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DATE: March 16, 2007

SUBJ: Adjustments to Sewer Service Charges
Murray Park Sewer Maintenance District
San Quentin Village Sewer Maintenance District

INTRODUCTION

Bartle Wells Associates has been retained by the Marin County Department of Public Works to assist the County in identifying the amount of needed sewer service charges to maintain adequate revenues to meet increasingly strict health, safety and environmental regulations in two sewer service areas: Murray Park Sewer Maintenance District and San Quentin Village Sewer Maintenance District.

Table 1.	San Quentin Village	Murray Park
Location	San Quentin Village is located basically along Main Street leading to the main gate of San Quentin State Prison.	Murray Park is an unincorporated area located roughly between Larkspur and Kent woodlands.
Pipeline Maintenance	Limited Maintenance	Murray Park currently contracts with Ross Valley Sanitary District (also called Sanitary District #1) for collection system maintenance.
Wastewater Treatment	Central Marin Sanitation Agency Regional treatment plant	Central Marin Sanitation Agency Regional treatment plant
Total Service Units	45 (33 single family + 10 multi-family + 2 other)	91 (89 single family + 2 multi-family)
Parcels	37	90

PROJECT BACKGROUND AND PURPOSE

Historical Challenges Facing Murray Park and San Quentin Village SMDs

Both Murray Park and San Quentin Village Sewer Maintenance Districts are independent local government units providing sewer collection services. In prior years, only minimal maintenance was required and the systems basically ran themselves with some modest "voluntary" oversight by the County. Treatment and disposal is provided at the Central Marin Sanitation Agency

(CMSA) treatment facilities. State and federal grants in the mid-1980s funded the treatment plant.

The members of the Board of Directors of each agency are the same people who serve as County Supervisors. The Supervisors "change hats" periodically to serve as directors of the sewer agencies. The County has no source of revenue to pay costs related to the Districts, and also lacks the personnel and expertise to meet increasing regulatory and sewer maintenance mandates.

As a result of this unusual situation, the Districts have: no preventive maintenance, no capital improvements, no planned operations and maintenance activities, no maps of systems and facilities, and a large liability per customer since so few people would share in the cost of any breakdown or regulatory fine.

Looming Challenges Facing Murray Park and San Quentin Village

The Central Marin Sanitation Agency, manager of the regional wastewater treatment plant, is undertaking major improvements at its plant. State and federal grants are no longer available and improvement costs are being funded by selling about \$64 million of bonds with the cost to be shared among treatment plant users throughout the region.

In addition, the state is now enforcing mandatory penalties for any collection system sewage spills. Previously, small sewage spills were not subject to penalty and were an expected result given sewer construction practice prior to about 1970. San Quentin Village is especially vulnerable because of the proximity of its aging pump station to San Francisco Bay.

Given the above conditions, every sewer user within CMSA will be subject to increasing costs for wastewater service. Actually, wastewater costs are increasing statewide because of similar constraints.

FINANCES

Financial Summary

Current sewer service charges for both agencies are low. Costs are increasing for repair and maintenance of aging pipeline systems, stricter regulations are increasing operations and maintenance costs, treatment costs are on the rise, and some major capital improvements are needed.

Table 2.	San Quentin Village	Murray Park
Expenses	Has not funded expenses for treatment and disposal in the past. These expenses must be funded in the future.	Expenses do not reflect the true cost of providing wastewater service

Current Service Charges and Expenses

Each District is very small and levies an annual service charge that is collected along with property taxes. The current level of service charge is well below an amount sufficient to pay for collection system maintenance and treatment and disposal of wastewater. The current level of

service charge is well below all other agencies in the CMSA service area as well as the rest of Marin County. Both districts hold some reserves. These reserves are available to fund a share of needed capital improvements.

Table 3 shows the number of service units and service charge revenues.

Table 3.	Review of Sewer Service Charges	
	San Quentin Village	Murray Park
Single family residential	33	89
Multi family residential	10	2
Other	2	
Total service units	45	91
Parcels	37	90
Annual service charge/unit (1)	\$120	\$84
Annual service charge revenue	\$5,474	\$7,738
Less: County \$2/parcel charge	74	180
Net service charge revenue	\$5,400	\$7,558

Current Annual Revenues and Expenses

Table 4 shows a four year history of revenues and expenses for San Quentin Village and Table 5 shows the same information for Murray Park. Annual budgets are prepared by Marin County staff.

Table 4.

	Summary of SQV Revenues and Expenses			
	2002/03	2003/04	2004/05	2005/06
Beginning fund balance	\$216,995	\$234,613	\$238,216	\$250,257
Revenues				
Service charges	\$5,134	\$5,160	\$5,278	\$5,354
Property taxes	11,124	11,593	10,134	12,685
Interest	4,412	3,217	4,255	3,500
Misc revenues	120	117	116	120
Excess ERAF	<u>1,252</u>	<u>1,360</u>	<u>3,999</u>	<u>2,050</u>
Total revenues	22,042	21,447	23,782	23,709
Expenses				
Contract services	\$3,018	\$12,180	\$7,950	\$4,512
Marin Co administration				533
Marin Co. overhead	822	863	906	951
Misc fees	135	164	173	0
Other	<u>449</u>	<u>4,637</u>	<u>2,712</u>	<u>3,400</u>
	4,424	17,844	11,741	9,396
Net revenues	\$17,618	\$3,603	\$12,041	\$14,313

Table 5.

	Murray Park Revenues and Expenses			
	2002/03	2003/04	2004/05	2005/06
Beginning fund balance	\$75,459	\$82,296	\$89,441	\$99,069
Revenues				
Service charges	\$7,689	\$7,728	\$7,560	\$7,738
Property taxes	21,758	22,678	21,518	24,602
Interest	1,437	1,171	1,646	1,500
Misc revenues	233	228	230	235
Excess ERAF	<u>1,874</u>	<u>2,035</u>	<u>5,905</u>	<u>2,149</u>
Total revenues	32,991	33,840	36,859	36,224
Expenses				
SD#1/CMSA	\$25,098	\$25,543	\$25,988	\$30,000
Marin Co administration				533
Marin Co. overhead	792	832	874	918
Misc fees	<u>264</u>	<u>320</u>	<u>369</u>	<u>0</u>
	26,154	26,695	27,231	31,451
Net revenues	\$6,837	\$7,145	\$9,628	\$4,773

Growing Cost of Repairs and Ongoing Maintenance

Older sewer pipelines require more modern joint methods and materials to reduce sewage spills. Such facilities normally have useful lives of about 50 years and pipelines in the two sewer service district are about 50 years old. Because the sewer pipelines are aging and becoming worn, increased collection system repairs and replacements are an ongoing requirement for both agencies. Each year some portion of the collection system will require repair or replacement. Furthermore, in both areas, the lines are expected to require complete replacement in the foreseeable future. An ongoing maintenance program can greatly extend the useful life of sewer lines.

Additional Costs of Increasing State Regulations

The state has instituted a system of mandatory fines for any wastewater spill. In addition, the state is now implementing sewer system management programs that mandate sewer maintenance requirements. A passive sewer maintenance program is now longer allowable.

Cost of Treatment Plant Improvements

Wastewater from both districts is treated at the Central Marin Sanitation Agency wastewater treatment plant. CMSA serves the entire Ross Valley including Corte Madera, Greenbrae, Larkspur, Kentfield, San Quentin Prison, downtown San Rafael, Ross, Fairfax, San Anselmo and adjacent other unincorporated areas. CMSA costs are levied to every sewer user in the service area. CMSA is implementing a plan to replace and improve major components of the treatment and disposal facility. The agency recently sold about \$64 million in bonds (certificates of participation) to finance needed improvements. CMSA estimates that these bonds will cost each user \$109 per year.

Capital Improvements

In San Quentin Village a sewage pump station is located within about 100 feet of San Francisco Bay. The State of California Water Resources Control Board would consider any sewage overflow to the Bay a serious violation and would likely impose severe fines. An engineering study performed by Nute Engineering determined that the existing pump station must be replaced in San Quentin Village. The engineers estimate the new pump station will cost about \$270,000. In addition, an emergency power generator is required at the pump station, in the event of a power outage (\$70,000).

Table 5.	San Quentin Village	Murray Park
Pipeline Quantity and Lifespan	San Quentin Village has about 1,200 feet of mostly 6" sewers.	The Murray Park service area includes over 4,500 feet of 5" and 6" diameter sewer lines.
Cost of Full replacement of sewer lines @ \$100 / foot	\$120,000 in San Quentin Village.	\$450,000 in Murray Park
Wastewater Treatment Increases	\$109 per user / year	\$109 per user / year
Capital Improvement Costs	\$340,000 for pump station and emergency power generator	

Costs of Increased Operations and Maintenance Management

As mentioned earlier, the County has no personnel with wastewater expertise and no funds to retain such workers. What's more, proper sewer maintenance requires a variety of specialized workers with state certifications and costly equipment. The size of the service areas of Murray Park and San Quentin Village Sewer Maintenance District's are not large enough to support the required team of maintenance workers and their equipment. Currently Murray Park Sanitary District contracts with the neighboring Ross Valley Sanitary District for sewer collection system maintenance and repairs. This study proposes that a similar agreement should be made for Ross Valley Sanitary District to carry out maintenance and repairs for San Quentin Village as well. Preliminary discussions with Ross Valley Sanitary District have been held.

Revenue Requirement

The numerous factors described above that are increasing the need for revenue will require a series of increases in sewer service charges. There are a number of ways to estimate future costs and revenue needs. The classic way is to undertake a Sewer Master Plan—a detailed study of the physical system, operational effectiveness, maintenance status and methods and management. Such studies are usually undertaken by outside engineering firms and are prohibitively costly for very small system users.

A less costly, yet still reasonable alternative is to compare costs to similar neighboring systems. It is reasonable to expect that Murray Park and San Quentin Village users will require a similar level of sewer service charges as all other users of the CMSA treatment facilities in the region.

Table 6. **COMPARISON OF SEWER SERVICE CHARGES** 2006-2007

Murray Park Sewer Maint. District	\$84
San Quentin Village Sewer Maint. District	120
Richardson Bay Sanitary District	246
Las Gallinas Valley Sanitary District	253
Ross Valley Sanitary District (CMSA)	270
Alto Sanitary District	285
Mill Valley	297
Sausalito-Marin City Sanitary District	298
Novato Sanitary District	302
Larkspur (CMSA)	342
Corte Madera Sanitary District (CMSA)	350
Tiburon Sanitary District	351
San Rafael Sanitation District (CMSA)	396
Benicia	472
Petaluma	516
Belvedere	890

Table 6 shows a comparison of Sewer Service Charges for neighboring wastewater agencies in 2006-2007. The rate recommendations for San Quentin Village and Murray park apply the rates of Ross Valley Sanitary District as a baseline to estimate charges for San Quentin Village and Murray Park because it is the lowest cost provider in the CMSA treatment system, is adjacent to both SMD's, provides maintenance for Murray Park currently and could, potentially, provide maintenance for San Quentin Village.

Table 7.	PROJECTED SEWER SERVICE CHARGE REQUIREMENTS	Current San Quentin	Current Murray Park	CMSA Area Required
	Treatment plant operations			\$162
	Treatment plant rehabilitation (bonds)			100
	Collection system operations and capital			210
	Total	\$120	\$84	\$472

Table 7 shows a projection of sewer service charges developed by CMSA and estimated for Ross Valley Sanitary District. CMSA projects service charge increases for operations as well as to finance treatment plant improvements. Likewise, Ross Valley Sanitary District also expects future rate increases because of the strict new federal and state guidelines and regulations.

The Table shows that service charge rates are expected to increase substantially within the next several years. Rate projections shown on Table 7 are based on the latest available information.

Service Charge Rate Recommendation

Both Murray Park SMD and San Quentin Village SMD will need to increase sewer service charges substantially over the next few years. Rate increases are required to provide an adequate level of current funding plus increase to pay a proportionate share of future requirements.

Table 8 shows the recommended sewer service charges to catch up with projected charge requirements. The charges would phase-in over a two-year period. Initially the charges may be slightly ahead of the other CMSA areas. This would provide revenues to rehabilitate collections system facilities. By the third year they would be on a par with all other users within Ross Valley Sanitary District and others within the CMSA service area.

Table 8.	RECOMMENDED SEWER SERVICE CHARGES	CMSA Area Required	2007/08	2008/09
	Total	\$472	\$368	\$472

Implementation

A number of steps are required for the Districts to approve increases to the sewer service charge as summarized in Table 9.

Table 9.	SUMMARY OF STEPS TO APPROVE SEWER SERVICE CHARGE INCREASE	Timing
	Outreach and dialogue with customers of Murray Park and San Quentin Village Sewer Maintenance Districts through public meetings, mailings and direct contact.	October 2006 – March 2007
	Refine service charge report and finalize it based on new information and input from the users	April 2007
	Board of each district accepts fee report and sets public hearing date	April 2007
	Mail Proposition 218 Mailer to all customers providing information about the proposed increase and date of hearing	April 2007
	Public Hearing to Consider and approve increase	June 2007