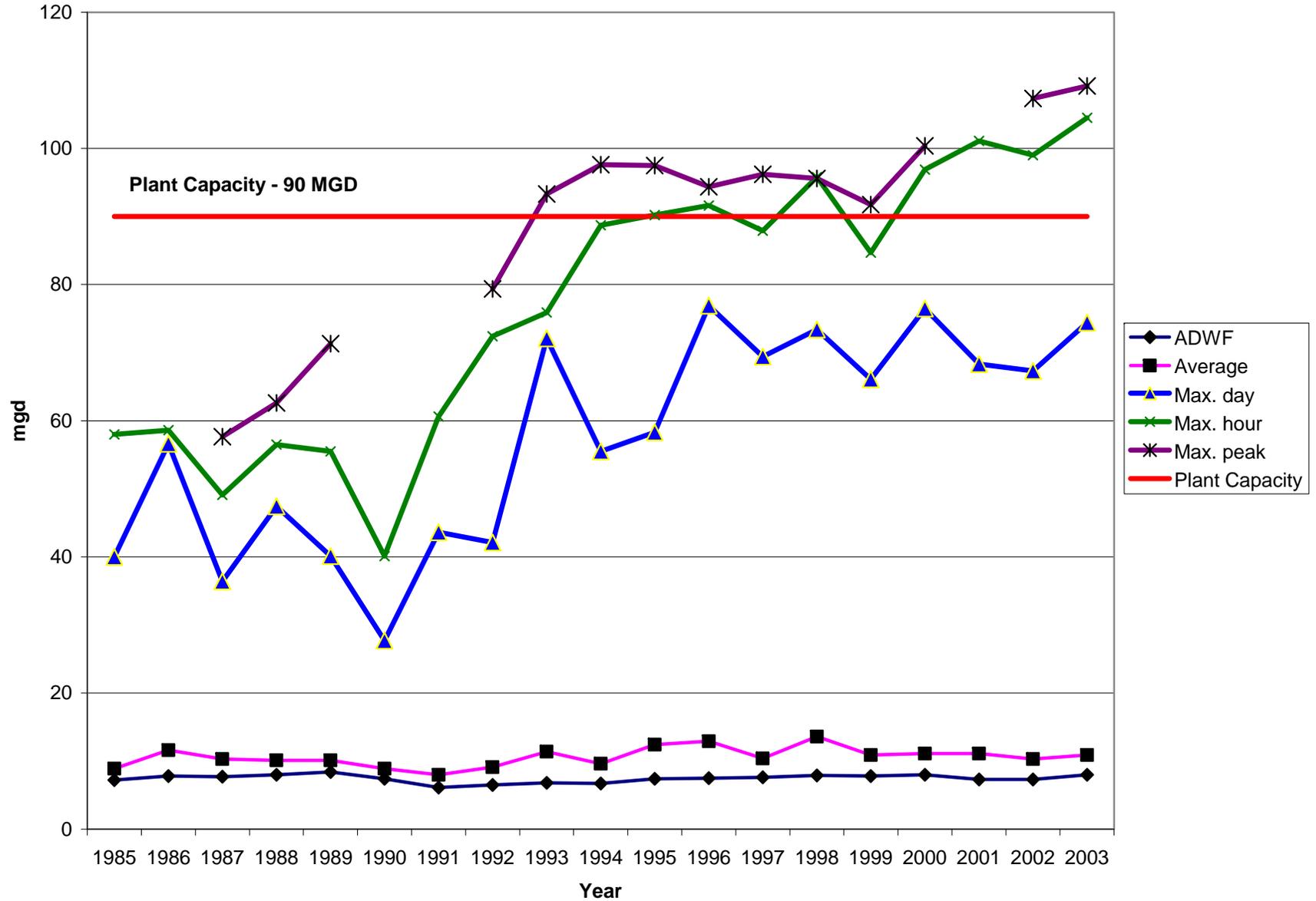
- 1) CMSA Commissioners to agree:
 - a. That the two scenarios identified as viable warrants further evaluation and that they should be implemented concurrently
 - b. If they wish to pursue the development of a regionally planned CIP while other regional scenarios are being evaluated.
- 2) CMSA Commissioners identify and prioritize JPA modifications that are necessary and desirable. Proposed modification of the CMSA Regional Charge should be first priority.
- 3) CMSA Commissioners to assign evaluation into priority modifications and development of modifications for consideration
- 4) CMSA and/or member agencies to develop inter-agency service contracts as needed and communicate intents to other member agencies before such contracts are effective.
- 5) CMSA and/or member agencies to propose JPA modifications to the Commissioners as appropriate.

- 6) CMSA Commissioners initiate a full evaluation Scenario 3. This evaluation should include the following factors
 - a. Organizational structure and governance
 - b. Assets and asset condition
 - c. Regulatory and environmental considerations
 - d. Customer service and quality impacts
 - e. Preliminary financial analysis
 - i) Projection of operation and maintenance costs, repair and replacement funding and capital spending
 - ii) Preliminary cost of service evaluation, including allocation of potential savings derived from regionalization
 - f. Determination of the ability of the scenario to meet the Commissioners' and Member Agencies' needs and concerns,
 - g. Identification of steps for implementation.
 - h. Identification of schedule for implementation.
- 7) CMSA Commissioners to select preferred structure for total combination
- 8) Gain political consensus from all member agencies on proposed structure.
- 9) CMSA Commissioners to develop action plan for implementation of Scenario 3 (Total Combination).

APPENDIX A

CMSA Historic Flow Data 1985 - 2003

CMSA Flows, mgd



APPENDIX B

JPA Member Agency Comparison

APPENDIX C

Documentation Submitted by Member Agencies