



Borrego Water District Water and Sewer Financial Plan

Final Report

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RFC
RAFTELIS FINANCIAL
CONSULTANTS, INC.

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SECTION 1: INTRODUCTION

BACKGROUND

Borrego Water District (BWD or District) currently provides water and wastewater services to approximately 2,200 customers in Borrego Springs, California. Its sole water supply source is approximately 3,700 acre feet of groundwater per year from the Borrego Valley Groundwater Basin, which has been in overdraft since about 1945. According to the U.S. Geological Survey (USGS) in 2011, the overdraft of this basin is approximately 14,000 acre feet per year. The District also maintains about 90 miles of transmission and pipe distribution lines, a wastewater reclamation plant, trunk sewer lines and internal sewer lines to serve the community.

There are several key issues driving this water and wastewater financial plan. In 2008, a new strategy to address groundwater overdraft was developed. The new strategy assumed that fallowing agricultural lands was insufficient to address the issue and recommended building a pipeline to import water to the Valley to ameliorate the overdraft problem. The immediate cost of such a strategy has significantly affected the District's finances. Historically, the District has produced operating surpluses under its present rate structure. However, in recent years (fiscal years 2009 and 2010), the District has operated at a loss of approximately \$1.1 million. For FY 2011, the District anticipates a \$400,000 operating loss, largely accumulated during the first six months of FY 2011.

In the past three years, through December 2010, the District had spent approximately \$5.7 million of its \$6.5 million reserves that it had accumulated over the past 20 years. During the first half of FY 2011, the prior board allocated an additional \$600,000 in cash reserves to be spent during the second half FY 2011. Moreover, approximately \$7.5 million in future unfunded cash payments for principal, interest and future losses were accumulated from real estate and lease agreements entered into just prior to December 2010. The current board is presently working to reduce or eliminate these unfunded commitments. For this reason, these commitments by the prior board are not reflected in the financial model, as the new board believes that their financial impact will not be material once all negotiations are completed.

For the above reasons, the District's current cash reserves are inadequate to fund principal and interest payments for new debt required for future capital projects, to provide for normal working capital requirements, and to provide an emergency source of cash should an emergency occur. In its current financial situation, which includes inadequate cash flow from revenues to fund normal operations and virtually no cash reserves, the District is unable to raise funds in the private capital markets or to obtain

an emergency line of credit from a bank. This present situation is not sustainable and potentially risky for the continuance of normal operations.

As a result, the District engaged Raftelis Financial Consultants (RFC) to conduct a long-term financial plan to ensure financial sustainability and sufficiency for its water and wastewater operational and capital expenditures. The objectives of this study include evaluating different:

- Capital improvement project (CIP) scenarios;
- Cost saving mechanisms;
- Financial policies regarding reserves and debt coverage ratios to ensure the District's long-term financial sustainability; and
- Revenue adjustment alternatives to minimize customer impacts

SCOPE OF STUDY

The scope of this study entails developing a comprehensive financial plan.

Financial Planning: Revenue requirements are projected for the forecast period from FY 2012 through FY 2017. Financial planning involves estimating annual Operating and Maintenance (O&M) and capital expenses, annual debt service, bond coverage and reserve requirements, as well as projecting operating and capital revenues and determining required annual user revenues from rates and charges.

SECTION 2: WATER REVENUE REQUIREMENTS

A review of the District's revenue requirements is a key first step in the financial planning process. The review involves an analysis of annual operating revenues under existing rates, O&M expenses, capital expenditures, transfers among funds, and reserve requirements. This section of the report provides a discussion of the District's financial plan, including the projected revenues, O&M expenses, CIP, as well as debt service requirements for the water enterprise

OPERATING AND MAINTENANCE (O&M) EXPENSES

The District's FY 2012 budget was used as the basis for projecting O&M costs. In order to project O&M expenses for future years, RFC assumed a general inflation factor of 3% for FY 2013 and 5% for FY 2014 and thereafter. Table 2-1 budgeted and projected O&M expenses for the water fund.

TABLE 2 - 1- WATER O&M EXPENSES

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
	\$	\$	\$	\$	\$	\$
<u>Water ID 1, ID 3 & ID5</u>						
Repairs & Maintenance	75,800	78,074	81,978	86,077	90,380	94,899
Professional Services	74,000	76,220	80,031	84,033	88,234	92,646
Insurance	49,110	50,583	53,112	55,768	58,556	61,484
Personnel Expense	345,539	355,905	373,701	392,386	412,005	432,605
Employee Benefits	164,293	169,222	177,683	186,567	195,896	205,690
Office expense	35,596	36,664	38,498	40,422	42,444	44,566
Utilities	132,000	135,960	142,758	149,896	157,391	165,260
Interest Expense-COP 2008	-	-	-	-	-	-
Groundwater Management	2,000	2,060	2,163	2,271	2,385	2,504
All Other	51,000	52,530	55,157	57,914	60,810	63,851
Well 12 Agreement	91,000	118,300	130,130	143,143	150,300	157,815
Water ID 1, ID 3 & ID5 Total	1,020,338	1,075,519	1,135,209	1,198,476	1,258,400	1,321,320
<u>Water ID 4</u>						
Repairs & Maintenance	75,800	78,074	81,978	86,077	90,380	94,899
Professional Services	74,000	76,220	80,031	84,033	88,234	92,646
Insurance	49,110	50,583	53,112	55,768	58,556	61,484
Personnel Expense	345,539	355,905	373,701	392,386	412,005	432,605
Employee Benefits	164,293	169,222	177,683	186,567	195,896	205,690
Office expense	35,596	36,664	38,498	40,422	42,444	44,566
Utilities	132,000	135,960	142,758	149,896	157,391	165,260
Interest Expense-COP 2008	-	-	-	-	-	-
Groundwater Management	2,000	2,060	2,163	2,271	2,385	2,504
All Other	51,000	52,530	55,157	57,914	60,810	63,851
Water ID 4 Total	929,338	957,219	1,005,079	1,055,333	1,108,100	1,163,505
Total Water O&M Expenses	1,949,677	2,032,737	2,140,289	2,253,810	2,366,500	2,484,825

CAPITAL IMPROVEMENT PROGRAM (CIP) AND SHORT LIVED ASSETS REPLACEMENT PROGRAM

The District has developed a water CIP and a short term assets replacement program to address future water system needs. Table 2-2 shows the uninflated water CIP for the study period from FY 2012 to FY 2017; Table 2-3 shows a list of uninflated short term assets; and Table 2-4 shows the total inflated CIP and short term assets. An annual CIP inflation factor of 5% was used.

TABLE 2 - 2- CAPITAL IMPROVEMENT PROGRAM FOR WATER – UNINFLATED

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
	\$	\$	\$	\$	\$	\$
<u>Pressure Reducing Stations</u>						
ID4, Reducing Sta. design and installation	\$ -	\$ 25,000	\$ -	\$ -	\$ -	\$ -
ID4, Reducing Sta. design and installation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,000
ID5, Reducing Sta. design and installation, Borrego Valley Rd.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<u>Pipelines</u>						
Borrego Springs Rd, Weathervane Dr. to Barrel Dr.	\$ -	\$ -	\$ 112,500	\$ -	\$ -	\$ -
Borrego Springs Rd, Walking H Dr. to Tilting T Dr.	\$ -	\$ -	\$ -	\$ 162,750	\$ -	\$ -
Borrego Springs Rd, Tilting T Dr. to Country Club Rd. First half	\$ -	\$ -	\$ -	\$ -	\$ 142,500	\$ -
Borrego Springs Rd, Tilting T Dr. to Country Club Rd. Second half	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 135,000
Circle J Dr.	\$ -	\$ 108,000	\$ -	\$ -	\$ -	\$ -
Bending Elbow Rd. First half	\$ -	\$ -	\$ 102,000	\$ -	\$ -	\$ -
Bending Elbow Rd. Second half	\$ -	\$ -	\$ -	\$ 102,000	\$ -	\$ -
Double O	\$ -	\$ -	\$ -	\$ -	\$ 180,000	\$ -
Fairway Lane	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 36,000
<u>Other Infrastructure</u>						
Fire Hydrant Replacements	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000
Groundwater Management Implementation Plan ⁿ	\$ 150,000	\$ 150,000	\$ 100,000	\$ -	\$ -	\$ -
Total - Capital Improvements Program - Water	\$ 162,000	\$ 295,000	\$ 326,500	\$ 276,750	\$ 334,500	\$ 208,000

TABLE 2 - 3- SHORT TERM WATER ASSETS REPLACEMENT - UNINFLATED

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
	\$	\$	\$	\$	\$	\$
<u>Wells</u>						
ID1-1, replace 40 Hp submersible pump, clean casing	-	-	-	-	15,000	-
ID1-8, 125 Hp, rewind motor in yr 4, pump and casing cleaning in yr 10	-	-	-	10,000	-	-
ID1-10, 150 Hp, rewind motor in yr 2, pump and casing cleaning in yr 5	-	10,000	-	-	45,000	-
ID1-12, 200 Hp, rewind motor in yr 3, pump and casing cleaning in yr 6	-	-	12,000	-	-	60,000
ID1-16, 300 Hp, pump and casing cleaning in yr 5, rewind motor in yr 7	-	-	-	60,000	-	-
ID4-4, 150 Hp, rewind motor in yr 3, pump and casing cleaning in yr 8	-	-	10,000	-	-	-
ID4-10, replace 30 Hp submersible yr 5 and yr 10	-	-	-	-	8,000	-
ID4-11, 200 Hp, pump and casing cleaning in yr 1, rewind motor yr 2	60,000	15,000	-	-	-	-
ID4-18, 100 Hp, rewind motor in yr 3, pump and casing cleaning in yr 7	-	-	8,000	-	-	-
ID5-5, 200 Hp, rewind motor in yr 4, pump and casing cleaning in yr 9	-	-	-	10,000	-	-
<u>Tanks</u>						
Rams Hill #1, 1980 steel, needs inside coating, 1.25 MG	150,000	-	-	-	-	-
800 Tank, Hyperlon 2003 new liner, 0.75 MG	-	125,000	-	-	-	-
Reclaim #1, 1985, galv repaired 2010 0.4 MG	-	-	-	-	40,000	-
Indianhead, 1970's 1- 0.22MG, inside coating	-	-	-	-	-	40,000
Twin Tanks, 1970's 2- 0.22 MG, inside coating #1 in yr 3, #2 in yr 10	40,000	-	-	-	-	-
<u>Booster/Pressure Reducing Sta.</u>						
ID1, Booster Sta. 1, #1, 30 Hp, motor yr 1, pump yr 3	4,000	-	9,000	-	-	-
ID1, Booster Sta. 1, #2, 30 Hp, motor yr 3, pump yr 6	-	-	4,000	-	-	9,000
ID1, Booster Sta. 1, #3, 50 Hp, motor and pump yr 3	-	-	15,000	-	-	-
ID1, Booster Sta. 2, #4, 30 Hp, motor yr 2, pump yr 5	-	4,000	-	-	9,000	-
ID1, Booster Sta. 2, #5, 30 Hp, pump yr 3, motor yr 4	-	-	4,000	9,000	-	-
ID1, Booster Sta. 2, #6, 50 Hp, motor yr 2, pump yr 8	-	5,000	-	-	-	-
ID4, Booster Sta. 3, #7, 25 Hp, motor yr 4, pump yr 8	-	-	-	4,000	-	-
<u>Equipment</u>						
Tractor w/gannon for road work	-	25,000	-	-	-	-
Backhoe	-	-	-	-	80,000	-
Pickups	-	-	20,000	-	20,000	-
Big Truck	-	-	-	50,000	-	-
Misc. Equipment	5,000	10,000	5,000	15,000	5,000	10,000
Computers/Office Equipment	-	-	10,000	-	-	10,000
Short Lived Assets Replacement Program - Water	259,000	194,000	97,000	158,000	222,000	129,000

TABLE 2 - 4 – TOTAL INFLATED WATER CIP AND SHORT TERM ASSETS REPLACEMENT

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
	\$	\$	\$	\$	\$	\$
Total - Capital Improvements Program - Water	162,000	309,750	359,966	320,373	406,587	265,467
Short Lived Assets Replacement Program - Water	259,000	203,700	106,943	182,905	269,842	164,640
Total CIP and Short Lived Assets - Water	421,000	513,450	466,909	503,277	676,429	430,107

RESERVES UNDER CURRENT RATE STRUCTURE

Table 2-5 displays the pro forma of the District’s water enterprise fund reserves under current rates over the forecast period. All the projections in this table are based on current rate structure and assume no new debt is issued. Additionally, usage growth is assumed to be zero percent for FY 2012 to FY 2015 and one percent for FY 2016 to FY 2017.

TABLE 2 - 5 – WATER FUND RESERVES UNDER CURRENT RATES

	Budget FY 2012	Projected FY 2013	Projected FY 2014	Projected FY 2015	Projected FY 2016	Projected FY 2017
1 Existing Rate Revenue	\$ 1,702,312	\$ 1,702,312	\$ 1,702,312	\$ 1,702,312	\$ 1,719,335	\$ 1,736,528
2 Additional Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3 Other Revenue (w/ interest)	\$ 346,719	\$ 210,880	\$ 183,424	\$ 155,030	\$ 118,099	\$ 78,424
4 Total Revenue	\$ 2,049,031	\$ 1,913,192	\$ 1,885,736	\$ 1,857,342	\$ 1,837,434	\$ 1,814,953
5 O&M Expenses	\$ 1,949,677	\$ 2,032,737	\$ 2,140,289	\$ 2,253,810	\$ 2,366,500	\$ 2,484,825
6 Net Revenue	\$ 99,354	\$ (119,545)	\$ (254,553)	\$ (396,468)	\$ (529,066)	\$ (669,873)
7 CIP Financing						
8 Cash CIP	\$ 421,000	\$ 513,450	\$ 466,909	\$ 503,277	\$ 676,429	\$ 430,107
9 Existing Debt Service	\$ 124,875	\$ 124,875	\$ 149,313	\$ 255,713	\$ 254,525	\$ 253,113
10 Net Annual Cash Balance	\$ (446,521)	\$ (757,870)	\$ (870,774)	\$ (1,155,458)	\$ (1,460,020)	\$ (1,353,092)
11 Beginning Reserves Level	\$ 315,081	\$ (131,440)	\$ (889,310)	\$ (1,760,084)	\$ (2,915,542)	\$ (4,375,562)
12 Ending Reserves Level	\$ (131,440)	\$ (889,310)	\$ (1,760,084)	\$ (2,915,542)	\$ (4,375,562)	\$ (5,728,654)
13 Upper Target Reserve Level	\$ 3,281,373	\$ 3,328,027	\$ 3,393,530	\$ 3,445,959	\$ 3,917,554	\$ 4,024,676
14 Lower Target Reserve Level	\$ 2,625,623	\$ 2,653,318	\$ 2,686,276	\$ 2,704,533	\$ 3,140,246	\$ 3,209,692
15 Coverage Ratio for ID 4 Debt	8%	-70%	-102%	-86%	-115%	-146%

The previous table shows that the District's current revenues are unable to fund the projected O&M and capital expenses. In addition, the District is unable to maintain recommended debt coverage (see the following section for debt coverage recommendations) under current revenues. Without revenue adjustments, the District will be unable to fund water operations through FY 2012.

DEBT SERVICE AND RESERVES POLICY

Existing Debt Service Requirements and Coverage

Existing debt service requirements consist of both principal and interest payments. From FY 2012 to 2017 and beyond, customers in the ID-4 service area are required to make debt service payments, ranging from \$120,000 to \$260,000 annually. RFC recommends that the District maintains a debt-coverage ratio greater than or equal to 1.25 on any outstanding debt service.

Operating Reserve

RFC recommends that the District maintain a minimum and maximum operating reserve level equal to 25% and 50% of the District's annual O&M expenses, respectively.

CIP Fund

RFC recommends that the District maintain a CIP reserve of no less than 25% of the three-year CIP average (average of the current fiscal year and the following two years). The reason this approach to establishing a CIP reserve is proposed rather than using a percent of assets book value or an accumulated depreciation is because normally using actual replacement costs provides a more realistic means for establishing a CIP reserve as opposed to using historical asset or depreciation values. For example, the value of the District's depreciable capital assets in FY 2010 balance sheet was \$13,441,998. However, the District's consulting engineers, Dynamic Consulting Engineers, calculate the replacement cost for the District's capital infrastructure in April 2011 at \$62,712, 237.

Contingency Reserve

RFC recommends that the District maintain a minimum and maximum contingency reserve level equal to 1% and 10% of the District's annual O&M expenses, respectively.

Emergency Reserve

RFC recommends that the District maintain a minimum emergency reserve of approximately \$2.5 million for water and sewer. The ideal method for allocating such an amount would be based upon the values of assets owned by each system (water and sewer) calculated by Dynamic Consulting Engineers to be approximately \$62.7 million. However, due to the constraints of this study, the amount used for the financial models was allocated based on the percentage of total revenue that each system generates. Allocating based on percentage of revenue establishes an emergency reserve of approximately \$2.1 million for water, approximately \$207,000 for sewer IDs-1 & 5, and approximately \$238,000 for sewer ID-2.

The District presently carries an \$8.5 million earthquake damages policy for above ground damage. The value of critical assets calculated by Dynamic Consulting Engineers that potentially should be covered by an emergency reserve is \$5,315,620. The value of the emergency reserve may be adjusted in future years as additional data becomes available.

OPERATING FINANCIAL PLAN***Proposed Revenue Adjustments***

The projections indicate that the District needs the following water revenue adjustments over the next few years. The first rate adjustment will be implemented in July 2011. Subsequent rate increases are anticipated to be effective in July of each year. RFC proposes the following adjustments.

FY 2012	FY 2013	FY 2014	FY 2015	FY 2016- FY 2017
30%	30%	10%	10%	5%

It should be noted that revenue adjustments are not necessarily the same as rate increases. Some customers may face bill impacts higher than the overall revenue adjustment while other customers may face lower bill impacts.

RESERVES UNDER PROPOSED RATE STRUCTURE

Table 2-6 shows the ending reserve balance in each year of the forecast period. The table indicates that the District will meet the recommended debt coverage over the forecast period and target reserves level by the end of the forecast period under the proposed water revenue adjustments.

Line 12 shows the reserve levels at the end of the fiscal year, and lines 13 and 14 show the upper and lower target reserve levels for all the reserves, respectively.

TABLE 2 - 6 – WATER FUND RESERVES UNDER PROPOSED RATES

		Budget FY 2012	Projected FY 2013	Projected FY 2014	Projected FY 2015	Projected FY 2016	Projected FY 2017
1	Existing Rate Revenue	\$ 1,702,312	\$ 1,702,312	\$ 1,702,312	\$ 1,702,312	\$ 1,719,335	\$ 1,736,528
2	Additional Revenue	\$ 510,700	\$ 1,174,600	\$ 1,462,300	\$ 1,778,800	\$ 1,972,300	\$ 2,178,600
3	Other Revenue (w/ interest)	\$ 350,420	\$ 232,224	\$ 254,758	\$ 275,864	\$ 297,400	\$ 323,838
4	Total Revenue	\$ 2,563,432	\$ 3,109,136	\$ 3,419,370	\$ 3,756,976	\$ 3,989,035	\$ 4,238,966
5	O&M Expenses	\$ 1,949,677	\$ 2,032,737	\$ 2,140,289	\$ 2,253,810	\$ 2,366,500	\$ 2,484,825
6	Net Revenue	\$ 613,755	\$ 1,076,399	\$ 1,279,081	\$ 1,503,166	\$ 1,622,535	\$ 1,754,141
7	CIP Financing						
8	Cash CIP	\$ 421,000	\$ 513,450	\$ 466,909	\$ 503,277	\$ 676,429	\$ 430,107
9	Existing Debt Service	\$ 124,875	\$ 124,875	\$ 149,313	\$ 255,713	\$ 254,525	\$ 253,113
10	Net Annual Cash Balance	\$ 67,880	\$ 438,074	\$ 662,860	\$ 744,176	\$ 691,581	\$ 1,070,921
11	Beginning Reserves Level	\$ 315,081	\$ 382,961	\$ 821,035	\$ 1,483,895	\$ 2,228,070	\$ 2,919,651
12	Ending Reserves Level	\$ 382,961	\$ 821,035	\$ 1,483,895	\$ 2,228,070	\$ 2,919,651	\$ 3,990,572
13	Upper Target Reserve Level	\$ 3,293,973	\$ 3,357,007	\$ 3,429,608	\$ 3,489,845	\$ 3,965,734	\$ 4,077,365
14	Lower Target Reserve Level	\$ 2,631,083	\$ 2,665,876	\$ 2,701,909	\$ 2,723,550	\$ 3,161,124	\$ 3,232,524
15	Coverage Ratio for ID 4 Debt	194%	361%	361%	249%	267%	287%

In addition, under the proposed revenues, reserve levels would be sufficient to meet operating and CIP target levels in FY 2013. This is shown in Table 2-7.

TABLE 2 - 7 – WATER FUND RESERVES UNDER PROPOSED RATES (ONLY OPERATING AND CIP FUND TARGETS CONSIDERED)

		Budget FY 2012	Projected FY 2013	Projected FY 2014	Projected FY 2015	Projected FY 2016	Projected FY 2017
11	Beginning Reserves Level	\$ 315,081	\$ 382,961	\$ 821,035	\$ 1,483,895	\$ 2,228,070	\$ 2,919,651
12	Ending Reserves Level	\$ 382,961	\$ 821,035	\$ 1,483,895	\$ 2,228,070	\$ 2,919,651	\$ 3,990,572
13	Upper Target Reserve Level	\$ 1,044,148	\$ 1,098,876	\$ 1,160,722	\$ 1,209,607	\$ 1,674,227	\$ 1,774,025
14	Lower Target Reserve Level	\$ 556,729	\$ 590,692	\$ 625,649	\$ 646,155	\$ 1,082,602	\$ 1,152,819

SECTION 3: REVENUE REQUIREMENTS FOR SEWER IDS-1 & 5

OPERATING AND MAINTENANCE (O&M) EXPENSES

The District’s FY 2012 budget was used as the basis for projecting O&M costs. In order to project O&M expenses for future years, RFC assumed a general inflation factor of 3% for FY 2013 and 5% for FY 2014 and thereafter. Table 3-1 shows budgeted and projected O&M expenses for the (sewer) fund.

TABLE 3 - 1– SEWERs ID-1 & 5 O&M EXPENSES

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
	\$	\$	\$	\$	\$	\$
<u>Wastewater ID 1 & ID 5</u>						
Repairs & Maintenance	28,425	29,278	30,742	32,279	33,893	35,587
Professional Services	27,750	28,583	30,012	31,512	33,088	34,742
Insurance	18,416	18,969	19,917	20,913	21,959	23,056
Personnel Expense	129,577	133,465	140,138	147,145	154,502	162,227
Employee Benefits	61,610	63,458	66,631	69,963	73,461	77,134
Office expense	13,349	13,749	14,437	15,158	15,916	16,712
Utilities	49,500	50,985	53,534	56,211	59,022	61,973
Interest Expense-COP 2008	29,231	30,108	31,614	33,194	34,854	36,597
Groundwater Management	750	773	811	852	894	939
All Other	19,125	19,699	20,684	21,718	22,804	23,944
Wastewater ID 1 & ID 5 Total	377,733	389,065	408,518	428,944	450,392	472,911

CAPITAL IMPROVEMENT PROGRAM (CIP) AND SHORT LIVED ASSETS REPLACEMENT PROGRAM

The District has also developed a sewer CIP and a short term assets replacement program to address future sewer system needs. Table 3-2 shows the uninflated sewer CIP for the study period of FY 2012 to FY 2017; Table 3-3 shows a list of uninflated short term assets; and Table 3-4 shows totals for inflated CIP and for short term assets. Again, an annual CIP inflation factor of 5% was used.

TABLE 3 - 2– CAPITAL IMPROVEMENT PROGRAM FOR SEWER – UNINFLATED

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
	\$	\$	\$	\$	\$	\$
<u>Wastewater Plant</u>						
Catchment berm along north and northeast side of property	\$ 5,000	\$ -	\$ -	\$ -	\$ -	\$ -
Total - Capital Improvements Program - Wastewater	5,000	-	-	-	-	-

TABLE 3 - 3–SHORT TERM SEWER ASSETS REPLACEMENT

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
	\$	\$	\$	\$	\$	\$
Wastewater Plant						
Shredder Cutters	6,000	6,000	6,000	6,000	6,000	6,000
Motor and Gear Reducers for Brushes	-	-	16,000	-	-	-
Wastewater Return Pump	-	-	6,000	-	-	-
Surface Aerator Motor	-	-	-	-	4,500	-
Video Sewer Lines	-	-	10,000	-	-	-
Short Lived Assets Replacement Program - Wastewater	6,000	6,000	38,000	6,000	10,500	6,000

TABLE 3 - 4 – TOTAL INFLATED SEWER CIP AND SHORT TERM ASSETS REPLACEMENT

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
	\$	\$	\$	\$	\$	\$
Total - Capital Improvements Program - Wastewater	5,000	-	-	-	-	-
Short Lived Assets Replacement Program - Wastewater	6,000	6,300	41,895	6,946	12,763	7,658
Total CIP and Short Lived Assets - Wastewater	11,000	6,300	41,895	6,946	12,763	7,658

It should be noted that the table above provides the total inflated CIP and short term assets replacement program costs for all sewer financial plans. Since the District maintains separate accounts for the different service areas (IDs-1 & 5 and ID-2), capital costs must be allocated to the appropriate service area.

RESERVES UNDER CURRENT RATE STRUCTURE

Table 3-5 displays the pro forma of the District’s sewer IDs-1 & 5 enterprise fund reserves under current rates over the forecast period. All the projections in this table are based on current rate structure and assume no new debt is issued. Additionally, usage growth is assumed to be zero percent for FY 2012 to FY 2015 and one percent for FY 2016 to FY 2017.

TABLE 3 - 5 – SEWER IDs-1 & 5 FUNDS RESERVES UNDER CURRENT RATES

		Budget FY 2012	Projected FY 2013	Projected FY 2014	Projected FY 2015	Projected FY 2016	Projected FY 2017
1	Existing Rate Revenue	\$ 249,407	\$ 249,407	\$ 249,407	\$ 249,407	\$ 251,901	\$ 254,420
2	Additional Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	Other Revenue (w/ interest)	\$ 39,725	\$ 37,555	\$ 32,231	\$ 27,368	\$ 22,145	\$ 16,158
4	Total Revenue	\$ 289,132	\$ 286,962	\$ 281,638	\$ 276,775	\$ 274,046	\$ 270,578
5	O&M Expenses	\$ 377,733	\$ 389,065	\$ 408,518	\$ 428,944	\$ 450,392	\$ 472,911
6	Net Revenue	\$ (88,601)	\$ (102,104)	\$ (126,880)	\$ (152,169)	\$ (176,346)	\$ (202,333)
7	CIP Financing						
8	Cash CIP	\$ 11,000	\$ 6,300	\$ 38,220	\$ 6,946	\$ 12,763	\$ 7,658
9	Net Annual Cash Balance	\$ (99,601)	\$ (108,404)	\$ (165,100)	\$ (159,115)	\$ (189,109)	\$ (209,991)
10	Beginning Reserves Level	\$ 31,717	\$ (67,884)	\$ (176,288)	\$ (341,388)	\$ (500,503)	\$ (689,612)
11	Ending Reserves Level	\$ (67,884)	\$ (176,288)	\$ (341,388)	\$ (500,503)	\$ (689,612)	\$ (899,602)
12	Upper Target Reserve Level	\$ 434,112	\$ 440,286	\$ 451,958	\$ 464,214	\$ 477,082	\$ 490,594
13	Lower Target Reserve Level	\$ 305,683	\$ 308,004	\$ 313,062	\$ 318,373	\$ 323,949	\$ 329,804

Again, the previous table shows that the District's current sewer ID-1 & 5 revenues are unable to fund the projected O&M and capital expenses. Without revenue adjustments, the District will also be unable to fund sewer IDs-1 & 5 operations through FY 2012.

RESERVES POLICY

Reserves policies for sewer IDs-1 & 5 are the same as the water reserves policies outlined in the "Debt Service and Reserves Policy" subsection of Section 2.

OPERATING FINANCIAL PLAN***Proposed Revenue Adjustments***

The projections indicate that the District needs the following revenue adjustments for sewer IDs-1 & 5 over the next few years. The first rate adjustment will be implemented in July 2011. Subsequent rate increases are anticipated to be effective in July of each year. RFC proposes the following adjustments.

FY 2012	FY 2013	FY 2014- FY 2017
30%	30%	5%

RESERVES UNDER PROPOSED RATE STRUCTURE

Table 3-6 shows the ending reserve balance in each year of the forecast period. The table indicates that the District will meet its target reserves level by the end of the forecast period under the proposed sewer IDs-1 & 5 revenue adjustments.

Line 11 shows the reserve levels at the end of the fiscal year, and lines 12 and 13 show the upper and lower target reserve levels for all the reserves, respectively.

TABLE 3 - 6 – SEWER IDs-1 & 5 FUND RESERVES UNDER PROPOSED RATES

	Budget FY 2012	Projected FY 2013	Projected FY 2014	Projected FY 2015	Projected FY 2016	Projected FY 2017
1 Existing Rate Revenue	\$ 249,407	\$ 249,407	\$ 249,407	\$ 249,407	\$ 251,901	\$ 254,420
2 Additional Revenue	\$ 74,800	\$ 172,100	\$ 193,200	\$ 215,300	\$ 241,100	\$ 268,200
3 Other Revenue (w/ interest)	\$ 40,290	\$ 40,815	\$ 42,810	\$ 44,489	\$ 46,738	\$ 49,256
4 Total Revenue	\$ 364,497	\$ 462,323	\$ 485,417	\$ 509,196	\$ 539,739	\$ 571,876
5 O&M Expenses	\$ 377,733	\$ 389,065	\$ 408,518	\$ 428,944	\$ 450,392	\$ 472,911
6 Net Revenue	\$ (13,236)	\$ 73,257	\$ 76,898	\$ 80,252	\$ 89,347	\$ 98,965
7 CIP Financing						
8 Cash CIP	\$ 11,000	\$ 6,300	\$ 38,220	\$ 6,946	\$ 12,763	\$ 7,658
9 Net Annual Cash Balance	\$ (24,236)	\$ 66,957	\$ 38,678	\$ 73,306	\$ 76,584	\$ 91,307
10 Beginning Reserves Level	\$ 31,717	\$ 7,481	\$ 74,438	\$ 113,117	\$ 186,423	\$ 263,007
11 Ending Reserves Level	\$ 7,481	\$ 74,438	\$ 113,117	\$ 186,423	\$ 263,007	\$ 354,315
12 Upper Target Reserve Level	\$ 434,112	\$ 440,286	\$ 451,958	\$ 464,214	\$ 477,082	\$ 490,594
13 Lower Target Reserve Level	\$ 305,683	\$ 308,004	\$ 313,062	\$ 318,373	\$ 323,949	\$ 329,804

In addition, under the proposed revenues reserve levels would be sufficient to meet operating and CIP target levels in FY 2014, as shown in Table 3-7.

**TABLE 3 - 7 – SEWER IDs-1 & 5 FUND RESERVES UNDER PROPOSED RATES
(ONLY OPERATING AND CIP FUND TARGETS CONSIDERED)**

		Budget FY 2012	Projected FY 2013	Projected FY 2014	Projected FY 2015	Projected FY 2016	Projected FY 2017
10	Beginning Reserves Level	\$ 31,717	\$ 7,481	\$ 74,438	\$ 113,117	\$ 186,423	\$ 263,007
11	Ending Reserves Level	\$ 7,481	\$ 74,438	\$ 113,117	\$ 186,423	\$ 263,007	\$ 354,315
12	Upper Target Reserve Level	\$ 189,492	\$ 194,533	\$ 204,259	\$ 214,472	\$ 225,196	\$ 236,456
13	Lower Target Reserve Level	\$ 95,058	\$ 97,266	\$ 102,130	\$ 107,236	\$ 112,598	\$ 118,228

SECTION 4: REVENUE REQUIREMENTS FOR SEWER ID-2

OPERATING AND MAINTENANCE (O&M) EXPENSES

The District's FY 2012 budget was entered into the Rate Model and used as the base year for projecting O&M costs. In order to project O&M expenses for future years, RFC assumed a general inflation factor of 3% for FY 2013 and 5% for FY 2014 and thereafter. Table 4 – 1 shows the O&M budget and projected O&M costs for sewer ID-2.

TABLE 4 - 1- SEWER ID-2 O&M EXPENSES

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
	\$	\$	\$	\$	\$	\$
<i>Wastewater ID 2</i>						
Repairs & Maintenance	9,475	9,759	10,247	10,760	11,298	11,862
Professional Services	9,250	9,528	10,004	10,504	11,029	11,581
Insurance	6,139	6,323	6,639	6,971	7,320	7,685
Personnel Expense	43,192	44,488	46,713	49,048	51,501	54,076
Employee Benefits	20,537	21,153	22,210	23,321	24,487	25,711
Office expense	4,450	4,583	4,812	5,053	5,305	5,571
Utilities	16,500	16,995	17,845	18,737	19,674	20,658
Interest Expense-COP 2008	9,744	10,036	10,538	11,065	11,618	12,199
Groundwater Management	250	258	270	284	298	313
All Other	6,375	6,566	6,895	7,239	7,601	7,981
Wastewater ID 2 Total	125,911	129,688	136,173	142,981	150,131	157,637

CAPITAL IMPROVEMENT PROGRAM (CIP) AND SHORT LIVED ASSETS REPLACEMENT PROGRAM

Both the CIP and short lived assets replacement program were outlined in the previous section. Again, since the district maintains separate accounts for the different service areas (IDs-1 & 5 and ID-2), the capital costs must be allocated to the appropriate service area.

RESERVES UNDER CURRENT RATE STRUCTURE

Table 4-2 displays the pro forma of the District's sewer ID-2 enterprise fund reserves under current rates over the forecast period. All the projections in this table are based on current rate structure and assume no new debt is issued. Additionally, usage growth is assumed to be zero percent for FY 2012 to FY 2015 and one percent for FY 2016 to FY 2017.

TABLE 4 - 2 – SEWER ID-2 FUNDS RESERVES UNDER CURRENT RATES

		Estimated FY 2012	Projected FY 2013	Projected FY 2014	Projected FY 2015	Projected FY 2016	Projected FY 2017
1	Existing Rate Revenue	\$ 166,271	\$ 166,271	\$ 166,271	\$ 166,271	\$ 166,271	\$ 166,271
2	Additional Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	Other Revenue (w/ interest)	\$ 16,021	\$ 17,448	\$ 20,157	\$ 21,528	\$ 22,784	\$ 23,855
4	Total Revenue	\$ 182,292	\$ 183,720	\$ 186,428	\$ 187,799	\$ 189,056	\$ 190,127
5	O&M Expenses	\$ 125,911	\$ 129,688	\$ 136,173	\$ 142,981	\$ 150,131	\$ 157,637
6	Net Revenue	\$ 56,381	\$ 54,031	\$ 50,256	\$ 44,818	\$ 38,925	\$ 32,490
7	CIP Financing						
8	Cash CIP	\$ -	\$ -	\$ 3,675	\$ -	\$ -	\$ -
9	Net Annual Cash Balance	\$ 56,381	\$ 54,031	\$ 46,581	\$ 44,818	\$ 38,925	\$ 32,490
10	Beginning Reserves Level	\$ 36,539	\$ 92,920	\$ 146,952	\$ 193,532	\$ 238,350	\$ 277,275
11	Ending Reserves Level	\$ 92,920	\$ 146,952	\$ 193,532	\$ 238,350	\$ 277,275	\$ 309,765
12	Upper Target Reserve Level	\$ 313,843	\$ 316,109	\$ 320,000	\$ 324,085	\$ 328,374	\$ 332,878
13	Lower Target Reserve Level	\$ 271,033	\$ 272,015	\$ 273,701	\$ 275,471	\$ 277,330	\$ 279,282

The above table shows that the District's current sewer ID-2 revenues are sufficient to meet current and projected revenue requirements. As a result, reserve levels continue to grow, eventually meeting the target reserves at the end of the forecast period. In addition, under current sewer ID-2 revenues, reserve levels would be sufficient to meet operating and CIP target levels for FY 2012. This is shown in Table 4-3. As a result, no revenue adjustments are required or necessary.

TABLE 4 - 3 – SEWER ID-2 FUNDS RESERVES UNDER CURRENT RATES (ONLY OPERATING AND CIP FUND TARGETS CONSIDERED)

		Estimated FY 2012	Projected FY 2013	Projected FY 2014	Projected FY 2015	Projected FY 2016	Projected FY 2017
10	Beginning Reserves Level	\$ 36,539	\$ 92,920	\$ 146,952	\$ 193,532	\$ 238,350	\$ 277,275
11	Ending Reserves Level	\$ 92,920	\$ 146,952	\$ 193,532	\$ 238,350	\$ 277,275	\$ 309,765
12	Upper Target Reserve Level	\$ 62,956	\$ 64,844	\$ 68,086	\$ 71,491	\$ 75,065	\$ 78,819
13	Lower Target Reserve Level	\$ 31,478	\$ 32,422	\$ 34,043	\$ 35,745	\$ 37,533	\$ 39,409

RESERVES POLICY

Reserves policies for sewer ID-2 are the same as the water reserves policies outlined in the "Debt Service and Reserves Policy" subsection of Section 2.

SECTION 5: PROPOSED RATE STRUCTURE

Rate design is the process of developing rate schedules for each user class which will recover, in an equitable manner, the annual cost of service from the members of that class. Rate structures should be designed to ensure that users pay only their proportionate share of costs. In addition, rate structures should be easy to understand, simple to administer, and comply with regulatory requirements.

After careful review of the District’s revenue requirements, RFC recommends the following rate structures for different customer classes.

Water Charges: The structure of the water rates remains relatively unchanged, consisting of a variable water charge in addition to a fixed monthly ready-to-serve charge. Ready-to-serve charges vary based upon meter size, while water charges vary seasonally and with consumption. The major difference in the proposed rate structure is that all customers will now be required to pay the same commodity charge rates regardless of region. RFC recommends that the District reevaluate the water rate structure, once the Groundwater Implementation Plan has been developed.

Sewer Charges: RFC recommends that the district retain the current sewer rate structure, which consists of fixed monthly sewer charges depending on region. Customers in ID-2 will retain their current charges.

A summary of current rates is shown in Table 5-1, and a summary of proposed water and sewer rates is shown in Table 5-2.

TABLE 5 - 1 – CURRENT WATER AND SEWER RATES

	Winter		Summer	
	Tier 1	Tier 2	Tier 1	Tier 2
Commodity Water Rates (\$/hcf)	45hcf	>45hcf	55hcf	>55hcf
Water ID-1	\$ 1.02	\$ 1.53	\$ 1.02	\$ 1.53
Water ID-3	\$ 1.23	\$ 1.84	\$ 1.23	\$ 1.84
Water ID-4 & 5	\$ 1.12	\$ 1.68	\$ 1.12	\$ 1.68
Fixed Meter Rates				
Meter Size	\$/mo.			
3/4"	\$ 19.58			
1"	\$ 28.62			
1 1/2"	\$ 48.26			
2"	\$ 73.05			
3"	\$ 132.67			
4"	\$ 211.50			
6"	\$ 422.00			
Sewer Rates				
	\$/mo.			
SA-1	\$ 17.14			
SA-5	\$ 32.00			

TABLE 5 - 2 – PROPOSED WATER AND SEWER RATES

		FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
		Proposed	Proposed	Proposed	Proposed	Proposed	Proposed
Water Rates							
<u>Winter</u>							
Tier 1	45hcf	\$ 1.46	\$ 1.90	\$ 2.09	\$ 2.30	\$ 2.42	\$ 2.55
Tier 2	>45hcf	\$ 2.19	\$ 2.85	\$ 3.14	\$ 3.46	\$ 3.64	\$ 3.83
<u>Summer</u>							
Tier 1	55hcf	\$ 1.46	\$ 1.90	\$ 2.09	\$ 2.30	\$ 2.42	\$ 2.55
Tier 2	>55hcf	\$ 2.19	\$ 2.85	\$ 3.14	\$ 3.46	\$ 3.64	\$ 3.83
Fixed Charge							
<u>Meter Size</u>							
	3/4"	\$ 25.45	\$ 33.09	\$ 36.40	\$ 40.04	\$ 42.04	\$ 44.14
	1"	\$ 37.21	\$ 48.37	\$ 53.20	\$ 58.53	\$ 61.45	\$ 64.52
	1 1/2"	\$ 62.74	\$ 81.56	\$ 89.72	\$ 98.69	\$ 103.62	\$ 108.80
	2"	\$ 94.97	\$ 123.45	\$ 135.80	\$ 149.38	\$ 156.85	\$ 164.69
	3"	\$ 172.47	\$ 224.21	\$ 246.63	\$ 271.30	\$ 284.86	\$ 299.10
	4"	\$ 274.95	\$ 357.44	\$ 393.18	\$ 432.50	\$ 454.12	\$ 476.83
	6"	\$ 548.60	\$ 713.18	\$ 784.50	\$ 862.95	\$ 906.10	\$ 951.40
Sewer Rates							
	SA-1	\$ 22.29	\$ 28.98	\$ 30.43	\$ 31.96	\$ 33.56	\$ 35.24
	SA-5	\$ 41.60	\$ 54.08	\$ 56.79	\$ 59.63	\$ 62.62	\$ 65.76