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FINAL REPORT

COUNTY OF SONOMA

WATER & SEWER DISTRICT PROVIDERS MUNICIPAL SERVICE REVIEW

Prepared for the
Sonoma Local Agency Formation Commission

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I. INTRODUCTION

In 1997, the State Legislature convened a special commission to study and make recommendations to address California's rapidly accelerating growth. The Commission on Local Governance for the 21st Century focused energies on ways to empower the already existing County Local Agency Formation Commissions (LAFCOs). The Commission's final report, *Growth within Bounds*, recommended various changes to local land use laws and LAFCO statutes. Assembly Speaker Robert M. Hertzberg encompassed the recommendations of the Commission in Assembly Bill 2838, which passed into the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000. The new law endows LAFCO with more responsibilities and more influence to oversee growth in California.

One of the major new responsibilities of LAFCO is to conduct comprehensive, regional studies of municipal services (Municipal Service Reviews, or MSRs) every five years, in conjunction with reviews of city and district spheres of influence (SOIs). LAFCOs are directed to review and update agencies' SOIs, as necessary, every five years, according to Government Code Section 56425. Section 56430 requires MSRs to be conducted prior to or in conjunction with the sphere updates. Municipal Service Reviews must address at least the following nine factors:

1. Infrastructure needs or deficiencies
2. Growth and population projections for the affected area
3. Financing constraints and opportunities
4. Cost avoidance opportunities
5. Opportunities for rate restructuring
6. Opportunities for shared facilities
7. Government structure options, including advantages and disadvantages or consolidation or reorganization of service providers
8. Evaluation of management efficiencies
9. Local accountability and governance

Sonoma LAFCO retained Economic & Planning Systems, Inc. (EPS) to develop the MSRs for cities and special districts in Sonoma County. The process was split into phases, with water and sewer district providers first. An initial survey was mailed to each water and sewer service provider with a request for documents such as general plans, budgets, and maps. EPS used the completed surveys and supporting documents to write provider profiles and to make the nine determinations required by law for each provider. The provider profiles and determinations were submitted to each district for its review, and the districts' comments were incorporated into the report.

II. WATER

SUMMARY OF WATER SERVICE PROVIDERS

Sonoma County's water supply is from both groundwater and surface water sources. The Sonoma County Water Agency (SCWA) acts as a water wholesaler, providing drinking water to a majority of the County's population in both cities and unincorporated areas. Some water districts in unincorporated areas provide water exclusively from local groundwater sources. Although a number of small, private companies also provide water to users in specific areas of the County, the companies are not included in the MSR, which is required of public agencies only. The provision of water in cities will be included in the city MSRs, although city-related water issues that affect other agencies are noted in the current document where appropriate. Water service providers reviewed in this report are summarized in **Table 1**.

GOVERNANCE AND OPERATIONS

SCWA's Russian River Project provides the single largest source of water in Sonoma County to the cities of Santa Rosa, Rohnert Park, Petaluma, Cotati, Sonoma, and Windsor; and the North Marin, Marin Municipal, Valley of the Moon and Forestville Water Districts. Local groundwater often supplements the allotment these cities and districts receive from the Agency. Other public agencies that provide water to unincorporated areas of the County include the Russian River, Sonoma Mountain, Timber Cove County, North Bay, Rains Creek and Sweetwater Springs Water Districts, the Occidental Community Services District, and the Camp Meeker Recreation and Park District. The Bodega Bay Public Utility District provides both water and wastewater services.

Each of these systems is subject to its own particular physical and regulatory constraints. The State Department of Health Services has the authority to restrict the addition of new connections to any system based on its evaluation of the adequacy of the system's source, storage and reliability to meet annual, maximum month and maximum peak day demands. Each district functions with its own, independent Board. In the case of many of the smaller districts, there is limited staff support, and Board members often assume multiple responsibilities.

INFRASTRUCTURE, FACILITIES AND SERVICES

Lake Mendocino and Lake Sonoma are collectively referred to as the Russian River Project. Water from these lakes is released into the Russian River and Dry Creek and flows to the Wohler and Mirabel collection wells located adjacent to the Russian River.

Table 1
Summary of Water Service Providers
Sonoma County LAFCO Municipal Service Reviews

Name	Area Served	Population Served	Number of Connections	Production Capacity	Usage (annual or daily)
Bodega Bay Public Utility District	10 sq. miles - Bodega Bay	3,050	1,797	705 gpm	142.8 million gallons annually
Camp Meeker Park and Recreation District	Camp Meeker	700	355	100 gpm	20 million gallons annually
Forestville Water District	3.5 sq. miles - Forestville	2,000	930	1.5 mgd	0.84 mgd max (summer peak), 0.45 mgd (winter)
North Bay Water District	n/a	n/a	n/a	n/a	n/a
Occidental Community Services District	Occidental downtown commercial area	200	70	40 gpm	8-9 million gallons annually
Rains Creek Water District	142 acres - near Cloverdale airport	150	63	13 million gallons annually	13 million gallons annually; 61,000 daily
Russian River County Water District	Russian River area	2,600	1,180	600 gpm	80-90 million gallons annually
Sonoma Mountain Water District	516.75 acres of residential development in hill between Sonoma Valley & Rohnert Park		55	62,000 gpd	22,500 gpm (annual average daily demand)
Sweetwater Springs Water District	15,580 acres in Guerneville, Monte Rio and Rio Nido	8,400	4,000	370.3 million gallons annually	370.3 million gallons annually
Timber Cove County Water District	Approximately 546 acre planned residential community along Sonoma's coastline	100 full-time residents	135	varies by season; production meets usage.	4.8 million gallons annually (summer peak)
Valley of the Moon Water District	12 sq. miles north and west of City of Sonoma	23,000	6,743	3,200 acre-feet allocation from SCWA; 419 acre-feet well production, 500 acre-feet (temporary assistance) from	3,486 acre-feet annually

"gpm" = gallons per minute
"mgd" = million gallons per day
"gpd" = gallons per day

An aqueduct transmission system conveys collected water to contracted agencies that then distribute the water to consumers. This system supplies water to the agencies that contract with SCWA, listed above.

Much of the County's population is partially or fully served by groundwater. Major supplies are found in the extensive alluvial gravels underlying the area's major valleys (Alexander, middle Russian River, Santa Rosa, Petaluma and Sonoma). Sustainable yield from these sources depends on the rate and quantity of withdrawal versus recharge. Recharge depends directly on highly variable seasonal rainfall and is gradually diminished by the construction of impermeable surfaces and storm drainage facilities associated with urban development. Information regarding the sustained capacity of these major aquifers is largely unavailable, although SCWA has requested that its contractors initiate studies to document their local water supplies. At this time, the County has chosen not to pursue a groundwater management plan.

The distinction between surface and groundwater is not always clear as rivers and streams can both recharge and draw water from adjacent aquifers. This is particularly true along the Russian River where many users have wells adjacent to the River and may be extracting groundwater that is directly replenished by Agency releases from Lakes Mendocino and Sonoma. The Department of Health Services can require water from such wells to be treated as if it were surface water.

Outside of the major valleys, competition for scarce groundwater supplies is common as many residents have faced the need to deepen wells, connect to community services or in some cases, particularly in dry years, truck water to their homes.

Agriculture in Sonoma County uses both surface and groundwater. Agricultural use of water can compete directly or indirectly with domestic and urban use. Direct competition occurs when both residential and agricultural users tap the same aquifer. Indirect competition occurs when agricultural wells are located adjacent to the Russian River and its tributaries and pumping may reduce water otherwise flowing to the collection systems belonging to the Agency and other water purveyors. Competition between agricultural and domestic water users may be reduced in the future by increasing agricultural use of treated wastewater.

Water quality issues also have the potential to impact the availability and reliability of both current and future water supplies. Surface water is particularly vulnerable to spills and releases while groundwater impacts generally occur from gradual releases accumulating over time. The Russian River water collected and distributed by the SCWA meets Federal drinking water quality requirements with a minimum of treatment. Deterioration of that quality or the imposition of new requirements could necessitate the construction of expensive treatment facilities that would greatly increase the Agency's capital needs. For example, an emerging water quality issue not currently subject to regulation is pharmaceuticals.

Funds for the construction and repair of water district infrastructure are increasingly limited and competition for public revenues is intense. Connection fees charged of new developments and the revenues collected from water sales help to fund the repair and construction of water collection, storage and distribution facilities. Public district rate increases require the approval of a council or board accountable to the system's users. Thus, water districts are subject to politically imposed limits on the availability of funds for system expansion. Many systems have had difficulty raising the funds necessary to maintain their existing facilities and provide the upgrades necessary to meet new regulatory requirements. The rates currently charged by public water providers are shown in **Table 2**. These rates are only representative; many districts charge customers bimonthly so an average monthly water bill is difficult to estimate.

WATER SERVICE DEMAND AND CAPACITY

The County's water supply is finite and both physical and regulatory constraints can impact future development. Physical constraints include the size of the collecting watersheds, the amount of annual rainfall, and the capacity of storage reservoirs and collection and transmission facilities. Regulatory constraints include requirements to maintain natural stream flows, limits on the rights to extract groundwater, and contractual obligations between the Agency and its contractors.

SCWA has determined that its water transmission system's reliable summertime capacity is less than its contract commitments and is thus "temporarily impaired" until new facilities are constructed. The Agency has initiated projects to construct additional collection and transmission facilities and secure the right to increase the amount of water released from Lake Sonoma and diverted from the Russian River. These projects will allow the Agency to increase its supply to customers from the current daily maximum of 92 to 148.9 million gallons and its annual supply from 75,000 to 101,000 acre-feet. This augmentation is sized to supply the Agency's customers' demand, as determined by the applicable General Plans within its customers' service areas that were adopted at the time the environmental review for the Agency's Water Supply and Transmission System Project was performed.

Completion of the Agency augmentation projects is contingent upon a number of regulatory and judicial determinations. These include the resolution of litigation challenging the adequacy of the Environmental Impact Report for the construction of the additional collection and transmission facilities and the completion of a federal Endangered Species Act Section 7 consultation regarding threatened fish species. In the meantime, the Agency has encouraged its contractors to develop local water supply, increase the use recycled water, and implement various water conservation programs.¹

¹ This is called the LRT2 program, which stands for local supplies, recycled water, and tier 2 conservation. From Kiergan Pegg, phone interview, 10/8/04.

Table 2
Average Monthly Water Service Rates for Typical Single-Family Homes
Sonoma County LAFCO Municipal Service Reviews

Water Service Provider*	Monthly Charges		Total Monthly Charge	
	Base Rate	Commodity Charge		
Bodega Bay Utility	(1)	\$11.00	\$10.00	\$21.00
Camp Meeker Recreation and Park District	(2)	\$40.00	\$11.00	\$51.00
City of Cloverdale	(3)	\$8.02	\$24.64	\$32.66
City of Cotati	(4)	\$10.97	\$10.15	\$21.12
City of Healdsburg	(5)	\$29.63	\$18.48	\$48.11
City of Petaluma	(6)	\$3.38	\$36.26	\$39.64
City of Rohnert Park	(7)	\$10.55	\$8.75	\$19.30
City of Santa Rosa	(8)	\$4.65	\$13.25	\$17.90
City of Sebastopol	(9)	\$10.18	\$13.75	\$23.93
City of Sonoma	(10)	\$9.59	\$21.53	\$31.12
Forestville Water District	(11)	\$12.00	\$2.40	\$14.40
North Bay Water District	(12)	n/a	n/a	n/a
Occidental Community Services District	(13)	\$30.00	\$12.50	\$42.50
Rains Creek Water District	(14)	\$37.50	\$7.50	\$45.00
Russian River County Water District	(15)	\$12.00	\$7.50	\$19.50
Sonoma Mountain Water District	(16)	\$34.00	\$9.65	\$43.65
Sweetwater Springs Water District	(17)	\$21.50	\$9.50	\$31.00
Timber Cove County Water District	(18)	\$35.00	\$25.00	\$60.00
Town of Windsor	(19)	\$6.03	\$7.20	\$13.23
Valley of the Moon Water District	(20)	\$5.00	\$11.90	\$16.90
Sonoma County average				\$31.16
Sonoma County median				\$31.00
Statewide average	(21)			\$30.33
Statewide median	(21)			\$30.93

* Includes publicly-owned water providers only.

- (1) BBPUD charges a bi-monthly base rate of \$22 plus \$2.50 per hcf of water for 801 cf to 2,500 cf. Assumes 1,200 cf per month.
- (2) Represents Camp Meeker's monthly service charge of \$40 plus 5,000 gallons for \$11.
- (3) Cloverdale charges an \$8.02 monthly access charge plus \$1.52 per 100 cf for the first 4 units and \$2.32 for the next 8 units, assuming 1,200 cf.
- (4) Cotati charges as bi-monthly base rate of \$21.93 plus \$2.03 per thousand gallons, assuming 5,000 gallons. FY 04-05, Ordinance No. 734.
- (5) Healdsburg's monthly base rate as of Oct '04 is \$29.63, plus \$2.64 per hcf over the first 500 hcf. Assumes 1200 hcf. Rates increase Jan '05.
- (6) Petaluma charges a bi-monthly service charge of \$6.76 plus \$1.92 per hcf, assuming 18 hcf per month.
From City of Petaluma's website: www.ci.petaluma.ca.us/wrcd/waterrates.html.
- (7) Rohnert Park charges \$1.75 per thousand gallons, assuming 5,000 gallons, and a \$10.55 monthly base charge. From City website, 10/8/2004.
- (8) City of Santa Rosa charges \$4.65 per month plus a \$2.65 quantity charge for each thousand gallons; assumes 5,000 gallons.
- (9) Sebastopol charges a \$20.35 bi-monthly fixed charge plus \$1.25 per hundred cubic feet over 100 cu. ft.; assumes 1,200 cu. ft. of water monthly.
- (10) Effective, Feb 2004, Sonoma charges a \$19.18 bi-monthly flat fee, plus a commodity charge of \$2.39 for the first 6,000 gallons and \$3.59 for up to 36,000 gallons; assumes 7,000 gallons per month.
- (11) FWD charges a \$12.00 flat monthly fee for the first 5,000 gallons, plus \$2.40 per 1,000 gallons over 5,000 gallons; assumes 6,000 gallons.
- (12) The North Bay Water District does not provide any services nor collect any revenues.
- (13) Occidental's service charge is \$30 plus 5,000 gallons a month at \$2.50 per thousand gallons.
- (14) Rains Creek's service charge is \$37.50 plus 5,000 gallons for \$7.50.
- (15) RRCWD's typical monthly charge is \$12 plus 5,000 gallons at \$1.50 per thousand gallons.
- (16) Sonoma Mountain County Water District bills bi-monthly; base charge is \$68 plus a per gallon rate of \$0.00193; assumes 5,000 gallons.
- (17) Sweetwater Springs typical household usage is 600 cubic feet each month in a two month period. SSWD charges a bi-monthly base rate of \$43 plus \$1 for the first 5 units and \$2 for the next 7 units, totaling \$31 for each month. From Julie Kenny, SSWD.
- (18) TCCWD charges a monthly base rate of \$35 plus a water quantity charge of \$0.005 per gallon; assumes 5,000 gallons.
- (19) Windsor charges a \$6.03 monthly service charge plus \$1.44 per thousand gallons for the first 5,000 gallons. Assumes 5,000 gallons.
- (20) Valley of the Moon charges a \$5.00 monthly service charge plus a commodity charge of \$2.38 per thousand gallons, assuming 5,000 gallons.
- (21) Statewide average and median from Black & Veatch California Wastewater Charge Survey 2003, p. 3.

The extent to which water constrains future growth will depend significantly on the amount of groundwater that can be used to supplement the surface water supply as well as the amount of treated wastewater that is used to offset potable water use and agricultural demands. Widespread water conservation can also effectively extend the amount of development that can be supported by the finite County water supplies.

BODEGA BAY PUBLIC UTILITY DISTRICT

GOVERNANCE AND OPERATIONS

The Bodega Bay Public Utility District (BBPUD) was formed in 1947² and is empowered to provide services including water and sanitary sewer services. BBPUD employs ten full-time staff and is directed by its own Board of Directors.

BBPUD's main sources of operating revenue are water charges (34 percent) and sewer charges (50 percent).³ Depreciation and loan payments are accounted for in the District's budget; loan payments account for 19 percent of operating expenditures.⁴ Income for capital expenditures in FY 2001-2002 came from water and sewer connection fees and was spent on improvements to the water system and the advanced wastewater treatment project.⁵

BBPUD last updated water fees in 2003 and sewer fees in 2002 and anticipates reviewing and increasing user fees and connection charges again in the future to cover costs. Customers are billed bimonthly. The typical average monthly cost for water service to consumers is about \$21⁶ (see **Table 2**). The typical average monthly sewer service charge is about \$27 (see **Table 4 in Chapter III, the sewer section of this report**).

BBPUD has a Master Plan for both its sewer and water systems. The original Master Plan for the water system was created in 1986 and updated in 1998, and a Sewer Master Plan was written in 1994. The most recent water and sewer plans were created by a civil engineering firm in 1998.

² Section 15501 of the California Public Utility District Act formed the District.

³ FY 02-03 Operating revenue was \$1.24 million; water charges contributed \$419,500, sewer charges contributed \$620,000.

⁴ In 1996 two Sewer Revenue Refunding Bonds were issued with a total amount of \$930,000; these bonds have already expired (in 2000 and 2004). Another bond was issued in 2001 for \$2,132,700, repayable to the State Water Resources Control Board. Payments began in June 2002 at the amount of \$148,500, to expire in 2021. Total 2003 bond repayment amounted to \$203,800.

⁵ FY 2001-2002 water and sewer connection fees were \$21,713 and \$45,986 respectively, plus interest income of \$47,335. Capital expenditures in FY 2001-2002 were \$162,527 for the water system and \$97,836 for the advanced wastewater treatment plant.

⁶ For standard meter size, the bi-monthly water base rate is \$22.00, with a \$2.50 per cubic foot charge for water use over 800 cubic feet, and \$2.75 per cubic feet for water use over 2,500 cubic feet.

INFRASTRUCTURE, FACILITIES AND SERVICES

BBPUD provides water and sewer service to a population of 3,050 in an area of approximately 10 square miles, or 6,400 acres.⁷ The number of water service connections was 1,797 residential unit equivalents (RUEs) in 1997 (most recent available data), just over half of which were residential.⁸ In 2000, BBPUD staff estimated that sewer service was being provided to 1,435 Equivalent Single-family Dwelling Units (ESDs).⁹

The District's overall service area includes the residential Bodega Harbour Subdivision, built in the mid-1970s, and many tourist establishments such as hotels, motels, bed and breakfasts, and restaurants. Almost half of Bodega Bay's RUEs with water connections are commercial, reflecting Bodega Bay's tourism industry. The BBPUD water system also supplies the Bodega Bay Fire District. BBPUD's water service area extends slightly beyond its sewer service area. Also, the sewer service area is not contiguous but encompasses two non-adjacent areas with the overall BBPUD boundary.

BBPUD's water production and distribution facilities include seven wells at three locations, Salmon Creek, Roppolo and Sand Dunes. Eight tanks (four redwood and four steel) at four locations provide water storage. Two booster pump stations lift water to the upper zones of the Bodega Harbour subdivision. Over 20 miles of water mains deliver water to customers. Total water supply is 705 gallons per minute (gpm).¹⁰

BBPUD has experienced somewhat high levels of unaccounted losses of water, from 15 percent in 1991 to a high of 26 percent in 1996. The recalibration of all district meters and the installation of a single water meter at the UC Marine laboratory have resulted in losses dropping to under 13 percent.¹¹

BBPUD's wastewater collection and treatment facilities consist of 15 miles of sewers and 8 lift stations, plus a tertiary level treatment plant¹² and 4 disposal-holding ponds. The majority of effluent is filtered prior to disinfection and pumped to Bruhn Reservoir, just above the Bodega Harbour subdivision, where it is later used to irrigate the golf course.

The remainder of effluent irrigates the North Disposal Site. Waste sludge is processed in two aerobic sludge digestion tanks and stored in bins before it is spread on the North Disposal Site twice a year.

⁷ LAFCO Request for Information

⁸ BBPUD Master Water Plan, October 1998, p 3-3

⁹ PRMD Water and Sewer Capacities Report, October 2003

¹⁰ "Gallons per minute" is a term used in the BBPUD Master Water Plan. 135 gpm from Salmon Creek, 420 gpm from Roppolo, and 150 gpm from San Dunes wells.

¹¹ BBPUD Master Water Plan, October 1998, p 3-8

¹² BBPUD's wastewater treatment plant treats wastewater to tertiary standards (due to a \$2.4 million upgrade completed in June of 2001).

WATER AND WASTEWATER DEMAND AND CAPACITY

Demand in the Bodega Bay area is growing due to increased tourism and a shift from summer-only to year-round residence. Water needs and sewer flows are much higher on weekends and in the summer, due to the influx of tourists. Conservation efforts do not generally affect tourist activities. Additionally, due to Bodega Bay's cool climate, not much water is needed for irrigation, which helps keep average water use relatively low. Opportunities for reducing water use are thus limited. With residents choosing to stay in Bodega Bay year-round, wastewater flows are fairly even between summer flows from tourists and winter flows from rains.

To accommodate for increased demand for potable water, the District recently purchased land for needed water storage capacity, and a new well site is expected to be acquired and operational within two years.¹³

Additional sewer system storage and disposal capacity is required. Several pond sites and irrigation sites were studied in the 1998 wastewater project report. A 16.5 million-gallon storage pond was recently built to address this need. Also, capacity at other existing storage ponds was increased. Additional storage capacity is required to meet demands of District-projected growth. Remaining disposal needs include 49 additional acres for irrigation.¹⁴

Full buildout of the General Plan Land Use Map in Bodega Bay depends on the construction of a Highway One bypass.¹⁵ At this time, funding and timing of the bypass are uncertain. Until the bypass is completed, growth can occur only according to Phase I of the County's Land Use Plan. Both water and sewer capacities will be adequate upon the completion of the above-mentioned capacity improvements to serve development of Phase I. However, the District will need additional well production capacity, potable water storage capacity, and wastewater storage and disposal capacity to meet the demands of full buildout.

¹³ PRMD Water and Sewer Capacities Report, October 2003

¹⁴ PRMD Water and Sewer Capacities Report, October 2003

¹⁵ The County PRMD estimates the construction of 236 residential units by 2020 and 460 at full buildout. Combined commercial and residential estimates are 1,875 ESDs by 2020, and 2,310 ESDs at full buildout.

CAMP MEEKER RECREATION & PARK DISTRICT

GOVERNANCE AND OPERATION

The Camp Meeker Recreation & Park District (CMRPD) was formed in 1935 and was empowered by State legislation in 1994 to own and operate a community water system.¹⁶ Camp Meeker is governed by its own five-member Board of Directors, which meets the second Tuesday of each month and as needed. Information about the District's budget is online and publicly accessible. Operations of the water system are contracted out to the Russian River Utility. CMRPD may provide sewer service to the community in the future.¹⁷

CMRPD's water system operating revenue comes primarily from monthly service charges, water usage charges, and capital fees charged of property owners for the water system and water sales.¹⁸ The average monthly water service charge for CMRPD customers is \$50 (see **Table 2**). In addition to a monthly service charge, customers are charged an annual fee of \$350, collected with property taxes, to repay \$5.3 million in capital improvements.¹⁹ The District is currently servicing two sources of debt, a USDA loan and a Department of Water Resources loan for infrastructure requirements, which total approximately \$2.5 million to \$3 million.²⁰ Loan payments for FY 2003-2004 are \$190,425, or 165 percent of water operating expenses. To assist with the 1999/2000 facilities upgrade, Camp Meeker also received \$2.1 million in grants from the State Department of Water Resources and the Federal Rural Development Agency.²¹ The District's reserve appears adequate at 52 percent.²²

INFRASTRUCTURE, FACILITIES AND SERVICES

CMRPD provides water to approximately 700 people, or 355 connections. Facilities include the Russian River Well in Monte Rio, two booster pumps, and three water storage tanks. The District's well produces 100 gpm, and annual usage amounts to

¹⁶ Camp Meeker Park & Rec District is also empowered to maintain and develop recreation programs and facilities for the Camp Meeker community. Water provision is enabled by State Legislature Act, Statutes 1994, Chapter 39. From LAFCO Request for Information.

¹⁷ LAFCO Request for Information.

¹⁸ From Russian River Utility, Comparison of Water Charges

¹⁹ From Russian River Utility Web Site, www.rruwater.com/rru/systems/camp_meeker.html, accessed 7/29/04.

²⁰ Camp Meeker Recreation & Park District Loan Activity June 30, 2003. Outstanding balance for USDA loan as of 6/30/03 is \$1.6 million; for DWR loan is \$1.4 million.

²¹ From Russian River Utility Web Site, www.rruwater.com/rru/systems/camp_meeker.html, accessed 7/29/04.

²² Camp Meeker's FY 03-04 water operating costs are \$115,352, with a fund balance of \$59,423.

approximately 20 million gallons per year. Facilities are new and include a remote monitoring system that reports the status of all equipment to a control center and sends alarms directly to the operator's pager.²³

WATER DEMAND AND CAPACITY

Future growth in the Camp Meeker area is expected to be very minimal, totaling two to three new connections per year maximum.

²³ From Russian River Utility Web Site, www.rruwater.com/rru/systems/camp_meeker.html, accessed 7/29/04.

FORESTVILLE WATER DISTRICT

GOVERNANCE AND OPERATION

The Forestville Water District (FWD) was formed in 1961.²⁴ FWD is empowered to furnish water, power, irrigation and flood control; operate sewer facilities, fire protection facilities and recreation facilities using water; and operate sanitation services. FWD sells water and recently took over ownership and operations of the Forestville and Mirabel Heights wastewater systems. The District is directed by its own Board of Directors.

FWD, SCWA, the Graton Citizens for Local Sewer Control and LAFCO worked over the past few years to dissolve the Forestville County Sanitation District and turn over operations and maintenance of both the sanitation district and Mirabel Heights CSA #41 to FWD. Both the sewer and water service areas have remained unchanged. The rest of the analysis below is of the provision of water only; the evaluation of the provision of sewer service in the Forestville area is provided in the section “Forestville Water District Sewer Service Zone.”

FWD’s revenue is from water sales (88 percent), property taxes, and investment earnings.²⁵ In July 2001, FWD raised water rates; a typical single-family home pays about \$14 each month²⁶ (see **Table 2**). No debt payments are shown on FWD’s budget, and depreciation is not accounted for in the budget. The District maintains one and a half times its total budget in reserves.²⁷

INFRASTRUCTURE, FACILITIES AND SERVICES

FWD provides water to 2,000 people in 3.5 square miles, or 2,240 acres.²⁸ About 83 percent of the District’s approximately 930 customers in FY 2001-2002 were single-family residences.²⁹ The District’s service area is smaller than the General Plan Urban Service Boundary.

FWD has a contracted allotment of 1.5 million gallons per day (mgd), or 45 million gallons per month, from SCWA. Peak daily usage in the past five years was 0.84 mgd, just over half of the district’s water supply capacity. In a temporary agreement with the

²⁴ FWD was established by the California Water Code, Division 13, Sections 30,000 to 34,000.

²⁵ Forestville Water District Final Budget FY 02-03. FY 2001-2002 water sales amounted to \$403,790; FY 02-03 Operating budget was \$459,720.

²⁶ Ordinance No. 31, Amending Ord. No. 30 Establishing rates for water service of FWD, July 2001. The standard minimum monthly charge is now \$12 for 5,000 gallons of water. The sale of every additional 1,000 gallons of water to district customers and for outside sales is \$2.40.

²⁷ George Roberts, General Manager e-mail correspondence 5/28/04

²⁸ LAFCO Request for Information

²⁹ FWD Water Sales 2001-2002

Valley of the Moon Water District (VOMWD) from 2000, FWD committed 500 acre-feet of its SCWA allotment to VOMWD. This agreement will terminate in 2005, unless VOMWD requests extension.³⁰ Other than small maintenance projects, supply and infrastructure appear adequate to serve projected growth.³¹

WATER DEMAND AND CAPACITY

Peak daily usage for the highest peak in the past five years was 0.84 mgd, so even assuming the heaviest peak demand, 0.66 mgd of water remains to serve the additional 351 units allowed by the General Plan at buildout of the Forestville Urban Service Area. This includes the capacity to serve 50 existing vacant lots in Mirabel Heights, projected commercial/industrial development equivalent to 150 new dwelling units, and existing vacant lots outside the sanitation zone.

Two schools and the Forestville Youth Park will soon convert to reclaimed water, which will add 45,000 gallons of potable water per day to the available supply, thus further reducing the need to produce additional supplies to serve future development.³²

³⁰ PRMD Water and Sewer Capacities Report, October 2003

³¹ Forestville Water District Final Budget FY 02-03. In FY 02-03, capital outlay included \$1,500 spent on meters and \$5,000 on plant equipment.

³² PRMD Water Sewer Capacities Report, October 2003

NORTH BAY WATER DISTRICT

The North Bay Water District is a “paper agency” and has no facilities and provides no service. It was formed in 1963 and no major changes have been made since. Revenues are from interest on cash only. Expenditure budget for FY 2002-2003 was \$850, only \$449 of which was spent. FY 2003-2004 expenditure budget is \$1,500. The District Board of Directors meets once a year and hires one contract bookkeeper/secretary. No determinations were made for this District.

OCcidental COMMUNITY SERVICES DISTRICT

GOVERNANCE AND OPERATIONS

The Occidental Community Services District (OCSD), formed in the early 1960s, provides water, fire, landscaping, and lighting service to the unincorporated Occidental community. The District's water service area is much smaller than the entire district service area and serves some residential but mostly commercial customers.³³ The District serves 81 customers, but 7 of the customers use 50 percent of the water.³⁴ The District contracts with the Russian River Utility to operate the water system. The District approved an assessment district in 2003 to improve the level of service and dependability of the water system.³⁵

OCSD's revenue is from water sales, tax assessments, property taxes, and donations.³⁶ OCSD's average monthly service rate of about \$90 is somewhat skewed due to a small number of customers using a large proportion of water. The average charge for a residential user is closer to \$42.50 per month (see **Table 2**). The District supports a graduated rate to encourage water conservation.³⁷ OCSD maintains a fund balance of approximately 88 percent of operating revenues.³⁸ OCSD is constructing new water system infrastructure and buying into the existing Camp Meeker Park and Recreation water system, using a combined USDA Grant and Loan. An assessment district passed in August 2003 will repay the loan.³⁹ Repayment of the 1987 improvements is funded by an annual charge of \$160, collected with property taxes.

INFRASTRUCTURE, FACILITIES AND SERVICES

OCSD provides water to the town's small commercial area. Users purchase approximately eight million to nine million gallons of water per year.

³³ Hal Wood, interview 5/28/04

³⁴ From Russian River Utility Web Site, www.rruwater.com/rru/systems/occidental.html, accessed 7/29/04.

³⁵ LAFCO Request for Information

³⁶ Final Budget FY 03-04. Estimated revenue FY 02-03 was \$100,200, plus an unreserved fund balance of \$4,479.

³⁷ The water service charge for the average home is a base rate of \$30 plus an additional \$2.50 per 1,000 gallons up to 5,000 gallons, \$5.00 up to 10,000 gallons, \$7.50 for up to 15,000 gallons, and \$10.00 up to 15,000 gallons.

³⁸ The total fund balance for FY 02-03 was \$87,908.

³⁹ LAFCO Request for Information

WATER DEMAND AND CAPACITY

Precise growth and population projections for OCSD are unknown.⁴⁰ The immediate demand for water is increasing with the population growth projected in a new development of condominiums that is replacing the area's closed elementary school. Occidental's boundary is concise, and not much room remains for growth within District boundaries. However, there may be more of a push for growth once the community starts combined services with Camp Meeker. Within five years, it is anticipated that Occidental and Camp Meeker will form a Joint Powers or Community Service District, combining efforts so that Camp Meeker would operate the sewer and water services and Occidental would operate fire services.

The District has adopted policies allowing it to provide water to customers outside the District. Although Occidental does not currently serve customers outside its boundary, there is some anticipation of future territory annexation. The District is authorized to adopt greater service charges and connections fees from these customers in lieu of tax assessments currently paid by property owners within the District.⁴¹ LAFCO approval is required prior to annexation or extension of services.

⁴⁰ Occidental Community Services District was not included in the PRMD Water and Sewer Capacities Report.

⁴¹ OCSD Attachment A: Schedule of Fees and Charges

RAINS CREEK WATER DISTRICT

GOVERNANCE AND OPERATION

The Rains Creek Water District (RCWD) was formed in 1997 when LAFCO approved the joining of Rains Creek and Hiatt Road mutual water companies to form the new District. RCWD is empowered to provide water in accordance with the water code for “County Water Districts” and repays a loan in accordance with its contract with the Department of Water Resources. The District hires no employees but is operated and managed by the Russian River Utilities Company. The District’s first five-member Board of Directors was appointed by the County Board of Supervisors, but subsequent board membership has been elected within the District. RCWD’s Board meets quarterly. Meeting times and agendas are posted 72 hours prior to the meeting and when 50 or more people are expected, meetings are moved to the Cloverdale Public Library to accommodate all attendees.⁴²

Average monthly water rates are moderate compared to other Sonoma County water providers⁴³ (see **Table 2**). RCWD is currently servicing two sources of debt.⁴⁴ The County extended a loan upon the formation of the District, which RCWD will repay with an annual payment for the next ten years. Funds for the debt service come from a \$5 monthly fee on all parcels of land within the District’s boundary.⁴⁵ The second source of debt is a construction loan from the State’s Department of Water Resources. Each customer in the District will be charged \$441 annually on their property tax bill, and RCWD will make semi-annual payments until the principal and interest are paid off.⁴⁶

RCWD has a provision in its Ordinance establishing water service fees and charges for service to parcels outside the District. The Directors may establish higher connection fees of parcels outside the boundaries in lieu of tax assessments currently paid by property owners within the District. Furthermore, the customer must enter into an outside services agreement with the District and must agree to annex their property to the District if requested.⁴⁷ LAFCO approval is required prior to annexation or extension of services.

⁴² Ordinance No. 1 of the Rains Creek Hiatt County Water District

⁴³ Resolution No. 31 of the Rains Creek Water District Establishing Fees and Charges for Water Services 25 June 2003. The connection fee for a typical single-family residence is \$3,755, and the base service charge is \$37.50 per month for a home in Zone I (Zone II is slightly more expensive). An additional \$1.50 per 1,000 gallons (or \$2.30 per 1,000 gallons in Zone II) is billed based on bi-monthly meter readings.

⁴⁴ LAFCO Request for Information. FY 03-04 debt payment is \$36,000.

⁴⁵ Resolution No. 31 of the Rains Creek Water District Establishing Fees and Charges for Water Services 25 June 2003

⁴⁶ Ibid.

⁴⁷ Ibid.

INFRASTRUCTURE, FACILITIES AND SERVICES

RCWD serves 63 connections, or approximately 150 people, in 142 acres near Cloverdale, and major facilities are located at the Cloverdale airport.⁴⁸ The District provides for a water connection to the City's airport. The District does not expect any change in service within the next five years unless it is annexed to the City of Cloverdale.⁴⁹ Cloverdale is not considering the annexation of the area at this time.

Existing facilities include old pipes and a new system installed in 1997.⁵⁰ The system operates in two gravity zones, one serviced by gravity only and one requiring a pumping surcharge.⁵¹ Future infrastructure needs are currently unknown.⁵²

WATER DEMAND AND CAPACITY

Population projections for the Rains Creek area are currently unknown.⁵³

⁴⁸ LAFCO Request for Information

⁴⁹ Ibid.

⁵⁰ Ibid.

⁵¹ Resolution No. 31 of the Rains Creek Water District Establishing Fees and Charges for Water Services 25 June 2003

⁵² This information was not provided.

⁵³ Rains Creek Water District was not included in the PRMD Water and Sewer Capacities Report.

RUSSIAN RIVER COUNTY WATER DISTRICT

GOVERNANCE AND OPERATION

The Russian River County Water District (RRCWD) was formed in 1983 to acquire the private Russian River Terrace and Rio Del Water Companies. The District expanded in 1994 to include the Summer Home Park area and in 2000 to include the private “Hacienda Water Company.” RRCWD is governed by its own publicly elected Board of Directors. Russian River Utilities provides contractual management and operations.

The majority of RRCWD’s operating revenue comes from water sales (77 percent), a cash balance from the previous year, a \$12 flat charge on all customers, and interest income.⁵⁴ The average monthly service charge for RRCWD customers is low compared to other Sonoma County water providers (see **Table 2**). However, this monthly rate does not take into account capital facilities and bond repayment charges. RRCWD collects an annual \$30 charge with property taxes for capital improvements. The District pays off the assessment bonds acquired for the annexation and improvement of former water districts with annual charges ranging from a low of \$164 in Rio Del to a high of \$480 in Hacienda.⁵⁵

INFRASTRUCTURE, FACILITIES AND SERVICES

RRCWD serves a population of approximately 2,600 people, or 1,180 connections. If RRCWD continues to expand, it may take over operations of previously constructed water delivery infrastructure belonging to separate small water companies.⁵⁶ Three annexations are being planned for areas east of the Hacienda Bridge Assessment District, the Rural Water Company Assessment District, and the Hollydale Mutual Water Company Assessment District. Costs associated with these annexations are unknown.

Major existing facilities include two wells located at Steelhead Beach, the River Road Pump Station, five steel storage tanks, and a distribution system including service meters and fire hydrants throughout the district. The District’s wells each produce 300 gpm. Typical annual use is approximately 80 million to 90 million gallons.

⁵⁴ RRCWD FY 02-03 Adopted Budget. Total operating revenue for 2002-03 was \$367,000.

⁵⁵ Russian River County Water District Web Site. A 1986 assessment bond funded the Rio Del and Russian River services. The 1994 bonds funded expansion to serve Summer Home Park. The 1999 assessment bonds were issued for expansion to Hacienda. These annual charges amount to \$30 for capital replacement, \$164 and \$198 for the 1986 assessment bonds (for the Rio Del and Russian River areas), \$426 for the 1994 bonds (Summer Home Park), and \$480 for the 1999 assessment bonds (Hacienda).

⁵⁶ LAFCO Request for Information

RRCWD's first Capital Improvement Plan (CIP) was adopted in 1993, and by 2002, an investment of \$170,000 had completed many projects including the construction of new water mains, a new chlorine contact tank, repairs and replacements of valves, booster pumps, and other operation and emergency infrastructure, and a CAD drawing of RRCWD for future planning efforts.

RRCWD's new CIP for 2000-2007 includes installation of more emergency shut-off devices and connections, new pipes and water mains, two new wells at Steelhead Beach and on the north side of the Russian River west of Hacienda Bridge, enlarged storage capacity and the replacement of two booster pumps.⁵⁷

WATER DEMAND AND CAPACITY

Projected growth and future demand on RRCWD is unknown at this time.⁵⁸ However, nearly \$17,000 was budgeted in the FY 2002-2003 adopted budget for "future system expansion," funded by connection fees collected in RRCWD's restricted connection fee budget. In FY 2002-2003, \$20,000 was budgeted towards RRCWD's water conservation program,⁵⁹ which may help to lower current water use and future demand.

⁵⁷ RRCWD Five-Year Capital Improvement Plan 2000-2007. Total cost for the proposed projects is \$85,000.

⁵⁸ RRCWD was not included in the PRMD Water and Sewer Capacities Report.

⁵⁹ RRCWD FY 02-3 Adopted Budget

SONOMA MOUNTAIN COUNTY WATER DISTRICT

GOVERNANCE AND OPERATION

The Sonoma Mountain County Water District (SMCWD) was formed in 1964 by the California Water Code to provide domestic water service. The District is governed by its own Board of Directors. The District hires one part-time general manager and one part-time contracted superintendent.⁶⁰

SMCWD operations are funded primarily through water sales,⁶¹ with additional revenue from property taxes and interest earned on the fund balance. SMCWD average monthly service charges are moderate compared to other Sonoma County water providers (see **Table 2.**) SMCWD has no outstanding debt and no reserve indicated in the budget although the district does have funds invested in the state sponsored Local Agency Investment Fund.⁶²

INFRASTRUCTURE, FACILITIES AND SERVICES

SMCWD provides potable water to 55 residential hook-ups in 516.75 acres of residential development in the hills between Sonoma Valley and Rohnert Park.

SMCWD has two operational wells, one of which usually remains on stand-by; three storage tanks; and water mains throughout the District. The production capacity of each well is 31,000 gallons per day. The annual average daily demand is 22,500 gallons per day, so that even during the summer months, the second well is rarely needed.

SMCWD's infrastructure is aging and vulnerable; about one quarter of the FY 2003-2004 expenditure budget is for maintenance projects.⁶³ The completion of infrastructure repairs and replacements will affect the District's ability for future service. An engineering firm has been hired by the District to create a comprehensive report from which the Board will develop a prioritized replacement program. Funding for the infrastructure repairs and replacements has not yet been discussed.

WATER DEMAND AND CAPACITY

SMCWD does not anticipate any changes in its sphere or in its level of service over the next five years. The Sonoma Mountain community is fully built out and no developable lots remain.

⁶⁰ SMCWD's Superintendent has just renewed his contract through May 1, 2005.

⁶¹ Sonoma Mountain Water District Income Statement FY 02-03. Water sales were \$27,765 in FY 02-03.

⁶² Janice Johnson, personal interview May 26, 2004. Amount invested is \$90,826.

⁶³ Sonoma Mountain Water District Budget 03-04

SWEETWATER SPRINGS WATER DISTRICT

GOVERNANCE AND OPERATION

The Sweetwater Springs Water District (SSWD) was created by public vote in December 1988 and is empowered to provide domestic water supply.⁶⁴ As a result of a 1990 election, the District acquired the existing water systems that serve Guerneville and Monte Rio from the Citizens Utility Company in April 1992.⁶⁵ A publicly-elected Board of Directors manages the District's operations and oversees a staff of 12.⁶⁶

Operations of SSWD are funded largely through water sales (84 percent); the average monthly water bill is just over \$30 (see **Table 2**). The District has raised rates and fees only once since it acquired the water system in 1992.⁶⁷ This rate increase in July 2002 was to pay for principal and interest payments on General Obligation Bonds issued in 2003 for the construction of water system improvements.⁶⁸ The District maintains an operating reserve fund that represents approximately 30 percent of its operating budget.⁶⁹

The District's ongoing operation expenses are rising, largely due to increasing labor and benefits costs. However, managing liability insurance claims may help reduce District expenses. The District's General Liability Insurer has notified the District that "due to excessive claims⁷⁰ filed by the District, they have had to spend \$4.20 for each \$1.00 in premiums" and consequently had to increase the cost of the District's insurance and deductible.⁷¹ The District has undertaken an aggressive program to identify and replace any existing leaks which pose potential for claims to minimize litigation against the District.

⁶⁴ The District operates under County Water District Law (Water Code section 30000) pursuant to LAFCO Resolution No. 1063.

⁶⁵ Sweetwater Springs District Budget Report FY 2003-04. The cost of purchase was \$6.5 million.

⁶⁶ LAFCO Request for Information

⁶⁷ From www.sweetwatersprings.com. The current rate structure includes a bi-monthly base rate based on meter size and a bi-monthly per unit charge based on actual water use. For example, a typical residence with a .625" meter uses approximately 6 units (600 cubic feet) of water each month in two-month period, equivalent to \$43.00 plus 5 units at \$1, and 7 units at \$2, , for a bi-monthly charge of \$62.00 and a monthly charge of \$31.00.

⁶⁸ Sweetwater Springs Water District Capital Improvement Program FY 2002-2007. With the 2003 bond issue, outstanding loans and bonds require a total annual payment of \$855,200.

⁶⁹ Sweetwater Springs District Budget Report FY 2003-04. The reserve, currently \$700,000 is approximately 30 percent of the District's operating budget of almost \$2 million.

⁷⁰ These claims include leaks due to deteriorating pipes and failing control pumps, as well as the 1997 collapse of a hillside on Highway 116 due to a 325,000 gallon leak caused by operator error and mechanical failure.

⁷¹ From Sweetwater Springs Water District FY 03-04 Budget Report

INFRASTRUCTURE, FACILITIES AND SERVICES

SSWD provides potable water to a population of about 8,400 people⁷² in 15,580 acres, including the communities of Guerneville, Monte Rio, and Rio Nido. SSWD serves an area much larger than that of the sanitary service provider, Russian River County Sanitation Zone, whose boundary closely matches the General Plan Urban Service Boundary for Guerneville.⁷³

SSWD consists of two separate water systems. The first, which serves the Guerneville area, consists of three wells, a chlorination disinfecting system, a filtration plant with 10 filters, 18 storage tanks with a capacity of 1,105,000 gallons, several small pressure tanks and five pressure zones. The system distributes 270.6 million gallons of water annually to customers.

The second system, which serves the Monte Rio area, consists of two wells, a chlorination disinfecting system, a filtration plant with two filters, eight storage tanks with a capacity of 580,000 gallons, several small pressure tanks and five pressure zones. 99.7 million gallons of water are distributed annually to customers.

A \$3 million upgrade was completed in 1997 that increased the system's storage capacity from 835,000 gallons to 1,685,000 gallons, and replaced water mains, improved pumping facilities, and replaced fire hydrants.⁷⁴

All water in the SSWD systems is diverted from Russian River underflow by a special permit that allows a maximum diversion rate of 3.0 cubic feet per second and a maximum annual diversion of 1,249 acre-feet. The permit expired in 2002 and the Water Resources Control Board (WRCB) has indicated that the new license terms will likely be a maximum diversion rate of 2.3 cubic feet per second and a maximum annual diversion volume of 1,136.5 acre-feet.⁷⁵

SSWD has a comprehensive five-year CIP, approved April 2002, to undertake significant upgrades to its aging treatment and storage facilities and distribution lines.⁷⁶ The second of two major improvement projects is nearly complete, adding just over \$7 million dollars in improvements to District facilities. Funding for these two projects

⁷² LAFCO Request for Information

⁷³ PRMD Sewer and Water Capacities Report, October 2003

⁷⁴ Sweetwater Springs District Budget Report FY 2003-04

⁷⁵ PRMD Water and Sewer Capacities Report, October 2003. Upon expiration in 2002, the permit was supposed to be converted to a license based on the District's historical maximum diversion rate and annual withdrawal. These terms left no room for growth, so the District delayed the conversion by filing a number of permit extensions with WRCB. WRCB has now advised SSWD that further permit extensions would require environmental review and documentation, for which the District lacks funding.

⁷⁶ Sweetwater Springs Water District Budget Report FY 03-04. The District has identified \$17.8 million of projects including these priority projects: a new treatment plant for Guerneville, replacement of water mains in downtown Guerneville, along Highway 116, and on Moscow Road in Monte Rio; the replacement of the Monte Rose Storage tank and system improvements in the Guerneville Heights Area.

came from issuance of \$4 million in bonds, together with \$2.25 million in grants from the Federal Rural Development Administration and approximately \$800,000 in existing District funds. An in-house construction program funded by existing District monies is online to plan and complete smaller projects. However, the District will need to obtain substantial additional funding to address larger system improvements still needed.⁷⁷

WATER DEMAND AND CAPACITY

The County's Permit and Resource Management Department (PRMD) report estimates 794 units remain to buildout in Guerneville and expects 521 units by 2020. Equivalent numbers for commercial space are 447,135 square feet to buildout and 293,410 square feet by 2020.⁷⁸

In Monte Rio, future development is dependent upon the establishment of a new sewer project.⁷⁹ The sewer system is not a responsibility of SSWD, but the limits on growth in the community will greatly affect the need for increased water service. The potential 131 residential units remaining to buildout in Monte Rio will be built on existing vacant lots at the rate of ten units per year, assuming the sewer issue is addressed. Commercial space in Monte Rio is projected to increase by 62,482 square feet by 2020, with buildout estimated at 94,669 square feet.⁸⁰

The new WRCB permit limit is lower than what will be required to serve increased demand from new development, unless reductions in use and/or water loss from the distribution system are achieved. With the District's limited potential to accommodate growth, discussions have been initiated with SCWA for additional water supplies equivalent to 0.1 cubic feet per second or 200 acre-feet per year. Without additional water supplies above the historic levels allowed by the license, SSWD will not be able to serve projected growth or buildout.

⁷⁷ Sweetwater Springs Water District Capital Improvement Program, p. 3

⁷⁸ PRMD Water and Sewer Capacities Report, October 2003

⁷⁹ Ibid. This project is called the Monte Rio Wastewater Pollution Control Project, and would serve 455 existing residences, existing commercial development, plus new development on 10 vacant commercial properties and 131 vacant residential parcels at a rate of 10 per year. Growth in the Monte Rio area requires the construction of a sewer system due to health hazards associated with existing malfunctioning septic systems. Designation as a "waiver prohibition area" requires strict enforcement of septic system standards and severely limits growth. The proposed system has been approved by voters but the timing of construction and operation of the system is still uncertain.

⁸⁰ PRMD Water and Sewer Capacities Report, October 2003

TIMBER COVE COUNTY WATER DISTRICT

GOVERNANCE AND OPERATION

The Timber Cove County Water District (TCCWD) was formed in 1984 by the Sonoma County LAFCO and is empowered to treat and distribute water. The District employs three staff members and is directed by its own Board of Directors, which meets on the third Saturday of each month at the Fort Ross Elementary School.

TCCWD's operations are funded through water sales and base rates.⁸¹ TCCWD updated water rates in both 2003 and 2004. In 2003 the monthly base rate was increased from \$30 to \$35, and in January 2004 the quantity charge was changed to a tiered system based on gallons of water used.⁸² The new rates (see **Table 2**) are on the high end of the Sonoma County spectrum. Half of the lots within the District are metered, and half are unmetered. The unmetered lots are charged a non-user base rate, while the metered lots are charged the same base rate plus the additional quantity charge. Capital improvements⁸³ are funded by non-user base rates. The user fees paid by metered lots fund District operations.⁸⁴

The District maintains a \$138,350 reserve, a portion of which is in CDs.⁸⁵ The District accounts for depreciation (almost 50 percent of the operating budget) in its budgetary process.⁸⁶ Timber Cove currently has two outstanding bond issues, one for the construction of the distribution system and the second to re-finance the first. Timber Cove also received a state loan to pay for the construction of its water storage reservoir.

INFRASTRUCTURE, FACILITIES AND SERVICES

TCCWD provides water to 273 lots of approximately two acres each in a planned residential community along the Sonoma coastline. Timber Cove's water is from Timber Cove Creek. Surface water is pumped into the district's reservoir before treatment at the water treatment plant. From there, treated water is stored in three holding tanks before distribution.

Nearly \$200,000 of capital improvements in FY 2003-2004 funded various capital projects, including a new operations building, as well as infrastructure and equipment upgrades, many of which are still in process. More than half of the capital improvement

⁸¹LAFCO Request for Information and TCCWD Income Statement FY 02-03. FY 02-03 total revenue was \$176,591; water sales \$24,773; hook-up fees \$49,241; and base rate fees \$99,000 (56 percent of total revenue).

⁸² Interview with Ann Carlson, TCCWD, 6/9/04

⁸³ TCCWD Budget FY 03-04. Capital Improvements call for \$198,730 in FY 03-04.

⁸⁴ Interview with Ann Carlson, TCCWD, 6/9/04

⁸⁵ Fax from Ann Carlson, TCCWD, 6/10/04

⁸⁶ TCCWD Budget FY 03-04 and TCCWD Income Statement FY 02-03. FY 02-03 Depreciation is \$84,216, almost 50 percent of total expenses. FY 03-04 depreciation increases to \$99,990.

funds have been set aside for a future addition to the storage capacity of treated water. Other future potential issues may include watershed protection and the surface water collection and detention system. However, TCCWD lacks a Master Plan or Capital Improvement Program to address these future needs.

WATER DEMAND AND CAPACITY

TCCWD is a small water provider with little potential for growth within its boundaries. Precise growth estimates are currently not available.⁸⁷ At subdivision buildout beyond the next five years, raw water storage infrastructure and water treatment and storage facilities may need to be upgraded or replaced. TCCWD does not anticipate any changes in its SOI or in its level of service over the next five years.

⁸⁷ TCCWD is not in PRMD Water and Sewer Capacities Report.

VALLEY OF THE MOON WATER DISTRICT

GOVERNANCE AND OPERATION

VOMWD was created in 1960 by acquiring the Sonoma Water and Irrigation Company, and began operation in 1962.⁸⁸ VOMWD is governed by five locally-elected officials on its own Board of Directors. The Board of Directors governs the policy direction of the District and employs a General Manager to oversee approximately 12 employees.

VOMWD operations are funded largely (85 percent) by water sales.⁸⁹ Construction and CIP funds are derived from fees paid by new development, operating revenues in excess of annual operating expenditures, and surplus property sales.⁹⁰ Average water rates for VOMWD customers are fairly low compared to other Sonoma County water providers⁹¹ (see **Table 2**). VOMWD maintains a more than adequate fund balance and a contingency fee for emergencies.⁹² The District issued \$2.8 million in debt in 1999 and 2000 for a major capital improvement project along Highway 12 to enlarge its transmission pipeline.⁹³

INFRASTRUCTURE, FACILITIES AND SERVICES

VOMWD provides potable water to approximately 23,000 people for residential, commercial and institutional use in 12 square miles, or 7,680 acres, in the unincorporated areas west and north of the City of Sonoma.⁹⁴ About 85 percent of District water sales are residential. The service boundary is adjacent to portions of Sonoma's northwest boundary and overlaps with a portion of Sonoma's SOI and voter-approved Urban Growth Boundary. VOMWD's service area comprises several non-contiguous communities, including the Trinity Oaks Subdivision just north of Glen Ellen; the Temelec Subdivision in the southern end of Sonoma Valley; and the

⁸⁸ LAFCO Request for Information. The VOMWD operates pursuant to Division 12, Section 30000 of the California State Water Code.

⁸⁹ VOMWD 2003-04 Annual Budget. Total revenue for FY 2002-03 is estimated at \$3.6 million.

⁹⁰ No additional surplus property sales are anticipated after 2003-04.

⁹¹ VOMWD District Code, Updated January 1, 2004, adopted a new water rate structure. The District bills on a bimonthly basis. The rates consist of a flat monthly basic service charge of \$5.00 for standard 5/8" meters. The rate for single-family residential customers is based on a tiered system which charges \$2.38 per 1,000 gallons (billing unit) for the first 18 billing units used per 2 month billing cycle, \$3.56 per billing unit for water used from 19 to 40 billing units, and \$5.34 per billing unit for all water used in excess of 40 billing units. Water usage charge for all classes of service other than single-family residential is the flat charge of \$5 per 5/8" service plus a uniform charge of \$2.86 per 1,000 gallons used. The connection fee for a typical single-family residential unit averages about \$8,700.

⁹² The 2003-04 budget shows an estimated fund balance of \$4.2 million. Of these funds, \$700,000 is designated as contingency for emergencies; this contingency is about 25 percent of annual budgeted operating expenditures.

⁹³ This debt was in the form of Certificates of Participation with a local bank and will mature in 2021.

⁹⁴ LAFCO Request for Information

unincorporated communities El Verano, Fetters Hot Springs, Glen Ellen, Agua Caliente and Boyes Hot Springs. VOMWD had expected a few small annexations in the near future due to failing private wells on already developed parcels adjacent to the District's current boundary, but the landowners have since removed their requests.

The majority of VOMWD's water (84 percent in 2002)⁹⁵ comes from SCWA through the Sonoma Aqueduct. VOMWD's eight booster pump stations lift water from the aqueduct to the service zones.⁹⁶ Groundwater from VOMWD's wells supplements the water purchased from SCWA. VOMWD currently has four active wells and leases capacity in a private well. VOMWD distributes water to customers through 85 miles of water mains, ranging from ¾" to 14"; approximately 12 miles of these mains need to be replaced.⁹⁷ VOMWD oversees ten storage tanks with a capacity of 4.35 million gallons, all of which are in good condition and have been retrofitted for seismic tolerance.⁹⁸ The District has completed installation of all phases of its Supervising Control and Data Acquisition (SCADA) project and now has the capability to remotely monitor all of its facilities.⁹⁹

VOMWD has a Master Plan¹⁰⁰ which helps to guide its operations and capital improvement planning. The District maintains a five-year CIP, which it updates annually. The District's 5-year CIP shows total expenditures of \$7.7 million for ongoing facility replacement and other upgrades. The current \$3.2 million of funds available to the CIP represent approximately 40 percent of the five-year funding required for the CIP. Other capital improvement funds, e.g., Federal, State, or County grants, are anticipated but are not shown in the CIP due to their uncertainty. There is money set aside for the construction of a new well, but an ideal location has not yet been found. The County will reimburse the District for the construction of the well.¹⁰¹

WATER DEMAND AND CAPACITY

Total 2002 demand for water was 3,486 acre-feet, of which 2,983 acre-feet were supplied from the Russian River. The district is entitled to 3,200 acre-feet per year from the Water Agency, of which 380 acre-feet were used by commercial and industrial customers.

⁹⁵ PRMD Water and Sewer Capacities Report, October 2003

⁹⁶ VOMWD plans to eliminate the Saddle booster pump station after the construction of two new Glen Ellen booster pump stations.

⁹⁷ Interview, VOMWD General Manager May 11 2004

⁹⁸ Additionally, SCWA provides water storage for the District and the City of Sonoma in the Eldridge and Sonoma Tanks, with a combined capacity of 18 million gallons.

⁹⁹ Interview, VOMWD General Manager May 11 2004

¹⁰⁰ Valley of the Moon Water District Master Water Plan, Feb 1998. Brelje & Race, Consulting Engineers, Santa Rosa, CA. Following the recommendations of the Master Plan, VOMWD has replaced old storage tanks, constructed 2 additional tanks, added booster stations and is replacing undersized and deteriorated water mains on an ongoing basis. It is also in the process of adding another storage tank and securing additional well capacity.

¹⁰¹ Interview, VOMWD General Manager May 11 2004

VOMWD wells produce an additional 419 acre-feet. The Water Agency allocation and the wells combined provide 3,619 acre-feet of water. The district also has a temporary agreement (set to expire in 2005) with the Forestville County Water District for 500 acre-feet of the FCWD's SCWA entitlement. VOMWD anticipates requesting a five-year extension of this agreement.

PRMD estimates that 1,226 residential units remain to 100 percent buildout in VOMWD, and projects 81 percent buildout, or an additional 990 units, by 2020. VOMWD assumes an annual growth rate of 1.4 percent.¹⁰² Projections for 81 percent buildout in 2020 of commercial and industrial space are 591,438 square feet and 327,421 square feet, respectively.¹⁰³

VOMWD has reached its current SCWA Russian River entitlement. To supply for either build-out or projected growth, the district needs significant additional water supplies. This additional water will need to come from either new wells or from SCWA, or from a combination of the two. VOMWD has formally requested an additional 1,000 acre-feet per year from SCWA to accommodate future water needs. SCWA has indicated that the Sonoma Aqueduct is nearing capacity and that an additional, parallel aqueduct will be needed to provide additional water supplies to VOMWD and the City of Sonoma. The construction of a \$3 million segment of the second aqueduct from the Sonoma Tanks at Eldridge to Madrone Road and the subsequent construction of the additional segments of the aqueduct needed to complete the second Sonoma Aqueduct would be jointly-financed by VOMWD and the City of Sonoma.

VOMWD has increased its use of well water from 0.1 percent in 91-92 to almost 20 percent in 2002-2003. The district has found that it is less expensive to supply groundwater, but the future and reliability of groundwater remains uncertain given the increased demand for additional private residential and agricultural wells.

In an effort to prepare for long-term sustainability, the District has restored four of its own wells, which can meet approximately 20 percent of the district's water needs. Additionally, the District has hired a consultant to explore options for new wells. VOMWD has participated in water conservation efforts, and expects significant conservation of water with the full implementation of the 14 best management practices of the California Urban Water Conservation Council. The water savings through conservation, the addition of new local groundwater supply, and possible participation in a reclaimed water project could all result in water savings sufficient to delay the schedule for construction of a second aqueduct.

¹⁰² LAFCO Request for Information

¹⁰³ PRMD Water and Sewer Capacities Report, October 2003

III. SEWER

SUMMARY OF SANITATION SERVICE PROVIDERS

All development requires some means for the collection, treatment and disposal of sewage and wastewater that protects both public health and the environment. Except for the individual septic systems regulated by the County Department of Environmental Health, all such systems are subject to the requirements of the Federal Clean Water act and/or the State Porter Cologne Water Quality Act, both administered in Sonoma County by the North Coast and Bay Area Regional Water Quality Control Boards. The provision of sewer service in cities will be included in the city MSRs, although city-related sewer issues that affect other agencies are noted in the current document where appropriate. Sewer service providers reviewed in this report are summarized in **Table 3.**

GOVERNANCE AND OPERATIONS

The larger of the sanitation systems in the County are owned and operated by the cities or by special districts created by the authority of the County and managed by SCWA. Sebastopol, Cotati, Rohnert Park and the South Park Sanitation District have joined with the City of Santa Rosa to construct and operate the Laguna Sub-Regional Wastewater Treatment Plant and associated disposal facilities that serve their collective needs.

In addition to those systems developed and operated by the incorporated cities, the County created a number of service districts and zones to serve non-incorporated areas. These systems were often created in response to the need to abate potential public health risks resulting from the gradual development of an area, its increasing density, and incidents of failing individual septic disposal systems. A number of the systems were established prior to the adoption of the County's first General Plan. District boundaries and system capacities were generally based on then-current need plus some additional increment of capacity to serve future growth. These systems in particular were designed to serve the already existing but undeveloped residential parcels within their district boundaries. The four largest (serving over 2,500 people) are the Sonoma Valley, Russian River, South Park and Airport/Larkfield/Wikiup systems. Others serve various small unincorporated communities including Occidental, Graton, Sea Ranch, Penngrove, Geyserville, Forestville and Guerneville.

The California Legislature created SCWA as a special district in 1949 to act as the local sponsor for federal flood control and water supply projects in the Russian River watershed. Legislation enacted in 1994 added the treatment and disposal of wastewater to the Agency's functions. In 1995, SCWA assumed responsibility for five county sanitation districts and six county sanitation zones that operated wastewater collection, treatment and disposal systems. Each district or zone is managed as an independent

Table 3
Summary of Wastewater Service Providers
Sonoma County LAFCO Municipal Service Reviews

Name	Area Served	Population Served	Number of ESDs	Wastewater Flow	Capacity
Airport-Larkfield-Wikiup Sanitation Zone	2,100 acres along Hwy 101 north of Santa Rosa	8,000	3,233	0.8 mgd	0.9 mgd
Bodega Bay Public Utilities District	10 sq. miles - Bodega Bay	3,050	1,435		
Forestville Water District Sewer Service Zone	70 acres - "downtown" Forestville and Mirable Heights	>1200	613	64,000 gpd	130,000 gpd
Geyserville Sanitation Zone	177 acres - Geyserville	1,000	334	54,000 gpd	92,000 gpd
Graton Community Services District	260 acres - Graton	1,000	637	100,000 gpd	140,000 gpd
Occidental County Sanitation District	55 acres - Occidental	500	261	17,000 gpd	50,000 gpd
Penngrove Sanitation Zone	475 acres -north of Petaluma	1,200	487		3,000 people
Russian River County Sanitation District	2,700 acres - Guerneville, Rio Nido, Guernewood Park, Vacation Beach	8,000	3,148	0.3 mgd	0.51 mgd (1)
Sea Ranch Sanitation Zone	4,600 acres along northern Sonoma coast	2,000	529		
Central North Sonoma Valley County Sanitation District	4,500 acres in City of Sonoma and unincorporated surrounding communities	35,000	16,513	0.004 mgd 0.019 mgd 2.6 - 2.8 mgd	0.027 mgd 0.130 mgd 3 mgd (2)
South Park County Sanitation District	1,460 acres south of Santa Rosa along Hwy. 101	8,000	3,943	approaching 700,000 gpd limit	700,000 gpd

(1) RRCSD has a treatment capacity of 0.71 mgd but a permitted summertime disposal capacity of 0.51 mgd.

(2) The estimated capacity of the SVCSD wastewater treatment plant is 10 to 11 mgd, but is limited by its NPDES permit to 3 mgd.

"mgd" = million gallons per day

"gpd" = gallons per day

"ESD" = Equivalent Single Family Dwelling

financial entity. The County Board of Supervisors sits as the Agency's Board of Directors. SCWA assigns a "Level of Service" rating to each of the wastewater systems it operates.¹⁰⁴ These levels are:

- "Minimum Level of Service": Includes services necessary for the protection of public health, employee safety, and public safety.
- "Standard Level of Service": Includes services necessary to operate and maintain the sanitation systems in order to limit or reduce the risk of (1) service interruption and (2) violations of the respective National Pollutant Discharge Elimination System (NPDES) permit or Waste Discharge Requirements issued by the Regional Boards.
- "Asset Preservation Level of Service": Includes services and programs necessary to (1) operate, maintain and replace facilities and equipment within the sanitation systems in order to preserve the system's assets; (2) provide a beneficial impact on the quality of life in the community; and (3) provide economic savings to the ratepayers through optimizing life cycle costs.

The Agency's Board had directed it to attempt to transfer responsibility for those systems serving fewer than 2,500 people to local public entities or to consolidate such facilities to create systems with greater than 2,500 people. The transfer of responsibility to local agencies has been successful for the Graton and Forestville Districts/Zones, and is scheduled for the South Park Zone no later than 2011. For the future, the transfer of the Sea Ranch Sanitation Zone and Occidental County Sanitation District is being investigated and/or pursued.

User fees are the primary source of funding for the sanitation service providers. **Table 4** summarizes user fees, which generally are nearly twice the State average. Possible reasons for the high cost of sanitation services in Sonoma County are strict regulations on discharge into the Russian River, which is habitat for endangered fish species; and the age, rural character, and small size of many of Sonoma County's communities. Capital improvements are typically funded through revenue bonds (bonds repaid by service charge revenues) and supplemented by state and federal grants for system upgrades and expansions.

INFRASTRUCTURE, FACILITIES AND SERVICES

Historically, most jurisdictions collected sewage and wastewater and discharged it to the nearest stream or river. Public health and nuisance concerns resulted in the installation of treatment systems using bacterial digestion promoted by aeration. Chlorination was introduced to kill pathogens prior to discharge of the treated wastewater. The Federal

¹⁰⁴ These Levels of Service are defined in the FY 03-04 County Budget, p. 415.

Table 4
Average Monthly Wastewater Service Rates for Typical Single-Family Homes
Sonoma County LAFCO Municipal Service Reviews

Sewer Service Provider*	Typical Service Charges	
	Annual	Monthly
Airport-Larkfield-Wikiup SZ (1)	\$392	\$32.67
Bodega Bay Utility (2)	\$335	\$27.75
City of Cloverdale (3)	\$318	\$26.46
City of Cotati (4)	\$683	\$56.91
City of Healdsburg (5)	\$569	\$47.38
City of Petaluma (6)	\$462	\$38.54
City of Rohnert Park (7)	\$354	\$29.53
City of Santa Rosa (8)	\$526	\$43.84
City of Sebastopol (9)	\$493	\$41.08
Forestville SSZ (10)	\$970	\$80.83
Geyserville SZ (1)	\$595	\$49.58
Graton SZ (1)	\$795	\$66.25
Mirabel Heights CSA #41 (10)	\$512	\$42.67
Occidental CSD (1)	\$976	\$81.33
Penngrove SZ (1)	\$635	\$52.92
Russian River CSD (1)	\$816	\$68.00
Sea Ranch SZ (1)	\$637	\$53.08
Sonoma Valley CSD (1)	\$486	\$40.50
South Park CSD (1)	\$684	\$57.00
Town of Windsor (11)	\$368	\$30.69
Sonoma County average		\$48.35
Sonoma County median		\$47.38
Statewide average (12)		\$21.48
Statewide median (12)		\$18.37

* Includes publicly-owned wastewater providers only.

- (1) Average annual charge for Sanitation Zones and Districts from Sonoma County Proposed Budget 04-05, pp. 343-353.
- (2) Bodega Bay sewer charge is \$55.50 bi-monthly plus \$2.40 per 100 cf of metered water use in excess of 4,000 cf bi-monthly.
- (3) The City of Cloverdale charges a \$26.46 monthly sewer system access charge.
- (4) Cotati charges a \$52.52 bi-monthly base fee and \$6.13 per thousand gallons, assuming 5,000 gallons. FY 04-05, Ordinance No. 735.
- (5) Healdsburg's monthly sewer service flat rate for Single Family Residential is \$47.38, effective Oct '04. Rate will increase Jan '05.
- (6) New sewer rates in Petaluma as of January 1, 2004 are a \$32.74 bi-monthly base fee and \$2.463 per hcf of discharge, based on an average use of 18 hcf in a two-month period. From www.ci.petaluma.ca.us/wrcd/wastewaterrates.html.
- (7) Rohnert Park charges a \$1.03 monthly service charge plus \$5.70 per thousand gallons, assuming 5,000 gallons. From City's website, 10/8/2004.
- (8) City of Santa Rosa monthly wastewater charge is \$10.79 plus a \$6.61 quantity charge per thousand gallons; assumes 5,000 gallons.
- (9) An average bi-monthly charge in Sebastopol is \$82.15. From Patty Murphy, Sebastopol Finance, 10/13/04.
- (10) Forestville CSD and Mirabel Heights CSA have been dissolved into the Forestville Water District. The rates represented here are the rates charged under the former Forestville CSD and CSA #41 Mirabel Heights.
- (11) Windsor water reclamation charge is \$30.69 for 5,000 gallons or less.
- (12) Statewide average and median are from Black & Veatch California Wastewater Charge Survey 2004, p 2.

Clean Water Act, adopted in 1977, both established standards for the quality of water discharged to the nation's streams and rivers and provided substantial Federal funding to construct new wastewater treatment plants.

Over the years, the Federal Government has adopted additional and progressively more stringent standards for the quality of discharged wastewater. Many agencies turned to land disposal of wastewater as an alternative to stream discharge, as the standards for land disposal could be less stringent and thus less costly to achieve. Today, many treatment systems provide advanced treatment, producing a highly purified wastewater, meeting standards for all means of disposal, including the irrigation of public spaces and stream discharge.

Nevertheless, some uncertainty remains regarding the elimination of all risks associated with the discharge of wastewater; there has been public opposition in Sonoma County to the large-scale discharge of wastewater to the Russian River. Although a number of other agencies continue to use NPDES-permitted stream and river disposal, the City of Santa Rosa has sought alternatives to river disposal. For example, a major capital improvement project has been completed that constructed a pipeline to convey treated wastewater to the Geysers geothermal steam field where it is to be used to recharge the steam reservoir and thus prolong its use for the generation of electricity. This project will be explored more thoroughly in the Municipal Service Review of the City of Santa Rosa.

Other Districts and sanitation zones are actively pursuing methods to recycle treated wastewater as well. Increasingly, both public agencies and the public at large are recognizing that appropriately treated wastewater is not simply "waste," but rather a significant resource. Constraints on available water supplies promote the increased use of treated wastewater for urban irrigation or for agricultural irrigation, which can directly offset freshwater consumption. The long-term commitment of lands to irrigation for the purpose of recycling treated wastewater can provide protection for open space and support for agriculture.

Sanitation service providers in Sonoma County are challenged by the need to upgrade and expand many of their systems to meet updated discharge standards and to accommodate elevated winter flows resulting from storm water infiltrating into aging collection systems. Many service providers have been subjected to additional costs due to regulatory and legal actions related to inadequate systems. SCWA has attempted to thwart the incidence of spills, leaks, and other instances of system failure by installing SCADA equipment at many sites. This equipment monitors wastewater flow, collects data on volume and toxicity, and, in some cases, allows for the remote control of certain operations. In this way, the Agency is able to more effectively monitor and control rural wastewater systems and to respond more quickly to any problems that may arise.

Expansion of wastewater collection, treatment and disposal facilities is capital intensive and requires long lead times. Funded largely by user fees and assessments on new development, these facilities are likely to act as constraints on future development rather

than accommodating development as they have historically. A number of the County's cities and districts have had difficulty meeting the terms of their Regional Water Quality Control Board permits and are currently planning to or are undertaking system upgrades and/or expansions. Discussion of the cities' efforts will be included in MSRs for cities.

WASTEWATER SERVICE DEMAND AND CAPACITY

Several recent planning studies have helped to determine existing capacities and future needs for the disposal of wastewater anticipated to result from the planned development of the communities served by the systems, up to 2020. The County's PRMD recently completed a study and report of water and sewer capacities and expected demand based on the future projected growth according to the County's General Plan.¹⁰⁵

Expansion of the service area boundaries requires the approval of the system's operating board and the concurrence of LAFCO. Any such decisions must be consistent with the operative General Plans and are subject to the public disclosure and mitigation requirements of the California Environmental Quality Act.

¹⁰⁵ PRMD Water and Sewer Capacities Report, October 2003

AIRPORT-LARKFIELD-WIKIUP SANITATION ZONE

GOVERNANCE AND OPERATION

The Airport-Larkfield-Wikiup Sanitation Zone (A-L-W Zone) was formed in 1981 and turned over to the Water Agency in 1995. The Sonoma County Board of Supervisors serves as the Board of Directors for the Zone, and SCWA personnel operate the facilities. Most aspects of the A-L-W Zone's system are already connected to the Agency's SCADA system.¹⁰⁶

Operations are funded primarily through user fees and charges; the A-L-W Zone's average monthly sewer service rate is lower than most other sewer rates in the County (see **Table 4**). The Zone's major capital improvement project, the "Reclamation Facilities Project," is being funded by revenue bonds issued in FY 2000-2001. Other capital improvement projects are being partially funded by an increase in user fees and a slight increase in the number of customers served.¹⁰⁷ The Zone maintains a reasonable reserve¹⁰⁸ and provides for depreciation in its budgetary process. According to its operator, SCWA, the Zone currently operates at a Standard Level of Service and is partially funding programs necessary to operate at an Asset Preservation Level of Service.¹⁰⁹

INFRASTRUCTURE, FACILITIES AND SERVICES

The A-L-W Zone provides sanitation services to a population of approximately 8,000 people, or 3,232.69 ESDs in approximately 2,100 acres along Highway 101, north of the City of Santa Rosa.¹¹⁰ The A-L-W Zone has a high ratio of commercial and industrial development compared to residential development, comprising approximately 25 to 30 percent commercial and industrial hook-ups.

The County General Plan Citizens Advisory Committee has recommended that the Urban Service Boundary be expanded to coincide with the A-L-W Zone's service area, with the exception of four parcels, which will be split. These parcels, which fall within

¹⁰⁶ The SCADA system is the supervisory control and data acquisition system that allows for remote monitoring and limited remote control of the sanitation system's equipment.

¹⁰⁷ ESDs are a method to equate services to commercial customers to the equivalent number of residential units.

¹⁰⁸ Compared to FY 03-04 operating expenditures of \$2.3 million, the fund balance of \$805,100 represents 35 percent of the Zone's operating expenditures.

¹⁰⁹ FY 03-04 County Budget. "Asset Preservation Level of Service" is the highest level assigned by SCWA, and indicates that the Zone is maintaining its facilities at an adequate level and setting aside reserves adequate for future repair and replacement.

¹¹⁰ As of October 2003 (Randy Cullen, SCWA)

the sanitation zone and within the community separator, include one large undeveloped parcel, one vineyard, and two small landscaped parcels within the Airport Business Center.¹¹¹

The A-L-W Zone operates a gravity collection system and a wastewater treatment facility on Aviation Boulevard, which became operational in 1983 and was upgraded in 1989 and in 1997. The plant currently treats wastewater to tertiary levels and has an average dry weather flow capacity of 0.9 mgd but normally treats an average of 0.8 mgd.¹¹² Treated effluent is used by local irrigators during the summer, and stored during the winter for summer use.

The Zone's capital improvement project, called the Reclamation Facilities Project, has already raised the level of service of the plant to the required tertiary levels. The Project will also increase storage and disposal capacity. The Reclamation Facilities Project is funded by \$6.6 million in revenue bonds issued in FY 2000-2001.¹¹³

Other capital improvements over the next five years include the replacement or repair of worn out parts in the collection system and the design of a fourth aeration lagoon which is required to increase treatment plant capacity to 1.2 mgd.¹¹⁴ Additional storage and disposal capacity will also be necessary for the Regional Water Quality Control Board to approve the increase in capacity.

WASTEWATER DEMAND AND CAPACITY

PRMD estimates that the treatment plant's remaining capacity (after the upgrade to 1.2 mgd) of approximately 0.53 mgd¹¹⁵ will be adequate to serve 1,884 ESDs, enough for full residential buildout (1,109 units) but may not be sufficient for industrial land buildout. The type and intensity of industrial development west of Highway 101 is not yet certain.¹¹⁶ Future service may also be affected by existing and potential development east of Highway 101, which is currently not within either the A-L-W Zone or Santa Rosa urban service boundary. Development there includes the existing Luther Burbank Center for the Arts and a proposed hospital.

¹¹¹ CAC Urban Boundaries Recommendations

¹¹² LAFCO Request for Information. However, the PRMD Water & Sewer Capacities Report estimates that the Airport Zone currently uses 0.67 mgd.

¹¹³ The FY 03-04 County Budget reports that principal and interest payments for FY 02-03 were \$472,000; bonds will mature in 2026.

¹¹⁴ County CIP 2003-08

¹¹⁵ This estimated remaining capacity comes from PRMD's assumption that the A-L-W Zone is currently treating 0.67 mgd and that the plant's future capacity will rise to 1.2 mgd.

¹¹⁶ As of October 2003, PRMD Water and Sewer Capacities Report, p. 16.

BODEGA BAY PUBLIC UTILITY DISTRICT

The Bodega Bay Public Utility District operates both water and wastewater services. Coverage of both is provided in the previous chapter.

FORESTVILLE WATER DISTRICT SEWER SERVICE ZONE

GOVERNANCE AND OPERATION

The sewer system formerly known as the Forestville County Sanitation District was formed in 1952. The District was transferred to SCWA in 1995. The Forestville Water District has assumed ownership and operational responsibilities as of the July 1, 2004 dissolution of the Forestville County Sanitation District. The district is now called a “sewer service zone” within the Forestville Water District, and will be referred to in the rest of this report as the “Forestville Sewer Service Zone” (FSSZ). SCWA may remain involved in sanitary operations to assist with the transition. Some of Forestville’s equipment at its filter building is monitored by its own stand-alone SCADA system.

Operations are funded primarily through user fees and charges; FSSZ’s average monthly sewer service rate is among the highest in the County (see **Table 4**). The District lacks an adequate reserve in FY 2003-2004¹¹⁷ but provides for depreciation in its budgetary process. The recent upgrade of Forestville’s treatment plant to tertiary standards was made possible through various grants and loans.¹¹⁸ Last year, the FSSZ operated at a Standard Level of Service.¹¹⁹ However, as SCWA no longer operates the sewer system, the use of this rating system will probably be discontinued.

INFRASTRUCTURE, FACILITIES AND SERVICES

FSSZ provides sanitation service to a population of approximately 1,200 people, with 619 ESDs.¹²⁰ FSSZ serves approximately 70 acres, mostly in “downtown” Forestville. The District’s boundary is considerably smaller than that of the Forestville Water District, which is even smaller than the General Plan’s Urban Service Boundary. Forestville’s wastewater treatment plant also serves the former Mirabel Heights CSA #41, with 233.5 ESDs.¹²¹

FSSZ operates a wastewater treatment facility at 6194 Forestville Street in Forestville, upgraded in 1962 and again in 1978. The treatment plant discharges treated water to Jones Creek, a tributary of Green Valley Creek, which flows to the Russian River,

¹¹⁷ Total operations costs in FY 03-04 were expected to be \$604,400, so the fund balance of \$6,200, representing about 1 percent of Forestville’s budget, was inadequate.

¹¹⁸ In 1999, the Forestville County Sanitation District received a federal one million dollar grant for the plant upgrade project. Another \$1.5 million grant and low interest financing came from USDA. These grants and loans made the Mirabel Heights connection and the treatment plant upgrade possible.

¹¹⁹ FY 03-04 County Budget. “Standard Level of Service” is the middle level of service assigned by SCWA, and indicates that the District is operating and maintaining the system in order to limit the risk of service interruption or violate NPDES or Waste Discharge Requirements issued by Regional Boards.

¹²⁰ As of October 2003 (Randy Cullen, SCWA). ESDs are a method to equate services to commercial customers to the equivalent number of residential units.

¹²¹ As of October 2003 (Hody Wilson, SCWA)

between October and May. The Forestville sewer treatment plant was ordered by the North Coast Regional Water Quality Control Board to improve treatment to tertiary levels in order to continue discharging into the Russian River. The upgrade of the treatment plant was completed before the transfer of responsibilities to FWD. The upgrade allows the plant to process up to 130,000 gallons per day (gpd) average dry weather flow to tertiary levels; the plant currently treats up to 64,000 gpd¹²².

During the summer, recycled water is used to irrigate private property. As part of the "Regional Facilities" project, a temporary underground pipeline was installed in 1996 between the Forestville treatment plant and the Graton Sanitation Zone (now the Graton Community Services District) treatment plant to allow for the transfer and delivery of irrigation water between the two facilities.¹²³ A second permanent pipeline has been constructed to allow for the transfer of secondary effluent from Graton for tertiary treatment at the Forestville plant, and, in an emergency, transfer of secondary effluent from Forestville to secondary storage at Graton.

Additionally, flows and revenue from Mirabel Heights' newly constructed collection system are connected to the Forestville treatment plant according to the 2000 Mirabel Heights Water Pollution Control Project.¹²⁴

WASTEWATER DEMAND AND CAPACITY

The Forestville treatment plant's remaining capacity of 66,000 mgd is expected to be adequate to serve an estimated 473 ESDs, enough for 2020 projections (230 residential units and about 150,000 square feet of industrial and commercial space) but not quite enough (3,000 gpd short) for full General Plan buildout. A slight capacity increase will be required to accommodate full buildout.

¹²² Ibid.

¹²³ A \$2,100,000 revenue bond was issued to refinance existing debt and construct the recycled water pipeline between FCSD and the Graton Sanitation Zone in 1996.

¹²⁴ FY 03-04 County Budget. An operating transfer of \$85,900 moved revenues from Mirabel Heights residents who connected to the Forestville system to the FCSD operating budget. FCSD's budget has been turned over to FWD.

GEYSERVILLE SANITATION ZONE

GOVERNANCE AND OPERATIONS

The Geyserville Sanitation Zone (GSZ) was formed in 1981, after its treatment plant first became operational in 1978. The District was transferred to SCWA in 1995. The Sonoma County Board of Supervisors serves as the Board of Directors for the District, and SCWA personnel operate the facilities and charge time based on actual hours spent in the GSZ. Geyserville's sanitation system is already connected to the Agency's SCADA system.¹²⁵

Revenue sources for GSZ are annual sewer service charges and interest on the fund balance. GSZ's monthly sewer service rate is about \$50, which is moderate compared to other County sewer service charges (see **Table 4**). The District maintains a more than adequate reserve¹²⁶ and provides for depreciation in its budgetary process. General Obligation bonds were issued in 1980 to finance Geyserville's share of the local wastewater collection system.¹²⁷ Existing equipment and disposal facilities have been adequate for Geyserville's slow growth thus far, so money has been set aside for anticipated repairs and replacements,¹²⁸ allowing GSZ to operate at near an "Asset Preservation Level of Service."¹²⁹

INFRASTRUCTURE, FACILITIES AND SERVICES

GSZ provides for the collection and treatment of wastewater to approximately 1,000 people,¹³⁰ or 334.42 ESDs,¹³¹ in 177 acres. The boundaries of GSZ and the General Plan Urban Service Boundary are basically coterminous, with just a few District parcels extending beyond the urban service area.

GSZ operates a wastewater treatment facility at 155 Hamilton Lane in Geyserville as well as one lift station. The treatment plant is designed to provide secondary treatment for an average daily dry flow of up to 92,000 gpd, and currently treats about 54,000 gpd. Recycled water from the treatment plant is disposed of through percolation and evaporation.

¹²⁵ The SCADA system is the supervisory control and data acquisition system that allows for remote monitoring and limited remote control of the sanitation system's equipment.

¹²⁶ GSZ's fund balance for FY 03-04 is expected to be \$309,000, which exceeds the annual operations expenditures, representing 116 percent of the operating budget.

¹²⁷ FY 03-04 County Budget. Payments in FY 03-04 will be \$28,900; the bond will mature in 2020.

¹²⁸ \$30,000 is budgeted in FY 03-04 to replace portions of the collection system.

¹²⁹ County Budget FY 03-04. "Asset Preservation Level of Service" is the highest level assigned by SCWA, and indicates that the District is maintaining its facilities at an adequate level and setting aside reserves adequate for future repair and replacement.

¹³⁰ LAFCO Request for Information

¹³¹ As of October 2003 (Randy Cullen, SCWA). ESDs are a method to equate services to commercial customers to the equivalent number of residential units.

WASTEWATER DEMAND AND CAPACITY

Though growth has been slow in the Geyserville area and on-site percolation ponds have been adequate thus far, GSZ estimates that it can serve an additional 187 ESDs, which is inadequate for projected development.¹³² Projections for growth by 2020 estimate 305 new residential units and 406 residential units at buildout.¹³³ PRMD expresses specific concern about the capacity to serve potential density bonus units and second dwelling units. GSZ has no Master Facility Plan or similar documents at this time to address capacity expansion.

¹³² PRMD Water and Sewer Capacities Report, October 2003

¹³³ Ibid.

GRATON COMMUNITY SERVICES DISTRICT

GOVERNANCE AND OPERATION

The Graton Sanitation Zone was formed in 1976 and transferred to SCWA in 1994. It was then transferred to a newly formed Graton Community Services District (GCSD) on July 1, 2004.

Operations are funded primarily through user fees and charges; Graton's average monthly sewer service charge is somewhat high for Sonoma County (see **Table 4**). The acquisition of Graton's share of the local wastewater collection system was financed through General Obligation bonds issued in 1976.¹³⁴ Graton maintains a reasonable reserve¹³⁵ and provides for depreciation in its budgetary process.

INFRASTRUCTURE, FACILITIES AND SERVICES

GCSD provides sanitation services to a population of approximately 1,000 people,¹³⁶ or 637.12 ESDs.¹³⁷ GCSD's service area encompasses approximately 260 acres. The District's boundary is coterminous with the General Plan Urban Service Area.

GCSD's wastewater treatment facility is located at 4950 Ross Road in Graton. It is designed to provide secondary treatment for an average daily dry flow of up to 140,000 gpd and currently treats about 100,000 gpd. GCSD also operates two lift stations. Between October 1 and May 14, treated wastewater is discharged to Atascadero Creek, a tributary of the Russian River. During the summer months, recycled water irrigates private land along the Forestville – Graton pipeline.

The Basin Plan for the North Coast Region requires that discharge to the Russian River be of tertiary standards.¹³⁸ To comply, Forestville's treatment plant has been upgraded to treat wastewater to tertiary standards and a permanent pipeline has been built between Graton's and Forestville's treatment facilities. This pipeline allows for the transfer of wastewater between the two Districts for tertiary treatment at Forestville and for the summertime disposal of recycled water through irrigation. In the future, Graton

¹³⁴ FY 03-04 County Budget. Payments in FY 03-04 will be \$19,200; the bond will mature in 2016.

¹³⁵ FY 03-04 fund balance is \$307,100, or about 50 percent of the District's operating budget.

¹³⁶ LAFCO Request for Information

¹³⁷ As of October 2003 (Randy Cullen, SCWA). ESDs are a method to equate services to commercial customers to the equivalent number of residential units.

¹³⁸ GSZ, as well as other west County communities, suffered many sewage spills and illegal discharges in to the Russian River in the 1980s. Partly due to the negative effects of those spills, the Russian River Basin Plan requires water discharged to the Russian River to be treated to tertiary levels.

is considering upgrading its treatment plant to tertiary levels, which is expected to cost \$3 million.¹³⁹ In addition to long-term treatment concerns, GCSD's collection system needs more immediate repair and replacement.¹⁴⁰

WASTEWATER DEMAND AND CAPACITY

The Graton area has a General Plan buildout projection of an additional 211 residential units, 44,918 additional commercial square feet, and 89,836 additional industrial square feet. Graton's remaining wastewater treatment capacity, (40,000 gpd, or about 270 ESDs according to PRMD), along with tertiary treatment agreements with the neighboring Forestville treatment plant, appears adequate to accommodate projected growth through 2020, but not full buildout of the land use map.¹⁴¹ The District is anticipated to continue working with Forestville Water District to provide for additional storage and disposal capacity during storm events or other emergencies.

¹³⁹ County CIP 2003-08

¹⁴⁰ Ibid. \$20,000 is budgeted for collection system repair in FY 03-04. Within the next five years, the District anticipates spending \$45,000 on Capital Improvement Projects.

¹⁴¹ PRMD Water and Sewer Capacities Report, October 2003

OCcidental COUNTY SANITATION DISTRICT

GOVERNANCE AND OPERATION

The Occidental County Sanitation District (OCS D) treatment plant first became operational in 1965 and was upgraded in 1970 and 1975; it was transferred to SCWA in 1995. The Sonoma County Board of Supervisors serves as the Board of Directors for the District, and SCWA personnel operate the facilities and charge time based on actual hours spent in the OCS D. The future goal of the Water Agency and local community members is to transfer responsibilities of the sanitation district to the Occidental Community Services District. Wastewater in Occidental must be both dechlorinated and pH-adjusted before it is discharged into the holding pond. Failure of the dechlorination system is an ongoing problem and needs to be connected to an alarm system to reduce the District's number of permit violations.¹⁴² However, the Occidental treatment plant is not connected to the Agency's SCADA system.¹⁴³

Operations are funded primarily through user fees and charges; Occidental's sewer service rates are among the highest in Sonoma County (see **Table 4**). These high rates are indicative of the small size of the district, aging infrastructure, and numerous lawsuits and permit violations. General Obligation bonds, issued in 1969 for the local share of the wastewater collection system, will mature in 2006 and require \$1,300 in debt service in FY 2003-2004.¹⁴⁴ OCS D lacks an adequate reserve¹⁴⁵ and faces multiple financial and operational constraints, which threaten the ability of the District to comply with the terms of its operating permit.¹⁴⁶ In the past number of years, operating revenues have been inadequate to support required improvements, and continued operation of the Occidental system has required annual emergency transfers from the Water Agency's General Fund.¹⁴⁷

The District has been involved in legal and compliance issues for most of the past decade. The west Sonoma County community has long dealt with failing and outdated septic and wastewater disposal systems, due to increasing inhabitation of year-round residents in former part-time residential parcels. Additionally, the North Coast Water Quality Control Board's imposition of advanced wastewater treatment standards on

¹⁴² Randy Cullen, SCWA

¹⁴³ The SCADA system is the supervisory control and data acquisition system that allows for remote monitoring and limited remote control of the sanitation system's equipment.

¹⁴⁴ FY 03-04 County Budget

¹⁴⁵ Ibid. OCS D's fund balance for FY 03-04 is expected to be \$18,900, only 7 percent of its operating budget.

¹⁴⁶ The OCS D was faced with a costly civil lawsuit in 1997 due to numerous permit violations regulating chlorine and pH levels in discharge caused by operating and infrastructure deficiencies. Additionally, in 1997, the Sanitation District was sued by the organization that owns the land on which the Occidental Wastewater Treatment Plant is located. The organization claimed that the County did not pave and maintain the roadways, which it had agreed to do, and that the plant was polluting the property. As of 2003, the dispute remained unresolved.

¹⁴⁷ FY 03-04 County Budget

wastewater dischargers into the Russian River has added further strain on District operations. The District is considered by SCWA to be operating at a “Minimum Level of Service.”¹⁴⁸

INFRASTRUCTURE, FACILITIES AND SERVICES

OCSD provides for the collection, treatment and disposal of wastewater to a rural 55-acre community of 500 people¹⁴⁹ in addition to 69,306 square feet of commercial development,¹⁵⁰ for a total of 260.82 ESDs.¹⁵¹ The OCSD treatment plant processes wastewater to secondary treatment levels. The plant currently treats 17,000 gpd, only 35 percent of its design capacity of an average daily dry flow of up to 50,000 gpd.¹⁵² Between October 1 and May 14 recycled water is discharged to Dutch Bill Creek, a tributary of the Russian River. From May 15 to September 30, recycled water irrigates private property.

In addition to the treatment plant, the District operates one lift station and leases a 10 million-gallon storage reservoir on private property called Graham’s Pond. The reservoir is currently used to store treated effluent prior to discharge into Dutch Bill Creek, but the long-term lease with the Graham’s Pond landowners came due in 2003. The pond will be used until new facilities can be built.

The OCSD service area encompasses approximately 55 acres in the rural community of Occidental, adjacent to the Camp Meeker Recreation and Park District. The Occidental District’s service area is coterminous with the existing County General Plan Urban Service Boundary (USB), with some exceptions; the current USB excludes certain residential parcels that are served by the District’s sewer plant. County staff recommend that the current USB, established in 1991, be expanded to more closely match the sanitation district boundary.¹⁵³

OCSD is currently working with Camp Meeker Recreation and Park District on a joint wastewater project, including the construction of Camp Meeker’s first sewer collection system, construction of a new OCSD wastewater treatment plant, replacement of OCSD’s collection system, and construction of a new effluent storage reservoir and irrigation system. OCSD requires approximately \$12.5 million in wastewater treatment

¹⁴⁸ FY 03-04 Budget. A Minimum level of service is defined as including “services necessary for the protection of public health, employee safety, and public safety.”

¹⁴⁹ 2003 LAFCO Request for Information

¹⁵⁰ PRMD Water and Sewer Capacities Report, October 2003

¹⁵¹ As of October 2003 (Randy Cullen, SCWA). ESDs are a method to equate services to commercial customers to the equivalent number of residential units.

¹⁵² PRMD Water and Sewer Capacities Report, October 2003

¹⁵³ Sonoma County Permit and Resource Management Dept. staff report to GP2020 Citizens Advisory Committee re: Urban Boundaries (11/6/2003). At the time the USB was created, it excluded certain residences that were connected to the sewer system; the proposed USB corrects that situation while excluding additional vacant land on the larger parcels, discouraging development.

and disposal improvements. The FY 2003-2004 infrastructure activity of \$3,785,000 will be funded through a combination of expected loans and USDA grants.¹⁵⁴ OCSD, Camp Meeker RPD, and the Occidental Community Services District are working to identify further federal and state funding sources for this project, and to develop governance models for the operation of the new system.¹⁵⁵

WASTEWATER DEMAND AND CAPACITY

Based on current flows and existing capacity, the OCSD treatment plant has an additional 33,000 gpd of capacity. The County PRMD calculates that this capacity is sufficient to serve the remaining General Plan buildout of 22 additional residential units and 27,570 square feet of additional commercial development, which would utilize 8,000 gpd.¹⁵⁶ At buildout, the OCSD facility would be left with 25,000 gpd of remaining capacity, or approximately 50 percent of its total capacity. However, secondary treatment standards are not high enough for Russian River disposal, and upgrades are necessary.

Growth in Occidental is currently limited to one connection per year, in part due to ongoing NPDES violations, and water availability for the area is significantly constrained. Also, potential for commercial growth is low because most commercial lots are already developed.¹⁵⁷

¹⁵⁴ 2003-08 County CIP, FY 03-04 County Budget

¹⁵⁵ FY 04-05 County Budget, p. 350.

¹⁵⁶ PRMD Water and Sewer Capacities Report, October 2003

¹⁵⁷ PRMD Water and Sewer Capacities Report, October 2003

PENNGROVE SANITATION ZONE

GOVERNANCE AND OPERATIONS

The Penngrove Sanitation Zone (PSZ) was formed in 1972 and was transferred to SCWA in 1995. The Sonoma County Board of Supervisors serves as the Board of Directors for the Zone, and SCWA personnel operate the facilities and charge time based on actual hours spent in the PSZ. The sanitation zone's pump system is already connected to the Agency's SCADA system¹⁵⁸ with no potential for more future connections.

Penngrove Sanitation services are funded primarily through user fees. Penngrove's sewer service rate is near the average for Sonoma County (see **Table 4**). Additionally, connection fees are being collected as the collection system expands. The PSZ's fund balance appears adequate at approximately 44 percent of the operating budget.¹⁵⁹ General Obligation bonds were issued in 1977 to finance Penngrove's share of the local wastewater collection system.¹⁶⁰ The District is considered by its operator, SCWA, to be operating at a "Standard Level of Service."¹⁶¹

INFRASTRUCTURE, FACILITIES AND SERVICES

The Penngrove Sanitation Zone provides for the collection of wastewater to approximately 1,200 people¹⁶², or 486.8 ESDs¹⁶³ in 475 acres north of Petaluma. Penngrove's service area is generally coterminous with the General Plan's urban service boundary.

The PSZ's lift station is located at 25 Ely Boulevard in Penngrove. It is designed to collect sewage and route it to the City of Petaluma's collection system for treatment at Petaluma's wastewater treatment plant. PRMD reports that, to fully serve future demand, the existing trunk sewer line between Penngrove and Petaluma will require replacement.¹⁶⁴ Other infrastructure costs include Penngrove's portion of the costs to upgrade Petaluma's wastewater treatment plant to tertiary standards¹⁶⁵ and Penngrove's own Capital Replacement Program. These infrastructure costs will be passed on to PSZ customers through rate increases.

¹⁵⁸ The SCADA system is the supervisory control and data acquisition system that allows for remote monitoring and limited remote control of the sanitation system's equipment.

¹⁵⁹ FY 03-04 County Budget. PSZ's fund balance is \$191,600, about 44 percent of operating costs \$439,600.

¹⁶⁰ Payments in FY 03-04 will be \$17,800; the bond will mature in 2017.

¹⁶¹ County Budget FY 04-05, p. 353.

¹⁶² LAFCO Request for Information

¹⁶³ As of October 2003 (Randy Cullen, SCWA). ESDs are a method to equate services to commercial customers to the equivalent number of residential units.

¹⁶⁴ 2003-08 County CIP. \$533,000 is budgeted in FY 03-04 for this project.

¹⁶⁵ Ibid. \$510,000 is earmarked for this project from 2004 to 2006.

WASTEWATER DEMAND AND CAPACITY

The contract for sewage treatment with the City of Petaluma is capped at a population of 3,000. According to the PRMD's calculations, the PSZ has adequate capacity with sewer line improvements to serve an additional 670 housing units, far more than 2020 projections of 202 residential units and modest industrial/commercial development.¹⁶⁶

¹⁶⁶ PRMD Water and Sewer Capacities Report

RUSSIAN RIVER COUNTY SANITATION DISTRICT

GOVERNANCE AND OPERATION

The Russian River County Sanitation District (RRCSD) was formed in 1982 to collect and treat wastewater; it was transferred to SCWA in 1995. The Sonoma County Board of Supervisors serves as the Board of Directors for the District, and SCWA personnel operate the facilities and charge time based on actual hours spent in the RRCSD.¹⁶⁷ Most of the treatment plant's equipment is already connected to the Agency's SCADA system, and new construction at the treatment plant will be added, allowing for real-time remote monitoring from the Agency's headquarters.¹⁶⁸

Operations are funded primarily through user fees and charges¹⁶⁹; the RRCSD's average monthly sewer service rate of \$68 is high for Sonoma County (see **Table 4**). A grant has been secured for a part of the RRCSD's current Capital Improvement Project. General obligation bonds were issued in 1979 to finance the local share of the wastewater collections system.¹⁷⁰ Additionally, revenue bonds were issued in 1981 to pay for system improvements.¹⁷¹ Combined, debt service payments represent approximately 10 percent of the current operating budget. The fund balance is approximately 42 percent of the operating budget.¹⁷² SCWA, as the operator, considers the District to be operating at a "Standard Level of Service."¹⁷³

¹⁶⁷ LACO Request for Information

¹⁶⁸ The SCADA system is the supervisory control and data acquisition system that allows for remote monitoring and limited remote control of the sanitation system's equipment.

¹⁶⁹ FY 03-04 Final Budget Detail. Total 2002-03 revenues amounted to \$2,412,052, nearly all of which is derived from customer charges.

¹⁷⁰ Ibid. The principal and interest payments on this bond for FY 2003-04 are \$174,000. Bonds will mature in 2018.

¹⁷¹ FY 03-04 County Budget. Principal and interest payments for FY 2003-04 are \$117,300. These bonds will mature in 2020.

¹⁷² The Fund balance by the end of FY 03-04 is expected to be \$1,010,000, which represents 42 percent of the District's operating budget.

¹⁷³ FY 03-04 County Budget. "Standard Level of Service" is the middle level of service assigned by SCWA, and indicates that the District is operating and maintaining the system in order to limit the risk of service interruption or violate NPDES or Waste Discharge Requirements issued by Regional Boards.

INFRASTRUCTURE, FACILITIES AND SERVICES

The RRCSD provides sanitation service to a population of approximately 8,000 people¹⁷⁴ and 322,827 commercial square feet; ESDs total 3,147.96.¹⁷⁵ The RRCSD service area encompasses 2,700 acres in the unincorporated rural communities of Guerneville, Rio Nido, Guerneville Park, and Vacation Beach.¹⁷⁶ The RRCSD boundary is generally coterminous with the General Plan Urban Service Area boundary.

The RRCSD's wastewater treatment facility became operational in 1983 and is located at 18400 Neely Road in Vacation Beach. The RRCSD currently has a treatment capacity of an average dry weather flow of 0.71 mgd.¹⁷⁷ The facility is limited, however, by permitted summertime disposal capacity of 0.51 mgd. RRCSD operates 11 lift stations and 2 holding ponds with a total storage capacity of 4.5 million gallons.

The RRCSD processes wastewater to tertiary treatment levels. Between October 1 and May 14, treated wastewater is discharged to the Russian River. Between May 15 and September 30, treated wastewater is used for irrigation on 40 acres of the Northwood Golf Course and 20 acres of other forested land. The RRCSD requires increased storage capacities during the summer season when treated water is not discharged to the Russian River.¹⁷⁸

The RRCSD faces constraints in its ability to store, treat and dispose of wastewater during flood conditions and rainy weather; wet weather flows can reach 5 million gallons per day. During flood events, the County's Environmental Health Department has directed the District to commingle tertiary treated effluent with primary treated and disinfected overflow, which is then discharged to the Russian River.¹⁷⁹ The District is undertaking a \$22 million capital improvement program to address these storm flow disposal issues.¹⁸⁰

¹⁷⁴ LAFCO Request for Information

¹⁷⁵ As of October 2003 (Randy Cullen, SCWA). ESDs are a method to equate services to commercial customers to the equivalent number of residential units.

¹⁷⁶ The Sweetwater Springs Water District encompasses the same communities, but also serves a much larger area outside the RRCSD boundary.

¹⁷⁷ A new Regional Water Quality Board permit with the same capacity limitations as before was issued in December of 2003.

¹⁷⁸ 2003-08 County CIP. \$500,000 is budgeted in FY 03-04 for the purchase of land.

¹⁷⁹ Staff Report Sanitation Workshop, SCWA December 2000, p. 11

¹⁸⁰ Additional disinfection capacity and emergency storage capacity is being added to deal with periods of excessive flow due to storms and flood events. This project will cost \$2.2 million over the next five years.

Another capital improvement project, the Third Unit Process project, will ultimately increase the treatment facility's maximum sustained peak flow capacity from 1.2 mgd to 3.5 mgd.¹⁸¹ The project will add a third aeration basin, a secondary clarifier, and a tertiary filter at the existing treatment plant.¹⁸² A grant has been secured for a part of the Third Unit Process project.

WASTEWATER DEMAND AND CAPACITY

At General Plan buildout, the area served by the RRCSD can accommodate an additional 794 residential units and 447,135 commercial/industrial square feet, or 1,642 ESDs. Projections for 2020 indicate the development of an additional 521 residential units, and an additional 293,410 commercial/industrial square feet, or 1,077 ESDs.¹⁸³

The RRCSD will need to find additional disposal capacity by 2020 in order to maximize the system's current treatment capacity of 0.71 mgd. This additional 0.20 mgd of summertime disposal capacity will allow RRCSD to serve an additional 1,795 ESDs, adequate for both projected growth and full buildout.¹⁸⁴

¹⁸¹ Randy Cullen, SCWA.

¹⁸² 2003-08 County CIP. \$270,000 is budgeted for this project over the next five years.

¹⁸³ PRMD Water and Sewer Capacities Report

¹⁸⁴ Ibid.

SEA RANCH SANITATION ZONE

GOVERNANCE AND OPERATION

The Sea Ranch Sanitation Zone (SRSZ) was formed in 1972 and was transferred to SCWA in 1994. The Sonoma County Board of Supervisors serves as the Board of Directors for the SRSZ. SCWA owns the facilities, but, under contract, the Sea Ranch Water Company operates the system. The sanitation zone is considered by SCWA to be operating at a “Standard Level of Service.” In the future, the Water Agency will possibly negotiate to turn over the SRSZ to the Sea Ranch Association.

Operations are funded primarily through user fees and charges; the SRSZ's average monthly sewer service fees are moderate for Sonoma County (see **Table 4**). A major capital facilities project, the \$3.1 million consolidation of the Zone's two treatment plants, will be funded by both existing sewer connection and development impact fees. The SRSZ maintains an adequate fund balance of 43 percent of operating revenues and carries no debt¹⁸⁵

INFRASTRUCTURE, FACILITIES AND SERVICES

The SRSZ provides for the collection and treatment of wastewater for a population of approximately 2,000 people¹⁸⁶, with 528.8 ESDs¹⁸⁷ in an area of 4,600 acres along the northern Sonoma coast. The SRSZ serves a much more limited area than the Sea Ranch Water Company, which serves the entire planned community. Many homes in the community are designed to be served by private septic systems.

The SRSZ has two wastewater treatment facilities, the Central Plant located at 37875 Highway One and the North Plant located at 41775 Highway One. The Central and North facilities are designed to provide secondary treatment for an average daily dry weather flow of up to 160,000 gpd and 27,000 gpd, respectively. Treated water from both facilities is disposed of through irrigation.

The Central Plant will need additional storage and disposal capacity in the near future. The North Facility has an agreement with the Gualala wastewater treatment plant for tertiary treatment of its secondary effluent so that the North plant can recycle its effluent as irrigation water on the Sea Ranch Golf Links.

¹⁸⁵ FY 03-04 County Budget. SRSZ's fund balance for FY 03-04 is expected to be \$170,100, which is 43 percent of the annual operating budget.

¹⁸⁶ 2003 LAFCO Request for Information

¹⁸⁷ As of October 2003 (Randy Cullen, SCWA). ESDs are a method to equate services to commercial customers to the equivalent number of residential units.

A Draft EIR was prepared in 2003 to address the possibility of consolidating the two treatment plants and increasing storage and irrigation capacity. The estimated cost for FY 2003-2004 for the design and construction of the project is \$3.1 million.¹⁸⁸ The FY 2004-2005 construction budget for this project allows \$282,000 for environmental, engineering design, and construction work. SCWA indicates that the project includes two main projects. The construction of a major trunk line between the two treatment plants is estimated to cost \$1.7 million, and will be funded by existing sewer connection and development impact fees. The second major three-mile trunk line will connect the Sea Ranch Lodge to the Central treatment plant at a cost of \$1.5 million, to be funded by the Sea Ranch Lodge as a prerequisite for expansion.¹⁸⁹

Additionally, \$45,000 of repair and replacement of portions of the collection system are necessary within the next five years.¹⁹⁰

WASTEWATER DEMAND AND CAPACITY

The SRSZ currently serves 504 ESDs and estimates that it has the capacity for an additional 668 ESDs, based on historic flows. This capacity estimate depends on how many residences in the future are occupied year round versus seasonally. PRMD estimates only 304 residential units and no commercial/industrial development at buildout, so the SRSZ wastewater treatment facilities appear adequate for future growth.

¹⁸⁸ 2003 -08 County CIP

¹⁸⁹ Roberts, Dale, SCWA Engineer. Telephone interview, 7/27/04.

¹⁹⁰ 2003 -08 County CIP

SONOMA VALLEY COUNTY SANITATION DISTRICT

GOVERNANCE AND OPERATION

The Sonoma Valley County Sanitation District (SVCSD) was formed in 1977 to collect and treat wastewater. Management of the system was transferred to SCWA in 1995. Two Sonoma County Supervisors and the Mayor of the City of Sonoma serve as the District's Board of Directors. SCWA personnel operate the facilities and charge time based on actual hours spent on SVCSD work. Critical points of the treatment facility are connected to the Agency's SCADA system, which allows for real-time data acquisition and remote monitoring.

Operations are funded primarily through user fees and charges. The SVCSD's average monthly sewer service rate is lower than most other sewer rates in the County (see **Table 4**). This may be due its relatively large size, or the fact that it serves a more urbanized area than other sewer districts in the County. Recent capital improvements were funded through revenue bonds. The District maintains a reasonable reserve¹⁹¹ and provides for depreciation in its budgetary process. SCWA considers the District to be operating at close to an "Asset Preservation Level of Service."¹⁹²

INFRASTRUCTURE, FACILITIES AND SERVICES

The SVCSD provides sanitation services to an area of 4,500 acres and a population of 35,000, or 16,513 ESDs.¹⁹³ Sonoma Valley communities served include the City of Sonoma and the unincorporated communities and subdivisions of Glen Ellen, Eldridge, Agua Caliente, Fetters Hot Springs, Boyes Hot Springs, El Verano, Temelec, Vineburg, and Schellville.

The wastewater treatment facility is located at 22675 8th Street in Sonoma. The SVCSD also operates three lift stations. Between November 1 and April 30 of each year, recycled wastewater is discharged into the Schell Slough. From May 1 to October 31 annually, recycled water is used for irrigation by a local dairy and vineyards and for wetlands enhancement. Within an estimated three years, a new pipeline is proposed to transfer recycled effluent west towards more irrigators and to the Sonoma Developmental Center, where a large amount of potable water can be saved.

¹⁹¹ Operations fund balance at the end of FY 03-4 is expected to be \$1,766,100, or about 19 percent of the District's FY 03-04 operating expenditures of \$9,524,200.

¹⁹² County Budget FY 03-04. "Asset Preservation Level of Service" is the highest level assigned by SCWA, and indicates that the District is maintaining its facilities at an adequate level and setting aside reserves adequate for future repair and replacement.

¹⁹³ "Equivalent Single Dwelling Units" include both residential and commercial customers. ESDs are a method to equate services to commercial customers to the equivalent number of residential units.

The estimated maximum capacity of the SVCSD wastewater treatment plant is approximately 11 to 12 mgd, but is limited by its NPDES permit to treat and average dry weather flow of 3 mgd to secondary treatment. Current average dry weather flows are between 2.6 and 2.8 mgd, which is nearing the plant's permitted capacity. The SVCSD has had difficulty meeting NPDES water quality requirements due to high wet weather inflows, worn out and obsolete equipment, and insufficient storage and disposal capacity.

In the past six years, the SVCSD has spent \$20 million completing a number of repairs and improvements through the use of revenue bonds. One of these projects was a 90 million gallon storage reservoir to add to the previously existing 120 million gallon-storage capacity for irrigators. The District is currently seeking funds to upgrade the treatment plant to tertiary standards. Additionally, the collection system needs over \$40 million of work in the future.¹⁹⁴ Projects in the County's CIP planned for the next five years include treatment system upgrades to meet tertiary treatment standards and the main sewer trunk replacement and will likely total over \$5 million.¹⁹⁵

In 1998, the SVCSD Board of Directors approved an urban service boundary that would prohibit annexation of new territory into the District until facility upgrades and other improvements were made, which will address requirements imposed by the Bay Area Regional Water Quality Control Board. However, parcels annexed by the City of Sonoma are automatically served by SVCSD, which frustrates the District's "no-growth" objective.¹⁹⁶ The boundary will be in place for at least ten years, with an optional five-year extension.

WASTEWATER DEMAND AND CAPACITY

Existing treatment and disposal facilities are anticipated to be able to serve 2,377 more ESDs within the SVCSD's service boundary.¹⁹⁷ However, buildout would add about 2,400 ESDs within the unincorporated areas of the Service Area and 1,850 from within Sonoma City limits to the existing 16,513 ESDs.¹⁹⁸ Achieving this level of service will require increasing treatment capacity beyond current permitted levels and increasing disposal capacity by securing more irrigators. An anticipated engineering study is likely to show that plant treatment capacity could be closer to 4.5 mgd, and many disposal projects, such as the westward pipeline, are already in the planning stages.

¹⁹⁴ Jim Zambenini, personal interview March 10, 2004

¹⁹⁵ 2003-08 County CIP

¹⁹⁶ Olvera, Manuel, personal communication April 13, 2004

¹⁹⁷ PRMD Water and Sewer Capacities Report, October 2003

¹⁹⁸ Ibid; City staff indicates that about 90 ESDs are actually constructed each year. Approximately 150 commercial ESDs remain to buildout.

SOUTH PARK COUNTY SANITATION DISTRICT

GOVERNANCE AND OPERATION

The South Park County Sanitation District (SPCSD) was formed in 1972 and was transferred to SCWA in 1994.¹⁹⁹ The Sonoma County Board of Supervisors serves as the Board of Directors for the District, and although SCWA owns the facilities and provides mutual aid and equipment when necessary, Santa Rosa personnel operate the facilities. An agreement for the dissolution of SPCSD and the transfer of responsibility to the City of Santa Rosa was approved in 1996 and amended in 2000. The dissolution of SPCSD and the transfer of operations are anticipated to take place in FY 2010-2011.²⁰⁰ The South Park equipment is not connected to the Agency's SCADA system and will not be, due to the upcoming transfer of operations to Santa Rosa. The system is considered by SCWA to be operating at a "Standard Level of Service."

Operations are funded primarily through user fees; South Park's average monthly service charge is just above the average for Sonoma County (see **Table 4**). South Park maintains an adequate reserve of 25 percent of the operating budget.²⁰¹ The District issued \$3.1 million in revenue bonds in FY 2001-2002 to fund capital replacement obligations required prior to the District's transfer to the City of Santa Rosa.²⁰²

Annual District expenditures include a \$125,000 annual remediation fee to the North Coast Water Quality Control Board for HVOC remediation.²⁰³ The HVOC contamination in soil and groundwater was partly a result of releases from the collection system. Potential total costs for remediation could be substantial (\$2 to 10 million).

INFRASTRUCTURE, FACILITIES AND SERVICES

SPCSD provides for the collection and transmittal of wastewater to the City of Santa Rosa's treatment facility for a population of approximately 8,000 people,²⁰⁴ with 3,943 ESDs.²⁰⁵ SPCSD serves 1,460 acres south of Santa Rosa along Highway 101. SPCSD's lift

¹⁹⁹ SB 1578 amended the Sonoma County Flood Control and Water Conservation District Act to dissolve County Sanitation Zones and transfer those areas and responsibilities to SCWA.

²⁰⁰ Stillman, Cordell, SCWA, 7/27/04.

²⁰¹ FY 03-04 County Budget. SPCSD's fund balance for FY 03-04 is expected to be \$669,700, or about 25 percent of the District's \$2,632,738 operating expenditures.

²⁰² Ibid. FY 03-04 bond payments will be \$260,600. The bonds will mature in FY 26-27.

²⁰³ HVOC stand for high volatility organic compounds. FY 03-04 County Budget. The fee was imposed in FY99-00 and will expire in FY 03-04.

²⁰⁴ LAFCO Request for Information

²⁰⁵ As of October 2003 (Randy Cullen, SCWA). ESDs are a method to equate services to commercial customers to the equivalent number of residential units.

station at 200 Todd Road in Santa Rosa transfers water to the City of Santa Rosa's Laguna Sub-Regional Treatment Plant on Llano Road. SPCSD's service area consists of non-contiguous groups of parcels, mostly within the Santa Rosa Urban Service Area.

The contract between Santa Rosa and the SPCSD allocates 700,000 gpd of treatment and disposal capacity to SPCSD. The boundary of SPCSD is within the urban boundary and the City of Santa Rosa's sphere.²⁰⁶ Before Santa Rosa takes over operations of the District, the Water Agency has agreed to fund the replacement of 41,610 feet of the collection system as well as upgrade the Todd Road lift station.²⁰⁷

WASTEWATER DEMAND AND CAPACITY

Current flows from SPCSD are approaching the 700,000 gpd limit set by the City of Santa Rosa contract, but there is no actual way to measure exact flows out of the District due to irregular boundaries and the difficulty involved in metering the District. Most anticipated new development in the area will occur after the projected FY 2010-2011 annexation to the City. PRMD estimates 1,143 new residential units and about 2 million square feet of commercial/industrial development by 2020. Future service capacity to this area largely depends on the City of Santa Rosa's ability to find additional disposal capacity beyond that provided by the Geysers Pipeline Project.

²⁰⁶ Only areas within the S.O.I that are zoned for urban development are approved for water and sewer service with a City Utility Certificate. All new development within the County jurisdiction must be consistent with the City General Plan to receive a Utility Certificate.

²⁰⁷ 2003-08 County CIP. Projects total \$1,692,500.

IV. DETERMINATIONS

EXPLANATION OF DETERMINATIONS

The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 requires LAFCOs to make nine written determinations for municipal service providers. The following factors²⁰⁸ provide examples of how Sonoma LAFCO will fulfill the determination requirement.

Infrastructure Needs and Deficiencies

This determination refers to the adequacy of existing and planned public facilities in relation to how public services are, and will be, provided to citizens. Infrastructure can be evaluated in terms of capacity, condition, availability and quality.

Growth and Population Projections

Efficient provision of public services is linked to the ability of service providers to plan for future need. For example, a water purveyor must be prepared to supply water for existing **and** future levels of demand and also be able to determine **where** future demand will occur. Municipal service reviews will give LAFCO, affected agencies, and the public the means to examine both the existing and future need for public services and will evaluate whether projections for future growth and population patterns are integrated into an agency's planning function.

Financing Constraints and Opportunities

LAFCO must weigh a community's public service needs against the resources available to fund the services. Service reviews may also suggest innovations for contending with financing constraints, which may be of considerable value to numerous agencies.

Cost Avoidance Opportunities

The municipal service review will explore cost avoidance opportunities including, but not limited to: (1) eliminating duplicative services; (2) reducing high administration to operation cost ratios; (3) replacing outdated or deteriorating infrastructure and equipment; (4) reducing inventories of underutilized equipment, buildings, or facilities; (5) redrawing overlapping or inefficient service boundaries; (6) replacing inefficient purchasing or budgeting practices; (7) implementing economies of scale; and (8) increasing profitable outsourcing.

²⁰⁸ Excerpted from North County Inland Municipal Service Review and Sphere of Influence Update Study, San Diego LAFCO, September 2003.

Opportunities for Rate Restructuring

When applicable, the municipal service review will review varying agency rates, fees, taxes, charges, etc., within an agency and region, to examine opportunities for rate restructuring without impairing the quality of service.

Opportunities for Shared Facilities

Public service costs may be reduced and service efficiencies increased, if service providers develop strategies for sharing resources. Sharing facilities and excess system capacity decreases duplicative efforts, may lower costs, and minimizes unnecessary resource consumption. Options for plans for future shared facilities and services will also be considered.

Government Structure Options

The MSR provides a tool to comprehensively study existing and future public service conditions and to evaluate organizational options for accommodating growth, preventing urban sprawl, and ensuring that critical services are efficiently and cost-effectively provided. LAFCO may examine efficiencies that could be gained through (1) functional reorganizations within existing agencies, (2) amending or updating SOIs, (3) annexations or detachments from cities or special districts, (4) formation of new special districts, (5) special district dissolutions, (6) mergers of special districts with cities, (7) establishment of subsidiary districts, or (8) any additional reorganization options found in Government Code § 56000 et. seq.

Evaluation of Management Efficiencies

Management efficiency refers to the effectiveness of internal and external characteristics of agencies to provide efficient, quality public services. Efficiently managed agencies consistently implement plans to improve service delivery, reduce waste, eliminate duplications of effort, contain costs, maintain qualified employees, build and maintain adequate contingency reserves, and encourage and maintain open dialogues with the public and other public and private agencies. The service review will evaluate management efficiency by analyzing agency functions, operations, and practices—as well as the agency's ability to meet current and future service demands.

Local Accountability and Governance

Local accountability and governance refers to public agency decision making and operational and management processes that (1) include an accessible and accountable elected or appointed decision making body and agency staff; (2) encourage and value public participation; (3) disclose budgets, programs, and plans; (4) solicit public input when considering rate changes and work and infrastructure plans; and (5) evaluate outcomes of plans, programs, and operations, and disclose results to the public.

Bodega Bay Public Utility District

- 1 Infrastructure Needs and Deficiencies** BBPUD has plans for increased water production and storage and for increased wastewater storage and disposal that will be adequate to serve water and wastewater demand until the Highway One Bypass is completed. To serve full General Plan buildout, BBPUD will need to develop further plans for both increased water and wastewater capacities.
- 2 Growth and Population Projections** Future growth in Bodega Bay depends in part on the construction of the Highway One bypass. Until then, Phase I of growth will likely include a growing number of residents choosing to stay year-round and more tourists, both of which will increase water and sewer service demand.
- 3 Financing Constraints and Opportunities** Since BBPUD operates both the water and sewer systems, it gathers revenues from two different types of fees. This allows for more stability in the face of contingencies.
- 4 Cost Avoidance Opportunities** The installation and recalibration of water meters have reduced water loss in Bodega Bay, successfully reducing costs. The irrigation of the Bodega Bay Golf Course using reclaimed wastewater also saves the District the cost of using potable water.
- 5 Opportunities for Rate Restructuring** BBPUD last updated water fees in 2003 and sewer fees in 2002, and anticipates reviewing and increasing user fees and connection charges again in the future to cover costs. The monthly water and sewer service charges are both below the Sonoma County average.
- 6 Opportunities for Shared Facilities** Bodega Bay is isolated geographically from other service areas and no opportunities for shared facilities are currently known.
- 7 Government Structure Options** No changes to BBPUD's government structure are pending or proposed.
- 8 Evaluation of Management Efficiencies** BBPUD appears to be reasonably managed and no management changes are pending or proposed.
- 9 Local Accountability and Governance** BBPUD's Board of Directors meets publicly the third Wednesday of each month; no changes to the district's governance are pending or proposed.

Camp Meeker Recreation and Park District

- 1 Infrastructure Needs and Deficiencies** Camp Meeker's water system is new and in excellent condition, but the area still needs sewer services.
- 2 Growth and Population Projections** Camp Meeker Recreation and Park District has addressed growth and population projections by adopting an Environmental Impact Statement which includes a specific growth allotment. Growth is expected to be very minimal at two to three new connections per year.
- 3 Financing Constraints and Opportunities** The addition of sewer service to Camp Meeker's responsibilities would add a new stream of revenue. The District has been successful acquiring state and federal grant monies in the past and may do so again in the future.
- 4 Cost Avoidance Opportunities** The buy-in by the adjoining Occidental County Sanitation District may help reduce costs to Camp Meeker residents by sharing the costs of operations and maintenance between residents from both districts.
- 5 Opportunities for Rate Restructuring** Camp Meeker facilities are new, and thus maintenance costs are expected to remain low, so substantial rate increases are unlikely.
- 6 Opportunities for Shared Facilities** Camp Meeker is currently working with Occidental County Sanitation District on a joint wastewater project, including the construction of Camp Meeker's first sewer collection system, construction of a new OCSD wastewater treatment plant, replacement of OCSD's collection system, and construction of a new effluent storage reservoir and irrigation system.
- 7 Government Structure Options** Camp Meeker RPD and Occidental County Sanitation District will need to develop a governance model for the operation of the joint sanitation system after it is constructed.
- 8 Evaluation of Management Efficiencies** Currently, the Russian River Utilities staff operates and maintains the Camp Meeker RPD water system. Construction of a joint sanitation system between Occidental and Camp Meeker RPD may offer opportunities for efficiency improvements in the future.
- 9 Local Accountability and Governance** Governance in Camp Meeker may change upon completion of the joint Occidental project. Future governance and operating models are currently being explored by OCSD, Camp Meeker, and the Occidental Community Services District, which proposes to take over the financially struggling sanitation district.

Forestville Water District

- 1 Infrastructure Needs and Deficiencies** With regular maintenance, Forestville Water District infrastructure and facilities appear adequate for existing development and to serve projected growth.
- 2 Growth and Population Projections** Forestville's current water allotment appears more than adequate to serve projected growth within the Forestville Urban Services Area, Mirabel Heights, and existing vacant lots outside the sanitation zone.
- 3 Financing Constraints and Opportunities** FWD's water system budget shows no outstanding debt, but the District will assume responsibility for the debt of the Forestville and Mirabel Heights sewer systems. The operation of sanitation services in Forestville and Mirabel Heights will both increase revenue to the District and incur more costs.
- 4 Cost Avoidance Opportunities** The Forestville Water District has attempted to avoid excess costs by establishing mechanisms to separate sanitation and water revenues and expenditures.
- 5 Opportunities for Rate Restructuring** Forestville Water District rates for water and sewer service will be reviewed and adjusted as necessary to fund District costs. Rates for sanitation service will no longer be set by the SCWA Board of Directors but instead by the FWD Board.
- 6 Opportunities for Shared Facilities** The Mirabel Heights collection system feeds into the Forestville wastewater treatment plant; the treatment plant also shares disposal and treatment capacity with the newly formed Graton Community Services District. Additionally, FWD's water supply allotment from SCWA is shared with Valley of the Moon Water District.
- 7 Government Structure Options** The Board of the Forestville Water District has assumed responsibility for not just water provision but for sanitation provision with the dissolution of the Forestville and Mirabel Heights sanitation districts.
- 8 Evaluation of Management Efficiencies** Having acquired the Forestville County Sanitation District and Mirabel Heights CSA #41, FWD will be able to eliminate confusion among customers formerly served by different districts and to streamline services for improved efficiency. Russian River Utility staff provide water operations for vacation relief and emergencies.
- 9 Local Accountability and Governance** FWD's five-member Board of Directors meets on the first Tuesday of each month. The transfer of sanitary operations to the Forestville Water District will provide further opportunities for localized accountability and governance.

Occidental Community Services District

- 1 Infrastructure Needs and Deficiencies** New water system infrastructure in the Occidental Community Services District is currently being funded through a combination USDA grant and loan.
- 2 Growth and Population Projections** Growth is expected to be minimal because not much undeveloped land remains within District boundaries. However, the District is expecting some growth in the immediate future with the development of a townhome project.
- 3 Financing Constraints and Opportunities** The Occidental Community Services District is currently repaying a 1987 loan and just created an assessment district to service the 2003 USDA loan. The District maintains an ample reserve.
- 4 Cost Avoidance Opportunities** OCSD may reduce costs in the future by reducing its service provision to fire service only if Camp Meeker takes over water and sewer provision in the area. Alternately, the District could incur more costs if it takes over the Occidental County Sanitation District.
- 5 Opportunities for Rate Restructuring** The Occidental Community Services District Board of Directors reviews rates each June and adjusts fees based on the construction cost index. Rates are currently higher than the Sonoma County average. It is anticipated that rates will continue to be reviewed and adjusted periodically as necessary to fund District costs.
- 6 Opportunities for Shared Facilities** OCSD is buying into the existing Camp Meeker Park and Recreation water system, which was just upgraded with new facilities.
- 7 Government Structure Options** OCSD may, in the future, take over the financially struggling Occidental County Sanitation District. A local operator may make the system more financially feasible.
- 8 Evaluation of Management Efficiencies** The OCSD water system is currently operated and maintained by Russian River Utility staff. This arrangement appears to be working efficiently and no changes to OCSD's management are pending or proposed.
- 9 Local Accountability and Governance** Occidental Community Services District's five-member Board of Directors meets on the third Thursday of each month. Accounting and governance of the District appear reasonable and no changes are pending or proposed.

Rains Creek Water District

- 1 Infrastructure Needs and Deficiencies** Existing facilities include old pipes and a new water system. Future infrastructure needs for Rains Creek have not been determined.
- 2 Growth and Population Projections** Population projections for the Rains Creek Water District were not available for review.
- 3 Financing Constraints and Opportunities** Rains Creek is currently servicing two sources of debt.
- 4 Cost Avoidance Opportunities** One way RCWD avoided costs was to incorporate gravity into its water system design.
- 5 Opportunities for Rate Restructuring** It is anticipated that rates will continue to be reviewed and adjusted as necessary to fund Rains Creek costs.
- 6 Opportunities for Shared Facilities** Rains Creek has a well located adjacent to the Cloverdale airport and provides a water connection to the airport.
- 7 Government Structure Options** No changes to the District's government structure are currently pending, although the District has considered the possibility of annexation by Cloverdale.
- 8 Evaluation of Management Efficiencies** RCWD lacks a Master Plan for its water system. Currently, the Russian River Utilities staff operates and maintains the Rains Creek water collection and delivery system.
- 9 Local Accountability and Governance** The District's first five-member Board of Directors was appointed by the County Board of Supervisors, but subsequent board membership has been elected within the District. RCWD's Board meets quarterly, and meetings are advertised and open to the public.

Russian River County Water District

- 1 Infrastructure Needs and Deficiencies** Current infrastructure plans in RRCWD's Capital Improvement Plan include new wells, new pipes and water mains, replacement of booster pumps, and increased storage capacity.
- 2 Growth and Population Projections** Although the district has not developed growth or population projections, RRCWD has budgeted funds for "future system expansion" in anticipation of increased demand.
- 3 Financing Constraints and Opportunities** RRCWD operations and improvement projects appear to be adequately funded by water sales and annual assessments.
- 4 Cost Avoidance Opportunities** The expansion of RRCWD services to nearby customers may offer opportunities for the distribution of costs in the future, potentially lowering customer charges. RRCWD's water conservation program may also lower water usage and operation costs.
- 5 Opportunities for Rate Restructuring** RRCWD's connection fee and user charges are annually reviewed and adjusted based on rising costs.
- 6 Opportunities for Shared Facilities** Russian River County Water District is in the process of annexing the Rural Canyon Mutual Water Company and the Hollydale Mutual Water Company. Also, RRCWD shares an intertie pipeline with the Forestville County Water District for accessing water during emergencies.
- 7 Government Structure Options** The Russian River County Water District is in the process of expanding its services to nearby water companies and applying for annexation of small areas outside its current boundaries.
- 8 Evaluation of Management Efficiencies** Currently, the Russian River Utility staff operate and maintain the RRCWD system. No changes to RRCWD's management are pending or proposed.
- 9 Local Accountability and Governance** RRCWD Board of Directors holds monthly public meetings the fourth Tuesday of every month in Forestville. Additionally, the District mails to all customers an annual "Consumer Confidence Report" which includes water quality information and the annual budget.

Sonoma Mountain County Water District

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| 1 Infrastructure Needs and Deficiencies | Sonoma Mountain County Water District's equipment is aging and vulnerable and may affect the District's ability to serve future growth. The District will develop a prioritized infrastructure replacement program after a comprehensive Brejle and Race report is completed. |
| 2 Growth and Population Projections | SMCWD does not expect any growth as the Sonoma Mountain community is completely built-out and no developable lots remain. |
| 3 Financing Constraints and Opportunities | SMCWD's budget shows no outstanding debt or reserve, though the district does retain funds in the state sponsored Local Agency Investment Fund. |
| 4 Cost Avoidance Opportunities | The completion of Sonoma Mountain County Water District capital improvement projects may offer opportunities to reduce future maintenance costs. |
| 5 Opportunities for Rate Restructuring | It is anticipated that rates will continue to be reviewed and adjusted as necessary to fund SMCWD's costs. |
| 6 Opportunities for Shared Facilities | Sonoma Mountain does not currently share facilities and probably could not, due to its geographical isolation. |
| 7 Government Structure Options | No changes to the Sonoma Mountain County Water District's government structure or boundary are pending or proposed. |
| 8 Evaluation of Management Efficiencies | No changes to SMCWD's management are pending or proposed. |
| 9 Local Accountability and Governance | SMCWD's Board of Directors meets on the second Tuesday of every other month at the home of one of the Board members. |

Sweetwater Springs Water District

- 1 Infrastructure Needs and Deficiencies** SSWD's infrastructure is aging and requires substantial upgrades. SSWD has secured partial funding for its comprehensive five-year CIP but needs to locate more funds to fully accomplish its significant infrastructure repair and replacement goals.
- 2 Growth and Population Projections** According to District staff, unless aggressive programs to reduce water demand and loss are implemented, the District will need to acquire additional water supplies to accommodate projected growth.
- 3 Financing Constraints and Opportunities** SSWD is currently paying off three sources of debt and maintains a modest reserve. The District has successfully acquired grant money in the past and may be able to do so again in the future to fund capital facilities needs.
- 4 Cost Avoidance Opportunities** The District may be able to postpone future costs associated with the acquisition of additional water supplies if water conservation and water-loss reduction programs are implemented.
- 5 Opportunities for Rate Restructuring** Water conservation efforts may help keep SSWD rates at about the Sonoma County average.
- 6 Opportunities for Shared Facilities** No opportunities for shared facilities have been identified.
- 7 Government Structure Options** The SSWD boundary is not expected to grow in the next five years. Most commercial and residential development in the area will be infill on existing vacant lots. No changes to the government structure are pending or proposed.
- 8 Evaluation of Management Efficiencies** SSWD is undertaking a substantial (over \$17 million) capital improvement program to address system deficiencies. It is likely that these improvements will help reduce water loss from the system, and potentially reduce future claims against the District, and related insurance costs.
- 9 Local Accountability and Governance** SSWD is governed by a five-member Board of Directors elected at-large throughout the District. Meetings are open to public comment and staff reports and other documents are available for public review at District headquarters in Guerneville. The District's annual budget report is available to the public online at www.sweetwatersprings.com.

Timber Cove County Water District

- 1 Infrastructure Needs and Deficiencies** At subdivision buildout beyond the next five years, Timber Cove's raw water storage infrastructure and water treatment and storage facilities may need to be upgraded or replaced.
- 2 Growth and Population Projections** The Timber Cove County Water District is a small water provider for a planned residential community with little potential for growth within its boundaries.
- 3 Financing Constraints and Opportunities** TCCWD raised both the base rate and the tiered quantity rate in the past two years. The District maintains an adequate reserve of more than half of annual operating expenditures, and the District provides for depreciation in its budgetary process.
- 4 Cost Avoidance Opportunities** Half of TCCWD's lots are unmetered. Metering all connections might allow the District to more effectively track water use and water loss.
- 5 Opportunities for Rate Restructuring** Timber Cove County Water District's base rates were raised from \$30 to \$35 in July 2003. Quantity charges were changed in January 2004 to a tiered rate based on gallons used. This type of rate encourages water conservation. Rates will continue to be reviewed and adjusted to fund District costs.
- 6 Opportunities for Shared Facilities** No opportunities for shared facilities have been identified at this time due to the geographical isolation of Timber Cove.
- 7 Government Structure Options** No changes to TCCWD's government structure are pending or proposed.
- 8 Evaluation of Management Efficiencies** TCCWD lacks a Master Plan, and could benefit from establishing a long-term plan.
- 9 Local Accountability and Governance** TCCWD's Board of Directors meets on the third Saturday of each month at the Fort Ross Elementary School.

Valley of the Moon Water District

- 1 Infrastructure Needs and Deficiencies** Many of VOMWD's water mains, storage tanks, and booster pumps have already been repaired or replaced, and the District is in the process of adding another storage tank and securing additional well capacity. VOMWD is also negotiating with SCWA for additional water supplies, which may require a new aqueduct to be jointly funded by VOMWD and the City of Sonoma.
- 2 Growth and Population Projections** VOMWD has reached its SCWA entitlement and needs additional water supplies to serve projected growth. This additional supply may come from a combination of new VOMWD wells, water conservation, reclaimed water, and an increased SCWA entitlement.
- 3 Financing Constraints and Opportunities** VOMWD maintains a strong reserve and a contingency fund for emergencies, while funding operations through user fees.
- 4 Cost Avoidance Opportunities** An aggressive water conservation program and the development of new District wells may postpone or obviate the need for the construction of a costly new Aqueduct.
- 5 Opportunities for Rate Restructuring** The District's governing body is empowered to adjust user fees and/or secure debt financing to cover District needs annually. It is anticipated that rates will continue to be reviewed and adjusted as necessary to fund VOMWD's costs.
- 6 Opportunities for Shared Facilities** VOMWD shares the use of the current Sonoma Aqueduct with the City of Sonoma, and would jointly fund and use a second Aqueduct, if needed.
- 7 Government Structure Options** No changes to VOMWD's governing structure are pending or proposed.
- 8 Evaluation of Management Efficiencies** VOMWD has completed its SCADA system to allow for remote monitoring of all infrastructure. This will allow the District to gather more data faster, increasing both efficiency and accuracy. VOMWD's CIP is updated each year to effectively address needs as they arise.
- 9 Local Accountability and Governance** VOMWD conducts Brown Act Open Meeting workshops after every election, and the District adheres to accounting practices and standards as required by the State of California, and consistent with the Government Accounting Standards Board.

Airport-Larkfield-Wikiup Sanitation Zone

- 1 Infrastructure Needs and Deficiencies** The A-L-W Sanitation Zone needs additional treatment, storage and disposal capacity to accommodate future growth. The already-funded Reclamation Facilities Project appears to adequately address these infrastructure needs.
- 2 Growth and Population Projections** Demand at buildout of the A-L-W Sanitation Zone depends on what type of growth is allowed west of Highway 101, and may change if a planned Hospital is annexed into the service boundary. The demand on sanitation services partly will depend on whether the area west of the Highway is slated for residential or industrial use.
- 3 Financing Constraints and Opportunities** The A-L-W Sanitation Zone has funded current improvements through the use of revenue bonds and through rate increases, and maintains reasonable reserves.
- 4 Cost Avoidance Opportunities** The A-L-W Zone is already connection to SCWA's data-gathering SCADA system and works with local irrigators for the beneficial re-use of recycled wastewater. Expansion of either of these programs may lead to further cost savings.
- 5 Opportunities for Rate Restructuring** Rates should continue to be reviewed and adjusted annually as necessary to fund District costs and provide for capital improvements as needed.
- 6 Opportunities for Shared Facilities** No opportunities for shared facilities have been identified at this time.
- 7 Government Structure Options** In the current General Plan Update, the A-L-Z Sanitation Zone's Urban Service Boundary will probably be expanded so that it is coterminous with the Zone's actual service boundary, minus three split parcels.
- 8 Evaluation of Management Efficiencies** The A-L-Z Zone appears to be managed efficiently by SCWA personnel, with the help of the data-gathering and remote monitoring SCADA system. No changes to management are pending or proposed.
- 9 Local Accountability and Governance** Water Agency operators of the A-L-Z Sanitation Zone's follow standard County accounting procedures, and the County Board of Directors holds public meetings most Tuesday mornings.

Forestville Water District "Sewer Service Zone"

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| 1 Infrastructure Needs and Deficiencies | The recently completed upgrade to the Forestville wastewater treatment plant appears adequate to meet the requirement that wastewater discharged into the Russian River be treated to tertiary levels. A new pipeline has been constructed to allow the transfer of water between Graton and Forestville for both further treatment and irrigation purposes. |
| 2 Growth and Population Projections | Forestville's sewer system will require a slight capacity increase to accommodate full General Plan buildout, but the new capacity of the upgraded treatment plant appears adequate for the near future. |
| 3 Financing Constraints and Opportunities | The Forestville sewer system has received funding for required improvements through various grants and loans, but lacks a reasonable reserve. Charges collected by Mirabel Heights are transferred to the Forestville operating budget. |
| 4 Cost Avoidance Opportunities | Forestville Water District's exercise of its latent powers to provide sanitation services to parcels in what was the Forestville County Sanitation District may offer opportunities to streamline efficiencies and reduce costs. |
| 5 Opportunities for Rate Restructuring | Forestville has limited opportunity to raise rates because its sanitary service charges are already among the highest in Sonoma County. |
| 6 Opportunities for Shared Facilities | The Forestville treatment plant's capacity is shared with the Mirabel Heights collection system and a pipeline connects it to the Graton Community Services District for treatment and irrigation purposes. |
| 7 Government Structure Options | The Forestville sewer service boundary did not change with the transfer of sewer operations to the Forestville Water District. Operation and maintenance duties have been taken over by the staff and Board of Directors of the Forestville Water District. |
| 8 Evaluation of Management Efficiencies | The consolidation of the Forestville Water and Sewer systems may offer opportunities to streamline efficiencies and reduce costs. |
| 9 Local Accountability and Governance | The transfer of sanitation service from SCWA to the Forestville Water District offers opportunities for more localized accountability and a more responsive governing board. |

Geyserville Sanitation Zone

- 1 Infrastructure Needs and Deficiencies** The Geyserville Sanitation Zone's infrastructure is adequate to treat and dispose of inflows for the next five years. However, capacity is not adequate for 2020 projections and significant infrastructure upgrades will be required to meet demands beyond five years.
- 2 Growth and Population Projections** A significant increase in treatment capacity will be required to accommodate buildout in the Geyserville Sanitation Zone. GSZ lacks a Master Plan or equivalent document to address future plans for service.
- 3 Financing Constraints and Opportunities** With slow growth in the area, Geyserville has been able to put aside revenue and has accumulated a more than adequate reserve, with set-asides for anticipated repairs and replacements.
- 4 Cost Avoidance Opportunities** No cost avoidance opportunities have been identified at this time.
- 5 Opportunities for Rate Restructuring** Rates should continue to be reviewed and adjusted annually as necessary to fund District costs and provide for capital improvements as needed. The District is operating at the Agency's top level of service rating.
- 6 Opportunities for Shared Facilities** No opportunities for shared facilities have been identified at this time.
- 7 Government Structure Options** No boundary changes are pending or proposed at this time.
- 8 Evaluation of Management Efficiencies** Geyserville's small treatment plant is already fully-connected to the Water Agency's SCADA system and no other efficiency improvements are planned at this time.
- 9 Local Accountability and Governance** Currently, the Water Agency operators of GSZ follow standard County accounting procedures, and the County Board of Directors holds public meetings most Tuesday mornings.

Graton Community Services District

- 1 Infrastructure Needs and Deficiencies** The construction of a permanent pipeline between the Graton and Forestville treatment plants will allow Forestville to further treat Graton's secondary treated effluent to tertiary levels. In the long-term, Graton may need to upgrade its own treatment facility to tertiary levels.
- 2 Growth and Population Projections** The Graton CSD's infrastructure, along with the agreement for tertiary treatment by the Forestville plant, is adequate to accommodate projected 2020 growth, but will need increased storage and/or disposal capacity to handle wet weather flows and full buildout of the land use map.
- 3 Financing Constraints and Opportunities** The Graton CSD is currently making payments on its General Obligation bond (for acquisition of the District) and maintains a reasonable reserve.
- 4 Cost Avoidance Opportunities** Construction of various infrastructure improvements in Graton will reduce the likelihood of future litigation related to sewage spills and illegal discharge of effluent.
- 5 Opportunities for Rate Restructuring** The magnitude of possible rate increases in Graton depends on whether the Graton treatment plant itself will eventually be upgraded, and also on the availability of State and Federal funds.
- 6 Opportunities for Shared Facilities** Graton CSD shares a pipeline with the Forestville treatment plant for the transfer of Graton's secondary treated effluent for further treatment to tertiary standards and for the transfer of recycled water for irrigation purposes.
- 7 Government Structure Options** The Graton Community Services District was just formed and has taken over responsibility and operations of the former Graton Sanitation Zone of the Sonoma County Water Agency.
- 8 Evaluation of Management Efficiencies** The recent re-organization of the SCWA Graton Sanitation Zone has transferred management responsibility to a new local entity, the Graton Community Services District, which may improve management response to local conditions.
- 9 Local Accountability and Governance** The Graton Community Service District will provide opportunities for more localized accountability and governance.

Occidental County Sanitation District

- 1 Infrastructure Needs and Deficiencies** The Occidental County Sanitation District is in a “critical state of disrepair.” The collection system and the treatment facility need replacement and upgrades. Plans are in place for new joint sanitation infrastructure with Camp Meeker.
- 2 Growth and Population Projections** Growth in Occidental is currently limited to one connection per year, in part due to ongoing NPDES violations and significantly constrained water availability. Also, potential for commercial growth is low because most commercial lots are already developed.
- 3 Financing Constraints and Opportunities** For years, the Occidental Sanitation system has been kept afloat through loans from SCWA’s General Fund. Operating revenues are not sufficient to cover both the costs of continued operation and the required infrastructure improvements. The District has successfully won federal grant money for its upcoming infrastructure improvements.
- 4 Cost Avoidance Opportunities** The construction of capital improvement projects at Occidental CSD offers opportunities for reductions of future costs, allowing for an improved financial base and stronger management structure. The installation of a data-gathering and remote monitoring system might detect spills and leaks earlier, allowing a faster and less-costly response.
- 5 Opportunities for Rate Restructuring** Occidental has limited opportunity to raise rates because its sanitary service charges are among the highest in Sonoma County, probably due to a minimal number of ratepayers (little revenue) and the district’s aging infrastructure (high maintenance and replacement costs). The future possibility of combining efforts with Camp Meeker may offer opportunities to reduce rates.
- 6 Opportunities for Shared Facilities** OCSD is currently working with Camp Meeker Recreation and Park District on a joint wastewater project, including the construction of Camp Meeker’s first sewer collection system, construction of a new OCSD wastewater treatment plant, replacement of OCSD’s collection system, and construction of a new effluent storage reservoir and irrigation system.
- 7 Government Structure Options** Occidental County Sanitation District and Camp Meeker RPD will need to develop a governance model for the operation of the joint sanitation system after it is constructed.
- 8 Evaluation of Management Efficiencies** Construction of a joint sanitation system between Occidental and Camp Meeker RPD offers opportunities for efficiency improvements. New facilities will improve operations and reduce system failure.
- 9 Local Accountability and Governance** Governance in Occidental may change upon completion of the joint Camp Meeker project. Future governance and operating models are currently being explored by OCSD, Camp Meeker, and the Occidental Community Services District, which proposes to take over the financially struggling sanitation district.

Penngrove Sanitation Zone

- 1 Infrastructure Needs and Deficiencies** Penngrove needs a new trunk sewer line to convey wastewater to the Petaluma wastewater treatment plant. Funding for this project has already been budgeted. Penngrove will also be involved in the upgrade of the Petaluma treatment plant.
- 2 Growth and Population Projections** Penngrove's contract with Petaluma's sanitation facility is capped at a population of 3,000, which appears more than adequate for the area's projected residential and moderate commercial/industrial development.
- 3 Financing Constraints and Opportunities** Penngrove's Sanitation Zone is currently making payments on its General Obligation bond (for acquisition of the District) and maintains a reasonable reserve. Penngrove will be required to fund a share of the Petaluma treatment plant upgrade.
- 4 Cost Avoidance Opportunities** Penngrove Sanitation Zone is already connected to SCWA's SCADA system; no other cost avoidance opportunities have been identified at this time.
- 5 Opportunities for Rate Restructuring** Rates should continue to be reviewed and adjusted annually as necessary to fund District costs and provide for capital improvements as needed.
- 6 Opportunities for Shared Facilities** The Penngrove Sanitation Zone pipelines deliver wastewater to Petaluma's wastewater treatment plant, thus sharing Petaluma's available treatment capacity.
- 7 Government Structure Options** No changes to government structure are pending or proposed.
- 8 Evaluation of Management Efficiencies** Penngrove's pump station is already connected to the Agency's SCADA system and no other management efficiency improvements are currently planned or proposed.
- 9 Local Accountability and Governance** Currently, the Water Agency operators of Penngrove Sanitation Zone follow standard County accounting procedures, and the County Board of Directors holds public meetings most Tuesday mornings.

Russian River County Sanitation Zone

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| 1 Infrastructure Needs and Deficiencies | The Russian River County Sanitation District is currently funding major capital improvements to increase treatment, storage and disposal capacity for future development and to better accommodate wet weather flows. Further funding is needed to complete required projects. |
| 2 Growth and Population Projections | RRCSD will need to increase disposal capacity to meet projected demands from future growth. |
| 3 Financing Constraints and Opportunities | RRCSD has acquired a grant to cover part of its current capital improvement project. The District is currently paying off general obligation bonds from 1979 and 1981; debt payments represent ten percent of the operating budget. |
| 4 Cost Avoidance Opportunities | RRCSD is seeking defense provisions in its Regional Water Quality Control Board permit for protection against financial penalties for disruptions in operations due to natural disasters such as floods. This may help the District avoid future liability costs. |
| 5 Opportunities for Rate Restructuring | Rates in the Russian River District are expected to rise to increase the level of capital replacement funding to ensure the long-term viability of the system. However, Russian River rates are already high for Sonoma County. |
| 6 Opportunities for Shared Facilities | No opportunities for shared facilities have been identified. |
| 7 Government Structure Options | No changes to government structure are pending or proposed. |
| 8 Evaluation of Management Efficiencies | The connection of new construction at Russian River's new treatment plant to the Agency's SCADA system offers opportunities for real-time data acquisition and more prompt mitigation measures in response to problem situations. |
| 9 Local Accountability and Governance | Water Agency operators of the RRCSD follow standard County accounting procedures, and the County Board of Directors holds public meetings most Tuesday mornings. |

Sea Ranch Sanitation Zone

- 1 Infrastructure Needs and Deficiencies** Other than routine repair and replacement of portions of the collections system, Sea Ranch Sanitation Zone infrastructure and facilities appear adequate at this time. The Zone has plans for the consolidation of the two treatment plants in the future to address the needs of added demand and more stringent water quality standards.
- 2 Growth and Population Projections** Demand for sanitation service in Sea Ranch depends partly on the growing number of year-round residents. It is likely that existing facilities, once consolidated, will be adequate to serve future growth.
- 3 Financing Constraints and Opportunities** Sea Ranch Zone shows no outstanding debt and maintains an adequate reserve. The Zone applied for but did not win Clean Beach Funding for the treatment plant consolidation project. The treatment plant consolidation project will be funded by existing sewer connection fees and development impact fees.
- 4 Cost Avoidance Opportunities** The consolidation of the two treatment plants in Sea Ranch will likely reduce costs associated with the operation of two wastewater treatment plants. One plant will be used either as a pump station only, or to treat wastewater to secondary standards only, after which water will be sent to the second plant for tertiary treatment. This will obviate the need to upgrade both treatment plants.
- 5 Opportunities for Rate Restructuring** Rates should continue to be reviewed and adjusted annually as necessary to fund District costs and provide for capital improvements as needed.
- 6 Opportunities for Shared Facilities** The draft EIR prepared in 2003 proposes to consolidate Sea Ranch's two treatment plants for streamlined efficiency. Additionally, the Gualala treatment plant has agreed to further treat effluent from Sea Ranch's North treatment plant to tertiary levels so that it can be used to irrigate the Sea Ranch Golf Links.
- 7 Government Structure Options** SRSZ is currently investigating the feasibility of turning over operations to the Sea Ranch Association. This would cancel the need for the special contract between the Water Agency and the Sea Ranch Water Company.
- 8 Evaluation of Management Efficiencies** Currently, no changes to management in the Sea Ranch Sanitation Zone are pending or proposed.
- 9 Local Accountability and Governance** Water Agency operators of the SRSZ follow standard County accounting procedures, and the County Board of Directors holds public meetings most Tuesday mornings. The transfer of SRSZ to the Sea Ranch Water Company would offer opportunities for more local governance and community accountability.

Sonoma Valley County Sanitation District

- 1 Infrastructure Needs and Deficiencies** SVCSD is completing a program of improvements to address infrastructure deficiencies, and to comply with the terms of its NPDES permit. Currently planned projects include a new pipeline for increased irrigation disposal, the replacement of the main sewer trunk, and an upgrade of the treatment plant to tertiary levels.
- 2 Growth and Population Projections** Anticipated growth within SVCSD's unincorporated areas and the City of Sonoma will require capacity increases and additional disposal capacity, for which the District is already planning.
- 3 Financing Constraints and Opportunities** SVCSD has funded required improvements through the use of revenue bonds, and maintains reasonable reserves and provides set-asides for ongoing facility depreciation in its budgeting process. SVCSD also pursues other funding options such as state-revolving fund loans, grants, and others.
- 4 Cost Avoidance Opportunities** Recent and planned improvements are likely to reduce future costs of possible litigation and fines related to permit violations. Further connections to the Water Agency's SCADA system may allow operators to respond more quickly to problems, helping to further reduce the costs associated with possible permit violations. The District has also achieved cost-savings through power savings, including the automation of its aeration system, which is highest power consumer in a treatment plant, plus power infrastructure revision to reduce power usage and costs.
- 5 Opportunities for Rate Restructuring** Rates should continue to be reviewed and adjusted annually as necessary to fund District costs and provide for capital improvements as needed.
- 6 Opportunities for Shared Facilities** No opportunities for shared facilities have been identified.
- 7 Government Structure Options** No changes to government structure are pending or proposed.
- 8 Evaluation of Management Efficiencies** The Agency's SCADA system, already installed at SVCSD, allows real-time monitoring of facilities and allows operators to respond more quickly to problems.
- 9 Local Accountability and Governance** SVCSD is governed by two members of the Sonoma County Board of Supervisors and the Mayor of the City of Sonoma. Meetings and hearings are open to the public at the County Administration Center, Tuesday mornings.

South Park County Sanitation District

- 1 Infrastructure Needs and Deficiencies** SCWA, the operator of South Park County Sanitation District, has agreed to complete \$1.7 million of infrastructure improvements to the collection system as a prerequisite for Santa Rosa to takeover District operations. These projects include the replacement of over 40,000 feet of collector lines and an upgrade to the Todd Road lift station.
- 2 Growth and Population Projections** Future capacity for sewer service in South Park will depend on the disposal capacity of the City of Santa Rosa's wastewater treatment plant. Most growth in the South Park area is expected to take place after the transfer in FY 10-11.
- 3 Financing Constraints and Opportunities** South Park CSD maintains adequate reserves and is funding current infrastructure improvements with revenue bonds. HVOC remediation presents a possibly substantial future financing constraint.
- 4 Cost Avoidance Opportunities** No cost avoidance opportunities have been identified at this time.
- 5 Opportunities for Rate Restructuring** Upon transfer of SPSZ to Santa Rosa, rates in the South Park area may be adjusted.
- 6 Opportunities for Shared Facilities** South Park's sanitation system is connected to the City of Santa Rosa's wastewater treatment facility and thus shares the City's disposal capacity.
- 7 Government Structure Options** The City of Santa Rosa will eventually assume management and operations of the South Park sanitation system, resulting in a change to the District's governing structure.
- 8 Evaluation of Management Efficiencies** Transfer to the City of Santa Rosa offers potential opportunities for improved management efficiencies.
- 9 Local Accountability and Governance** Following transfer of the South Park Sanitation Zone from SCWA to Santa Rosa, accountability and governance will become the responsibilities of the City and its Board of Directors.