

City of Vista Wastewater Final Report Financial Plan

January 2013





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January 15, 2013

Robin Putnam
Director of Community Projects
200 Civic Center Drive
Vista, California 92084

Dear Ms. Putnam,

Raftelis Financial Consultants (RFC), Inc. is pleased to provide the Wastewater Rate Study Report (Report), which develops a financial plan and the associated rates for the City for fiscal years 2014 to 2018. This Report summarizes key findings and recommendations related to the rates necessary for the City to meet its financial obligations.

It has been a pleasure working with you and we wish to express our thanks to you and City Staff for the support provided throughout the course of this study. If you have any questions regarding the Report, please do not hesitate to contact me at (213) 327-4405.

Sincerely,

Raftelis Financial Consultants, Inc.

A handwritten signature in black ink, appearing to read 'Sanjay Gaur', written in a cursive style.

Sanjay Gaur
Senior Manager

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Section 1

Approach

Approach

Every wastewater utility must receive sufficient total revenue to ensure proper operation and maintenance (O&M), development and perpetuation of the system, and preservation of the utility's financial integrity to provide adequate wastewater service to its customers.

Revenue requirements may be established either through the utility approach or the cash-needs approach. The utility approach to determine revenue requirements is followed by most investor-owned utilities and government utilities that are regulated by a state public utilities commission. The utility approach allows the utility to recover operating requirements, depreciation, and a return on capital as determined by generally accepted accounting principles. For the cash-needs approach, followed by most unregulated governmental utilities, user charges are structured to recover specific operations and capital cash requirements.

For the City of Vista Wastewater Enterprise (City), RFC utilized the cash-needs approach for development of revenue requirements and the associated rates. In conducting the cash-needs approach, RFC developed a ten-year financial plan that identifies:

- Beginning fund balance and target reserve levels,
- Operation and Maintenance (O&M) expenses,
- Capital expenses and capital financing;
- Debt coverage requirement;
- Cash flow analysis that compares the revenue under existing rates with the revenue requirements to determine the necessary revenue adjustments; and
- Rate adjustments

To conduct this analysis, RFC developed a financial model in Microsoft Excel that allowed RFC and City Staff to conduct what-if scenarios associated with rate increases, debt issuance and different CIP expenditures.

Based on City objectives, RFC has developed a financial plan that accomplishes the following goals:

- Ensures revenue sufficiency to meet operating and capital expenses as well as debt service coverage and reserve target; and
- Determines rate adjustments necessary to meet revenue requirements.

Section 2

Wastewater Financial Plan

A review of the City's revenue requirements involves an analysis of annual operating revenues under the current rates, operation and maintenance (O&M) expenses, capital expenditures, debt service requirements, and reserve requirements. This section of the report provides a discussion of the projected revenues, O&M and capital expenditures, capital improvement financing plan, debt service requirements, and the revenue adjustments required to ensure the fiscal sustainability of the wastewater enterprise.

Data and Assumptions

In order to conduct the rate study, RFC compiled current and historical data from the City. This data included operating budgets, miscellaneous expenses, current and projected revenues and capital improvement projects. In addition, RFC used the FY 2013 budgeted expenses as a baseline for projections into future years.

In order to develop a consistent Financial Plan, the inputs and assumptions for the City were developed in conjunction with City staff and based on historical data as well as future budgeted projections. A detailed listing of key inputs and assumptions can be found in **Appendix A**

Operations and Maintenance Expenses

Using budget data provided by City Staff, RFC projected operations and maintenance (O&M) expenses for the City for the FY 2014 to FY 2023 time period. The assumptions used in projecting these expenses can be found in **Appendix A**. The O&M expenses for the City are budgeted at \$9.3 million in FY 2013. A detailed listing of the City of Vista's O&M expenses throughout the planning period can be found in **Appendix B**.

Capital Improvement Plan

The City has adopted a long-term CIP to address future wastewater enterprise needs. The City anticipates significant capital expenses throughout the ten-year planning period, totaling approximately \$112 million over the planning horizon (escalated for construction cost increases). Significant projects that the City plans on undertaking include the CIP related to the Encina wastewater authority; totaling \$31.2 million over FY 2014 through FY 2023, and a Gravity Main Pipe Rehabilitation of \$9.6 million. Rising operating costs described in the previous section coupled with extensive capital costs are the significant drivers of the proposed financial plan and revenue adjustments necessary to maintain financial stability.

A detailed listing of the City's inflated Capital Improvement plan for the planning period can be found in **Appendix D**.

Debt Service

In order to finance the \$112 million in Capital Projects described above, the City will use a combination of debt and Pay-As-You-Go (PAYGO) financing. The City plans on issuing a total of \$33 million in debt via the state revolving fund (SRF). **Appendix F** provides a detailed listing of the City's planned debt issuance as well as the proposed debt service associated with the debt issuance. The standard debt service coverage ratio for SRF loans is 110%. A debt service coverage ratio is typically calculated by subtracting operating expenses from operating income and dividing that result by the total debt service.

Reserve Requirements

Currently, the City maintains three reserves for its wastewater enterprise; an operating reserve, a rate stabilization reserve and a capital repairs and replacement Fund.

Operating Reserve

The purpose of the Operating Cash Flow Reserve is to maintain and provide liquidity for operations and maintenance of the Sewer System throughout the year. The major portion of revenues for operating and maintaining the Sewer System is received at the end of the first half and midway through the second half of each fiscal year. For this reason, the City intends that the Operating Cash Flow Reserve be maintained at a funding level of approximately 50% of

each annual approved budget for maintenance and operation of the Sewer System for each fiscal year.

Rate Stabilization Reserve

The purpose of the treatment and discharge Rate Stabilization Reserve is to provide for unexpected treatment and discharge costs imposed upon the sewer system by the Encina Wastewater Authority (EWA). The City is a member of the EWA and all of the wastewater entering the Sewer System is treated and discharged through the EWA treatment and discharge facilities under permit. The costs of such treatment and discharge are not known or fixed until the City's budget is approved. Therefore, a rate stabilization reserve is necessary to meet unexpected costs. The City maintains a reserve with funding equivalent to 25 percent of the running average annual cost to the Sewer System for treatment and discharge services by EWA over the preceding five-year period.

Capital Repairs and Replacement Fund

The purpose of the Capital Repairs and Replacement Fund is to provide funding to finance the cost of repairs and replacement of the existing capital facilities, equipment and appurtenances of the Sewer System required in any given year in the event of a shortfall or lag in revenues of the system, or unexpected requirements for repairs or replacements. The City has set the Reserve to be \$2.9 million.

Status Quo Financial Plan

Figure 1 is a graphical representation (Dashboard from the Financial Model) of the City's financial plan under the "status" quo scenario. The status quo scenario includes no revenue adjustments throughout the planning period. Alternatively, **Table 2** provides a numerical representation of the District's financial plan under the status quo scenario, displayed in pro-forma statement format.

As mentioned in the previous sections, the City is experiencing rising O&M costs and is planning to undertake significant capital expenses throughout the planning period. Under the status quo financial plan scenario, beginning in FY 2013, the City's revenues will be insufficient to meet its revenue requirements (consisting of operating and capital costs as well as any existing and

proposed debt service). As a result of the large CIP program, the City is required to draw down its fund balance to fund its expenses adequately. Because the City will need to utilize cash reserves to fund revenue requirements, the City will be below the targeted fund balance in 2022.

Figure 1: Status Quo Financial Plan Dashboard for the City of Vista

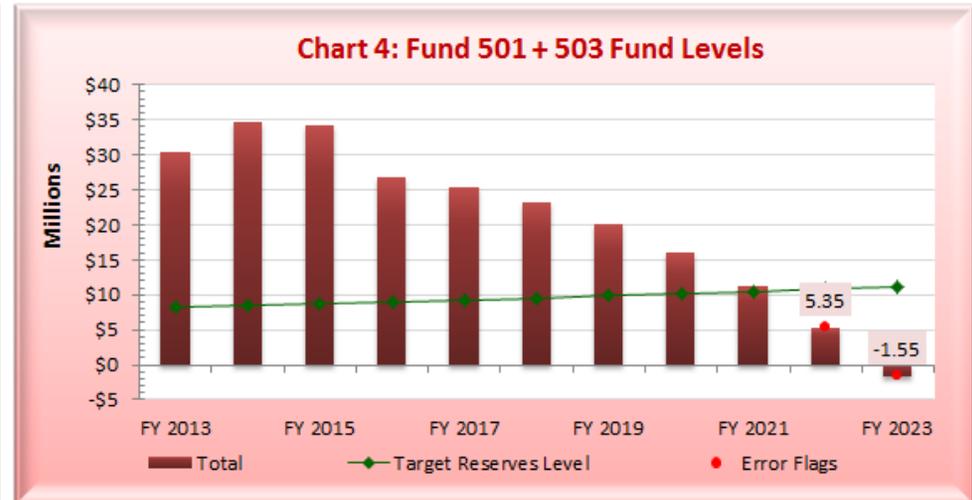
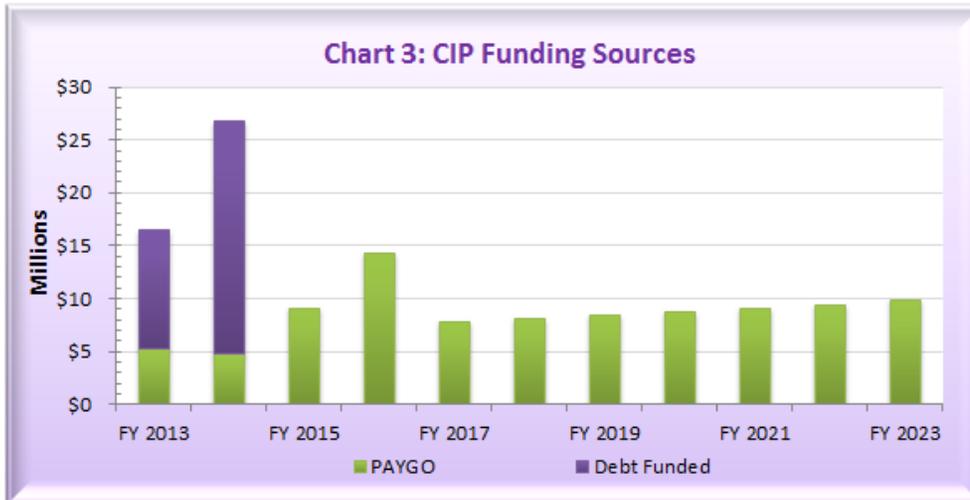
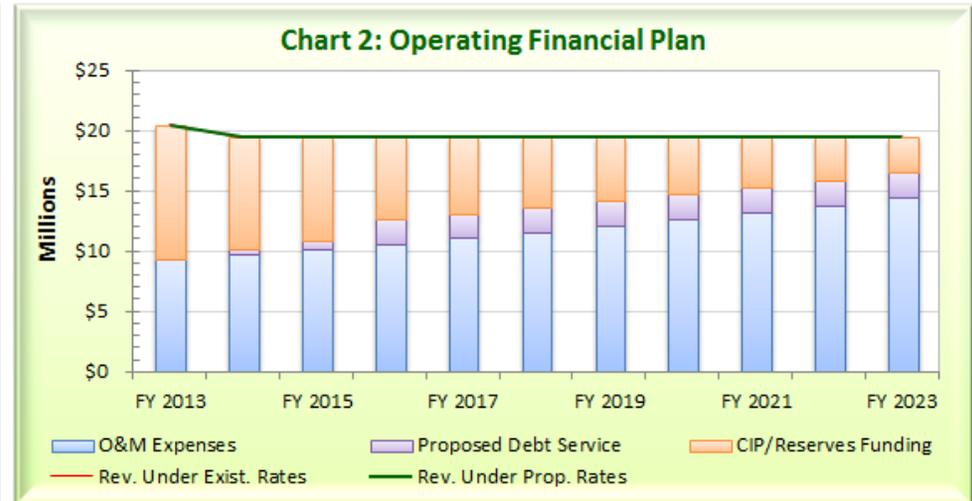
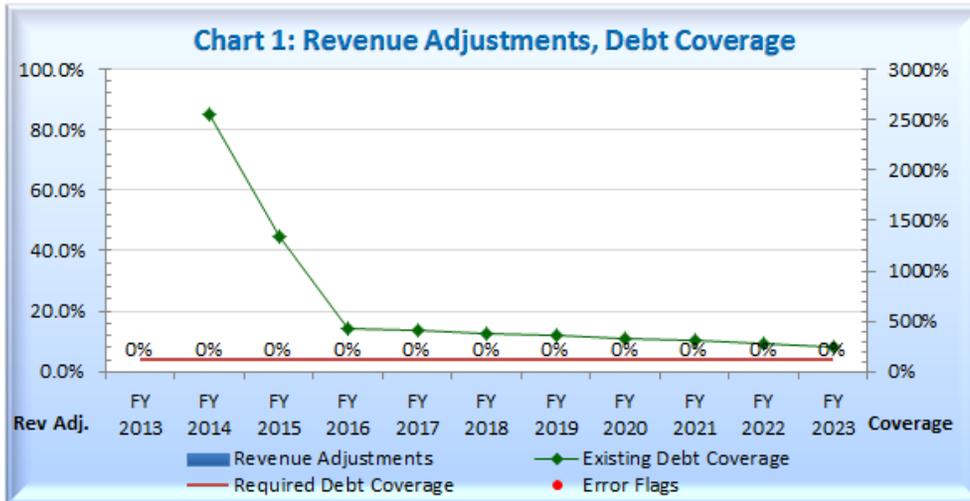


Table 2: Status Quo Financial Plan Pro Forma for the City of Vista

Line #	Descriptions	Budgeted FY 2013	Projected FY 2014	Projected FY 2015	Projected FY 2016	Projected FY 2017	Projected FY 2018	Projected FY 2019	Projected FY 2020	Projected FY 2021	Projected FY 2022	Projected FY 2023
1	REVENUES											
2	Existing Revenues from Rates	\$18,468,388	\$18,468,388	\$18,468,388	\$18,468,388	\$18,468,388	\$18,468,388	\$18,468,388	\$18,468,388	\$18,468,388	\$18,468,388	\$18,468,388
3	Rev from Rev Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	Phase 5 Refund	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5	Non-Operating Revenues	\$700,037	\$262,556	\$262,556	\$262,556	\$262,556	\$262,556	\$262,556	\$262,556	\$262,556	\$262,556	\$262,556
6	Interest (Funds 501+503)		\$108,657	\$173,825	\$157,260	\$135,074	\$125,936	\$112,737	\$95,253	\$73,246	\$46,464	\$14,637
7	Other Revenues	\$290,635	\$601,460	\$613,551	\$626,125	\$639,202	\$652,802	\$666,946	\$681,656	\$696,954	\$712,864	\$729,411
8	Total Revenues	\$20,459,060	\$19,441,061	\$19,518,320	\$19,514,329	\$19,505,220	\$19,509,682	\$19,510,627	\$19,507,853	\$19,501,144	\$19,490,272	\$19,474,992
9												
10	REVENUE REQUIREMENTS											
11	O&M Expenses	\$9,371,991	\$9,763,059	\$10,175,224	\$10,609,929	\$11,068,729	\$11,553,310	\$12,065,494	\$12,607,256	\$13,180,735	\$13,788,249	\$14,432,312
12	Other Misc. Expenses	\$16,769	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13	Total Revenue Requirements	\$9,388,760	\$9,763,059	\$10,175,224	\$10,609,929	\$11,068,729	\$11,553,310	\$12,065,494	\$12,607,256	\$13,180,735	\$13,788,249	\$14,432,312
14												
15	Net Revenues	\$11,070,300	\$9,678,003	\$9,343,096	\$8,904,401	\$8,436,492	\$7,956,372	\$7,445,133	\$6,900,596	\$6,320,409	\$5,702,024	\$5,042,680
16												
17	Total CIP	\$16,624,955	\$26,915,142	\$9,200,501	\$14,297,899	\$7,805,676	\$8,117,903	\$8,442,619	\$8,780,324	\$9,131,537	\$9,496,798	\$9,876,670
18												
19	Proposed Debt Service (SRF Loans)	\$0	\$378,315	\$695,865	\$2,066,913	\$2,066,913	\$2,066,913	\$2,066,913	\$2,066,913	\$2,066,913	\$2,066,913	\$2,066,913
20	Proposed Debt Service (Loan from Buena)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
21	Total Proposed Debt Service	\$0	\$378,315	\$695,865	\$2,066,913							
22												
23	NET ANNUAL CASH BALANCE	(\$5,554,655)	(\$17,615,454)	(\$553,270)	(\$7,460,412)	(\$1,436,098)	(\$2,228,444)	(\$3,064,400)	(\$3,946,641)	(\$4,878,041)	(\$5,861,688)	(\$6,900,904)
24												
25	Beginning Reserve Balances (501 & 503)	\$34,023,545	\$30,404,276	\$34,780,691	\$34,227,421	\$26,767,010	\$25,330,912	\$23,102,467	\$20,038,067	\$16,091,426	\$11,213,385	\$5,351,697
26	Adjustment for Carry Over CIP	(\$9,292,300)										
27	Adjusted Beginning Reserve Balances (501 & 503)	\$24,731,245	\$30,404,276	\$34,780,691	\$34,227,421	\$26,767,010	\$25,330,912	\$23,102,467	\$20,038,067	\$16,091,426	\$11,213,385	\$5,351,697
28	Debt Proceed Balances	\$11,227,686	\$21,991,869	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
29	Ending Reserve Balances (501 & 503)	\$30,404,276	\$34,780,691	\$34,227,421	\$26,767,010	\$25,330,912	\$23,102,467	\$20,038,067	\$16,091,426	\$11,213,385	\$5,351,697	(\$1,549,207)
30	Target Reserve Balances (501 & 503)	\$8,330,008	\$8,551,408	\$8,788,504	\$9,017,773	\$9,283,849	\$9,562,852	\$9,863,254	\$10,180,661	\$10,516,251	\$10,871,302	\$11,247,193
31												
32	Coverage Ratio	#N/A	2558%	1343%	431%	408%	385%	360%	334%	306%	276%	244%
33	Required Coverage Ratio	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%

Proposed Financial Plan

Table 3 below shows the revenue adjustments for the proposed financial plan throughout the planning period:

Table 3: Proposed & Forecasted Revenue adjustments

Fiscal Year	Proposed Revenue Adjustment	Fiscal Year	Forecasted Revenue Adjustment
FY 2014	0.0%	FY 2019	3.0%
FY 2015	0.0%	FY 2020	3.0%
FY 2016	CPI*	FY 2021	3.0%
FY 2017	CPI*	FY 2022	3.0%
FY 2018	CPI*	FY 2023	3.0%

*A 3% revenue adjustment is used in the financial model because 3% is the average annual Federal CPI increase for the past 30 years

It is recommended that the City adopt five years of rates, which would include no adjustments from FY 2014 – FY 2015. As the City’s reserves are well funded, no rate adjustments are necessary for the first two years. However, RFC recommends an adjustment from FY 2017 thru FY 2023 to keep up with historical CPI costs. **Figure 2** below shows the annual Federal CPI increase for the past 30 years. The 30 year average is 2.98%, thus the financial model uses a 3% revenue adjustment assumption beginning in FY 2016 and onwards. RFC recommends that the City adopt a 5 year rate plan, as shown in Table 3 under the proposed revenue adjustment, and conduct another Financial Plan in FY 2018 to ensure that the City’s revenues sufficiently meet revenue requirements and debt obligations.

Figure 2: 30-year Federal Consumer Price Index

Year	Annual Average	Annual Percent Change	Year	Annual Average	Annual Percent Change
1983	99.6	3.20%	1998	163	1.60%
1984	103.9	4.30%	1999	166.6	2.20%
1985	107.6	3.50%	2000	172.2	3.40%
1986	109.6	1.90%	2001	177.1	2.80%
1987	113.6	3.70%	2002	179.9	1.60%
1988	118.3	4.10%	2003	184	2.30%
1989	124	4.80%	2004	188.9	2.70%
1990	130.7	5.40%	2005	195.3	3.40%
1991	136.2	4.20%	2006	201.6	3.20%
1992	140.3	3.00%	2007	207.3	2.90%
1993	144.5	3.00%	2008	215.3	3.80%
1994	148.2	2.60%	2009	214.5	-0.40%
1995	152.4	2.80%	2010	218.1	1.60%
1996	156.9	2.90%	2011	224.9	3.20%
1997	160.5	2.30%			

The proposed CPI rate increases ensure that the City is able to fund the significant Capital Improvement Program completely. In addition, the City will be able to maintain reserve balances which exceed the minimum target level for the ten-year period from FY 2014 to FY 2023 with the proposed rate adjustments.

Figure 3 on the following page is a graphical representation of the City's financial plan under the proposed financial plan scenario. Alternatively, **Table 4** provides a numerical representation of the City's financial plan under the proposed financial plan scenario, displayed in pro-forma statement format. **Table 5** shows the proposed rates in dollars for single family residences, multifamily residences and commercial/industrial customers. As seen in Chart 4 of Figure 3, the proposed rates will enable the City to maintain healthy reserves throughout the ten-year study period.

Figure 3: Proposed Financial Plan Dashboard for the City of Vista

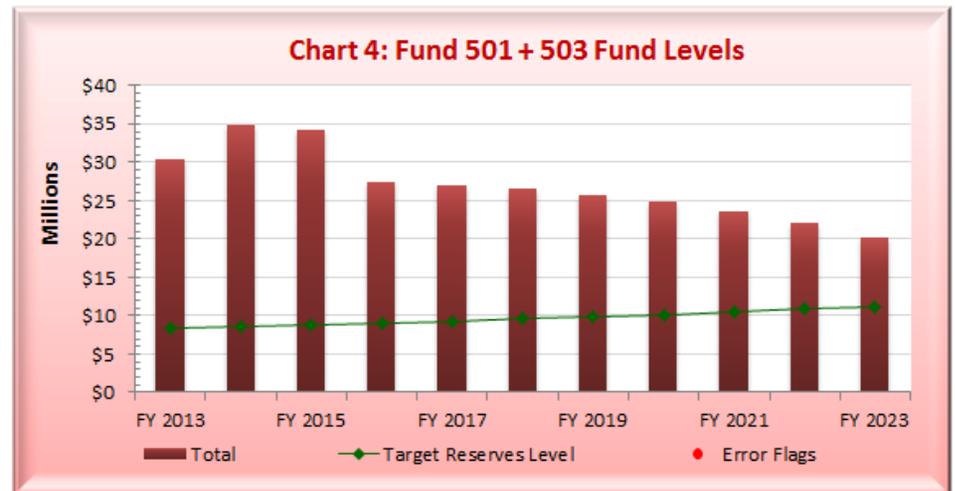
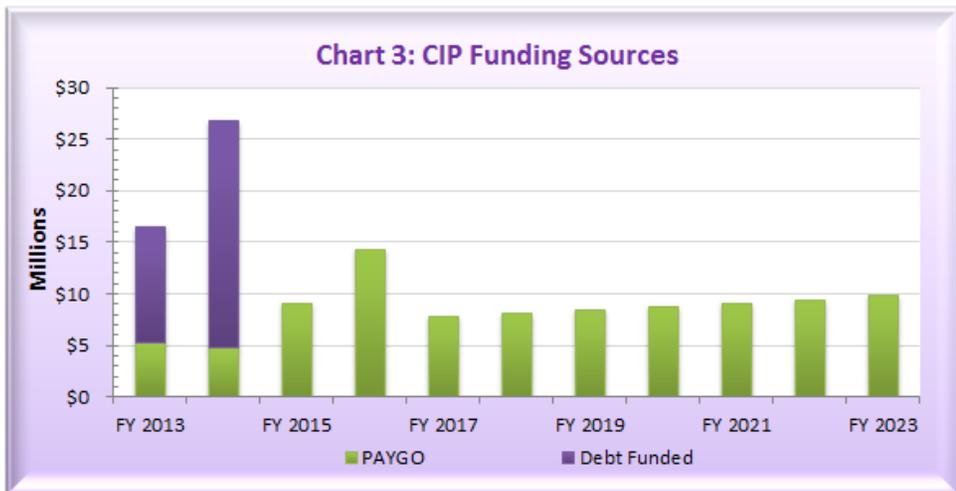
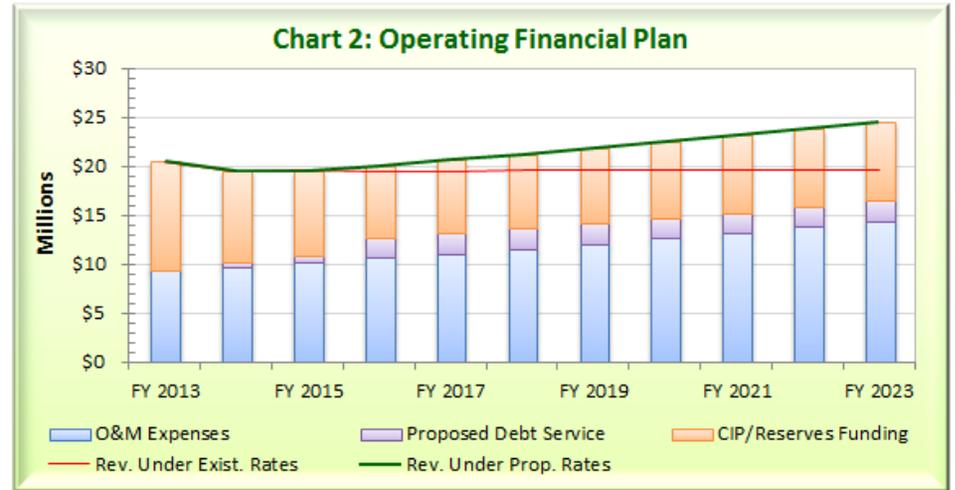
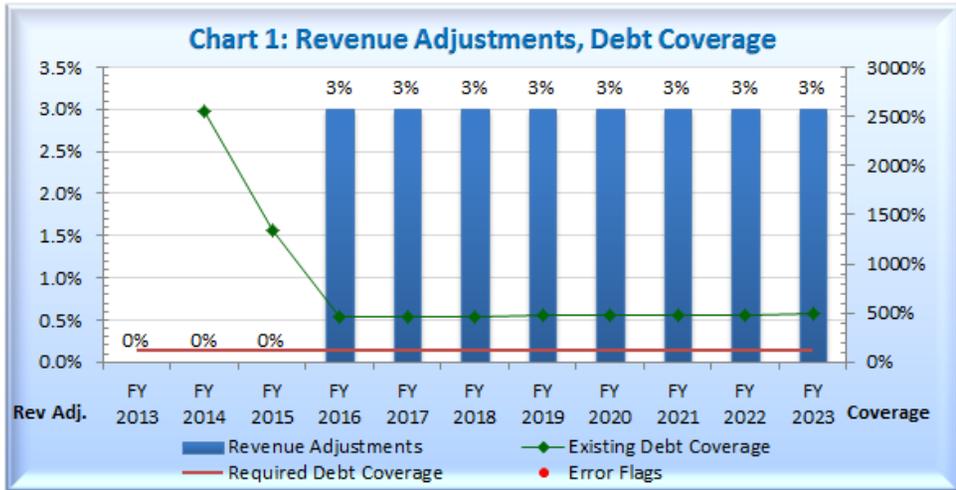


Table 4: Proposed Financial Plan Pro-Forma Statement

Line #	Descriptions	Budgeted FY 2013	Projected FY 2014	Projected FY 2015	Projected FY 2016	Projected FY 2017	Projected FY 2018	Projected FY 2019	Projected FY 2020	Projected FY 2021	Projected FY 2022	Projected FY 2023
1	REVENUES											
2	Existing Revenues from Rates	\$18,468,388	\$18,468,388	\$18,468,388	\$18,468,388	\$18,468,388	\$18,468,388	\$18,468,388	\$18,468,388	\$18,468,388	\$18,468,388	\$18,468,388
3	Rev from Rev Adjustments	\$0	\$0	\$0	\$554,052	\$1,124,725	\$1,712,518	\$2,317,945	\$2,941,535	\$3,583,833	\$4,245,400	\$4,926,813
4	Phase 5 Refund	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5	Non-Operating Revenues	\$700,037	\$262,556	\$262,556	\$262,556	\$262,556	\$262,556	\$262,556	\$262,556	\$262,556	\$262,556	\$262,556
6	Interest (Funds 501+503)		\$108,657	\$173,825	\$158,645	\$140,663	\$138,646	\$135,587	\$131,366	\$125,853	\$118,907	\$110,372
7	Other Revenues	\$290,635	\$601,460	\$613,551	\$626,125	\$639,202	\$652,802	\$666,946	\$681,656	\$696,954	\$712,864	\$729,411
8	Total Revenues	\$20,459,060	\$19,441,061	\$19,518,320	\$20,069,766	\$20,635,534	\$21,234,910	\$21,851,422	\$22,485,501	\$23,137,584	\$23,808,115	\$24,497,541
9												
10	REVENUE REQUIREMENTS											
11	O&M Expenses	\$9,371,991	\$9,763,059	\$10,175,224	\$10,609,929	\$11,068,729	\$11,553,310	\$12,065,494	\$12,607,256	\$13,180,735	\$13,788,249	\$14,432,312
12	Other Misc. Expenses	\$16,769	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13	Total Revenue Requirements	\$9,388,760	\$9,763,059	\$10,175,224	\$10,609,929	\$11,068,729	\$11,553,310	\$12,065,494	\$12,607,256	\$13,180,735	\$13,788,249	\$14,432,312
14												
15	Net Revenues	\$11,070,300	\$9,678,003	\$9,343,096	\$9,459,837	\$9,566,805	\$9,681,600	\$9,785,928	\$9,878,245	\$9,956,849	\$10,019,866	\$10,065,229
16												
17	Total CIP	\$16,624,955	\$26,915,142	\$9,200,501	\$14,297,899	\$7,805,676	\$8,117,903	\$8,442,619	\$8,780,324	\$9,131,537	\$9,496,798	\$9,876,670
18												
19	Proposed Debt Service (SRF Loans)	\$0	\$378,315	\$695,865	\$2,066,913	\$2,066,913	\$2,066,913	\$2,066,913	\$2,066,913	\$2,066,913	\$2,066,913	\$2,066,913
20	Proposed Debt Service (Loan from Buena)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
21	Total Proposed Debt Service	\$0	\$378,315	\$695,865	\$2,066,913							
22												
23	NET ANNUAL CASH BALANCE	(\$5,554,655)	(\$17,615,454)	(\$553,270)	(\$6,904,975)	(\$305,784)	(\$503,216)	(\$723,605)	(\$968,993)	(\$1,241,601)	(\$1,543,846)	(\$1,878,355)
24												
25	Beginning Reserve Balances (501 & 503)	\$34,023,545	\$30,404,276	\$34,780,691	\$34,227,421	\$27,322,446	\$27,016,662	\$26,513,446	\$25,789,841	\$24,820,848	\$23,579,247	\$22,035,402
26	Adjustment for Carry Over CIP	(\$9,292,300)										
27	Adjusted Beginning Reserve Balances (501 & 503)	\$24,731,245	\$30,404,276	\$34,780,691	\$34,227,421	\$27,322,446	\$27,016,662	\$26,513,446	\$25,789,841	\$24,820,848	\$23,579,247	\$22,035,402
28	Debt Proceed Balances	\$11,227,686	\$21,991,869	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
29	Ending Reserve Balances (501 & 503)	\$30,404,276	\$34,780,691	\$34,227,421	\$27,322,446	\$27,016,662	\$26,513,446	\$25,789,841	\$24,820,848	\$23,579,247	\$22,035,402	\$20,157,047
30	Target Reserve Balances (501 & 503)	\$8,330,008	\$8,551,408	\$8,788,504	\$9,017,773	\$9,283,849	\$9,562,852	\$9,863,254	\$10,180,661	\$10,516,251	\$10,871,302	\$11,247,193
31												
32	Coverage Ratio	#N/A	2558%	1343%	458%	463%	468%	473%	478%	482%	485%	487%
33	Required Coverage Ratio	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%

Table 5: Proposed Rates for the City of Vista

Line #	Customer Class	Proposed FY 2013	Proposed FY 2014	Proposed FY 2015	Proposed FY 2016	Proposed FY 2017	Proposed FY 2018	Proposed FY 2019	Proposed FY 2020	Proposed FY 2021	Proposed FY 2022	Proposed FY 2023
1	Proposed Revenue Adjustments	0%	0%	0%	3%	3%	3%	3%	3%	3%	3%	3%
2												
3	<u>Residential Single-Family and Duplex</u>											
4	Fixed Rate per Unit	\$639	\$639	\$639	\$658	\$678	\$698	\$719	\$741	\$763	\$786	\$809
5												
6	<u>Residential Multi-Family</u>											
7	Fixed Rate per Unit	\$447	\$447	\$447	\$460	\$474	\$488	\$503	\$518	\$534	\$550	\$566
8												
9	<u>Industrial/Commercial</u>											
10	Part 1: Fixed Rate per EDU	\$152	\$152	\$152	\$157	\$161	\$166	\$171	\$176	\$181	\$187	\$193
11												
12	Part 2: Flow Charge @ Strength Rate per HCF											
13	Low Strength per HCF	\$4.99	\$4.99	\$4.99	\$5.14	\$5.29	\$5.45	\$5.62	\$5.78	\$5.96	\$6.14	\$6.32
14	Medium Strength per HCF	\$5.71	\$5.71	\$5.71	\$5.88	\$6.06	\$6.24	\$6.43	\$6.62	\$6.82	\$7.02	\$7.23
15	High Strength per HCF	\$7.14	\$7.14	\$7.14	\$7.35	\$7.57	\$7.80	\$8.04	\$8.28	\$8.53	\$8.78	\$9.04
16												
17	Surcharge for Extra Strength											
18	Biological Oxygen Demand (BOD) Rate per Lb.	\$0.87	\$0.87	\$0.87	\$0.90	\$0.92	\$0.95	\$0.98	\$1.01	\$1.04	\$1.07	\$1.10
19	Suspended Solids (SS) per Lb.	\$0.40	\$0.40	\$0.40	\$0.41	\$0.42	\$0.44	\$0.45	\$0.46	\$0.48	\$0.49	\$0.51

Section 4

Appendix

A. Key Inputs/Assumptions Used in the Study for the City of Vista

Revenue Assumptions

Assumption Type	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Account Growth	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other Revenues	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Connection Fee	2.0%	2.0%	2.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%

O&M Assumptions

	Budgeted FY 2013	Projected FY 2014	Projected FY 2015	Projected FY 2016	Projected FY 2017	Projected FY 2018	Projected FY 2019	Projected FY 2020	Projected FY 2021	Projected FY 2022	Projected FY 2023	Projected FY 2024
SUMMARY												
Subtotal Sewer Administration	\$3,606,296	\$3,777,476	\$3,956,976	\$4,145,206	\$4,342,594	\$4,549,593	\$4,766,675	\$4,994,338	\$5,233,103	\$5,483,518	\$5,746,158	\$6,021,624
Subtotal Sewer Engineering	\$1,460,014	\$1,514,155	\$1,571,408	\$1,632,023	\$1,696,276	\$1,764,466	\$1,836,923	\$1,914,006	\$1,996,109	\$2,083,665	\$2,177,145	\$2,277,069
Subtotal Stormwater Engineering	\$1,063,728	\$1,103,589	\$1,145,692	\$1,190,215	\$1,237,350	\$1,287,310	\$1,340,325	\$1,396,648	\$1,456,555	\$1,520,350	\$1,588,363	\$1,660,958
Subtotal Sewer Maintenance	\$2,324,675	\$2,416,044	\$2,512,920	\$2,615,759	\$2,725,056	\$2,841,355	\$2,965,251	\$3,097,396	\$3,238,505	\$3,389,359	\$3,550,816	\$3,723,817
Subtotal Stormwater Maintenance	\$917,278	\$951,795	\$988,228	\$1,026,726	\$1,067,453	\$1,110,587	\$1,156,321	\$1,204,869	\$1,256,462	\$1,311,356	\$1,369,829	\$1,432,186
TOTAL O&M	\$9,371,991	\$9,763,059	\$10,175,224	\$10,609,929	\$11,068,729	\$11,553,310	\$12,065,494	\$12,607,256	\$13,180,735	\$13,788,249	\$14,432,312	\$15,115,654
Annual Increase	0.00%	4.17%	4.22%	4.27%	4.32%	4.38%	4.43%	4.49%	4.55%	4.61%	4.67%	4.73%

(Continued)

A. Key Inputs/Assumptions Used in the Study for the City of Vista

CIP Assumptions

Assumption Type	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Capital	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Accumulated Inflation	104%	108%	112%	117%	122%	127%	132%	137%	142%	148%

Cash flow Assumptions

Assumptions	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Reserve Interest Rates	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%

B. Inflated CIP expenditures – City of Vista

Project No.	Project Name	Budgeted FY 2013	Projected FY 2014	Projected FY 2015	Projected FY 2016	Projected FY 2017	Projected FY 2018	Projected FY 2019	Projected FY 2020	Projected FY 2021	Projected FY 2022	Projected FY 2023
8077	V1 - W. Vista Way Sewer - Phase 1											
	Vista Capital Replacement	\$343,368	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Funded w/SRF Loan	\$2,021,400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8125	VC11 - 15 Vista/Carlsban Interceptor and Agua Hedionda Pump Station Replacement											
	Vista Capital Replacement	\$515,090	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Funded w/SRF Loan	\$0	\$22,871,544	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8157	Encina Wastewater Authority Capital Improvement Projects (Vista Portion only)											
	Vista Capital Replacement	\$2,145,000	\$2,606,635	\$2,710,901	\$2,819,337	\$2,932,110	\$3,049,395	\$3,171,370	\$3,298,225	\$3,430,154	\$3,567,360	\$3,710,055
8158	Vista/Carlsbad Interceptor (VC4 Reline and new Parallel Line)											
	Vista Capital Replacement	\$500,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Funded w/SRF Loan	\$3,461,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8164	Gravity Main Ductile Iron Pipe Rehabilitation											
	Vista Capital Replacement	\$60,724	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Funded w/SRF Loan	\$2,673,118	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8165	Pipeline Rehabilitation											
	Vista Capital Replacement	\$421,921	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Funded w/SRF Loan	\$3,072,168	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8199	V8 - Monte Vista											
	Vista Capital Replacement	\$397,166	\$885,763	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8209	Gravity Main Ductile Iron Pipe Rehabilitation											
	Vista Capital Replacement	\$0	\$0	\$0	\$9,656,283	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8212	V2 and V6 - Hacienda Ave/Vista Village Drive											
	Vista Capital Replacement	\$765,000	\$0	\$6,489,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8229-NEW	Delpy Ditch Sewer Protection											
	Vista Capital Replacement	\$0	\$551,200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8244	New CIP											
	Other Funding Source	\$249,000	\$0	\$0	\$1,822,280	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Replacement & Rehabilitation											
	Other Funding Source	\$0	\$0	\$0	\$0	\$4,873,566	\$5,068,509	\$5,271,249	\$5,482,099	\$5,701,383	\$5,929,438	\$6,166,616
Total City CIP (Inflated)		\$16,624,955	\$26,915,142	\$9,200,501	\$14,297,899	\$7,805,676	\$8,117,903	\$8,442,619	\$8,780,324	\$9,131,537	\$9,496,798	\$9,876,670

F. Debt Service – City of Vista

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Total Annual Debt Service:	\$0	\$378,315	\$695,865	\$2,066,913	\$2,066,913	\$2,066,913	\$2,066,913	\$2,066,913	\$2,066,913	\$2,066,913	\$2,066,913
Debt Proceed Balances:	\$11,227,686	\$21,991,869	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0